

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue
Implementation and Administration, and
Consider Further Development, of California
Renewables Portfolio Standard Program.

Rulemaking 15-02-020
(Filed February 26, 2015)

**SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E)
FINAL 2017 RENEWABLES PORTFOLIO
STANDARD PROCUREMENT PLAN**

(PUBLIC VERSION)

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission (the “Commission”), the *Decision Accepting Draft 2017 Renewables Portfolio Standard Procurement Plans* (“the Decision”), issued in the above-captioned docket on December 18, 2017, San Diego Gas & Electric Company (“SDG&E”) hereby submits its final 2017 Renewables Portfolio Standard (“RPS”) Procurement Plan and related appendices (together, the “Plan”).

In the Decision, the Commission established a schedule for submission of the final 2017 Plans. In accordance with the direction set forth in the Decision, SDG&E’s Plan is attached hereto as Attachment A. The Plan includes the following Appendices:

- Appendix 1 – 2017 Project Development Status Update
- Appendix 2 – 2017 Quantitative Information
- Appendix 3 – 2017 Cost Quantification Table
- Appendix 4 – 2017 Expiring Contracts
- Appendix 5 – Important Changes from Draft 2017 Plan to Final 2017 Plan

- Appendix 6 – 2017 RPS Long-Term Model Power Purchase Agreement (“PPA”)^{1/}
- Appendix 7 – 2017 RPS Short-Term Model PPA
- Appendix 8 – 2017 RPS Renewable Energy Credit (“REC”) Agreement
- Appendix 9 – 2017 Least-Cost Best-Fit (“LCBF”)
- Appendix 10 – 2017 RPS Sales Request for Proposals (“RFP”)
- Appendix 10.A – 2017 RPS Sales Model PPA
- Appendix 10.B – 2017 Framework for Assessing Potential RPS Sales
- Appendix 11 – 2017 Green Tariff (“GT”) Renewable Auction Mechanism (“RAM”) Request for Offers (“RFO”)
- Appendix 11.A – 2017 GT RAM PPA
- Appendix 11.B – 2017 GT RAM Offer Form
- Appendix 12 – 2017 Enhanced Community Renewables (“ECR”) RAM RFO
- Appendix 12.A – 2017 ECR RAM PPA Rider
- Appendix 12.B – 2017 ECR RAM Offer Form
- Appendix 13 – Redline of Final 2017 RPS Solicitation Documents Against Draft 2017 RPS Solicitation Documents
- Appendix 14 – Redline of Final 2017 RPS Plan (Except Solicitation Documents) Against Draft 2017 RPS Plan (Except Solicitation Documents)

^{1/} As discussed in Attachment A, SDG&E proposes that it not issue a Request for Offers (“RFO”) for RPS purchases in the 2017 cycle. Accordingly, it does not include herewith bid solicitation protocol documents. Although SDG&E does not intend to issue a solicitation in 2017, it has attached a Long-Term and Short-Term RPS Model PPA, an RPS REC Agreement, and an LCBF methodology to prevent these documents from becoming stale.

Respectfully submitted this 17th day of January, 2018.

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ATTACHMENT A

**SAN DIEGO GAS & ELECTRIC COMPANY
2017 RPS PROCUREMENT PLAN**

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I. EXECUTIVE SUMMARY

San Diego Gas & Electric Company's ("SDG&E's") 2017 Renewable Portfolio Standard ("RPS") Procurement Plan (the "RPS Plan") describes the processes used by SDG&E to determine its RPS procurement need, as well as the methods it will use to manage its RPS portfolio to meet RPS program compliance targets in a cost-effective manner.¹ The RPS Plan establishes guidelines for SDG&E's procurement of Least-Cost Best-Fit ("LCBF") RPS-eligible resources that have enabled and, in the future, will enable SDG&E to achieve the following levels of renewable deliveries during each Compliance Period ("CP"): (a) an average of 20% of retail sales between January 1, 2011 and December 31, 2013, inclusive ("CP1"); (b) 25% of retail sales by December 31, 2016, with reasonable progress made in 2014 and 2015 ("CP2"); (c) 33% of retail sales by December 31, 2020, with reasonable progress made in 2017, 2018 and 2019 ("CP3"); (d) 40% of retail sales by December 31, 2024, with reasonable progress made in 2021, 2022 and 2023 ("CP4"); (e) 45% of retail sales by December 31, 2027, with reasonable progress made in 2025 and 2026 ("CP5"); (f) 50% of retail sales by December 31, 2030, with reasonable progress made in 2028 and 2029 ("CP6"); and (g) 50% of retail sales for all compliance periods beginning in 2031.² The RPS Plan also accounts for the new requirement that beginning in 2021, 65% of the procurement a retail seller counts towards its RPS compliance must be from long-term contracts ("65% long-term contracting requirement").³

To date, SDG&E has led the State in RPS procurement, achieving 35% renewable energy in 2015 (thereby exceeding the 2020 target of 33% five years early), 100% of which was from long-term contracts (also exceeding the 65% long-term contracting requirement). SDG&E achieved 43% renewable energy in 2016, 100% of which was also from long-term contracts; see

¹ SDG&E reserves the right to update its 2017 RPS Plan, including all Appendices attached hereto, as necessary.

² Compliance towards CP's 1, 2, and 3 shall be measured in accordance with Decision ("D.") 11-12-020, Ordering Paragraphs ("OP") 1-3. Senate Bill ("SB") 350 added CP's 4, 5, 6, and three-year compliance periods beginning in 2031. On December 15, 2016, the California Public Utilities Commission ("Commission") issued D.16-12-040 implementing the new compliance periods and procurement quantity requirements per SB 350.

³ SB 350 added a new long-term contracting requirement under 399.13(b), which was formalized in D.17-06-026, issued on July 5, 2017. To count towards this requirement, RPS-eligible procurement must be from: (i) facilities owned by the retail seller; (ii) facilities in which the retail seller has an ownership agreement for a duration of 10 years or more; and (iii) contracts with a duration of 10 years or more. Grandfathered contracts, which are those meeting the requirements of 399.16(d), also count in full towards the long-term contracting requirement per D.17-06-026. All statutory references herein are to the Public Utilities Code unless otherwise noted.

Appendix 2 for further detail. SDG&E is forecasted to reach 49% renewable energy in 2021, 98% of which will be from long-term contracts.

To determine the quantity of renewable generation that must be procured to meet SDG&E's RPS procurement need in each CP, SDG&E will follow the Need Determination Methodology described below. To determine its optimal portfolio mix, SDG&E manages its portfolio to conform to the portfolio content, balance, and 65% long-term contracting requirements established through the RPS program. SDG&E will implement a work plan to fulfill its need, if any, including potentially soliciting additional multi-product and multi-term contracts through RPS solicitations, considering bilateral proposals, utilizing banked procurement, selling surplus RPS generation when appropriate, and pursuing utility investment opportunities and/or utility ownership when economic and prudent. SDG&E will use all tools available to seek to manage its existing RPS-portfolio and the investment in SDG&E's banked procurement in the best interest of its ratepayers. As explained in more detail below, based on SDG&E's current portfolio and forecasted position, the most reasonable course of action for SDG&E is to not hold an RPS RFO during the 2017 procurement cycle.

Edits throughout the RPS Plan reflect the direction provided by the *Assigned Commissioner and Assigned Administrative Law Judge's Ruling Identifying Issues and Schedule of Review for 2017 Renewables Portfolio Standard Procurement Plans and Inviting Comments on Renewable Auction Mechanism Proposal* ("the ACR"), issued on May 26, 2017, and the *Decision Accepting Draft 2017 Renewables Portfolio Standard Procurement Plans*, issued on December 18, 2017,⁴ as well as edits reflecting updates necessary due to the passage of time⁵ and to explain SDG&E's proposed changes.

Additionally, on July 5, 2017, the Commission issued Decision D.17-06-026, the *Decision Revising Compliance Requirements for the California Renewables Portfolio Standard in Accordance with Senate Bill 350*. The Decision addresses modifications made to the RPS program banking rules by SB 350, and provides direction regarding Section 399.13(a)(4)(B)(iii),⁶

⁴ Decision ("D.") 17-12-007.

⁵ The use of "passage of time" in this document denotes basic updates (e.g., decision issuance since prior plan version).

⁶ New 399.13(a)(4)(B)(iii) allows a retail seller who elects to utilize the new banking rules to notify the Commission of such intention as well as its intention to comply with the new long-term contracting requirement (399.13(b)).

which allows a retail seller to utilize these new banking rules in CP3 if it also notifies the Commission that it will comply with the new 65% long-term contracting requirement beginning in CP3 (instead of CP4). The Decision requires the following: (i) a retail seller must provide notice to the Commission of its intention to utilize the new banking rules in a letter to the Director of Energy Division, served on the service list and filed with the Docket Office, within 60 days of the effective date of the final decision; and (ii) reflection of the early application of the new banking rules in the retail seller's RPS procurement plans filed in CP3, including an express statement that the retail seller has elected early compliance, the date of the letter to the Director of Energy Division indicating the election, and any specific consequences. SDG&E has elected early compliance with the 65% long-term contracting requirement, and submitted its letter to the Director of Energy Division on July 17, 2017. SB 350's adoption of the 65% long-term contracting requirement reaffirms the Legislature's longstanding view that long-term contracts and new-build projects are critical to the success of the RPS Program. As mentioned above, 100% of the renewable energy that SDG&E delivered to its customers in 2016 came from long-term contracts, therefore SDG&E is well positioned for early compliance with SB 350 goals. The 65% long-term contracting requirement and the new banking rules have been incorporated into SDG&E's Renewable Net Short ("RNS") table under Appendix 2.

While SDG&E cannot predict the results of SB 350 implementation at this time, it is important to note that SB 350 includes a wide-sweeping planning process, the Integrated Resource Planning ("IRP") process, which SDG&E anticipates will optimize RPS planning and procurement, within a larger framework that looks at meeting State policies at the lowest possible cost as is discussed in more detail below under Section II.C. In short, the current siloed approach to procurement, in which resource procurement mandates are imposed on a program-by-program basis without reference to other potential forms of supply- and/or demand-side procurement, runs directly counter to both the goal of optimization and the new statutory mandates. Procurement should be done in a manner that maximizes ratepayer benefits while minimizing bill impacts. The holistic process contemplated by the IRP must evaluate the costs and benefits of all available resources when developing portfolios that comply with the requirements set by SB 350 and will be able to better guide RPS planning and procurement, thereby maximizing the value of ratepayer dollars and minimizing ratepayer exposure to excessive costs. SDG&E remains focused on effective cost and risk management, as described

in more detail below under Section II.B, and it looks forward to assisting the Commission in its implementation of the new IRP regime.

II. ASSESSMENT OF RPS PORTFOLIO SUPPLIES AND DEMAND

A. Need Determination Methodology

SDG&E makes procurement decisions based on how its risk-adjusted RPS position forecast (referred to herein as its “RPS position”) compares to its RPS program compliance requirements, the result of which is its probability-weighted procurement need or RNS. In order to calculate its RPS Position, SDG&E assigns a probability of success, following a qualitative and quantitative assessment, to the expected deliveries for each project that is not yet online in its portfolio⁷ and then adds the risk-adjusted expected deliveries across all projects in its entire RPS portfolio. Probabilities are used because renewable projects and their deliveries are exposed to multiple risks, and the flexible compliance mechanisms that allowed for borrowing from future procurement were eliminated by SB 2 (1X).⁸ These risks include approval risks (*e.g.*, Commission approval and the timing of such), development risks (*e.g.*, permitting, financing, or transmission interconnection), delivery risks (*e.g.*, generation fluctuations given the variant-intermittent nature of some renewable resources, or operational challenges), and/or other risks (*e.g.*, under-development of transmission infrastructure common to a group of projects).

In general, if SDG&E’s RPS Position is less than its RPS requirements, SDG&E will plan to procure additional RPS resources on a schedule that will allow for the procurement and development of resources in time to provide deliveries to meet anticipated shortfalls. If, on the other hand, its RPS Position is greater than its RPS requirements, SDG&E will consider opportunities to bank or sell bundled and/or unbundled renewable energy credits (“RECs”). In addition, to optimize the relative value of renewable energy across compliance periods, SDG&E also considers short-term contracts when, for example, it is short⁹ in the most immediate CP but

⁷ For purposes of determining its RPS Position, SDG&E considers its portfolio to include all executed contracts until contract expiration (*e.g.*, it does not assume expiring contracts will be renewed and excludes contracts under-negotiation unless indicated otherwise) and investment and UOG projects where relevant progress has been made.

⁸ Stats. 2011, Ch. 1.

⁹ The term “short” is used herein to refer to an RPS Position that is lower than the relevant RPS program requirements. The term “long” is used to refer to an RPS Position that is higher than relevant RPS program requirements.

long in the subsequent CP. SDG&E will also consider procurement strategies that are in the best interest of ratepayers across compliance periods in order to secure greater value from approved RPS expenditures. For example, SDG&E strives to have a well-diversified RPS portfolio so that its RPS compliance, particularly in the most immediate compliance period, is not unduly exposed to any given risk (*e.g.*, a particular technology, region, counterparty, etc.). SDG&E's RPS portfolio management strategy involves identifying needs and risks and managing them in a cost-effective manner in the best interest of its ratepayers.

The following sections explain SDG&E's methodology for determining its RNS. First, the process used to compute the RPS Position is explained. Then, procurement needs by compliance periods are inferred by comparing RPS requirements to RPS Positions.

i. Assessment of Probability of Success for Various Project Types as a Key Component of Calculating the Probability-Weighted RPS Position Forecast

SDG&E must assess the probability of success and/or expected generation of the following main types of projects: (a) delivering; (b) approved but not yet delivering; and (c) not yet approved.¹⁰ SDG&E evaluates the probability of success for each project in its portfolio on a monthly basis in order to calculate its RNS, which is the basis for its procurement need. To do this, SDG&E conducts a monthly review with an interdisciplinary team and uses the most up-to-date qualitative and quantitative information to assign a probability of success and/or determine the expected generation of each individual project. SDG&E's most up-to-date assessment as of June 2017 is set forth in Appendix 2. SDG&E applies the following methodology to analyze each project type:

a. Assessment of Performance of Delivering Projects

Projects that have already achieved commercial operation and have begun delivering energy provide the most stable source of RPS deliveries when forecasting RPS procurement need. These projects have overcome development hurdles and are supported by steady revenues under executed Power Purchase Agreements ("PPAs"). However, it is crucial to consider the potential fluctuations in deliveries that these projects can experience and the impact that such fluctuations could have on SDG&E's need to procure additional resources to meet its RPS goals. As discussed further in Section V, deliveries from these projects can be impacted by resource

¹⁰ See the Renewable Net Short Calculation set forth in Appendix 2.

availability, regulatory changes, economic environment, evolving technologies, and third party systems. These types of fluctuations can be significant. In order to ensure RPS compliance, SDG&E must account for potential fluctuations (while recognizing that swings in production could be positive). The monitoring of performance of delivering contracts and the assessment of probabilities focuses on (a) understanding the historical generation profile of each project and how it has differed year-over-year and relative to forecasts; and (b) the operational track record of any given project. SDG&E has found that a weighting of 100% is typically appropriate for delivering contracts. The forecast of future deliveries for delivering contracts is based on historical deliveries (up to the most recent three years, if available; if not available historical deliveries are used), which SDG&E will revise as appropriate. Adjusting forecasts when necessary is a crucial component of SDG&E's need assessment methodology.

b. Assessment of the Development Progress of Approved Projects that Have Not Yet Begun Delivering

Another important aspect of SDG&E's need assessment methodology is evaluating the development status of projects approved by the Commission, but not yet delivering energy. These projects are typically much riskier than projects that have begun delivering due to the challenges that can arise during the development process that might prevent a project from completing construction and achieving commercial operation. Permitting, interconnection, financing and other development issues are discussed further in Section IV. SDG&E must account for development risks when determining its procurement need and the monitoring of development status is the most critical aspect of SDG&E's need assessment methodology. As with delivering contracts, SDG&E meets internally on a monthly basis to assign a probability of success to each of its developing projects. This factor is then applied to the expected deliveries stated in the contracts. SDG&E's current assessment as of June 2017 is provided in the RNS Calculation in Appendix 2.

c. Assessment of the Approval Queue for Projects that Have Been Submitted to the Commission, But Are Not Yet Approved

SDG&E typically meets monthly with its Procurement Review Group ("PRG"), which includes Energy Division staff, to discuss the likely approval timetable of projects that SDG&E has submitted to the Commission for approval. The discussion covers expected timing of Commission action and any potential constraints that might necessitate expedited Commission action or require additional information. SDG&E works collaboratively with the Commission to

develop a work plan that results in timely approval. It is possible, however, that the shortage of Energy Division staff or other procedural challenges can result in approval delays that can impact a project's ability to achieve milestones. SDG&E must monitor this process closely to determine what impact, if any, delays may have on the timing of expected deliveries or sales.

ii. Assessment of Other Portfolio Impacts

Once SDG&E has determined the probability of success for each of the contracts in its portfolio, SDG&E must also consider a broader range of risk factors that can impact multiple projects or its entire portfolio. SDG&E evaluates the impact of these factors on a monthly basis and describes its methodology for analyzing these risk factors below.

a. Impact of Retail Sales Fluctuations

Because RPS compliance is based on an energy target, as opposed to a capacity target that is calculated using a percentage of retail sales, it is important to monitor fluctuations in forecasted retail sales. In accordance with Commission guidance, SDG&E uses the latest California Energy Commission ("CEC") forecast consistent with the standardized planning assumptions authorized in D.12-01-033. SDG&E monitors its retail sales forecasts on a monthly basis to identify potential fluctuations and their impact on its RPS requirements.

b. Impact of Solar Panel Degradation

Contracts with solar photovoltaic ("PV") developers incorporate a degradation factor that is used to forecast the project's performance over time as the panels age and become less efficient. SDG&E utilizes the degradation factor provided by the bidder in its LCBF evaluation, and uses the contractual degradation factor when calculating project deliveries for its RPS position calculation (both nominal¹¹ and probability-weighted). To the extent deliveries are different than the provided estimates, SDG&E will adjust its RPS position calculation accordingly.

c. Impact of Key Transmission Upgrades and/or Infrastructure

Transmission availability has long been recognized as a potential barrier to achieving RPS goals, and SDG&E continues to monitor the progress of transmission upgrades on which

¹¹ Nominal RPS position refers to a position estimate assuming that deliveries from contracts will occur as expected 100% of the time.

SDG&E's RPS projects depend in order to assess potential delays and possible impacts. A more detailed discussion of transmission is provided under Section IV.

d. Impact of Contract Renewal

SDG&E began signing RPS contracts in 2003, most of which had terms of 20 years. Some of these contracts are expected to deliver through 2023, and may impact SDG&E's procurement needs post-2020. Some contracts for renewable energy procurement, however, were signed before the institution of the RPS program. Some of these contracts terminated during Compliance Period 2 and some are scheduled to terminate in Compliance Period 3. As part of its RPS position calculation, and in accordance with Commission direction,¹² SDG&E does not assume that these contracts will be renewed. Owners of these projects will be asked to bid such projects into future requests for offers ("RFO") to compete with other options available to SDG&E at that time, and these bids will be required to conform with the need identified in the then-current RFO.¹³ SDG&E believes that ratepayers will benefit from this additional supply being submitted into solicitations as this would make these solicitations more competitive and provide these facilities with the opportunity to extend their contracts past the original termination dates into later years when SDG&E has a need for additional resources. Additionally, as explained under Section B below, SDG&E may seek to extend the term of an existing contract when economically prudent.

e. Impact of Contract Termination

As part of its contract administration process, SDG&E actively monitors contractual requirements including conditions precedent that must be met (or waived) in order for the contract to be viable. When a condition precedent may not be met or has not been met, or when parties can mutually agree to a termination, SDG&E may consider terminating the contract if it is in the best interest of ratepayers.

f. Impact of Banking Rules

¹² Administrative Law Judge's Ruling on Renewable Net Short, issued May 21, 2014.

¹³ Qualifying Facilities with expiring RPS contracts may be able to sign a Standard Contract for Qualifying Facilities with a Power Rating that is Less than or Equal to 20 MW, which was approved by the Commission on November 23, 2011 as part of the Qualifying Facilities and Combined Heat and Power Program Settlement (the "QF Settlement").

Current RPS program rules allow SDG&E to bank excess procurement from one compliance period for use in another, with exceptions for short term contracts and products that meet the requirements of § 399.16(b)(3) (“Category 3”).¹⁴ SB 350 adopted a new set of banking rules, formalized in D.17-06-026. There are several key differences between the current and new SB 350 banking rules. Under the new SB 350 banking rules: (i) short-term Category 1 products can be banked;¹⁵ (ii) Category 2 products cannot be banked;¹⁶ and (iii) Category 2 and 3 products of any duration cannot be deducted from the bank.¹⁷ In accordance with Commission direction,¹⁸ SDG&E assumes for purposes of calculating its RNS that eligible excess procurement¹⁹ will be utilized in future compliance periods,²⁰ and it has updated its RNS table under Appendix 2 to comport with the new SB 350 banking rules, consistent with SDG&E’s election to utilize the new SB 350 banking rules beginning in CP3.

g. Impact of the Resale Market

SDG&E will closely monitor opportunities to sell excess procurement. SDG&E will assess the market when opportunities arise to determine whether it is more advantageous for SDG&E’s ratepayers to bank such excess procurement for use in a future compliance period or sell the excess procurement. If SDG&E believes that the current market price is favorable and expects that it will be able to fulfill any future needs with more economic options, it may choose to sell excess procurement instead of banking it²¹ if such a transaction is viewed to be in the best interests of its ratepayers. More detail is provided under Section B below and Appendix 10.B, attached hereto.

¹⁴ 399.13(a)(4)(B)(ii).

¹⁵ 399.13(a)(4)(B)(i).

¹⁶ 399.13(a)(4)(B)(ii).

¹⁷ The current banking rules, established by D.12-06-038 (see p. 66), require that bankable excess procurement be calculated by deducting all short-term RECs of any category from the total volume of bankable excess procurement. SB 350 expressly changes this by allowing the banking of short-term Category 1 products (399.13(a)(4)(B)(i)), and prohibiting the deduction of any Category 2 and 3 products when determining bankable excess procurement (399.13(a)(4)(B)(ii)).

¹⁸ *Administrative Law Judge’s Ruling on Renewable Net Short*, issued May 21, 2014.

¹⁹ Rules regarding excess procurement are set forth in D.12-06-038, and D.17-06-026.

²⁰ Note that SDG&E may manage excess procurement by selling such products when doing so would benefit ratepayers, or by utilizing a retired REC for RPS compliance in future compliance periods.

²¹ Note that banking a REC may either mean that the REC is held in SDG&E’s active WREGIS sub-account to be used later in its 36-month active lifespan, or it can mean that the REC is retired before its 36-month active lifespan ends and is then held in SDG&E’s retirement account for use in future compliance periods.

h. Impact of Rim Rock Settlement

In 2011, the Commission approved a settlement agreement between SDG&E, NaturEner Rim Rock Wind Energy, LLC, the Division of Ratepayer Advocates (“DRA”) (now known as the Office of Ratepayer Advocates (“ORA”)) and The Utility Reform Network (“TURN”) (together, the “Settling Parties”) regarding the Rim Rock wind project located in Montana.²² As part of the settlement agreement, SDG&E has agreed not to procure any incremental RECs from projects that are neither directly connected nor dynamically scheduled to a California-based Balancing Area Authority (“CBA”) if such purchase would cause SDG&E to meet more than 25% of its RPS requirements with such RECs through December 31, 2017. SDG&E currently includes generation from Rim Rock in its RNS calculation.

i. Impact of Mandated Procurement Programs

The Legislature has passed, and the Commission has been working to implement several renewable procurement programs mandated by State legislature: SB 43 (“Green Tariff Shared Renewables” or “GTSR”), SB 1122 (“Bioenergy Market Adjusting Tariff” or “BioMAT”), and the Renewable Market Adjusting Tariff (“Re-MAT”). The Commission implemented its own mandated renewable procurement program, the Renewable Auction Mechanism (“RAM”) program in 2010, as well as the Bioenergy Renewable Auction Mechanism (“BioRAM”) in 2016 in response to the Governor’s Emergency Proclamation to protect public safety and property from falling dead trees and wildfire (“Emergency Proclamation”).²³ These programs have resulted and will result in additional RPS procurement that SDG&E must include in its RNS calculation;²⁴ this will impact SDG&E’s position and procurement decisions. As explained under Section II.C, SDG&E anticipates that the recently codified IRP process signifies a shift away from separate programs and processes (including those discussed below), towards a holistic planning and procurement process. Further detail regarding the current mandated programs is as follows:

- Green Tariff Shared Renewables: SB 43 is intended to facilitate customer participation in offsite renewable generation facilities and became effective on

²² See D.11-07-002 and D.16-07-006.

²³ ACR, p. 16.

²⁴ SDG&E’s RNS calculation, attached hereto as Appendix 2, only includes programs that have been fully implemented.

January 1, 2014.²⁵ This bill requires participating utilities, including SDG&E, to file an application for a GTSR program, which would allow customers to buy some or all of their energy from local renewable projects. This bill also requires that SDG&E use “commission-approved tools and mechanisms to procure additional eligible renewable energy resources for the green tariff shared renewables program,” and states that “[a]ny renewable energy credits associated with electricity procured by a participating utility for the shared renewable energy self-generation program, but not utilized by a participating customer, shall be counted toward meeting that participating utility’s renewables portfolio standard.” SDG&E’s target for this program is 59 MW,²⁶ and this program is discussed in more detail below under Section XVII.

- BioMAT: SB 1122 became effective on January 1, 2013,²⁷ and requires that the Commission create a new feed-in-tariff (“FiT”) for bioenergy projects commencing operations after June 1, 2013, that are no larger than 3 MW in size. The goals of this new FiT program are to: (i) establish a rate based on quantifiable avoided cost, (ii) contain costs, (iii) ensure maximum value to the ratepayer and utility, and (iv) stimulate the development of in-state biogas. The Commission issued D.14-12-081 on December 26, 2014, setting forth the tariff and contract requirements. These documents were submitted to the Commission on February 9, 2015, and subsequently approved with certain modifications in D.15-09-004. SDG&E submitted the modified BioMAT documents as directed on October 19, 2015, began accepting applications for its BioMAT program on December 1, 2015, and the first program period was February-March of 2016. SDG&E’s target for this program is 24.68 MW.²⁸
- Re-MAT: The Re-MAT program began on October 1, 2013, and was offered to projects that are no larger than 3 MW in size on a first-come first-serve basis. The goals of this FiT program were similar to those of the BioMAT, ReMAT was intended to: (i) establish a rate based on quantifiable avoided cost, (ii) contain costs,

²⁵ Section 2831 *et seq.*

²⁶ D.15-01-051, p. 32.

²⁷ Stats. 2012, Ch. 612.

²⁸ D.14-12-081, p. 36.

(iii) ensure maximum value to the ratepayer and utility, and (iv) utilize locations close to load and the distribution system. In order to participate, a project was required to apply, and if SDG&E determined that a project was eligible, it would assign this project a Re-MAT Queue Number for the project's relevant Product Type (Baseload, Peaking As-Available, and Non-Peaking As-Available), and the project would then be able to indicate acceptance of the price for its Product Type. Capacity was offered incrementally on a bi-monthly basis in 3 MW increments to each Product Type Queue to the extent possible. SDG&E's target was 48.8 MW, less the amount contracted under SDG&E's prior FiT Programs (the Customer Renewable Energy ("CRE") FiT and the Water Agency Tariff for Eligible Renewables ("WATER") FiT.²⁹ Per Section F.3. of SDG&E's Commission-approved Schedule Re-MAT Tariff, its Re-MAT program ends for all Product Types 24 months after the first Product Type is fully subscribed or reaches a de minimis amount of capacity. SDG&E's Peaking As-Available Product Type was fully subscribed in Period 4, therefore SDG&E's Re-MAT program ended 24 months after the close of Period 4, on June 30, 2016. SDG&E posted notice regarding this future closure date in July of 2014 on both SDG&E's Company and Accion Re-MAT websites, and on July 1, 2016, updated these websites and informed all parties registered on SDG&E's Accion site that the Re-MAT program had closed effective June 30, 2016. On December 15, 2016, SDG&E filed Advice Letter ("AL") 3018-E to provide notice to the Commission of the closure of SDG&E's Schedule Re-MAT Tariff, effective June 30, 2016. This AL is pending before the Commission. Additionally, on December 15, 2017, the Commission directed the IOUs to not sign any new Re-MAT contracts pending next steps, as a result of the U.S. District Court for the Northern District of California's finding that the program does not comply with the Public Utility Regulatory Policies Act ("PURPA").

- Renewable Auction Mechanism: The Commission adopted the RAM program in December 2010 with the intent of creating a standardized method for procuring projects up to 20 MW in size in order to contribute to RPS goals in the near-term, and

²⁹ D.13-01-041, pp. 79-80.

reduce transaction costs for all parties. SDG&E's program target is 165 MW,³⁰ and SDG&E held seven RAM solicitations between 2011 and 2017. SDG&E's most recent AL 3151-E, detailing its RAM VII solicitation results, was approved by the Commission on December 21. The Investor Owned Utilities ("IOUs") were authorized in D.14-11-042 to utilize the RAM program for GTSR procurement,³¹ and as a streamlined procurement mechanism going forward.³² The RAM mechanism is discussed in more detail under Sections II.B and XVI.

- BioRAM: In response to Governor Brown's Emergency Proclamation to protect public safety and property from falling dead trees and wildfire the Commission issued Resolution E-4770 on March 17, 2016, requiring SDG&E to hold a solicitation targeting 10 MW of capacity from facilities that utilize biofuel from high hazard zones using the RAM procurement mechanism and standard contract. SDG&E issued its solicitation on June 28, 2016. This program is discussed in more detail under Section II.B.

j. Impact of Local Capacity Resource Needs

In D.14-03-004, the Commission authorized SDG&E to procure 500-800 MW of local capacity resources to be on-line by 2022 of which up to 600 MW could be from any source, and the remaining 200 MW from preferred resources or energy storage (including a required minimum of 25 MW of energy storage).³³ In D.15-05-051 (the Carlsbad Energy Center conditional approval decision), the Commission approved a power purchase tolling agreement ("PPTA") for the 500 MW Carlsbad Energy Center, which was 100 MW smaller than the 600 MW PPTA requested in SDG&E's application. The reduced contract capacity is "subject to the same per-unit price and other terms and conditions of the power purchase toll agreement ('PPTA') submitted with the application."³⁴ Additionally, D.15-05-051 mandated that "[a]ll of the 100 megawatts in residual procurement authority resulting from the reduction of the purchase power tolling agreement must consist of preferred resources and energy storage."³⁵ D.14-03-004

³⁰ SDG&E's previous target was 155 MW; however, D.14-11-042 (pp. 102-103) added 10 MW to this target.

³¹ D.15-01-051, p. 23.

³² D.14-11-042, p. 92.

³³ D.14-03-004, OP 2, p. 143.

³⁴ Carlsbad Decision at p. 36, OP 1.

³⁵ Carlsbad Decision at p. 37, OP 2.

also required that SDG&E submit a procurement plan within 90 days of the issuance of that decision. SDG&E complied with that requirement by submitting a conventional resource procurement plan and a preferred resources procurement plan to the Energy Division that were approved by the Director of the Energy Division on July 17 and July 22, 2014 respectively.

In accordance with these approved procurement plans, SDG&E has issued two solicitations. The most recent of which was SDG&E's 2016 Preferred Resources local capacity requirement ("LCR") solicitation, issued on February 26, 2016, seeking up to 140 MW of preferred resources from demand response, energy efficiency, energy storage, renewables or distributed generation. On April 19, 2017 SDG&E filed A.17-04-017 requesting approval of 88 MW of in-basin capacity (83.5 MW from energy storage, and 4.5 MW from Demand Response). SDG&E may issue another solicitation for preferred resources to fill any remaining 2022 LCR need (which can include renewable energy), in the future and to allow for sufficient time for approval.

k. Impact of Distributed Generation Policy Goals

The Governor's commitment to renewable distributed generation ("DG") continues to influence proceedings, programs, and legislation. This commitment will ultimately shape the State's renewable mix, and as load-serving entities ("LSEs") reach compliance, they may be required to shift procurement from utility-scale projects to small-scale DG projects. Two programs related to the Governor's policy position are the BioMAT and GTSR programs, discussed in more detail above, as well as in Sections II.B and XVII below. SDG&E is monitoring the legislative and policy activities related to this goal, and any potential impacts to its portfolio. Again, as explained under Section II.C, SDG&E anticipates that the recently codified IRP process signifies a shift away from separate programs and processes (including DG-specific programs), towards a holistic planning and procurement process.

l. Impact of Energy Storage Procurement

The Commission issued D.13-10-040³⁶ on October 1, 2013, requiring SDG&E to procure 165 MW of energy storage by 2020.³⁷ As required by D.13-10-040, SDG&E filed A.14-02-006 on February 28, 2014 detailing its Energy Storage Procurement Framework and Program for the

³⁶ This decision established the policies and mechanisms for procurement of electric energy storage pursuant to Assembly Bill 2514.

³⁷ D.13-10-040, *mimeo*, OP 3, p. 77.

2014 Biennial Procurement Period (“Energy Storage Procurement Framework”), which was approved by the Commission on October 16, 2014 via D.14-10-045. On March 1, 2016, SDG&E filed A.16-03-003, as required by D.13-10-040, detailing its energy storage procurement framework for the 2016 energy storage procurement cycle. Energy storage itself is not explicitly RPS-eligible, as explained in the 9th Edition of the CEC’s RPS Renewables Portfolio Standard Eligibility Commission Guidebook (“RPS Guidebook”).³⁸ However, to the extent SDG&E procures energy storage that, in the future the CEC determines is RPS-eligible, it will count this capacity towards its RPS targets.

m. Impact of California Energy Commission Requirements

The CEC revises its RPS Guidebook with relative frequency, which sometimes results in changes to eligibility requirements for various renewable energy resources. SDG&E monitors this process and works with CEC staff to determine the effects, if any, on its portfolio as a result of these periodic Guidebook revisions. The CEC is also tasked with verifying RPS procurement. SDG&E submits its procurement data from the prior year to the CEC annually by July 1 and is prepared to work with the CEC in its review process.

n. Impact of New Generator Interconnection and Deliverability Allocation Procedure

Under the California Independent System Operator’s (“CAISO’s”) Generator Interconnection and Deliverability Allocation Procedure (“GIDAP”) procedure, the CAISO will: (i) identify the needed transmission upgrades in its annual Transmission Planning Process (“TPP”); (ii) calculate the amount of transmission capacity (“TP Deliverability”) available; and (iii) allocate this TP Deliverability to eligible projects based on project viability. As a part of this process, projects seeking either Full or Partial Capacity Deliverability Status will be required to select Option A (indicating the need for ratepayer-funded deliverability upgrades), or Option B (indicating the willingness and ability to self-fund the necessary upgrades). The outcome of this TP Deliverability allocation process can affect projects in several ways if they select Option A. While projects choosing Option A will receive cash reimbursement for upgrades in accordance with their assigned cost responsibility, they may have to downsize, keep their project size and accept “Partial Capacity Deliverability Status,” convert to “Energy-Only Deliverability Status,” or withdraw from the interconnection queue if they do not receive a sufficient TP Deliverability

³⁸ RPS Guidebook, p. 40

allocation. A project's TP Deliverability allocation and the consequences associated with it could make it difficult for the project to secure financing, and it may also impact the project's ability to meet its contractual obligations, such as the project online date. SDG&E will closely monitor this process, and any effects it may have on its portfolio.

o. Impact of Departing Load

The State has recognized the potential for departing load from utility bundled service to alternative providers such as Electric Service Providers ("ESPs"), and Community Choice Aggregators ("CCAs"). The Commission held an En Banc regarding CCAs on February 1, 2017, and the Commission and the CEC held a joint En Banc on May 19, 2017, to discuss consumer retail choice in California. Additionally, the City of Solana Beach voted to begin the process to adopt a CCA program on May 24, 2017, the first city within SDG&E's service territory to do so.³⁹ Various other cities within SDG&E's service territory are actively exploring adoption of a CCA program as well, including the City of San Diego, which represents 43% of SDG&E's load.⁴⁰ If any cities form a CCA within SDG&E's territory, this will reduce its volume of retail sales, thereby impacting its RPS position. However, the overall impact to SDG&E is not isolated to the RPS program, but is in fact much broader as the current methodology for allocating costs to departing load, the Power Charge Indifference Amount ("PCIA"), is ineffective at maintaining bundled customer indifference as required by law.

With this larger impact in mind, the three IOUs together filed a joint Application⁴¹ requesting approval of the Portfolio Allocation Methodology ("PAM") for all customers. The PAM is a new methodology by which the costs and benefits of an IOU's procurement portfolio are fairly allocated among its departing load customers and remaining bundled customers. It is intended to replace the PCIA, which utilizes projected market costs and administratively-determined benchmarks without true-up mechanisms. The PCIA not only fails to ensure bundled customer indifference in the event of departing load, but it is also not scalable – the larger the volume of departing load, the larger the impact to remaining bundled customers. On the other

³⁹ <http://www.sandiegouniontribune.com/communities/north-county/sd-no-solana-beach-energy-20170525-story.html>.

⁴⁰ The City of San Diego published its CCA Feasibility Study in July 2017: https://www.sandiego.gov/sites/default/files/san_diego_cca_feasibility_study_final_draft_main_report_7-11-17.pdf.

⁴¹ A.17-04-018.

hand, PAM is based on actual market results and true-up mechanisms and scales seamlessly from low to high levels of departing load, including instances where departing load returns to bundled service. The IOUs proposed that PAM will take effect no sooner than one year from Commission approval through the next utility-specific Energy Resource Recovery Account (“ERRA”) Forecast proceeding (e.g., if approved in December 2017, PAM would be implemented in the Joint Utilities’ 2019 ERRA Forecast proceedings filed in 2018, with PAM rates in effect as of January 1, 2019), and requested Commission approval of the PAM Application by December 2017.

On June 29, 2017, the Commission adopted an Order Instituting Rulemaking (“OIR”) seeking to review the PCIA, the scope of which will include stakeholder work on the PCIA to date as well as language within SB 350 regarding customer indifference requirements under a departing load scenario. The OIR concludes that the Joint IOU PAM Application is premature, and dismisses it without prejudice, which means that the Joint IOUs are not precluded from proposing the PAM proposal as part of the OIR process. SDG&E looks forward to the expeditious resolution of the OIR and the Joint IOU PAM proposal, and will modify its future RPS Plans as appropriate to reflect the outcome of this work.

iii. Determination of the Compliance Needs for Each Compliance Period

After probabilities are assigned to each project, SDG&E’s RNS is calculated by multiplying the expected contractual deliveries (including degradation) by each contract’s probability weighting and then adding the resulting expected deliveries across the portfolio.⁴² The discussion below describes SDG&E’s current forecasted RNS for each compliance period based on its assessment as of June 2017.

D.14-03-004 authorizes SDG&E to procure resources to meet LCR needs by 2022. D.14-03-004 also directs that at least 25 MW of SDG&E’s authorization come from energy storage and at least 200 MW come from preferred resources or energy storage to be on-line by 2022. This authorization may result in new renewables contracts that can provide local capacity although no renewable contracts were signed as a result of the 2014 All Source solicitation or the

⁴² As explained above, SDG&E’s practice is to exclude contracts under-negotiation and estimates of deliveries from programs that are not yet fully implemented, and not to assume renewal for expiring contracts.

2016 Preferred Resources LCR RFO that followed from D.14-03-004. As explained above, SDG&E exceeded the 2020 goal of 33% renewable energy five years early (achieving 35% RPS in 2015), and SDG&E is currently forecasting 49% renewable energy by 2021, 98% of which will be from long-term contracts – therefore it is SDG&E’s expectation that it will be able to meet its CP2 and CP3 goals with RPS eligible procurement already under contract (as also explained below). Consistent with its assessment of supply (SDG&E’s delivering and developing contracts) and demand (SDG&E’s RPS targets in each CP),⁴³ the most reasonable course of action at this time is to refrain from soliciting new renewable resources via an RPS-specific solicitation in the 2017 procurement cycle. As also explained below, it is likely that SDG&E will not seek to hold an RPS RFO for the next several years given its current forecasted position. SDG&E notes that it continues to procure renewable energy projects under mandated procurement programs, such as the BioMAT and GTSR programs. SDG&E will seek permission from the Commission to procure any amounts, other than amounts separately mandated by the Commission, during the 2017 solicitation cycle.

Additionally, SDG&E continues to seek optimization opportunities, which may include the sale of RPS products via bilateral sales agreements and/or a request for proposals (“RFP”). These opportunities are market-driven. To the extent SDG&E determines that an RFP is necessary, it will issue the RFP attached hereto as Appendix 10. SDG&E will determine if a need for either a buy RFO or sales RFP exists at the time it files its final 2017 RPS Plan based upon updated information available at that time. More detail on SDG&E’s need in each compliance period is provided in Appendix 2.

a. Compliance Period 1 Procurement Needs

The compliance reporting process for CP1 is not yet complete. SDG&E reported all RECs used for CP1 compliance to the CEC on June 25, 2014, and to the Commission on August 1, 2014. As explained under Section IV, the Commission has also requested additional documentation to substantiate all retail sellers’ contract content categorizations. SDG&E will know the results of its CP1 RPS compliance efforts and any impact to its procurement needs once the CEC and Commission have completed their respective review processes.

b. Compliance Period 2 Procurement Needs

⁴³ See Appendix 2 for SDG&E’s RNS as well as its list of probability weighted deliveries from contracts presently delivering and developing.

Based on current projections, SDG&E expects that it will meet its CP2 RPS goals with generation from contracts that have been executed, together with the deliveries from utility-owned generation (“UOG”) initiatives where relevant progress has been made.⁴⁴ SDG&E intends to manage potential over-procurement by banking it for future compliance needs, terminating contracts when appropriate or where mutual agreement is reached, and/or selling such excess procurement.

c. Compliance Period 3 Procurement Needs

Based on SDG&E’s current probability-weighted RPS position forecast, SDG&E will likely not require additional procurement in CP3. It is important to note, however, that this outlook is based on current data, and procurement needs are difficult to forecast for periods beyond several years into the future. The level of any new purchases required for CP3 will be a function of portfolio performance and will be subject to the level of banking, if any, related to potential excess procurement in CP2 into CP3. SDG&E intends to fill any remaining RPS need with viable low-cost opportunities from future solicitations, bilateral transactions, and potential investments, and will continue to procure from mandated programs to the extent required. SDG&E intends to manage potential over-procurement by banking it for future compliance needs, terminating contracts where conditions precedent are not met or where mutual agreement is reached, and/or selling such excess procurement.

d. Post-2020 Compliance Period Needs

Based on SDG&E’s current forecast, SDG&E anticipates meeting its RPS requirements for each CP through 2030 with procurement already under contract. As with CP3 above, however, it is important to note that this expectation is based on data available to date. SDG&E may undertake additional procurement at some point in the future to ensure compliance, with the understanding that any resulting excess can be either banked or sold bilaterally or through an RFP. Additional discussion regarding the analysis of selling versus banking can be found in Section B below.

iv. Utility Tax Equity Investment and Utility Ownership Opportunities

SDG&E’s participation as a tax equity investor or utility owner in renewable generation and/or associated transmission projects may enhance project viability (through securing of financing) and may decrease costs for ratepayers (given SDG&E’s cost of capital relative to the

⁴⁴ This analysis includes SDG&E’s Solar Energy Project.

renewable financing market). SDG&E may consider additional investment opportunities where: (a) its involvement might enhance the viability or cost competitiveness of a project; and/or (b) where a project may have a positive socioeconomic impact, potentially involving a Diverse Business Enterprise (“DBE”).

Additionally, SDG&E has also undertaken the construction of renewable energy facilities, for example under the Solar Energy Project program. SDG&E will complete this program with the commercial operation of the 4.95 MW(dc) Ramona Solar Project.⁴⁵

v. System Requirements

A wide variety of procurement programs exist both within the RPS program, as well as in addition to the RPS program that will contribute to SDG&E’s overall portfolio diversity. An overview of mandated RPS procurement programs is provided above, as is a discussion of SDG&E’s recent preferred resources solicitation, and Section X below includes information on SDG&E’s flexible capacity and storage procurement efforts. Together, these sections clearly address how SDG&E will increase the diversity of its portfolio and how such increase will contribute to ratepayer value.

Another factor that will influence SDG&E’s portfolio diversity as well as help to appropriately address integration and overgeneration is the LCBF calculation that SDG&E will use to select shortlisted projects. The LCBF document is attached hereto as Appendix 9. The methodology outlined in this document includes the interim integration adder, the application of which will ensure that integration is factored into bid evaluation, with the objective of selecting a diverse portfolio in consideration of system needs. The LCBF document also contains qualitative evaluation metrics described in Appendix 9, which play a part in selecting a diverse portfolio.

Additionally, SDG&E’s 2017 Plan includes a section dedicated to economic curtailment, Section X, which outlines how SDG&E proposes to address the integration of renewables and the issue of overgeneration, both of which can contribute significantly to the incidence of economic curtailment. This section includes a discussion of SDG&E’s analysis and activities, as

⁴⁵ Approved by D.08-07-017. SDG&E was authorized to build up to 26 MWs of distributed utility-owned solar PV at a cost cap of \$3.50/W(dc). SDG&E held an RFP in the fall of 2011 and executed a contract for up to a total of 17 MW at eight sites owned by SDG&E. To stay under the cost cap, the number of projects were subsequently reduced due to permitting, site, and contractor issues. SDG&E held another RFP in the spring of 2015, and no contracts were executed as a result of the RFP.

well as information regarding contract modifications SDG&E has made over time to address curtailment. SDG&E notes that the ACR expresses an interest in how SDG&E is addressing the “under-utilization” of renewable energy. This term implies that renewable energy is not being used to the extent possible when generated, which is not the case. As explained further under Section X, renewable generation is not load-following, and as such can result in overgeneration. One way to address overgeneration is through the use of energy storage. Section X includes an update on the status of SDG&E’s energy storage portfolio, as well as more detail regarding the potential of this technology to address overgeneration, which is responsive to the ACR’s interest.

The various procurement activities and continued refinement of both the project valuation methodology and contract are undertaken on behalf of SDG&E’s ratepayers to ensure that they receive a reliable and cost-effective portfolio of generation.

B. Portfolio Optimization Strategy

SDG&E’s optimization strategy is designed to allow SDG&E to meet and maintain its RPS compliance, while minimizing ratepayer costs, maximizing portfolio value and managing risk. SDG&E approaches this task from a variety of angles as described below. SDG&E’s optimization strategy is aimed at ensuring an optimal cost-effective portfolio mix based on technology, location, and contract length. SDG&E continually assesses opportunities to increase the value of its existing portfolio of contracts, and the investment in SDG&E’s RPS bank in order to continually mitigate potential compliance, financial, and cost-allocation risks.

i. RNS Optimization

The first step in SDG&E’s portfolio optimization strategy is to determine its RPS need. As outlined above, the probability of success and/or the expected generation of each of the projects in SDG&E’s portfolio is revised monthly in an interdepartmental meeting using the most current information. The result of this comprehensive review is a calculation of SDG&E’s forecasted RPS position, which is then compared with SDG&E’s RPS compliance requirements to determine its RNS. SDG&E uses this RNS to determine the appropriate level of procurement, including the necessary margin of over-procurement, going forward. Generally, if SDG&E were to foresee a shortfall it will then procure additional resources; if it foresees an excess then it may sell a portion or all of this excess pending the results of a detailed cost and benefit analysis of banking versus selling. Once SDG&E has determined its need, it proceeds to manage its

procurement by continually reviewing its portfolio to minimize costs, maximize value and manage risk.

The *Administrative Law Judge's Ruling on Renewable Net Short*, issued May 21, 2014, included specific questions regarding the RNS calculation and assumptions. Responses to these questions are set forth below:

- a. *How do current and historical performance of online resources in your RPS portfolio impact future projections of RPS deliveries and your subsequent RNS?*

An explanation of SDG&E's methodology for forecasting project deliveries can be found in Section II(A)(i).

- b. *Do you anticipate any future changes to the current bundled retail sales forecast? If so, describe how the anticipated changes impact the RNS.*

An explanation of SDG&E's methodology for forecasting bundled retail sales can be found in Section II(A)(ii)(a).

- c. *Do you expect curtailment of RPS projects to impact your projected RPS deliveries and subsequent RNS?*

Curtailment is discussed in Section X.

- d. *Are there any significant changes to the success rate of individual RPS projects that impact the RNS?*

The average success rate of SDG&E's contracts currently in effect is discussed in Section II(A)(i), and the success rates of individual projects are shown in Appendix 2.

- e. *As projects in development move towards their COD, are there any changes to the expected RPS deliveries? If so, how do these changes impact the RNS?*

The average success rate of SDG&E's contracts currently in effect is discussed in Section II(A)(i), and the success rates of individual projects are shown in Appendix 2.

- f. *What is the appropriate amount of RECs above the PQR ("Procurement Quantity Requirement") to maintain? Please provide a quantitative justification and elaborate on the need for maintaining banked RECs above the PQR.*

SDG&E's current level of RECs above its PQR is discussed in Section VII, and is shown in Appendix 2.

- g. *What are your strategies for short-term management (10 years forward) and long-term management (10-20 years forward) of RECs above the PQR? Please discuss any plans to use RECs above the PQR for future RPS compliance and/or to sell RECs above the PQR.*

An explanation of SDG&E’s methodology for managing RECs above the PQR can be found in Sections II(B)(ii)(d) and II(B)(ii)(e).

- h. *Provide a voluntary margin of over-procurement (“VMOP”) on both a short-term (10 years forward) and long-term (10-20 years forward) basis. This should include a discussion of all risk factors and a quantitative justification for the amount of VMOP.*

A discussion of risk factors affecting RPS procurement can be found in Sections IV and V, and SDG&E’s current level of RECs above its PQR is discussed in Section VII and is shown in Appendix 2 (see row Ga).

- i. *Please address the cost-effectiveness of different methods for meeting any projected VMOP procurement need, including application of forecast RECs above the PQR.*

An explanation of SDG&E’s methodology for managing RECs above the PQR can be found in Sections II(B)(ii)(d) and II(B)(ii)(e).

- j. *Are there cost-effective opportunities to use banked RECs above the PQR for future RPS compliance in lieu of additional RPS procurement to meet the RNS?*

An explanation of SDG&E’s methodology for managing RECs above the PQR can be found in Sections II(B)(ii)(d) and II(B)(ii)(e).

- k. *How does your current RNS fit within the regulatory limitations for PCCs? Are there opportunities to optimize your portfolio by procuring RECs across different PCCs?*

An explanation of the content categorization of SDG&E’s portfolio can be found in Section II(A)(iii)(a), and an explanation of SDG&E’s methodology for optimizing procurement across content categories can be found in Section II(B)(iv)(a) and (d).

ii. Cost Optimization

Cost optimization begins before a contract is executed, with contract analysis methodology development and adoption. Once this analysis methodology is utilized and a contract is executed, if an opportunity to optimize this contract becomes apparent, SDG&E will investigate it to determine the best course of action for ratepayers.

a. Least-Cost Best-Fit Analysis

SDG&E carefully analyzes bids and bilateral proposals according to its LCBF methodology. This methodology is intended to optimize SDG&E's procurement decisions by minimizing cost and maximizing value. It includes analysis of the PPA price, which inherently includes the counterparty's interest, carrying, and transaction costs. The analysis also takes into account the energy and capacity value provided by each of the projects, congestion costs, and transmission costs. The LCBF process results in the quantification and subsequent ranking of the cost and benefits of each bid based on these metrics. The formula deducts the PPA Price ("Levelized Contract Cost"), Transmission Cost, Renewable Integration Cost Adder ("RICA"), and Congestion Cost from the sum of the Energy Benefit and Capacity Benefits to determine a project's Net Market Value ("NMV"). These NMVs can then be compared and used to create a quantitative ranking. SDG&E then evaluates any identifiable qualitative aspects, such as DBE status, project viability, developer experience, and portfolio fit to determine the shortlist. The projects that are placed on the shortlist will have the lowest combined net cost and best portfolio fit when compared with other bids from the particular solicitation. D.14-11-042 directed several changes to the LCBF methodology, and these changes have been included in the LCBF methodology attached hereto as Appendix 9.⁴⁶ SDG&E revises its LCBF methodology as necessary to incorporate new information, such as through the outcome of the LCBF review process currently underway at the Commission, as discussed in Section IV.

b. Revision of Time of Day Factors and Periods, and Capacity Values

Integral to the LCBF calculation are the Time-of Day ("TOD") factors and periods, and Capacity values. SDG&E utilizes forward market conditions to calculate the TOD factors and periods as well as the Capacity values. These data points assist in providing a comparison between bids that is based on the best information available at the time of bid evaluation. As the forward market evolves, SDG&E will continue to assess the TOD factors and periods, and Capacity values, and prior to the issuance of any RPS solicitation, may update those factors, time periods, and values so that they are consistent with the latest forecasts.

c. Contract Management

SDG&E continually monitors its existing contracts and seeks to improve their performance for the benefit of customers. SDG&E may attempt to negotiate a modification to a

⁴⁶ D.14-11-042, pp. 16, 19, 49, 61-63.

contract to meet its current portfolio needs, for example, by allowing an alternate termination date⁴⁷ or a change in contract volumes.⁴⁸ SDG&E may also have the opportunity to secure increased value from an RPS resource by adjusting terms of an existing contract, such as by extending the contract term of a relatively inexpensive contract or by moving the project site to a location that provides greater capacity benefits. SDG&E is also active in modifying contract terms to incorporate economic curtailment rights. SDG&E's PPA also allows for the right to review and accept or reject proposed material changes to a generating facility at its sole discretion.⁴⁹ SDG&E is also willing to consider arrangements involving existing contracts that would improve counterparty financing options, thereby increasing the probability of project success. If opportunities such as these present themselves, SDG&E will perform a detailed analysis of the costs and benefits associated with making such a change, and if it determines that the proposed changes would result in more value for ratepayers it will pursue these options. Finally, SDG&E has made efforts to streamline its mid-office process with respect to tracking the progress of contracts under construction by revising the RPS PPA Milestone Schedule (Exhibit B) to remove unnecessary checkpoints. These optimization methods provide SDG&E with flexibility in managing its portfolio and therefore portfolio costs.

d. Banking vs. Sales Analysis

Another optimization tool related to contract management is the analysis of the option to bank or sell excess procurement.⁵⁰ When SDG&E has excess RPS procurement in its portfolio, it will perform an analysis of both the short-term and long-term quantitative and qualitative costs and benefits associated with either banking this excess, or selling it. The quantitative portion of the valuation includes consideration of SDG&E's RPS position, the time value of revenues from the potential REC sale, and the potential replacement cost. The qualitative portion includes consideration of the impact on market liquidity and SDG&E's RPS position. If SDG&E determines that banking would provide the most value to SDG&E's ratepayers, then this optimization method will be used. If it finds that a sale would provide customers with more

⁴⁷ For example, in Resolution E-4587, the Commission approved a contract amendment that established an earlier termination date for an existing RPS contract.

⁴⁸ SDG&E will seek approval of any contract modifications pursuant to Commission direction.

⁴⁹ D.14-11-042, *mimeo*, p. 29.

⁵⁰ SDG&E's excess procurement is SDG&E's VMOP (discussed in more detail under Section VII).

value, then this optimization method will be chosen. SDG&E will reflect current industry best practices in its sales contracts.⁵¹ For more information regarding SDG&E's Sales Framework, please see Appendix 10.B.

e. Retirement Analysis

There is a significant link between SDG&E's banking versus sales analysis and its retirement analysis where SDG&E evaluates its compliance position and strategy to ensure that RECs are handled in the most cost-effective way in both the short-term and long-term for SDG&E's ratepayers. SDG&E's retirement decisions include consideration of its RPS position and the 36-month shelf-life of the RECs. SDG&E also considers the time value of the impact of potential revenues or additional RPS procurement on rates for bundled customers when making the decision to buy, sell, bank, or retire RECs.

iii. Value Optimization

In addition to its contract analysis and management strategies, SDG&E also seeks to add value to the RPS procurement process by actively participating in the discussion of current and proposed procurement programs, and by evaluating unique procurement opportunities.

a. RAM Program

SDG&E has actively participated in discussions regarding the future of this program, and has provided recommendations regarding the continued availability of a streamlined procurement process for small to mid-sized RPS projects on an as-needed basis. The Commission ultimately addressed the future of RAM in D.14-11-042, where it determined that "the original objectives of RAM have been met... [however, as] suggested by SDG&E and [the Office of Ratepayer Advocates]... RAM may provide the IOUs with a procurement tool to facilitate more streamlined procurement for RPS needs... [therefore] starting with the 2015 annual RPS procurement plans filings, the utilities shall include, at the discretion of the utility, RAM as a streamlined procurement tool."⁵² SDG&E intends to utilize the RAM tool on an as-needed basis

⁵¹ In Resolution E-4572, the Commission approved SCE's request to enter into a 19.5-month renewable energy sales contract with Energy America LLC. Contractual deliveries began on May 15, 2012, and the contract was filed with the Commission on July 6, 2012. The Commission also approved, in Resolution E-4639, PG&E's request to enter into two overlapping renewable energy sales agreements for a period of approximately 1 month and 9 days with Tenaska Power Services Company. Contractual deliveries began November 22, 2013, and the contract was filed with the Commission on December 19, 2013. In order to provide maximum flexibility and value to customers, SDG&E will also consider opportunities where deliveries begin before the contract is submitted and approval is granted retroactively.

⁵² D.14-11-042, *mimeo*, pp. 91-92.

to efficiently procure low cost RPS resources, as discussed in Section XVI below, and believes that the flexibility provided by the Commission in allowing the IOUs to utilize RAM as a need-based procurement tool provides a benefit not found in mandated procurement – proper alignment with actual procurement need. As explained under Section II.C, SDG&E anticipates that the recently codified IRP process signifies a shift away from separate programs and processes (including a stand-alone RAM program), towards a holistic planning and procurement process.

b. BioMAT Program

SDG&E has actively participated in the development of the BioMAT program by providing program design recommendations intended to contain costs and protect ratepayers. As explained above, the first auction was the period of February-March of 2016. Additionally, as explained under Section II.C, SDG&E anticipates that the recently codified IRP process signifies a shift away from separate programs and processes (including stand-alone Feed-in Tariffs), towards a holistic planning and procurement process.

c. BioRAM Program

On October 30, 2015, Governor Brown issued an Emergency Proclamation (the “Proclamation”) to protect public safety and property from falling dead trees and wildfire. In response, the Commission issued Resolution E-4770 (the “BioRAM Resolution”) which directs the IOUs to procure 50 MW of biomass from high hazard fire zones through an expedited solicitation using the RAM mechanism. The BioRAM Resolution allocated SDG&E a capacity target of 10 MW.⁵³ As explained in the BioRAM Resolution, the Governor’s goal is to see contracts executed with bioenergy facilities using high-hazard feedstock in 2016. Pursuant to this expectation, the Commission directed the IOUs to launch one targeted RAM solicitation (“BioRAM I”) by July 1, 2016 (which SDG&E did on June 28, 2016), and also lifted SDG&E’s bilateral contract prohibition during the 2015 RPS solicitation cycle (which is the year 2016) for the narrow purpose of fulfilling the Proclamation’s objectives.⁵⁴

Subsequent to the BioRAM Resolution, the California Legislature passed Senate Bill (“SB”) 859, and Governor Brown, signed SB 859 into law on September 14, 2016.⁵⁵ SB 859

⁵³ This allocation is at issue in an application for rehearing (“AFR”) filed by SDG&E on April 18, 2016.

⁵⁴ BioRAM Resolution, pp. 5, 7.

⁵⁵ http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB859

developed a new, similar requirement for electrical corporations to procure their respective shares of 125 MW from existing biomass facilities using similar prescribed amounts of dead and dying trees in high hazard fire zones as feedstock. SB 859 also allows capacity procured in excess of the BioRAM I solicitation requirement to apply toward the SB 859 requirement. In addition, SB 859, at Public Utilities Code §399.20.3(f), requires that the procurement costs to satisfy this requirement be recovered from all customers on a non-bypassable basis. On October 21, 2016, the Commission issued Resolution E-4805 to implement the requirements of SB 859. Resolution E-4805 allocated 9 MW of additional capacity to SDG&E, with the option to fulfill this procurement mandate through excess capacity signed in the BioRAM I solicitation, bilateral contracting, or a second BioRAM solicitation. On November 14, 2016, the IOUs filed A.16-11-005 to create a new Tree Mortality Non-Bypassable Charge (“Tree Mortality NBC” or “TM NBC”) to track the procurement costs incurred by the IOUs as directed by Resolutions E-4770 and E-4805. A prehearing conference on this matter was held on June 23, 2017.

The BioRAM program is for a specified purpose in 2016 only and for this reason SDG&E has not included BioRAM solicitation documentation in its 2017 RPS Plan as it does not plan to hold subsequent BioRAM solicitations. From its BioRAM I solicitation, SDG&E submitted AL 3002-E seeking approval of a 24 MW BioRAM PPA which meets both its Resolution E-4770 and E-4805 capacity targets. The advice letter was approved via disposition letter and effective December 16, 2016.

SDG&E has actively participated in the development of the BioRAM program by providing program design recommendations intended to contain costs, protect ratepayers, and ensure that bundled ratepayers are not left to shoulder the entire cost of this program. The BioRAM is intended to address a public safety issue and benefits the entire state of California, accordingly, the cost of this program is most appropriately allocated through a non-bypassable charge to be included in the Public Purpose Program (“PPP”) surcharge rate to guarantee that all beneficiaries pay their fair share. On April 18, 2016, SDG&E filed a PFM of D.10-12-048 (the “RAM Decision”) to enable all contract-related costs incurred by SDG&E as part of the BioRAM program to be allocated to all benefitting customers through a new non-bypassable charge (a “BioRAM NBC”) to be included in the PPP surcharge rate and billed based on delivered energy. On December 1, 2016, the CPUC, via consent agenda, approved Administrative Law Judge Simon’s proposed decision which denied SDG&E’s April 2016 PFM

of the RAM Decision and required applications (A.16-11-005) to be filed to allocate costs for procurement pursuant to the BioRAM through a tree mortality nonbypassable charge.

Lastly, on April 18, 2016, SDG&E filed two separate AFRs of the BioRAM Resolution alleging: (i) the CPUC erred by allocating 10 MW of the 50 MW BioRAM program capacity to SDG&E instead of the roughly 10% allocation that SDG&E has been allocated in RAM and other renewables programs (based on proportion of statewide load); and (ii) the CPUC erred by not implementing a Cost Allocation Mechanism (“CAM”) or other nonbypassable charge when clearly all customers benefit from increased electric reliability due to the procurement of BioRAM resources that are meant to mitigate fire risks. On August 18, 2016, the CPUC Commissioners denied SDG&E’s AFR’s on BioRAM cost allocation and capacity allocation.

d. Tax Equity

As explained above, SDG&E evaluates tax equity opportunities as a procurement option and assesses the value of its involvement. SDG&E may participate in this type of project if its participation would either augment the probability of project success or cost competitiveness of a project, and/or lead to a positive socioeconomic impact, for example potentially involving a DBE.

e. Utility Ownership

SDG&E evaluates utility ownership opportunities as a procurement option and assesses the value of its involvement. SDG&E may participate in this type of project if its participation would either augment the probability of project success or cost-effectiveness of a project, and/or lead to a positive socioeconomic impact, for example potentially involving a DBE.

f. Bilateral Transactions

SDG&E will enter into bilateral purchase or sales agreements to the extent that these transactions benefit ratepayers. Not all products are well-suited for the RFO process due to, for example, deal timing and/or complexity. The ability to contract bilaterally is a valuable tool in maximizing value to ratepayers – it is useful in addressing an unforeseen need in a timely manner and also allows an IOU to take advantage of opportunities that are too complex to solicit through an RFO, such as tax equity, utility ownership, or buy/sell transactions. In addition, the ability to engage in bilateral deals is necessary from a practical perspective; bilateral deals assist market development by offering an additional sales option, making project development less dependent on RPS solicitation cycles.

iv. Risk Optimization

SDG&E addresses risk optimization through several long-term and short-term strategies to mitigate this risk, and also seeks to add value by actively participating in discussions regarding compliance and enforcement rules.

a. *Category 1 Procurement*

While SDG&E faces some degree of risk related to a procurement deficit – and therefore, as explained herein, regularly reviews its RNS so that it has the best information available with which to manage its portfolio towards compliance – the most significant non-compliance risk faced by SDG&E relates to contract categorization under § 399.16(b)⁵⁶ – *i.e.*, the risk that SDG&E’s categorization of the contracts in its portfolio will not be accepted by the Commission. SDG&E has expressed this concern verbally and in comments to the Commission filed in R.11-05-005. This concern will be alleviated somewhat after CP1 compliance has been determined, as many of the CP1 contracts span several compliance periods. Thus, any change in categorization of these contracts can be reflected going forward, and any discrepancies will have been explained and can be used to inform categorization determinations in the future. In the meantime, however, this uncertainty constrains SDG&E’s procurement activities and as a conservative measure, SDG&E’s long-term strategy is to continue to emphasize the procurement of products it considers to be Category 1.

b. *Voluntary Margin of Over-procurement*

A second long-term procurement strategy utilized by SDG&E is the adoption of a “buffer” or Voluntary Margin of Over-procurement (“VMOP”)⁵⁷ to ensure to the extent possible that SDG&E is able to reach its RPS goals, as explained in more detail below under Section VII which describes SDG&E’s VMOP formula. Project development can present challenges which must be accounted for when determining need, and in combination with the constant fluctuation

⁵⁶ For reference, the categories are as follows: (i) Category 1 is a bundled (energy + REC) product, (ii) Category 2 is a firm-and-shaped product, and (iii) Category 3 is an unbundled product (REC only).

⁵⁷ 399.13(a)(4)(D):

(4) The commission shall adopt, by rulemaking, all of the following...

(D) An appropriate minimum margin of procurement above the minimum procurement level necessary to comply with the renewables portfolio standard to mitigate the risk that renewable projects planned or under contract are delayed or canceled. This paragraph does not preclude an electrical corporation from voluntarily proposing a margin of procurement above the appropriate minimum margin established by the commission.

of RPS targets (based on retail sales), as well as continual changes in RPS deliveries, it is essentially impossible to meet the RPS targets exactly. SDG&E undertakes conservative VMOP procurement as a prudent measure to guard against any unforeseen events that may impact its portfolio and jeopardize compliance.

c. Short-term Contracts

Due to unforeseen events, a situation may occur in which SDG&E needs to procure a small amount of renewable energy in the near-term. In this scenario, short-term contracting is a viable strategy as it allows SDG&E to respond quickly to a sudden change in portfolio status and manage a short-term need without entering into an unnecessary long-term commitment.

d. Category 3 Procurement

SDG&E may consider Category 3 procurement to the extent that such products are shown to be cost-effective and a need for additional procurement becomes evident. However, SDG&E also intends to maintain enough room below its Category 3 procurement limits to ensure that Category 3 procurement is a potential strategy in the short-term should SDG&E need to procure to fill any unforeseen immediate need.

C. Lessons Learned & Trends

The following sections discuss how trends and lessons learned over the past several years impact RPS procurement, and illustrate how SDG&E accounts for these factors in its RPS plan and procurement activities.

i. Lessons Learned

a. Overbuilding

As described in SDG&E's 2013, 2014, 2015, and 2016 RPS Plans, SDG&E is concerned that developers have provided profiles in prior solicitations that ultimately do not match the profiles of the facilities that are built,⁵⁸ in other words, developers have "overbuilt" facilities (i.e., installed capacity above the amount bid and/or shaped the production profile to take advantage of higher-priced TOD periods). The resulting overgeneration has increased costs to customers through increased contract costs, and increased generation overall which increases the incidence of and payments for negative real-time energy pricing. In response to this observation,

⁵⁸SDG&E 2013 RPS Plan, p. 37. SDG&E 2014 RPS Plan, p. 25. SDG&E 2015 RPS Plan, p. 25. SDG&E 2016 RPS Plan, p. 28.

SDG&E modified its PPA to include a maximum limit on generation during each TOD period, which the Commission approved as a part of SDG&E's 2013 RPS Plan. SDG&E also made several changes to its PPA in its 2015 RPS Plan⁵⁹ in an effort to address overbuilding through stronger generation caps.⁶⁰ SDG&E acknowledges that the grid landscape is changing and will continue to reevaluate its contract provisions in subsequent versions of the plan, as new information becomes available, to determine if and how its contracts should be updated.

b. Peak Shifting

As a result of the success of the RPS program, a significant amount of solar and wind energy has been added to the grid, and much more appears likely to come online before 2020. These renewable resources are very low variable cost resources that (at high penetration levels) will cause significant reductions in marginal prices in periods when they operate. Substantial amounts of rooftop solar are also being added by customers behind the meter. A large amount of variable resource penetration during any single time during the day may result in significant decreases in marginal energy prices and even significant ramping events. As a result of increased renewable generation in Southern California, the peak load net of variable energy resources has shifted and will continue to shift as the California resource portfolio evolves. As market conditions develop, it is important that SDG&E's TOD factors and time periods, which will be used for analysis purposes, reflect the most up-to-date information to provide ratepayers with the greatest value. SDG&E updated its TOD periods in the 2013 RPS Plan, as well as the TOD factors based on the market conditions, to reflect the shift in timing and magnitude of energy and capacity and will continue to do so as market conditions change. SDG&E's LCBF document, attached hereto as Appendix 9, includes the most recent TOD factors which were calculated as of June 2017.

c. Capacity Value

SDG&E's method for calculating energy and capacity values uses a benchmark where energy values are shaped hourly based on a forecast of SP15 energy prices and the results of

⁵⁹ SDG&E 2015 RPS Plan, pp. 25-28.

⁶⁰ SDG&E also proposed to change its TOD factors to 1 in all contracts going forward in 2014 to reduce the incentive to overbuild (SDG&E Draft 2014 RPS Plan, pp. 25-26), and in 2015 explained that although stronger generation caps may be more effective at addressing overbuilding, TODs of 1 in the contract would provide price transparency and avoid sending the wrong price signals over time (SDG&E Draft 2015 RPS Plan, pp. 28-29). The Commission rejected SDG&E's recommendations in both instances and deferred this issue to LCBF Reform (D.14-11-042, p. 26; D.15-12-025, p. 93).

production cost modeling that yields a year 2022 hourly energy shape. The capacity value is shaped hourly using a year 2022 Loss-of-Load Probability (“LOLP”) study. The process assigns higher capacity value to hours of greater capacity need, which more accurately reflects the impact of variable energy resources upon capacity needs.

The annual capacity values are based on the following:

- For Local Area Projects: the Marginal Generation Capacity Cost of \$120/kW-year,⁶¹ which is intended to provide a proxy for the net cost of new entry, as discussed in Section 3 of the Revised Prepared Direct Testimony of David T. Barker, Chapter 5, On Behalf of SDG&E in connection with Application 11-10-002 (Application of SDG&E For Authority To Update Marginal Costs, Cost Allocation, And Electric Rate Design).
- For IV Area Projects and System Area Projects: the CPUC penalty of \$40/kW-year⁶² associated with failure to meet system RA requirements.

These annual values are then taken through a process which creates monthly capacity values using the LOLP mentioned above, then down to an hourly level using the monthly values.

These benchmark values are reasonable because, when evaluating a contract on a standalone basis, it should be measured against the avoided costs the utility might face had this contract not been part of the portfolio. For example, if SDG&E had a resource in its portfolio, and that resource was crucial to meeting local resource adequacy requirements, the marginal value of that resource is the amount that SDG&E must pay to replace that resource if it becomes unavailable plus the cost to replace the energy that resource would have generated in order to serve hourly retail load. SDG&E will update its calculations as the assumption sources are updated.

d. Distributed Generation Deliverability

The CAISO conducts an annual assessment methodology for determining and allocating RA deliverability to DG resources at locations that do not require any yet-to-be-approved network transmission upgrades. The assessment is coordinated with the CAISO’s

⁶¹ Note that this value will need to be updated from time to time in correlation with market trends. The current value of \$120/kW-year is in 2012 dollars and a 2.5% annual escalation rate is applied to calculate the value beyond 2012.

⁶² CPUC 2014 Filing Guide for System, Local and Flexible Resource Adequacy (RA) Compliance Filings, p. 27.

interconnection procedures and the CAISO's transmission planning process. The initiative is in support of California's goal of 12,000 MWs of DG by 2020.⁶³

The CAISO performed the 2016-2017 Distributed Generation Deliverability ("DGD") assessment to determine MW quantities of Potential DGD at specific nodes of the CAISO Controlled Grid for assigning deliverability status to DG Facilities.⁶⁴ The 2016-2017 DG deliverability assessment results indicate that a total of 1,950.46 MWs of Potential DGD is available at locations on the CAISO grid for assignment of deliverability status to DG resources connected or requesting interconnection below those locations.

There were 27 locations studied for Potential DGD in the SDG&E service territory. A total of 28.48 MW of Potential DGD is available at the studied nodes including the Potential DGD that was identified but not assigned in the previous DGD cycle. DG resources interconnected, or seeking interconnection, to the Distribution System of an IOU Participating Transmission Owner may apply to the applicable IOU Participating Transmission Owner to be eligible to receive a Deliverability Status assignment in the current DG Deliverability Assessment cycle.

The study model used by the CAISO for the DGD assessment incorporates the most recent CAISO generation interconnection deliverability assessment base case and is a snapshot in time. SDG&E plans continued monitoring of this annual assessment and will make existing and potential distribution-level resources aware of the need to apply for a potential assignment of deliverability.

e. Delay of COD Declaration

SDG&E is concerned that a facility could reach commercial operation prior to the contractual commercial operation date ("COD"), but delay declaring COD until the COD date in the contract. As a result, the facility would be paid for this energy at the contract price, thereby extending the term of its contract, resulting in an additional cost to ratepayers. To mitigate this issue, SDG&E adjusted its PPAs in its 2015 RPS Plan to change the price paid for energy delivered prior to COD to a fixed REC value plus CAISO revenues net of CAISO costs. This

⁶³ See

<http://www.caiso.com/informed/Pages/StakeholderProcesses/DeliverabilityforDistributedGeneration.aspx>

⁶⁴ <http://www.caiso.com/Documents/2017DeliverabilityforDistributedGenerationStudyResultsReport.pdf>

will incentivize developers to declare COD once it is reached, rather than delaying COD to earn extra revenue.

ii. Trends

a. Steady Project Success Rates

As the market for renewable energy has matured, SDG&E has observed a positive trend in the success rate of achieving commercial operations of the projects in its current RPS portfolio. As explained above, SDG&E reviews project success rates on a monthly basis to incorporate the most recent information and will continue this practice.

b. Expansion of RA Products

The RA program is currently the subject of Commission rulemaking (“R.”) proceeding R.14-10-010. The Effective Load Carrying Capability (“ELCC”) methodology for Net Qualifying Capacity (“NQC”) values of wind and solar resources starting in the 2018 compliance year was adopted in D.17-06-027, issued on July 7, 2017. The current methodology calculates the NQC values based on seventy percent (70%) exceedance of historical actual output during a specified set of hours each month. The ELCC methodology measures the resource’s contribution towards reliability throughout all hours of the year rather than a set of hours of the exceedance methodology. Solar resources are expected have a lower NQC value while wind resources will have a higher value when compared to their current NQC values. This is consistent with the fuel source of each resource type throughout the day. The impact of ELCC on the State’s total supply of RA capacity is expected to decrease as there is more installed solar capacity than wind capacity. However, the effect on the bilateral market is unknown at this time.

The Commission also adopted the continuation of the interim flexible capacity product under D.17-06-027 as the durable flexible capacity framework is not yet ready for adoption. The CAISO continues to refine its needs of the physical attributes as more renewable resources are integrated into the energy markets. SDG&E is monitoring the active Commission RA proceeding to determine the impact any applicable decisions will have on SDG&E’s procurement practices.

c. Multiple RPS Contract Versions Across Programs

SDG&E has noted that as the volume of mandated programs has increased, so have the number of contract versions that must be managed. At this time, there are six distinct PPAs for

RPS products, all with separate approval processes: the Long-Term and Short-Term RPS PPAs (attached hereto as Appendices 6 and 7), the Green Tariff (“GT”) RAM PPA (attached hereto as Appendix 11.A), the Enhanced Community Renewables (“ECR”) RAM PPA Rider (attached hereto as Appendix 12.A), the BioMAT PPA, and the BioRAM PPA. As the Commission has acknowledged, it is logical that the TOD factors used in each PPA be consistent, to the extent possible.⁶⁵ Going forward, in accordance with D.14-11-042, SDG&E intends to use the TOD factors approved in each RPS Plan in all PPAs for RPS products executed in that plan year, with updates where appropriate. Additionally, any Tier 1 AL filed by SDG&E requesting Commission approval of conforming TOD factors across its RPS Procurement Programs will be served on the R.15-02-020 service list, or then current RPS proceeding, and any entities in SDG&E’s RPS procurement queue.⁶⁶

d. Integrated Resource Planning

SB 350 recently added a provision to the Public Utilities Code directing the Commission to implement a holistic integrated resource planning process. IRP is a wide-ranging effort at the Commission, undertaken along with staff from the CEC and the California Air Resources Board (“CARB”), that will/should combine the numerous planning processes currently undertaken in separate resource-specific cases into a single look to ensure that IOU and non-IOU load-serving entities will achieve the targets to be established by CARB related to GHG emission reductions.⁶⁷ As explained in the IRP OIR, prior planning has not addressed the comprehensive resource optimization challenge presented by IRP.⁶⁸ IRP incorporates at least 19 different procurement-related proceedings, including the RPS proceeding,⁶⁹ and is bound by the following constraints which are addressed in or related to the various incorporated proceedings: (i) GHG emissions; (ii) reliability; (iii) cost; (iv) the 50% by 2030 RPS goal; (v) the goal of doubling cost-effective energy efficiency savings; and (vi) the Commission’s continuing responsibility to ensure safe and reliable service at just and reasonable rates.⁷⁰

⁶⁵ D.14-11-042, *mimeo*, p. 24.

⁶⁶ D.15-12-025, OP 7, p. 123.

⁶⁷ Senate Bill 350 (Stats. 2015, Ch. 547). at 14.

⁶⁸ R.16-02-007, p. 13.

⁶⁹ R.16-02-007, p. 11.

⁷⁰ R.16-02-007, p. 13.

RPS procurement is currently a composite of several different procurement programs and targets that are the results of separate mandates to address the needs of a particular technology, market segment, or policy goal. As described above, these programs do not necessarily address an identified resource need, cost-effectiveness or grid implications in the broader context – these elements are necessary to ensure that ratepayers receive the least-cost best-fit resources.

SDG&E views the IRP process and associated constraints as a marked transition away from procurement made via numerous one-off programs and separate processes towards a comprehensive, optimized and cost-effective process that evaluates a portfolio of resources on a comparative basis. IRP should enable procurement in consideration of multiple data points, not just what is required by a particular policy-driven program, thereby providing cost and grid optimization opportunities to the benefit of SDG&E ratepayers as well as ratepayers statewide. Of particular interest in the RPS context are several items discussed in the OIR: (i) cost containment of renewable resource procurement; (ii) consistent valuation methodologies across resource types; and (iii) the integration of renewable resources onto the grid.⁷¹ These items are all under development in the RPS proceeding, as explained above. SDG&E looks forward to participating in the resolution of these items and the development of the IRP process, with the end goal of enhancing the cost-effectiveness of RPS and other procurement mandates. SDG&E believes that it is prudent to pause any incremental RPS-procurement, including the adoption of new procurement mandates, while IRP is being implemented, especially given SDG&E's RPS performance to date.

e. Meeting Demand for Higher Levels of Renewables

In addition to the State's goals (the most recent development of which was SB 350), many customers and communities within SDG&E's service territory are interested in electricity service with even higher levels of renewables than required by law. Related to SDG&E's RPS planning efforts, SDG&E will consider ways in which SDG&E can potentially provide offerings that are made available to customers throughout the SDG&E service territory to help meet these goals.

⁷¹ R.16-02-007, pp. 15-16.

III. PROJECT DEVELOPMENT STATUS UPDATE

As described further in Section II, SDG&E regularly evaluates project development status to assess each project's ability to begin deliveries pursuant to contract terms and conditions. SDG&E's portfolio of renewable energy resources currently under contract but not yet delivering (either pre-construction or in construction) are in various stages of development. Projects under development generally require numerous permitting approvals, generator interconnection, financing, and completion of construction before they can achieve commercial operation. Each of the above issues adds significant risk to the development of a project and can directly impact the success or failure of a project. SDG&E's experience is that achieving all of these milestones represents a significant challenge for developers.

SDG&E has or is developing contracts for three renewable projects that are in the pre-construction or construction phase (of which one is UOG), and 62 projects that are in commercial operation (none of which are UOG). Generally, projects in the pre-construction phase are most at risk of failure. However, projects under construction may also encounter issues that could affect their ability to achieve commercial operation, such as successful litigation against the project. In general, projects that have achieved commercial operation have a high probability of meeting their contractual obligations; however, project failure or resource fluctuations (*i.e.*, a bad wind year) can create challenges. Although a developer's experience may improve the likelihood of a project achieving commercial operation, it does not ensure that a project will be successful. Sections IV and V of this plan discuss the various delays and risks that could impact projects in various stages of development, and Appendix 1 provides the most recent information on SDG&E's developing projects from SDG&E's June 2017 PRG meeting.

Renewable project developers continue to face a challenging environment. SDG&E observed an increase in the difficulty experienced by developers in securing financing after 2008 when the U.S. economy entered a deep recession. In addition, as more projects were proposed, especially in desert regions, permitting approvals took longer than developers expected due to increased scrutiny of environmental issues and permitting agency coordination efforts. Today, many smaller projects are experiencing local agency permitting delays as individuals and community groups challenge projects. These challenges can result in increased costs to the developer and significant project delays that can jeopardize project viability and potentially lead

to project failure. Finally, studying and constructing generator interconnection upgrades continues to take years to complete and can significantly influence project costs.

A transition from large-scale to smaller distributed renewable resource development is occurring as the IOUs reach RPS compliance. As explained above under Section II, California enacted legislation to encourage the development of distributed renewable generation, which is taking place under the BioRAM, BioMAT and GTSR programs. Renewable procurement efforts will be focused on fulfilling these goals in the near-term and through the sunset dates of each of these respective programs, subject to the ultimately adopted Procurement Expenditure Limitation (“PEL”) methodology, which is described in more detail below in Section IV.

A. Impact of Project Development Status

As a practical matter, until a project actually begins commercial operation, it bears significant development risk. SDG&E currently expects that a majority of the projects in its portfolio will meet their commercial operation dates either on schedule or within the prescribed cure period. SDG&E bases its forecasting, and therefore its RNS calculation, on its individual project assessments, as is described in more detail in Section II. It also relies on the lessons it has learned and trends it has observed as a result of the RPS procurement process, as discussed in more detail in Section II. The above factors contribute to SDG&E’s monthly project assessments of the likelihood of each project’s success. For example, a project that has been experiencing permitting issues would receive a probability weighting reduction to account for this risk until the issue is resolved. The result of these cumulative assessments is reflected in the RNS, which SDG&E will use to inform its procurement activities over the next two compliance periods and past 2020. The RNS as of June 2017 is provided in Appendix 2. For additional information on RPS products, please visit the Commission’s RPS Database at http://cpuc.ca.gov/RPS_Reports_Data.

IV. POTENTIAL COMPLIANCE DELAYS

The market for renewable energy is dynamic; multiple factors can impact project development and SDG&E’s attainment of its RPS program goals. The following discussion covers the major issues affecting both renewable project developers and SDG&E. It begins with the transmission, permitting, and financing hurdles faced during project development, and continues through some of the challenges experienced as a project matures – e.g., viability, debt equivalence, accounting issues, and regulatory uncertainty.

A. Transmission and Permitting

i. Interconnection Facility Delays

The timely approval, permitting, and completion of interconnection facilities are crucial to the successful implementation of SDG&E’s renewable portfolio. The completion of the East County (“ECO”) Substation and the Drew Switchyard, as well as the interconnection of five renewable projects to the Imperial Valley (“IV”) Substation, have all been positive developments. However, SDG&E notes that recent events impacting the development of certain transmission facilities may impede the development of future renewable resources in the IV region. Two collector switchyards north of the IV Substation were planned as part of an effort to increase the transfer capability between the Imperial Irrigation District (“IID”) and CAISO balancing authorities and to facilitate the development of additional renewable resources northwest of IV Substation.

The first collector switchyard was a “Public Policy” project approved by the CAISO where IID was selected to construct and own the facilities. However, the CAISO received notice from IID on November 24, 2015 that IID was exercising its right to terminate the Approved Project Sponsor Agreement (“APSA”) between IID and the CAISO.⁷² IID’s decision not to move forward with this collector switchyard could have adverse ramifications for the development of new renewable resources northwest of IV Substation.

IID also cancelled the second collector switchyard on February 16, 2016,⁷³ which was initially proposed to interconnect the existing CSolar West generating project and ultimately create a new 230 kV line between IID’s proposed Dixieland Substation and IV Substation. The CSolar West project is currently operational and connected to IV Substation via a radial gen-tie line. Accordingly, even with IID not moving forward with the second collector switchyard, the CSolar West project can continue to operate. Nevertheless, as with IID’s decision to terminate the APSA, a decision not to move forward with the second collector switchyard could have adverse ramifications for the development of new renewable resources northwest of IV Substation. While the failure to move forward with these two switchyards does not affect the

⁷² IID Notice of Termination, p. 1-2 & 51
<http://www.caiso.com/Documents/Dec112015NoticeofTerminationofApprovedProjectSponsorAgreementImperialIrrigationDistrictER16-508.pdf>

⁷³ IID Board of Directors meeting, February 16, 2016, agenda item 17
http://imperialid.granicus.com/MediaPlayer.php?view_id=3&clip_id=150

development of any renewable resources contemplated by SDG&E's existing PPAs, future renewable resource options may be reduced as a result.

Transfer capability between the IV Substation and the San Diego load center has been greatly expanded with the construction of the Sunrise Powerlink project. Even with construction of the Sunrise Powerlink, ongoing requests to interconnect generation – principally new renewable generation – in the San Diego and Imperial Valley areas,⁷⁴ the anticipated retirement of coastal gas-fired power plants using ocean water for cooling, and the permanent retirement of the San Onofre Nuclear Generating Station (“SONGS”), have lead the CAISO to approve a new 230 kV Sycamore Canyon-Penasquitos transmission line. This new line will support the ability of renewable resources to obtain Full Capacity Deliverability Status (“FCDS”); thereby enhancing the likelihood that new renewable resources can be counted towards LSEs’ RA requirements. The CAISO Board-approved 2016-2017 transmission plan lists the 230 kV Sycamore Canyon-Penasquitos line with a June 2018 in-service date.⁷⁵

The CAISO conducted a competitive solicitation for developers to offer proposals to construct, own, and maintain this new line. SDG&E submitted a proposal to this solicitation and was selected by the CAISO. Subsequent to its selection, SDG&E submitted an application to the Commission for a Certificate of Public Convenience and Necessity (“CPCN”) to build the new line. SDG&E obtained the CPCN on October 14, 2016. However, the project is behind the original in-service date of June 2017 due to the delay in receiving the CPCN.

The existing series capacitors on the Southwest Powerlink (“SWPL”) and Sunrise Powerlink 500 kV lines were bypassed to increase generation deliverability in the Imperial zone and mitigate the various overload concerns as set out in the 2014-2015 CAISO transmission plan.⁷⁶ Any further delays may cause uncertainty for renewable developers whose project economics rely on the deliverability that the 230 kV Sycamore Canyon-Penasquitos project supports.

Timely approval and construction of interconnection facilities will support the schedules of renewable facilities under development, both within and external to California. Accordingly, SDG&E submitted an interregional transmission project to both CAISO and WestConnect in

⁷⁴ 2012-2013 ISO Transmission Plan, p 34.

⁷⁵ 2016-2017 ISO Transmission Plan, p 377.

⁷⁶ 2016-2017 ISO Transmission Plan, p. 140.

March 2016 through their respective interregional transmission processes. SDG&E also submitted this interregional transmission project into the CAISO's economic study request window in March 2017 as part of the CAISO's 2017-2018 Transmission Planning Process.

The SDG&E alternating current to direct current ("AC-to-DC") conversion project proposes to convert a portion of the 500 kV SWPL to a multi-terminal, multi-polar high-voltage DC ("HVDC") system with terminals at North Gila, IV, and Miguel Substations. The conversion of a portion of SWPL to a HVDC system will provide significant regional and interregional benefits including but not limited to solving loop flow issues, optimizing transfer capabilities, aiding the integration of new transmission and generation projects, and increasing the ability to deliver renewable resources into the Southern California load centers. The project will also increase import capability into the San Diego and Greater Imperial Valley transmission-constrained load pockets during critical contingency conditions. The increased import capability will reduce LCRs and the attendant requirement of LSEs serving load in the San Diego area to contract for comparatively scarce, and therefore costly, dependable generating capacity within those LCR areas RA generating capacity.

The CAISO is currently conducting an Interregional Transmission Project Evaluation and 50% out-of-state Assessment ("Assessment") which includes the AC-to-DC conversion project. CAISO expects the assessment to be completed as a continuation of the 2016-2017 planning cycle and is intended to be for informational purposes.⁷⁷

Analysis conducted by the CAISO for the CAISO's 2014-2015 transmission plan found that:

The early retirement of the San Onofre Nuclear Generating Station had materially changed flow patterns in the area, resulting in a significant decline in forecast deliverability from the Imperial area as set out in the 2013-2014 Transmission Plan. These new measures, in combination with previously approved transmission projects are projected to provide over 1,700 to 1,800 MW of incremental transmission deliverability for the Imperial area. As approximately 1,050 to 1,200 MW of new renewable generation interconnecting to either the ISO or IID in the Imperial area is already moving forward, there is sufficient transmission deliverability projected to support an additional 500 to 750 MW of renewable resources, depending on the precise resource locations within the Imperial area.⁷⁸

⁷⁷ Interregional Transmission Project Evaluation and 50% RPS Out-of-state Portfolio Assessment Study Plan, p. 1.

⁷⁸ *Id.* at p. 2.

Moreover, the CAISO found that “[t]o make the entire 2,600 MW of the portfolio deliverable would require a transmission project such as a new Midway-Devers 500 kV line or the STEP project.”⁷⁹ On the other hand:

ISO considers that emphasis needs to be placed on how solutions addressing future reliability concerns in the LA Basin/San Diego area integrate with potential solutions for increasing generation deliverability benefits for resource development in the Imperial area given the high degree of interaction between the two areas. In addition, other considerations that should be taken into account include:

- Timing and emergency of need for additional mitigation for both needs (i.e., reliability and generation deliverability);
- Feasibility of various developments, which can be drawn from the Imperial area consultation efforts at the ISO, as well as the CEC/Aspen high-level environmental assessment analysis;
- Potential benefits of a more staged approach, such as some transmission solutions that work well together but have standalone benefits as well. Examples of such options include the Midway – Devers 500 kV AC (or DC line) and the Valley – Talega 500kV line, where the former primarily supports exports of renewables from the Imperial area, and the latter primarily supports the LA Basin and San Diego areas;
- Future analysis that will be required as needs evolve, including consideration of a larger picture that benefits both California and Mexico clean energy objectives, such as the CFE – ISO Bulk 500kV AC or HVDC transmission option.”⁸⁰

The analysis conducted for the CAISO’s 2014-2015 transmission plan focused on the year 2024. The extent to which the retirement of SONGS will affect the deliverability of Imperial Valley renewable generation between now and year 2024 will depend upon: (i) how quickly the CAISO Board-approved mitigation solutions can be permitted and built; and (ii) the results of the CAISO’s ongoing analysis of other potential transmission upgrades (such as the proposed 500 kV Midway-Devers transmission line). Delays in implementing these transmission solutions could limit the deliverability of existing and planned renewable resources in the Imperial Valley and thereby compromise the economic viability of those resources.

⁷⁹ *Id.* at p. 219.

⁸⁰ *Id.* at p. 100-101.

ii. Interconnection Study Process

The CAISO's process for determining required upgrades for renewable projects can cause delay and expense. SDG&E protects ratepayers by establishing transmission upgrade cost limits and including conditions precedent in the PPA whereby if the upgrade costs are higher than the thresholds established in the PPA, the contract can be terminated. In the past, developers have been required to wait years for study results and in some cases have been faced with extremely high upgrade costs that render their projects unviable.

Changes in the CAISO's approach for identifying network upgrades that provide interconnecting renewable generators with FCDS were implemented several years ago and appear to be reducing transmission funding hurdles for new generators that are in interconnection cluster 5 and later clusters. The CAISO's transmission planning process now identifies ratepayer-funded transmission upgrades that support a specific RPS portfolio. For generators that are not part of the specific RPS portfolio, the CAISO's interconnection studies will identify Delivery Network Upgrades that are needed to support the generator's request for FCDS. However, generators now have the option to choose not to fund construction of these upgrades and instead rely on deliverability that may be available because other generators fail to develop as expected. Nevertheless, renewable generators that sought interconnection prior to cluster 5 are still subject to financing hurdles tied to the requirement to advance construction funds for Delivery Network Upgrades.

iii. Jurisdictional Agency Permitting Delays

Uncertainty surrounding the timely issuance of key permits associated with lead agency review continues to create risks for projects under development. The permitting timeline can vary greatly based on a multitude of factors including project location, environmental issues, lead/other agency resources, and public participation. First, this uncertainty may lead to scheduling challenges and corresponding problems with project elements such as site control, financing, permitting, engineering, procurement including supplier and engineering, procurement, and construction ("EPC") contracts. Second, costs to mitigate environmental issues or respond to public concerns can lead to higher than expected costs for developers to complete a project.

B. Project Finance, Tax Equity Financing and Government Incentives

Obtaining financing is key to the successful development of renewable projects. Two

areas of financing are of primary importance: (i) project financing relied upon to construct the project; and (ii) tax equity financing relied upon to monetize tax benefits such as the Production Tax Credits (“PTC”) or Investment Tax Credits (“ITC”). Financial institutions traditionally provide project financing, the cost and availability of which is a function of the overall health of the financial system. Tax equity financing is also traditionally provided by banks or large corporations. In order to secure financing, renewable projects generally must: (i) complete permitting; (ii) have a long-term fixed price PPA from a credit-worthy off-taker; and (iii) have a bankable (or proven) technology. The financial markets have proven unstable, thus non-traditional investors are also key to the success of the renewable energy industry. Non-traditional investors include institutional investors reached by projects issuing a security, and utilities and other corporations with tax appetite as tax equity investors.

The American Recovery and Reinvestment Act of 2009 was successful in increasing the economic viability of projects through enabling the PTC and ITC, with both the PTC and ITC being extended by former President Obama’s signing of the Omnibus Appropriations Act. The PTC (which expired at the end of 2013 and was reinstated for 2015 through the end of 2019) and ITC (currently set to expire at the end of 2022, with a 10% credit remaining in perpetuity) represent about 33% of the economic value of renewable projects and without them, the relative competitiveness of renewable energy relative to fossil fuels, will be severely impacted. The recent reinstatement of the PTC through 2019 (and potentially longer where a project can demonstrate that it is “under construction”) and the extension of the ITC will support the project development and financing landscape for future projects.

C. Debt Equivalence and Accounting

Two additional issues may challenge SDG&E’s ability to achieve its RPS goals. The first involves debt equivalence. The cumulative debt equivalence of executed PPAs could affect SDG&E’s credit profile and, consequently, its financial standing. Rating agencies may include long-term fixed financial obligations, such as PPAs, in their credit risk analysis. These obligations could be treated as additional debt during their financial ratio assessment. Standard and Poor’s (“S&P”) views three ratios, Funds From Operations (“FFO”) to Debt, FFO to Interest Expense, and Debt to Capitalization, as the critical components of a utility’s credit profile. Debt equivalence could negatively impact all three ratios. Unless this risk is mitigated, a PPA would negatively impact SDG&E’s credit profile by degrading credit ratios.

The second issue relates to Accounting Standards Codification (“ASC”) 810 Consolidation, which includes the subject of Consolidation of Variable Interest Entities (“VIEs”). Application of ASC 810 as it pertains to Consolidation of VIEs could also impact SDG&E’s ability to sign new contracts. As part of SDG&E’s overall internal review and approval process for new PPAs, SDG&E conducts a review of whether each PPA will be subject to consolidation under ASC 810. Under ASC 810, no renewable PPA has been deemed subject to such consolidation, however, ASC 810 requires SDG&E to perform an evergreen assessment for those contracts which are considered VIEs. For this reason, SDG&E believes that it is required to assess quarterly each contract or category of contracts to ensure continued compliance with ASC 810, to determine whether or not SDG&E must consolidate a seller’s financial information with SDG&E’s own quarterly financial reports to the Securities and Exchange Commission. The accounting rules associated with ASC 810 can change, thus wind, solar, geothermal and bio-gas renewable sellers could be impacted.

Application of ASC 810 could hinder SDG&E’s ability to achieve its RPS goals, and add further costs and risk to execution of new renewable contracts. If SDG&E determines that consolidation is required, a seller must open its books to SDG&E and submit financial information, on a quarterly and monthly basis, as specified in SDG&E’s contract language for the duration of the relevant agreement.

All PPAs are affected by either debt equivalence or ASC 810 requirements. The Commission is well aware of the negative impact of debt equivalence on SDG&E’s credit profile. AB 57 requires that the Commission adopt procurement plans that, among other objectives, enhance the creditworthiness of the utility. ASC 810 will affect SDG&E’s reported financial data and may have a negative impact on SDG&E’s balance sheet and/or credit profile. ASC 810 could impact SDG&E’s capital structure on a consolidated basis and cause it to be misaligned with its authorized capital structure. To the extent SDG&E must seek to mitigate the impacts of debt equivalence and ASC 810, it will do so through a separate cost of capital filing.

D. Regulatory Factors Affecting Procurement

The Commission is in the process of implementing changes to the RPS program required by SB 2 (1X) as well as SB 350. As a result, full program details are not yet final, which creates regulatory uncertainty. However, it is important to note that SDG&E currently expects to meet and exceed its near-term RPS program goals, as well as those established by SB 350, with

procurement already under contract, as explained in Sections I and II above, and as such the RPS procurement initiatives pending before the Commission will likely have a greater impact on RPS procurement undertaken to meet future need. On February 5, 2016, the Commission issued an *Amended Scoping Memo of Assigned Commissioner* to identify the issues for consideration under R.15-02-020. A plethora of RPS procurement issues were listed in the amended scoping memo, several of which are particularly important to note here: the RPS PEL, verified compliance reports for CP1, LCBF methodology revisions including updating the variable integration cost adder, and SB 350 implementation.

Beginning with the PEL, SDG&E has urged the Commission to implement a cap on expenditures by IOUs to meet RPS goals. Greater detail regarding the actual limitation for SDG&E, how it will relate to the procurement dollars spent and contracts signed as of the date of the final decision, and how the expenditure cap will interact with the other requirements of the RPS program will assist SDG&E in planning its future procurement activities, especially as the State moves towards a 50% RPS goal. Given the shift away from separate programs and processes towards a holistic planning and procurement process under the IRP (discussed in more detail under Section II.C), SDG&E has taken a renewed look at cost containment and believes that any PEL developed by the Commission should be informed by the IRP proceeding. The IRP not only incorporates all procurement types, but also contemplates an evaluation metric that ties procurement to the State's Cap-and-Trade program to reduce greenhouse gas ("GHG") across all sectors in the most cost-effective manner by using a marginal GHG abatement cost (or "GHG Planning Price").⁸¹ In order to procure the best possible resources to meet both RPS and GHG goals, this metric should be applied to RPS procurement.

With respect to compliance, the results of the CEC and Commission review and verification of SDG&E's CP1 procurement and associated documentation will provide greater certainty regarding the PCCs of contracts in SDG&E's portfolio and will thereby inform SDG&E's procurement activities going forward.

The pending nature of LCBF reform also creates uncertainty. *The Scoping Memo and Ruling of Assigned Commissioner* for R.15-02-020 (the "2015 RPS OIR Ruling"), filed May 22, 2015, lists LCBF reform as one of the Commission's top five priorities.⁸² On June 22, 2016, the

⁸¹ Energy Division Staff Proposal for Implementing Integrated Resource Planning at the CPUC, p. 30-31

⁸² 2015 RPS OIR Ruling, p. 4.

Commission issued a ruling requesting comment on the LCBF staff paper and requesting that the IOUs jointly submit a proposal for developing a standardized methodology and set of inputs and assumptions for estimating future capacity prices. Clarity surrounding the ultimate alterations to this calculation and the factors used in bid evaluation as a result of this LCBF revision initiative will help SDG&E understand and plan for any impacts. In addition to this initiative, there are also several other items under consideration at this time, or slated to be considered in the near future, that will impact the LCBF calculation. First, the Commission issued a ruling on May 12, 2016 requesting input on a report and next steps for development of a renewable integration cost adder (“RICA”). The results of this initiative will inform the development of the variable component of the interim integration cost adder for use in the LCBF evaluation. Second, the Commission’s new probabilistic reliability model may significantly alter the expected qualifying capacity of new and existing wind and solar resources and thereby impact the Net Qualifying Capacity (“NQC”) of a resource for RA compliance purposes. This in turn may materially alter the NQC value assigned to renewable projects as a part of the LCBF evaluation. And third, R.15-02-020 introduces “integrating goals and metrics for reducing the emission of [greenhouse gases] GHG into RPS procurement processes and evaluation”⁸³ as a new initiative and one of the top five priorities for the RPS proceeding. It is unclear at this time how this will impact RPS project valuation, and as such the outcome of this work cannot be predicted currently, but SDG&E looks forward to participating in the development of these goals and metrics. SDG&E continues to monitor these processes and will incorporate any new data points or methodologies into its LCBF evaluation when final.

And finally, Governor Brown signed SB 350 into law on October 7, 2015. This law increases the RPS target to 50% by 2030. The Commission issued a ruling on April 15, 2016 seeking comments on implementation of various portions of SB 350, and has issued two decisions regarding SB 350 parameters;⁸⁴ SDG&E looks forward to participating actively in the stakeholder process that this change in law will initiate.

E. Unanticipated Curtailment

As explained in more detail below under Section X, the incidence of curtailment has

⁸³ 2015 RPS OIR Ruling, p. 5.

⁸⁴ D.16-12-040 extending the current straight-line method for calculating RPS targets which can be seen in SDG&E’s RNS table under Appendix 2, and D.17-06-026 which sets forth the new banking rules, also incorporated into SDG&E’s RNS table.

increased and will continue to do so as more and more intermittent renewable generation is brought online. SDG&E's current strategy inherently addresses curtailment as it seeks to mitigate the need to curtail by procuring a diverse portfolio of resources that account for system needs as described above in Section II, and by refining its RPS PPA to ensure that the projects that are ultimately built reflect the project as bid, also described under Section II. Additionally, SDG&E has taken steps in its RPS PPA to provide for economic curtailment rights, and these past RPS PPA modifications are referenced in Section X below.

F. Insufficient Supply of Renewable Resources

As described above under Section II, it is SDG&E's expectation that it will be able to meet its CP goals through 2030 with RPS eligible procurement already under contract, and as such, it is likely that SDG&E will not seek to hold an RPS RFO for the next several years given its current forecasted position. The majority of the facilities with which SDG&E has contracted are operating, as can be seen in the probability weighted tables in Appendix 2. It is unlikely that an event or series of events will undermine SDG&E's ability to procure energy from these resources. However, as mentioned in Sections II and VII, SDG&E procures a VMOP to guard against unforeseen circumstances.

G. Unanticipated Increases in Retail Sales

SDG&E's retail sales forecast methodology, which is intended to capture both increases and decreases, is explained above under Section II. It is unlikely that an event or series of events will increase SDG&E's retail sales to a level that would prevent RPS compliance. However, as mentioned above and in Sections II and VII, SDG&E procures a VMOP to guard against unforeseen circumstances.

H. Impact of Potential Delays

SDG&E bases its forecasting, and therefore its RNS calculation, on its individual project assessments, as described in more detail in Section II. It also considers lessons learned and trends it has observed as a result of the RPS procurement process, as discussed in more detail in Section II. The factors discussed in this section contribute to SDG&E's monthly assessment of the likelihood of each project's success. For example, a project that has been experiencing difficulty in obtaining a key permit would receive a probability weighting reduction to account for this risk until the issue is resolved. While the impacts of the regulatory proceedings mentioned above cannot be known until the final decisions are issued, SDG&E is monitoring

these issues and will reflect their outcomes accordingly, when appropriate. The results of these cumulative assessments are reflected in the RNS, which helps SDG&E to identify any potential project delays that may impact compliance and to then plan its procurement activities over the next two compliance periods and past 2020. The RNS as of June 2017 is provided in Appendix 2.

V. RISK ASSESSMENT

SDG&E periodically evaluates the risk that delivering projects will underperform. In SDG&E's experience, developers are inherently motivated to achieve the COD for their facilities and maintain successful operations due to several factors: (i) the significant investment required to achieve COD; (ii) the timely payments made for energy delivered once COD is reached; and (iii) the penalties incurred if the project does not meet contractual requirements to supply at least the minimum amount of energy contemplated. As explained above under Section II, SDG&E anticipates meeting its CP3 targets with procurement already under contract. However, risks are still present, and over the past decade, SDG&E has observed some dynamic factors that may affect power production from delivering projects:

- Resource Availability and Variable Generation: Renewable resources depend on natural sources of energy which are variable, and can be impacted by various factors. For example, a bad wind year can greatly impact a wind facility's performance and cause lower than expected generation, impacting SDG&E's ability to meet its RPS goals. Another factor that could also impact generation, and therefore SDG&E's ability to meet its RPS goals, is the occurrence of unexpected mechanical failures. This could cause the facility to be partially or fully unavailable until the issue can be resolved.
- Regulatory Changes: The expiration of subsidies or additional requirements resulting from changes in regulations could lower the revenue stream and increase costs for RPS developers and could lead to reduced production if the project has difficulty in supporting this lower revenue stream.
- Economic Environment: The interest rates and flexibility of financing arrangements entered into by developers can impact a project's success. Long-term project financing arrangements with unfavorable terms can lead to project failure or reduced production if the project has difficulty in supporting the financing cost requirements.

Additionally, a change in the economic environment could negatively impact a generator's supply chain, potentially causing difficulty in complying with contract terms.

- Evolving Technology: Facilities with older generation technology that is no longer supported by the manufacturer can experience project failure or reduced production. This problem is arising now for older RPS projects, and could repeat itself over the next 20 years as the projects being contracted for today begin to age.
- Issues with Third Party Mandatory Systems: CAISO and WREGIS systems have experienced technical issues in the past, and potential technical problems with these systems going forward could complicate the compliance process.

SDG&E's current assessment is that, as an overall matter, projects in its portfolio are at a low risk of non-performance, but notes that this assessment is based on the above risk factors remaining relatively stable. As noted herein, SDG&E bases its forecasting, and therefore its RNS calculation, on its individual project assessments, lessons learned and trends it has observed as a result of the RPS procurement process. The above factors contribute to SDG&E's monthly project assessments of the likelihood of each project's success. For example, the probability weighting for a project that has begun experiencing technical difficulties due to an aging system and has been unable to receive assistance from a manufacturer that no longer exists, would receive a probability weighting reduction to account for its reduced generation until the issue is resolved. The result of these cumulative assessments is reflected in the RNS, which SDG&E will then use to inform its procurement activities over the next two compliance periods and beyond 2020. The RNS as of June 2017 is provided in Appendix 2.

VI. QUANTITATIVE INFORMATION

The analysis attached hereto in Appendix 2 shows the Commissions' prescribed RNS calculation with supporting probability weighting calculations by project as of June 2017. SDG&E intends to monitor the vintage and remaining life of RECs in order to maximize their value to the portfolio by retiring them at the most opportune time, this is discussed in more detail in Section II.

VII. MINIMUM MARGIN OF OVER-PROCUREMENT

SDG&E's RPS Risk Adjusted⁸⁵ RNS Calculation, as shown in Appendix 2, provides a VMOP.⁸⁶ SDG&E's VMOP is composed of a "Minimum Margin of Procurement" that is intended to account for foreseeable project failures or delays, as well as an additional volume of procurement which is undertaken to ensure that SDG&E achieves its RPS requirements despite unforeseeable risks. Due to constant fluctuations in RPS targets (as a result of changes in retail sales) and RPS deliveries, it is nearly impossible to meet RPS targets with the exact number of MWhs required. SDG&E's VMOP is designed to ensure that it achieves its RPS goals with a "buffer" to and considers foreseeable and unforeseeable risks such as those discussed in Sections IV and V. Because it is difficult to predict retail sales and project performance, particularly for periods farther into the future, SDG&E's VMOP may be higher in later years. SDG&E's portfolio (RPS resources necessary to reach compliance and provide a VMOP) is the result of the forecasts (including need, retail sales, and project success rates), the assessment of potential risks, and the project valuations made at the time of each individual contract execution and approval. SDG&E's RNS calculation, including its VMOP, for each year is based on the following formula:

$$\text{RPS Risk-adjusted Net Short} = (\text{Bundled Retail Sales Forecast} \times \text{RPS Procurement Quantity Requirement} + \text{Voluntary Minimum Margin of Procurement}) - (\text{Online Generation} + \text{Risk-adjusted Forecast Generation} + \text{Pre-approved Generic Generation})^{87}$$

Where:

- a. Bundled Retail Sales Forecast = the forecast developed in accordance with Section II(A)(ii)(a) of SDG&E's 2017 RPS Plan
- b. RPS Procurement Quantity Requirement = the target for the relevant CP or year

⁸⁵ Probability weightings are used to adjust estimated deliveries based on the likelihood that each developing project will reach COD, as well as the likelihood that each delivering projects will continue to deliver as estimated. The probability weighting process identifies the volume of generation under contract that SDG&E is likely to receive and be able to apply towards its RPS compliance. Based on this analysis, SDG&E can determine what additional procurement is necessary to (i) reach its RPS targets, and (ii) provide a buffer against foreseen and unforeseen events (the VMOP).

⁸⁶ See Row D of the RNS Table.

⁸⁷ All generation data listed in any of SDG&E's RPS Plans, as well as any of its RPS Plan Appendices, are from contracts that have been approved or pre-approved by the Commission.

- c. Voluntary Minimum Margin of Procurement = up to the current anticipated net long position for the relevant CP or year
- d. Online Generation = the generation that SDG&E expects will be delivered by its portfolio of RPS projects that have achieved commercial operation, as discussed in Section II(A)(i)(a) of SDG&E's 2017 RPS Plan
- e. Risk-adjusted Forecast Generation = the generation that SDG&E expects will be delivered by its portfolio of RPS projects that have not yet achieved commercial operation, as discussed in Section II(A)(i)(b) of SDG&E's 2017 RPS Plan
- f. Pre-approved Generic Generation = unsubscribed volumes that SDG&E is required to procure under fully implemented CPUC mandated procurement programs (RAM and Re-MAT)

VIII. BID SOLICITATION PROTOCOL, INCLUDING LEAST-COST, BEST-FIT

Attached hereto in Appendices 6-12.B are SDG&E's proposed RPS Long- and Short-Term Model PPAs, RPS REC Agreement, LCBF, RPS Sale RFP, RPS Sales Model PPA, documentation for a GT RAM solicitation, and documentation for an ECR RAM solicitation. Note that the RPS Sales Model PPA currently contemplates the sale of a Category 1 product; SDG&E will modify this agreement as necessary to accommodate the sale of Category 3 products. Although SDG&E does not intend to issue a solicitation for RPS purchases in 2017, it has attached RPS Long- and Short-Term Model PPAs,⁸⁸ an RPS REC Agreement, and an LCBF document. Submitting these updated documents is important so that they do not become stale. As required by D.14-11-042, SDG&E has included GT RAM and ECR RAM solicitation documents. Per D.14-11-042, SDG&E will request Commission approval via a Tier 1 AL if it determines that changes to these documents are necessary.⁸⁹

- Appendix 6 – 2017 RPS Long-Term Model PPA
- Appendix 7 – 2017 RPS Short-Term Model PPA
- Appendix 8 – 2017 RPS REC Agreement
- Appendix 9 – 2017 LCBF
- Appendix 10 – 2017 RPS Sales RFP

⁸⁸ D.14-11-042, p. 78.

⁸⁹ D.14-11-042, *mimeo*, p. 22.

- Appendix 10.A – 2017 RPS Sales Model PPA
- Appendix 10.B – 2017 Framework for Assessing Potential RPS Sales
- Appendix 11 – 2017 GT RAM RFO
- Appendix 11.A – 2017 GT RAM PPA
- Appendix 11.B – 2017 GT RAM Offer Form
- Appendix 12 – 2017 ECR RAM RFO
- Appendix 12.A – 2017 ECR RAM PPA Rider
- Appendix 12.B – 2017 ECR RAM Offer Form

A. Workforce Development Assessment Proposal

A Workforce Development Assessment has been added as a qualitative factor within SDG&E’s LCBF. The information used in this Assessment will be gathered as part of the required bid information for any solicitations which include renewable resources. The Assessment results will be qualitatively compared among all renewable resource bids within the solicitation which will inform the final bid ranking, similar to all other qualitative factors.

B. Assessment of Benefits to Disadvantaged Communities

In D.04-07-029, the Commission directed the use of “benefits to low income or minority communities” as a qualitative factor in the LCBF analysis. Consistent with this direction, SDG&E has applied this factor on a qualitative basis along with several other qualitative factors (see Appendix 9 for a full list). Benefits to the community are either described by the developer in the project description form, or can be requested by SDG&E if not provided. The results of SDG&E’s LCBF analysis (quantitative as well as any additional qualitative) are shared with the PRG and also described in the AL seeking approval for SDG&E’s shortlist.

IX. CONSIDERATION OF PRICE ADJUSTMENT MECHANISMS

SDG&E acknowledges that contracts with online dates occurring more than 24 months after the contract execution date can pose additional risk to ratepayers. SDG&E has incorporated price adjustment mechanisms into some of its current contracts that are intended to alleviate some of these risks, including the following:

- Price adjustment for delay in Guaranteed Commercial Operation Date (“GCOD”): A lower price for a late GCOD provides additional incentive for developers to come online pursuant to the contract. However, this structure can create financing challenges if

financing parties are not comfortable with the potentially lower price. It is also difficult to quantify an appropriate price adjustment amount and can lead to drawn out negotiations.

- Capped transmission upgrade costs: Placing a cap on the amount of transmission upgrade costs, which are ultimately borne by ratepayers, that a project can incur is an effective way to limit ratepayer exposure to such costs. This type of cap is especially important for projects with CODs more than 24 months after the contract execution date because it is more likely that transmission upgrade cost estimates could change for these projects. The cap is set as a condition precedent to SDG&E's obligations under the PPA. If estimated costs exceed the cap, SDG&E has the right not to move forward with the PPA.
- Price adjustment for higher than expected transmission upgrade costs: Another mechanism that SDG&E has successfully incorporated into past contracts is a mechanism whereby the seller agrees to a price reduction to offset higher than anticipated transmission upgrade costs. Under this mechanism, the contract price would be reduced on a dollars per megawatt-hour basis commensurate with the cost of transmission upgrades above an agreed upon cap. The price adjustment mechanism would include an upper limit on transmission upgrade costs, above which SDG&E can terminate the contract. This mechanism is similar to the cap described immediately above except, rather than giving SDG&E the right not to move forward with the PPA, it gives the developer the choice of whether to go forward at a reduced price equal to the amount of transmission costs above the cap, or the developer may choose not to go forward with the PPA.
- Price adjustment for failure to achieve full capacity deliverability status: If a project is not deemed fully deliverable by CAISO at the time of COD, then the PPA price is reduced by either a negotiated price reduction specific to the project, or the application of energy only TOD factors in place of FCDS factors until such time as the project is deemed fully deliverable.

X. ECONOMIC CURTAILMENT FREQUENCY, COSTS, & FORECASTING

The sections below discuss observations, analysis, activities, and how the RPS Plan contents address these items.

A. Market & Operational Observations

The issue of curtailment is a result of the operational characteristics of the facilities within the renewable market (both those procured pursuant to the RPS program, as well as customer-side facilities that are incremental to the RPS program under existing rules, specifically net energy metered installations). These resources are as-available (that is, they generate only when the wind is blowing or the when sunlight strikes the panel, and they are negatively affected by atmospheric conditions which interfere with this energy production, such as cloud cover) and intermittent, which results in generation profiles that do not necessarily follow load. SDG&E's net load profile now shows a pronounced shift toward an evening peak as increased solar generation has begun to offset load during SDG&E's historical peak load hours (mid-day). The shift of SDG&E's net peak into the evening hours becomes more pronounced as more renewable generation (particularly solar) is brought online, as it has over the past several years and will continue to do so as RPS penetration increases.⁹⁰ This difference leads to integration issues, specifically overgeneration, which in turn leads to an increase in economic curtailment orders and negative pricing. The CAISO, the Participating Transmission Owner or distribution operator, or the Buyer (SDG&E) can instruct a generator to curtail (take its power off of the grid) in order to manage excess generation, minimize the effect of negative pricing, and maintain grid reliability. When negative pricing occurs, and generators are not economically curtailed, SDG&E must pay the CAISO to take this power if it is the Scheduling Coordinator for the project. It is important to address and work to mitigate these issues through the valuation process and the contracting process. It should also be noted that each year brings with it more information and additional opportunity for refinement of the procurement process.

With respect to the valuation component, the Commission adopted an interim renewable integration cost adder in D.14-11-042⁹¹ which has been incorporated into SDG&E's LCBF calculation attached hereto as Appendix 9. SDG&E has also initiated work, discussed under

⁹⁰ See the CAISO "duck chart" at:

https://www.aiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf.

⁹¹ D.14-11-042, p. 63.

Section IV above, to address revision of this process by authorizing integration studies that will ultimately be used to inform the development of the final integration cost adder. This final adder will be incorporated into the LCBF calculation with the objective of enhancing its effectiveness in identifying projects with the lowest cost in consideration of the cost of integration, and ideally reducing the incidence of curtailment and/or negative pricing. SDG&E looks forward to participating in this process and in the revision of the LCBF calculation as a whole, as discussed in Section IV.

Regarding the contracting component, SDG&E has and will continue to address this process as it gains more and more experience with the issue of curtailment. SDG&E has made contract modifications related to curtailment, which are discussed in more detail below under Subsections C and D. These revisions are an important step in addressing the issue of curtailment, the cost of which has increased significantly over the past several years.⁹²

B. Analysis, Initiatives, & Strategy

SDG&E has been tracking its curtailment actions and results since Q3 2014, and based on the data available to date, its curtailment activities have resulted in significant cost savings for SDG&E ratepayers. SDG&E will continue to track this data and report on it as appropriate.

C. Activities

SDG&E has undertaken activities to manage its existing contracts, as well as strengthen the language regarding economic curtailment in its pro forma PPA to be used in future contracting.

Beginning with its existing contracts, SDG&E has seen multiple instances of negative pricing since the CAISO implemented its new tariff revisions on May 1, 2014, and has acted to minimize ratepayer exposure to negative pricing by economically curtailing facilities with which it has this contractual right. These instances have generally followed the same sequence of

⁹² The Federal Energy Regulatory Commission (“FERC”) issued Order No. 764 (“FERC 764”) on June 22, 2012, in an effort to “adopt reforms that would remove barriers to the integration of variable energy resources and provide for related just and reasonable rates” (see CAISO Docket No. ER13-2452-000 Tariff Revisions to Comply with Order No. 764, p. 2). In response to FERC 764, the CAISO updated its open access transmission tariff, which was conditionally approved by the FERC on December 19, 2013, and implemented on May 1, 2014. As part of this tariff update, the floor on negative bids was decreased from -\$30 to -\$150, which may be modified in future years. As a result, the magnitude of potential negative prices has increased. SDG&E’s ratepayers are exposed to negative CAISO prices plus the hourly price of the contract. The likelihood of incurring these charges is greatly increased with respect to renewable facilities which, as mentioned above, typically do not follow load.

events: (a) as facility Scheduling Coordinator SDG&E economically bids energy from a facility into the market; (b) a negative pricing event occurs; (c) the CAISO instructs the facility that was economically bid by SDG&E to dispatch down (curtail); and (d) the facility responds to the extent possible. These actions protected ratepayers by reducing the negative pricing payments made to the CAISO, but SDG&E's ability to curtail its current portfolio is limited by several factors: (a) the majority of SDG&E's existing RPS contracts do not contain economic curtailment rights (however, as mentioned below, SDG&E has initiated contract renegotiations minimizing adverse impacts on ratepayers); (b) many facilities have operating restrictions which impact their ability to respond immediately to an economic curtailment order; and (c) (where the contract contains economic curtailment rights) SDG&E's ability to economically curtail is limited in many cases to 5% of a facility's annual deliveries.

With respect to SDG&E's RPS PPA, the Commission approved the proposed revisions filed with SDG&E's 2014 RPS Plan, which allow for uncapped economic curtailment rights, and included a requirement that the generator install the automated dispatch system ("ADS"), which is the software that receives the dispatch notice/curtailment order, and the application programming interface ("API"), which is the software necessary to respond to and implement the dispatch notice/curtailment order.⁹³ Requiring this software will ensure that responses to economic curtailment orders are immediate, which will bolster grid management efforts and forecasting. D.14-11-042 also provided for the incorporation of several provisions allowing payment to the generator for the economically curtailed generation (i.e., what could have been generated but for the economic curtailment), and requiring the generator to be responsible for CAISO imbalance energy costs or charges incurred during periods of economic curtailment. The benefits of these changes to ratepayers and reliability are threefold. First, requiring that facilities are both required and equipped to respond to a curtailment order will assist the CAISO in complying with the North American Electric Reliability Corporation ("NERC") reliability standards. Second, this increased ability to manage excess generation could help reduce the incidence of negative pricing events on the CAISO system as a whole, which provides a general benefit to all ratepayers in the State. Third, by allowing uncapped curtailment, SDG&E will better be able to manage the incidence of negative pricing payments made to the CAISO, which is beneficial to SDG&E's ratepayers.

⁹³ D.14-11-042, p. 38.

SDG&E has continued renegotiation of dispatch down, scheduling and curtailment provisions of existing contracts. To the extent feasible, SDG&E plans to address all contracts that require updates due to CAISO's implementation of FERC Order 764. SDG&E's PPAs generally contain language⁹⁴ which contemplates the need for the buyer and seller to update the PPA when there are major market changes (such as CAISO's implementation of FERC Order 764).

D. 2017 RPS Plan

SDG&E's 2017 RPS Plan contains a comprehensive overview of SDG&E's procurement strategy, including ways to address the economic curtailment observations and activities discussed in this section. As explained above, on the evaluation side of procurement, work to revise the LCBF and incorporate a final integration adder is underway at the Commission, and until this adder is finalized SDG&E will utilize the interim integration adder adopted in D.14-11-042. With respect to the contract side of procurement, SDG&E incorporated provisions into its PPA in the 2014 version of its RPS Plan related to curtailment and is working on the renegotiation of dispatch down and scheduling and curtailment provisions in existing contracts. SDG&E also made additional modifications to its RPS PPAs (attached hereto as Appendices 6, 7, and 11.A) to ensure clarity with respect to FERC 764 changes in its 2016 RPS Plan, and as explained above under Section II, has made contract adjustments intended to remove the incentive to overbuild (additional and unplanned generation can contribute to negative pricing incidences and lead to economic curtailment).

Initiatives undertaken outside of the RPS proceeding also have the potential to assist in the management of intermittent generation and the resulting curtailment – specifically, the addition of flexible capacity and energy storage resources to the grid. On May 21, 2015, the Commission approved SDG&E's 20-year term contract with the Carlsbad Energy Center in D.15-05-051, finding that “[t]he Carlsbad PPTA would provide additional benefits including reliability benefits by being able to meet SDG&E's LCR need by 2018, renewable resources integration benefits due to its flexible dispatchability, and locational benefits by virtue of being

⁹⁴ See RAM PPA Section 3.3.a: “In the event that the PIRP or the CAISO Tariff and/or any protocols relating thereto are changed, amended, modified replaced or terminated, Seller and Buyer agree to comply with such revisions and, to the extent practical, to implement such revisions in a manner that maintains the relative economic positions of the Parties as of the date of this Agreement.”

highly compatible with the existing transmission system and on previously disturbed land.”⁹⁵ The Commission’s decisions on storage (D.13-01-040, D.14-10-045 and D.16-01-032) list a myriad of grid management issues that can be addressed via storage, for example, transmission and distribution reliability.⁹⁶ Storage also has the ability to respond to periods of overgeneration, potentially mitigating the frequency of negative pricing. SDG&E is well on its way to meeting the energy storage procurement requirements included in D.13-01-040 including the procurement of at least 165 MW⁹⁷ of energy storage through a series of biannual solicitations. To date, SDG&E has completed the 2014 and 2016 energy storage procurement cycles and has at least two more (in 2018 and 2020). Additionally, D.14-03-004 required that SDG&E procure a minimum of 25 MW⁹⁸ of energy storage, and in A.17-04-017, filed by SDG&E on April 29, 2017, SDG&E made a showing that this requirement has been fulfilled.

In February of 2017, SDG&E brought 37.5 MW of battery energy storage on-line in Escondido (30 MW) and El Cajon (7.5 MW). As mentioned, energy storage resources could potentially mitigate the effects of surplus energy. They have the capability to absorb excess energy during times of high renewable generation, and discharge it at times when generation is more valuable. However, the total volume of energy storage available in the CAISO is not enough to have a significant impact on the utilization of renewable generation. As energy storage capacity increases, the ability of this resource to absorb excess energy may increase, which may decrease the need for economic curtailments.

XI. EXPIRING CONTRACTS

The table attached hereto in Appendix 4 lists the contracts in SDG&E’s portfolio, as of June 2017, that will be expiring in the next 10 years.

XII. COST QUANTIFICATION

The tables attached hereto in Appendix 3 provide an annual summary of both actual and forecasted RPS procurement costs and generation, by technology type, as of June 2017.

⁹⁵ D.15-05-051, p. 34.

⁹⁶ D.13-10-040, p. 15.

⁹⁷ D.13-10-040, p. 15.

⁹⁸ D.14-03-004, p. 2.

XIII. IMPERIAL VALLEY

SDG&E did not hold a 2016 RPS RFO, however, the RPS portfolio currently contains 11 contracts in the IV/IID territory, that when completed will provide an estimated 3,100 GWh per year. As of June 2017, 10 of these projects have reached commercial operation, and the generation from these projects is anticipated to be approximately 3,000 GWh per year. Additionally, projects located within IV and either directly connected or dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO are eligible to participate in SDG&E's GTSR program.⁹⁹ SDG&E proposed in AL 2717-E, which addresses initial procurement for the GT component via RAM, that projects from the IV be allowed to submit bids,¹⁰⁰ this AL was approved without modification and became effective on June 11, 2015. SDG&E made this same recommendation for the ECR component, and the GTSR Phase IV decision allows ECR facilities that contract with SDG&E to site in the IV.¹⁰¹

XIV. IMPORTANT CHANGES TO DRAFT 2017 RPS PLAN

Important changes made to SDG&E's Draft 2017 RPS Plan are detailed in Appendix 5.

XV. SAFETY CONSIDERATIONS

SDG&E is committed to providing safe, reliable and environmentally sound electric service for its customers. As discussed herein, SDG&E's RPS Plan contemplates procurement of RPS-eligible generation through both PPAs and UOG. SDG&E's emphasis on safety is reflected in: (i) the terms and conditions contained in the pro forma PPAs used in its various procurement programs, and (ii) the safety procedures that all contractors working on UOG facilities are required by SDG&E to follow.

A. RPS Power Purchase Agreements

SDG&E's current procurement programs and the safety-related contractual provisions included in the contract for each program are detailed below. Although the precise wording varies slightly among PPAs related to different programs, each PPA follows the same logic by first defining prudent business practices as those which, given the information available at the

⁹⁹ D.15-01-051, p. 35.

¹⁰⁰ SDG&E AL 2717-E, p. 5.

¹⁰¹ D.16-05-006, p. 17.

time the decision was made, could reasonably be expected to accomplish the desired result consistent with good business practices, reliability and safety. This definition is then referenced throughout the contract. By executing any of the following referenced PPAs, a counterparty agrees to incorporate safety considerations into its decision-making process and operate accordingly.

- i. **PPA Provisions - Utility Scale RFOs (Long-Term and Short-Term¹⁰² Contracts) and GT RAM¹⁰³**
 - Section 1.1: “Good Industry Practice” means those practices, methods and acts that would be implemented and followed by prudent operators of electric transmission facilities (with respect to Buyer) or prudent operators of electric generation facilities similar to the Project (with respect to Seller) in the Western United States during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety, and shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers’ warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and applicable Law. Good Industry Practice is not intended to be the optimum practice, method or act to the exclusion of all others, but rather is intended to be any of the practices, methods and/or actions generally accepted in the region.
 - Section 3.1(f)(ii): [For Baseload, Peaking, Dispatchable Product: Annual Capacity Testing. Thereafter, at least once per Contract Year within the first quarter of each Contract Year, upon no less than 14 days prior Notice to

¹⁰² SDG&E’s Short-Term PPA is for projects that have already been constructed because it is not likely that a new project would be interested in a term of 5 years or less, as such it does not contain a Milestone Schedule, a Commercial Operations Certificate, or a Form of Quarterly Progress Report.

¹⁰³ D.14-11-042 requires that SDG&E file a short-term RPS PPA and RAM PPA, and D.16-05-006 requires that SDG&E utilize a RAM Rider for its ECR program. These documents are attached here to as Appendices 7, 11.A and 12.A, respectively. All of these documents are based on SDG&E’s RPS PPA, attached hereto as Appendix 6, as such the safety provisions and associated references are the same.

Buyer, Seller shall schedule and complete a Capacity Test. In addition, Buyer shall have the right to require a retest of the Capacity Test at any time upon five (5) days prior written Notice to Seller if Buyer reasonably believes that the actual Contract Capacity has varied materially from the results of the most recent tests. Seller shall have the right to run a retest of the Capacity Test at any time upon two (2) days prior written Notice to Buyer (or any shorter period reasonably acceptable to Buyer consistent with Good Industry Practices).]

- Section 3.5(a): General Operation. Seller shall comply with all applicable requirements of Law, the CAISO, NERC and WECC relating to the Project (including those related to safety, construction, ownership and/or operation of the Project).
- Section 3.5(b): CAISO and WECC Standards. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs and protocols of the CAISO, (ii) WECC scheduling practices and (iii) Good Industry Practices.
- Section 3.5(c): Reliability Standards. Seller agrees to abide by all (i) NERC, WECC and CAISO reliability requirements, including all such reliability requirements for generator owners and generator operators, and, if applicable, CPUC General Order No.167, “Enforcement of Maintenance and Operation Standards for Electrical Generating Facilities,” and (ii) all applicable requirements regarding interconnection of the Project, including the requirements of the interconnected Transmission Provider.
- Section 3.6(a)(i): Testing and Calibration. Seller shall perform or cause to be performed, at its expense, annual testing and calibration of the electric meters in accordance with Good Industry Practice and the CAISO Tariff. Seller shall give Buyer reasonable advance notice of any inspection, testing or calibration of the electric meters. Buyer shall have the right to have a representative or designee present at such inspection, test or calibration of the electric meters. Buyer shall have the right to require, at Buyer’s expense, except as required

below, a test of any of the electric meters not more often than two (2) times every twelve (12) months.

- Section 3.7(a): Planned Outages. Seller shall schedule Planned Outages for the Project in accordance with Good Industry Practices and with the prior written consent of Buyer, which consent may not be unreasonably withheld or conditioned. The Parties acknowledge that in all circumstances, Good Industry Practices shall dictate when Planned Outages should occur. Seller shall notify Buyer of its proposed Planned Outage schedule for the Project for the following calendar year by submitting a written Planned Outage schedule no later than October 1st of each year during the Delivery Term. The Planned Outage schedule is subject to Buyer's approval, which approval may not be unreasonably withheld or conditioned. Buyer shall promptly respond with its approval or with reasonable modifications to the Planned Outage schedule and Seller shall use its best efforts in accordance with Good Industry Practices to accommodate Buyer's requested modifications. Notwithstanding the submission of the Planned Outage schedule described above, Seller shall also submit a completed Outage Notification Form to Buyer no later than fourteen (14) days prior to each Planned Outage and all appropriate outage information or requests to the CAISO in accordance with the CAISO Tariff. Seller shall contact Buyer with any requested changes to the Planned Outage schedule if Seller believes the Project must be shut down to conduct maintenance that cannot be delayed until the next scheduled Planned Outage consistent with Good Industry Practices. Seller shall not change its Planned Outage schedule without Buyer's approval, not to be unreasonably withheld or conditioned. Seller shall use its best efforts in accordance with Good Industry Practices not to schedule Planned Outages during the months of July, August, September and October. At Buyer's request, Seller shall use commercially reasonable efforts to reschedule Planned Outage so that it may deliver Product during CAISO declared or threatened emergency periods. Seller shall not substitute Energy from any other source for the output of the Project during a Planned Outage.

- Exhibit F, Form of Quarterly Progress Report, Section 9.0: Safety and Health Reports
 - 9.1 Please list all accidents from the previous calendar quarter.
 - 9.2 Any work stoppage from the previous calendar quarter.
 - 9.3 Work stoppage impact on construction of the Project.
- ii. **PPA Provisions – CRE and WATER FiT Programs¹⁰⁴**
 - Section 5.4: The Generating Facility shall be operated with all of Producer's Protective Functions in service and in accordance with Prudent Electrical Practices whenever the Generating Facility is operated in parallel with SDG&E's Distribution System. Any deviation from these requirements may occur only when the Parties have agreed to such deviations in writing.
 - Appendix F, Item 32: "Operate," "Operating" or "Operation" means to provide (or the provision of) all the operation, engineering, purchasing, repair, supervision, training, inspection, testing, protection, use, management, improvement, replacement, refurbishment, retirement, and maintenance activities associated with operating the Generating Facility in accordance with Prudent Electrical Practices.
 - Appendix F, Item 41: "Prudent Electrical Practices" means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy generating facilities in the Western United States, similar to the Generating Facility, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety.
 - Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers' warranties,

¹⁰⁴ SDG&E's CRE FiT and WATER FiT programs terminated July 24, 2013.

restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the ISO and applicable laws.

- Prudent Electrical Practices shall also include taking reasonable steps to ensure that:
 - Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Generating Facility's needs;
 - Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Generating Facility properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Generating Facility and emergencies whether caused by events on or off the Site;
 - Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Generating Facility, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
 - Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;
 - Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or SDG&E's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
 - Equipment and components designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy generating facilities operating in the

Western United States and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

iii. PPA Provisions – Re-MAT FiT Program, and BioRAM¹⁰⁵

- Section 6.4: Standard of Care. Seller shall: (a) maintain and operate the Facility and Interconnection Facilities, except facilities installed by Buyer, in conformance with all Laws and in accordance with Prudent Electrical Practices; (b) obtain any governmental authorizations and permits required for the construction and operation thereof; and (c) generate, schedule and perform transmission services in compliance with all applicable operating policies, criteria, rules, guidelines and tariffs and Prudent Electrical Practices. Seller shall reimburse Buyer for any and all losses, damages, claims, penalties, or liability Buyer incurs as a result of Seller's failure to obtain or maintain any governmental authorizations and permits required for construction and operation of the Facility throughout the Term of this Agreement.
- Section 6.5.2: Access Rights. Buyer, its authorized agents, employees and inspectors may, on reasonable advance notice under the circumstances, visit the Project during normal business hours for purposes reasonably connected with this Agreement or the exercise of any and all rights secured to Buyer by Law, its tariff schedules, and rules on file with the CPUC. Buyer, its authorized agents, employees and inspectors must (a) at all times adhere to all safety and security procedures as may be required by Seller; and (b) not interfere with the operation of the Project. Buyer shall make reasonable efforts to coordinate its emergency activities with the Safety and Security Departments, if any, of the Project operator. Seller shall keep Buyer advised of current procedures for contacting the Project operator's Safety and Security Departments.

¹⁰⁵ SDG&E's Re-MAT FiT Program ended June 30, 2016. Note that SDG&E's BioRAM contract is also based on SDG&E's ReMAT PPA.

- Appendix A: “Demonstrated Contract Capacity” means the Facility’s total rated electric alternating current energy generating capacity which will equal the [lesser of (a) the sum of the Inverter Block Unit Capacity of all Inverter Block Units in the Facility and (b) the continuous output power rating at the expected operating power factor of the step-up transformer that connects the Facility to the Transmission/Distribution Owner’s system[for solar photovoltaic technology]] [the total of the manufacturer’s nameplate ratings of all installed Wind Turbines, consistent with Prudent Electrical Practices and accepted industry standards, as indicated on the nameplates physically attached to the individual Wind Turbine generators[for wind technology]] [sum of the Metered Amounts for the Demonstration Hour[all other technologies]], as determined in accordance with Appendix M.
- Appendix A: “Inverter Block Unit Capacity” means, with respect to each Inverter Block Unit, the total rated electric alternating current energy generating capacity of such Inverter Block Unit, determined as the lesser of: (a) The manufacturer’s output rating of the Current Inverter included in such Inverter Block Unit, consistent with Prudent Electrical Practices and accepted industry standards, as indicated on the nameplate physically attached to such Current Inverter; (b) The sum of the manufacturer’s nameplate ratings of all Photovoltaic Modules included in such Inverter Block Unit, consistent with Prudent Electrical Practices and accepted industry standards, as indicated on the nameplates physically attached to such individual Photovoltaic Modules;
- Appendix A: “Prudent Electrical Practices” means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy generating facilities in the Western United States, similar to the Facility, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety. Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods

and acts described in the preceding sentence that comply with manufacturers' warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and Laws. Prudent Electrical Practices also includes taking reasonable steps to ensure that:

- (a) Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Facility's needs;
- (b) Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Facility properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Facility and Emergencies whether caused by events on or off the Site;
- (c) Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Facility, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
- (d) Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;
- (e) Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or the Transmission/Distribution Owner's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
- (f) Equipment and components are designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy generating facilities operating in the Western United States and will function properly over the full range of ambient temperature and

weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

iv. PPA Provisions – BioMAT FiT Program¹⁰⁶

- Section 5.4: Standard of Care. Seller shall: (a) maintain and operate the Facility and Interconnection Facilities, except facilities installed by Buyer, in conformance with all Laws and in accordance with Prudent Electrical Practices; (b) obtain any governmental authorizations and permits required for the construction and operation thereof; and (c) generate, schedule and perform transmission services in compliance with all applicable operating policies, criteria, rules, guidelines and tariffs and Prudent Electrical Practices. Seller shall reimburse Buyer for any and all losses, damages, claims, penalties, or liability Buyer incurs as a result of Seller’s failure to obtain or maintain any governmental authorizations and permits required for construction and operation of the Facility throughout the Term of this Agreement.
- Section 5.5.2: Access Rights. Buyer, its authorized agents, employees and inspectors may, on reasonable advance notice under the circumstances, visit the Project during normal business hours for purposes reasonably connected with this Agreement or the exercise of any and all rights secured to Buyer by Law, its tariff schedules, and rules on file with the CPUC. Buyer, its authorized agents, employees and inspectors must (a) at all times adhere to all safety and security procedures as may be required by Seller; and (b) not interfere with the operation of the Project. Buyer shall make reasonable efforts to coordinate its emergency activities with the Safety and Security Departments, if any, of the Project operator. Seller shall keep Buyer advised of current procedures for contacting the Project operator’s Safety and Security Departments.
- Section 5.17: Safety Plan. Seller shall provide to Buyer, prior to commencement of any construction activities on the Site, a report from an independent engineer (acceptable to both Buyer and Seller) certifying that

¹⁰⁶ SDG&E’s BioMAT FiT Program began February 1, 2016.

Seller has a written plan for the safe construction and operation of the Facility in accordance with Prudent Electrical Practices.

- Appendix A: “Demonstrated Contract Capacity” means the Facility’s total rated electric alternating current energy generating capacity which will equal the sum of the metered amounts for the Demonstration Hour, as determined in accordance with Appendix J.
- Appendix A: “Prudent Electrical Practices” means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy generating facilities in the Western United States, similar to the Facility, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety. Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers’ warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and Laws. Prudent Electrical Practices also includes taking reasonable steps to ensure that:
 - (a) Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Facility’s needs;
 - (b) Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Facility properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Facility and Emergencies whether caused by events on or off the Site;
 - (c) Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Facility, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;

- (d) Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;
- (e) Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or the Transmission/Distribution Owner's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
- (f) Equipment and components are designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy generating facilities operating in the Western United States and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

B. Renewable Utility-Owned Generation Projects

SDG&E requires all contractors working on the construction of new UOG facilities to observe the following safety-related procedures:

i. Safety Requirements

- The Contractor must comply with all applicable federal, state, regional, municipal, and local laws, ordinances, rules, codes, regulations, and executive orders, including all laws, ordinances, rules, codes, regulations, and executive orders applicable to health and safety, SDG&E's Class 1 Contractor Safety Manual, and all contract terms as set forth in the contract entered into with the Company, and must ensure that all employees and subcontractors working on Contractor's behalf meet or exceed these same requirements. If there is a conflict between SDG&E's Class 1 Contractor Safety Manual, the contract entered into with the Company, or applicable H&S Laws, the more specific standard applies.

- The Contractor must enroll in and maintain compliance with SDG&E's Contractor safety program.
- The Contractor must establish, implement, and maintain a complete site-specific safety program. The Contractor must submit electronic and written copies of this program to SDG&E for review.
- The safety program must include a full-time, on-site Safety Manager at the start of the project and sufficient, qualified support staff for the duration of on-site work. This safety program must follow the applicable laws, ordinances, regulations, and standards for such programs and must include: code of safe practices, fire protection plan, spill prevention plan, worker environmental awareness training, emergency situations response plan and procedures, and hazardous material control and training. The plan must be coordinated with SDG&E's and local authorities as required.
- The safety program must include sections addressing site environmental protection and a personal protective equipment.
- Safety and Health Orientation:
 - Each new employee (including subcontractors and vendors) must receive a thorough safety and health orientation from the Contractor that gives the employee the basic information about the Contractor's safety program, Federal or State OSHA (the most stringent in any case), and other applicable safety rules and regulations. The Contractor must provide additional safety instructions during the scope of the normal daily activities for the performance of hazardous or unfamiliar tasks.
- Supervisor's Safety Orientation
 - The Contractor must familiarize all supervisory personnel with the Contractor's safety and health responsibilities by conducting a safety and health orientation with each supervisor. Supervisors must be trained in CPR and First Aid.
- Weekly Toolbox and Daily Safety Meetings

- The Contractor must conduct weekly toolbox meetings, open to SDG&E's representatives, to provide all on-site employees with up-to-date safety and health information. Daily task safety analysis for each planned activity must be performed to help the employees prepare for the hazards associated with each assigned task.
- General Safety Requirements:
 - Barricades: The Contractor must erect and maintain all barricades used to protect personnel from hazardous work operations as required by Federal or State OSHA, whichever is applicable.
 - Safety Signs: The Contractor must post any signs or posters that may be needed to advise employees of unsafe areas or conditions as required by Federal or State OSHA, whichever is applicable.
 - Scaffolds: The Contractor must erect all scaffolds in conformance with applicable Federal or State OSHA standards and maintain a method of communication that daily scaffolding erection inspection has been performed and that the scaffolding is ready for use.
 - Floor and Roof Openings: The Contractor must barricade or cover all floor and roof openings to protect employees from falls as required by Federal or State OSHA.
 - Lock Out and Tag Out: The Contractor must provide an approved procedure for lock out and tag out, including all lock tags, of all applicable equipment.
 - The Contractor must identify in writing a qualified safety representative to administer the Contractor's safety program. All vendor-supplied service organizations must each be required to implement a safety program appropriate for the Work being performed and in compliance with the Contractor's safety program. The Contractor is responsible for all subcontractor compliance with the its safety program.
- Loss Prevention Requirements:
 - Implementation of an approved safety program

- Provision of a safe workplace for all employees
- Implementation of a fire prevention program in accordance with NFPA 241: Standard for Safeguarding Construction, Alteration, and Demolition Operations
- Prevention of equipment operation unless the equipment is safe to operate, all protective equipment is in place, and the operators are properly trained and licensed or certified for the particular equipment being operated
- Identified hazards are addressed/mitigated
- Implementation of regular safety meetings and training
- Adherence to all applicable Federal or State OSHA, DOT, and other applicable safety requirements
- Occupational Health
 - The Contractor must take all reasonable steps and precautions to protect the health of their employees and other site personnel. The Contractor must conduct occupational health monitoring and sampling as required by Federal or State OSHA, whichever is applicable, to determine the levels of exposure of its employees to hazardous or toxic substances or environmental conditions. Copies of employee sampling results must be provided to SDG&E upon request.
- Fire Protection and Prevention
 - The Contractor must provide fire extinguishers that are adequate for potential fire hazards present during construction, and must provide instruction regarding the proper use of such equipment to all employees. Only carbon dioxide (CO₂) fire extinguishers may be used within proximity of the inverters, transformers, switchgear, and communications enclosures to avoid damage to this equipment.
 - The Contractor must ensure the material it proposes to use at the site conforms to appropriate standards for flame-resistance or fireproof characteristics or is adequately protected from fire danger. Specific materials in this category include coatings, plastic-covering materials,

construction lumber, scaffold plans, paper, boxes, and crating materials. Flammables, such as fuels and solvents, must be stored in appropriate containers. Fire blankets must be used to protect personnel and permanent project equipment/installations when necessary.

- Crane Safety and Material Handling
 - The Contractor must comply with all rules, regulations, and standards associated with crane safety and material handling. No equipment or machinery intended for material or personnel handling is allowed on site without having written proof of a current inspection, insurance, and crane operator certification. All equipment inspection reports must be renewed prior to expiration. All crane equipment must have an inspection checklist signed off by the operator at the beginning of each shift to ensure that any crane used is in safe operating condition. Equipment must have functioning horns of sufficient volume to provide warnings when required. When applicable, crane lift plan(s) will be submitted in advance for SDG&E's review.

ii. Safety Inspections and Reporting

- Inspections
 - The Contractor must conduct weekly safety inspections of all work areas and operations in accordance with the Contractor's safety program. The Contractor must cooperate with any general safety inspections conducted by SDG&E.
 - The Contractor must maintain an inspection program for review of safety compliance for the Contractor's equipment, including power tools, electrical cords, rigging equipment, safety equipment, etc.
- Accident and Incident Reporting
 - The Contractor must immediately notify SDG&E's Project Manager of all project-related incidents, as required by SDG&E's Class 1 Contractor Safety Manual.
 - The Contractor must analyze any accident or incident (including "near misses") and provide an independent report of the cause and results of

the accident or incident to SDG&E, as required by SDG&E's Class 1 Contractor Safety Manual. The Contractor safety program must identify and implement all necessary corrective action to prevent future occurrence of a similar incident.

- Contractor must immediately notify Owner of any governmental agency (OSHA, Fire Dept., Health Dept., etc.) complaint and inspection of the project.
- Recordkeeping
 - The Contractor must maintain all records required by federal and state agencies that pertain to work-related injuries or illness.
- Security
 - The Contractor is responsible for providing site security as necessary during construction.

XVI. RENEWABLE AUCTION MECHANISM

A. Procurement Need

As outlined above under Section II, SDG&E anticipates meeting its CP3 need with projects it already has under contract. Consequently, SDG&E may use the RAM solicitation documentation, attached hereto as Appendices 11-12.B, on an as-needed basis to procure for its GTSR program,¹⁰⁷ as authorized by D.15-01-051¹⁰⁸ and D.16-05-006.¹⁰⁹ The attached RAM documentation is intended for procurement of resources for the GT¹¹⁰ component of SDG&E's GTSR program, as well as for the ECR¹¹¹ component of SDG&E's GTSR program.

B. Documents & Updated Parameters

SDG&E has attached GT RAM solicitation form documentation hereto as Appendices 11-11.B. These documents are summarized below:

¹⁰⁷ SDG&E will use the capacity procured via the RAM mechanism to satisfy its LCR requirement if the resources contracted with are eligible.

¹⁰⁸ D.15-01-051, OP 5, p. 180.

¹⁰⁹ D.16-05-006, OP 1, p. 41.

¹¹⁰ EcoChoice, formally known as SunRate.

¹¹¹ EcoShare, formally known as Share the Sun.

- Appendix 11, GT RAM RFO: This document incorporates the eligibility criteria required by D.14-11-041, D.15-01-051, and D.16-05-006: allows for all RPS-eligible projects to participate in the program, allows for projects to be sized 0.5 MW to 20 MW, allows projects to be located in, or dynamically transferred into, SDG&E’s territory (which is within the CAISO), requires at a minimum a Phase II Interconnection Study for projects interconnecting at the transmission level (and equivalent requirements for projects interconnecting at the distribution level), requires a 36 month construction timeline with a 6 month extension for interconnection, force majeure and/or regulatory delays, and requires the submittal of a Geographic Information System (“GIS”) file of the project boundaries and associated gen-tie. SDG&E will use its RPS LCBF methodology, attached hereto as Appendix 9, to evaluate projects that bid into future RAM auctions.¹¹²
- Appendix 11.A, GT RAM PPA: SDG&E’s GT RAM PPA is a modified version of the RAM PPA and includes the additional eligibility criteria required by D.15-01-051 and D.16-05-006. Because this PPA is non-modifiable, SDG&E has also included a due date for FCDS.
- Appendix 11.B, GT RAM Offer Form: SDG&E’s GT RAM Offer form, attached hereto as Appendix 11.B, is compatible with its LCBF methodology, attached hereto as Appendix 9. The GT Projection Description form has been consolidated into the GT RAM Offer form.

SDG&E has attached ECR RAM solicitation form documentation hereto as Appendices 12-12.B. These documents are summarized below:

- Appendix 12, ECR RAM RFO: This document incorporates the following eligibility criteria required by D.14-11-042, D.15-01-051¹¹³ and D.16-05-006:¹¹⁴ allows for projects to be sized 0.5 MW to 20 MW, allows for distributed energy resource providers (“DERPs”) to aggregate, allows projects to be located in, or dynamically transferred into, SDG&E’s territory (which is within the CAISO), requires at a minimum a Phase II Interconnection Study for projects interconnecting at the transmission level (and equivalent requirements for projects interconnecting at the distribution level), requires a

¹¹² D.14-11-042, pp. 23, 66, 94-101.

¹¹³ D.15-01-051, OP 5, p. 180.

¹¹⁴ D.16-05-006, OP 1, p. 41.

36 month construction timeline with a 6 month extension for interconnection, force majeure and/or regulatory delays, and requires the submittal of a GIS file of the project boundaries and associated gen-tie. SDG&E will use its RPS LCBF methodology, attached hereto as Appendix 9, to evaluate projects that bid into future RAM auctions.

- Appendix 12.A, ECR RAM Rider: SDG&E's ECR RAM Rider was designed to modify the GT RAM PPA pursuant to D.16-05-006 to procure RPS-eligible capacity for the purpose of implementing the ECR program. Pursuant to D.16-05-006, SDG&E is authorized to use the RAM to procure RPS-eligible capacity for the purposes of implementing the ECR program.
- Appendix 12.B, ECR RAM Offer Form: SDG&E's ECR RAM Offer form, attached hereto as Appendix 12.B, is compatible with its LCBF methodology, attached hereto as Appendix 9. The ECR Projection Description form has been consolidated into the ECR RAM Offer form.

C. Approval Process

D.14-11-042 allows the IOUs to propose an approval method for contracts resulting from the RAM process. At this time, SDG&E proposes no change to the current Tier 2 AL process, but may propose alternate methods in subsequent versions of its RPS Plan.

XVII. GREEN TARIFF SHARED RENEWABLES PROGRAM

A. Program History and Status

As explained above under Section II, SB 43, which requires participating utilities to file an application for a GTSR program allowing customers to buy some or all of their energy from local renewable projects (via a GT or an ECR) option, became effective on January 1, 2014. Prior to the effective date of this law, SDG&E filed an application requesting approval of its "connected.....to the sun" program in January of 2012 (A.12-01-008). This application included both a GT and an ECR program, and SDG&E subsequently modified this application to comport with the GTSR program requirements of SB 43. The Commission issued D.15-01-051 on February 2, 2015, requiring the IOUs to submit a series of ALs regarding advanced procurement, marketing, implementation, and customer-side considerations for both GTSR components. Pursuant to D.15-01-051, SDG&E filed a Tier 1 AL describing its advanced procurement plan on February 23, 2015, which became effective on February 25, 2015. This AL explained that

SDG&E will procure only for GT at this time, stating “SDG&E will seek to procure its authorized initial advanced procurement capacity of between 10.5 MW and 25 MW for SDG&E’s GT program as part of SDG&E’s RAM VI solicitation.”¹¹⁵ SDG&E also filed a Joint Procurement Implementation AL¹¹⁶ (“JPIAL”) in partnership with SCE and PG&E, as well as SDG&E-specific Marketing Implementation¹¹⁷ (“MIAL”) and Customer Side Implementation¹¹⁸ (“CSIAL”) ALs on May 13, 2015. The Commission issued D.16-05-006 on May 12, 2016, addressing participation of ECR projects in the RAM and other refinements to the GTSR program. Pursuant to that decision, SDG&E filed a Tier 2 AL on June 15, 2016 submitting a revised ECR rider and solicitation documents to allow for procurement of ECR projects using the RAM, and issued its first ECR solicitation on August 31, 2016.

SDG&E issued a combined GTSR solicitation for GT and ECR projects on March 22, 2017.¹¹⁹ The discussion below summarizes the information that SDG&E anticipates providing in subsequent versions of this RPS Plan, following complete implementation of all components of the GTSR program.

B. Progress Towards Target and Reservations

SDG&E has a target of 59 MW total capacity between its GT and ECR programs, and within this target are two reservations of 10 MW each for residential customers and EJ projects.¹²⁰ The Commission approved SDG&E’s AL 3074-E, via disposition letter, effective June 5, 2017, approving a 20 MW project for SDG&E’s GT program leaving 39 MW of available capacity in SDG&E’s GTSR program. At the time of this filing, the results of SDG&E’s Q1 2017 GTSR solicitation are undetermined, and any procurement resulting from this solicitation would impact SDG&E’s remaining 39 MW program capacity. Subsequent procurement for the GT program through RAM, as described above under Section XVI, will be based on assessment of “incremental customer enrollments and the amount of dedicated Green Tariff procurement... [already] under contract.”¹²¹ While an ECR project remains to be

¹¹⁵ SDG&E AL 2708-E, p. 2.

¹¹⁶ SDG&E AL 2743-E.

¹¹⁷ SDG&E AL 2744-E.

¹¹⁸ SDG&E AL 2745-E.

¹¹⁹ SDG&E AL 3043-E, submitted February 10, 2017.

¹²⁰ D.15-01-051, p. 5.

¹²¹ AL 3218, p. 8.

developed in SDG&E’s service territory, SDG&E has solicited for ECR projects based upon D.16-05-006 and will hold two solicitations a year through 2018.¹²² SDG&E’s first ECR solicitation of 2017 was launched March 22, 2017.

C. Reporting

D.15-01-051 allows an IOU to supply initial GT program demand from an interim pool of existing RPS resources under contract with that IOU.¹²³ The decision also requires reporting regarding this pool, specifically that the IOU’s RPS Plan include “all information related to the transfer of megawatts from the existing RPS program to GTSR. This information includes the impact on residual net short and the need to bridge for any shortfall, accounting of RECs, list of contracts with price, and other relevant details.”¹²⁴ SDG&E received Commission approval of its interim project pool Alternative B (list below).¹²⁵ Enrollment in SDG&E’s GT program began in Q4 2016, and SDG&E’s reporting on the interim project pool Alternative B as of June 2017 is as follows: in 2016 8 RECs were transferred between the interim project pool Alternative B and the GTSR program; between January 1, 2017 and June 30, 2017, 477 RECs were transferred between the interim project pool Alternative B and the GTSR program; and the price of contracts within interim project pool Alternative B is \$93.68/MWh.¹²⁶ Per SB 43,¹²⁷ the generation used to serve the customers enrolled in SDG&E’s GT program as well as the bundled retail load served via SDG&E’s GT program have not been included in SDG&E’s RNS table, attached hereto as Appendix 2.

SDG&E GTSR Interim Pool Contracts				
Facility Name	Technology	MW	Location	GTSR Pool %
Desert Green Solar Farm	Solar PV	6.3	Borrego Springs, CA	8%
Sol Orchard 20 - Ramona 1	Solar PV	2.0	San Diego County, CA	2%
Sol Orchard 22 - Valley Center 1	Solar PV	2.5	San Diego County, CA	3%

¹²² D.16-05-006, p. 10.

¹²³ D.15-01-051, p. 39.

¹²⁴ D.15-01-051, p. 41.

¹²⁵ SDG&E AL 2745-E, pp. 3-4.

¹²⁶ Energy Resource Recovery Account (“ERRA”) Prepared Direct Testimony of Cynthia Fang on Behalf of SDG&E, April 14, 2017, p. CF 16.

¹²⁷ 2833(t).

Sol Orchard 21 - Ramona 2	Solar PV	5.0	San Diego County, CA	5%
Sol Orchard 23 - Valley Center 2	Solar PV	5.0	San Diego County, CA	5%
Cascade Solar	Solar PV	18.4	Sun Fair, CA	20%
Calipatria, LLC	Solar PV	20.0	Calipatria, CA	18%
TallBear Seville	Solar PV	20.0	El Centro, CA	22%
Maricopa West	Solar PV	20.0	Maricopa, CA	16%

XVIII. OTHER RPS PLANNING CONSIDERATIONS AND ISSUES

In accordance with D.17-01-006,¹²⁸ SDG&E is including the below information on its base time of use (“TOU”) periods. SDG&E’s base TOU periods are established as part of the rate design proceeding commonly referred to as the General Rate Case Phase 2 (“GRC Phase 2”).

A. SDG&E’s Current Standard Base TOU Periods

Current TOU Periods [EFFECTIVE THROUGH 11/30/17]		
TOU Period	Summer (May 1 – October 31)	Winter (November 1 – April 30)
On-peak	11:00 a.m.-6:00 p.m. Weekdays	5:00 p.m.-8:00 p.m. Weekdays
Semi-peak	6:00 a.m.-11:00 a.m. Weekdays; 6:00 p.m.-10:00 p.m. Weekdays	6:00 a.m.-5:00 p.m. Weekdays; 8:00 p.m.-10:00 p.m. Weekdays
Off-peak	10:00 p.m.-6:00 a.m. Weekdays Plus Weekends & Holidays	10:00 p.m.-6:00 a.m. Weekdays Plus Weekends & Holidays

B. SDG&E’s Adopted Base TOU Periods

SDG&E’s current base TOU periods were updated in D.17-08-030.¹²⁹ These adopted base TOU periods are scheduled to take effect on December 1, 2017.

Adopted TOU Periods (Weekdays) [EFFECTIVE BEGINNING 12/1/17]		
TOU Period	Summer (June 1 – October 31)	Winter (November 1 – May 31)
On-peak	4:00 p.m.-9:00 p.m.	4:00 p.m.-9:00 p.m.
Off-peak	6:00 a.m.-4:00 p.m.; 9:00 p.m.-midnight	6:00 a.m.-4:00 p.m. excluding 10:00 a.m.-2:00 p.m. in March and April; 9:00 p.m.-midnight

¹²⁸ D.17-01-006, OP2, p. 78.

¹²⁹ D.17-08-030 was approved by the Commission on August 24, 2017.

Super-off-peak	Midnight- 6:00 a.m.	Midnight-6:00 a.m.; 10:00 a.m.-2:00 p.m. in March and April
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Adopted TOU Periods (Weekends and Holidays) [EFFECTIVE BEGINNING 12/1/17]		
TOU Period	Summer (June 1 – October 31)	Winter (November 1 – May 31)
On-peak	4:00 p.m.-9:00 p.m.	4:00 p.m.-9:00 p.m.
Off-peak	2:00 p.m.-4:00 p.m.; 9:00 p.m.-midnight	2:00 p.m.-4:00 p.m.; 9:00 p.m.-midnight
Super-off-peak	Midnight- 2:00 p.m.	Midnight- 2:00 p.m.



APPENDIX 1

2017 PROJECT DEVELOPMENT STATUS UPDATE

SDG&E submits its RPS database update to the Commission monthly. The following excerpt from SDG&E's June 16, 2017 PRG meeting provides the most updated information on the developing projects in SDG&E's portfolio.

[REDACTED]



APPENDIX 2

2017 QUANTITATIVE INFORMATION

SDG&E Renewable Net Short for RPS Procurement – June 2017:

The tables below provide the data behind SDG&E’s RPS Risk Adjusted Net Short Calculation as of June, 2017. They include the outputs required by the *Administrative Law Judge’s Ruling on Renewable Net Short*, dated May 21, 2014, and have been updated to reflect the banking rules adopted under D.17-06-026 as SDG&E has elected to use these rules beginning in CP3. A discussion of this analysis is provided in Section II.

Variable	Calculation	Item	Prior Deficit	2011 - 2013	2014 - 2016	2017 - 2020
		Forecast Year		CP1	CP2	CP3
Annual RPS Requirement						
A		Bundled Retail Sales Forecast (LTPP)		49,040	48,388	
B		RPS Procurement Quantity Requirement (%)		20.2%	23.3%	30.0%
C	A * B	Gross RPS Procurement Quantity Requirement (GWh)	78	9,886	11,277	
D		Voluntary Margin of Over-procurement		0	0	
E	C + D	Net RPS Procurement Need (GWh)		9,886	11,277	
RPS-Eligible Procurement						
Fa		Risk-Adjusted RECs from Online Generation		11,287	19,300	
Faa		Forecast Failure Rate for Online Generation (%) ⁽¹⁾		0%	0%	
Fb		Risk-Adjusted RECs from RPS Facilities in Development		0	0	
Fbb		Forecast Failure Rate for RPS Facilities in Development (%) ⁽¹⁾		0%	0%	
Fc		Pre-Approved Generic RECs ⁽²⁾		0	0	306
Fd		RECs Pending CPUC Approval		0	0	0
Fe		Executed REC Sales		697	1,540	0
F	Fa + Fb + Fc + Fd - Fe	Total RPS Eligible Procurement (GWh)		10,590	17,760	29,088
F0		Category 0 RECs		6,568	7,837	
F1		Category 1 RECs		3,780	9,922	
F2		Category 2 RECs		0	0	
F3		Category 3 RECs		242	0	
F _{LT}		RECs from LT contracts ⁽³⁾		7,452	17,760	
F _{LT%}	F _{LT} /F	% of RECs from LT contracts		70%	100%	
Gross RPS Position (Physical Net Short)						
Ga	F-E	Annual Gross RPS Position (GWh)		703	6,483	
Gb	F/A	Annual Gross RPS Position (%)		21.6%	36.7%	
Application of Bank						
Ha	La _{t-1} + J _{t-1}	Existing Banked RECs above the PQR		(2)	7,031	
Hb	+Ga - Hc	RECs above the PQR added to Bank		569	6,478	
Hc		Non-bankable RECs above the PQR		136	5	
H	Ha + Hb	Gross Balance of RECs above the PQR		567	13,509	
Ia	-Ga < Bank	Planned Application of RECs above the PQR towards RPS Compliance		(0)		
Ib		Planned Sales of RECs above the PQR		0	0	
J	H - Ia - Ib	Net Balance of RECs above the PQR		567	13,509	
J0		Category 0 RECs ⁽⁴⁾		360	7,317	
J1		Category 1 RECs ⁽⁴⁾		207	6,191	
J2		Category 2 RECs ⁽⁴⁾		0	0	
Expiring Contracts						
K		RECs from Expiring RPS Contracts		2,043	410	355
Net RPS Position (Optimized Net Short)						
La	Ga - Hb - Hc + Ia	Annual Net RPS Position after Bank Optimization (GWh) ⁽⁵⁾		(2)	(0)	
Lb	(E + La)/A	Annual Net RPS Position after Bank Optimization (%)		20.2%	23.3%	

Note: Values are shown in GWhs

(1) Delivery failure rate is the probability weighted deviation below expected forecast generation, and is based upon but not limited to probability assessments of project failure, project capacity reduction, operational failure after project success, project curtailment due to transmission constraints, etc.

(2) Pre-Approved Generic Generation includes mandated programs.

(3) Excludes executed REC sales.

(4) The "Net Balance of RECs above PQR" has been allocated between PCC0 and PCC1 categories based on the historical procurement of the total RECs by each category in "F0" and "F1." For CP1, the RECs over PQR applied for compliance versus the RECs applied that meet the PQR are not broken out as all RECs to be applied for compliance are submitted together and RECs above and for PQR are not differentiated from one another.

(5) The formula was changed so that it includes the effect of the non-bankable RECs.

Variable	Calculation	Item	2021 - 2024	2025 - 2027	2028 - 2030	2031 - 2033	2034 - 2036
		Forecast Year	CP4	CP5	CP6	CP7	CP8
Annual RPS Requirement							
A		Bundled Retail Sales Forecast (LTPP)	60,138	45,007	44,964	44,968	44,971
B		RPS Procurement Quantity Requirement (%)	37.4%	43.3%	48.3%	50.0%	50.0%
C	A * B	Gross RPS Procurement Quantity Requirement (GWh)	22,493	19,502	21,733	22,484	22,485
D		Voluntary Margin of Over-procurement	0	0	0	0	0
E	C + D	Net RPS Procurement Need (GWh)	22,493	19,502	21,733	22,484	22,485
RPS-Eligible Procurement							
Fa		Risk-Adjusted RECs from Online Generation	26,607	17,505	17,161	15,579	7,848
Faa		Forecast Failure Rate for Online Generation (%) ⁽¹⁾	0%	0%	0%	0%	0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development	261	193	190	188	150
Fbb		Forecast Failure Rate for RPS Facilities in Development (%) ⁽¹⁾	27%	27%	27%	27%	18%
Fc		Pre-Approved Generic RECs ⁽²⁾	1,823	1,575	1,558	1,542	1,526
Fd		RECs Pending CPUC Approval	0	0	0	0	0
Fe		Executed REC Sales	0	0	0	0	0
F	Fa + Fb + Fc + Fd - Fe	Total RPS Eligible Procurement (GWh)	28,691	19,273	18,910	17,309	9,524
F0		Category 0 RECs	8,171	4,272	4,102	3,440	206
F1		Category 1 RECs	20,520	15,001	14,808	13,869	9,318
F2		Category 2 RECs	0	0	0	0	0
F3		Category 3 RECs	0	0	0	0	0
F _{LT}		RECs from LT contracts ⁽³⁾	28,452	19,273	18,910	17,309	9,524
F _{LT%}	F _{LT} /F	% of RECs from LT contracts	99%	100%	100%	100%	100%
Gross RPS Position (Physical Net Short)							
Ga	F-E	Annual Gross RPS Position (GWh)	6,198	(230)	(2,823)	(5,175)	(12,961)
Gb	F/A	Annual Gross RPS Position (%)	47.7%	42.8%	42.1%	38.5%	21.2%
Application of Bank							
Ha	La _{t-1} + J _{t-1}	Existing Banked RECs above the PQR	83,375	73,043	69,593	59,370	35,776
Hb	+Ga - Hc	RECs above the PQR added to Bank	6,198	300	0	0	0
Hc		Non-bankable RECs above the PQR	0	0	0	0	0
H	Ha + Hb	Gross Balance of RECs above the PQR	89,573	73,342	69,593	59,370	35,776
Ia	-Ga < Bank	Planned Application of RECs above the PQR towards RPS Compliance	0	529	2,823	5,175	12,961
Ib		Planned Sales of RECs above the PQR	0	0	0	0	0
J	H - Ia - Ib	Net Balance of RECs above the PQR	89,573	72,813	66,771	54,195	22,815
J0		Category 0 RECs ⁽⁴⁾	34,687	25,785	22,168	17,115	6,848
J1		Category 1 RECs ⁽⁴⁾	54,886	47,028	44,603	37,080	15,967
J2		Category 2 RECs ⁽⁴⁾	0	0	0	0	0
Expiring Contracts							
K		RECs from Expiring RPS Contracts	626	160	49	1,699	533
Net RPS Position (Optimized Net Short)							
La	Ga - Hb - Hc + Ia	Annual Net RPS Position after Bank Optimization (GWh) ⁽⁵⁾	0	0	0	0	0
Lb	(E + La)/A	Annual Net RPS Position after Bank Optimization (%)	37.4%	43.3%	48.3%	50.0%	50.0%

Variable	Calculation	Item	2011 Actuals	2012 Actuals	2013 Actuals	2014 Actuals	2015 Actuals
		Forecast Year					
Annual RPS Requirement							
A		Bundled Retail Sales Forecast (LTPP)	16,249	16,627	16,164	16,468	16,267
B		RPS Procurement Quantity Requirement (%)	20.0%	20.0%	20.0%	21.7%	23.3%
C	A * B	Gross RPS Procurement Quantity Requirement (GWh)	3,328	3,325	3,233	3,574	3,790
D		Voluntary Margin of Over-procurement					
E	C + D	Net RPS Procurement Need (GWh)	3,328	3,325	3,233	3,574	3,790
RPS-Eligible Procurement							
Fa		Risk-Adjusted RECs from Online Generation	3,380	3,376	4,531	5,936	6,445
Faa		Forecast Failure Rate for Online Generation (%) ⁽¹⁾	0%	0%	0%	0%	0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development	0	0	0	0	0
Fbb		Forecast Failure Rate for RPS Facilities in Development (%) ⁽¹⁾	0%	0%	0%	0%	0%
Fc		Pre-Approved Generic RECs ⁽²⁾	0	0	0	0	0
Fd		RECs Pending CPUC Approval	0	0	0	0	0
Fe		Executed REC Sales	0	0	697	666	714
F	Fa + Fb + Fc + Fd - Fe	Total RPS Eligible Procurement (GWh)	3,380	3,376	3,834	5,270	5,732
F0		Category 0 RECs	2,784	1,969	1,815	2,805	2,567
F1		Category 1 RECs	596	1,166	2,019	2,466	3,164
F2		Category 2 RECs	0	0	0	0	0
F3		Category 3 RECs	0	242	0	0	0
F _{LT}		RECs from LT contracts ⁽³⁾	2,816	2,048	2,588	5,270	5,732
F _{LT%}	F _{LT} /F	% of RECs from LT contracts	83%	61%	68%	100%	100%
Gross RPS Position (Physical Net Short)							
Ga	F-E	Annual Gross RPS Position (GWh)	52	50	601	1,697	1,942
Gb	F/A	Annual Gross RPS Position (%)	20.8%	20.3%	23.7%	32.0%	35.2%
Application of Bank							
Ha	La _{t-1} + J _{t-1}	Existing Banked RECs above the PQR	0	(0)	(2)	567	2,262
Hb	+Ga - Hc	RECs above the PQR added to Bank	0	0	569	1,695	1,940
Hc		Non-bankable RECs above the PQR	52	52	32	2	2
H	Ha + Hb	Gross Balance of RECs above the PQR	0	(0)	567	2,262	4,202
Ia	-Ga < Bank	Planned Application of RECs above the PQR towards RPS Compliance	0	(0)	0	0	0
Ib		Planned Sales of RECs above the PQR					
J	H - Ia - Ib	Net Balance of RECs above the PQR	0	0	567	2,262	4,202
J0		Category 0 RECs ⁽⁴⁾	0	0	360	1,357	2,350
J1		Category 1 RECs ⁽⁴⁾	0	0	207	905	1,852
J2		Category 2 RECs ⁽⁴⁾	0	0	0	0	0
Expiring Contracts							
K		RECs from Expiring RPS Contracts	966	721	356	115	295
Net RPS Position (Optimized Net Short)							
La	Ga - Hb - Hc + Ia	Annual Net RPS Position after Bank Optimization (GWh) ⁽⁵⁾	(0)	(2)	0	(0)	0
Lb	(E + La)/A	Annual Net RPS Position after Bank Optimization (%)	20.5%	20.0%	20.0%	21.7%	23.3%

Variable	Calculation	Item	2016 Actuals	2017 Forecast	2018 Forecast	2019 Forecast	2020 Forecast
		Forecast Year		1	2	3	4
Annual RPS Requirement							
A		Bundled Retail Sales Forecast (LTPP)	15,653				
B		RPS Procurement Quantity Requirement (%)	25.0%	27.0%	29.0%	31.0%	33.0%
C	A * B	Gross RPS Procurement Quantity Requirement (GWh)	3,913				
D		Voluntary Margin of Over-procurement					
E	C + D	Net RPS Procurement Need (GWh)	3,913				
RPS-Eligible Procurement							
Fa		Risk-Adjusted RECs from Online Generation	6,918				
Faa		Forecast Failure Rate for Online Generation (%) ⁽¹⁾	0%				
Fb		Risk-Adjusted RECs from RPS Facilities in Development	0				
Fbb		Forecast Failure Rate for RPS Facilities in Development (%) ⁽¹⁾	0%				
Fc		Pre-Approved Generic RECs ⁽²⁾	0	0	102	102	101
Fd		RECs Pending CPUC Approval	0	0	0	0	0
Fe		Executed REC Sales	160	0	0	0	0
F	Fa + Fb + Fc + Fd - Fe	Total RPS Eligible Procurement (GWh)	6,758	7,175	7,474	7,333	7,106
F0		Category 0 RECs	2,465				
F1		Category 1 RECs	4,292				
F2		Category 2 RECs	0				
F3		Category 3 RECs	0				
F _{LT}		RECs from LT contracts ⁽³⁾	6,758				
F _{LT%}	F _{LT} /F	% of RECs from LT contracts	100%				
Gross RPS Position (Physical Net Short)							
Ga	F-E	Annual Gross RPS Position (GWh)	2,844				
Gb	F/A	Annual Gross RPS Position (%)	43.2%				
Application of Bank							
Ha	La _{t-1} + J _{t-1}	Existing Banked RECs above the PQR	4,202				
Hb	+Ga - Hc	RECs above the PQR added to Bank	2,843				
Hc		Non-bankable RECs above the PQR	1				
H	Ha + Hb	Gross Balance of RECs above the PQR	7,045				
Ia	-Ga < Bank	Planned Application of RECs above the PQR towards RPS Compliance	0				
Ib		Planned Sales of RECs above the PQR					
J	H - Ia - Ib	Net Balance of RECs above the PQR	7,045				
J0		Category 0 RECs ⁽⁴⁾	3,610				
J1		Category 1 RECs ⁽⁴⁾	3,435				
J2		Category 2 RECs ⁽⁴⁾	0				
Expiring Contracts							
K		RECs from Expiring RPS Contracts	0	21	124	210	0
Net RPS Position (Optimized Net Short)							
La	Ga - Hb - Hc + Ia	Annual Net RPS Position after Bank Optimization (GWh) ⁽⁵⁾	(0)				
Lb	(E + La)/A	Annual Net RPS Position after Bank Optimization (%)	25.0%				

Variable	Calculation	Item	2021 Forecast	2022 Forecast	2023 Forecast	2024 Forecast	2025 Forecast
		Forecast Year	5	6	7	8	9
Annual RPS Requirement							
A		Bundled Retail Sales Forecast (LTPP)	14,978	15,064	15,054	15,042	15,025
B		RPS Procurement Quantity Requirement (%)	34.8%	36.5%	38.3%	40.0%	41.7%
C	A * B	Gross RPS Procurement Quantity Requirement (GWh)	5,212	5,498	5,766	6,017	6,265
D		Voluntary Margin of Over-procurement					
E	C + D	Net RPS Procurement Need (GWh)	5,212	5,498	5,766	6,017	6,265
RPS-Eligible Procurement							
Fa		Risk-Adjusted RECs from Online Generation	6,921	6,781	6,648	6,257	5,973
Faa		Forecast Failure Rate for Online Generation (%) ⁽¹⁾	0%	0%	0%	0%	0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development	66	65	65	65	65
Fbb		Forecast Failure Rate for RPS Facilities in Development (%) ⁽¹⁾	27%	27%	27%	27%	27%
Fc		Pre-Approved Generic RECs ⁽²⁾	383	381	531	529	527
Fd		RECs Pending CPUC Approval	0	0	0	0	0
Fe		Executed REC Sales	0	0	0	0	0
F	Fa + Fb + Fc + Fd - Fe	Total RPS Eligible Procurement (GWh)	7,369	7,227	7,244	6,851	6,565
F0		Category 0 RECs	2,157	2,144	2,108	1,761	1,528
F1		Category 1 RECs	5,212	5,083	5,135	5,090	5,037
F2		Category 2 RECs	0	0	0	0	0
F3		Category 3 RECs	0	0	0	0	0
F _{LT}		RECs from LT contracts ⁽³⁾	7,194	7,163	7,244	6,851	6,565
F _{LT%}	F _{LT} /F	% of RECs from LT contracts	98%	99%	100%	100%	100%
Gross RPS Position (Physical Net Short)							
Ga	F-E	Annual Gross RPS Position (GWh)	2,157	1,729	1,478	834	300
Gb	F/A	Annual Gross RPS Position (%)	49.2%	48.0%	48.1%	45.5%	43.7%
Application of Bank							
Ha	La _{t-1} + J _{t-1}	Existing Banked RECs above the PQR	17,992	20,149	21,878	23,356	24,190
Hb	+Ga - Hc	RECs above the PQR added to Bank	2,157	1,729	1,478	834	300
Hc		Non-bankable RECs above the PQR	0	0	0	0	0
H	Ha + Hb	Gross Balance of RECs above the PQR	20,149	21,878	23,356	24,190	24,490
Ia	-Ga < Bank	Planned Application of RECs above the PQR towards RPS Compliance	0	0	0	0	0
Ib		Planned Sales of RECs above the PQR					
J	H - Ia - Ib	Net Balance of RECs above the PQR	20,149	21,878	23,356	24,190	24,490
J0		Category 0 RECs ⁽⁴⁾	8,124	8,587	8,950	9,026	8,894
J1		Category 1 RECs ⁽⁴⁾	12,025	13,291	14,406	15,164	15,596
J2		Category 2 RECs ⁽⁴⁾	0	0	0	0	0
Expiring Contracts							
K		RECs from Expiring RPS Contracts	1	95	295	235	155
Net RPS Position (Optimized Net Short)							
La	Ga - Hb - Hc + Ia	Annual Net RPS Position after Bank Optimization (GWh) ⁽⁵⁾	0	0	0	0	0
Lb	(E + La)/A	Annual Net RPS Position after Bank Optimization (%)	34.8%	36.5%	38.3%	40.0%	41.7%

Variable	Calculation	Item	2026 Forecast	2027 Forecast	2028 Forecast	2029 Forecast	2030 Forecast
		Forecast Year	10	11	12	13	14
Annual RPS Requirement							
A		Bundled Retail Sales Forecast (LTPP)	14,995	14,987	14,988	14,988	14,988
B		RPS Procurement Quantity Requirement (%)	43.3%	45.0%	46.7%	48.3%	50.0%
C	A * B	Gross RPS Procurement Quantity Requirement (GWh)	6,493	6,744	6,999	7,239	7,494
D		Voluntary Margin of Over-procurement					
E	C + D	Net RPS Procurement Need (GWh)	6,493	6,744	6,999	7,239	7,494
RPS-Eligible Procurement							
Fa		Risk-Adjusted RECs from Online Generation	5,777	5,755	5,738	5,721	5,702
Faa		Forecast Failure Rate for Online Generation (%) ⁽¹⁾	0%	0%	0%	0%	0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development	64	64	64	63	63
Fbb		Forecast Failure Rate for RPS Facilities in Development (%) ⁽¹⁾	27%	27%	27%	27%	27%
Fc		Pre-Approved Generic RECs ⁽²⁾	525	523	521	519	518
Fd		RECs Pending CPUC Approval	0	0	0	0	0
Fe		Executed REC Sales	0	0	0	0	0
F	Fa + Fb + Fc + Fd - Fe	Total RPS Eligible Procurement (GWh)	6,366	6,342	6,323	6,304	6,283
F0		Category 0 RECs	1,373	1,371	1,369	1,367	1,365
F1		Category 1 RECs	4,993	4,971	4,954	4,937	4,918
F2		Category 2 RECs	0	0	0	0	0
F3		Category 3 RECs	0	0	0	0	0
F _{LT}		RECs from LT contracts ⁽³⁾	6,366	6,342	6,323	6,304	6,283
F _{LT%}	F _{LT} /F	% of RECs from LT contracts	100%	100%	100%	100%	100%
Gross RPS Position (Physical Net Short)							
Ga	F-E	Annual Gross RPS Position (GWh)	(127)	(402)	(676)	(935)	(1,211)
Gb	F/A	Annual Gross RPS Position (%)	42.5%	42.3%	42.2%	42.1%	41.9%
Application of Bank							
Ha	La _{t-1} + J _{t-1}	Existing Banked RECs above the PQR	24,490	24,363	23,960	23,284	22,349
Hb	+Ga - Hc	RECs above the PQR added to Bank	0	0	0	0	0
Hc		Non-bankable RECs above the PQR	0	0	0	0	0
H	Ha + Hb	Gross Balance of RECs above the PQR	24,490	24,363	23,960	23,284	22,349
Ia	-Ga < Bank	Planned Application of RECs above the PQR towards RPS Compliance	127	402	676	935	1,211
Ib		Planned Sales of RECs above the PQR					
J	H - Ia - Ib	Net Balance of RECs above the PQR	24,363	23,960	23,284	22,349	21,138
J0		Category 0 RECs ⁽⁴⁾	8,616	8,275	7,871	7,410	6,886
J1		Category 1 RECs ⁽⁴⁾	15,747	15,685	15,413	14,939	14,251
J2		Category 2 RECs ⁽⁴⁾	0	0	0	0	0
Expiring Contracts							
K		RECs from Expiring RPS Contracts	5	0	0	0	49
Net RPS Position (Optimized Net Short)							
La	Ga - Hb - Hc + Ia	Annual Net RPS Position after Bank Optimization (GWh) ⁽⁵⁾	0	0	0	0	0
Lb	(E + La)/A	Annual Net RPS Position after Bank Optimization (%)	43.3%	45.0%	46.7%	48.3%	50.0%

Variable	Calculation	Item	2031 Forecast	2032 Forecast	2033 Forecast	2034 Forecast	2035 Forecast	2036 Forecast
		Forecast Year	15	16	17	18	19	20
Annual RPS Requirement								
A		Bundled Retail Sales Forecast (LTPP)	14,989	14,989	14,990	14,990	14,990	14,991
B		RPS Procurement Quantity Requirement (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%
C	A * B	Gross RPS Procurement Quantity Requirement (GWh)	7,494	7,495	7,495	7,495	7,495	7,495
D		Voluntary Margin of Over-procurement						
E	C + D	Net RPS Procurement Need (GWh)	7,494	7,495	7,495	7,495	7,495	7,495
RPS-Eligible Procurement								
Fa		Risk-Adjusted RECs from Online Generation	5,621	5,465	4,493	3,078	2,534	2,236
Faa		Forecast Failure Rate for Online Generation (%) ⁽¹⁾	0%	0%	0%	0%	0%	0%
Fb		Risk-Adjusted RECs from RPS Facilities in Development	63	63	62	51	50	49
Fbb		Forecast Failure Rate for RPS Facilities in Development (%) ⁽¹⁾	27%	27%	27%	19%	18%	18%
Fc		Pre-Approved Generic RECs ⁽²⁾	516	514	512	510	509	507
Fd		RECs Pending CPUC Approval	0	0	0	0	0	0
Fe		Executed REC Sales	0	0	0	0	0	0
F	Fa + Fb + Fc + Fd - Fe	Total RPS Eligible Procurement (GWh)	6,199	6,042	5,068	3,640	3,093	2,792
F0		Category 0 RECs	1,353	1,219	868	203	1	1
F1		Category 1 RECs	4,846	4,823	4,200	3,437	3,091	2,790
F2		Category 2 RECs	0	0	0	0	0	0
F3		Category 3 RECs	0	0	0	0	0	0
F _{LT}		RECs from LT contracts ⁽³⁾	6,199	6,042	5,068	3,640	3,093	2,792
F _{LT%}	F _{LT} /F	% of RECs from LT contracts	100%	100%	100%	100%	100%	100%
Gross RPS Position (Physical Net Short)								
Ga	F-E	Annual Gross RPS Position (GWh)	(1,295)	(1,452)	(2,427)	(3,855)	(4,402)	(4,704)
Gb	F/A	Annual Gross RPS Position (%)	41.4%	40.3%	33.8%	24.3%	20.6%	18.6%
Application of Bank								
Ha	L _{a,t-1} + J _{t-1}	Existing Banked RECs above the PQR	21,138	19,843	18,390	15,963	12,108	7,705
Hb	+Ga - Hc	RECs above the PQR added to Bank	0	0	0	0	0	0
Hc		Non-bankable RECs above the PQR	0	0	0	0	0	0
H	Ha + Hb	Gross Balance of RECs above the PQR	21,138	19,843	18,390	15,963	12,108	7,705
Ia	-Ga < Bank	Planned Application of RECs above the PQR towards RPS Compliance	1,295	1,452	2,427	3,855	4,402	4,704
Ib		Planned Sales of RECs above the PQR						
J	H - Ia - Ib	Net Balance of RECs above the PQR	19,843	18,390	15,963	12,108	7,705	3,002
J0		Category 0 RECs ⁽⁴⁾	6,363	5,800	4,952	3,679	2,292	877
J1		Category 1 RECs ⁽⁴⁾	13,480	12,590	11,011	8,429	5,413	2,125
J2		Category 2 RECs ⁽⁴⁾	0	0	0	0	0	0
Expiring Contracts								
K		RECs from Expiring RPS Contracts	12	480	1,207	281	241	11
Net RPS Position (Optimized Net Short)								
La	Ga - Hb - Hc + Ia	Annual Net RPS Position after Bank Optimization (GWh) ⁽⁵⁾	0	0	0	0	0	0
Lb	(E + La)/A	Annual Net RPS Position after Bank Optimization (%)	50.0%	50.0%	50.0%	50.0%	50.0%	50.0%

Probability-Weighted Deliveries, Contracts Presently Developing - June 2017:

	Name	CP3 Probability	Technology	Location	Date Signed	Term (yrs)	Start	Stop	Capacity (MW)	2017	2018
1	Lakeside Biogas LLC	[REDACTED]	Biogas	Lakeside	2/14/17	15	2/14/19	2/13/34	3	[REDACTED]	[REDACTED]
2	Ramona Solar Energy Project (SDG&E)		UOG Solar	SD County	6/20/12	25	10/1/17	9/30/42	4		
3	97W18ME LLC (Midway Solar Farm III)		Solar PV	Calipatria	12/11/15	20	12/1/18	11/30/38	20		

	Name	2019	2020	2021	2022	2023	2024	2025	2026	2027
1	Lakeside Biogas LLC	[REDACTED]								
2	Ramona Solar Energy Project (SDG&E)	[REDACTED]								
3	97W18ME LLC (Midway Solar Farm III)	[REDACTED]								

	Name	2028	2029	2030	2031	2032	2033	2034	2035	2036
1	Lakeside Biogas LLC	[REDACTED]								
2	Ramona Solar Energy Project (SDG&E)	[REDACTED]								
3	97W18ME LLC (Midway Solar Farm III)	[REDACTED]								

Probability-Weighted Deliveries, Contracts Presently Delivering - June 2017:

Index	Name	CP3 Probability	Technology	Location	Date Signed	Term (yrs)	Start	Stop	Capacity (MW)
1	Otay Landfill I	100%	Biogas	Chula Vista	5/1/09	10	5/1/09	4/30/19	2
2	Otay Landfill II	100%	Biogas	Chula Vista	2/22/11	20	7/1/11	6/30/31	2
3	Sycamore Energy 1 LLC	100%	Biogas	Santee	11/20/09	20	5/16/11	5/15/31	2
4	MM Prima Deshecha Energy LLC	100%	Biogas	San Juan Capistrano	9/6/05	15	10/1/07	9/30/22	6
5	San Marcos Energy LLC	100%	Biogas	San Marcos	11/20/09	20	5/18/11	5/17/31	2
6	Otay Landfill V	100%	Biogas	San Diego	12/27/11	20	6/21/13	6/20/33	2
7	Otay Landfill VI	100%	Biogas	San Diego	12/27/11	20	6/21/13	6/20/33	2
8	MM San Diego LLC (Miramar RAM)	100%	Biogas	San Diego	11/9/12	10	5/20/13	5/19/23	5
9	Sycamore Energy 2 LLC	100%	Biogas	Santee	3/7/14	10	3/30/14	3/29/24	2
10	HL Power Company LP	100%	Biomass	Wendel	11/14/16	5	2/1/17	1/31/22	24
11	City of San Diego (Point Loma)	100%	Biogas	San Diego	12/9/02	10	1/1/08	12/31/17	5
12	Santa Fe Irrigation District (Badger Filtration Plant)	100%	Small Hydro	Rancho Santa Fe	1/28/85	30	7/1/87	6/30/17	1
13	Olivenhain Municipal Water District	100%	Small Hydro	Encinitas	7/23/13	20	10/1/13	9/30/33	0
14	City of Oceanside (San Francisco Peak Hydro)	100%	Small Hydro	Oceanside	8/29/85	Evergreen	12/15/85	Evergreen	0
15	City of Escondido (Bear Valley Hydro)	100%	Small Hydro	Escondido	5/18/90	Evergreen	4/13/94	Evergreen	2
16	Centinela Solar Energy LLC	100%	Solar PV	Calexico	5/10/10	20	8/1/14	7/31/34	125
17	Centinela Solar Energy 2 LLC	100%	Solar PV	Calexico	7/29/10	20	8/15/14	8/14/34	45
18	CSolar IV South LLC	100%	Solar PV	Calexico	11/10/10	25	11/1/13	10/31/38	130
19	CSolar IV West LLC	100%	Solar PV	Imperial Valley	3/8/11	25	7/4/16	7/3/41	150
20	NRG Solar Borrego I LLC	100%	Solar PV	Borrego Springs	1/25/11	25	2/12/13	2/11/38	26
21	Desert Green Solar Farm LLC	100%	Solar PV	Borrego Springs	3/31/11	25	11/26/14	11/25/39	6
22	Campo Verde Solar LLC	100%	Solar PV	Imperial Valley	11/10/06	20	10/25/13	10/24/33	139
23	Sol Orchard 20 LLC (Ramona 1)	100%	Solar PV	San Diego County	4/11/11	25	12/31/13	12/30/38	2
24	Sol Orchard 21 LLC (Ramona 2)	100%	Solar PV	San Diego County	4/11/11	25	12/31/13	12/30/38	5
25	Sol Orchard 22 LLC (Valley Center 1)	100%	Solar PV	San Diego County	4/11/11	25	12/31/13	12/30/38	3
26	Sol Orchard 23 LLC (Valley Center 2)	100%	Solar PV	San Diego County	4/11/11	25	12/31/13	12/30/38	5
27	Arlington Valley Solar II LLC	100%	Solar PV	Hassayampa	6/3/11	25	11/5/13	11/4/38	127
28	Catalina Solar LLC	100%	Solar PV	Kern County	6/3/11	25	11/27/13	11/26/38	109
29	SG2 Imperial Valley LLC	100%	Solar PV	Imperial Valley	6/24/11	25	11/25/14	11/24/39	150
30	Imperial Valley Solar I LLC (Mount Signal)	100%	Solar PV	Imperial Valley	2/10/12	25	10/10/13	10/9/38	200

Index	Name	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
1	Otay Landfill I	9,363	10,565	3,473	0	0	0	0	0	0	0
2	Otay Landfill II	7,905	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718	10,718
3	Sycamore Energy 1 LLC	4,865	4,890	4,890	4,890	4,890	4,890	4,890	4,890	4,890	4,890
4	MM Prima Deshecha Energy LLC	45,414	42,390	42,390	42,390	42,390	31,705	0	0	0	0
5	San Marcos Energy LLC	12,872	11,923	11,923	11,923	11,923	11,923	11,923	11,923	11,923	11,923
6	Otay Landfill V	11,262	11,364	11,364	11,364	11,364	11,364	11,364	11,364	11,364	11,364
7	Otay Landfill VI	10,037	10,193	10,193	10,193	10,193	10,193	10,193	10,193	10,193	10,193
8	MM San Diego LLC (Miramar RAM)	31,352	28,765	28,765	28,765	28,765	28,765	10,954	0	0	0
9	Sycamore Energy 2 LLC	11,749	14,870	14,870	14,870	14,870	14,870	14,870	3,616	0	0
10	HL Power Company LP	169,137	175,000	175,000	175,000	175,000	14,863	0	0	0	0
11	City of San Diego (Point Loma)	20,166	19,281	0	0	0	0	0	0	0	0
12	Santa Fe Irrigation District (Badger Filtration Plant)	155	0	0	0	0	0	0	0	0	0
13	Olivenhain Municipal Water District	828	1,115	1,115	1,115	1,115	1,115	1,115	1,115	1,115	1,115
14	City of Oceanside (San Francisco Peak Hydro)	447	493	493	493	493	493	493	493	493	493
15	City of Escondido (Bear Valley Hydro)	1,705	876	876	876	876	876	876	876	876	876
16	Centinela Solar Energy LLC	353,785	376,936	375,051	373,176	371,310	369,453	367,606	365,768	363,939	362,120
17	Centinela Solar Energy 2 LLC	126,967	135,697	135,018	134,343	133,672	133,003	132,338	131,677	131,018	130,363
18	CSolar IV South LLC	297,706	321,485	319,878	318,278	316,687	315,104	313,528	311,960	310,401	308,849
19	CSolar IV West LLC	394,845	398,280	396,288	394,307	392,335	390,374	388,422	386,480	384,547	382,624
20	NRG Solar Borrego I LLC	71,961	73,442	73,074	72,709	72,346	71,984	71,624	71,266	70,909	70,555
21	Desert Green Solar Farm LLC	15,121	16,416	16,333	16,252	16,171	16,090	16,009	15,929	15,850	15,770
22	Campo Verde Solar LLC	363,751	369,072	367,227	365,391	363,564	361,746	359,937	358,138	356,347	354,565
23	Sol Orchard 20 LLC (Ramona 1)	4,844	4,812	4,788	4,764	4,740	4,717	4,693	4,670	4,646	4,623
24	Sol Orchard 21 LLC (Ramona 2)	9,594	12,031	11,971	11,911	11,851	11,792	11,733	11,674	11,616	11,558
25	Sol Orchard 22 LLC (Valley Center 1)	6,148	6,015	5,985	5,955	5,926	5,896	5,867	5,837	5,808	5,779
26	Sol Orchard 23 LLC (Valley Center 2)	12,375	12,031	11,971	11,911	11,851	11,792	11,733	11,674	11,616	11,558
27	Arlington Valley Solar II LLC	358,429	371,157	369,301	367,454	365,617	363,789	361,970	360,160	358,360	356,568
28	Catalina Solar LLC	276,161	281,648	280,240	278,838	277,444	276,057	274,677	273,303	271,937	270,577
29	SG2 Imperial Valley LLC	437,548	452,323	450,061	447,811	445,572	443,344	441,127	438,922	436,727	434,544
30	Imperial Valley Solar I LLC (Mount Signal)	520,093	552,002	549,242	546,496	543,763	541,045	538,339	535,648	532,969	530,305

Index	Name	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
1	Otay Landfill I	0	0	0	0	0	0	0	0	0	0
2	Otay Landfill II	10,718	10,718	10,718	10,718	5,315	0	0	0	0	0
3	Sycamore Energy 1 LLC	4,890	4,890	4,890	4,890	1,809	0	0	0	0	0
4	MM Prima Deshecha Energy LLC	0	0	0	0	0	0	0	0	0	0
5	San Marcos Energy LLC	11,923	11,923	11,923	11,923	4,475	0	0	0	0	0
6	Otay Landfill V	11,364	11,364	11,364	11,364	11,364	11,364	5,324	0	0	0
7	Otay Landfill VI	10,193	10,193	10,193	10,193	10,193	10,193	4,775	0	0	0
8	MM San Diego LLC (Miramar RAM)	0	0	0	0	0	0	0	0	0	0
9	Sycamore Energy 2 LLC	0	0	0	0	0	0	0	0	0	0
10	HL Power Company LP	0	0	0	0	0	0	0	0	0	0
11	City of San Diego (Point Loma)	0	0	0	0	0	0	0	0	0	0
12	Santa Fe Irrigation District (Badger Filtration Plant)	0	0	0	0	0	0	0	0	0	0
13	Olivenhain Municipal Water District	1,115	1,115	1,115	1,115	1,115	1,115	834	0	0	0
14	City of Oceanside (San Francisco Peak Hydro)	493	493	493	493	493	493	493	493	493	493
15	City of Escondido (Bear Valley Hydro)	876	876	876	876	876	876	876	876	876	876
16	Centinela Solar Energy LLC	360,309	358,508	356,715	354,931	353,157	351,391	349,634	202,060	0	0
17	Centinela Solar Energy 2 LLC	129,711	129,063	128,417	127,775	127,136	126,501	125,868	77,545	0	0
18	CSolar IV South LLC	307,304	305,768	304,239	302,718	301,204	299,698	298,200	296,709	295,225	293,749
19	CSolar IV West LLC	380,711	378,808	376,914	375,029	373,154	371,288	369,432	367,585	365,747	363,918
20	NRG Solar Borrego I LLC	70,202	69,851	69,502	69,154	68,809	68,465	68,122	67,782	67,443	67,106
21	Desert Green Solar Farm LLC	15,691	15,613	15,535	15,457	15,380	15,303	15,227	15,150	15,075	14,999
22	Campo Verde Solar LLC	352,792	351,029	349,273	347,527	345,789	344,060	278,562	0	0	0
23	Sol Orchard 20 LLC (Ramona 1)	4,600	4,577	4,554	4,531	4,509	4,486	4,464	4,441	4,419	4,397
24	Sol Orchard 21 LLC (Ramona 2)	11,500	11,443	11,385	11,328	11,272	11,215	11,159	11,104	11,048	10,993
25	Sol Orchard 22 LLC (Valley Center 1)	5,750	5,721	5,693	5,664	5,636	5,608	5,580	5,552	5,524	5,496
26	Sol Orchard 23 LLC (Valley Center 2)	11,500	11,443	11,385	11,328	11,272	11,215	11,159	11,104	11,048	10,993
27	Arlington Valley Solar II LLC	354,785	353,011	351,246	349,490	347,742	346,004	344,273	342,552	340,839	339,135
28	Catalina Solar LLC	269,224	267,878	266,539	265,206	263,880	262,561	261,248	259,942	258,642	257,349
29	SG2 Imperial Valley LLC	432,371	430,209	428,058	425,918	423,788	421,669	419,561	417,463	415,376	413,299
30	Imperial Valley Solar I LLC (Mount Signal)	527,653	525,015	522,390	519,778	517,179	514,593	512,020	509,460	506,913	504,378

Index	Name	CP3 Probability	Technology	Location	Date Signed	Term (yrs)	Start	Stop	Capacity (MW)
31	Cascade Solar LLC	100%	Solar PV	Sun Fair	11/7/12	20	12/24/13	12/23/33	18
32	Calpatria LLC	100%	Solar PV	Calpatria	12/13/12	20	2/11/16	2/10/36	20
33	Tallbear Seville LLC	100%	Solar PV	El Centro	12/13/12	20	12/30/15	12/29/35	20
34	Maricopa West Solar PV LLC	100%	Solar PV	Maricopa	4/16/13	15	12/18/15	12/17/30	20
35	NLP Granger A82 LLC	100%	Solar PV	Valley Center	4/3/14	20	9/17/16	9/16/36	3
36	NLP Valley Center Solar LLC	100%	Solar PV	Valley Center	7/20/15	20	12/7/17	12/6/37	2
37	Del Sur Elementary School	100%	UOG Solar	Various in SD County	4/13/07	10	7/1/09	6/30/19	0
38	Fairfield Grossmont Trolley	100%	UOG Solar	Various in SD County	12/7/07	10	1/1/12	12/31/21	0
39	Hunter Industries	100%	UOG Solar	Various in SD County	5/22/07	10	7/1/09	6/30/19	0
40	Innovative Cold Storage Enterprises	100%	UOG Solar	Various in SD County	5/4/07	10	4/20/09	4/19/19	1
41	Ladera Ranch I	100%	UOG Solar	Various in SD County	10/31/06	10	7/1/09	6/30/19	0
42	Pacific Station	100%	UOG Solar	Various in SD County	1/21/11	10	6/1/13	5/31/23	0
43	Sanford-Burnham Medical Research Institute I	100%	UOG Solar	Various in SD County	4/21/10	10	10/1/10	9/30/20	0
44	SDCCD - Skills Center	100%	UOG Solar	Various in SD County	2/6/08	10	10/1/10	9/30/20	0
45	Towers at Bressi Ranch	100%	UOG Solar	Various in SD County	7/10/07	10	7/1/09	6/30/19	0
46	Wilco Investments	100%	UOG Solar	Various in SD County	6/12/08	10	1/1/12	12/31/21	0
47	X-nth	100%	UOG Solar	Various in SD County	2/12/04	10	7/1/09	6/30/19	0
48	Oasis Power Partners LLC	100%	Wind	Mojave	10/30/02	15	12/25/04	12/24/19	60
49	Avangrid Renewables LLC (Mountain Wind)	100%	Wind	Riverside County	10/31/02	15	12/15/03	12/14/18	23
50	Avangrid Renewables LLC (Phoenix West Wind)	100%	Wind	Riverside County	11/7/03	15	12/15/03	12/14/18	2
51	FPL Energy Green Power Wind LLC	100%	Wind	Palm Springs	10/31/02	15	6/28/04	12/31/18	17
52	Kumeyaay Wind LLC	100%	Wind	Boulevard	5/31/04	20	3/21/06	12/31/25	50
53	Naturener Glacier Wind Energy 1 LLC	100%	Wind	Ethridge	5/16/08	15	12/29/08	12/28/23	107
54	Naturener Glacier Wind Energy 2 LLC	100%	Wind	Ethridge	5/23/08	15	10/16/09	10/15/24	104
55	Naturener Rim Rock Wind Energy LLC	100%	Wind	Kevin	5/5/09	20	10/15/13	10/14/33	189
56	Pacific Wind Lessee LLC	100%	Wind	Tehachapi	10/12/05	20	8/16/12	8/15/32	140
57	Coram Energy LLC	100%	Wind	Tehachapi	7/12/10	15	3/1/11	2/28/26	8
58	Ocotillo Express LLC	100%	Wind	Imperial Valley	2/1/11	21	12/27/12	7/29/33	265
59	Energia Sierra Juarez US LLC	100%	Wind	Mexico	4/6/11	20	6/5/15	6/4/35	155
60	Manzana Wind LLC	100%	Wind	Tehachapi	2/14/12	20	12/31/12	12/30/32	100
61	Oak Creek Wind Power LLC	100%	Wind	Mojave	4/16/13	10	1/26/14	1/25/24	4
62	San Gorgonio Westwinds II LLC	100%	Wind	Palm Springs	4/16/13	10	1/20/15	1/19/25	11

Index	Name	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
31	Cascade Solar LLC	55,806	55,104	54,828	54,554	54,281	54,010	53,740	53,471	53,204	52,938
32	Calpatría LLC	50,231	54,479	54,207	53,936	53,666	53,398	53,131	52,865	52,601	52,338
33	Tallbear Seville LLC	58,358	60,310	60,008	59,708	59,410	59,113	58,817	58,523	58,230	57,939
34	Maricopa West Solar PV LLC	49,102	54,479	54,207	53,936	53,666	53,398	53,131	52,865	52,601	52,338
35	NLP Granger A82 LLC	7,876	7,922	7,882	7,843	7,804	7,765	7,726	7,687	7,649	7,610
36	NLP Valley Center Solar LLC	6,101	6,153	6,122	6,091	6,061	6,030	6,000	5,970	5,940	5,911
37	Del Sur Elementary School	86	85	42	0	0	0	0	0	0	0
38	Fairfield Grossmont Trolley	112	115	115	114	113	0	0	0	0	0
39	Hunter Industries	177	182	90	0	0	0	0	0	0	0
40	Innovative Cold Storage Enterprises	639	814	242	0	0	0	0	0	0	0
41	Ladera Ranch I	86	86	42	0	0	0	0	0	0	0
42	Pacific Station	177	183	182	181	180	179	74	0	0	0
43	Sanford-Burnham Medical Research Institute I	322	381	379	283	0	0	0	0	0	0
44	SDCCD - Skills Center	86	94	94	70	0	0	0	0	0	0
45	Towers at Bressi Ranch	138	147	72	0	0	0	0	0	0	0
46	Wilco Investments	344	690	687	683	680	0	0	0	0	0
47	X-nth	34	69	34	0	0	0	0	0	0	0
48	Oasis Power Partners LLC	194,936	209,659	205,638	0	0	0	0	0	0	0
49	Avangrid Renewables LLC (Mountain Wind)	75,664	87,642	0	0	0	0	0	0	0	0
50	Avangrid Renewables LLC (Phoenix West Wind)	3,875	8,072	0	0	0	0	0	0	0	0
51	FPL Energy Green Power Wind LLC	25,807	28,511	0	0	0	0	0	0	0	0
52	Kumeyaay Wind LLC	128,654	153,510	153,510	153,510	153,510	153,510	153,510	153,510	153,510	0
53	Naturener Glacier Wind Energy 1 LLC	275,867	285,900	285,900	285,900	285,900	285,900	283,550	0	0	0
54	Naturener Glacier Wind Energy 2 LLC	278,781	292,949	292,949	292,949	292,949	292,949	292,949	231,318	0	0
55	Naturener Rim Rock Wind Energy LLC	650,872	657,150	657,150	657,150	657,150	657,150	657,150	657,150	657,150	657,150
56	Pacific Wind Lessee LLC	326,106	335,209	335,209	335,209	335,209	335,209	335,209	335,209	335,209	335,209
57	Coram Energy LLC	28,026	29,245	29,245	29,245	29,245	29,245	29,245	29,245	29,245	4,727
58	Ocotillo Express LLC	598,019	609,700	609,700	609,700	609,700	609,700	609,700	609,700	609,700	609,700
59	Energia Sierra Juarez US LLC	462,919	438,234	438,234	438,234	438,234	438,234	438,234	438,234	438,234	438,234
60	Manzana Wind LLC	269,364	272,136	272,136	272,136	272,136	272,136	272,136	272,136	272,136	272,136
61	Oak Creek Wind Power LLC	5,952	6,230	6,230	6,230	6,230	6,230	6,230	426	0	0
62	San Gorgonio Westwinds II LLC	28,747	32,943	32,943	32,943	32,943	32,943	32,943	32,943	1,715	0

Index	Name	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
31	Cascade Solar LLC	52,673	52,410	52,147	51,887	51,627	51,369	49,992	0	0	0
32	Calpatría LLC	52,076	51,816	51,557	51,299	51,043	50,787	50,533	50,281	50,029	5,576
33	Tallbear Seville LLC	57,649	57,361	57,074	56,789	56,505	56,223	55,941	55,662	55,080	0
34	Maricopa West Solar PV LLC	52,076	51,816	51,557	49,331	0	0	0	0	0	0
35	NLP Granger A82 LLC	7,572	7,535	7,497	7,459	7,422	7,385	7,348	7,311	7,275	5,142
36	NLP Valley Center Solar LLC	5,881	5,852	5,823	5,793	5,764	5,736	5,707	5,678	5,650	5,622
37	Del Sur Elementary School	0	0	0	0	0	0	0	0	0	0
38	Fairfield Grossmont Trolley	0	0	0	0	0	0	0	0	0	0
39	Hunter Industries	0	0	0	0	0	0	0	0	0	0
40	Innovative Cold Storage Enterprises	0	0	0	0	0	0	0	0	0	0
41	Ladera Ranch I	0	0	0	0	0	0	0	0	0	0
42	Pacific Station	0	0	0	0	0	0	0	0	0	0
43	Sanford-Burnham Medical Research Institute I	0	0	0	0	0	0	0	0	0	0
44	SDCCD - Skills Center	0	0	0	0	0	0	0	0	0	0
45	Towers at Bressi Ranch	0	0	0	0	0	0	0	0	0	0
46	Wilco Investments	0	0	0	0	0	0	0	0	0	0
47	X-nth	0	0	0	0	0	0	0	0	0	0
48	Oasis Power Partners LLC	0	0	0	0	0	0	0	0	0	0
49	Avangrid Renewables LLC (Mountain Wind)	0	0	0	0	0	0	0	0	0	0
50	Avangrid Renewables LLC (Phoenix West Wind)	0	0	0	0	0	0	0	0	0	0
51	FPL Energy Green Power Wind LLC	0	0	0	0	0	0	0	0	0	0
52	Kumeyaay Wind LLC	0	0	0	0	0	0	0	0	0	0
53	Naturener Glacier Wind Energy 1 LLC	0	0	0	0	0	0	0	0	0	0
54	Naturener Glacier Wind Energy 2 LLC	0	0	0	0	0	0	0	0	0	0
55	Naturener Rim Rock Wind Energy LLC	657,150	657,150	657,150	657,150	657,150	657,150	516,718	0	0	0
56	Pacific Wind Lessee LLC	335,209	335,209	335,209	335,209	335,209	208,819	0	0	0	0
57	Coram Energy LLC	0	0	0	0	0	0	0	0	0	0
58	Ocotillo Express LLC	609,700	609,700	609,700	609,700	609,700	609,700	350,786	0	0	0
59	Energia Sierra Juarez US LLC	438,234	438,234	438,234	438,234	438,234	438,234	438,234	438,234	186,099	0
60	Manzana Wind LLC	272,136	272,136	272,136	272,136	272,136	271,392	0	0	0	0
61	Oak Creek Wind Power LLC	0	0	0	0	0	0	0	0	0	0
62	San Gorgonio Westwinds II LLC	0	0	0	0	0	0	0	0	0	0



APPENDIX 3

2017 COST QUANTIFICATION TABLE

Cost Quantification Table 1 (Actual Procurement Net Costs, \$)⁽¹⁾		Actual RPS-Eligible Procurement Net Costs				
1	Executed CPUC-Approved RPS-Eligible Contracts	2003	2004	2005	2006	2007
2	Biogas	\$9,699,583	\$11,805,288	\$12,614,978	\$11,557,951	\$10,586,260
3	Biomass	\$18,888,387	\$18,693,045	\$17,205,462	\$16,965,465	\$12,237,997
4	Geothermal	\$0	\$0	\$0	\$0	\$0
5	Small Hydro	\$357,805	\$345,247	\$467,007	\$947,554	\$1,359,923
6	Solar PV	\$0	\$0	\$0	\$0	\$0
7	Solar Thermal	\$0	\$0	\$0	\$0	\$0
8	Wind	\$22,750	\$5,980,963	\$14,097,259	\$19,779,696	\$22,968,510
9	UOG Small Hydro	\$0	\$0	\$0	\$0	\$0
10	UOG Solar	\$0	\$0	\$0	\$0	\$0
11	Unbundled RECs	\$0	\$0	\$0	\$0	\$0
12	Total CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 2 through 11]	\$28,968,525	\$36,824,543	\$44,384,706	\$49,250,666	\$47,152,690
13	Bundled Retail Sales (kWh)	15,043,865,000	15,811,591,000	16,001,516,000	16,846,888,000	17,056,023,000
14	Incremental Rate Impact [Row 12 divided by row 13]	0.19 ¢/kWh	0.23 ¢/kWh	0.28 ¢/kWh	0.29 ¢/kWh	0.28 ¢/kWh

(1) Because the technology type of RECs sold in the past is known, this table shows costs net of revenues for all RPS-eligible procurement.

Cost Quantification Table 1 (Actual Procurement Net Costs, \$)⁽¹⁾		Actual RPS-Eligible Procurement Net Costs				
1	Executed CPUC-Approved RPS-Eligible Contracts	2008	2009	2010	2011	2012
2	Biogas	\$12,895,604	\$12,750,213	\$13,219,041	\$13,657,174	\$14,588,818
3	Biomass	\$23,121,233	\$23,221,640	\$25,207,547	\$25,591,354	\$29,270,390
4	Geothermal	\$0	\$0	\$20,906,408	\$67,532,423	\$87,210,604
5	Small Hydro	\$1,676,416	\$1,269,662	\$1,143,186	\$866,991	\$1,056,364
6	Solar PV	\$0	\$0	\$0	\$0	\$22,549
7	Solar Thermal	\$0	\$0	\$0	\$0	\$0
8	Wind	\$23,254,999	\$60,900,350	\$54,927,101	\$67,962,777	\$62,704,117
9	UOG Small Hydro	\$0	\$0	\$0	\$0	\$0
10	UOG Solar	\$0	\$616,522	\$1,048,718	\$1,677,565	\$2,301,472
11	Unbundled RECs	\$0	\$0	\$0	\$0	\$0
12	Total CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 2 through 11]	\$60,948,252	\$98,758,387	\$116,452,001	\$177,288,284	\$197,154,315
13	Bundled Retail Sales (kWh)	17,409,884,000	16,993,872,000	16,282,682,258	16,249,031,381	16,626,720,539
14	Incremental Rate Impact [Row 12 divided by row 13]	0.35 ¢/kWh	0.58 ¢/kWh	0.72 ¢/kWh	1.09 ¢/kWh	1.19 ¢/kWh

Cost Quantification Table 1 (Actual Procurement Net Costs, \$)⁽¹⁾		Actual RPS-Eligible Procurement Net Costs			
1	Executed CPUC-Approved RPS-Eligible Contracts	2013	2014	2015	2016
2	Biogas	\$11,382,787	\$6,680,945	\$12,063,399	\$14,829,981
3	Biomass	\$28,519,756	\$8,344,339	-\$4,751,806	\$0
4	Geothermal	\$38,286,888	\$5,761,869	\$0	\$0
5	Small Hydro	\$1,137,609	\$1,279,527	\$306,568	\$595,497
6	Solar PV	\$86,221,682	\$304,437,880	\$362,976,622	\$405,034,655
7	Solar Thermal	\$0	\$0	\$0	\$0
8	Wind	\$147,375,861	\$182,029,742	\$185,615,615	\$231,902,873
9	UOG Small Hydro	\$0	\$0	\$0	\$0
10	UOG Solar	\$2,239,192	\$2,268,987	\$1,907,706	\$1,412,716
11	Unbundled RECs	\$0	\$0	\$0	\$0
12	Total CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 2 through 11]	\$315,163,775	\$510,803,288	\$558,118,104	\$653,775,723
13	Bundled Retail Sales (kWh)	16,164,015,264	16,467,854,428	16,266,948,555	15,653,135,947
14	Incremental Rate Impact [Row 12 divided by row 13]	1.95 ¢/kWh	3.10 ¢/kWh	3.43 ¢/kWh	4.18 ¢/kWh

Cost Quantification Table 2 (Forecasted Costs and Revenues, \$) ⁽²⁾		Forecasted RPS-Eligible Procurement Costs and Revenues				
1	Executed But Not CPUC-Approved RPS-Eligible Contracts	2017	2018	2019	2020	2021
2	Biogas	\$0	\$0	\$0	\$0	\$0
3	Biomass	\$0	\$0	\$0	\$0	\$0
4	Geothermal	\$0	\$0	\$0	\$0	\$0
5	Small Hydro	\$0	\$0	\$0	\$0	\$0
6	Solar PV	\$0	\$0	\$0	\$0	\$0
7	Solar Thermal	\$0	\$0	\$0	\$0	\$0
8	Wind	\$0	\$0	\$0	\$0	\$0
9	UOG Small Hydro	\$0	\$0	\$0	\$0	\$0
10	UOG Solar	\$0	\$0	\$0	\$0	\$0
11	Unbundled RECs	\$0	\$0	\$0	\$0	\$0
12	REC Sales	\$0	\$0	\$0	\$0	\$0
13	Total Executed But Not CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 2 through 12]	\$0	\$0	\$0	\$0	\$0
14	Bundled Retail Sales (kWh)					14,978,336,254
15	Incremental Rate Impact [Row 13 divided by row 14]					0.00 ¢/kWh
Cost Quantification Table 2 (Forecasted Costs and Revenues, \$)		Forecasted RPS-Eligible Procurement Costs and Revenues				
16	Executed CPUC-Approved RPS-Eligible Contracts (Incl. RAM/FIT/PV Contracts)	2017	2018	2019	2020	2021
17	Biogas					
18	Biomass					
19	Geothermal					
20	Small Hydro					
21	Solar PV					
22	Solar Thermal					
23	Wind					
24	UOG Small Hydro					
25	UOG Solar					
26	Unbundled RECs					

27	REC Sales					
28	Total Executed CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 17 through 27]	\$696,409,880	\$727,203,406	\$718,689,103	\$706,744,905	\$727,825,010
29	Bundled Retail Sales (kWh)					14,978,336,254
30	Incremental Rate Impact [Row 28 divided by row 29]					4.86 ¢/kWh
31	Total Incremental Rate Impact [Row 15 + 30; Rounding can cause Row 31 to differ slightly from the sum of Row 15 and 30]					4.86 ¢/kWh

(2) Because the technology type of RECs to be sold in the future is unknown, this table shows forecasted revenues from RPS-eligible REC sales as a single line item.

Cost Quantification Table 2 (Forecasted Costs and Revenues, \$) ⁽²⁾		Forecasted RPS-Eligible Procurement Costs and Revenues				
1	Executed But Not CPUC-Approved RPS-Eligible Contracts	2022	2023	2024	2025	2026
2	Biogas	\$0	\$0	\$0	\$0	\$0
3	Biomass	\$0	\$0	\$0	\$0	\$0
4	Geothermal	\$0	\$0	\$0	\$0	\$0
5	Small Hydro	\$0	\$0	\$0	\$0	\$0
6	Solar PV	\$0	\$0	\$0	\$0	\$0
7	Solar Thermal	\$0	\$0	\$0	\$0	\$0
8	Wind	\$0	\$0	\$0	\$0	\$0
9	UOG Small Hydro	\$0	\$0	\$0	\$0	\$0
10	UOG Solar	\$0	\$0	\$0	\$0	\$0
11	Unbundled RECs	\$0	\$0	\$0	\$0	\$0
12	REC Sales	\$0	\$0	\$0	\$0	\$0
13	Total Executed But Not CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 2 through 12]	\$0	\$0	\$0	\$0	\$0
14	Bundled Retail Sales (kWh)	15,064,107,483	15,053,790,619	15,041,568,799	15,024,637,769	14,994,901,792
15	Incremental Rate Impact [Row 13 divided by row 14]	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh
Cost Quantification Table 2 (Forecasted Costs and Revenues, \$)		Forecasted RPS-Eligible Procurement Costs and Revenues				
16	Executed CPUC-Approved RPS-Eligible Contracts (Incl. RAM/FIT/PV Contracts)	2022	2023	2024	2025	2026
17	Biogas		\$9,314,217	\$7,353,834	\$7,033,788	\$7,033,788
18	Biomass		\$19,382,787	\$19,382,787	\$19,382,787	\$19,382,787
19	Geothermal		\$0	\$0	\$0	\$0
20	Small Hydro		\$244,164	\$244,164	\$244,164	\$244,164
21	Solar PV		\$458,566,292	\$458,069,343	\$457,589,553	\$457,126,985
22	Solar Thermal		\$0	\$0	\$0	\$0
23	Wind		\$231,322,747	\$223,357,169	\$214,346,626	\$203,260,696
24	UOG Small Hydro		\$0	\$0	\$0	\$0
25	UOG Solar		\$1,597,074	\$1,555,882	\$1,555,882	\$1,555,882
26	Unbundled RECs		\$0	\$0	\$0	\$0

27	REC Sales		\$0	\$0	\$0	\$0
28	Total Executed CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 17 through 27]	\$707,166,158	\$720,427,282	\$709,963,180	\$700,152,800	\$688,604,303
29	Bundled Retail Sales (kWh)	15,064,107,483	15,053,790,619	15,041,568,799	15,024,637,769	14,994,901,792
30	Incremental Rate Impact [Row 28 divided by row 29]	4.69 ¢/kWh	4.79 ¢/kWh	4.72 ¢/kWh	4.66 ¢/kWh	4.59 ¢/kWh
31	Total Incremental Rate Impact [Row 15 + 30; Rounding can cause Row 31 to differ slightly from the sum of Row 15 and 30]	4.69 ¢/kWh	4.79 ¢/kWh	4.72 ¢/kWh	4.66 ¢/kWh	4.59 ¢/kWh

Cost Quantification Table 2 (Forecasted Costs and Revenues, \$) ⁽²⁾		Forecasted RPS-Eligible Procurement Costs and Revenues				
1	Executed But Not CPUC-Approved RPS-Eligible Contracts	2027	2028	2029	2030	2031
2	Biogas	\$0	\$0	\$0	\$0	\$0
3	Biomass	\$0	\$0	\$0	\$0	\$0
4	Geothermal	\$0	\$0	\$0	\$0	\$0
5	Small Hydro	\$0	\$0	\$0	\$0	\$0
6	Solar PV	\$0	\$0	\$0	\$0	\$0
7	Solar Thermal	\$0	\$0	\$0	\$0	\$0
8	Wind	\$0	\$0	\$0	\$0	\$0
9	UOG Small Hydro	\$0	\$0	\$0	\$0	\$0
10	UOG Solar	\$0	\$0	\$0	\$0	\$0
11	Unbundled RECs	\$0	\$0	\$0	\$0	\$0
12	REC Sales	\$0	\$0	\$0	\$0	\$0
13	Total Executed But Not CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 2 through 12]	\$0	\$0	\$0	\$0	\$0
14	Bundled Retail Sales (kWh)	14,987,421,601	14,987,782,249	14,988,141,674	14,988,499,881	14,988,856,878
15	Incremental Rate Impact [Row 13 divided by row 14]	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh
Cost Quantification Table 2 (Forecasted Costs and Revenues, \$)		Forecasted RPS-Eligible Procurement Costs and Revenues				
16	Executed CPUC-Approved RPS-Eligible Contracts (Incl. RAM/FIT/PV Contracts)	2027	2028	2029	2030	2031
17	Biogas	\$7,033,788	\$7,033,788	\$7,033,788	\$7,033,788	\$5,250,578
18	Biomass	\$19,382,787	\$19,382,787	\$19,382,787	\$19,382,787	\$19,382,787
19	Geothermal	\$0	\$0	\$0	\$0	\$0
20	Small Hydro	\$244,164	\$244,164	\$244,164	\$244,164	\$244,164
21	Solar PV	\$456,681,702	\$456,253,768	\$455,843,251	\$455,322,821	\$451,769,906
22	Solar Thermal	\$0	\$0	\$0	\$0	\$0
23	Wind	\$202,750,457	\$202,750,457	\$202,750,457	\$202,750,457	\$202,750,457
24	UOG Small Hydro	\$0	\$0	\$0	\$0	\$0
25	UOG Solar	\$1,555,882	\$1,555,882	\$1,555,882	\$1,555,882	\$1,555,882
26	Unbundled RECs	\$0	\$0	\$0	\$0	\$0

27	REC Sales	\$0	\$0	\$0	\$0	\$0
28	Total Executed CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 17 through 27]	\$687,648,781	\$687,220,847	\$686,810,330	\$686,289,900	\$680,953,774
29	Bundled Retail Sales (kWh)	14,987,421,601	14,987,782,249	14,988,141,674	14,988,499,881	14,988,856,878
30	Incremental Rate Impact [Row 28 divided by row 29]	4.59 ¢/kWh	4.59 ¢/kWh	4.58 ¢/kWh	4.58 ¢/kWh	4.54 ¢/kWh
31	Total Incremental Rate Impact [Row 15 + 30; Rounding can cause Row 31 to differ slightly from the sum of Row 15 and 30]	4.59 ¢/kWh	4.59 ¢/kWh	4.58 ¢/kWh	4.58 ¢/kWh	4.54 ¢/kWh

Cost Quantification Table 2 (Forecasted Costs and Revenues, \$) ⁽²⁾		Forecasted RPS-Eligible Procurement Costs and Revenues				
1	Executed But Not CPUC-Approved RPS-Eligible Contracts	2032	2033	2034	2035	2036
2	Biogas	\$0	\$0	\$0	\$0	\$0
3	Biomass	\$0	\$0	\$0	\$0	\$0
4	Geothermal	\$0	\$0	\$0	\$0	\$0
5	Small Hydro	\$0	\$0	\$0	\$0	\$0
6	Solar PV	\$0	\$0	\$0	\$0	\$0
7	Solar Thermal	\$0	\$0	\$0	\$0	\$0
8	Wind	\$0	\$0	\$0	\$0	\$0
9	UOG Small Hydro	\$0	\$0	\$0	\$0	\$0
10	UOG Solar	\$0	\$0	\$0	\$0	\$0
11	Unbundled RECs	\$0	\$0	\$0	\$0	\$0
12	REC Sales	\$0	\$0	\$0	\$0	\$0
13	Total Executed But Not CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 2 through 12]	\$0	\$0	\$0	\$0	\$0
14	Bundled Retail Sales (kWh)	14,989,212,669	14,989,567,262	14,989,920,662	14,990,272,874	14,990,623,906
15	Incremental Rate Impact [Row 13 divided by row 14]	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh	0.00 ¢/kWh
Cost Quantification Table 2 (Forecasted Costs and Revenues, \$)		Forecasted RPS-Eligible Procurement Costs and Revenues				
16	Executed CPUC-Approved RPS-Eligible Contracts (Incl. RAM/FIT/PV Contracts)	2032	2033	2034	2035	2036
17	Biogas	\$3,974,669	\$2,691,648	\$188,144	\$0	\$0
18	Biomass	\$19,382,787	\$19,382,787	\$19,382,787	\$19,382,787	\$19,382,787
19	Geothermal	\$0	\$0	\$0	\$0	\$0
20	Small Hydro	\$244,164	\$201,011	\$72,957	\$72,957	\$72,957
21	Solar PV	\$451,428,578	\$442,190,285	\$370,798,607	\$331,993,806	\$322,918,492
22	Solar Thermal	\$0	\$0	\$0	\$0	\$0
23	Wind	\$188,094,904	\$105,134,576	\$45,896,220	\$19,490,176	\$0
24	UOG Small Hydro	\$0	\$0	\$0	\$0	\$0
25	UOG Solar	\$1,555,882	\$1,555,882	\$1,555,882	\$1,555,882	\$1,555,882
26	Unbundled RECs	\$0	\$0	\$0	\$0	\$0

27	REC Sales	\$0	\$0	\$0	\$0	\$0
28	Total Executed CPUC-Approved RPS-Eligible Procurement Net Costs [Sum of Rows 17 through 27]	\$664,680,984	\$571,156,189	\$437,894,596	\$372,495,608	\$343,930,118
29	Bundled Retail Sales (kWh)	14,989,212,669	14,989,567,262	14,989,920,662	14,990,272,874	14,990,623,906
30	Incremental Rate Impact [Row 28 divided by row 29]	4.43 ¢/kWh	3.81 ¢/kWh	2.92 ¢/kWh	2.48 ¢/kWh	2.29 ¢/kWh
31	Total Incremental Rate Impact [Row 15 + 30; Rounding can cause Row 31 to differ slightly from the sum of Row 15 and 30]	4.43 ¢/kWh	3.81 ¢/kWh	2.92 ¢/kWh	2.48 ¢/kWh	2.29 ¢/kWh

Cost Quantification Table 3 (Actual Net Generation, MWh) ⁽³⁾		Actual RPS-Eligible Net Generation				
1	Executed CPUC-Approved RPS-Eligible Contracts	2003	2004	2005	2006	2007
2	Biogas	200,123	212,475	218,223	201,138	171,650
3	Biomass	341,718	337,466	298,945	284,031	217,967
4	Geothermal	0	0	0	0	0
5	Small Hydro	7,465	13,134	11,700	11,584	21,302
6	Solar PV	0	0	0	0	0
7	Solar Thermal	0	0	0	0	0
8	Wind	550	114,778	296,434	402,768	469,859
9	UOG Small Hydro	0	0	0	0	0
10	UOG Solar	0	0	0	0	0
11	Unbundled RECs	0	0	0	0	0
12	Total CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 2 through 11]	549,856	677,852	825,302	899,520	880,777

(3) Because the technology type of RECs sold in the past is known, this table shows generation net of REC sales for all RPS-eligible procurement.

Cost Quantification Table 3 (Actual Net Generation, MWh)		Actual RPS-Eligible Net Generation				
1	Executed CPUC-Approved RPS-Eligible Contracts ⁽³⁾	2008	2009	2010	2011	2012
2	Biogas	208,236	205,021	210,067	215,821	224,763
3	Biomass	318,941	341,361	339,899	353,605	477,323
4	Geothermal	0	0	183,000	782,976	1,090,136
5	Small Hydro	30,883	24,439	22,367	16,866	20,560
6	Solar PV	0	0	0	0	200
7	Solar Thermal	0	0	0	0	0
8	Wind	489,368	1,212,703	1,182,541	2,008,572	1,559,684
9	UOG Small Hydro	0	0	0	0	0
10	UOG Solar	0	809	1,577	2,364	3,064
11	Unbundled RECs	0	0	0	0	0
12	Total CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 2 through 11]	1,047,428	1,784,333	1,939,451	3,380,204	3,375,730

Cost Quantification Table 3 (Actual Net Generation, MWh)⁽³⁾		Actual RPS-Eligible Net Generation			
1	Executed CPUC-Approved RPS-Eligible Contracts	2013	2014	2015	2016
2	Biogas	141,509	60,196	121,501	174,561
3	Biomass	266,027	5,998	186,901	0
4	Geothermal	349,835	0	0	0
5	Small Hydro	21,240	21,122	4,562	10,649
6	Solar PV	613,652	2,537,210	2,896,476	3,352,095
7	Solar Thermal	0	0	0	0
8	Wind	2,438,308	2,642,521	2,519,440	3,218,080
9	UOG Small Hydro	0	0	0	0
10	UOG Solar	3,161	3,308	2,857	2,188
11	Unbundled RECs	0	0	0	0
12	Total CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 2 through 11]	3,833,732	5,270,355	5,731,737	6,757,573

Cost Quantification Table 4 (Forecasted Generation and Sales, MWh) ⁽⁴⁾		Forecasted RPS-Eligible Generation and Sales				
1	Executed But Not CPUC-Approved RPS-Eligible Contracts	2017	2018	2019	2020	2021
2	Biogas	0	0	0	0	0
3	Biomass	0	0	0	0	0
4	Geothermal	0	0	0	0	0
5	Small Hydro	0	0	0	0	0
6	Solar PV	0	0	0	0	0
7	Solar Thermal	0	0	0	0	0
8	Wind	0	0	0	0	0
9	UOG Small Hydro	0	0	0	0	0
10	UOG Solar	0	0	0	0	0
11	Unbundled RECs	0	0	0	0	0
12	RECs Sales	0	0	0	0	0
13	Total Executed But Not CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 2 through 12]	0	0	0	0	0
Cost Quantification Table 4 (Forecasted Generation and Sales, MWh)		Forecasted RPS-Eligible Generation and Sales				
14	Executed CPUC-Approved RPS-Eligible Contracts (Incl. RAM/FIT/PV Contracts)	2017	2018	2019	2020	2021
15	Biogas	165,488	164,959	149,333	147,333	147,333
16	Biomass	169,137	175,000	175,000	175,000	175,000
17	Geothermal	0	0	0	0	0
18	Small Hydro	3,135	2,484	2,484	2,484	2,484
19	Solar PV	3,476,801	3,673,609	3,677,812	3,659,423	3,923,024
20	Solar Thermal	0	0	0	0	0
21	Wind	3,353,589	3,447,089	3,318,843	3,113,205	3,113,205
22	UOG Small Hydro	0	0	0	0	0
23	UOG Solar	6,647	10,427	9,523	8,838	8,443
24	Unbundled RECs	0	0	0	0	0
25	RECs Sales	0	0	0	0	0
26	Total Executed CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 15 through 25]	7,174,798	7,473,569	7,332,995	7,106,283	7,369,489
27	Total Executed RPS-Eligible Net Generation [Row 13 + 26]	7,174,798	7,473,569	7,332,995	7,106,283	7,369,489

(4) Because the technology type of RECs to be sold in the future is unknown, this table shows forecasted RPS-eligible REC sales as a single line item.

Cost Quantification Table 4 (Forecasted Generation and Sales, MWh) ⁽⁴⁾		Forecasted RPS-Eligible Generation and Sales				
1	Executed But Not CPUC-Approved RPS-Eligible Contracts	2022	2023	2024	2025	2026
2	Biogas	0	0	0	0	0
3	Biomass	0	0	0	0	0
4	Geothermal	0	0	0	0	0
5	Small Hydro	0	0	0	0	0
6	Solar PV	0	0	0	0	0
7	Solar Thermal	0	0	0	0	0
8	Wind	0	0	0	0	0
9	UOG Small Hydro	0	0	0	0	0
10	UOG Solar	0	0	0	0	0
11	Unbundled RECs	0	0	0	0	0
12	RECs Sales	0	0	0	0	0
13	Total Executed But Not CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 2 through 12]	0	0	0	0	0
Cost Quantification Table 4 (Forecasted Generation and Sales, MWh)		Forecasted RPS-Eligible Generation and Sales				
14	Executed CPUC-Approved RPS-Eligible Contracts (Incl. RAM/FIT/PV Contracts)	2022	2023	2024	2025	2026
15	Biogas	136,648	87,132	64,923	61,307	61,307
16	Biomass	14,863	151,760	151,760	151,760	151,760
17	Geothermal	0	0	0	0	0
18	Small Hydro	2,484	2,484	2,484	2,484	2,484
19	Solar PV	3,903,408	3,883,889	3,864,468	3,845,142	3,825,913
20	Solar Thermal	0	0	0	0	0
21	Wind	3,113,205	3,110,855	2,759,869	2,496,898	2,317,156
22	UOG Small Hydro	0	0	0	0	0
23	UOG Solar	7,612	7,469	7,358	7,322	7,285
24	Unbundled RECs	0	0	0	0	0
25	RECs Sales	0	0	0	0	0
26	Total Executed CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 15 through 25]	7,178,220	7,243,590	6,850,862	6,564,913	6,365,906
27	Total Executed RPS-Eligible Net Generation [Row 13 + 26]	7,178,220	7,243,590	6,850,862	6,564,913	6,365,906

Cost Quantification Table 4 (Forecasted Generation and Sales, MWh) ⁽⁴⁾		Forecasted RPS-Eligible Generation and Sales				
1	Executed But Not CPUC-Approved RPS-Eligible Contracts	2027	2028	2029	2030	2031
2	Biogas	0	0	0	0	0
3	Biomass	0	0	0	0	0
4	Geothermal	0	0	0	0	0
5	Small Hydro	0	0	0	0	0
6	Solar PV	0	0	0	0	0
7	Solar Thermal	0	0	0	0	0
8	Wind	0	0	0	0	0
9	UOG Small Hydro	0	0	0	0	0
10	UOG Solar	0	0	0	0	0
11	Unbundled RECs	0	0	0	0	0
12	RECs Sales	0	0	0	0	0
13	Total Executed But Not CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 2 through 12]	0	0	0	0	0
Cost Quantification Table 4 (Forecasted Generation and Sales, MWh)		Forecasted RPS-Eligible Generation and Sales				
14	Executed CPUC-Approved RPS-Eligible Contracts (Incl. RAM/FIT/PV Contracts)	2027	2028	2029	2030	2031
15	Biogas	61,307	61,307	61,307	61,307	45,375
16	Biomass	151,760	151,760	151,760	151,760	151,760
17	Geothermal	0	0	0	0	0
18	Small Hydro	2,484	2,484	2,484	2,484	2,484
19	Solar PV	3,806,779	3,787,741	3,768,797	3,747,979	3,680,148
20	Solar Thermal	0	0	0	0	0
21	Wind	2,312,429	2,312,429	2,312,429	2,312,429	2,312,429
22	UOG Small Hydro	0	0	0	0	0
23	UOG Solar	7,249	7,212	7,176	7,140	7,105
24	Unbundled RECs	0	0	0	0	0
25	RECs Sales	0	0	0	0	0
26	Total Executed CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 15 through 25]	6,342,008	6,322,934	6,303,954	6,283,100	6,199,301
27	Total Executed RPS-Eligible Net Generation [Row 13 + 26]	6,342,008	6,322,934	6,303,954	6,283,100	6,199,301

Cost Quantification Table 4 (Forecasted Generation and Sales, MWh)⁽⁴⁾		Forecasted RPS-Eligible Generation and Sales				
1	Executed But Not CPUC-Approved RPS-Eligible Contracts	2032	2033	2034	2035	2036
2	Biogas	0	0	0	0	0
3	Biomass	0	0	0	0	0
4	Geothermal	0	0	0	0	0
5	Small Hydro	0	0	0	0	0
6	Solar PV	0	0	0	0	0
7	Solar Thermal	0	0	0	0	0
8	Wind	0	0	0	0	0
9	UOG Small Hydro	0	0	0	0	0
10	UOG Solar	0	0	0	0	0
11	Unbundled RECs	0	0	0	0	0
12	RECs Sales	0	0	0	0	0
13	Total Executed But Not CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 2 through 12]	0	0	0	0	0
Cost Quantification Table 4 (Forecasted Generation and Sales, MWh)		Forecasted RPS-Eligible Generation and Sales				
14	Executed CPUC-Approved RPS-Eligible Contracts (Incl. RAM/FIT/PV Contracts)	2032	2033	2034	2035	2036
15	Biogas	33,777	22,319	1,473	0	0
16	Biomass	151,760	151,760	151,760	151,760	151,760
17	Geothermal	0	0	0	0	0
18	Small Hydro	2,484	2,203	1,369	1,369	1,369
19	Solar PV	3,661,741	3,578,526	3,040,194	2,746,474	2,631,629
20	Solar Thermal	0	0	0	0	0
21	Wind	2,185,295	1,305,738	438,234	186,099	0
22	UOG Small Hydro	0	0	0	0	0
23	UOG Solar	7,069	7,034	6,999	6,964	6,929
24	Unbundled RECs	0	0	0	0	0
25	RECs Sales	0	0	0	0	0
26	Total Executed CPUC-Approved RPS-Eligible Net Generation [Sum of Rows 15 through 25]	6,042,126	5,067,580	3,640,029	3,092,666	2,791,687
27	Total Executed RPS-Eligible Net Generation [Row 13 + 26]	6,042,126	5,067,580	3,640,029	3,092,666	2,791,687



APPENDIX 4

2017 EXPIRING CONTRACTS

SDG&E Contracts Expiring in the Next 10 Years						
Facility Name	Technology	MW	Location	Contract Expiration Year	Expected Annual Generation (GWh)	Contract Type
Otay Landfill I	Biogas	1.5	Chula Vista	2019	11	
Otay Landfill 3	Biogas	3.75	Chula Vista	2017	9	
MM Prima Deshecha Energy LLC	Biogas	6.1	San Juan Capistrano	2022	42	
MM San Diego LLC (Miramar RAM)	Biogas	4.5	San Diego	2023	29	
Sycamore Energy 2 LLC	Biogas	2.25	Santee	2024	15	
HL Power Company LP	Biomass	24	Wendel	2022	175	
San Diego County Water Authority Hydro (Rancho Penasquitos)	Small Hydro	4.5	San Diego	2017	9	
City of San Diego (Point Loma)	Biogas	4.836	San Diego	2017	19	
Santa Fe Irrigation District (Badger Filtration Plant)	Small Hydro	1.485	Rancho Santa Fe	2017	1	
Del Sur Elementary School	UOG Solar	0.041	Various in SD County	2019	0	
Fairfield Grossmont Trolley	UOG Solar	0.0647	Various in SD County	2021	0	
Hunter Industries	UOG Solar	0.102	Various in SD County	2019	0	
Innovative Cold Storage Enterprises	UOG Solar	0.504	Various in SD County	2019	1	
Ladera Ranch I	UOG Solar	0.05	Various in SD County	2019	0	
Pacific Station	UOG Solar	0.1092	Various in SD County	2023	0	
Sanford-Burnham Medical Research Institute I	UOG Solar	0.2002	Various in SD County	2020	0	
SDCCD - Skills Center	UOG Solar	0.056	Various in SD County	2020	0	
Towers at Bressi Ranch	UOG Solar	0.08	Various in SD County	2019	0	
Wilco Investments	UOG Solar	0.3843	Various in SD County	2021	1	
X-nth	UOG Solar	0.04	Various in SD County	2019	0	
Oasis Power Partners LLC	Wind	60	Mojave	2019	210	
Avangrid Renewables LLC (Mountain Wind)	Wind	22.8	Riverside County	2018	76	
Avangrid Renewables LLC (Phoenix West Wind)	Wind	2.1	Riverside County	2018	4	
FPL Energy Green Power Wind LLC	Wind	16.5	Palm Springs	2018	26	
Kumeyaay Wind LLC	Wind	50	Boulevard	2025	154	
Naturener Glacier Wind Energy 1 LLC	Wind	106.5	Ethridge	2023	286	
Naturener Glacier Wind Energy 2 LLC	Wind	103.5	Ethridge	2024	293	
Coram Energy LLC	Wind	7.5	Tehachapi	2026	29	
Oak Creek Wind Power LLC	Wind	3.5	Mojave	2024	6	
San Gorgonio Westwinds II LLC	Wind	11.2	Palm Springs	2025	33	



APPENDIX 5

IMPORTANT CHANGES FROM DRAFT 2017 PLAN TO FINAL 2017 PLAN

**IMPORTANT CHANGES FROM DRAFT 2017 RPS PROCUREMENT PLAN
TO FINAL 2017 RPS PROCUREMENT PLAN**

ELEMENT	DRAFT 2017 RPS PLAN	FINAL 2017 RPS PLAN	EXPLANATION / JUSTIFICATION	LOCATION OF CHANGES WITHIN THE 2017 PLAN
Assessment of RPS Portfolio Supplies and Demand	Based on status of portfolio and RPS obligations as of June 2017.	Based on status of portfolio and RPS obligations as of June 2017.	Updated status of Re-MAT per December 15, 2017 letter from the Commission's Executive Director Timothy Sullivan; updated status of RAM per the Commission's approval of SDG&E's AL 3151-E; and per OP 6 of D.17-12-007, clarified that SDG&E will seek permission from the Commission to procure any amounts, other than amounts separately mandated by the Commission, during the 2017 solicitation cycle.	2017 RPS Plan
Project Development Status Update	Based on status of portfolio as of June 2017.	Based on status of portfolio as of June 2017.	Per OP 11 of D.17-12-007, added reference to and a link to the Commission's RPS Database.	2017 RPS Plan
Least-Cost Best-Fit	SDG&E's LCBF methodology as of June 2017.	SDG&E's LCBF methodology as of June 2017.	Detail regarding qualitative factors was inadvertently removed in the draft 2017 version and has been added back to this final version.	Appendix 9
RPS Sales RFP	SDG&E's proposed RPS Sale RFP.	SDG&E's proposed RPS Sale RFP.	Modified to provide clarity and conform to D.17-12-007.	Appendix 10



APPENDIX 6

2017 RPS LONG-TERM MODEL POWER PURCHASE AGREEMENT (“PPA”)

[Form of PPA for As-Available, Baseload, Peaking or Dispatchable Product]

[Standard contract terms and conditions that “may not be modified” per CPUC D.04-06-014 and subsequent decisions are shown in red shaded text and standard contract terms and conditions that may be modified per CPUC D.04-06-014 and subsequent decisions are shown in green shaded text.]

POWER PURCHASE AGREEMENT

Between

SAN DIEGO GAS & ELECTRIC COMPANY
(as “Buyer”)

and

(as “Seller”)

POWER PURCHASE AGREEMENT

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COVER SHEET

This Power Purchase Agreement is made as of the following date: [_____]. This Power Purchase Agreement and all exhibits, schedules, appendices, and any written supplements hereto, any designated collateral, credit support or margin agreement or similar arrangement between the Parties as well as all written and signed amendments and modifications thereto shall be a part of, and shall be referred to as, the "Agreement." The Parties to this Agreement (hereinafter individually a "Party" and collectively the "Parties") are the following:

Name: _____ ("Seller")

All Notices:

Street: _____
City: _____ Zip: _____
Attn: Contract Administration
Phone: _____
Facsimile: _____
Duns: _____
Federal Tax ID Number: _____

Invoices:

Attn: _____
Phone: _____
Facsimile: _____

Scheduling:

Attn: _____
Phone: _____
Facsimile: _____

Payments:

Attn: _____
Phone: _____
Facsimile: _____

Wire Transfer:

BNK: _____
ABA: _____
ACCT: _____
Confirmation: _____
FAX: _____

Credit and Collections:

Attn: _____

Name: San Diego Gas & Electric Company
("Buyer")

All Notices:

Street: 8315 Century Park Court
City: San Diego, CA Zip: 92123
Attn: Electric & Fuel Procurement - Contract
Administration
Phone: (858) 636-5536
Facsimile: (858) 650-6190
Duns: 006911457
Federal Tax ID Number: 95-1184800

Invoices:

San Diego Gas & Electric Company
8315 Century Park Ct.
San Diego, California 92123-1593
Attn: Electric & Fuel Procurement – Invoicing and
Reporting
Phone: (858) 650-6187
Facsimile: (858) 650-6190

Scheduling:

San Diego Gas & Electric Company
8315 Century Park Ct.
San Diego, California 92123-1593
Attn: Transaction Scheduling Manager
Phone: (858) 650-6160
Facsimile: (858) 650-6191

Payments:

San Diego Gas & Electric Company
PO Box 25110
Santa Ana, CA 92799-5110
Attn: Mail Payments
Phone: (619) 696-4521
Facsimile: (619) 696-4899

Wire Transfer:

BNK: Union Bank of California
for: San Diego Gas & Electric Company
ABA: Routing # 122000496
ACCT: #4430000352
Confirmation: SDG&E, Major Markets
FAX: (213) 244-8316

Credit and Collections:

San Diego Gas & Electric Company, Major
Markets
555 W. Fifth Street, ML 18A3
Los Angeles, CA 90013-1011

Phone: _____
Facsimile: _____

With additional Notices of an Event of Default or
Potential Event of Default to:

Attn: _____
Phone: _____
Facsimile: _____

Attn.: Major Markets, Credit and Collections
Manager
Fax No.: (213) 244-8316
Phone: (213) 244-4343

With additional Notices of an Event of Default or
Potential Event of Default to:

San Diego Gas & Electric Company
8330 Century Park Ct.
San Diego, California 92123

Attn: General Counsel
Phone: (858) 650-6141
Facsimile: (858) 650-6106

GENERAL TERMS AND CONDITIONS

ARTICLE ONE: GENERAL DEFINITIONS

1.1 General. The following terms shall have the following meaning for purposes of this Agreement.

“[AAA][JAMS]” means [the American Arbitration Association] [JAMS, Inc.].

“Affiliate” means, with respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such person. For this purpose, “control” means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

“Agreement” has the meaning set forth in the preamble to the Cover Sheet.

“Arbitration” has the meaning set forth in Section 12.3.

[For As-Available Product only: “As-Available” means a Product for which, subject to the terms of this Agreement, Seller is excused from selling and delivering the Product to Buyer, and Seller shall not be liable to Buyer for any damages determined pursuant to Section 3.1(h) of the Agreement, in the event that Seller fails to deliver the Product to Buyer for any of the following reasons:

- (a) if the Project is unavailable as a result of a Forced Outage and such Forced Outage is not the result of Seller’s negligence or willful misconduct;
- (b) Force Majeure;
- (c) by the Buyer’s failure to perform;
- (d) by a Planned Outage of the Project;
- (e) a reduction in output as ordered under Dispatch Down Periods; or
- (f) [the unavailability of landfill gas which was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such landfill gas to the Project, and which by the exercise of reasonable due diligence, Seller is unable to overcome or avoid or causes to be avoided.] OR [insufficient wind power for the Project to generate energy as determined by the best wind speed and direction standards utilized by other wind producers or purchasers in the vicinity of the Project or if wind speeds exceed the Project’s technical specifications.] OR [the unavailability of water or the unavailability of sufficient pressure required for operation of the hydroelectric turbine-generator as reasonably determined by Seller within its operating procedures, neither of which was anticipated as of the

Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such water to the Project, and which by the exercise of due diligence, such Seller or the party supplying the water is unable to overcome or avoid or causes to be avoided.] OR [insufficient solar power for the Project to generate energy as determined by the best solar standards utilized by other solar producers or purchasers in the vicinity of the Project.]

[For Dispatchable Product only: “Availability Adjustment Factor” has the meaning set forth in Section 4.1(b).]

“Availability Incentive Payments” shall mean Availability Incentive Payments as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

[For Dispatchable Product only: “Availability Notice” has the meaning set forth in Section 3.3([f/g]).]

“Availability Standards” shall mean Availability Standards as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

“Bankrupt” means with respect to any entity, such entity that (a) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar Law, (b) has any such petition filed or commenced against it which remains unstayed or undismissed for a period of sixty (60) days, (c) makes an assignment or any general arrangement for the benefit of creditors, (d) otherwise becomes bankrupt or insolvent (however evidenced), (e) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (f) is generally unable to pay its debts as they fall due.

[For Baseload Product only: “Baseload” means a Unit Firm Product for which the delivery levels are uniform twenty-four (24) hours per day, seven (7) days per week.]

“Bundled Green Energy” means Energy, Green Attributes, and any other Product, the quantity of which is measured based on the amount of Delivered Energy, in each case, that are produced by or associated with the Project. The quantity of Bundled Green Energy shall be equal to the lesser of the quantity of (i) **[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program:** Contract Energy] **[When SDG&E is SC for the Project and Project is in the VER Forecasting Program:** Delivered Energy] (ii) Green Attributes that are delivered to Buyer, and (iii) any other Product that is delivered to Buyer, the quantity of which is measured based on the amount of Delivered Energy. For example, if the quantity of Renewable Energy Credits that are delivered to Buyer is less than the quantity of the **[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program:** Contract Energy] **[When SDG&E is SC for the Project and Project is in the VER Forecasting Program:** Delivered Energy], then the quantity of Bundled Green Energy shall be equal to the quantity of Renewable Energy Credits that are delivered to Buyer.

“Business Day” means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday and shall be between the hours of 8:00 a.m. and 5:00 p.m. local time for the relevant Party’s principal place of business where the relevant Party, in each instance unless otherwise specified, shall be the Party from whom the Notice, payment or delivery is being sent and by whom the Notice or payment or delivery is to be received.

“Buyer” has the meaning set forth on the Cover Sheet.

“CAISO” means the California Independent System Operator Corporation or any successor entity performing similar functions.

[When SDG&E is the SC for the Project: “CAISO Charges Invoice” has the meaning set forth in Section 3.3([a/b])(iv).]

“CAISO Grid” means the system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the CAISO’s operational control.

“CAISO Tariff” means the CAISO Operating Agreement and Tariff, including the rules, protocols, procedures and standards attached thereto, as the same may be amended or modified from time-to-time and approved by FERC.

“California Renewables Portfolio Standard” means the Renewables Portfolio Standard of California under California Senate Bills 1078 and 107, as codified in California Public Utilities Code Sections 387, 390.1, and Article 16 (commencing with Section 399.11) of Chapter 2.3 of Part 1 of Division 1, as such provisions are amended or supplemented from time to time.

“Capacity Attributes” means any current or future defined characteristic, certificate, tag, credit, or ancillary service attribute, whether general in nature or specific as to the location or any other attribute of the Project intended to value any aspect of the capacity of the Project to produce Energy or ancillary services, including but not limited to any accounting construct so that the Contract Capacity of the Project may be counted toward a Resource Adequacy obligation or similar measure in respect to the capacity of the Project to generate Energy by the CPUC, the CAISO, the FERC, or any other entity vested with the authority under federal or state Law, to require Buyer to procure, or to procure at Buyer’s expense, Resource Adequacy or other similar products.

[For Dispatchable Product only: “Capacity Price” has the meaning set forth in Section 4.1(a).]

[For Baseload, Peaking, or Dispatchable Product only: “Capacity Test” shall be the complete capacity testing procedure for the Project that is reasonably acceptable to Buyer that Seller shall develop no later than thirty (30) days prior to the initial capacity testing of the Project prior to the Commercial Operation Date. The capacity testing procedure shall describe in detail the testing standard(s) to be used for the technology of the Project, the conditions under which testing shall take place, the average summer ambient conditions to which the results will be corrected, and the testing procedures. The same capacity testing procedure shall be applied to all subsequent Capacity Tests.]

“CEC” means the California Energy Commission or its successor agency.

“CEC Certification and Verification” means that the CEC has certified (or, with respect to periods before the Project has been constructed, that the CEC has pre-certified) that the Project is an ERR for purposes of the California Renewables Portfolio Standard and that all Energy produced by the Project qualifies as generation from an ERR for purposes of the Agreement.

“Claims” has the meaning set forth in Section 11.2(a).

“Commercial Operation” means that (a) the Project is operating and able to produce and deliver the Product to Buyer pursuant to the terms of this Agreement; (b) Seller shall have satisfied the requirements set forth in the Commercial Operation Certificate in the form attached as Exhibit E; (c) Seller shall have delivered a true, correct, and complete Commercial Operation Certificate from Seller, the Renewable Generation Equipment Supplier, the EPC Contractor, and a Licensed Professional Engineer; (d) Seller shall have delivered to Buyer the Delivery Term Security required under Article 8; (e) Seller has received all local, state and federal Governmental Approvals and other approvals as may be required by Law for the construction, operation and maintenance of the Project, including approvals, if any, required under the California Environmental Quality Act for the Project and related interconnection facilities; ***[For Baseload, Peaking, Dispatchable Product only:*** and (f) Seller shall have successfully completed the initial Capacity Test and delivered to Buyer a true, correct, and complete report documenting the results of Seller’s initial Capacity Test as required under Section 3.1(f)].

“Commercial Operation Date” means the date on which Seller achieves Commercial Operation for the Project.

“Conditions Precedent” has the meaning set forth in Section 2.3.

“Construction Period Security” shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(ii)/(iii)] to secure performance of its obligations hereunder.

“Contract Capacity” has the meaning set forth in Section 3.1(f).

[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: “Contract Energy” means the lower of Delivered Energy or Scheduled Energy for any given period in each case net of all Electrical Losses.]

“Contract Quantity” has the meaning set forth in Section 3.1(e).

“Contract Year” means a period of twelve (12) consecutive months (except in the case of the first Contract Year which may be longer) with the first Contract Year commencing on the Commercial Operation Date and each subsequent Contract Year commencing on the anniversary of the first day of the month following the Commercial Operation Date.

“Costs” means, with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into

new arrangements which replace a Terminated Transaction; and all reasonable attorneys' fees and expenses incurred by the Non-Defaulting Party in connection with such Terminated Transaction.

"Cover Sheet" means the document that precedes Article 1: General Definitions to this Agreement.

"CP Satisfaction Date" shall mean the date on which all of the Conditions Precedent have been satisfied (or waived in writing by the Party described in Section 2.4).

"CPUC" or "Commission or successor entity" means the California Public Utilities Commission, or successor entity.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

(a) approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement; and

(b) finds that any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable Law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable. ***[For Agreements for the purchase and sale of TRECS only, use STC REC-3 instead of the foregoing]***

[For Agreements with Delivery Terms greater than two years: "CPUC Approval Date" shall mean the date on which the Conditions Precedent set forth in Section 2.3(a) have been satisfied (or waived in writing by the beneficiary Party described in Section 2.4).]

[For Agreements with Delivery Terms greater than two years: "CPUC Approval Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)(i) to secure performance of its obligations hereunder.]

"Credit Rating" means, with respect to any entity, the rating then assigned to such entity's unsecured, senior long-term debt obligations (not supported by third party credit enhancements) by S&P or Moody's.

"Daily Delay Damages" means an amount equal to (a) the Construction Period Security amount required hereunder, divided by (b) the number of days in the Project Cure Period.

"Day-Ahead Forecast" has the meaning set forth in Section 3.3([d/e]).

[For As-Available and Baseload Products only: “Deemed Bundled Green Energy” means the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was prevented from delivering to Buyer by reason of Economic Dispatch Down. The quantity of Deemed Bundled Green Energy shall be equal to **[For As-Available Products:** (a) the Deemed Delivery Forecast of Energy corresponding to the applicable Economic Dispatch Down periods, whether or not Seller is participating in the VER Forecasting Program during such events, less the amount of Energy scheduled under Economic Dispatch Down as specified in the Dispatch Notice during such periods, and less any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault but only to the extent the Deemed Delivery Forecast does not already reflect the foregoing *provided that*, if the applicable amount calculated pursuant to this clause (a) is negative, the Deemed Bundled Green Energy shall be zero (0), or (b) if there is no such Deemed Delivery Forecast available during the applicable Economic Dispatch Down periods or if the Bundled Green Energy amount has historically not been determined based on clause (i) of the definition of Bundled Green Energy, the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was prevented from delivering to Buyer as a result of Economic Dispatch Down as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.] **[For Baseload Products:** the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was prevented from delivering to Buyer during the applicable Economic Dispatch Down periods, as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.]]

[For As-Available only: “Deemed Delivery Forecast” means the forecast of the Energy to be produced by the Project prepared by the CAISO or its agent in accordance with the VER Forecasting Program and communicated to the Scheduling Coordinator, which forecast is the last such forecast prepared by the CAISO that does not reflect curtailed production as a result of Economic Dispatch Down periods. As of the Execution Date, such Deemed Delivery Forecast is the CAISO forecast generated through its Resource Specific VER Forecast Usage Report].

[Dispatchable Product only: “Default Availability Factor” means, for any period, the amount determined according to the following formula:

$$\text{Default Availability Factor} = (\text{PH} - (\text{EDH} - \text{EEDH})) / \text{PH}$$

Where:

PH is the number of period hours;

EDH is the number of equivalent derate hours calculated as the sum, for each derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the initial Contract Capacity (as of the Commercial Operation Date) divided by the initial Contract Capacity. For the purposes of this calculation, a derate includes all

outages for any reason, including without limitation, Forced Outages, Force Majeure events, Dispatch Down Periods, Planned Outages, Buyer's failure to perform, and other times when any portion of the Contract Capacity is not available and when the Delivered Energy of the Project is less than the amount of Energy dispatched by Buyer; and

EEDH is the number of equivalent excused derate hours solely due to either Force Majeure events, Dispatch Down Periods or Buyer's failure to perform (and for no other reason), calculated as the sum, for each excused derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the initial Contract Capacity, divided by the initial Contract Capacity.]

"Defaulting Party" means the Party that is subject to an Event of Default.

"Default Rate" means for any date, the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in *The Wall Street Journal* under "Money Rates" on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) and (b) the maximum rate permitted by applicable Law.

"Delivered Energy" means all Energy produced from the Project and delivered to Buyer at the Delivery Point as measured in MWh at the CAISO revenue meter of the Project based on a power factor of precisely one (1) and net of all Electrical Losses.

"Delivery Point" means the point at which Buyer receives Seller's Product, as set forth in Section 3.1(d).

"Delivery Term" has the meaning set forth in Section 3.1(c).

"Delivery Term Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(iii)/(iv)] to secure performance of its obligations hereunder.

"Development Period Security" shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(i)/(ii)] to secure performance of its obligations hereunder.

"Disclosing Party" has the meaning set forth in Section 13.1(a).

"Disclosure Order" has the meaning set forth in Section 13.1(a).

"Dispatch Down Period" means the period of curtailment of delivery of Product from the Project resulting from System Dispatch Down [***For all Products other than Dispatchable Product:*** or Economic Dispatch Down].

"Dispatch Notice" means the operating instruction, and any subsequent updates given either by Buyer to Seller or by the CAISO to Seller, directing Seller to operate the Project at a specified megawatt output for the period of time set forth in such order.

[For Dispatchable Product only: “Dispatchable” means a Unit Firm Product for which Seller makes available capacity for Buyer to Schedule and dispatch up or down at Buyer’s option in accordance with Section 3.3([g/h]).]

“Distribution Upgrades” has the meaning set forth in the CAISO Tariff.

“DUNS” means the Data Universal Numbering System, which is a unique nine character identification number provided by Dun and Bradstreet.

“Early Termination Date” has the meaning set forth in Section 5.2.

[For all Products other than Dispatchable Product: “Economic Dispatch Down” means curtailment of delivery of Product from the Project that is the result of economic curtailment where Buyer (as the Scheduling Coordinator) or a third party Scheduling Coordinator (in accordance with Buyer’s directions) either submits a self-schedule with a binding Product quantity or an economic bid in the applicable CAISO market or fails to submit any such schedule or bid, in either case, that when implemented by the CAISO results in an otherwise available Product quantity not being scheduled or awarded in such CAISO market and such curtailment is not concurrently the result of a Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.

“Electrical Losses” means all electrical losses associated with the transmission of Product to the Delivery Point, including if applicable, but not limited to, any transmission or transformation losses between the CAISO revenue meter and the Delivery Point.

“Electrical Interconnection Upgrades” means the facilities to which Seller shall be able to interconnect and deliver Energy from the Project to and at the Delivery Point and Buyer shall be able to transmit Energy from the Delivery Point and the facilities that protect the Participating Transmission Owner’s, Transmission Provider’s, distribution operator’s, or other affected system owner’s, as applicable, electric system (or other systems to which such electric systems are connected, including the CAISO Grid) and the Participating Transmission Owner’s, Transmission Provider’s, distribution operator’s, or other affected system owner’s, as applicable, customers from faults occurring at the Project, including, but not limited to, all network, distribution, connection, transformation, switching, metering, communications, control, and safety equipment, as such equipment may be required pursuant to Good Industry Practices or in accordance with the Participating Transmission Owner’s, Transmission Provider’s, distribution operator’s, or other affected system owner’s, as applicable, facility connection requirements. Such Electrical Interconnection Upgrades include all Network Upgrades, Distribution Upgrades, Interconnection Facilities, and other network upgrades, distribution upgrades, or interconnection facilities on any other affected system owner’s electrical system that are determined to be necessary by the CAISO, Participating Transmission Owner, other affected system owner, as applicable, to physically and electrically interconnect the Project to the Participating Transmission Owner’s electric system so as to allow Seller to deliver Energy from the Project to the Delivery Point and Buyer to be able to transmit Energy from the Delivery Point.

“Eligible Renewable Energy Resource” or “ERR” has the meaning set forth in California Public Utilities Code Section 399.11, *et seq.*, as amended or supplemented from time to time.

“Energy” means electric energy measured in MWh and net of Station Service (unless otherwise specified).

“Energy Price” has the meaning set forth in Section 4.[1/2](a).

“EPC Contract” means the Seller’s engineering, procurement and construction contract with the EPC Contractor.

“EPC Contractor” means an engineering, procurement, and construction contractor, selected by Seller, with substantial experience in the engineering, procurement, and construction of power plants of the same type of facility as Seller’s.

“Equitable Defenses” means any bankruptcy, insolvency, reorganization or other Laws affecting creditors’ rights generally and, with regard to equitable remedies, the discretion of the court before which proceedings may be pending to obtain same.

[For Dispatchable Product only: “Equivalent Availability Factor” or “EAF” has the meaning set forth in Section 4.1(b).]

“Event of Default” has the meaning set forth in Section 5.1.

“Execution Date” means the date hereof as set forth in the preamble of the Cover Sheet.

“Executive(s)” has the meaning set forth in Section 12.2(a).

“FERC” means the Federal Energy Regulatory Commission or any successor government agency.

“Force Majeure” means any event or circumstance which wholly or partly prevents or delays the performance of any material obligation arising under this Agreement but only to the extent (1) such event is not within the reasonable control, directly or indirectly, of the Party seeking to have its performance obligation(s) excused thereby, (2) the Party seeking to have its performance obligation(s) excused thereby has taken all reasonable precautions and measures in order to prevent or avoid such event or mitigate the effect of such event on such Party’s ability to perform its obligations under this Agreement and which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which by the exercise of due diligence it has been unable to overcome, and (3) such event is not the direct or indirect result of the fault or negligence of the Party seeking to have its performance obligations excused thereby.

(a) Subject to the foregoing, events that could qualify as Force Majeure include, but are not limited to the following:

(i) acts of God, flooding, lightning, landslide, earthquake, fire, drought, explosion, epidemic, quarantine, storm, hurricane, tornado, volcano, other natural disaster or unusual or extreme adverse weather-related events;

(ii) war (declared or undeclared), riot or similar civil disturbance, acts of the public enemy (including acts of terrorism), sabotage, blockade, insurrection, revolution, expropriation or confiscation; or

(iii) except as set forth in subpart (b)(vii) below, strikes, work stoppage or other labor disputes (in which case the affected Party shall have no obligation to settle the strike or labor dispute on terms it deems unreasonable).

(b) Force Majeure shall not be based on:

(i) Buyer's inability economically to use or resell the Product purchased hereunder;

(ii) Seller's ability to sell the Product at a price greater than the price set forth in this Agreement;

(iii) Seller's inability to obtain Governmental Approvals or other approvals of any type for the construction, operation, or maintenance of the Project;

(iv) a lack of wind, sun or other fuel source of an inherently intermittent nature;

(v) Seller's inability to obtain sufficient labor, equipment, materials, or other resources to build or operate the Project, except to the extent Seller's inability to obtain sufficient labor, equipment, materials, or other resources is caused by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above;

(vi) Seller's failure to obtain financing or other funds, including funds authorized by a state or the federal government or agencies thereof to supplement the payments made by Buyer pursuant to this Agreement;

(vii) a strike, work stoppage or labor dispute limited only to any one or more of Seller, Seller's Affiliates, the EPC Contractor or subcontractors thereof or any other third party employed by Seller to work on the Project; or

(viii) any equipment failure except if such equipment failure is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above.

"Force Majeure Extension Period" has the meaning set forth in Section 3.9(c)(ii).

"Forced Outage" means any unplanned reduction or suspension of production of Product from the Project or unavailability of the Project in whole or in part that is not a Planned Outage or a willful withholding of Product when the Project is otherwise capable of delivering Product under Good Industry Practices.

"GAAP" has the meaning set forth in Section 13.4.

“Gains” means with respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of this Agreement for the remaining Delivery Term, determined in a commercially reasonable manner, subject to Section 5.2 hereof. Factors used in determining economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties, including, without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

“Good Industry Practice” means those practices, methods and acts that would be implemented and followed by prudent operators of electric transmission facilities (with respect to Buyer) or prudent operators of electric generation facilities similar to the Project (with respect to Seller) in the Western United States during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety, and shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers’ warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and applicable Law. Good Industry Practice is not intended to be the optimum practice, method or act to the exclusion of all others, but rather is intended to be any of the practices, methods and/or actions generally accepted in the region.

“Governmental Approval” means all authorizations, consents, approvals, waivers, exceptions, variances, filings, permits, orders, licenses, exemptions and declarations of or with any governmental entity and, with respect to the Seller, shall include those siting and operating permits and licenses, and any of the foregoing under any applicable environmental Law, that are required for the construction, use, and operation of the Project.

“Governmental Authority” means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

“Governmental Charges” has the meaning set forth in Section 9.2.

“Green Attributes” means, subject to the limitations in the final sentence of this definition, any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations

Intergovernmental Panel on Climate Change, or otherwise by Law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere;¹ and (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state Law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local Law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any energy, capacity, reliability or other power attributes from the Project, (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits. If the Project is a biomass facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project and for all electric generation using biomethane as fuel, Seller shall transfer to Buyer sufficient Green Attributes of biomethane production and capture to ensure that there are zero net emissions associated with the production of electricity from the Project using the biomethane.

"Guaranteed Commercial Operation Date" or "GCOD" means [insert date], as may be extended pursuant to Section 3.9(c)(ii).

"Guaranteed Energy Production" has the meaning set forth in Section 3.1(e).

"Guarantor" means, with respect to Seller, any person that (a) does not already have any material credit exposure to Buyer under any other agreements, guarantees, or other arrangements at the time its Guaranty is issued, (b) is an Affiliate of Seller, or other third party reasonably acceptable to Buyer, (c) has a Credit Rating of [_____] or better from S&P or a Credit Rating of [_____] or better from Moody's, (d) has a tangible net worth of at least [_____], (e) is incorporated or organized in a jurisdiction of the United States and is in good standing in such jurisdiction, and (f) executes and delivers a Guaranty for the benefit of Buyer substantially in the form attached hereto as Exhibit D. ***[SDG&E will consider accepting a Guaranty based on the Project, the amount of Performance Assurance, and the identity of the Seller and Guarantor]***

¹ Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

“Guaranty” means a guaranty from a Guarantor provided for the benefit of Buyer substantially in the form attached hereto as Exhibit D. ***[SDG&E will consider accepting a Guaranty based on the Project, the amount of Performance Assurance, and the identity of the Seller and Guarantor]***

“Imbalance Energy” means the amount of Energy, in any given settlement interval, by which the amount of Delivered Energy deviates from the amount of Scheduled Energy.

“Initial Negotiation End Date” has the meaning set forth in Section 12.2(a).

“Interconnection Facilities” has the meaning set forth in the CAISO Tariff.

“Interest Amount” means, with respect to an Interest Period, the amount of interest derived from the product of (a) the sum of (i) the principal amount of Performance Assurance in the form of cash held by Buyer during that Interest Period, and (ii) the sum of all accrued and unpaid Interest Amounts accumulated prior to such Interest Period; multiplied by (b) the Interest Rate in effect on the first day of the Interest Period; multiplied by (c) the number of days in that Interest Period; divided by (d) 360.

“Interest Payment Date” means the date on which cash held as Performance Assurance is returned pursuant to the terms of this Agreement.

“Interest Period” means the monthly period beginning on the first day of each month and ending on the last day of each month or the shorter period during which Performance Assurance in the form of cash is held by Buyer.

“Interest Rate” means for any date the rate per annum equal to the Commercial Paper (non-financial, 3 months) rate as published the prior month in the Federal Reserve Statistical Release, H.15. Should publication of the interest rate on Commercial Paper (non-financial, 3 months) be discontinued, then the interest rate on commercial paper, which most closely approximates the discontinued rate, published the prior month in the Federal Reserve Statistical Release, H.15, or its successor publication.

“[Large/Small] Generator Interconnection Agreement” has the meaning set forth in the CAISO Tariff.

“Law” means any statute, law, treaty, rule, regulation, ordinance, code, Governmental Approval, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, including any of the foregoing that are enacted, amended, or issued after the Execution Date, and which become effective prior to the end of the Delivery Term; or any binding interpretation of the foregoing by a Governmental Authority.

“Letter(s) of Credit” means one or more irrevocable, standby letters of credit issued by a U.S. commercial bank or a foreign bank with a U.S. branch with such bank having a Credit Rating of at least [A-] with an outlook designation of “stable” from S&P or [A3] with an outlook designation of “stable” from Moody’s, in substantially the form as contained in Exhibit C to this Agreement.

“Licensed Professional Engineer” means a person acceptable to Buyer in its reasonable judgment who (a) is licensed to practice engineering in California, (b) has training and experience in the power industry specific to the technology of the Project, (c) has no economic relationship, association, or nexus with Seller or Buyer, other than to meet the obligations of Seller pursuant to this Agreement, (d) is not a representative of a consultant, engineer, contractor, designer or other individual involved in the development of the Project or of a manufacturer or supplier of any equipment installed at the Project, and (e) is licensed in an appropriate engineering discipline for the required certification being made.

“Locational Marginal Price” has the meaning set forth in the CAISO Tariff.

“Losses” means with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from a Terminated Transaction for the remaining term of this Agreement, determined in a commercially reasonable manner. Factors used in determining the loss of economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties including without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g. NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

“Manager” has the meaning set forth in Section 12.2(a).

“Milestones” has the meaning set forth in Section 3.9(b)(i).

[For Dispatchable Product only: “Monthly Capacity Payment” has the meaning set forth in Section 4.1(b).]

“Monthly Energy Payment” has the meaning set forth in Section 4.[1/2]([b/c]).

[For Dispatchable Product only: “Monthly Shaping Factor” has the meaning set forth in Section 4.1(b).]

“Moody’s” means Moody’s Investor Services, Inc., or its successor.

“MWh” means megawatt-hour.

“Negative Imbalance Energy” has the meaning set forth in Section 4.[2/3].

“NERC” means the North American Electric Reliability Corporation or a successor organization that is responsible for establishing reliability criteria and protocols.

“NERC Holiday” means any of the following holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Three of these days, Memorial Day, Labor Day, and Thanksgiving Day, occur on the same day each year. Memorial Day is the last Monday in May; Labor Day is the first Monday in September; and Thanksgiving

Day is the fourth (4th) Thursday in November. New Year's Day, Independence Day, and Christmas Day occur on the same date each year, but in the event any of these holidays occur on a Sunday, the "NERC Holiday" is celebrated on the Monday immediately following that Sunday; and if any of these holidays occur on a Saturday, the "NERC Holiday" remains on that Saturday.

"Network Upgrades" has the meaning set forth in the CAISO Tariff.

"Non-Availability Charges" shall mean Non-Availability Charges as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

"Non-Defaulting Party" has the meaning set forth in Section 5.2.

"Notice" shall, unless otherwise specified in the Agreement, mean written communications by a Party to be delivered by hand delivery, United States mail, overnight courier service, facsimile or electronic messaging (e-mail).

"Notice to Proceed" or "NTP" means the notice provided by Seller to the EPC Contractor following execution of the EPC Contract between Seller and such EPC Contractor and satisfaction of all conditions precedent to performance of such contract, by which Seller authorizes such EPC Contractor to commence and complete full performance of the work under the EPC Contract without any delay or waiting periods.

"Outage Notification Form" means the completed document from Seller notifying Buyer of an outage of the Project substantially in the form attached hereto as Exhibit G. Buyer reserves the right to reasonably revise or change the form upon Notice to Seller.

[For intermittent As-Available Product: "Participating Intermittent Resource" shall have the meaning set forth in the CAISO Tariff.]

"Participating Transmission Owner" or "Participating TO" means an entity that (a) owns, operates and maintains transmission lines and associated facilities and/or has entitlements to use certain transmission lines and associated facilities that are interconnected to the Delivery Point and (b) has transferred to the CAISO operational control of such facilities and/or entitlements to be made part of the CAISO Grid. As of the Execution Date, the Participating Transmission Owner is ***[San Diego Gas & Electric Company]***.

"Party" or "Parties" means the Buyer or Seller individually, or to both collectively.

[For Peaking Product only: "Peaking" means a Unit-Firm Product for which Energy must be delivered during hours ending 1200-1900 (11:00 am to 7:00 pm) on Monday-Friday, excluding NERC Holidays, for the months July through October and during hours ending 1400-2100 (1:00 pm to 9:00 pm) on Monday-Friday, excluding NERC Holidays, for the months November and December.] [Note: Buyer will consider other firm products such as 6x16: "6x16 Block" means a Unit-Firm Product for which Energy must be delivered during hours ending 0700-2200 (6:00 am to 10:00 pm) on Monday-Saturday throughout the Delivery Term.]

“Performance Assurance” means collateral provided by Seller to Buyer to secure Seller’s obligations hereunder and includes ***[For Agreements with Delivery Terms greater than two years: CPUC Approval Security,] Development Period Security, Construction Period Security, and Delivery Term Security.***

[For As-Available, Baseload, Peaking Product: “Performance Measurement Period” has the meaning set forth in Section 3.1(e).]

“Planned Outage” means any planned reduction or suspension of the electrical output from the Project or unavailability of the Project in whole or in part as a result of the inspection, maintenance, or repair of equipment that is scheduled in accordance with Section 3.7(a).

“PNode” has the meaning set forth in the CAISO Tariff.

“Positive Imbalance Energy” has the meaning set forth in Section 4.[2/3].

“Product” has the meaning set forth in Section 3.1(a).

[For Projects receiving PTCs: “Production Tax Credit” or “PTC” means the tax credit for electricity produced from certain renewable generation resources described in Section 45 of the Internal Revenue Code of 1986, as it may be amended from time to time./

“Project” means all of the *[insert technology]* electric generating units, the Site at which the generating facility is located, the utility interconnection facilities up to the point of change in ownership to the applicable utility’s facilities, and the other assets, tangible and intangible, that compose the generation facility as more particularly described on Exhibit A.

“Project Cure Period” has the meaning set forth in Section 3.9(c)(i).

“Quarterly Progress Report” means the report similar in form and content attached hereto as Exhibit F, as may be modified from time to time to meet applicable CPUC requirements.

“Recording” has the meaning set forth in Section 13.6.

“Reductions” has the meaning set forth in Section 3.2(c).

“Referral Date” has the meaning set forth in Section 12.2(a).

“Remedial Action Plan” has the meaning provided in Section 3.9(b)(ii).

“Renewable Energy Credit” has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028, as each may be amended from time to time or as further defined or supplemented by Law.

“Renewable Generation Equipment Supplier” means the supplier of the [electric generating [wind] [gas] [steam] turbine(s)] [solar electric generating equipment] for the Project, selected by Seller.

“Replacement Price” means the price (in dollars per megawatt hour) at which Buyer, acting in a commercially reasonable manner, purchases for delivery at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) a replacement for any Product (including its associated Green Attributes) that was not Scheduled and delivered by Seller, plus (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Buyer in purchasing such replacement Product and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Buyer for such replacement Product, or absent a purchase, the market price at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) for such replacement Product for the hours impacted by such failure to Schedule or deliver such Product as determined by Buyer in a commercially reasonable manner. The Replacement Price also shall include all CAISO and other charges and penalties calculated in dollars per megawatt hour with respect to the deviation from the Scheduled supply resulting from Seller’s failure to Schedule or deliver; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Buyer be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Seller’s liability. For the purposes of this definition, Buyer shall be considered to have purchased replacement Product to the extent Buyer shall have entered into one or more arrangements in a commercially reasonable manner whereby Buyer repurchases its obligation to sell and deliver the Product to another party. If for any reason a Replacement Price is unavailable when Seller fails to deliver or Schedule Product, then the Replacement Price for the hours when a Replacement Price is unavailable shall be the last available Replacement Price together with any charges and penalties allocated to Buyer during such time.

“Resource Adequacy” means the procurement obligation of load serving entities, including Buyer, as such obligations are described in CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and subsequent CPUC decisions addressing Resource Adequacy issues, as those obligations may be altered from time to time in the CPUC Resource Adequacy Rulemakings (R.) 04-04-003 and (R.) 05-12-013 or by any successor proceeding, and all other Resource Adequacy obligations established by any other entity, including the CAISO.

“Sales Price” means the price (in dollars per megawatt hour) at which Seller, acting in a commercially reasonable manner, resells any Product not Scheduled and received by Buyer, deducting from such proceeds any (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Seller in reselling such Product including all costs charged by CAISO to Schedule and deliver the Product into the CAISO System, and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Seller in Scheduling and delivering such Product to the third party purchasers, or absent a sale despite commercially reasonable efforts to resell the Product, zero. The Sales Price shall also be reduced by all CAISO and other costs, charges and penalties with respect to the deviation from the Scheduled supply, in each case, resulting from Buyer’s failure to take Product and calculated in dollars per megawatt hour; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Seller be required to utilize or change its utilization of its owned or controlled assets, including contractual assets, or market positions to minimize Buyer’s liability. The Sales Price may be less than zero.

“S&P” means the Standard & Poor’s Rating Group (a division of McGraw-Hill, Inc.) or its successor.

“Schedule” means the actions of Seller, Buyer and/or their designated representatives, or Scheduling Coordinators, including each Party’s Transmission Providers, if applicable, of notifying, requesting and confirming to each other and the CAISO the quantity and type of Product to be delivered on any given day or days at a specified Delivery Point.

“Scheduling Coordinator” or “SC” means an entity certified by the CAISO as qualifying as a Scheduling Coordinator pursuant to the CAISO Tariff, for the purposes of undertaking the functions specified in “Responsibilities of a Scheduling Coordinator,” of the CAISO Tariff, as amended from time-to-time.

“Scheduled Energy” means the Energy that clears under the applicable CAISO market based on the final Schedule developed in accordance with this Agreement, the operating procedures developed by the Parties pursuant to Section 3.10, and the applicable CAISO Tariff, protocols and Scheduling practices.

“SEC” means the U.S. Securities and Exchange Commission.

“Seller” shall have the meaning set forth on the Cover Sheet.

“Settlement Amount” means, with respect to the Non-Defaulting Party, the Losses or Gains, and Costs, expressed in U.S. Dollars, which such Party incurs as a result of the liquidation of a Terminated Transaction pursuant to Sections 5.2 and 5.3.

“Site” shall mean the location of the Project as described in Exhibit A.

“Station Service” means the electric energy produced by the Project that is used within the Project to power the lights, motors, control systems and other auxiliary electrical loads that are necessary for operation of the Project.

“System Dispatch Down” means curtailment of delivery of Product from the Project resulting from (a) curtailment ordered by the CAISO (whether directly or through the Scheduling Coordinator or the Participating Transmission Owner), for any reason, including, but not limited to, an Exceptional Dispatch (as defined in the CAISO Tariff), any system emergency as defined in the CAISO Tariff (“System Emergency”), any warning of an anticipated System Emergency, or any warning of an imminent condition or situation which could jeopardize the CAISO’s or Participating Transmission Owner’s electric system integrity or the integrity of other systems to which the CAISO or Participating Transmission Owner is connected, any warning, forecast, or anticipated overgeneration conditions, including a request from CAISO to manage over-generation conditions; (b) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) for reasons including, but not limited to, (i) any situation that affects normal function of the electric system including, but not limited to, any abnormal condition that requires action to prevent circumstances such as equipment damage, loss of load, or abnormal voltage conditions, (ii) any warning, forecast or anticipation of conditions or situations that jeopardize the Participating Transmission Owner’s electric system integrity or the integrity of other systems to which the Participating Transmission Owner is connected; (c) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) as a result of scheduled or unscheduled maintenance or construction on the Participating Transmission Owner’s

transmission facilities or distribution operator's facilities (if interconnected to distribution or sub-transmission system) that prevents the delivery or receipt of Delivered Energy to or at the Delivery Point, (d) curtailment in accordance with Seller's obligations under its interconnection agreement with the Participating Transmission Owner or distribution operator, ***[If the Project is located outside of the CAISO:*** or (e) curtailment ordered by the Transmission Provider provided, that Seller has contracted for firm transmission with such Transmission Provider for the Product to be delivered to the Delivery Point and such curtailment is due to "force majeure" or "uncontrollable force" or a similar term as defined under the Transmission Provider's tariff]; ***[For Dispatchable Product only:*** or ([e/f]) curtailment ordered by Buyer pursuant to a Dispatch Notice.] ***[For all Products other than Dispatchable:*** provided, however, that System Dispatch Down shall not include Economic Dispatch Down].

"Terminated Transaction" means the termination of this Agreement in accordance with Section 5.2 of this Agreement.

"Termination Payment" has the meaning set forth in Section 5.2.

[For TOD Pricing Only: "TOD Delivery Cap" has the meaning set forth in Section 4.[1/2](a).]

[For TOD Pricing Only: "TOD Factors" has the meaning set forth in Section 4.[1/2](b).]

[For TOD Pricing Only: "TOD Period" has the meaning set forth in Section 4.[1/2](b).]

"Transmission Provider" means any entity or entities transmitting or transporting the Product on behalf of Seller or Buyer to or from the Delivery Point.

[For Baseload, Peaking, or Dispatchable Product only: "Unit Firm" means, with respect to a Product, that the Product is intended to be supplied from the Project, and subject to the terms of this Agreement, Seller is excused from selling and delivering the Product to Buyer, and Seller shall not be liable to Buyer for any damages determined pursuant to Section 3.1(h) of the Agreement, in the event that Seller fails to deliver the Product to Buyer for any of the following reason:

- (a) if the Project is unavailable as a result of a Forced Outage and such Forced Outage is not the result of Seller's negligence or willful misconduct;
- (b) Force Majeure;
- (c) by the Buyer's failure to perform;
- (d) by a Planned Outage of the Project; or
- (e) a reduction in output as ordered under Dispatch Down Periods.

The following products shall be considered "Unit Firm" products: Peaking, Baseload, and Dispatchable.]

[For an intermittent As-Available Product only: “VER Forecasting Program” means the rules, protocols, procedures and standards for Participating Intermittent Resources under the CAISO’s Eligible Intermittent Resource Protocol, as may be amended from time to time, as set forth in the CAISO Tariff.]

“WECC” means the Western Electricity Coordinating Council or successor agency.

“WREGIS” means the Western Renewable Energy Generating Information System or any successor renewable energy tracking program.

1.2 Interpretation. The following rules of interpretation shall apply:

(a) The term “month” shall mean a calendar month unless otherwise indicated, and a “day” shall be a 24-hour period beginning at 12:00:01 a.m. Pacific Prevailing Time and ending at 12:00:00 midnight Pacific Prevailing Time; provided that a “day” may be 23 or 25 hours on those days on which daylight savings time begins and ends.

(b) Unless otherwise specified herein, all references herein to any agreement or other document of any description shall be construed to give effect to amendments, supplements, modifications or any superseding agreement or document as then exist at the applicable time to which such construction applies.

(c) Capitalized terms used in this Agreement, including the appendices hereto, shall have the meaning set forth in Article 1, unless otherwise specified.

(d) Unless otherwise specified herein, references in the singular shall include references in the plural and vice versa, pronouns having masculine or feminine gender will be deemed to include the other, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal personality). Other grammatical forms of defined words or phrases have corresponding meanings.

(e) The term “including” when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation.

(f) References to a particular article, section, subsection, paragraph, subparagraph, appendix or attachment shall, unless specified otherwise, be a reference to that article, section, subsection, paragraph, subparagraph, appendix or attachment in or to this Agreement.

(g) Any reference in this Agreement to any natural person, Governmental Authority, corporation, partnership or other legal entity includes its permitted successors and assigns or to any natural person, Governmental Authority, corporation, partnership or other legal entity succeeding to its functions.

(h) All references to dollars are to U.S. dollars.

ARTICLE TWO: EFFECTIVENESS OF AGREEMENT; CONDITIONS PRECEDENT

2.1 Effectiveness of Agreement Prior to CP Satisfaction Date. Commencing on the Execution Date until the CP Satisfaction Date, this Agreement shall be in full force and effect, enforceable and binding only to the extent required to give full effect to, and enforce, the rights and obligations of the Parties under this Article 2, including, as it relates to Article 2, the rights and obligations under Articles 1, 5, 7, 8, 9, 10, 11, 12, and 13.

2.2 Obligations of the Parties. The Parties shall cooperate with each other to cause the Conditions Precedent to be satisfied as soon as reasonably practical.

(a) Seller's Obligations. Prior to the CP Satisfaction Date, Seller shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections [____], (ii) diligently pursue development of the Project in accordance with Section 3.9, (iii) comply with Section 3.9(b) in achieving the applicable Milestones that have due dates occurring prior to the CP Satisfaction Date, reporting completion of such Milestones, and delivering Remedial Action Plans in respect of missed Milestones as more fully described therein, (iv) deliver the Quarterly Progress Report in accordance with Section 3.9(a), and (v) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. ***[For Agreements with Delivery Terms greater than two years:*** Upon an Event of Default of Seller prior to the CPUC Approval Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the amount of the CPUC Approval Security.] Upon an Event of Default of Seller ***[For Agreements with Delivery Terms greater than two years:*** on or after the CPUC Approval Date but] prior to the CP Satisfaction Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the amount of the Development Period Security. Buyer may retain such Performance Assurances to pay such liquidated damages. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to an Event of Default of Seller prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Seller prior to the CP Satisfaction Date.

(b) Buyer's Obligations. Prior to the CP Satisfaction Date, Buyer shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections 2.3(a), and (ii) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. ***[For Agreements with Delivery Terms greater than two years:*** Upon an Event of Default of Buyer prior to the CPUC Approval Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the CPUC Approval Security.] Upon an Event of Default of Buyer ***[For Agreements with Delivery Terms greater than two years:*** on or after the CPUC Approval Date but] prior to the CP Satisfaction Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the Development Period Security. Each Party agrees and acknowledges that (a) the actual damages that Seller would incur due to an Event of Default of Buyer prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Buyer prior to the CP Satisfaction Date.

2.3 Conditions Precedent. Subject to Section 2.1, the effectiveness of the remainder of this Agreement is conditioned upon the satisfaction (or waiver by the Party described in Section 2.4) of all of the following conditions precedent (“Conditions Precedent”) by the deadline dates set forth below for each Condition Precedent without extension for Force Majeure or any other reason:

(a) CPUC Approval. No later than [_____], Buyer shall have obtained CPUC Approval. Prior to this deadline, should the CPUC issue an order approving this Agreement but with conditions or modifications that materially alter the commercial aspects of this Agreement, the Parties agree to use good faith efforts to renegotiate this Agreement and file the amended agreement with the CPUC seeking CPUC Approval therefor. If, no later than the earlier of (i) sixty (60) days after such order or (ii) the deadline date above, no agreement is reached, either Party may terminate this Agreement upon delivery of Notice to the other Party.

(b) Electrical Interconnection. No later than [_____], Seller shall have entered into a [Large/Small] Generator Interconnection Agreement providing for the construction of the Electrical Interconnection Upgrades necessary to maintain the “[Full Capacity] [Energy Only] Deliverability Status” (as defined in the CAISO Tariff) of the Project and setting forth:

(i) an estimated in-service interconnection date for the “Participating TO’s Interconnection Facilities,” the “Network Upgrades,” and the “Distribution Upgrades” (as each term is defined in the CAISO Tariff) of no later than [_____] months after Seller provides the Participating Transmission Owner with the appropriate security and written authorization to proceed under its [Large/Small] Generator Interconnection Agreement for the Project,

(ii) a refundable cost for “Network Upgrades” (as defined in the CAISO Tariff) that Seller would be obligated to pay and would be entitled to reimbursement from the CAISO, a Participating Transmission Owner, or any other affected transmission provider as provided thereunder not exceeding \$[_____], and [*Note: Seller may propose additional provisions whereby Seller can satisfy this Condition Precedent by buying down the Network Upgrade costs that exceed the foregoing cost cap in a manner that is mutually acceptable to the Parties.*]

(iii) a nonrefundable cost that Seller would be obligated to pay thereunder not exceeding \$[_____] (or such greater amount as Seller may approve, in its sole discretion).

(c) *[Others, Major Governmental Approvals, Financing, etc.]*

2.4 Failure to Meet All Conditions Precedent.

(a) Beneficiary Party.

(i) Both of the Parties are the beneficiaries of the Conditions Precedent set forth in Sections 2.3(a), 2.3(b)(i)-(ii) *[Others]*, and in order for a waiver of non-satisfaction of

such Conditions Precedent to be effective, both of the Parties must waive (in their sole discretion) non-satisfaction by the deadline date therefor.

(ii) Buyer shall be the sole beneficiary of the Conditions Precedent set forth in Sections **[List]**, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Buyer alone must waive (in its sole discretion) non-satisfaction by the deadline date therefor.

(iii) Seller shall be the sole beneficiary of the Conditions Precedent set forth in Sections 2.3(b)(iii) **[Others]**, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Seller alone must waive (in its sole discretion) non-satisfaction by the deadline date therefor.

(b) **Termination.** If any of the Conditions Precedent is not satisfied or waived in writing by the beneficiary Parties thereto on or before the date that is fifteen (15) days after the applicable deadline date therefor, then this Agreement shall automatically terminate with no further obligation to either Party (other than as set forth in Sections 2.4(b)(i)-(ii) below and any other payment obligations which are accrued and payable at the time of termination).

(i) Upon a termination of this Agreement for any reason under Section 2.4 other than as described in Section 2.4(b)(ii) below, Seller shall forfeit to Buyer an amount equal to the Performance Assurance then required to be delivered to Buyer hereunder. Buyer may retain such Performance Assurance to pay such amount.

(ii) Upon a termination of this Agreement under this Section 2.4 as a result of the failure of the Conditions Precedent set forth in Sections 2.3(a) to be satisfied (or waived by both Parties) or as a result of the failure of the Conditions Precedent set forth in Sections 2.3(b)(i)-(ii) to be satisfied or waived by Buyer, Buyer shall return to Seller the Performance Assurances then held by Buyer.

2.5 **Effectiveness of Agreement on and after CP Satisfaction Date.** This Agreement shall be in full force and effect, enforceable and binding in all respects as of the CP Satisfaction Date until the conclusion of the Delivery Term or earlier termination pursuant to the terms of this Agreement; provided however, that this Agreement shall remain in effect until (i) the Parties have fulfilled all obligations under this Agreement, including payment in full of amounts due for the Product delivered prior to the end of the Delivery Term, the Settlement Amount, indemnification payments or other damages (whether directly or indirectly such as through set-off or netting) and (ii) the undrawn portion of the **[For Agreements with Delivery Terms greater than two years: CPUC Approval Security,] Development Period Security, Construction Period Security, or Delivery Term Security, as applicable, is released and/or returned as applicable (if any is due).** All indemnity rights shall survive the termination or expiration of this Agreement for the longer of twelve (12) months or the expiration of the statute of limitations period of the claim underlying the indemnity obligation.

ARTICLE THREE: OBLIGATIONS AND DELIVERIES

3.1 **Transaction.**

(a) Product. The “Product” to be delivered and sold by Seller and received and purchased by Buyer under this Agreement is *[Seller to select: As-Available, Baseload, Peaking, or Dispatchable]* Energy, Capacity Attributes, Green Attributes, and other ancillary products, services or attributes similar to the foregoing which are or can be produced by or associated with the Project (net of Station Service) in accordance with the terms hereof.

(b) Transaction. Unless specifically excused by the terms of this Agreement during the Delivery Term, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, the Product at the Delivery Point, and Buyer shall pay Seller for the Product in accordance with the terms hereof. **In no event shall Seller have the right to procure any element of the Product from sources other than the Project for sale or delivery to Buyer under this Agreement [If the Project is located outside of the CAISO: except with respect to Imbalance Energy from the Transmission Provider].**

(c) Delivery Term. The Parties agree that **the period of Product delivery is [] Contract Years**. As used herein, “Delivery Term” shall mean the period of Contract Years specified above beginning on the Commercial Operation Date and continuing until the end of the last Contract Year unless terminated earlier as provided by the terms of this Agreement.

(d) Delivery Point. The Delivery Point shall be [the point of interconnection of the Project to the CAISO Grid] *[Seller may specify another delivery point; for a Project located outside the CAISO Grid, the Delivery Point should be a CAISO Scheduling Point as defined by the CAISO]* and for financial settlement purposes under the applicable CAISO market, the PNode corresponding to such point.

(e) *[For Baseload, Peaking, As-Available Product: Contract Quantity and Guaranteed Energy Production]*. The quantity of Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is [] MWh (“Contract Quantity”). Throughout the Delivery Term, Seller shall be required to deliver to Buyer no less than the Guaranteed Energy Production (as defined below) in any [twelve (12)] [twenty-four (24)] consecutive calendar month period during the Delivery Term (“Performance Measurement Period”). “Guaranteed Energy Production” means an amount of Bundled Green Energy, as measured in MWh, equal to [two times] []% of the Contract Quantity. Notwithstanding the excuses to performance set forth in the definition of the Product type (as such Product type is specified in Section 3.1(a)), Seller shall be excused from achieving the Guaranteed Energy Production during any Performance Measurement Period only to the extent of any Force Majeure events, Buyer’s failure to perform, or Dispatch Down Periods. For purposes of determining whether Seller has achieved the Guaranteed Energy Production, Seller shall be deemed to have delivered to Buyer an amount of Bundled Green Energy that it could reasonably have delivered to Buyer but was prevented from delivering to Buyer by reason of any Force Majeure events, Buyer’s failure to perform, or Dispatch Down Periods.] *[For Dispatchable Product: Contact Quantity]*. The quantity of Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is [] MWh (“Contract Quantity”).]

(f) Contract Capacity. The “Contract Capacity” is the full generation capacity of the Project net of all Station Service which shall be *[For As-Available Product: no less than [] MW and no greater than [] MW] [For Baseload, Peaking, or Dispatchable Product*

only: an amount determined periodically pursuant to a Capacity Test as set forth below]. Throughout the Delivery Term, Seller shall sell and Schedule all Product associated with the Contract Capacity of the Project solely to Buyer, except in the case of an Event of Default of Buyer or an unexcused failure by Buyer to Schedule, receive, and pay for Product under Section 3.1(h)(ii) **[If the Project is located outside of the CAISO:** or the sale of Imbalance Energy to the Transmission Provider]. **[For Dispatchable Product:** Throughout the Delivery Term, Seller shall make the Contract Capacity available solely to Buyer at all times, except in the case of an Event of Default of Buyer or an unexcused failure by Buyer to Schedule, receive, and pay for Product under Section 3.1(h)(ii) **[If the Project is located outside of the CAISO:** or the sale of Imbalance Energy to the Transmission Provider].]

(i) **[For Baseload, Peaking, Dispatchable Product: Initial Capacity Testing**. Upon no less than fourteen (14) days prior Notice to Buyer, Seller shall schedule and complete a Capacity Test prior to the Commercial Operation Date for the Project. Such initial Capacity Test shall establish the Contract Capacity for the Project for the first Contract Year.]

(ii) **[For Baseload, Peaking, Dispatchable Product: Annual Capacity Testing**. Thereafter, at least once per Contract Year within the first quarter of each Contract Year, upon no less than 14 days prior Notice to Buyer, Seller shall schedule and complete a Capacity Test. In addition, Buyer shall have the right to require a retest of the Capacity Test at any time upon five (5) days prior written Notice to Seller if Buyer reasonably believes that the actual Contract Capacity has varied materially from the results of the most recent tests. Seller shall have the right to run a retest of the Capacity Test at any time upon two (2) days prior written Notice to Buyer (or any shorter period reasonably acceptable to Buyer consistent with Good Industry Practices).]

(iii) **[For Baseload, Peaking, Dispatchable Product: Witness at Capacity Tests**. Buyer shall have the right to send one or more representative(s) to witness all Capacity Tests.]

(iv) **[For Baseload, Peaking, Dispatchable Product: Capacity Test Reporting**. No later than fourteen (14) days following any Capacity Test, Seller shall submit a testing report detailing results and findings of the test. The report shall include meter readings and plant log sheets verifying the operating conditions and output of the Project. The Contract Capacity determined pursuant to a Capacity Test shall become the new Contract Capacity at the beginning of the day following the completion of the test for all purposes under this Agreement.]

(v) **[For Baseload, Peaking, Dispatchable Product: Capacity Test Costs and Payments**. Buyer shall pay the [Monthly Energy Payment] in respect of the Product produced during the initial Capacity Test prior to the Commercial Operation Date and each annually scheduled Capacity Test thereafter. In addition, Buyer shall pay the [Monthly Energy Payment] in respect of the Product produced during any other Buyer requested test unless the results of such test demonstrate that the actual Contract Capacity has varied by more than two percent (2%) from the results of the most recent tests, in which case Buyer shall pay the lesser of the [Monthly Energy Payment] in respect of the Product produced during such test and the applicable CAISO real-time hourly average energy price. In addition, Buyer shall pay the lesser of the [Monthly Energy Payment] in respect of the Product produced during any Seller requested

test and the applicable CAISO real-time hourly average energy price]. Buyer is responsible for all costs, expenses and fees payable or reimbursable to its representative(s) witnessing Capacity Testing. All other costs of any Capacity Tests shall be borne by Seller.]

(g) Project. All Product provided by Seller pursuant to this Agreement shall be supplied from the Project only *[If the Project is located outside of the CAISO: except with respect to Imbalance Energy from the Transmission Provider]*. Other than maintenance in accordance with Good Industry Practices, Seller shall not make any alteration or modification to the Project which results in a change to the Contract Capacity of the Project or any other material changes to the Project without Buyer's prior written consent. The Project is further described in Exhibit A.

(h) Performance Excuses.

(i) Seller Excuses. The performance of Seller to Schedule, deliver, and sell the Product shall be excused only for the reasons set forth in the definition of *[Seller to select: "As-Available" or "Unit Firm"]*. If Seller fails to Schedule, deliver, or sell all or part of the Product for a period or a series of periods that is cumulatively longer than thirty (30) days, and such failure is not excused as described above, then such failure shall be an Event of Default. If Seller fails to Schedule, deliver, or sell all or part of the Product for any period prior to an Early Termination Date, and such failure is not excused as described above, then Seller shall pay Buyer, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency equal to the positive difference, if any, obtained by subtracting (A) the product of the Energy Price *[For TOD Pricing Only: times the weighted average TOD Factor for such period of Product deficiency]* times the Product deficiency, from (B) the product of the Replacement Price times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

(ii) Buyer Excuses. The performance of Buyer to Schedule, receive, and pay for the Product shall be excused only (A) during periods of Force Majeure, (B) by Seller's failure to perform or (C) during Dispatch Down Periods *[For all Products other than Dispatchable Product: (except that Buyer shall not be excused from paying for the Product as required under Section 3.4 during periods of Economic Dispatch Down)]*. If Buyer fails to Schedule, receive, or purchase all or part of the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described above, then such failure shall be an Event of Default. If Buyer fails to Schedule, receive, or purchase all or part of the Product for any period prior to an Early Termination Date and such failure is not excused as described above, then Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency equal to the positive difference, if any, obtained by subtracting (Y) the product of the Sales Price times the Product deficiency from (Z) the product of the Energy Price *[For TOD Pricing Only: times the weighted average TOD Factor for such period of Product deficiency]* times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

(i) Green Attributes. Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from

the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project. For all electric generation using biomethane as fuel, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane if the capture and destruction is required by Law. If the capture and destruction of the biomethane is not required by Law, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane, unless the environmental attributes associated with the capture and destruction of the biomethane pursuant to that contract are transferred to Buyer and retired on behalf of the retail customers consuming the electricity associated with the use of that biomethane, or unless Seller's procurement contract with the source of biomethane prohibits the source of biomethane from separately marketing the environmental attributes associated with the capture and destruction of the biomethane sold pursuant to that contract, and such attributes have been retired.

(j) Resource Adequacy. During the Delivery Term, Seller grants, pledges, assigns and otherwise commits to Buyer all of the Project's Contract Capacity, including Capacity Attributes, from the Project for Buyer to use in meeting its Resource Adequacy or successor program requirements, as the CPUC, CAISO or other regional entity may prescribe. Seller understands that the CPUC is currently in the process of developing requirements for Resource Adequacy and these requirements and the implementation thereof have not been finalized. Seller agrees that it shall take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to enable Buyer to use all of the Contract Capacity, including Capacity Attributes, to be committed by Seller to Buyer pursuant to this Agreement for the Resource Adequacy requirements of Buyer. Seller agrees that the Project is subject to the terms of the Availability Standards.

(k) WREGIS. Prior to the initial delivery of Energy to Buyer, Seller shall register the Project in WREGIS, execute a CAISO Qualified Reporting Entity Service Agreement to allow CAISO, on the Seller's behalf, to upload generation information directly into WREGIS, and take all other actions necessary to ensure that the Green Attributes produced from the Project in an amount equal to the amount of Delivered Energy are issued and tracked for purposes of satisfying the requirements of the California Renewable Portfolio Standard and transferred to Buyer, including payment of all fees required to register the facility in WREGIS, issue WREGIS certificates, and transfer such certificates to Buyer. Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in WREGIS will be taken prior to the first delivery under the Agreement.

(l) Prevailing Wage. To the extent applicable, Seller shall comply with the prevailing wage requirements of California Public Utilities Code Section 399.13, subdivision (h).

3.2 Transmission.

(a) Seller's Transmission Service Obligations. During the Delivery Term, Seller shall arrange and be responsible for transmission service for delivery of the Product to and

at the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission losses, and any transmission outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods. ***[For Projects located outside of CAISO:*** Seller shall obtain and maintain during the Delivery Term firm transmission service to deliver the Product from the Site to the Delivery Point from all intermediary Transmission Providers between the Site and the Delivery Point. At Buyer's request, Seller shall provide to Buyer a copy of all firm transmission service agreements and any amendments thereto.] Seller shall fulfill all contractual, metering and applicable interconnection requirements, including those set forth in Participating Transmission Owner's applicable tariffs, the CAISO Tariff and implementing CAISO standards and requirements, including, but not limited to, executing applicable interconnection agreements, Participating Generator Agreement and Meter Service Agreement so as to be able to deliver Energy to the CAISO Grid. Seller shall arrange for any interconnection agreement with the CAISO and such interconnection agreement is separate and not a part of this Agreement.

(b) Buyer's Transmission Service Obligations. During the Delivery Term, Buyer shall arrange and be responsible for transmission service for delivery of the Product from the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission losses, and any transmission outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods.

(c) Congestion Charges. Seller shall be responsible for all costs of congestion for transmission of the Product up to and at the Delivery Point. Buyer shall be responsible for all costs of congestion for transmission of the Product from the Delivery Point. To the extent that Seller is reimbursed for or receives any refunds, credits, or benefits from the CAISO for congestion charges or losses in respect of transmission of the Product from the Delivery Point, whether due to differences between the locational marginal pricing at the Delivery Point and Buyer's load aggregation point or any other point downstream of the Delivery Point, congestion revenue rights associated with any transmission path downstream of the Delivery Point, or any other hedging instruments associated with the transmission of the Product from the Delivery Point (collectively, any such refunds, credits or benefits are referred to as "Reductions"), then, at Buyer's option, either (i) Seller shall transfer any such Reductions and their related rights to Buyer; or (ii) Buyer shall reduce payments due to Seller under this Agreement in amounts equal to the Reductions and Seller shall retain the Reductions.

3.3 Scheduling.

(a) ***[For As-Available intermittent Product only:*** VER Forecasting Program Requirements. Seller shall cause the Project to become a Participating Intermittent Resource including executing all necessary documents to become a Participating Intermittent Resource. Seller shall be responsible for all CAISO forecasting fees and related charges associated with the Project becoming a Participating Intermittent Resource and participating in the VER Forecasting Program. Seller and Buyer shall comply with the VER Forecasting Program, and all additional protocols issued by the CAISO relating to Participating Intermittent Resources, including the VER Forecasting Program, for the Delivery Term. Seller shall provide Buyer with a copy of the notice from the CAISO certifying the Project as a Participating Intermittent Resource prior to the

Commercial Operation Date. In the event that the VER Forecasting Program or the CAISO Tariff and/or any protocols relating thereto are changed, amended, modified replaced or terminated, Seller and Buyer agree to comply with such revisions and, to the extent practical, to implement such revisions in a manner that maintains the relative economic positions of the Parties as of the date of this Agreement.]

(b) Scheduling Coordinator.

[When Seller is SC for the Project, include the following two paragraphs:

(i) Seller as Scheduling Coordinator for the Project. During the Delivery Term, Seller shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to Schedule and deliver the Product to the Delivery Point and Buyer shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to Schedule and receive the Product at the Delivery Point. Throughout the Delivery Term, Buyer and Seller shall submit inter-SC trades for scheduling all Product from the Project at the Delivery Point (including Energy, Integrated Forward Market Load Uplift Obligations in respect of self-scheduled Energy, and other Product from time to time contemplated under the CAISO Tariff to be subject to inter-SC trades), based on a final Schedule developed in compliance with this Agreement. During the Delivery Term, each Party or each Party's SC shall conduct all Scheduling in accordance with the operating procedures developed by the Parties pursuant to Section 3.10 and in full compliance with the applicable CAISO Tariff, protocols and Scheduling practices for Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. ***[For As-Available intermittent Product only:*** Whenever the VER Forecasting Program is available, Seller shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program.] In all cases, ***[For all Products other than Dispatchable:*** consistent with its Economic Dispatch Down curtailment rights,] Buyer may direct the Scheduling Coordinator to submit, and Seller shall cause the Scheduling Coordinator to submit in accordance with such Buyer's directions, a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO. It is the intent of the Parties that neither Party be subject to a double payment or a double charge for Product from the Project through this Agreement and CAISO settlement process and that the more detailed Scheduling and operating procedures developed pursuant to Section 3.10 complement the CAISO settlement process to produce a final economic result between them that is consistent with the fundamental transaction of this Agreement.

(ii) CAISO Costs and Revenues. Seller shall be responsible for CAISO costs (including penalties and other charges) and shall be entitled to all CAISO revenues (including credits and other payments) as the Scheduling Coordinator for the Project, in each case, associated with Imbalance Energy, including all CAISO charges or penalties incurred as a consequence of the Project not being available, the Seller not notifying the CAISO and Buyer of outages in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7), any other failure by Seller to abide by the CAISO Tariff, and any other deviations between Delivered Energy and Scheduled Energy that are attributable to Seller, the Project, or any event, circumstance, act, or incident occurring prior to or at the Delivery Point, including without limitation uninstructed deviation penalties. The Parties agree that any Availability Incentive Payments are for the benefit

of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, the cost of the sanctions or penalties shall be the Seller's responsibility. Buyer shall be entitled to all credits, payments, or revenues from the CAISO in respect of the Contract Energy, from the Project including revenues associated with CAISO dispatches, inter-SC trade credits, and bid cost recovery.

[When SDG&E is SC for the Project, include the following seven paragraphs:

(iii) Buyer as Scheduling Coordinator for the Project. [During the Delivery Term] [Upon initial synchronization of the Project to the CAISO Grid], Buyer shall be the Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with the CAISO for the Project for both the delivery and the receipt of the Product at the Delivery Point. At least thirty (30) days prior to the [Commercial Operation Date of the Project] [initial synchronization of the Project to the CAISO Grid], Seller shall take all actions and execute and deliver to Buyer and the CAISO all documents necessary to authorize or designate Buyer as Seller's Scheduling Coordinator for the Project effective as of [the beginning of the Delivery Term] [initial synchronization of the Project to the CAISO Grid]. [During the Delivery Term] [On and after initial synchronization of the Project to the CAISO Grid], Seller shall not authorize or designate any other party to act as Seller's Scheduling Coordinator, nor shall Seller perform for its own benefit the duties of Scheduling Coordinator, and Seller shall not revoke Buyer's authorization to act as Seller's Scheduling Coordinator unless agreed to by Buyer. Buyer (as Seller's SC) shall submit Schedules to the CAISO based on the final Schedule developed in accordance with this Agreement, the operating procedures developed by the Parties pursuant to Section 3.10, and the applicable CAISO Tariff, protocols and Scheduling practices for Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. ***[For As-Available intermittent Product only:*** Buyer (as Seller's SC) shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program whenever the VER Forecasting Program is available, and consistent with Buyers' best estimate based on the information reasonably available to Buyer including Buyer's forecast whenever the VER Forecasting Program is not available.] In all cases, ***[For all Products other than Dispatchable:*** consistent with its Economic Dispatch Down curtailment rights,] Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO.

(iv) Notices. Buyer (as Seller's SC) shall provide Seller with access to a web based system through which Seller shall submit to Buyer and the CAISO all notices and updates required under the CAISO Tariff regarding the Project's status, including, but not limited to, all outage requests, forced outages, forced outage reports, clearance requests, or must offer waiver forms. In accordance with Section 3.7 and this Section 3.2, Seller will cooperate with Buyer to provide such notices and updates. If the web based system is not available, Seller shall promptly submit such information to Buyer and the CAISO (in order of preference) telephonically, by electronic mail, or facsimile transmission to the personnel designated to receive such information.

(v) CAISO Costs and Revenues. Except as otherwise set forth below, ***[For all Products other than Dispatchable Product:*** in Section 3.4(c)(ii),] and elsewhere in this Agreement, Buyer (as Seller's SC) shall be responsible for CAISO costs (including penalties, ***[For As-Available Product VER Forecasting Program Participants only:*** Negative Imbalance Energy costs or revenues,] and other charges) and shall be entitled to all CAISO revenues (including credits, ***[For As-Available Product VER Forecasting Program Participants only:*** Positive Imbalance Energy revenues or costs,] and other payments) as the Scheduling Coordinator for the Project, including revenues associated with CAISO dispatches, bid cost recovery, inter-SC trade credits, or other credits in respect of the Product Scheduled or delivered from the Project; provided, however that during periods when the Project is under curtailment for both System Dispatch Down and Economic Dispatch Down during the same CAISO settlement interval, Imbalance Energy costs and revenues shall be allocated in accordance with Section 3.4(c)(ii). ***[For As-Available Product VER Forecasting Program Participants only:*** Seller shall be responsible for all CAISO charges or penalties net of credits and payments (including without limitation all Imbalance Energy costs), in each case, resulting from the Seller not notifying the CAISO and Buyer (as Seller's SC) of outages or other unavailability of Project capacity in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7) or any other failure by Seller to abide by the CAISO Tariff.] ***[For all Products other than As-Available Product VER Forecasting Program Participants:*** Seller shall be responsible for all CAISO charges or penalties net of credits and payments, in each case, resulting from the Project not being available, the Seller not notifying the CAISO and Buyer (as Seller's SC) of outages in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7), any other failure by Seller to abide by the CAISO Tariff, and deviations between Delivered Energy and Scheduled Energy that are attributable to Seller, the Project, or any event, circumstance, act, or incident occurring prior to or at the Delivery Point, including without limitation uninstructed deviation penalties.] The Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, and any such sanctions or penalties are imposed upon the Project or to Buyer as Scheduling Coordinator due to the actions or inactions of Seller, the cost of the sanctions or penalties shall be the Seller's responsibility.

(vi) CAISO Settlements. Buyer (as Seller's SC) shall be responsible for all settlement functions with the CAISO related to the Project. Buyer shall render a separate invoice to Seller for any CAISO charges or penalties ("CAISO Charges Invoice") for which Seller is responsible under this Agreement. CAISO Charges Invoices shall be rendered after settlement information becomes available from the CAISO that identifies any CAISO charges. Notwithstanding the foregoing, Seller acknowledges that the CAISO will issue additional invoices reflecting CAISO adjustments to such CAISO charges. Seller shall pay the amount of CAISO Charges Invoices within ten Business Days of Seller's receipt of the CAISO Charges Invoice. If Seller fails to pay such CAISO Charges Invoice within that period, Buyer may net or offset any amounts owing to it for these CAISO Charges Invoices against any future amounts it may owe to Seller under this Agreement. The obligations under this section with respect to payment of CAISO Charges Invoices shall survive the expiration or termination of this Agreement.

(vii) Dispute Costs. Buyer (as Seller's SC) may be required to dispute CAISO settlements in respect of the Project. Seller agrees to pay Buyer's costs and expenses (including reasonable attorneys' fees, including reasonably allocated costs of in-house counsel of the Buyer) associated with its involvement with such CAISO disputes. In no event shall Buyer (or its third party designee, as Scheduling Coordinator) be liable to Seller for the actions, inactions, errors, or omissions of the CAISO or its agents in the performance of their scheduling functions and/or market operations.

(viii) Terminating Buyer's Designation as Scheduling Coordinator. At least thirty (30) days prior to expiration of this Agreement or as soon as reasonably practicable upon an earlier termination of this Agreement, the Parties will take all actions necessary to terminate the designation of Buyer as Scheduling Coordinator for the Project as of 11:59 p.m. on such expiration date.

(ix) Master File and Resource Data Template. Seller shall provide the data to the CAISO (and to Buyer) that is required for the CAISO's Master File and Resource Data Template (or successor data systems) for this Project consistent with this Agreement. Neither Party shall change such data without the other Party's prior written consent.]

(c) Annual Delivery Schedules. No later than forty-five (45) days before (A) the first day of the first Contract Year of the Delivery Term and (B) the beginning of each calendar year for every subsequent Contract Year during the Delivery Term, Seller shall provide a non-binding forecast of each month's average-day expected Delivered Energy, by hour, for the following calendar year.

(d) Monthly Delivery Schedules. Ten (10) Business Days before the beginning of each month during the Delivery Term, Seller shall provide a non-binding forecast of each day's average expected Delivered Energy, by hour, for the following month ("Monthly Delivery Forecast").

(e) Daily Delivery Schedules. By 5:30 AM Pacific Prevailing Time on the Business Day immediately preceding the date of delivery, Seller shall [*When Seller is SC for the Project*: cause its Scheduling Coordinator to] provide Buyer with a [*For As-Available intermittent Product only*: non-binding forecast of the Project's available capacity (or if the VER Forecasting Program is not available for any reason, the expected Delivered Energy)] [*For all Products other than As-Available intermittent*: binding forecast of the expected Delivered Energy] for each hour of the immediately succeeding day ("Day-Ahead Forecast") [*For all Products other than As-Available intermittent*: [*When Seller is SC for the Project*: concurrent with delivery to the CAISO] [*When SDGE is SC for the Project*: and Buyer shall submit a Schedule to the CAISO consistent with such Day-Ahead Forecast], it being understood that, [*For all Products other than Dispatchable*: consistent with its Economic Dispatch Down curtailment rights,] Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO]. A Day-Ahead Forecast provided in a day prior to any non-Business Day(s) shall include Schedules for the immediate day, each succeeding non-Business Day and the next Business Day. Each Day-Ahead Forecast shall clearly identify, for each hour, Seller's best estimate of [*For As-Available intermittent Product only*: the Project's available capacity (or if

the VER Forecasting Program is not available for any reason, the expected Delivered Energy)] ***[For all Products other than As-Available intermittent:*** the expected Delivered Energy]. Seller may not change such Schedule past the deadlines provided in this section except in the event of a Forced Outage or Schedule change imposed by Buyer or the CAISO, in which case Seller shall promptly provide Buyer with a copy of any and all updates to such Schedule indicating changes from the then-current Schedule. These notices and changes to the Schedules shall be sent to Buyer's on-duty Scheduling Coordinator. If Seller fails to provide Buyer with a Day-Ahead Forecast as required herein, then for such unscheduled delivery period only Buyer shall rely on the delivery Schedule provided in the Monthly Delivery Forecast or Buyer's best estimate based on information reasonably available to Buyer and Seller shall be liable for Scheduling and delivery based on such Monthly Delivery Forecast or Buyer's best estimate.

(f) **Real Time Delivery Schedules.** Notwithstanding anything to the contrary herein, in the event Seller makes a change to its Schedule on the actual date of delivery for any reason including Forced Outages (other than a scheduling change imposed by Buyer or CAISO) which results in a change to its deliveries (whether in part or in whole), Seller shall notify Buyer immediately by calling Buyer's on-duty Scheduling Coordinator. Seller shall notify Buyer and the CAISO of Forced Outages in accordance with Section 3.7. Seller shall keep Buyer informed of any developments that will affect either the duration of the outage or the availability of the Project during or after the end of the outage.

(g) ***[For Dispatchable Product Only: Availability Notices.*** During the Delivery Term, no later than two (2) Business Days before each Schedule day for the day-ahead market in accordance with WECC scheduling practices, Seller shall provide Buyer with an hourly Schedule of the capacity that the Project is expected to have available for each hour of such Schedule day (the "Availability Notice"). Seller will notify Buyer immediately if the available capacity of the Project may change after Buyer's receipt of an Availability Notice. Seller shall accommodate Buyer's reasonable requests for changes in the time of delivery of Availability Notices. Seller shall provide Availability Notices using the form developed by the Parties under Section 3.10 by (in order of preference) electronic mail, facsimile transmission or, telephonically to Buyer personnel designated to receive such communications.]

(h) ***[For Dispatchable Product Only: Dispatch Notices.*** Buyer or the CAISO will have the right to dispatch the Project, seven days per week and 24 hours per day (including holidays), by providing Dispatch Notices and updated Dispatch Notices to Seller electronically, subject to the requirements and limitations set forth in this Agreement, including the system requirements under Section 3.4(b) and the Project operating restrictions set forth in Exhibit H. Each Dispatch Notice will be effective unless and until Buyer modifies such Dispatch Notice by providing Seller with an updated Dispatch Notice. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and updated Dispatch Notices will be made in accordance with the timelines as specified in the CAISO Tariff.]

3.4 **Dispatch Notices.**

(a) **General.** Seller shall adjust delivery amounts as directed by the CAISO, the Participating Transmission Owner, Buyer, or a Transmission Provider during any Dispatch Down Period.

(b) System Requirements. Seller shall acquire, install, and maintain such facilities, communications links and other equipment, and implement such protocols and practices, as necessary (i) for Seller to respond and follow instructions, including an electronic signal conveying real time instructions, to operate the Project as directed by the Buyer and/or the CAISO, including to implement a System Dispatch Down or an Economic Dispatch Down in accordance with the then-current methodology used to transmit such instructions as it may change from time to time, and (ii) for Buyer and/or the CAISO to control the quantity of Product generated by the Project in order to implement a System Dispatch Down or an Economic Dispatch Down, in each case, in accordance with the then-current methodology used to transmit such instructions as it may change from time to time. As of the Execution Date, the systems required to comply with clause (i) include at a minimum the CAISO's Automatic Dispatch System (as described in the CAISO website) and the systems required to comply with clause (ii) include at a minimum the CAISO'S Application Programming Interfaces (as described in the CAISO website). If at any time during the Delivery Term Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies, Seller shall take all commercially reasonable steps necessary to become compliant as soon as possible. Seller shall be liable pursuant to Section *[For all Products other than Dispatchable Product: 3.4(c)(ii)] [For Dispatchable Product: 3.3(b)(ii)/(iii)]* for failure to comply with an order directing a Dispatch Down Period, during the time that Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies. For the avoidance of doubt, an order directing a Dispatch Down Period via such systems and facilities shall have the same force and effect on Seller as any other form of communication. If an electronic submittal is not possible, Buyer and/or the CAISO may provide Dispatch Notices by (in order of preference) electronic mail, telephonically, or facsimile transmission to Seller's personnel designated to receive such communications, as provided by Seller in writing and Seller shall maintain communications systems necessary to permit such transmittal of Dispatch Notices. The Parties shall describe with more specificity the Economic Dispatch Down process (including the automated communication process for Dispatch Notices) in the operating procedures developed by the Parties pursuant to Section 3.10.

(c) *[For all Products other than Dispatchable Product: Economic Dispatch Down. [For Projects where SDG&E purchases Test Energy: Before or after the Commercial Operation Date,]* each of Buyer and the CAISO has the right to order Seller to curtail deliveries of Energy from the Project to the Delivery Point for Economic Dispatch Down purposes, seven days per week and 24 hours per day (including holidays), by providing Dispatch Notices and updated Dispatch Notices to Seller electronically via the communications systems described in Section 3.4(b), subject to the requirements and limitations set forth in this Agreement, including the Project operating restrictions set forth in Exhibit H. Each Dispatch Notice will be effective unless and until Buyer (or the CAISO) modifies such Dispatch Notice by providing Seller with an updated Dispatch Notice. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and updated Dispatch Notices will be made in accordance with the timelines as specified in the CAISO Tariff. Seller agrees to adjust the Project's Delivered Energy as set forth in a Dispatch Notice that meets the requirements of Economic Dispatch Down.]

(i) [Buyer Payments. *[For Projects where SDG&E purchases Test Energy: On and after the Commercial Operation Date]*, Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which any such Economic Dispatch

Down occurred an amount equal to the positive difference, if any, of (Y) the product of the Energy Price, times *[For TOD Pricing Only:* the weighted average TOD Factor for such period of Economic Dispatch Down, times] the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down *[For Projects receiving PTCs:* plus the product of the after tax value of any lost PTC benefits (in dollars per megawatt hour) that Seller has not been able to mitigate after use of reasonable efforts, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down], minus (Z) the product of the positive value of the Sales Price, if received, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down. *[For Projects receiving PTCs:* Seller shall provide Buyer with documentation that establishes to Buyer's reasonable satisfaction (A) that Seller would have been entitled to receive PTCs for the Deemed Bundled Green Energy if it had actually been generated; and (B) the after tax value of any lost PTC benefits (in dollars per megawatt hour) due under this Section 3.4(c)(i).]]

(ii) Failure to Comply. If Seller fails to comply with a Dispatch Notice that is in compliance with this Agreement, then, for the deviation between the Delivered Energy and the amount set forth in the Dispatch Notice, Seller shall pay Buyer an amount equal to the sum of (A) + (B) + (C), where: (A) is the amount, if any, paid to Seller by Buyer for any Delivered Energy in excess of the amount set forth in the Dispatch Notice (for example, the Energy Price adjusted by TOD Factors), and (B) is all Imbalance Energy costs or charges (excluding any revenues or credits), and (C) is any penalties or other charges resulting from Seller's failure to comply with the Dispatch Notice.]

3.5 Standards of Care.

(a) General Operation. Seller shall comply with all applicable requirements of Law, the CAISO, NERC and WECC relating to the Project (including those related to safety, construction, ownership and/or operation of the Project).

(b) CAISO and WECC Standards. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs and protocols of the CAISO, (ii) WECC scheduling practices and (iii) Good Industry Practices.

(c) Reliability Standard. Seller agrees to abide by all (i) NERC, WECC and CAISO reliability requirements, including all such reliability requirements for generator owners and generator operators, and, if applicable, CPUC General Order No.167, "Enforcement of Maintenance and Operation Standards for Electrical Generating Facilities," and (ii) all applicable requirements regarding interconnection of the Project, including the requirements of the interconnected Transmission Provider.

3.6 Metering.

(a) CAISO Revenue Meter. All output from the Project per the terms of this Agreement must be delivered through a single CAISO revenue meter and that meter must be dedicated exclusively to the Project described herein. All Product purchased under this Agreement must be measured by the Project's CAISO revenue meter to be eligible for payment under this

Agreement. Seller shall bear all costs relating to all metering equipment reasonably necessary to accommodate the Project. In addition, Seller hereby agrees to provide all meter data to Buyer in a form acceptable to Buyer, and consents to Buyer obtaining from the CAISO the CAISO meter data applicable to the Project and all inspection, testing and calibration data and reports. Seller shall grant Buyer the right to retrieve the meter reads from the CAISO meter reporting website and/or directly from the CAISO meter(s) at the Project site. If the CAISO makes any adjustment to any CAISO meter data for a given time period, Seller agrees that it shall submit revised monthly invoices, pursuant to Section 6.2, covering the entire applicable time period in order to conform fully such adjustments to the meter data. Seller shall submit any such revised invoice no later than thirty (30) days from the date on which the CAISO provides to Seller such binding adjustment to the meter data.

(i) Testing and Calibration. Seller shall perform or cause to be performed, at its expense, annual testing and calibration of the electric meters in accordance with Good Industry Practice and the CAISO Tariff. Seller shall give Buyer reasonable advance notice of any inspection, testing or calibration of the electric meters. Buyer shall have the right to have a representative or designee present at such inspection, test or calibration of the electric meters. Buyer shall have the right to require, at Buyer's expense, except as required below, a test of any of the electric meters not more often than two (2) times every twelve (12) months.

(ii) Inaccurate Meters. If any of the electric meters is deemed to be inaccurate under the Meter Service Agreement, deliveries shall be measured by reference to Seller's check-meters, if any are installed and registering accurately, or the meter readings for the period of inaccuracy shall be adjusted as far as can be reasonably ascertained by Seller from the best available data, subject to review and approval by Buyer. If the period of the inaccuracy cannot be ascertained reasonably, any such adjustment shall be for a period equal to one-half of the time elapsed since the preceding test by applying the percentage of inaccuracy so found. Seller shall promptly cause such electric meters to be corrected and, where such inaccuracy was determined pursuant to a test required by Buyer, Seller shall bear the expense of any such test.

(iii) Delivered MWh Adjustments. In the event that, due to correction for inaccurate electric meters deemed to be inaccurate under the Meter Service Agreement, the Delivered Energy is increased or decreased, the revised Delivered Energy shall be used for purposes of calculating payments. If any of such amounts for any period have already been calculated using the previous amount of Delivered Energy, they shall be recalculated using the revised amount of Delivered Energy. If the recalculation changes the amount payable for the period in question, revised payments shall be made by Buyer or Seller, as applicable, in accordance with Section 6.2.

(b) Real Time Telemetry. Seller shall install, activate and maintain metering, communication and telemetry equipment for the Project in a centralized system to which Buyer shall have real time access. Seller shall link its system to Buyer via an approved Buyer communication network, utilizing existing industry standard network protocol, as reasonably approved by Buyer. Seller shall correct any problems with such equipment as soon as practicable.

(c) *[The following section is for As-Available Intermittent Products only]* Meteorological Station. Seller, at its own expense, shall install and maintain such stand-alone

meteorological stations at the Project as may be required under the VER Forecasting Program and the CAISO Tariff to monitor and report weather data to both the CAISO and Buyer's weather station data collection system. Each station shall be equipped with instruments and equipment that meet the specifications of the VER Forecasting Program and shall measure, collect, record, format, and communicate the data required under the VER Forecasting Program. Seller shall submit to Buyer for review and approval, which shall not be unreasonably withheld, its technical specifications for the meteorological station along with a site plan showing the location of the station within the Project. Seller shall correct any problems with such equipment as soon as practicable.

3.7 Outage Notification.

(a) Planned Outages. Seller shall schedule Planned Outages for the Project in accordance with Good Industry Practices and with the prior written consent of Buyer, which consent may not be unreasonably withheld or conditioned. The Parties acknowledge that in all circumstances, Good Industry Practices shall dictate when Planned Outages should occur. Seller shall notify Buyer of its proposed Planned Outage schedule for the Project for the following calendar year by submitting a written Planned Outage schedule no later than October 1st of each year during the Delivery Term. The Planned Outage schedule is subject to Buyer's approval, which approval may not be unreasonably withheld or conditioned. Buyer shall promptly respond with its approval or with reasonable modifications to the Planned Outage schedule and Seller shall use its best efforts in accordance with Good Industry Practices to accommodate Buyer's requested modifications. Notwithstanding the submission of the Planned Outage schedule described above, Seller shall also submit a completed Outage Notification Form to Buyer no later than fourteen (14) days prior to each Planned Outage and all appropriate outage information or requests to the CAISO in accordance with the CAISO Tariff. Seller shall contact Buyer with any requested changes to the Planned Outage schedule if Seller believes the Project must be shut down to conduct maintenance that cannot be delayed until the next scheduled Planned Outage consistent with Good Industry Practices. Seller shall not change its Planned Outage schedule without Buyer's approval, not to be unreasonably withheld or conditioned. Seller shall use its best efforts in accordance with Good Industry Practices not to schedule Planned Outages during the months of July, August, September and October. At Buyer's request, Seller shall use commercially reasonable efforts to reschedule Planned Outage so that it may deliver Product during CAISO declared or threatened emergency periods. Seller shall not substitute Energy from any other source for the output of the Project during a Planned Outage.

(b) Forced Outages. Within *[When Seller is the SC for the Project: Within two hours of any Forced Outage,] [When SDG&E is the SC for the Project: Within one-half of the notification time prescribed under the CAISO Tariff for Forced Outages,]* Seller shall submit a completed Outage Notification Form to the Buyer in accordance with the instructions shown on the form and shall submit outage information to the CAISO in accordance with the CAISO Tariff *[When SDG&E is the SC for the Project: and Section 3.3(b)(ii) above].* Seller shall not substitute Energy from any other source for the output of the Project during a Forced Outage.

(c) Coordination with CAISO. Seller shall be responsible *[When SDG&E is SC for the Project: in accordance with Section 3.3(b)(ii)]* for all outage coordination

communications with the CAISO. Buyer shall cooperate with Seller in arranging and coordinating all Project outages with the CAISO.

3.8 Operations Logs and Access Rights.

(a) Operations Logs. Seller shall maintain a complete and accurate log of all material operations and maintenance information on a daily basis. Such log shall include, but not be limited to, information on power production, fuel consumption, efficiency, availability, maintenance performed, outages, results of inspections, manufacturer recommended services, replacements, electrical characteristics of the generators, control settings or adjustments of equipment and protective devices. Seller shall maintain this information for at least two (2) years and shall provide this information electronically to Buyer within one day of Buyer's request.

(b) Access Rights. Buyer, its authorized agents, employees and inspectors shall have the right of ingress to and egress from the Project during normal business hours upon reasonable advance Notice and for any purposes reasonably connected with this Agreement.

3.9 New Generation Facility.

(a) Project Development. Seller, at no cost to Buyer, shall:

(i) Design and construct the Project.

(ii) Perform all studies, pay all fees, obtain all necessary approvals and execute all necessary agreements with the CAISO and the Participating Transmission Owner for the Electrical Interconnection Upgrades to Schedule and deliver the Product from the Project [***For Projects Providing Resource Adequacy:*** under "Full Capacity Deliverability Status" (as defined in the CAISO Tariff)]. Following satisfaction or waiver of the Conditions Precedent set forth in Section 2.3(b), Seller shall not request from the CAISO or the Participating Transmission Owner any changes to its plan of interconnection that are inconsistent with the plan of interconnection that was evaluated in connection with the satisfaction or waiver of the Conditions Precedent in Section 2.3(b) without Buyer's prior written consent.

(iii) Acquire all Governmental Approvals and other approvals necessary for the construction, operation, and maintenance of the Project.

(iv) Complete all environmental impact studies necessary for the construction, operation, and maintenance of the Project, including all environmental analysis required under the California Environmental Quality Act for the Project and related interconnection facilities.

(v) At Buyer's request, provide to Buyer Seller's electrical specifications and design drawings pertaining to the Project.

(vi) Within fifteen (15) days after the close of each calendar quarter following the Execution Date until the Commercial Operation Date, provide to Buyer a Quarterly Progress Report and agree to regularly scheduled meetings between representatives of Buyer and Seller to review such reports and discuss Seller's construction progress. The Quarterly Progress

Report shall identify the Milestones and indicate whether Seller has met or is on target to meet such Milestones.

(vii) Provide access to Buyer, its authorized agents, employees and inspectors for purpose of inspecting the Project's construction site or on-site Seller data and information pertaining to the Project during normal business hours upon reasonable advance Notice.

(viii) At Buyer's request, provide information to Buyer relating to Seller's or Seller's contractor's use, during Project construction, of "Women-Owned Businesses" or "Minority-Owned Businesses" or "Disabled Veteran Business Enterprises" as defined in CPUC General Order 156, and the number of new employees hired by Seller or Seller's contractors and the number of women, minority, and disabled veterans trained or hired by Seller or Seller's contractor's as contemplated under Cal. Public Utilities Code §910(a)(8), as each such group of entities and individuals may be amended from time to time or further defined, supplemented, or superseded by applicable Law or replaced with similar designations or certifications. [*Include other covenants related to "women-owned business" or "minority-owned business" as may be applicable to the Seller's RFO bid.*]

(b) Construction Milestones.

(i) The Parties agree time is of the essence in regards to this Agreement. As such, the Parties also agree certain milestones for the construction of the Project as set forth in the Milestone schedule attached hereto as Exhibit B ("Milestones") must be achieved in a timely fashion or Buyer will suffer damages.

(ii) Within seven (7) days after completion of each Milestone, Seller shall provide Buyer with Notice along with accompanying documentation (including reasonably redacted copies of applicable agreements, Governmental Approvals, and certificates) to reasonably demonstrate the achievement of such Milestone. If Seller misses the deadline date for three (3) or more Milestones or misses the deadline date for any one Milestone by more than ninety (90) days, Seller shall submit to Buyer, within ten (10) Business Days of such missed Milestone completion date, a remedial action plan ("Remedial Action Plan") that describes in detail a reasonable course of action and plan (including accelerating the work, for example, by using additional shifts, overtime, additional crews or resequencing of the work, as applicable) to achieve the missed Milestones and all subsequent Milestones no later than the Guaranteed Commercial Operation Date (as it may be extended under Section 3.9(c)(i)-(ii)); provided, that delivery of any Remedial Action Plan shall not relieve Seller of its obligation to meet any subsequent Milestones and the Guaranteed Commercial Operation Date.

(c) Daily Delay Damages.

(i) COD. Seller shall cause the Project to achieve the Commercial Operation Date by the Guaranteed Commercial Operation Date; provided, however, that the Commercial Operation Date shall not occur more than one hundred eighty (180) days prior to the Guaranteed Commercial Operation Date. Seller may elect to extend the Guaranteed Commercial Operation Date for no more than a total of [_____] days (the "Project Cure

Period”) by providing Buyer with Notice of its election to extend the Guaranteed Commercial Operation Date by no later than 5:00 p.m. on the Business Day prior to the Guaranteed Commercial Operation Date along with Seller’s estimate of the duration of the extension and its payment of Daily Delay Damages for each day or portion of a day that the Guaranteed Commercial Operation Date is extended. Seller may further extend the Guaranteed Commercial Operation Date beyond the already extended Guaranteed Commercial Operation Date subject to the same terms applicable to the original extension; provided, however, that the total of all extensions under this clause (i) shall not exceed the Project Cure Period. The Daily Delay Damages payments are in addition to, and not a part of, the Construction Period Security. Seller will be entitled to a refund (without interest) of any estimated Daily Delay Damages payments paid by Seller that exceed the amount required to cover the number of days or partial days by which the Commercial Operation Date occurred after the original Guaranteed Commercial Operation Date (where the original Guaranteed Commercial Operation Date excludes any extensions under this Section 3.9(c)(i) but includes any extensions under Section 3.9(c)(ii)). In addition, Seller shall submit a Remedial Action Plan within ten (10) days after each extension of the Guaranteed Commercial Operation Date if the Project has not then achieved the Commercial Operation Date. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to a delay in achieving the Commercial Operation Date on or before the original Guaranteed Commercial Operation Date (where the original Guaranteed Commercial Operation Date excludes any extensions under this Section 3.9(c)(i) but includes any extensions under Section 3.9(c)(ii)) would be difficult or impossible to predict with certainty, (b) the Daily Delay Damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the Daily Delay Damages set forth in this section are the exclusive remedy for Seller’s delay in achieving the Commercial Operation Date for the length of the extensions paid for in advance by Seller up to the Project Cure Period but shall not otherwise act to limit any of Buyer’s rights or remedies arising from any other Event of Default by Seller, including, without limitation, the failure by Seller to achieve the Commercial Operation Date altogether.

(ii) Extensions. The Guaranteed Commercial Operation Date and the deadline dates for Milestone numbers [] as set forth in Exhibit B shall be extended on a day for day basis for up to ninety (90) calendar days in the aggregate (“Force Majeure Extension Period”) without imposition of any Daily Delay Damages to the extent Seller is actually and demonstrably delayed in its critical path to achieving the Commercial Operation Date by the Guaranteed Commercial Operation Date as a result of Force Majeure; provided, however, any such delay in excess of this period shall be subject to Daily Delay Damages pursuant to Section 3.9(c)(i).

3.10 Operating Procedures. No later than forty-five (45) days before the Commercial Operation Date, and from time to time as reasonably determined necessary by the Parties, the Parties shall meet to address how each Party will perform its respective obligations under this Agreement, including, but not limited to: (1) the method of day-to-day communications; (2) key personnel lists for each Party; (3) procedures for Forced Outage and Planned Outage reporting; (4) procedures for delivery forecasting; (5) procedures for record keeping; (6) Scheduling procedures; and (7) invoicing and payment procedures; provided, that the failure to agree on these operating procedures will not relieve the Parties of their respective obligations under this Agreement, and any failure to agree shall be resolved in accordance with the dispute resolution procedures in Article 12.

ARTICLE FOUR: COMPENSATION; MONTHLY PAYMENTS

4.1 *[For Dispatchable Product Only: Capacity Payment.*

(a) Capacity Price.

Contract Year	Capacity Price (\$/KW)
1	

(b) Monthly Capacity Payment. For each month, Buyer shall pay Seller for the Product the amount calculated as follows (“Monthly Capacity Payment”):

$$MCP = CC \times CP \times SF \times AAF$$

Where:

MCP is the Monthly Capacity Payment expressed in Dollars for such month of the Delivery Term.

CC is the Contract Capacity, expressed in kW, rounded to the nearest 100 kW.

CP is the Capacity Price expressed in Dollars per kW-year, for the applicable month.

SF is the Monthly Shaping Factor for the applicable month, as set forth in the following table:

Month	Monthly Shaping Factor (%)
January	6.7
February	5.0
March	5.0
April	5.8
May	6.3
June	8.3
July	15.8
August	17.5
September	11.7
October	5.8
November	5.8

Month	Monthly Shaping Factor (%)
December	6.3

AAF is the Availability Adjustment Factor for each month, expressed as a three-place decimal and determined as follows:

- (a) If the Equivalent Availability Factor (“EAF”) for the month is less than or equal to 0.980, then the AAF equals EAF / 0.98.
- (b) If the EAF for the month is greater than 0.980 but less than 0.990, then the AAF equals 1.0.
- (c) If the EAF for the month is greater than or equal to 0.990, then the AAF equals EAF / 0.99.

EAF is the Equivalent Availability Factor for each month determined as follows:

$$EAF = (PH - (EDH - EEDH)) / PH$$

Where:

PH is the number of period hours;

EDH is the number of equivalent derate hours calculated as the sum, for each derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the Contract Capacity divided by the Contract Capacity for the month. For the purposes of this calculation, a derate includes all outages for any reason, including without limitation, Forced Outages, Force Majeure events, Dispatch Down Periods, Planned Outages, Buyer’s failure to perform, and other times when any portion of the Contract Capacity is not available and when the Delivered Energy of the Project is less than the amount of Energy dispatched by Buyer; and

EEDH is the number of equivalent excused derate hours solely due to either Dispatch Down Periods or Buyer’s failure to perform (and for no other reason), calculated as the sum, for each excused derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the Contract Capacity, divided by the Contract Capacity for the month.

4.2 Energy Payment.

(a) Energy Price. The price for the Bundled Green Energy and Deemed Bundled Green Energy that is delivered to Buyer in each Contract Year shall be as follows (“Energy Price”):

Contract Year	Energy Price (\$/MWh)

provided, however, that:

(i) if Seller delivers Bundled Green Energy in the aggregate for any CAISO settlement interval (not to exceed one hour) in excess of the product of the Contract Capacity times the length of such settlement interval, expressed in hours, then the Energy Price for such excess Bundled Green Energy in such settlement interval shall be reduced to zero dollars (\$0), and if the real time Locational Marginal Price for the Delivery Point during such settlement interval is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times such excess Bundled Green Energy;

(ii) if Seller delivers Bundled Green Energy plus Deemed Delivered Energy in the aggregate for any Contract Year during the Delivery Term in excess of one hundred fifteen percent (115%) of the annual Contract Quantity, then the Energy Price for such excess Bundled Green Energy and Deemed Bundled Green Energy, if any, for each settlement interval for the remainder of that Contract Year shall be reduced to zero dollars (\$0) and Seller shall be entitled to the CAISO revenues (including positive Locational Marginal Prices, credits and other payments) in respect of such excess amounts and Seller shall be responsible for the CAISO costs (including negative Locational Marginal Prices, penalties, sanctions and other charges) in respect of such excess amounts.

(iii) ***[For TOD Pricing Only:*** if Seller delivers Bundled Green Energy plus Deemed Delivered Energy, in the aggregate, for any TOD Period during the Delivery Term in excess of one hundred fifteen percent (115%) of the TOD Delivery Cap listed in the table below for that TOD Period (“TOD Delivery Cap”), then the Energy Price for such excess Bundled Green Energy and Deemed Bundled Green Energy, if any, in such TOD Period shall be reduced to zero dollars (\$0), and for each CAISO settlement interval during that time in which the real time Locational Marginal Price is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times the Bundled Green Energy and Deemed Bundled Green Energy, if any, delivered during such settlement interval:

TOD Period	TOD Delivery Cap
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Winter On-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Winter Semi-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Winter Off-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Summer On-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Summer Semi-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Summer Off-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]

(b) ***[For TOD Pricing Only: TOD Factors and TOD Periods.*** In accordance with all other terms of this Article 4, the Energy Price shall be adjusted by the following Time of Delivery Factors (“TOD Factors”) for each of the specified Time of Delivery Periods (“TOD Periods”) in which Energy is delivered:]

[For Projects Providing Local Resource Adequacy:

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.638
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.541
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.823
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.943
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.819
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.963

[For Projects Providing System Resource Adequacy or For Projects Providing Resource Adequacy in Imperial Valley:

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.639
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.550
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.841

Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.841
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.792
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.967

[For Projects Not Providing Resource Adequacy:

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.641
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.562
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.864
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.714
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.758
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.971

(c) Monthly Energy Payment. For each month, Buyer shall pay Seller for the Product an amount equal to the sum for each hour in the month of the product of the Energy Price **[For TOD Pricing Only: times the TOD Factor for the applicable TOD Period/** times the sum of Bundled Green Energy plus Deemed Bundled Green Energy in each hour (“Monthly Energy Payment”).

$$\text{Monthly Energy Payment} = \sum \text{Energy Price} \times \text{[For TOD Pricing Only: TOD Factor} \times \text{(Bundled Green Energy} + \text{Deemed Bundled Green Energy)}$$

For any period where the quantity of Bundled Green Energy is less than the quantity of Delivered Energy and the quantity of Bundled Green Energy cannot practicably be determined for each settlement interval during such period (for example, where WREGIS does not specify in which settlement intervals Renewable Energy Credits were delivered or not delivered), then the quantity of Bundled Green Energy for any settlement interval during the entire period shall be equal to the product of the quantity of Delivered Energy for a settlement interval multiplied by the quotient of the aggregate quantity of Green Attributes that are delivered to Buyer during such entire period divided by the aggregate quantity of Delivered Energy that is delivered to Buyer during such entire period.

4.3 Imbalance Energy. Seller shall use commercially reasonable efforts to deliver Energy in accordance with the Scheduled Energy. Buyer and Seller recognize that from time to time the amount of Delivered Energy will deviate from the amount of Scheduled Energy. When Delivered Energy minus Scheduled Energy is a positive amount, it shall be considered “Positive Imbalance Energy;” when Delivered Energy minus Scheduled Energy is a negative amount, the absolute (i.e., positive) value of that amount shall be considered the “Negative Imbalance Energy.” ***[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program:*** Seller shall be responsible for settlement of Imbalance Energy with the CAISO and all fees, liabilities, assessments, or similar charges assessed by the CAISO in connection with Imbalance Energy.] Buyer and Seller shall cooperate to minimize charges and imbalances associated with Imbalance Energy to the extent possible. Seller shall promptly notify Buyer as soon as possible of any material imbalance that is occurring or has occurred. ***[When SDG&E is SC for the Project and Project is in the VER Forecasting Program:*** Buyer shall receive all Green Attributes for the Positive Imbalance Energy in all settlement intervals.]

[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program, include the following two paragraphs:

(a) Positive Imbalance Energy (Over Deliveries). In the event that Delivered Energy for any CAISO settlement interval is equal to or greater than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Positive Imbalance Energy. Buyer shall receive all Green Attributes for the Positive Imbalance Energy in such CAISO settlement interval regardless as to whether it was sold into the CAISO. Seller shall be entitled to all payments or credits from the CAISO to Seller’s SC and Seller shall make all payments to the CAISO in respect of the Positive Imbalance Energy.

(b) Negative Imbalance Energy (Under Deliveries). In the event that Delivered Energy for any CAISO settlement interval is less than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Negative Imbalance Energy. Seller shall make all payments to the CAISO and Seller shall be entitled to all payments or credits from the CAISO to Seller’s SC in respect of the Negative Imbalance Energy required under the CAISO Tariff.]

4.4 Additional Compensation. To the extent not otherwise provided for in this Agreement, in the event that Seller is compensated by a third party for any Product produced by the Project, including, but not limited to, compensation for Resource Adequacy or Green Attributes, Seller shall remit all such compensation directly to Buyer; provided that for avoidance

of doubt, nothing herein precludes Seller from retaining credits related to transmission upgrades funded by Seller.

4.5 Energy Sales Prior to Commercial Operation Date. For each month prior to the Commercial Operation Date, as compensation for the Product delivered to Buyer, (i) Buyer shall pay Seller for the Product an amount equal to the product of [*SDG&E to insert REC value amount in \$/MWh*] times the total Bundled Green Energy delivered to Buyer in such month, and (ii) Seller shall be entitled to all CAISO revenues (including credits, Imbalance Energy revenues, and other payments), including revenues associated with CAISO dispatches, bid cost recovery, inter-SC trade credits, or other credits in respect of the Product Scheduled or delivered from the Project, and Seller shall be responsible for all CAISO costs (including penalties, Imbalance Energy costs, and other charges) including all CAISO charges or penalties, in each case, resulting from the Project not being available, the Seller not notifying the CAISO of outages in a timely manner, and any other failure by Seller to abide by the CAISO Tariff, including without limitation uninstructed deviation penalties. *[When Buyer is SC for the Project, include the following:* Each month, Buyer (as the SC for the Project) shall deliver an invoice to Seller including a statement of all such CAISO revenues and charges within thirty (30) days after the CAISO final settlement data is available to Buyer for such deliveries.]

ARTICLE FIVE: EVENTS OF DEFAULT; FORCE MAJEURE

5.1 Events of Default. An “Event of Default” shall mean,

(a) with respect to a Party that is subject to the Event of Default the occurrence of any of the following:

(i) the failure by such Party to make, when due, any payment required pursuant to this Agreement and such failure is not remedied within five (5) Business Days after Notice thereof;

(ii) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and such default is not remedied within thirty (30) days after Notice thereof;

(iii) the failure by such Party to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default, and except for such Party’s unexcused failure to perform its obligations to Schedule, deliver, or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively no longer than thirty (30) days, the exclusive remedy for which is provided in Section 3.1(h)) and such failure is not remedied within thirty (30) days after Notice thereof;

(iv) the failure by such Party to perform its obligations to Schedule, deliver or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described in Section 3.1(h);

(v) such Party becomes Bankrupt;

(vi) such Party assigns this Agreement or any of its rights hereunder other than in compliance with Section 13.2; or

(vii) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of Law or pursuant to an agreement reasonably satisfactory to the other Party.

(b) with respect to Seller as the Defaulting Party, the occurrence of any of the following:

(i) if at any time, Seller delivers or attempts to deliver to the Delivery Point for sale under this Agreement Energy that was not generated by the Project *[If the Project is located outside of the CAISO: other than Imbalance Energy from the Transmission Provider]*;

(ii) the failure by Seller to achieve the Commercial Operation Date no later than the Guaranteed Commercial Operation Date;

(iii) *[For Baseload, Peaking, Dispatchable Product: the Contract Capacity at the Commercial Operation Date or at any other time pursuant to a Capacity Test is less than [] MW and such default is not remedied within thirty (30) days after Notice thereof;]*

(iv) *[For Baseload, Peaking, As-Available Product: the failure by Seller to achieve the Guaranteed Energy Production requirement during any Performance Measurement Period as set forth in Section 3.1(e) of this Agreement] [For Dispatchable Product: the Default Availability Factor of the Project is less than [] percent for any rolling twelve (12) consecutive calendar month period];*

(v) the failure by Seller to deliver a Remedial Action Plan that reasonably demonstrates in detail how Seller will achieve the Commercial Operation Date no later than the Guaranteed Commercial Operation Date, if such failure is not remedied within ten (10) days after Notice;

(vi) failure by Seller to satisfy the collateral requirements pursuant to Sections 8.3 or 8.4 of this Agreement;

(vii) with respect to any Guaranty provided for the benefit of Buyer, the failure by Seller to provide for the benefit of Buyer either (1) cash, (2) a replacement Guaranty from a different Guarantor meeting the criteria set forth in the definition of Guarantor, or (3) a replacement Letter of Credit from an issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:

(A) if any representation or warranty made by the Guarantor in connection with this Agreement is false or misleading in any material respect when made or when deemed made or repeated, and such default is not remedied within thirty (30) days after Notice thereof;

(B) the failure of the Guarantor to make any payment required or to perform any other material covenant or obligation in any Guaranty;

(C) the Guarantor becomes Bankrupt;

(D) the Guarantor shall fail to meet the criteria for an acceptable Guarantor as set forth in the definition of Guarantor;

(E) the failure of the Guaranty to be in full force and effect (other than in accordance with its terms) prior to the indefeasible satisfaction of all obligations of Seller hereunder; or

(F) the Guarantor shall repudiate, disaffirm, disclaim, or reject, in whole or in part, or challenge the validity of any Guaranty; or

(viii) with respect to any outstanding Letter of Credit provided for the benefit of Buyer that is not then required under this Agreement to be canceled or returned, the failure by Seller to provide for the benefit of Buyer either (1) cash, or (2) a substitute Letter of Credit from a different issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:

(A) the issuer of the outstanding Letter of Credit shall fail to maintain a Credit Rating of at least "A-" by S&P or "A3" by Moody's;

(B) the issuer of such Letter of Credit becomes Bankrupt;

(C) the issuer of the outstanding Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit and such failure shall be continuing after the lapse of any applicable grace period permitted under such Letter of Credit;

(D) the issuer of the outstanding Letter of Credit shall fail to honor a properly documented request to draw on such Letter of Credit;

(E) the issuer of the outstanding Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit;

(F) such Letter of Credit fails or ceases to be in full force and effect at any time; or

(G) Seller shall fail to renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit and as provided in accordance with this Agreement, and in no event less than sixty (60) days prior to the expiration of the outstanding Letter of Credit.

5.2 Remedies; Declaration of Early Termination Date. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party (“Non-Defaulting Party”) shall have the right (a) to send Notice, designating a day, no earlier than the day such Notice is deemed to be received and no later than twenty (20) days after such Notice is deemed to be received, as an early termination date of this Agreement (“Early Termination Date”) that terminates this Agreement and ends the Delivery Term effective as of the Early Termination Date, to accelerate all amounts owing between the Parties, and to collect liquidated damages calculated in accordance with Section 5.3 below (“Termination Payment”); (b) to withhold any payments due to the Defaulting Party under this Agreement; (c) to suspend performance; and (d) to exercise any other right or remedy available at law or in equity, including specific performance or injunctive relief, except to the extent such remedies are expressly limited under this Agreement.

5.3 Termination Payment. The Termination Payment for a Terminated Transaction shall be the aggregate of all Settlement Amounts plus any or all other amounts due to the Non-Defaulting Party netted into a single amount. Except in the case of a termination of this Agreement by the Non-Defaulting Party solely as a result of an Event of Default by the Defaulting Party under Section 5.1(a)(iv) [Bankruptcy], if the Non-Defaulting Party’s aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement, the Termination Payment shall be zero. The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for the Terminated Transaction as of the Early Termination Date. Third parties supplying information for purposes of the calculation of Gains or Losses may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information. The Settlement Amount shall not include consequential, incidental, punitive, exemplary, indirect or business interruption damages; provided, however, that any lost Capacity Attributes and Green Attributes shall be deemed direct damages covered by this Agreement. Without prejudice to the Non-Defaulting Party’s duty to mitigate, the Non-Defaulting Party shall not have to enter into replacement transactions to establish a Settlement Amount. Each Party agrees and acknowledges that (a) the actual damages that the Non-Defaulting Party would incur in connection with a Terminated Transaction would be difficult or impossible to predict with certainty, (b) the Termination Payment described in this section is a reasonable and appropriate approximation of such damages, and (c) the Termination Payment described in this section is the exclusive remedy of the Non-Defaulting Party in connection with a Terminated Transaction but shall not otherwise act to limit any of the Non-Defaulting Party’s rights or remedies if the Non-Defaulting Party does not elect a Terminated Transaction as its remedy for an Event of Default by the Defaulting Party.

5.4 Notice of Payment of Termination Payment. As soon as practicable after a Terminated Transaction, Notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to the Non-Defaulting Party. The Notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party, as applicable, within ten (10) Business Days after such Notice is effective.

5.5 Disputes With Respect to Termination Payment. If the Defaulting Party disputes the Non-Defaulting Party’s calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within five (5) Business Days of receipt of the Non-Defaulting Party’s

calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute. Disputes regarding the Termination Payment shall be determined in accordance with Article 12.

5.6 Rights And Remedies Are Cumulative. Except where liquidated damages are provided as the exclusive remedy, the rights and remedies of a Party pursuant to this Article 5 shall be cumulative and in addition to the rights of the Parties otherwise provided in this Agreement.

5.7 Mitigation. Any Non-Defaulting Party shall be obligated to mitigate its Costs, losses and damages resulting from any Event of Default of the other Party under this Agreement.

5.8 Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this Agreement and such Party gives Notice and details of the Force Majeure to the other Party as detailed below, then, the Party impacted by Force Majeure shall be excused from the performance of its obligations to the extent impacted. Within forty-eight (48) hours of commencement of an event of Force Majeure, the non-performing Party shall provide the other Party with oral notice of the event of Force Majeure, and within two (2) weeks of the commencement of an event of Force Majeure the non-performing Party shall provide the other Party with Notice in the form of a letter describing in detail the particulars of the occurrence giving rise to the Force Majeure claim. Seller shall not substitute Product from any other source for the output of the Project during an outage resulting from Force Majeure. The suspension of performance due to a claim of Force Majeure must be of no greater scope and of no longer duration than is required by the Force Majeure. Buyer shall not be required to make any payments for any Product that Seller fails to Schedule, deliver or provide as a result of Force Majeure during the term of a Force Majeure. This Agreement may be terminated by the non-claiming Party with no further obligation to the Force-Majeure-claiming Party if a Force Majeure event prevents the performance of a material portion of the obligations of the Force-Majeure-claiming Party hereunder and such Force Majeure event is not resolved within eight (8) months after the commencement of such Force Majeure event. In addition to the foregoing, prior to the Commercial Operation Date, this Agreement may be terminated by Buyer with no further obligation to Seller if one or more Force Majeure events prevents Seller from achieving the Commercial Operation Date by the end of the Force Majeure Extension Period; provided, however, that Buyer shall not have the right under this section to terminate this Agreement until the Guaranteed Commercial Operation Date if Seller is paying delay liquidated damages to Buyer as required under Section 3.9(c)(i) during the Project Cure Period (it being acknowledged, that Seller may elect to pay Daily Delay Damages during periods of Force Majeure up to the expiration of any remaining unclaimed portion of the Project Cure Period in lieu of claiming Force Majeure relief hereunder).

ARTICLE SIX: PAYMENT

6.1 Billing and Payment. On or about the tenth (10th) day of each month beginning with the second month of the first Contract Year and every month thereafter, and continuing through and including the first month following the end of the Delivery Term, Seller shall provide to Buyer (a) records of metered data, including CAISO metering and transaction data sufficient to document and verify the generation of Product by the Project for any CAISO settlement time interval during the preceding months, (b) access to any records, including invoices or settlement

data from CAISO, necessary to verify the invoice; and (c) an invoice, in a format reasonably specified by Buyer, covering the services provided in the preceding month determined in accordance with Article 4 (which may include preceding months), with all component charges and unit prices identified and all calculations used to arrive at invoiced amounts described in reasonable detail. Buyer shall pay the undisputed amount of such invoices on or before thirty (30) days after receipt of the invoice. If either the invoice date or payment date is not a Business Day, then such invoice or payment shall be provided on the next following Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any undisputed amounts not paid by the due date will be deemed delinquent and will accrue interest at the Default Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full. Invoices may be sent by facsimile or e-mail.

6.2 Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two (2) Business Days of such resolution along with interest accrued at the Default Rate from and including the original due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived if the other Party is not notified in accordance with this Section 6.2 within twelve (12) months after the invoice is rendered or subsequently adjusted, except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after the twelve-month period. If an invoice is not rendered within twelve (12) months after the close of the month during which performance occurred, the right to payment for such performance is waived.

6.3 Netting of Payments. The Parties hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts owed by each Party to the other Party for the purchase and sale of Product during the monthly billing period under this Agreement, including any related damages calculated pursuant to Section 3.1(h), interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the Party who owes it.

ARTICLE SEVEN: LIMITATIONS

7.1 Limitation of Remedies, Liability and Damages. EXCEPT AS SET FORTH HEREIN, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND

MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION IN QUESTION PROVIDES THAT THE EXPRESS REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE. EXCEPT FOR A PARTY'S INDEMNITY OBLIGATION IN RESPECT OF THIRD PARTY CLAIMS OR AS OTHERWISE EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. UNLESS EXPRESSLY HEREIN PROVIDED, AND SUBJECT TO THE PROVISIONS OF SECTION 11.2 (INDEMNITIES), IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

ARTICLE EIGHT: CREDIT AND COLLATERAL REQUIREMENTS

8.1 Buyer Financial Information. If requested by Seller, Buyer shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Buyer's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Buyer's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Buyer diligently pursues the preparation, certification and delivery of the statements. Buyer shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available.

8.2 Seller Financial Information. Seller shall provide the following financial information:

(a) If requested by Buyer, Seller shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Seller's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Seller's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the

statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Seller diligently pursues the preparation, certification and delivery of the statements.

(b) ***[If a Guaranty may be provided:*** If a Guaranty is provided and if requested by Buyer, Seller shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Guarantor's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Guarantor's quarterly report containing unaudited consolidated financial statements for such fiscal quarter certified by an officer of Guarantor. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Guarantor diligently pursues the preparation, certification and delivery of the statements. Seller shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available.]

8.3 Grant of Security Interest/Remedies. To secure its obligations under this Agreement and to the extent Seller delivers Performance Assurance hereunder, Seller hereby grants to Buyer a present and continuing first priority security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Buyer, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Buyer's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence and during the continuation of an Event of Default by Seller or an Early Termination Date as a result thereof, Buyer may do any one or more of the following: (i) exercise any of the rights and remedies of a secured party with respect to all Performance Assurance, including any such rights and remedies under Law then in effect; (ii) exercise its rights of setoff against such collateral and any and all proceeds resulting therefrom or from the liquidation thereof; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all or any portion of any Performance Assurance then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller. Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

8.4 Performance Assurance.

(a) ***[For Agreements with Delivery Terms greater than two years: CPUC Approval Security,] Development Period Security, Construction Period Security, Delivery Term Security.*** To secure its obligations under this Agreement Seller agrees to deliver to Buyer and

maintain in full force and effect for the period set forth below, the following Performance Assurance:

(i) ***[For Agreements with Delivery Terms greater than two years:*** CPUC Approval Security, in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from the Execution Date of this Agreement until the return date specified in Section 8.4(b)(i) below;]

(ii) Development Period Security in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from ***[For Agreements with Delivery Terms greater than two years:*** the CPUC Approval Date] ***[For all other Agreements:*** the Execution Date of this Agreement] until the return date specified in Section 8.4(b)[(i)/(ii)] below;

(iii) Construction Period Security in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from the CP Satisfaction Date until the return date specified in Section 8.4(b)[(ii)/(iii)] below; and

(iv) Delivery Term Security in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from the commencement of the Delivery Term until the return date specified in Section 8.4(b)[(iii)/(iv)] below.

Except as set forth in Section 2.2 as it pertains to ***[For Agreements with Delivery Terms greater than two years:*** the CPUC Approval Security and] the Development Period Security, any such Performance Assurance shall not be deemed a limitation of damages.

(b) Return of Performance Assurance.

(i) ***[For Agreements with Delivery Terms greater than two years:*** Buyer shall promptly return to Seller the unused portion of the CPUC Approval Security after the earlier of (A) the date on which Seller has delivered the Development Period Security or the Construction Period Security, as applicable, and (B) termination of the Agreement under Section 2.4(b)(ii).

(ii) Buyer shall promptly return to Seller the unused portion of the Development Period Security after the earlier of (A) the date on which Seller has delivered the Construction Period Security, and (B) termination of the Agreement under Section 2.4(b)(ii).

(iii) Buyer shall promptly return to Seller the unused portion of the Construction Period Security after the earlier of (A) the date on which Seller has delivered the Delivery Term Security, and (B) the date that all payment obligations of the Seller arising under this Agreement, including compensation for penalties, Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting) after an Early Termination Date.

(iv) Buyer shall promptly return to Seller the unused portion of the Delivery Term Security after the following have occurred: (A) the Delivery Term has expired or terminated early; and (B) all payment obligations of the Seller arising under this Agreement,

including compensation for penalties, Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting).

8.5 Interest on Cash. If Seller provides Performance Assurance in the form of cash, Buyer shall pay interest on such cash held as [*For Agreements with Delivery Terms greater than two years:* CPUC Approval Security,] Development Period Security, Construction Period Security, or Delivery Term Security, as applicable, at the Interest Rate. On or before each Interest Payment Date, Buyer shall transfer the sum of all accrued and unpaid Interest Amounts due to Seller for such security in the form of cash by wire transfer to the bank account specified under “Wire Transfer” in the Cover Sheet.

8.6 Costs of Letter of Credit. If Seller provides Performance Assurance in the form of a Letter of Credit, in all cases, the reasonable costs and expenses of (including but not limited to the reasonable costs, expenses, and attorneys’ fees, including reasonably allocated costs of in-house counsel of the Buyer) establishing, renewing, substituting, canceling, increasing and reducing the amount of (as the case may be) one or more Letters of Credit shall be borne by the Seller.

ARTICLE NINE: GOVERNMENTAL CHARGES

9.1 Cooperation. Each Party shall use reasonable efforts to implement the provisions of and to administer this Agreement in accordance with the intent of the Parties to minimize all taxes, so long as neither Party is materially adversely affected by such efforts.

9.2 Governmental Charges. Seller shall pay or cause to be paid all taxes imposed by any governmental authority (“Governmental Charges”) on or with respect to the Product or the transaction under this Agreement arising prior to and at the Delivery Point, including, but not limited to, ad valorem taxes and other taxes attributable to the Project, land, land rights or interests in land for the Project. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to the Product or the transaction under this Agreement from the Delivery Point. In the event Seller is required by Law or regulation to remit or pay Governmental Charges which are Buyer’s responsibility hereunder, Buyer shall promptly reimburse Seller for such Governmental Charges. If Buyer is required by Law or regulation to remit or pay Governmental Charges which are Seller’s responsibility hereunder, Buyer may deduct such amounts from payments to Seller with respect to payments under the Agreement; if Buyer elects not to deduct such amounts from Seller’s payments, Seller shall promptly reimburse Buyer for such amounts upon request. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under the Law.

ARTICLE TEN: REPRESENTATIONS AND WARRANTIES; COVENANTS

10.1 General Representations and Warranties. On the Execution Date and the CP Satisfaction Date, each Party represents and warrants to the other Party that:

(a) it is duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;

(b) it has all Governmental Approvals necessary for it to perform its obligations under this Agreement, except for as of the Execution Date (i) CPUC Approval in the case of Buyer, and (ii) all Governmental Approvals necessary to construct, operate and maintain the Project and related interconnection facilities in the case of Seller;

(c) the execution, delivery and performance of this Agreement is within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law;

(d) this Agreement and each other document executed and delivered in accordance with this Agreement constitutes a legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses;

(e) it is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt;

(f) except as may be set forth in its reports filed with the SEC, there is not pending or, to its knowledge, threatened against it or any of its Affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;

(g) no Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;

(h) it is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement; and

(i) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or the ability to make or take delivery of the Product as provided in this Agreement.

10.2 Seller Representations and Warranties.

(a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that: (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource (“ERR”) as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the Project’s output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.

(b) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to

Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in CPUC Decision 08-08-028, and as may be modified by subsequent decision of the CPUC or by subsequent legislation. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.

(c) *[Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]*

10.3 Covenants.

(a) General Covenants. Each Party covenants that throughout the Delivery Term:

(i) it shall continue to be duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;

(ii) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all Governmental Approvals necessary for it to legally perform its obligations under this Agreement;

(iii) it shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law; and

(iv) it shall not dispute its status as a “forward contract merchant” within the meaning of the United States Bankruptcy Code.

(b) Seller Covenants.

(i) Seller covenants throughout the Delivery Term that it, or its permitted successors or assigns, shall maintain ownership of a fee, easement, long-term leasehold interest, or other similar asset ownership interest in the Project.

(ii) Seller covenants throughout the Delivery Term that it shall maintain market based rate authority from FERC to sell Product to Buyer under the terms of this Agreement.

(iii) If at any time during the Delivery Term, Seller’s representations and warranties set forth in Section 10.2 become materially false or misleading, Seller covenants that it shall provide prompt Notice to Buyer describing such default along with a description of its efforts to cure such default.

(iv) *[Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]*

(v) *[Include other appropriate covenants regarding the use of contractors that may be diverse business enterprises.]*

ARTICLE ELEVEN: TITLE, RISK OF LOSS, INDEMNITIES

11.1 Title and Risk of Loss. Title to and risk of loss related to the Product shall transfer from Seller to Buyer at the Delivery Point. Seller warrants that it will deliver to Buyer the Product free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any person arising prior to or at the Delivery Point.

11.2 Indemnities.

(a) Indemnity by Seller. Seller shall release, indemnify, defend, and hold harmless Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all actions, suits, losses, costs, damages, injuries, liabilities, claims, demands, penalties and interest, including reasonable costs and attorneys' fees ("Claims") resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product delivered under this Agreement up to and at the Delivery Point, (ii) Seller's development, permitting, construction, ownership, operation and/or maintenance of the Project, (iii) the failure by Seller or the failure of the Project to comply with applicable Law, including without limitation the CAISO Tariff, (iv) any Governmental Charges for which Seller is responsible hereunder, or (v) any liens, security interests, encumbrances, or other adverse claims against the Product delivered hereunder made by, under, or through Seller, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives.

(b) Indemnity by Buyer. Buyer shall release, indemnify, defend, and hold harmless Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all Claims resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product received by Buyer under this Agreement after the Delivery Point, (ii) the failure by Buyer to comply with applicable Law, including without limitation the CAISO Tariff, or (iii) any Governmental Charges for which Buyer is responsible hereunder, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives.

ARTICLE TWELVE: DISPUTE RESOLUTION

12.1 Intent of the Parties. Except as provided in the next sentence, the sole procedure to resolve any claim arising out of or relating to this Agreement or any related agreement is the dispute resolution procedure set forth in this Article 12. Either Party may seek a preliminary injunction or other provisional judicial remedy if such action is necessary to prevent irreparable harm or preserve the status quo, in which case both Parties nonetheless will continue to pursue resolution of the dispute by means of the dispute resolution procedure set forth in this Article 12.

12.2 Management Negotiations.

(a) The Parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement or any related agreements by prompt negotiations between each Party's authorized representative designated in writing as a representative of the Party (each a "Manager"). Either Manager may, by Notice to the other Party, request a meeting to initiate negotiations to be held within ten (10) Business Days of the other Party's receipt of such request, at a mutually agreed time and place (either in person or telephonically). If the matter is not resolved within fifteen (15) Business Days of their first meeting ("Initial Negotiation End Date"), the Managers shall refer the matter to the designated senior officers of their respective companies that have authority to settle the dispute ("Executive(s)"). Within five (5) Business Days of the Initial Negotiation End Date ("Referral Date"), each Party shall provide one another Notice confirming the referral and identifying the name and title of the Executive who will represent the Party.

(b) Within five (5) Business Days of the Referral Date, the Executives shall establish a mutually acceptable location and date, which date shall not be greater than thirty (30) days from the Referral Date, to meet. After the initial meeting date, the Executives shall meet, as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.

(c) All communication and writing exchanged between the Parties in connection with these negotiations shall be confidential and shall not be used or referred to in any subsequent binding adjudicatory process between the Parties.

(d) If the matter is not resolved within forty-five (45) days of the Referral Date, or if the Party receiving the Notice to meet, pursuant to Section 12.2(a) above, refuses or does not meet within the ten (10) Business Day period specified in Section 12.2(a) above, either Party may initiate arbitration of the controversy or claim by providing Notice of a demand for binding arbitration at any time thereafter.

12.3 Arbitration. Any dispute that cannot be resolved by management negotiations as set forth in Section 12.2 above shall be resolved through binding arbitration by a retired judge or justice from the [AAA][JAMS] panel conducted in San Diego, California, administered by and in accordance with [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive][Streamlined] Arbitration Rules and Procedures] ("Arbitration").

(a) Any arbitrator shall have no affiliation with, financial or other interest in, or prior employment with either Party and shall be knowledgeable in the field of the dispute. The Parties shall cooperate with one another in selecting the arbitrator within sixty (60) days after Notice of the demand for arbitration. If, notwithstanding their good faith efforts, the Parties are unable to agree upon a mutually-acceptable arbitrator, the arbitrator shall be appointed as provided for in [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive][Streamlined] Arbitration Rules and Procedures].

(b) At the request of a Party, the arbitrator shall have the discretion to order depositions of witnesses to the extent the arbitrator deems such discovery relevant and appropriate.

Depositions shall be limited to a maximum of three (3) per Party and shall be held within thirty (30) days of the making of a request. Additional depositions may be scheduled only with the permission of the arbitrator, and for good cause shown. Each deposition shall be limited to a maximum of six (6) hours duration unless otherwise permitted by the arbitrator for good cause shown. All objections are reserved for the Arbitration hearing except for objections based on privilege and proprietary and confidential information. The arbitrator shall also have discretion to order the Parties to exchange relevant documents. The arbitrator shall also have discretion to order the Parties to answer interrogatories, upon good cause shown.

(c) The arbitrator shall have no authority to award punitive or exemplary damages or any other damages other than direct and actual damages and the other remedies contemplated by this Agreement.

(d) The arbitrator shall prepare in writing and provide to the Parties an award including factual findings and the reasons on which their decision is based.

(e) The arbitrator's award shall be made within nine (9) months of the filing of the notice of intention to arbitrate (demand) and the arbitrator shall agree to comply with this schedule before accepting appointment. However, this time limit may be extended by agreement of the Parties or by the arbitrator, if necessary.

(f) Judgment on the award may be entered in any court having jurisdiction.

(g) The prevailing Party in this dispute resolution process is entitled to recover its costs. Until such award is made, however, the Parties shall share equally in paying the costs of the Arbitration.

(h) The arbitrator shall have the authority to grant dispositive motions prior to the commencement of or following the completion of discovery if the arbitrator concludes that there is no material issue of fact pending before the arbitrator.

(i) The existence, content, and results of any Arbitration hereunder is confidential information that is subject to the provisions of Section 13.1.

ARTICLE THIRTEEN: MISCELLANEOUS

13.1 Confidentiality.

(a) General. Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 13.1(b) of this Agreement; (v) in order to comply with any applicable Law, regulation, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any

applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 13.1(a) (“Disclosure Order”) each Party shall, to the extent practicable, use reasonable efforts to prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

(b) RPS Confidentiality. Notwithstanding Section 13.1(a) of this Agreement, at any time on or after the date on which the Buyer makes its filing seeking CPUC Approval for this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Term, Project location, Contract Capacity, anticipated Commercial Operation Date, Contract Quantity, and Delivery Point.

(c) Publicity. Except as otherwise agreed to in this Section 13.1 above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed.

13.2 Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld. For purposes hereof, the transfer of more than fifty percent (50%) of the equity ownership or voting interest of Seller (or any parent entity holding directly or indirectly at least fifty percent (50%) of the equity ownership or voting interest of Seller if such interest constitutes more than twenty percent (20%) of the fair market value of the assets of such parent entity) to a person that is not an Affiliate of Seller shall also constitute an assignment of this Agreement requiring Buyer’s prior written consent. Notwithstanding the foregoing, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), transfer, sell, pledge, encumber, or assign this Agreement or the accounts, revenues or proceeds hereof to its financing providers. In connection with any financing or refinancing of the Project by Seller, Buyer shall in good faith negotiate and agree upon a consent to collateral assignment of this Agreement in a form that is commercially reasonable and customary in the industry.

13.3 Audit. Each Party has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement including amounts of Delivered Energy or Scheduled Energy. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made promptly and shall bear interest calculated at the Default Rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any statement or payment will be made unless objection to the accuracy thereof was made prior to the lapse of twelve (12) months from the rendition thereof, and thereafter any objection shall be deemed waived except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after such twelve-month period. In addition, Buyer shall have the right, at its sole expense and during normal working hours, to examine the

records of Seller to the extent reasonably necessary to verify Seller's compliance with its representations and warranties set forth in Section 10.2.

13.4 Sarbanes-Oxley and SEC Requirements. The Parties acknowledge that accounting principles generally accepted in the United States of America ("GAAP") and SEC rules require Buyer and its independent auditor to evaluate whether Buyer must consolidate Seller's financial information (but not financial information of Seller's constituent members unless deemed to be included in the entity under GAAP). Buyer may require access to information concerning Seller's organizational structure, including its debt/capital structure, as well as to personnel of Seller to determine if consolidated financial reporting is required. If Buyer and its independent auditor determine at any time that the Buyer must consolidate the Seller's financial statements to comply with GAAP and/or SEC rules regarding consolidated financial reporting, then:

(a) Buyer shall require from Seller and Seller agrees to provide to Buyer the following during the Term of this Agreement:

(i) Unaudited financial statements of the Seller prepared in accordance with GAAP as of the end of the quarterly period. The financial statements should include quarter to date and year to date information and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);

(ii) Unaudited financial schedules of the Seller, as deemed necessary for Buyer to prepare its consolidated financial statements and related footnotes to the financial statements in accordance with GAAP as of the end of the quarterly period. The financial schedules should include quarter to date and year to date information underlying the financial statements and footnotes to the financial statements and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);

(iii) Access to Seller's accounting and other records, and accounting and management personnel as reasonably determined by both Buyer and Seller so that (A) Buyer's independent auditor or its internal auditors may conduct financial audits (in accordance with the standards of the Public Company Accounting Oversight Board (United States)) as well as internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002) and (B) Buyer can be provided analytical information, as needed, to enable Buyer to meet its SEC filing requirements, including but not limited to those under Item 2 on Form 10-Q, and Item 7 on Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operations;"

(iv) Upon the request of Buyer, such certifications by a duly authorized representative(s) of Seller as may be reasonably requested by Buyer (which certifications shall presumptively be reasonable if the certifications are substantially identical to those required by Buyer or its parent of business units of Buyer or its parent); and

(v) As reasonably requested by Buyer, such information or schedules, similar to the items noted in clauses (i)-(iv) above, to enable Buyer to prepare consolidated financial statements and schedules as may be required for Buyer to obtain financing or to prepare other reports as required by regulatory bodies, such as the SEC, for periods other than as of the end of the monthly, quarterly or year to date periods then ended.

(b) If Buyer (i) in its sole discretion determines that the financial statements of the Seller would be considered material to the Buyer or its parent company's financial statements, financial condition, or internal controls over financial reporting, and (ii) reasonably determines Seller's internal controls over financial reporting are not operating effectively or have resulted in a control deficiency, Buyer shall provide Notice to Seller. Upon receipt of such Notice, Seller will have thirty (30) days to remediate any deficiency in Seller's internal controls over financial reporting identified by the Buyer, which Buyer and Buyer's independent auditor deem to be necessary to ensure Seller's internal controls over financial reporting are adequate, during or as a result of the audits permitted under Section 13.4(a)(iii) or any other provision of this Agreement.

(c) As soon as possible, but in no event later than two (2) Business Days following any occurrence that would affect Seller in any material way, Seller shall provide to Buyer a Notice describing such occurrence in sufficient detail to permit the Buyer to file a report on SEC Form 8-K. Such occurrences include all reportable events on the then current Form 8-K that applies to Buyer and its parent company at such time, including but not limited to a material acquisition or disposition of assets, a material direct financial obligation or off-balance sheet financing arrangement, material litigation, and the execution or termination of a material contract.

(d) Any information provided to Buyer shall be treated as confidential except that it may be disclosed in connection with the preparation, review, certification and publication of Buyer's financial statements.

(e) Seller shall notify Buyer at any time during the term of this Agreement of any services provided or proposed to be provided to Seller by Buyer's independent auditor. Seller, and any of Seller's Affiliates, are prohibited from engaging Buyer's independent auditor for any services or in any consulting agreement without the express written consent of partner in charge of Buyer's independent audit.

13.5 Entire Agreement. This Agreement, together with the Cover Sheet and each and every appendix, attachment, amendment, schedule and any written supplements hereto, if any, between the Parties constitutes the entire agreement between the Parties.

13.6 Recording. Unless a Party expressly objects to a Recording (defined below) at the beginning of a telephone conversation, each Party consents to the creation of a tape or electronic recording ("Recording") of all telephone conversations between the Parties to this Agreement, and that any such Recordings will be retained in confidence, secured from improper access, and may be submitted in evidence in any proceeding or action relating to this Agreement. Each Party waives any further notice of such monitoring or recording, and agrees to notify its officers and employees of such monitoring or recording and to obtain any necessary consent of such officers and employees.

13.7 Forward Contract. The Parties acknowledge and agree that this Agreement constitutes a "forward contract" within the meaning of the United States Bankruptcy Code.

13.8 Governing Law. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF

CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.

13.9 Attorneys' Fees. In any proceeding brought to enforce this Agreement or because of the breach by any Party of any covenant or condition herein contained, the prevailing Party shall be entitled to reasonable attorneys' fees (including reasonably allocated fees of in-house counsel) in addition to court costs and any and all other costs recoverable in said action.

13.10 General. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. Except to the extent provided for herein, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both Parties. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement). Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default. The headings used herein are for convenience and reference purposes only. This Agreement shall be binding on each Party's successors and permitted assigns.

13.11 Severability. If any provision in this Agreement is determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Agreement and the Parties shall use their best efforts to modify this Agreement to give effect to the original intention of the Parties.

13.12 Counterparts. This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same Agreement. Delivery of an executed counterpart of this Agreement by fax will be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by facsimile will also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Agreement will not affect the validity or effectiveness of this Agreement.

13.13 Notices. Whenever this Agreement requires or permits delivery of a "Notice" (or requires a Party to "notify"), the Party with such right or obligation shall provide a written communication delivered personally, by a nationally recognized overnight courier, mailed by registered or certified mail (return receipt requested), or by facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice) to the receiving Party at the addresses identified on the Cover Sheet (or at such other addresses as such receiving Party shall identify by like Notice to the other Party); provided, however, that notices of Outages or other Scheduling or dispatch information or requests, shall be provided in accordance with the terms set forth in the relevant section of this Agreement. Invoices may be sent by facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice). A Notice delivered in accordance herewith shall be deemed received (i) on the date of delivery, if hand delivered, (ii) two Business Days after the date of sending, if sent by

a nationally recognized overnight courier, or at such earlier time as is confirmed by the receiving Party, (iii) three Business Days after the date of mailing, if mailed by registered or certified mail, return receipt requested, or at such earlier time as is confirmed by the receiving Party, and (iv) on the Business Day on which such Notice was transmitted by facsimile transmission or e-mail (where permitted); provided, however, that a Notice delivered in accordance with this Section but received on any day other than a Business Day or after 5:00 p.m. in the place of receipt will be deemed received on the next Business Day. Each Party shall provide Notice to the other Party of the persons authorized to nominate and/or agree to a Schedule or Dispatch Order for the delivery or acceptance of the Product or make other Notices on behalf of such Party and specify the scope of their individual authority and responsibilities, and may change its designation of such persons from time to time in its sole discretion by providing Notice.

13.14 Mobile Sierra. Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party in seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to FERC pursuant to the provisions of Section 205, 206 or 306 of the Federal Power Act, or any other provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior agreement in writing by both Parties, the standard of review for changes to the rates, terms or conditions of service of this Agreement proposed by a Party, a non-Party or the FERC acting *sua sponte* shall be the “public interest” application of the “just and reasonable” standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 US 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 US 348 (1956) and clarified by *Morgan Stanley Capital Group Inc. v. Pub. Util. Dist. No. 1 of Snohomish County*, 128 S. Ct. 2733 (2008).

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the date first above written.

[_____]
a [_____]

SAN DIEGO GAS & ELECTRIC
COMPANY
a California corporation

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

Exhibit A

PROJECT DESCRIPTION INCLUDING DESCRIPTION OF SITE

PROJECT DESCRIPTION

Project name _____

Project Site name: _____

Project physical address: _____

Total number of electric generating units at the Project (committed and not committed to Buyer) _____

Technology Type: _____

Substation:

The term "Site" as defined in the Agreement means the following parcel description upon which the Project is located:

Latitude and Longitude of Project: _____.

The nameplate capacity of the Project is _____.

The electric generating units utilized as generation assets as part of the Project are described below:

[INSERT MAP]

Exhibit B

MILESTONE SCHEDULE

	<i>Date</i>	<i>Project Name</i>
1.		Obtains control of all lands and rights-of-way comprising the Site.
2.		Files a CEC Pre-Certification and Verification application.
3.		Receives a completed [Phase I Interconnection Study Report] [interconnection feasibility study] and CAISO Deliverability Assessment Study Report. [<i>Omit if addressed by a Condition Precedent</i>]
4.		Receives a completed [Phase II Interconnection Study Report] [interconnection system impact study] and CAISO Deliverability Assessment Study report [<i>Omit if addressed by a Condition Precedent</i>]
5.		Files CEQA/NEPA application with appropriate agency(ies).
6.		Executes interconnection agreement and/or transmission agreement and receives FERC approval.
7.		Receives CEQA/NEPA approval/permit
8.		Executes a supply contract.
9.		Executes an Engineering, Procurement and Construction (“EPC”) contract.
10.		Delivers full NTP under EPC contract and begins construction of the Project.
11.		Executes Meter Service Agreement and Participating Generator Agreement.
12.		Delivers Energy to the Transmission Provider to which the Project is physically interconnected.
13.		Receives all Governmental Approvals necessary to achieve COD.
14.		Receives CEC Certification and Verification.

Exhibit C

FORM OF LETTER OF CREDIT

[DATE]

To: San Diego Gas & Electric Company
555 W. Fifth Street
Mail Code: ML 18A3
Los Angeles, CA 90013

Re: Our Irrevocable Standby Letter of Credit No. _____
In the Amount of US _____

Ladies and Gentlemen:

We hereby open our irrevocable standby Letter of Credit Number _____ in favor of [name of Beneficiary] (“Beneficiary”), by order and for account of [name of Applicant] (“Applicant”), [address of Applicant], available at sight upon demand at our counters, at [location] for an amount of US\$ _____ [amount spelled out and xx/100 U.S. Dollars] against presentation one of the following documents:

1- Statement signed by a person purported to be an authorized representative of Beneficiary stating that: “[name of Applicant] (“Applicant”) is in default under the Power Purchase Agreement between Beneficiary and Applicant dated _____ or under any transaction contemplated thereby (whether by failure to perform or pay any obligation thereunder or by occurrence of a “default”, “event of default” or similar term as defined in such agreement, any other agreement between Beneficiary and Applicant, or otherwise). The amount due to Beneficiary is U.S. \$ _____.”

or

2- Statement signed by a person purported to be an authorized representative of Beneficiary stating that: “[name of Applicant] (“Applicant”) has forfeited all or part of its ***[For Agreements with Delivery Terms greater than two years: CPUC Approval Security or] Development Period Security*** as set forth and defined in the Power Purchase Agreement between Beneficiary and Applicant dated _____. The amount due to Beneficiary, whether or not a default has occurred, is U.S. \$ _____.”

or

3- Statement signed by a person purported to be an authorized representative of Beneficiary stating that: “as of the close of business on [insert date, which is less than 60 days prior to the expiration date of the Letter of Credit] you have provided written

notice to us indicating your election not to permit extension of this Letter of Credit beyond its current expiry date. The amount due to Beneficiary, whether or not a default has occurred, is U.S. \$ _____.”

Special Conditions:

- All costs and banking charges pertaining to this Letter of Credit are for the account of Applicant.
- Partial and multiple drawings are permitted.
- Fax of Document 1 or 2 or 3 above is acceptable. Notwithstanding anything to the contrary herein, any drawing hereunder may be requested by transmitting the requisite documents as described above to us by facsimile at _____ or such other number as specified from time to time by us. The facsimile transmittal shall be deemed delivered when received. It is understood that drawings made by facsimile transmittal are deemed to be the operative instrument without the need of originally signed documents.

This Letter of Credit expires on _____ at our counters.

We hereby engage with Beneficiary that upon presentation of a document as specified under and in compliance with the terms of this Letter of Credit, this Letter of Credit will be duly honored in the amount stated in Document 1, 2, or 3 above. If a document is so presented by 1:00 pm on any New York banking day, we will honor the same in full in immediately available New York funds on that day and, if so presented after 1:00 pm on a New York banking day, we will honor the same in full in immediately available New York funds by noon on the following New York banking day.

It is a condition of this Letter of Credit that it shall be deemed automatically extended without an amendment for a one year period beginning on the present expiry date hereof and upon each anniversary of such date, unless at least ninety (90) days prior to any such expiry date we have sent you written notice by regular and registered mail or courier service that we elect not to permit this Letter of Credit to be so extended beyond, and will expire on its then current expiry date. No presentation made under this Letter of Credit after such expiry date will be honored.

We agree that if this Letter of Credit would otherwise expire during, or within 30 days after, an interruption of our business caused by an act of god, riot, civil commotion, insurrection, act of terrorism, war or any other cause beyond our control or by any strike or lockout, then this Letter of Credit shall expire on the 30th day following the day on which we resume our business after the cause of such interruption has been removed or eliminated and any drawing on this Letter of Credit which could properly have been made but for such interruption shall be permitted during such extended period.

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision) International Chamber of Commerce, Publication No. 600 (“UCP”), except to the extent that the terms hereof are inconsistent with the provisions of the UCP, including but not limited to Articles 14(b) and 36 of the UCP, in which case the terms of this Letter of Credit shall

govern. Matters not covered by the UCP shall be governed and construed in accordance with the laws of the State of California.

[Name of Bank]

Authorized Signature(s)

Exhibit D

FORM OF GUARANTY

GUARANTY

In consideration of San Diego Gas & Electric Company (“Company”) entering into a power purchase agreement with [NAME OF COUNTERPARTY] (hereinafter referred to as “Applicant”), [NAME OF GUARANTOR], a [TYPE OF LEGAL ENTITY i.e. California corporation], (hereinafter referred to as “Guarantor”) agrees with Company as follows:

1. The term “Obligations” shall mean all obligations, liabilities and indebtedness of any kind whatsoever arising in connection with _____ or arising in connection with or under any security agreement or other agreement between the Company and Applicant. The amount of Obligations existing from time to time shall be calculated after giving effect to all contractual netting arrangements between Applicant and the Company.

2. Guarantor unconditionally and irrevocably guarantees to Company the full, prompt and faithful payment and performance when due of each and all of the Obligations.

3. This is a continuing guaranty relating to the Obligations. Guarantor acknowledges that there is a continuing consideration to Guarantor for this Guaranty and therefore Guarantor waives and relinquishes the right to revoke or terminate this Guaranty as provided in California Civil Code Section 2815.

4. Any of the Obligations may be amended, modified, waived, or increased (whether or not beyond any dollar limitation hereunder), further agreements may be entered into between Company and Applicant, Company may provide additional goods or services or credit to Applicant or increase or decrease the dollar value of such goods, services or credit, and further obligations (including, without limitation, the provision or pledging of security to Company for any obligation), indebtedness and liabilities may be entered into or incurred from time to time by Applicant and without further authorization from or notice to Guarantor and no such action shall terminate, release, impair, reduce, discharge, diminish or in any way affect any of the obligations of Guarantor hereunder or any security furnished by Guarantor or give Guarantor any recourse or defense against Company. Company need not inquire into the power of Applicant or the authority of its officers, directors, partners or agents acting or purporting to act in its behalf.

5. With respect to all Obligations, this is a guaranty of payment and performance and not of collection, and Guarantor waives and agrees not to assert or take advantage of:

(a) any right to require Company to proceed against Applicant or any other person or to resort to, proceed against or exhaust any security held by it at any time or to pursue any other remedy in its power before proceeding against any Guarantor;

(b) demand, presentment, protest and notice of any kind including, without limiting the generality of the foregoing, notice of nonperformance, protest, dishonor and acceptance of this Guaranty, notice under Section 9611 of the California Commercial Code, and

notice of the existence, creation or incurring of any new or additional indebtedness or obligation or of any action or non-action on the part of Applicant, Company, a guarantor under this or any other instrument, or creditor of Applicant or any other person whomsoever, in connection with any of the Obligations or any collateral for any of the Obligations or in connection with any of the Obligations; and

(c) any suretyship defenses and suretyship rights of every nature otherwise available under California law and the laws of any other state or jurisdiction, including, without limitation, all defenses and rights arising under Sections 2787 through 2855 of the California Civil Code (the “Suretyship Provisions”) and any successor provisions to those Sections. Without limiting the generality of the foregoing, Guarantor acknowledges his, her or its understanding that the Suretyship Provisions provide various partial or complete defenses to the recovery by Company from Guarantor and/or grant Guarantor rights the enforcement of which could reduce or eliminate entirely Guarantor’s liability hereunder to Company. Among the defenses and rights contained in the Suretyship Provisions are the following: (1) Section 2809 of the Civil Code, which provides, in part, that the obligation of a surety must not be either larger in amount or in other respects more burdensome than that of the principal; (2) Section 2810 of the Civil Code, which provides, in part, that a surety is not liable if for any reason other than the mere personal disability of the principal there is no liability upon the part of the principal at the time of execution of the contract, or the liability of the principal thereafter ceases; (3) Section 2819 of the Civil Code, which provides, in part, that a surety is exonerated if the creditor alters the original obligation of the principal without the consent of the surety; (4) Section 2845 of the Civil Code, which provides, in part, that a surety is exonerated to the extent that the creditor fails to proceed against the principal, or to pursue any other remedy in the creditor’s power which the surety cannot pursue and which would lighten the surety’s burden; (5) Section 2846 of the Civil Code, which provides that a surety may compel his principal to perform the obligation when due; (6) Section 2847 of the Civil Code, which provides, in part, that if a surety satisfies the principal obligation, or any part thereof, the principal is obligated to reimburse the surety for the amounts paid by the surety; (7) Section 2848 of the Civil Code, which provides, in part, that a surety, upon satisfaction of the obligation of the principal is entitled to enforce remedies which the creditor then has against the principal; (8) Section 2849 of the Civil Code, which provides, in part, that a surety is entitled to the benefit of security held by the creditor for the performance of the principal obligation held by the creditor; (9) Section 2850 of the Civil Code, which provides, in part, that whenever the property of a surety is hypothecated with property of the principal, the surety is entitled to have the property of the principal first applied to the discharge of the obligation; and (10) Section 2822 of the Civil Code, which provides, in part, for a right to have the principal designate the portion of any obligation to be satisfied by the surety in the event that the principal provides partial satisfaction of such obligation.

6. All existing and future indebtedness of Applicant to Guarantor (“Intercompany Obligations”) is subordinated to all Obligations hereby guaranteed. All of Guarantor’s right, title and interest in and to the Intercompany Obligations and rights to receive any payments of the Intercompany Obligations are hereby granted and assigned to Company as continuing security for the Obligations hereby guaranteed, and, in the event of any default in the payment of any of the Obligations when due and until the Obligations guaranteed hereby have been paid in full (a) at the Company’s request, Applicant shall forthwith pay to the Company all or any part of such Intercompany Obligations and any capital which Guarantor is entitled to withdraw until all of the

Obligations guaranteed hereby have been paid in full, and (b) Guarantor shall pay to Company immediately any payments of such Intercompany Obligations received by Guarantor.

7. Guarantor agrees to pay all attorneys' fees (including without limitation, reasonably allocated fees of in-house counsel) and all other costs and expenses which may be incurred by Company in the enforcement of this Guaranty against Guarantor.

8. This Guaranty is not assignable by Guarantor without Company's consent. This Guaranty shall inure to the benefit of Company and its successors and assigns, including the assignees of any Obligations, and bind the heirs, executors, administrators, successors and permitted (if any) assigns of Guarantor. This Guaranty is assignable by Company with respect to all or any portion of the Obligations, and when so assigned Guarantor shall be liable to the assignees under this Guaranty without in any manner affecting the liability of Guarantor hereunder with respect to any Obligations retained by Company.

9. This Guaranty shall be governed by and construed in accordance with the laws of the State of California, without reference to its choice of law provisions. Guarantor hereby irrevocably and unconditionally agrees that any legal action or proceeding against Guarantor or any of Guarantor's property with respect to this Guaranty may be brought in the courts of the State of California in the County of San Diego or the courts of the United States in the County of San Diego, as Company may elect, and by executing and delivering this Guaranty Guarantor hereby submits to and accepts with regard to any such action or proceeding for himself, herself or itself and in respect of his, her or its property, generally, irrevocably and unconditionally, the jurisdiction of the above mentioned courts. Guarantor hereby irrevocably appoints the Secretary of State of the State of California as his, her or its agent for service of process in any suit or proceeding if the Guarantor is located outside the State of California at the time of service or cannot reasonably be located by Company. The foregoing, however, shall not limit the right of Company as it may elect to bring any legal action or proceeding or to obtain execution of judgment in any other appropriate jurisdiction including but not limited to any other jurisdiction in which Guarantor or his, her or its property is located.

10. Except as provided in any other written agreement now or at any time hereafter in force between Company and Guarantor, this Guaranty shall constitute the entire agreement of Guarantor with Company with respect to the subject matter hereof and no representation, understanding, promise or condition concerning the subject matter hereof shall be binding upon Company unless expressed herein.

11. All notices, demands, requests and other communications required or permitted hereunder shall be in writing and shall be given personally, by certified or registered mail, postage prepaid, return receipt requested, or by reliable overnight courier to the address of the Company set forth below (or to such new address as Company may designate hereafter in a notice to Guarantor) in the case of a communication to the Company and to the address appearing next to Guarantor's signature on this Guaranty (or to such new address as Guarantor may designate hereafter in a notice to Company) in the case of a communication to Guarantor. Any notice served personally shall be deemed delivered upon receipt, and any notice served by certified or registered mail or by reliable overnight courier shall be deemed delivered on the date of receipt as shown on

the addressee's registry or certification of receipt or on the date receipt is refused as shown on the records or manifest of the U.S. Postal Service or such courier.

San Diego Gas & Electric Company
555 W. Fifth Street
Attn: Major Markets 18A3, Credit Manager
Los Angeles, CA 90013
Fax No.: (213) 244-8316

12. Until all of the Obligations guaranteed hereby have been satisfied in full, Guarantor shall have no right of subrogation or reimbursement from the Applicant which Guarantor may have as a result of any payment by Guarantor under this Guaranty, and waives any right to enforce any remedy which Company now has or may hereafter have against the Applicant as a result of such payment by Guarantor under this Guaranty and waives any right under section 2849 of the California Civil Code and any other benefit of or right to participate in any security now or hereafter held by Company.

13. All amounts payable by Guarantor hereunder shall be paid without set-off or counterclaim and without any deduction or withholding whatsoever unless and to the extent that Guarantor shall be prohibited by law from doing so, in which case Guarantor shall pay to Company such additional amount as shall be necessary to ensure that Company receives the full amount it would have received if no such deduction or withholding had been made.

14. If any portion of this Guaranty is held to be unenforceable by a court of competent jurisdiction, the remainder of this Guaranty shall remain in full force and effect.

IN WITNESS WHEREOF, the undersigned Guarantor has executed this Guaranty on [MONTH AND DAY], [YEAR].

GUARANTOR:
[NAME OF GUARANTOR]

Signature

Title

Printed Name of Person Signing for
Guarantor

Guarantor's Address

City, State, Zip

Guarantor's Phone No.

Exhibit E

COMMERCIAL OPERATION CERTIFICATE

The undersigned, _____ (“EPC Contractor”), _____ (“Renewable Generation Equipment Supplier”), _____ (“Licensed Professional Engineer”) and [_____] (“Owner”) make the following certifications to San Diego Gas & Electric Company (“SDG&E”), dated as of _____. All capitalized terms not otherwise defined herein shall have the meaning given to them in the Power Purchase Agreement dated _____ between Owner and SDG&E (the “Agreement”).

Renewable Generation Equipment Supplier hereby certifies that:

1. The [_____] comprising the Project have been erected and installed at the project site and have been commissioned as required under the Supply and Installation Agreement (“[_____] Supply Agreement”) dated as of _____, by and between Renewable Generation Equipment Supplier and Owner and each such [_____] has passed the performance testing required to be performed pursuant to the [_____] Supply Agreement.
2. The Warranty Period under the Warranty Agreement (“Warranty Agreement”) dated as of _____, by and between Renewable Generation Equipment Supplier and Owner has commenced.

EPC Contractor hereby certifies that:

All requirements necessary to achieve [Commercial Operation/Substantial Completion] as set forth in the agreement between the EPC Contractor and Owner dated _____ (“EPC Contract”) have been completed and the Project has successfully passed all performance tests at a level that demonstrates satisfaction of at least the [minimum performance guarantees].

Owner hereby certifies that:

1. Except for punch list items that would not materially affect the performance, reliability or safe operation of the Project, the Project has been completed in accordance with all applicable specifications and is ready for continuous commercial operation in compliance with all applicable laws and governmental approvals. The Project has successfully passed all performance tests at a level that demonstrates satisfaction of at least the [insert minimum performance guarantees], and complete test reports have been submitted to Buyer.
2. The Operation and Maintenance Agreement (O&M Agreement), by and between Owner and _____ dated as of _____ has commenced.

3. Owner has a valid leasehold or real property interest in the Project Site for a term of at least [] years from the Commercial Operation date.
4. The interconnection facilities have been completed in accordance with applicable specifications, tariffs, laws and governmental approvals to enable power generated by the Project to be received at the Delivery Point.
5. Owner has obtained all governmental approvals necessary for the continuous commercial operation of the Project and the Project is in compliance with all such governmental approvals and all other applicable laws.
6. The Contract Capacity of the Project is [] MWac and [] MWdc at [] conditions.

Licensed Professional Engineer certifies that:

1. We have read the Agreement, the [] Supply Contract, and the EPC Contract and we understand the requirements for Commercial Operation under the Agreement, the specifications and performance testing requirements under the [] Supply Contract, and the requirements for [Commercial Operation/Substantial Completion] under the EPC Contract.
2. We have reviewed the material and data made available to us by the Owner, the Renewable Generation Equipment Supplier, and the EPC Contractor for the Project.
3. To the extent practical, we have reviewed the engineering, procurement, construction and performance testing for the Project and in the course of this review we have not discovered any material errors or omissions in the work performed to date.
4. We have reviewed the certificates of Owner, Renewable Generation Equipment Supplier, and EPC Contractor above, and find the representations provided to be correct in all material respects.
5. We have reviewed all Governmental Approvals and permits identified by the Owner as being required for the construction and operation of the Project and are of the opinion that the Project as completed is in compliance in all material respects with the environmental and technical requirements contained therein.
6. Based on our review of the aforementioned information and of information provided to us by others which we have not independently verified, we are of the opinion that, as of, Commercial Operation has occurred as defined in the Agreement.

Executed this ___ day of ___, 200_

**RENEWABLE GENERATION EQUIPMENT
SUPPLIER**

**[Name of Renewable Generation
Supplier]**

a _____ corporation

By: _____

Name:

Title:

EPC CONTRACTOR

[Name of EPC Contractor]

a _____ corporation

By: _____

Name:

Title:

OWNER

[Name of Owner]

a _____ limited liability company

By: _____

Name:

Title:

LICENSED PROFESSIONAL ENGINEER:

[Name of Licensed Professional Engineer]

a _____

By: _____

Name:

Title:

ACCEPTED BY SAN DIEGO GAS & ELECTRIC COMPANY

By: _____

Name: _____

Title: _____

Date: _____

Exhibit F
FORM OF QUARTERLY PROGRESS REPORT

Quarterly Progress Report
of
[_____]
(“Seller”)

provided to
San Diego Gas & Electric Company

[Date]

Table of Contents

[Insert Table of Contents]

1.0 Instructions.

All capitalized terms used in this report shall have the meanings set forth below and any capitalized terms used in this report which are not defined below shall have the meanings ascribed thereto in the Power Purchase Agreement by and between _____ (“Seller”) and San Diego Gas & Electric Company dated _____, ____ (the “Agreement”).

Seller shall review the status of each significant element of the Project schedule and Seller shall identify such matters referenced in clauses (i)-(v) below as known to Seller and which in Seller’s reasonable judgment are expected to adversely affect the Project or the Project schedule, and with respect to any such matters, shall state the actions which Seller intends to take to ensure that Conditions Precedent and the Milestones will be attained by their required dates. Such matters may include, but shall not be limited to:

(i) Any material matter or issue arising in connection with a Governmental Approval, or compliance therewith, with respect to which there is an actual or threatened dispute over the interpretation of a law or regulation, actual or threatened opposition to the granting of a necessary Governmental Approval, any organized public opposition, any action or expenditure required for compliance or obtaining approval that Seller is unwilling to take or make, or in each case which could reasonably be expected to materially threaten or prevent financing of the Project, attaining any Condition or Milestone, or obtaining any contemplated agreements with other parties which are necessary for attaining any Condition or Milestone or which otherwise reasonably could be expected to materially threaten Seller’s ability to attain any Condition or Milestone;

(ii) Any development or event in the financial markets or the independent power industry, any change in taxation or accounting standards or practices or in Seller’s business or prospects which reasonably could be expected to materially threaten financing of the Project, attainment of any Condition or Milestone or materially threaten any contemplated agreements with other parties which are necessary for attaining any Condition or Milestone or could otherwise reasonably be expected to materially threaten Seller’s ability to attain any Condition or Milestone;

(iii) A change in, or discovery by Seller of, any legal or regulatory requirement which would reasonably be expected to materially threaten Seller’s ability to attain any Condition or Milestone;

(iv) Any material change in the Seller’s schedule for initiating or completing any material aspect of Project;

(v) The status of any matter or issue identified as outstanding in any prior Quarterly Report and any material change in the Seller’s proposed actions to remedy or overcome such matter or issue.

Seller shall complete, certify, and deliver this form Quarter Quarterly Progress Report to [____], together with all attachments and exhibits, with [3] copies of the Report delivered to [____] and [_____].

2.0 Executive Summary.

2.1 Major activities to be performed for each aspect of the Project during the current calendar quarter.

Please provide a brief summary of the Major² activities to be performed for each of the following aspects of the Project during the current calendar quarter:

- 2.1.1 Design
- 2.1.2 Engineering
- 2.1.3 Major Equipment procurement
- 2.1.4 Construction
- 2.1.5 Milestone report
- 2.1.6 Permitting (See Section 3.0)

2.2 Major activities scheduled to be performed in the previous calendar quarter but not completed as scheduled.

Please provide a brief summary of the Major activities which were scheduled to be performed in the previous calendar quarter and their status, including those activities that were not completed as scheduled:

- 2.2.1 Design
- 2.2.2 Engineering
- 2.2.3 Major Equipment procurement
- 2.2.4 Construction
- 2.2.5 Milestone report
- 2.2.6 Permitting

² For Purposes of this Report, “Major” shall mean any activity, event, or occurrence which may have a material adverse impact on the construction of the Facility or completion of the Project on a timely basis if such activity, event, or occurrence occurs or if such activity, event, or occurrence fails to occur as anticipated or scheduled, which material adverse impact includes, but is not limited to, Seller’s inability to achieve a Milestone Date.

3.0 Permitting.

The following describes each of the major Governmental Approvals required for the construction of the Project and the status of each:

3.1 State and/or federal Governmental Approvals.

Please describe each of the Major state and/or federal Governmental Approval (including the Permit to Construct issued by the San Diego County Air Pollution Control District) to be obtained by Seller (or EPC Contractor) and the status of each.

DESCRIPTION	STATUS

3.2 Local and/or county Governmental Approvals.

Please describe each of the Major local and/or county Governmental Approvals to be obtained by Seller and the status of each.

DESCRIPTION	STATUS

3.3 Permitting activities which occurred during the previous calendar quarter.

Please list all permitting activities which occurred during the previous calendar quarter.

3.4 Permitting activities occurring during the current calendar quarter.

Please list all permitting activities which are expected to occur during the current calendar quarter.

3.5 Permitting Notices received from EPC Contractor.

Please attach to this Quarterly Progress Report copies of any notices related to permitting activities received from EPC Contractor during the previous calendar quarter.

4.0 Design Activities.

4.1 Table of design schedule to be followed by Seller and its subcontractors.

The following table lists the design schedule to be followed by Seller and its subcontractors.

ACTIVITY	CONTRACTOR/ SUBCONTRACTOR	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE

4.2 Design activities to be performed during the current calendar quarter.

Please explain in detail the design activities which are expected to be performed during the current calendar quarter.

4.3 Table of design activities completed during the previous calendar quarter.

Please explain in detail the design activities which were completed during the previous calendar quarter.

5.0 Engineering Activities.

5.1 Table of engineering schedule to be followed by Seller and its subcontractors.

The following table lists the engineering schedule to be followed by Seller and its subcontractors:

ACTIVITY	CONTRACTOR/ SUBCONTRACTOR	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE

5.2 Engineering activities to be performed during the current calendar quarter.

Please explain in detail the engineering activities which are expected to be performed during the current calendar quarter.

5.3 Engineering activities completed during the previous calendar month.

Please explain in detail the engineering activities which were completed during the previous calendar quarter.

5.4 Three-month look-ahead engineering schedule.

Please provide a three-month look ahead engineering schedule.

6.0 Major Equipment Procurement.

6.1 Table of major equipment to be procured by Seller and its subcontractors.

The following table lists major equipment to be procured by Seller and its subcontractors:

EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL	CONTRACTED DELIVERY DATE	ACTUAL DELIVERY DATE	PROJECTED INSTALLATION DATE	ACTUAL INSTALLATION DATE

6.2 Major Equipment procurement activities to be performed during the current calendar quarter.

Please explain in detail the major equipment procurement activities which are expected to be performed during the current calendar quarter.

6.3 Major Equipment procurement activities completed during the previous calendar quarter.

Please explain in detail the major equipment procurement activities which were completed during the previous calendar quarter.

7.0 Construction Activities.

7.1 Table of construction activities to be performed by Seller and its subcontractors.

The following tables lists construction activities to be performed by Seller and its subcontractors:

ACTIVITY	CONTRACTOR/ SUBCONTRACTOR	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE
Civil Progress			
Structural Progress			
[Steam] Generator Progress			
Piping Progress			
IC and Electrical Progress			
Subcontractor Progress			

7.2 Construction activities to be performed during the current calendar quarter.

Please explain in detail the construction activities which are expected to be performed during the current calendar quarter.

7.3 Construction activities completed during the previous calendar quarter.

Please explain in detail the construction activities which are expected to be performed during the previous calendar quarter.

7.4 EPC Contractor Monthly Progress Report.

Please attach a copy of the Monthly Progress Reports received during the previous calendar quarter from the EPC Contractor pursuant to the EPC Contract, certified by the EPC Contractor as being true and correct as of the date issued.

7.5 Three-month look-ahead construction schedule.

Please provide a three-month look ahead construction schedule.

8.0 Milestones.

8.1 Milestone schedule.

Please state the status and progress of each Milestone and identify any completed Milestone(s) for the previous calendar quarter.

8.2 Remedial Action Plan (applicable if Seller fails to achieve Milestone by the Milestone Date).

Please explain in detail each of the following aspects of Seller's remedial action plan:

8.2.1 Missed Milestone

8.2.2 Plans to achieve missed Milestone

8.2.3 Plans to achieve subsequent Milestone

8.2.4 Delays in engineering schedule

Please explain in detail any delays beyond the scheduled Milestone Dates stated in Section 5.1, any impact from the delays on the engineering schedule, and Seller's plans to remedy such impact.

8.2.5 Delays in Major Equipment procurement

Please explain in detail any delays beyond the contracted delivery date and/or the projected installation date stated in Section 6.1, any impact from the delays on Major Equipment procurement schedule, and Seller's plans to remedy such impact.

8.2.6 Delays in construction schedule

Please explain in detail any delays beyond the scheduled completion dates stated in Section 7.1, any impact from the delays on the construction schedule, and Seller's plans to remedy such impact.

9.0 Safety and Health Reports

9.1 Please list all accidents from the previous calendar quarter:

9.2 Any work stoppage from the previous calendar quarter:

9.3 Work stoppage impact on construction of the Project:

I, _____, on behalf of and as an authorized representative of, do hereby certify that any and all information contained in the attached Seller's Quarterly Progress Report is true and accurate, and reflects, to the best of my knowledge, the current status of the construction of the Project as of the date specified below.

By: _____

Name: _____

Title: _____

Date: _____

RPS Project Development Status Report

Project Name
Date

Date of Latest Construction Progress Report from Counterparty:

Project Owner/Counterparty:

Technology:

Capacity (MW):

Annual Energy (GWh/year):

On-Line Date:

Term/Duration (years):

Construction Start Date:

Point of Delivery:

Location:

Status At-A-Glance

The below to be filled in w/ either: Completed, Acceptable, Unknown, or Concern. See Section B for a description of milestones. When the answer is "Concern" the milestone should be flagged with a notation number where additional detail is provided in Section A.

Milestones	Status	Initial Completion Date	Projected Completion Date
Fuel/Resource Supply:			
Financing:			
Corporate Financing			
Project Financing			
Site Control (100%):			
Permitting:			
Engineering:			
Major Equipment Procurement:			
Construction:			
Startup Testing and Commissioning:			
Transmission:			

Transmission - Detail (see Section C)

Dependent Transmission Upgrade(s):

Scheduled Completion:

Point of Interconnection:

Early Interconnection:

Gen-Tie Length:

Gen-Tie Voltage:

ISO Queue Position:

Feasibility Study (FS):

System Impact Study (SIS):

Facilities Study (FAS):

Remedial Action Plan:

Additional Comments:

Date of Preparation:

Exhibit G

OUTAGE NOTIFICATION FORM

OUTAGE NOTIFICATION FORM

This form may be used to comply with CAISO's outage notification requirements for both planned and forced outages. Report outages as soon as possible by submitting form via email to TSched@SemptraUtilities.com or via fax at (858) 650-6191.

<p>Request Type: <input type="text" value="New Scheduled Maintenance Outage"/></p> <p>Generator Name: _____ Location Code: _____ Address: _____ _____</p> <p>Contact Name: _____ Phone Number: _____ Email: _____</p> <p>Alternate Name: _____ Alternate Number: _____ Email: _____</p>	<p>Previous Notification (if applicable)</p> <table border="1" style="width: 100%;"><tr><td>Date Sent: _____ mm/dd/yyyy</td></tr><tr><td>Time Sent: _____ hh:mm</td></tr></table> <p style="text-align: center;"><small>(For times, use 24hr format)</small></p> <p>Today's Date: _____ mm/dd/yyyy Current Time: _____ hh:mm</p> <p>Outage Start Date: _____ mm/dd/yyyy Outage Start Time: _____ hh:mm</p> <p>Outage End Date: _____ mm/dd/yyyy Outage End Time: _____ hh:mm</p> <p>Outage Duration: _____ MW Available During Outage: _____ MW Unavailable During Outage: _____ RMR Unit? <input type="checkbox"/> Yes/No <input type="checkbox"/></p>	Date Sent: _____ mm/dd/yyyy	Time Sent: _____ hh:mm
Date Sent: _____ mm/dd/yyyy			
Time Sent: _____ hh:mm			

System (Select One)

<input checked="" type="radio"/> Boiler <small>Codes 0010-1999</small>	<input type="radio"/> Generator <small>Codes 4500-4899</small>	<input type="radio"/> Regulatory, Safety, Environmental <small>Codes 9504-9720</small>
<input type="radio"/> Balance of Plant <small>Codes 3110-3999</small>	<input type="radio"/> Pollution Control Equipment <small>Codes 8000-8835</small>	<input type="radio"/> Others <small>Codes 9900-9999</small>
<input type="radio"/> Steam Turbine <small>Codes 4000-4499</small>	<input type="radio"/> External <small>Codes 9000-9040</small>	

Cause Code Ranges / Affected Component

(Select One) _____ ▼

Cause Code / Component Problem

(Select One) _____ ▼

Comments

Exhibit H

PROJECT OPERATING RESTRICTIONS

Operational characteristics of the Project must be equal to or greater than the resource flexibility reflected in the resource Master File, as such term is defined in the CAISO Tariff. Buyer may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project and to ensure that the information provided by Seller is true and accurate. Seller agrees to coordinate with Buyer and any third party Scheduling Coordinator to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are actually based on physical characteristics of the resource. The Parties agree to make reasonable modifications to this Exhibit H to modify existing operating restrictions or add additional operating restrictions that may be necessary to address changes in the CAISO Tariff or applicable Law applicable to the Products provided from this Project.

- Nameplate capacity of the Project: ____MW
- Minimum operating capacity: ____MW
- Advance notification required for a Dispatch Notice: ____
- Ramp Rate: ____MW/minute



APPENDIX 7

2017 RPS SHORT-TERM MODEL PPA

[Form of PPA for As-Available, Baseload, Peaking or Dispatchable Product for a Project that is already constructed]

[Standard contract terms and conditions that “may not be modified” per CPUC D.04-06-014 and subsequent decisions are shown in red shaded text and standard contract terms and conditions that may be modified per CPUC D.04-06-014 and subsequent decisions are shown in green shaded text.]

POWER PURCHASE AGREEMENT

Between

SAN DIEGO GAS & ELECTRIC COMPANY
(as “Buyer”)

and

(as “Seller”)

POWER PURCHASE AGREEMENT

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COVER SHEET

This Power Purchase Agreement is made as of the following date: [_____]. This Power Purchase Agreement and all exhibits, schedules, appendices, and any written supplements hereto, any designated collateral, credit support or margin agreement or similar arrangement between the Parties as well as all written and signed amendments and modifications thereto shall be a part of, and shall be referred to as, the "Agreement." The Parties to this Agreement (hereinafter individually a "Party" and collectively the "Parties") are the following:

Name: _____ ("Seller")

All Notices:

Street: _____
City: _____ Zip: _____
Attn: Contract Administration
Phone: _____
Facsimile: _____
Duns: _____
Federal Tax ID Number: _____

Invoices:

Attn: _____
Phone: _____
Facsimile: _____

Scheduling:

Attn: _____
Phone: _____
Facsimile: _____

Payments:

Attn: _____
Phone: _____
Facsimile: _____

Wire Transfer:

BNK: _____
ABA: _____
ACCT: _____
Confirmation: _____
FAX: _____

Credit and Collections:

Attn: _____

Name: San Diego Gas & Electric Company
("Buyer")

All Notices:

Street: 8315 Century Park Court
City: San Diego, CA Zip: 92123
Attn: Electric & Fuel Procurement - Contract
Administration
Phone: (858) 636-5536
Facsimile: (858) 650-6190
Duns: 006911457
Federal Tax ID Number: 95-1184800

Invoices:

San Diego Gas & Electric Company
8315 Century Park Ct.
San Diego, California 92123-1593
Attn: Electric & Fuel Procurement – Invoicing and
Reporting
Phone: (858) 650-6187
Facsimile: (858) 650-6190

Scheduling:

San Diego Gas & Electric Company
8315 Century Park Ct.
San Diego, California 92123-1593
Attn: Transaction Scheduling Manager
Phone: (858) 650-6160
Facsimile: (858) 650-6191

Payments:

San Diego Gas & Electric Company
PO Box 25110
Santa Ana, CA 92799-5110
Attn: Mail Payments
Phone: (619) 696-4521
Facsimile: (619) 696-4899

Wire Transfer:

BNK: Union Bank of California
for: San Diego Gas & Electric Company
ABA: Routing # 122000496
ACCT: #4430000352
Confirmation: SDG&E, Major Markets
FAX: (213) 244-8316

Credit and Collections:

San Diego Gas & Electric Company, Major
Markets
555 W. Fifth Street, ML 18A3
Los Angeles, CA 90013-1011

Phone: _____
Facsimile: _____

With additional Notices of an Event of Default or
Potential Event of Default to:

Attn: _____
Phone: _____
Facsimile: _____

Attn.: Major Markets, Credit and Collections
Manager
Fax No.: (213) 244-8316
Phone: (213) 244-4343

With additional Notices of an Event of Default or
Potential Event of Default to:

San Diego Gas & Electric Company
8330 Century Park Ct.
San Diego, California 92123

Attn: General Counsel
Phone: (858) 650-6141
Facsimile: (858) 650-6106

GENERAL TERMS AND CONDITIONS

ARTICLE ONE: GENERAL DEFINITIONS

1.1 General. The following terms shall have the following meaning for purposes of this Agreement.

“[AAA][JAMS]” means [the American Arbitration Association] [JAMS, Inc.].

“Affiliate” means, with respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such person. For this purpose, “control” means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

“Agreement” has the meaning set forth in the preamble to the Cover Sheet.

“Arbitration” has the meaning set forth in Section 12.3.

[For As-Available Product only: “As-Available” means a Product for which, subject to the terms of this Agreement, Seller is excused from selling and delivering the Product to Buyer, and Seller shall not be liable to Buyer for any damages determined pursuant to Section 3.1(h) of the Agreement, in the event that Seller fails to deliver the Product to Buyer for any of the following reasons:

- (a) if the Project is unavailable as a result of a Forced Outage and such Forced Outage is not the result of Seller’s negligence or willful misconduct;
- (b) Force Majeure;
- (c) by the Buyer’s failure to perform;
- (d) by a Planned Outage of the Project;
- (e) a reduction in output as ordered under Dispatch Down Periods; or
- (f) [the unavailability of landfill gas which was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such landfill gas to the Project, and which by the exercise of reasonable due diligence, Seller is unable to overcome or avoid or causes to be avoided.] OR [insufficient wind power for the Project to generate energy as determined by the best wind speed and direction standards utilized by other wind producers or purchasers in the vicinity of the Project or if wind speeds exceed the Project’s technical specifications.] OR [the unavailability of water or the unavailability of sufficient pressure required for operation of the hydroelectric turbine-generator as reasonably determined by Seller within its operating procedures, neither of which was anticipated as of the

Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such water to the Project, and which by the exercise of due diligence, such Seller or the party supplying the water is unable to overcome or avoid or causes to be avoided.] OR [insufficient solar power for the Project to generate energy as determined by the best solar standards utilized by other solar producers or purchasers in the vicinity of the Project.]

[For Dispatchable Product only: “Availability Adjustment Factor” has the meaning set forth in Section 4.1(b).]

“Availability Incentive Payments” shall mean Availability Incentive Payments as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

[For Dispatchable Product only: “Availability Notice” has the meaning set forth in Section 3.3([f/g]).]

“Availability Standards” shall mean Availability Standards as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

“Bankrupt” means with respect to any entity, such entity that (a) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar Law, (b) has any such petition filed or commenced against it which remains unstayed or undismissed for a period of sixty (60) days, (c) makes an assignment or any general arrangement for the benefit of creditors, (d) otherwise becomes bankrupt or insolvent (however evidenced), (e) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (f) is generally unable to pay its debts as they fall due.

[For Baseload Product only: “Baseload” means a Unit Firm Product for which the delivery levels are uniform twenty-four (24) hours per day, seven (7) days per week.]

“Bundled Green Energy” means Energy, Green Attributes, and any other Product, the quantity of which is measured based on the amount of Delivered Energy, in each case, that are produced by or associated with the Project. The quantity of Bundled Green Energy shall be equal to the lesser of the quantity of (i) **[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program:** Contract Energy] **[When SDG&E is SC for the Project and Project is in the VER Forecasting Program:** Delivered Energy] (ii) Green Attributes that are delivered to Buyer, and (iii) any other Product that is delivered to Buyer, the quantity of which is measured based on the amount of Delivered Energy. For example, if the quantity of Renewable Energy Credits that are delivered to Buyer is less than the quantity of the **[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program:** Contract Energy] **[When SDG&E is SC for the Project and Project is in the VER Forecasting Program:** Delivered Energy], then the quantity of Bundled Green Energy shall be equal to the quantity of Renewable Energy Credits that are delivered to Buyer.

“Business Day” means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday and shall be between the hours of 8:00 a.m. and 5:00 p.m. local time for the relevant Party’s principal place of business where the relevant Party, in each instance unless otherwise specified, shall be the Party from whom the Notice, payment or delivery is being sent and by whom the Notice or payment or delivery is to be received.

“Buyer” has the meaning set forth on the Cover Sheet.

“CAISO” means the California Independent System Operator Corporation or any successor entity performing similar functions.

[When SDG&E is the SC for the Project: “CAISO Charges Invoice” has the meaning set forth in Section 3.3([a/b])(iv).]

“CAISO Grid” means the system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the CAISO’s operational control.

“CAISO Tariff” means the CAISO Operating Agreement and Tariff, including the rules, protocols, procedures and standards attached thereto, as the same may be amended or modified from time-to-time and approved by FERC.

“California Renewables Portfolio Standard” means the Renewables Portfolio Standard of California under California Senate Bills 1078 and 107, as codified in California Public Utilities Code Sections 387, 390.1, and Article 16 (commencing with Section 399.11) of Chapter 2.3 of Part 1 of Division 1, as such provisions are amended or supplemented from time to time.

“Capacity Attributes” means any current or future defined characteristic, certificate, tag, credit, or ancillary service attribute, whether general in nature or specific as to the location or any other attribute of the Project intended to value any aspect of the capacity of the Project to produce Energy or ancillary services, including but not limited to any accounting construct so that the Contract Capacity of the Project may be counted toward a Resource Adequacy obligation or similar measure in respect to the capacity of the Project to generate Energy by the CPUC, the CAISO, the FERC, or any other entity vested with the authority under federal or state Law, to require Buyer to procure, or to procure at Buyer’s expense, Resource Adequacy or other similar products.

[For Dispatchable Product only: “Capacity Price” has the meaning set forth in Section 4.1(a).]

[For Baseload, Peaking, or Dispatchable Product only: “Capacity Test” shall be the complete capacity testing procedure for the Project that is reasonably acceptable to Buyer that Seller shall develop no later than thirty (30) days prior to the initial capacity testing of the Project prior to the Initial Delivery Date. The capacity testing procedure shall describe in detail the testing standard(s) to be used for the technology of the Project, the conditions under which testing shall take place, the average summer ambient conditions to which the results will be corrected, and the testing procedures. The same capacity testing procedure shall be applied to all subsequent Capacity Tests.]

“CEC” means the California Energy Commission or its successor agency.

“CEC Certification and Verification” means that the CEC has certified (or, with respect to periods before the Project has been constructed, that the CEC has pre-certified) that the Project is an ERR for purposes of the California Renewables Portfolio Standard and that all Energy produced by the Project qualifies as generation from an ERR for purposes of the Agreement.

“Claims” has the meaning set forth in Section 11.2(a).

“Conditions Precedent” has the meaning set forth in Section 2.3.

“Contract Capacity” has the meaning set forth in Section 3.1(f).

[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: “Contract Energy” means the lower of Delivered Energy or Scheduled Energy for any given period in each case net of all Electrical Losses.]

“Contract Quantity” has the meaning set forth in Section 3.1(e).

“Contract Year” means a period of twelve (12) consecutive months (except in the case of the first Contract Year which may be longer) with the first Contract Year commencing on the Initial Delivery Date and each subsequent Contract Year commencing on the anniversary of the first day of the month following the Initial Delivery Date.

“Costs” means, with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into new arrangements which replace a Terminated Transaction; and all reasonable attorneys’ fees and expenses incurred by the Non-Defaulting Party in connection with such Terminated Transaction.

“Cover Sheet” means the document that precedes Article 1: General Definitions to this Agreement.

“CP Satisfaction Date” shall mean the date on which all of the Conditions Precedent have been satisfied (or waived in writing by the Party described in Section 2.4).

“CPUC” or “Commission or successor entity” means the California Public Utilities Commission, or successor entity.

“CPUC Approval” means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

(a) approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer’s administration of the Agreement; and

(b) finds that any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer’s compliance with any

obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable Law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable. ***[For Agreements for the purchase and sale of TRECS only, use STC REC-3 instead of the foregoing]***

[For Agreements with Delivery Terms greater than two years: “CPUC Approval Date” shall mean the date on which the Conditions Precedent set forth in Section 2.3(a) have been satisfied (or waived in writing by the beneficiary Party described in Section 2.4).]

[For Agreements with Delivery Terms greater than two years: “CPUC Approval Security” shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)(i) to secure performance of its obligations hereunder.]

“Credit Rating” means, with respect to any entity, the rating then assigned to such entity’s unsecured, senior long-term debt obligations (not supported by third party credit enhancements) by S&P or Moody’s.

“Day-Ahead Forecast” has the meaning set forth in Section 3.3([d/e]).

[For As-Available and Baseload Products only: “Deemed Bundled Green Energy” means the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was prevented from delivering to Buyer by reason of Economic Dispatch Down. The quantity of Deemed Bundled Green Energy shall be equal to ***[For As-Available Products:*** (a) the Deemed Delivery Forecast of Energy corresponding to the applicable Economic Dispatch Down periods, whether or not Seller is participating in the VER Forecasting Program during such events, less the amount of Energy scheduled under Economic Dispatch Down as specified in the Dispatch Notice during such periods, and less any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault but only to the extent the Deemed Delivery Forecast does not already reflect the foregoing *provided that*, if the applicable amount calculated pursuant to this clause (a) is negative, the Deemed Bundled Green Energy shall be zero (0), or (b) if there is no such Deemed Delivery Forecast available during the applicable Economic Dispatch Down periods or if the Bundled Green Energy amount has historically not been determined based on clause (i) of the definition of Bundled Green Energy, the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was prevented from delivering to Buyer as a result of Economic Dispatch Down as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.] ***[For Baseload Products:*** the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was prevented from delivering to Buyer during the applicable Economic Dispatch Down periods, as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any

concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.]]

[For As-Available only: “Deemed Delivery Forecast” means the forecast of the Energy to be produced by the Project prepared by the CAISO or its agent in accordance with the VER Forecasting Program and communicated to the Scheduling Coordinator, which forecast is the last such forecast prepared by the CAISO that does not reflect curtailed production as a result of Economic Dispatch Down periods. As of the Execution Date, such Deemed Delivery Forecast is the CAISO forecast generated through its Resource Specific VER Forecast Usage Report].

[Dispatchable Product only: “Default Availability Factor” means, for any period, the amount determined according to the following formula:

$$\text{Default Availability Factor} = (\text{PH} - (\text{EDH} - \text{EEDH})) / \text{PH}$$

Where:

PH is the number of period hours;

EDH is the number of equivalent derate hours calculated as the sum, for each derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the initial Contract Capacity (as of the Initial Delivery Date) divided by the initial Contract Capacity. For the purposes of this calculation, a derate includes all outages for any reason, including without limitation, Forced Outages, Force Majeure events, Dispatch Down Periods, Planned Outages, Buyer’s failure to perform, and other times when any portion of the Contract Capacity is not available and when the Delivered Energy of the Project is less than the amount of Energy dispatched by Buyer; and

EEDH is the number of equivalent excused derate hours solely due to either Force Majeure events, Dispatch Down Periods or Buyer’s failure to perform (and for no other reason), calculated as the sum, for each excused derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the initial Contract Capacity, divided by the initial Contract Capacity.]

“Defaulting Party” means the Party that is subject to an Event of Default.

“Default Rate” means for any date, the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in *The Wall Street Journal* under “Money Rates” on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) and (b) the maximum rate permitted by applicable Law.

“Delivered Energy” means all Energy produced from the Project and delivered to Buyer at the Delivery Point as measured in MWh at the CAISO revenue meter of the Project based on a power factor of precisely one (1) and net of all Electrical Losses.

“Delivery Point” means the point at which Buyer receives Seller’s Product, as set forth in Section 3.1(d).

“Delivery Term” has the meaning set forth in Section 3.1(c).

“Delivery Term Security” shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(ii)/(iii)] to secure performance of its obligations hereunder.

“Disclosing Party” has the meaning set forth in Section 13.1(a).

“Disclosure Order” has the meaning set forth in Section 13.1(a).

“Dispatch Down Period” means the period of curtailment of delivery of Product from the Project resulting from System Dispatch Down ***[For all Products other than Dispatchable Product: or Economic Dispatch Down]***.

“Dispatch Notice” means the operating instruction, and any subsequent updates given either by Buyer to Seller or by the CAISO to Seller, directing Seller to operate the Project at a specified megawatt output for the period of time set forth in such order.

[For Dispatchable Product only: “Dispatchable” means a Unit Firm Product for which Seller makes available capacity for Buyer to Schedule and dispatch up or down at Buyer’s option in accordance with Section 3.3([g/h]).]

“Distribution Upgrades” has the meaning set forth in the CAISO Tariff.

“DUNS” means the Data Universal Numbering System, which is a unique nine character identification number provided by Dun and Bradstreet.

“Early Termination Date” has the meaning set forth in Section 5.2.

[For all Products other than Dispatchable Product: “Economic Dispatch Down” means curtailment of delivery of Product from the Project that is the result of economic curtailment where Buyer (as the Scheduling Coordinator) or a third party Scheduling Coordinator (in accordance with Buyer’s directions) either submits a self-schedule with a binding Product quantity or an economic bid in the applicable CAISO market or fails to submit any such schedule or bid, in either case, that when implemented by the CAISO results in an otherwise available Product quantity not being scheduled or awarded in such CAISO market and such curtailment is not concurrently the result of a Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.

“Electrical Losses” means all electrical losses associated with the transmission of Product to the Delivery Point, including if applicable, but not limited to, any transmission or transformation losses between the CAISO revenue meter and the Delivery Point.

“Eligible Renewable Energy Resource” or “ERR” has the meaning set forth in California Public Utilities Code Section 399.11, *et seq.*, as amended or supplemented from time to time.

“Energy” means electric energy measured in MWh and net of Station Service (unless otherwise specified).

“Energy Price” has the meaning set forth in Section 4.[1/2](a).

“Equitable Defenses” means any bankruptcy, insolvency, reorganization or other Laws affecting creditors’ rights generally and, with regard to equitable remedies, the discretion of the court before which proceedings may be pending to obtain same.

[For Dispatchable Product only: “Equivalent Availability Factor” or “EAF” has the meaning set forth in Section 4.1(b).]

“Event of Default” has the meaning set forth in Section 5.1.

“Execution Date” means the date hereof as set forth in the preamble of the Cover Sheet.

“Executive(s)” has the meaning set forth in Section 12.2(a).

“FERC” means the Federal Energy Regulatory Commission or any successor government agency.

“Force Majeure” means any event or circumstance which wholly or partly prevents or delays the performance of any material obligation arising under this Agreement but only to the extent (1) such event is not within the reasonable control, directly or indirectly, of the Party seeking to have its performance obligation(s) excused thereby, (2) the Party seeking to have its performance obligation(s) excused thereby has taken all reasonable precautions and measures in order to prevent or avoid such event or mitigate the effect of such event on such Party’s ability to perform its obligations under this Agreement and which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which by the exercise of due diligence it has been unable to overcome, and (3) such event is not the direct or indirect result of the fault or negligence of the Party seeking to have its performance obligations excused thereby.

(a) Subject to the foregoing, events that could qualify as Force Majeure include, but are not limited to the following:

(i) acts of God, flooding, lightning, landslide, earthquake, fire, drought, explosion, epidemic, quarantine, storm, hurricane, tornado, volcano, other natural disaster or unusual or extreme adverse weather-related events;

(ii) war (declared or undeclared), riot or similar civil disturbance, acts of the public enemy (including acts of terrorism), sabotage, blockade, insurrection, revolution, expropriation or confiscation; or

(iii) except as set forth in subpart (b)(vii) below, strikes, work stoppage or other labor disputes (in which case the affected Party shall have no obligation to settle the strike or labor dispute on terms it deems unreasonable).

(b) Force Majeure shall not be based on:

- (i) Buyer's inability economically to use or resell the Product purchased hereunder;
- (ii) Seller's ability to sell the Product at a price greater than the price set forth in this Agreement;
- (iii) Seller's inability to obtain Governmental Approvals or other approvals of any type for the construction, operation, or maintenance of the Project;
- (iv) a lack of wind, sun or other fuel source of an inherently intermittent nature;
- (v) Seller's inability to obtain sufficient labor, equipment, materials, or other resources to build or operate the Project, except to the extent Seller's inability to obtain sufficient labor, equipment, materials, or other resources is caused by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above;
- (vi) Seller's failure to obtain financing or other funds, including funds authorized by a state or the federal government or agencies thereof to supplement the payments made by Buyer pursuant to this Agreement;
- (vii) a strike, work stoppage or labor dispute limited only to any one or more of Seller, Seller's Affiliates, the EPC Contractor or subcontractors thereof or any other third party employed by Seller to work on the Project; or
- (viii) any equipment failure except if such equipment failure is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above.

“Forced Outage” means any unplanned reduction or suspension of production of Product from the Project or unavailability of the Project in whole or in part that is not a Planned Outage or a willful withholding of Product when the Project is otherwise capable of delivering Product under Good Industry Practices.

“GAAP” has the meaning set forth in Section 13.4.

“Gains” means with respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of this Agreement for the remaining Delivery Term, determined in a commercially reasonable manner, subject to Section 5.2 hereof. Factors used in determining economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties, including, without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

“Good Industry Practice” means those practices, methods and acts that would be implemented and followed by prudent operators of electric transmission facilities (with respect to Buyer) or prudent operators of electric generation facilities similar to the Project (with respect to Seller) in the Western United States during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety, and shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers’ warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and applicable Law. Good Industry Practice is not intended to be the optimum practice, method or act to the exclusion of all others, but rather is intended to be any of the practices, methods and/or actions generally accepted in the region.

“Governmental Approval” means all authorizations, consents, approvals, waivers, exceptions, variances, filings, permits, orders, licenses, exemptions and declarations of or with any governmental entity and, with respect to the Seller, shall include those siting and operating permits and licenses, and any of the foregoing under any applicable environmental Law, that are required for the construction, use, and operation of the Project.

“Governmental Authority” means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

“Governmental Charges” has the meaning set forth in Section 9.2.

“Green Attributes” means, subject to the limitations in the final sentence of this definition, any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by Law, to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere;¹ and (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state Law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser’s discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local Law, regulation or bill, and international or foreign

¹ Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any energy, capacity, reliability or other power attributes from the Project, (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or “tipping fees” that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits. If the Project is a biomass facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project and for all electric generation using biomethane as fuel, Seller shall transfer to Buyer sufficient Green Attributes of biomethane production and capture to ensure that there are zero net emissions associated with the production of electricity from the Project using the biomethane.

“Guaranteed Energy Production” has the meaning set forth in Section 3.1(e).

“Guarantor” means, with respect to Seller, any person that (a) does not already have any material credit exposure to Buyer under any other agreements, guarantees, or other arrangements at the time its Guaranty is issued, (b) is an Affiliate of Seller, or other third party reasonably acceptable to Buyer, (c) has a Credit Rating of [_____] or better from S&P or a Credit Rating of [_____] or better from Moody’s, (d) has a tangible net worth of at least [_____], (e) is incorporated or organized in a jurisdiction of the United States and is in good standing in such jurisdiction, and (f) executes and delivers a Guaranty for the benefit of Buyer substantially in the form attached hereto as Exhibit C. ***[SDG&E will consider accepting a Guaranty based on the Project, the amount of Performance Assurance, and the identity of the Seller and Guarantor]***

“Guaranty” means a guaranty from a Guarantor provided for the benefit of Buyer substantially in the form attached hereto as Exhibit C. ***[SDG&E will consider accepting a Guaranty based on the Project, the amount of Performance Assurance, and the identity of the Seller and Guarantor]***

“Imbalance Energy” means the amount of Energy, in any given settlement interval, by which the amount of Delivered Energy deviates from the amount of Scheduled Energy.

“Initial Delivery Date” means [_____, 20__].

“Initial Negotiation End Date” has the meaning set forth in Section 12.2(a).

“Interest Amount” means, with respect to an Interest Period, the amount of interest derived from the product of (a) the sum of (i) the principal amount of Performance Assurance in the form of cash held by Buyer during that Interest Period, and (ii) the sum of all accrued and unpaid Interest Amounts accumulated prior to such Interest Period; multiplied by (b) the Interest Rate in effect on

the first day of the Interest Period; multiplied by (c) the number of days in that Interest Period; divided by (d) 360.

“Interest Payment Date” means the date on which cash held as Performance Assurance is returned pursuant to the terms of this Agreement.

“Interest Period” means the monthly period beginning on the first day of each month and ending on the last day of each month or the shorter period during which Performance Assurance in the form of cash is held by Buyer.

“Interest Rate” means for any date the rate per annum equal to the Commercial Paper (non-financial, 3 months) rate as published the prior month in the Federal Reserve Statistical Release, H.15. Should publication of the interest rate on Commercial Paper (non-financial, 3 months) be discontinued, then the interest rate on commercial paper, which most closely approximates the discontinued rate, published the prior month in the Federal Reserve Statistical Release, H.15, or its successor publication.

“Law” means any statute, law, treaty, rule, regulation, ordinance, code, Governmental Approval, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, including any of the foregoing that are enacted, amended, or issued after the Execution Date, and which become effective prior to the end of the Delivery Term; or any binding interpretation of the foregoing by a Governmental Authority.

“Letter(s) of Credit” means one or more irrevocable, standby letters of credit issued by a U.S. commercial bank or a foreign bank with a U.S. branch with such bank having a Credit Rating of at least [A-] with an outlook designation of “stable” from S&P or [A3] with an outlook designation of “stable” from Moody’s, in substantially the form as contained in Exhibit B to this Agreement.

“Locational Marginal Price” has the meaning set forth in the CAISO Tariff.

“Losses” means with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from a Terminated Transaction for the remaining term of this Agreement, determined in a commercially reasonable manner. Factors used in determining the loss of economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties including without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g. NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

“Manager” has the meaning set forth in Section 12.2(a).

[For Dispatchable Product only: “Monthly Capacity Payment” has the meaning set forth in Section 4.1(b).]

“Monthly Energy Payment” has the meaning set forth in Section 4.[1/2]([b/c]).

[For Dispatchable Product only: “Monthly Shaping Factor” has the meaning set forth in Section 4.1(b).]

“Moody’s” means Moody’s Investor Services, Inc., or its successor.

“MWh” means megawatt-hour.

“Negative Imbalance Energy” has the meaning set forth in Section 4.[2/3].

“NERC” means the North American Electric Reliability Corporation or a successor organization that is responsible for establishing reliability criteria and protocols.

“NERC Holiday” means any of the following holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Three of these days, Memorial Day, Labor Day, and Thanksgiving Day, occur on the same day each year. Memorial Day is the last Monday in May; Labor Day is the first Monday in September; and Thanksgiving Day is the fourth (4th) Thursday in November. New Year’s Day, Independence Day, and Christmas Day occur on the same date each year, but in the event any of these holidays occur on a Sunday, the “NERC Holiday” is celebrated on the Monday immediately following that Sunday; and if any of these holidays occur on a Saturday, the “NERC Holiday” remains on that Saturday.

“Non-Availability Charges” shall mean Non-Availability Charges as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

“Non-Defaulting Party” has the meaning set forth in Section 5.2.

“Notice” shall, unless otherwise specified in the Agreement, mean written communications by a Party to be delivered by hand delivery, United States mail, overnight courier service, facsimile or electronic messaging (e-mail).

“Notice to Proceed” or “NTP” means the notice provided by Seller to the EPC Contractor following execution of the EPC Contract between Seller and such EPC Contractor and satisfaction of all conditions precedent to performance of such contract, by which Seller authorizes such EPC Contractor to commence and complete full performance of the work under the EPC Contract without any delay or waiting periods.

“Outage Notification Form” means the completed document from Seller notifying Buyer of an outage of the Project substantially in the form attached hereto as Exhibit D. Buyer reserves the right to reasonably revise or change the form upon Notice to Seller.

[For intermittent As-Available Product: “Participating Intermittent Resource” shall have the meaning set forth in the CAISO Tariff.]

“Participating Transmission Owner” or “Participating TO” means an entity that (a) owns, operates and maintains transmission lines and associated facilities and/or has entitlements to use

certain transmission lines and associated facilities that are interconnected to the Delivery Point and (b) has transferred to the CAISO operational control of such facilities and/or entitlements to be made part of the CAISO Grid. As of the Execution Date, the Participating Transmission Owner is *[San Diego Gas & Electric Company]*.

“Party” or “Parties” means the Buyer or Seller individually, or to both collectively.

[For Peaking Product only: “Peaking” means a Unit-Firm Product for which Energy must be delivered during hours ending 1200-1900 (11:00 am to 7:00 pm) on Monday-Friday, excluding NERC Holidays, for the months July through October and during hours ending 1400-2100 (1:00 pm to 9:00 pm) on Monday-Friday, excluding NERC Holidays, for the months November and December.] ***[Note: Buyer will consider other firm products such as 6x16: “6x16 Block” means a Unit-Firm Product for which Energy must be delivered during hours ending 0700-2200 (6:00 am to 10:00 pm) on Monday-Saturday throughout the Delivery Term.]***

“Performance Assurance” means collateral provided by Seller to Buyer to secure Seller’s obligations hereunder and includes ***[For Agreements with Delivery Terms greater than two years: CPUC Approval Security,] Pre-Delivery Term Security, and Delivery Term Security.***

[For As-Available, Baseload, Peaking Product: “Performance Measurement Period” has the meaning set forth in Section 3.1(e).]

“Planned Outage” means any planned reduction or suspension of the electrical output from the Project or unavailability of the Project in whole or in part as a result of the inspection, maintenance, or repair of equipment that is scheduled in accordance with Section 3.7(a).

“PNode” has the meaning set forth in the CAISO Tariff.

“Positive Imbalance Energy” has the meaning set forth in Section 4.[2/3].

“Pre-Delivery Term Security” shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(i)/(ii)] to secure performance of its obligations hereunder.

“Product” has the meaning set forth in Section 3.1(a).

[For Projects receiving PTCs: “Production Tax Credit” or “PTC” means the tax credit for electricity produced from certain renewable generation resources described in Section 45 of the Internal Revenue Code of 1986, as it may be amended from time to time.]

“Project” means all of the *[insert technology]* electric generating units, the Site at which the generating facility is located, the utility interconnection facilities up to the point of change in ownership to the applicable utility’s facilities, and the other assets, tangible and intangible, that compose the generation facility as more particularly described on Exhibit A.

“Recording” has the meaning set forth in Section 13.6.

“Reductions” has the meaning set forth in Section 3.2(c).

“Referral Date” has the meaning set forth in Section 12.2(a).

“Renewable Energy Credit” has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028, as each may be amended from time to time or as further defined or supplemented by Law.

“Replacement Price” means the price (in dollars per megawatt hour) at which Buyer, acting in a commercially reasonable manner, purchases for delivery at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) a replacement for any Product (including its associated Green Attributes) that was not Scheduled and delivered by Seller, plus (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Buyer in purchasing such replacement Product and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Buyer for such replacement Product, or absent a purchase, the market price at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) for such replacement Product for the hours impacted by such failure to Schedule or deliver such Product as determined by Buyer in a commercially reasonable manner. The Replacement Price also shall include all CAISO and other charges and penalties calculated in dollars per megawatt hour with respect to the deviation from the Scheduled supply resulting from Seller’s failure to Schedule or deliver; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Buyer be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Seller’s liability. For the purposes of this definition, Buyer shall be considered to have purchased replacement Product to the extent Buyer shall have entered into one or more arrangements in a commercially reasonable manner whereby Buyer repurchases its obligation to sell and deliver the Product to another party. If for any reason a Replacement Price is unavailable when Seller fails to deliver or Schedule Product, then the Replacement Price for the hours when a Replacement Price is unavailable shall be the last available Replacement Price together with any charges and penalties allocated to Buyer during such time.

“Resource Adequacy” means the procurement obligation of load serving entities, including Buyer, as such obligations are described in CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and subsequent CPUC decisions addressing Resource Adequacy issues, as those obligations may be altered from time to time in the CPUC Resource Adequacy Rulemakings (R.) 04-04-003 and (R.) 05-12-013 or by any successor proceeding, and all other Resource Adequacy obligations established by any other entity, including the CAISO.

“Sales Price” means the price (in dollars per megawatt hour) at which Seller, acting in a commercially reasonable manner, resells any Product not Scheduled and received by Buyer, deducting from such proceeds any (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Seller in reselling such Product including all costs charged by CAISO to Schedule and deliver the Product into the CAISO System, and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Seller in Scheduling and delivering such Product to the third party purchasers, or absent a sale despite commercially reasonable efforts to resell the Product, zero. The Sales Price shall also be reduced by all CAISO and other costs, charges and penalties with respect to the deviation from the Scheduled supply, in each case, resulting from Buyer’s failure to take Product and calculated in dollars per megawatt hour; provided, however, in no event shall such price include any ratcheted demand or similar charges,

nor shall Seller be required to utilize or change its utilization of its owned or controlled assets, including contractual assets, or market positions to minimize Buyer's liability. The Sales Price may be less than zero.

"S&P" means the Standard & Poor's Rating Group (a division of McGraw-Hill, Inc.) or its successor.

"Schedule" means the actions of Seller, Buyer and/or their designated representatives, or Scheduling Coordinators, including each Party's Transmission Providers, if applicable, of notifying, requesting and confirming to each other and the CAISO the quantity and type of Product to be delivered on any given day or days at a specified Delivery Point.

"Scheduling Coordinator" or "SC" means an entity certified by the CAISO as qualifying as a Scheduling Coordinator pursuant to the CAISO Tariff, for the purposes of undertaking the functions specified in "Responsibilities of a Scheduling Coordinator," of the CAISO Tariff, as amended from time-to-time.

"Scheduled Energy" means the Energy that clears under the applicable CAISO market based on the final Schedule developed in accordance with this Agreement, the operating procedures developed by the Parties pursuant to Section 3.9, and the applicable CAISO Tariff, protocols and Scheduling practices.

"SEC" means the U.S. Securities and Exchange Commission.

"Seller" shall have the meaning set forth on the Cover Sheet.

"Settlement Amount" means, with respect to the Non-Defaulting Party, the Losses or Gains, and Costs, expressed in U.S. Dollars, which such Party incurs as a result of the liquidation of a Terminated Transaction pursuant to Sections 5.2 and 5.3.

"Site" shall mean the location of the Project as described in Exhibit A.

"Station Service" means the electric energy produced by the Project that is used within the Project to power the lights, motors, control systems and other auxiliary electrical loads that are necessary for operation of the Project.

"System Dispatch Down" means curtailment of delivery of Product from the Project resulting from (a) curtailment ordered by the CAISO (whether directly or through the Scheduling Coordinator or the Participating Transmission Owner), for any reason, including, but not limited to, an Exceptional Dispatch (as defined in the CAISO Tariff), any system emergency as defined in the CAISO Tariff ("System Emergency"), any warning of an anticipated System Emergency, or any warning of an imminent condition or situation which could jeopardize the CAISO's or Participating Transmission Owner's electric system integrity or the integrity of other systems to which the CAISO or Participating Transmission Owner is connected, any warning, forecast, or anticipated overgeneration conditions, including a request from CAISO to manage over-generation conditions; (b) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) for reasons including, but not limited to, (i) any situation that affects normal function of the electric system including, but

not limited to, any abnormal condition that requires action to prevent circumstances such as equipment damage, loss of load, or abnormal voltage conditions, (ii) any warning, forecast or anticipation of conditions or situations that jeopardize the Participating Transmission Owner's electric system integrity or the integrity of other systems to which the Participating Transmission Owner is connected; (c) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) as a result of scheduled or unscheduled maintenance or construction on the Participating Transmission Owner's transmission facilities or distribution operator's facilities (if interconnected to distribution or sub-transmission system) that prevents the delivery or receipt of Delivered Energy to or at the Delivery Point, (d) curtailment in accordance with Seller's obligations under its interconnection agreement with the Participating Transmission Owner or distribution operator, ***[If the Project is located outside of the CAISO:*** or (e) curtailment ordered by the Transmission Provider provided, that Seller has contracted for firm transmission with such Transmission Provider for the Product to be delivered to the Delivery Point and such curtailment is due to "force majeure" or "uncontrollable force" or a similar term as defined under the Transmission Provider's tariff]; ***[For Dispatchable Product only:*** or ([e/f]) curtailment ordered by Buyer pursuant to a Dispatch Notice.] ***[For all Products other than Dispatchable:*** provided, however, that System Dispatch Down shall not include Economic Dispatch Down].

"Terminated Transaction" means the termination of this Agreement in accordance with Section 5.2 of this Agreement.

"Termination Payment" has the meaning set forth in Section 5.2.

[For TOD Pricing Only: "TOD Delivery Cap" has the meaning set forth in Section 4.[1/2](a).]

[For TOD Pricing Only: "TOD Factors" has the meaning set forth in Section 4.[1/2](b).]

[For TOD Pricing Only: "TOD Period" has the meaning set forth in Section 4.[1/2](b).]

"Transmission Provider" means any entity or entities transmitting or transporting the Product on behalf of Seller or Buyer to or from the Delivery Point.

[For Baseload, Peaking, or Dispatchable Product only: "Unit Firm" means, with respect to a Product, that the Product is intended to be supplied from the Project, and subject to the terms of this Agreement, Seller is excused from selling and delivering the Product to Buyer, and Seller shall not be liable to Buyer for any damages determined pursuant to Section 3.1(h) of the Agreement, in the event that Seller fails to deliver the Product to Buyer for any of the following reason:

- (a) if the Project is unavailable as a result of a Forced Outage and such Forced Outage is not the result of Seller's negligence or willful misconduct;
- (b) Force Majeure;
- (c) by the Buyer's failure to perform;

(d) by a Planned Outage of the Project; or

(e) a reduction in output as ordered under Dispatch Down Periods.

The following products shall be considered “Unit Firm” products: Peaking, Baseload, and Dispatchable.]

[For an intermittent As-Available Product only: “VER Forecasting Program” means the rules, protocols, procedures and standards for Participating Intermittent Resources under the CAISO’s Eligible Intermittent Resource Protocol, as may be amended from time to time, as set forth in the CAISO Tariff.]

“WECC” means the Western Electricity Coordinating Council or successor agency.

“WREGIS” means the Western Renewable Energy Generating Information System or any successor renewable energy tracking program.

1.2 Interpretation. The following rules of interpretation shall apply:

(a) The term “month” shall mean a calendar month unless otherwise indicated, and a “day” shall be a 24-hour period beginning at 12:00:01 a.m. Pacific Prevailing Time and ending at 12:00:00 midnight Pacific Prevailing Time; provided that a “day” may be 23 or 25 hours on those days on which daylight savings time begins and ends.

(b) Unless otherwise specified herein, all references herein to any agreement or other document of any description shall be construed to give effect to amendments, supplements, modifications or any superseding agreement or document as then exist at the applicable time to which such construction applies.

(c) Capitalized terms used in this Agreement, including the appendices hereto, shall have the meaning set forth in Article 1, unless otherwise specified.

(d) Unless otherwise specified herein, references in the singular shall include references in the plural and vice versa, pronouns having masculine or feminine gender will be deemed to include the other, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal personality). Other grammatical forms of defined words or phrases have corresponding meanings.

(e) The term “including” when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation.

(f) References to a particular article, section, subsection, paragraph, subparagraph, appendix or attachment shall, unless specified otherwise, be a reference to that article, section, subsection, paragraph, subparagraph, appendix or attachment in or to this Agreement.

(g) Any reference in this Agreement to any natural person, Governmental Authority, corporation, partnership or other legal entity includes its permitted successors and assigns or to any natural person, Governmental Authority, corporation, partnership or other legal entity succeeding to its functions.

(h) All references to dollars are to U.S. dollars.

ARTICLE TWO: EFFECTIVENESS OF AGREEMENT; CONDITIONS PRECEDENT

2.1 Effectiveness of Agreement Prior to CP Satisfaction Date. Commencing on the Execution Date until the CP Satisfaction Date, this Agreement shall be in full force and effect, enforceable and binding only to the extent required to give full effect to, and enforce, the rights and obligations of the Parties under this Article 2, including, as it relates to Article 2, the rights and obligations under Articles 1, 5, 7, 8, 9, 10, 11, 12, and 13.

2.2 Obligations of the Parties. The Parties shall cooperate with each other to cause the Conditions Precedent to be satisfied as soon as reasonably practical.

(a) Seller's Obligations. Prior to the CP Satisfaction Date, Seller shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections [], and (ii) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. ***[For Agreements with Delivery Terms greater than two years:*** Upon an Event of Default of Seller prior to the CPUC Approval Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the amount of the CPUC Approval Security.] Upon an Event of Default of Seller ***[For Agreements with Delivery Terms greater than two years:*** on or after the CPUC Approval Date but] prior to the CP Satisfaction Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the amount of the Pre-Delivery Term Security. Buyer may retain such Performance Assurances to pay such liquidated damages. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to an Event of Default of Seller prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Seller prior to the CP Satisfaction Date.

(b) Buyer's Obligations. Prior to the CP Satisfaction Date, Buyer shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections 2.3(a), and (ii) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. ***[For Agreements with Delivery Terms greater than two years:*** Upon an Event of Default of Buyer prior to the CPUC Approval Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the CPUC Approval Security.] Upon an Event of Default of Buyer ***[For Agreements with Delivery Terms greater than two years:*** on or after the CPUC Approval Date but] prior to the CP Satisfaction Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the Pre-Delivery Term Security. Each Party agrees and acknowledges that (a) the actual damages that Seller would incur due to an Event of Default of Buyer prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated

damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Buyer prior to the CP Satisfaction Date.

2.3 Conditions Precedent. Subject to Section 2.1, the effectiveness of the remainder of this Agreement is conditioned upon the satisfaction (or waiver by the Party described in Section 2.4) of all of the following conditions precedent (“Conditions Precedent”) by the deadline dates set forth below for each Condition Precedent without extension for Force Majeure or any other reason:

(a) CPUC Approval. No later than [_____], Buyer shall have obtained CPUC Approval. Prior to this deadline, should the CPUC issue an order approving this Agreement but with conditions or modifications that materially alter the commercial aspects of this Agreement, the Parties agree to use good faith efforts to renegotiate this Agreement and file the amended agreement with the CPUC seeking CPUC Approval therefor. If, no later than the earlier of (i) sixty (60) days after such order or (ii) the deadline date above, no agreement is reached, either Party may terminate this Agreement upon delivery of Notice to the other Party.

(b) *[Others, Major Governmental Approvals, Financing, etc.]*

2.4 Failure to Meet All Conditions Precedent.

(a) Beneficiary Party.

(i) Both of the Parties are the beneficiaries of the Conditions Precedent set forth in Sections 2.3(a), *[Others]*, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, both of the Parties must waive (in their sole discretion) non-satisfaction by the deadline date therefor.

(ii) Buyer shall be the sole beneficiary of the Conditions Precedent set forth in Sections *[List]*, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Buyer alone must waive (in its sole discretion) non-satisfaction by the deadline date therefor.

(iii) Seller shall be the sole beneficiary of the Conditions Precedent set forth in Sections *[Others]*, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Seller alone must waive (in its sole discretion) non-satisfaction by the deadline date therefor.

(b) Termination. If any of the Conditions Precedent is not satisfied or waived in writing by the beneficiary Parties thereto on or before the date that is fifteen (15) days after the applicable deadline date therefor, then this Agreement shall automatically terminate with no further obligation to either Party (other than as set forth in Sections 2.4(b)(i)-(ii) below and any other payment obligations which are accrued and payable at the time of termination).

(i) Upon a termination of this Agreement for any reason under Section 2.4 other than as described in Section 2.4(b)(ii) below, Seller shall forfeit to Buyer an amount

equal to the Performance Assurance then required to be delivered to Buyer hereunder. Buyer may retain such Performance Assurance to pay such amount.

(ii) Upon a termination of this Agreement under this Section 2.4 as a result of the failure of the Conditions Precedent set forth in Sections 2.3(a) to be satisfied (or waived by both Parties) or as a result of the failure of the Conditions Precedent set forth in Sections [Others] to be satisfied or waived by Buyer, Buyer shall return to Seller the Performance Assurances then held by Buyer.

2.5 Effectiveness of Agreement on and after CP Satisfaction Date. This Agreement shall be in full force and effect, enforceable and binding in all respects as of the CP Satisfaction Date until the conclusion of the Delivery Term or earlier termination pursuant to the terms of this Agreement; provided however, that this Agreement shall remain in effect until (i) the Parties have fulfilled all obligations under this Agreement, including payment in full of amounts due for the Product delivered prior to the end of the Delivery Term, the Settlement Amount, indemnification payments or other damages (whether directly or indirectly such as through set-off or netting) and (ii) the undrawn portion of the [For Agreements with Delivery Terms greater than two years: CPUC Approval Security,] Pre-Delivery Term Security, or Delivery Term Security, as applicable, is released and/or returned as applicable (if any is due). All indemnity rights shall survive the termination or expiration of this Agreement for the longer of twelve (12) months or the expiration of the statute of limitations period of the claim underlying the indemnity obligation.

ARTICLE THREE: OBLIGATIONS AND DELIVERIES

3.1 Transaction.

(a) Product. The “Product” to be delivered and sold by Seller and received and purchased by Buyer under this Agreement is [Seller to select: As-Available, Baseload, Peaking, or Dispatchable] Energy, Capacity Attributes, Green Attributes, and other ancillary products, services or attributes similar to the foregoing which are or can be produced by or associated with the Project (net of Station Service) in accordance with the terms hereof.

(b) Transaction. Unless specifically excused by the terms of this Agreement during the Delivery Term, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, the Product at the Delivery Point, and Buyer shall pay Seller for the Product in accordance with the terms hereof. In no event shall Seller have the right to procure any element of the Product from sources other than the Project for sale or delivery to Buyer under this Agreement [If the Project is located outside of the CAISO: except with respect to Imbalance Energy from the Transmission Provider].

(c) Delivery Term. The Parties agree that the period of Product delivery is [] Contract Years. As used herein, “Delivery Term” shall mean the period of Contract Years specified above beginning on the Initial Delivery Date and continuing until the end of the last Contract Year unless terminated earlier as provided by the terms of this Agreement.

(d) Delivery Point. The Delivery Point shall be [the point of interconnection of the Project to the CAISO Grid] [Seller may specify another delivery point; for a Project located outside the CAISO Grid, the Delivery Point should be a CAISO Scheduling Point as defined by

the CAISO] and for financial settlement purposes under the applicable CAISO market, the PNode corresponding to such point.

(e) ***[For Baseload, Peaking, As-Available Product: Contract Quantity and Guaranteed Energy Production.*** The quantity of Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is [_____] MWh (“Contract Quantity”). Throughout the Delivery Term, Seller shall be required to deliver to Buyer no less than the Guaranteed Energy Production (as defined below) in any [twelve (12)] [twenty-four (24)] consecutive calendar month period during the Delivery Term (“Performance Measurement Period”). “Guaranteed Energy Production” means an amount of Bundled Green Energy, as measured in MWh, equal to [two times] [_____] % of the Contract Quantity. Notwithstanding the excuses to performance set forth in the definition of the Product type (as such Product type is specified in Section 3.1(a)), Seller shall be excused from achieving the Guaranteed Energy Production during any Performance Measurement Period only to the extent of any Force Majeure events, Buyer’s failure to perform, or Dispatch Down Periods. For purposes of determining whether Seller has achieved the Guaranteed Energy Production, Seller shall be deemed to have delivered to Buyer an amount of Bundled Green Energy that it could reasonably have delivered to Buyer but was prevented from delivering to Buyer by reason of any Force Majeure events, Buyer’s failure to perform, or Dispatch Down Periods.] ***[For Dispatchable Product: Contact Quantity.*** The quantity of Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is [_____] MWh (“Contract Quantity”).]

(f) ***Contract Capacity.*** The “Contract Capacity” is the full generation capacity of the Project net of all Station Service which shall be ***[For As-Available Product: no less than [_____] MW and no greater than [_____] MW] [For Baseload, Peaking, or Dispatchable Product only: an amount determined periodically pursuant to a Capacity Test as set forth below].*** Throughout the Delivery Term, Seller shall sell and Schedule all Product associated with the Contract Capacity of the Project solely to Buyer, except in the case of an Event of Default of Buyer or an unexcused failure by Buyer to Schedule, receive, and pay for Product under Section 3.1(h)(ii) ***[If the Project is located outside of the CAISO: or the sale of Imbalance Energy to the Transmission Provider]. [For Dispatchable Product: Throughout the Delivery Term, Seller shall make the Contract Capacity available solely to Buyer at all times, except in the case of an Event of Default of Buyer or an unexcused failure by Buyer to Schedule, receive, and pay for Product under Section 3.1(h)(ii) [If the Project is located outside of the CAISO: or the sale of Imbalance Energy to the Transmission Provider].]***

(i) ***[For Baseload, Peaking, Dispatchable Product: Initial Capacity Testing.*** Upon no less than fourteen (14) days prior Notice to Buyer, Seller shall schedule and complete a Capacity Test prior to the Initial Delivery Date for the Project. Such initial Capacity Test shall establish the Contract Capacity for the Project for the first Contract Year.]

(ii) ***[For Baseload, Peaking, Dispatchable Product: Annual Capacity Testing.*** Thereafter, at least once per Contract Year within the first quarter of each Contract Year, upon no less than 14 days prior Notice to Buyer, Seller shall schedule and complete a Capacity Test. In addition, Buyer shall have the right to require a retest of the Capacity Test at any time upon five (5) days prior written Notice to Seller if Buyer reasonably believes that the actual Contract Capacity has varied materially from the results of the most recent tests. Seller shall have

the right to run a retest of the Capacity Test at any time upon two (2) days prior written Notice to Buyer (or any shorter period reasonably acceptable to Buyer consistent with Good Industry Practices).]

(iii) ***[For Baseload, Peaking, Dispatchable Product: Witness at Capacity Tests***. Buyer shall have the right to send one or more representative(s) to witness all Capacity Tests.]

(iv) ***[For Baseload, Peaking, Dispatchable Product: Capacity Test Reporting***. No later than fourteen (14) days following any Capacity Test, Seller shall submit a testing report detailing results and findings of the test. The report shall include meter readings and plant log sheets verifying the operating conditions and output of the Project. The Contract Capacity determined pursuant to a Capacity Test shall become the new Contract Capacity at the beginning of the day following the completion of the test for all purposes under this Agreement.]

(v) ***[For Baseload, Peaking, Dispatchable Product: Capacity Test Costs and Payments***. Buyer shall pay the [Monthly Energy Payment] in respect of the Product produced during the initial Capacity Test prior to the Initial Delivery Date and each annually scheduled Capacity Test thereafter. In addition, Buyer shall pay the [Monthly Energy Payment] in respect of the Product produced during any other Buyer requested test unless the results of such test demonstrate that the actual Contract Capacity has varied by more than two percent (2%) from the results of the most recent tests, in which case Buyer shall pay the lesser of the [Monthly Energy Payment] in respect of the Product produced during such test and the applicable CAISO real-time hourly average energy price. In addition, Buyer shall pay the lesser of the [Monthly Energy Payment] in respect of the Product produced during any Seller requested test and the applicable CAISO real-time hourly average energy price]. Buyer is responsible for all costs, expenses and fees payable or reimbursable to its representative(s) witnessing Capacity Testing. All other costs of any Capacity Tests shall be borne by Seller.]

(g) ***Project***. All Product provided by Seller pursuant to this Agreement shall be supplied from the Project only ***[If the Project is located outside of the CAISO: except with respect to Imbalance Energy from the Transmission Provider]***. Other than maintenance in accordance with Good Industry Practices, Seller shall not make any alteration or modification to the Project which results in a change to the Contract Capacity of the Project or any other material changes to the Project without Buyer's prior written consent. The Project is further described in Exhibit A.

(h) ***Performance Excuses***.

(i) ***Seller Excuses***. The performance of Seller to Schedule, deliver, and sell the Product shall be excused only for the reasons set forth in the definition of ***[Seller to select: "As-Available" or "Unit Firm"]***. If Seller fails to Schedule, deliver, or sell all or part of the Product, for a period or a series of periods that is cumulatively longer than thirty (30) days, and such failure is not excused as described above, then such failure shall be an Event of Default. If Seller fails to Schedule, deliver, or sell all or part of the Product for any period prior to an Early Termination Date, and such failure is not excused as described above, then Seller shall pay Buyer, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency equal to the positive difference, if any, obtained by

subtracting (A) the product of the Energy Price [*For TOD Pricing Only:* times the weighted average TOD Factor for such period of Product deficiency] times the Product deficiency, from (B) the product of the Replacement Price times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

(ii) Buyer Excuses. The performance of Buyer to Schedule, receive, and pay for the Product shall be excused only (A) during periods of Force Majeure, (B) by Seller's failure to perform or (C) during Dispatch Down Periods [*For all Products other than Dispatchable Product:* (except that Buyer shall not be excused from paying for the Product as required under Section 3.4 during periods of Economic Dispatch Down)]. If Buyer fails to Schedule, receive, or purchase all or part of the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described above, then such failure shall be an Event of Default. If Buyer fails to Schedule, receive, or purchase all or part of the Product for any period prior to an Early Termination Date and such failure is not excused as described above, then Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency equal to the positive difference, if any, obtained by subtracting (Y) the product of the Sales Price times the Product deficiency from (Z) the product of the Energy Price [*For TOD Pricing Only:* times the weighted average TOD Factor for such period of Product deficiency] times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

(i) Green Attributes. Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project. For all electric generation using biomethane as fuel, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane if the capture and destruction is required by Law. If the capture and destruction of the biomethane is not required by Law, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane, unless the environmental attributes associated with the capture and destruction of the biomethane pursuant to that contract are transferred to Buyer and retired on behalf of the retail customers consuming the electricity associated with the use of that biomethane, or unless Seller's procurement contract with the source of biomethane prohibits the source of biomethane from separately marketing the environmental attributes associated with the capture and destruction of the biomethane sold pursuant to that contract, and such attributes have been retired.

(j) Resource Adequacy. During the Delivery Term, Seller grants, pledges, assigns and otherwise commits to Buyer all of the Project's Contract Capacity, including Capacity Attributes, from the Project for Buyer to use in meeting its Resource Adequacy or successor program requirements, as the CPUC, CAISO or other regional entity may prescribe. Seller understands that the CPUC is currently in the process of developing requirements for Resource

Adequacy and these requirements and the implementation thereof have not been finalized. Seller agrees that it shall take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to enable Buyer to use all of the Contract Capacity, including Capacity Attributes, to be committed by Seller to Buyer pursuant to this Agreement for the Resource Adequacy requirements of Buyer. Seller agrees that the Project is subject to the terms of the Availability Standards.

(k) WREGIS. Prior to the initial delivery of Energy to Buyer, Seller shall register the Project in WREGIS, execute a CAISO Qualified Reporting Entity Service Agreement to allow CAISO, on the Seller's behalf, to upload generation information directly into WREGIS, and take all other actions necessary to ensure that the Green Attributes produced from the Project in an amount equal to the amount of Delivered Energy are issued and tracked for purposes of satisfying the requirements of the California Renewable Portfolio Standard and transferred to Buyer, including payment of all fees required to register the facility in WREGIS, issue WREGIS certificates, and transfer such certificates to Buyer. Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in WREGIS will be taken prior to the first delivery under the Agreement.

(l) Prevailing Wage. To the extent applicable, Seller shall comply with the prevailing wage requirements of California Public Utilities Code Section 399.13, subdivision (h).

3.2 Transmission.

(a) Seller's Transmission Service Obligations. During the Delivery Term, Seller shall arrange and be responsible for transmission service for delivery of the Product to and at the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission losses, and any transmission outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods. *[For Projects located outside of CAISO: Seller shall obtain and maintain during the Delivery Term firm transmission service to deliver the Product from the Site to the Delivery Point from all intermediary Transmission Providers between the Site and the Delivery Point. At Buyer's request, Seller shall provide to Buyer a copy of all firm transmission service agreements and any amendments thereto.]* Seller shall fulfill all contractual, metering and applicable interconnection requirements, including those set forth in Participating Transmission Owner's applicable tariffs, the CAISO Tariff and implementing CAISO standards and requirements, including, but not limited to, executing applicable interconnection agreements, Participating Generator Agreement and Meter Service Agreement so as to be able to deliver Energy to the CAISO Grid. Seller shall arrange for any interconnection agreement with the CAISO and such interconnection agreement is separate and not a part of this Agreement.

(b) Buyer's Transmission Service Obligations. During the Delivery Term, Buyer shall arrange and be responsible for transmission service for delivery of the Product from the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission losses, and any transmission outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods.

(c) Congestion Charges. Seller shall be responsible for all costs of congestion for transmission of the Product up to and at the Delivery Point. Buyer shall be responsible for all costs of congestion for transmission of the Product from the Delivery Point. To the extent that Seller is reimbursed for or receives any refunds, credits, or benefits from the CAISO for congestion charges or losses in respect of transmission of the Product from the Delivery Point, whether due to differences between the locational marginal pricing at the Delivery Point and Buyer's load aggregation point or any other point downstream of the Delivery Point, congestion revenue rights associated with any transmission path downstream of the Delivery Point, or any other hedging instruments associated with the transmission of the Product from the Delivery Point (collectively, any such refunds, credits or benefits are referred to as "Reductions"), then, at Buyer's option, either (i) Seller shall transfer any such Reductions and their related rights to Buyer; or (ii) Buyer shall reduce payments due to Seller under this Agreement in amounts equal to the Reductions and Seller shall retain the Reductions.

3.3 Scheduling.

(a) ***[For As-Available intermittent Product only: VER Forecasting Program Requirements.*** Seller shall cause the Project to become a Participating Intermittent Resource including executing all necessary documents to become a Participating Intermittent Resource. Seller shall be responsible for all CAISO forecasting fees and related charges associated with the Project becoming a Participating Intermittent Resource and participating in the VER Forecasting Program. Seller and Buyer shall comply with the VER Forecasting Program, and all additional protocols issued by the CAISO relating to Participating Intermittent Resources, including the VER Forecasting Program, for the Delivery Term. Seller shall provide Buyer with a copy of the notice from the CAISO certifying the Project as a Participating Intermittent Resource prior to the Initial Delivery Date. In the event that the VER Forecasting Program or the CAISO Tariff and/or any protocols relating thereto are changed, amended, modified replaced or terminated, Seller and Buyer agree to comply with such revisions and, to the extent practical, to implement such revisions in a manner that maintains the relative economic positions of the Parties as of the date of this Agreement.]

(b) Scheduling Coordinator.

[When Seller is SC for the Project, include the following two paragraphs:

(i) Seller as Scheduling Coordinator for the Project. During the Delivery Term, Seller shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to schedule and deliver the Product to the Delivery Point and Buyer shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to schedule and receive the Product at the Delivery Point. Throughout the Delivery Term, Buyer and Seller shall submit inter-SC trades for scheduling all Product from the Project at the Delivery Point (including Energy, Integrated Forward Market Load Uplift Obligations in respect of self-scheduled Energy, and other Product from time to time contemplated under the CAISO Tariff to be subject to inter-SC trades), based on a final Schedule developed in compliance with this Agreement. During the Delivery Term, each Party or each Party's SC shall conduct all Scheduling in accordance with the operating procedures developed by the Parties pursuant to Section 3.9 and in full compliance with the applicable CAISO Tariff, protocols and Scheduling practices for

Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. ***[For As-Available intermittent Product only:*** Whenever the VER Forecasting Program is available, Seller shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program.] In all cases, ***[For all Products other than Dispatchable:*** consistent with its Economic Dispatch Down curtailment rights,] Buyer may direct the Scheduling Coordinator to submit, and Seller shall cause the Scheduling Coordinator to submit in accordance with such Buyer's directions, a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO. It is the intent of the Parties that neither Party be subject to a double payment or a double charge for Product from the Project through this Agreement and CAISO settlement process and that the more detailed Scheduling and operating procedures developed pursuant to Section 3.9 complement the CAISO settlement process to produce a final economic result between them that is consistent with the fundamental transaction of this Agreement.

(ii) CAISO Costs and Revenues. Seller shall be responsible for CAISO costs (including penalties and other charges) and shall be entitled to all CAISO revenues (including credits and other payments) as the Scheduling Coordinator for the Project, in each case, associated with Imbalance Energy, including all CAISO charges or penalties incurred as a consequence of the Project not being available, the Seller not notifying the CAISO and Buyer of outages in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7), any other failure by Seller to abide by the CAISO Tariff, and any other deviations between Delivered Energy and Scheduled Energy that are attributable to Seller, the Project, or any event, circumstance, act, or incident occurring prior to or at the Delivery Point, including without limitation uninstructed deviation penalties. The Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, the cost of the sanctions or penalties shall be the Seller's responsibility. Buyer shall be entitled to all credits, payments, or revenues from the CAISO in respect of the Contract Energy from the Project, including revenues associated with CAISO dispatches, inter-SC trade credits, and bid cost recovery.

[When SDG&E is SC for the Project, include the following seven paragraphs:

(iii) Buyer as Scheduling Coordinator for the Project. [During the Delivery Term], Buyer shall be the Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with the CAISO for the Project for both the delivery and the receipt of the Product at the Delivery Point. At least thirty (30) days prior to the [Initial Delivery Date of the Project], Seller shall take all actions and execute and deliver to Buyer and the CAISO all documents necessary to authorize or designate Buyer as Seller's Scheduling Coordinator for the Project effective as of [the beginning of the Delivery Term]. [During the Delivery Term], Seller shall not authorize or designate any other party to act as Seller's Scheduling Coordinator, nor shall Seller perform for its own benefit the duties of Scheduling Coordinator, and Seller shall not revoke Buyer's authorization to act as Seller's Scheduling Coordinator unless agreed to by Buyer. Buyer (as Seller's SC) shall submit Schedules to the CAISO based on the final Schedule developed in accordance with this Agreement, the operating procedures developed

by the Parties pursuant to Section 3.9, and the applicable CAISO Tariff, protocols and Scheduling practices for Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. **[For As-Available intermittent Product only:** Buyer (as Seller's SC) shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program whenever the VER Forecasting Program is available, and consistent with Buyers' best estimate based on the information reasonably available to Buyer including Buyer's forecast whenever the VER Forecasting Program is not available.] In all cases, **[For all Products other than Dispatchable:** consistent with its Economic Dispatch Down curtailment rights,] Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO.

(iv) Notices. Buyer (as Seller's SC) shall provide Seller with access to a web based system through which Seller shall submit to Buyer and the CAISO all notices and updates required under the CAISO Tariff regarding the Project's status, including, but not limited to, all outage requests, forced outages, forced outage reports, clearance requests, or must offer waiver forms. In accordance with Section 3.7 and this Section 3.2, Seller will cooperate with Buyer to provide such notices and updates. If the web based system is not available, Seller shall promptly submit such information to Buyer and the CAISO (in order of preference) telephonically, by electronic mail, or facsimile transmission to the personnel designated to receive such information.

(v) CAISO Costs and Revenues. Except as otherwise set forth below, **[For all Products other than Dispatchable Product:** in Section 3.4(c)(ii),] and elsewhere in this Agreement, Buyer (as Seller's SC) shall be responsible for CAISO costs (including penalties, **[For As-Available Product VER Forecasting Program Participants only:** Negative Imbalance Energy costs or revenues,] and other charges) and shall be entitled to all CAISO revenues (including credits, **[For As-Available Product VER Forecasting Program Participants only:** Positive Imbalance Energy revenues or costs,] and other payments) as the Scheduling Coordinator for the Project, including revenues associated with CAISO dispatches, bid cost recovery, inter-SC trade credits, or other credits in respect of the Product Scheduled or delivered from the Project; provided, however that during periods when the Project is under curtailment for both System Dispatch Down and Economic Dispatch Down during the same CAISO settlement interval, Imbalance Energy costs and revenues shall be allocated in accordance with Section 3.4(c)(ii). **[For As-Available Product VER Forecasting Program Participants only:** Seller shall be responsible for all CAISO charges or penalties net of credits and payments (including without limitation all Imbalance Energy costs), in each case, resulting from the Seller not notifying the CAISO and Buyer (as Seller's SC) of outages or other unavailability of Project capacity in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7) or any other failure by Seller to abide by the CAISO Tariff.] **[For all Products other than As-Available Product VER Forecasting Program Participants:** Seller shall be responsible for all CAISO charges or penalties net of credits and payments, in each case, resulting from the Project not being available, the Seller not notifying the CAISO and Buyer (as Seller's SC) of outages in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7), any other failure by Seller to abide by the CAISO Tariff, and deviations between Delivered Energy and Scheduled Energy that are attributable to Seller, the Project, or any event, circumstance, act, or incident occurring prior to or at the Delivery Point, including without limitation uninstructed deviation penalties.] The Parties agree that any

Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, and any such sanctions or penalties are imposed upon the Project or to Buyer as Scheduling Coordinator due to the actions or inactions of Seller, the cost of the sanctions or penalties shall be the Seller's responsibility.

(vi) CAISO Settlements. Buyer (as Seller's SC) shall be responsible for all settlement functions with the CAISO related to the Project. Buyer shall render a separate invoice to Seller for any CAISO charges or penalties ("CAISO Charges Invoice") for which Seller is responsible under this Agreement. CAISO Charges Invoices shall be rendered after settlement information becomes available from the CAISO that identifies any CAISO charges. Notwithstanding the foregoing, Seller acknowledges that the CAISO will issue additional invoices reflecting CAISO adjustments to such CAISO charges. Seller shall pay the amount of CAISO Charges Invoices within ten Business Days of Seller's receipt of the CAISO Charges Invoice. If Seller fails to pay such CAISO Charges Invoice within that period, Buyer may net or offset any amounts owing to it for these CAISO Charges Invoices against any future amounts it may owe to Seller under this Agreement. The obligations under this section with respect to payment of CAISO Charges Invoices shall survive the expiration or termination of this Agreement.

(vii) Dispute Costs. Buyer (as Seller's SC) may be required to dispute CAISO settlements in respect of the Project. Seller agrees to pay Buyer's costs and expenses (including reasonable attorneys' fees, including reasonably allocated costs of in-house counsel of the Buyer) associated with its involvement with such CAISO disputes. In no event shall Buyer (or its third party designee, as Scheduling Coordinator) be liable to Seller for the actions, inactions, errors, or omissions of the CAISO or its agents in the performance of their scheduling functions and/or market operations.

(viii) Terminating Buyer's Designation as Scheduling Coordinator. At least thirty (30) days prior to expiration of this Agreement or as soon as reasonably practicable upon an earlier termination of this Agreement, the Parties will take all actions necessary to terminate the designation of Buyer as Scheduling Coordinator for the Project as of 11:59 p.m. on such expiration date.

(ix) Master File and Resource Data Template. Seller shall provide the data to the CAISO (and to Buyer) that is required for the CAISO's Master File and Resource Data Template (or successor data systems) for this Project consistent with this Agreement. Neither Party shall change such data without the other Party's prior written consent.]

(c) Annual Delivery Schedules. No later than forty-five (45) days before (A) the first day of the first Contract Year of the Delivery Term and (B) the beginning of each calendar year for every subsequent Contract Year during the Delivery Term, Seller shall provide a non-binding forecast of each month's average-day expected Delivered Energy, by hour, for the following calendar year.

(d) Monthly Delivery Schedules. Ten (10) Business Days before the beginning of each month during the Delivery Term, Seller shall provide a non-binding forecast of each day's average expected Delivered Energy, by hour, for the following month ("Monthly Delivery Forecast").

(e) Daily Delivery Schedules. By 5:30 AM Pacific Prevailing Time on the Business Day immediately preceding the date of delivery, Seller shall *[When Seller is SC for the Project: cause its Scheduling Coordinator to]* provide Buyer with a *[For As-Available intermittent Product only: non-binding forecast of the Project's available capacity (or if the VER Forecasting Program is not available for any reason, the expected Delivered Energy)]* *[For all Products other than As-Available intermittent: binding forecast of the expected Delivered Energy]* for each hour of the immediately succeeding day ("Day-Ahead Forecast") *[For all Products other than As-Available intermittent: [When Seller is SC for the Project: concurrent with delivery to the CAISO] [When SDGE is SC for the Project: and Buyer shall submit a Schedule to the CAISO consistent with such Day-Ahead Forecast], it being understood that, [For all Products other than Dispatchable: consistent with its Economic Dispatch Down curtailment rights,]* Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO]. A Day-Ahead Forecast provided in a day prior to any non-Business Day(s) shall include Schedules for the immediate day, each succeeding non-Business Day and the next Business Day. Each Day-Ahead Forecast shall clearly identify, for each hour, Seller's best estimate of *[For As-Available intermittent Product only: the Project's available capacity (or if the VER Forecasting Program is not available for any reason, the expected Delivered Energy)]* *[For all Products other than As-Available intermittent: the expected Delivered Energy]*. Seller may not change such Schedule past the deadlines provided in this section except in the event of a Forced Outage or Schedule change imposed by Buyer or the CAISO, in which case Seller shall promptly provide Buyer with a copy of any and all updates to such Schedule indicating changes from the then-current Schedule. These notices and changes to the Schedules shall be sent to Buyer's on-duty Scheduling Coordinator. If Seller fails to provide Buyer with a Day-Ahead Forecast as required herein, then for such unscheduled delivery period only Buyer shall rely on the delivery Schedule provided in the Monthly Delivery Forecast or Buyer's best estimate based on information reasonably available to Buyer and Seller shall be liable for Scheduling and delivery based on such Monthly Delivery Forecast or Buyer's best estimate.

(f) Real Time Delivery Schedules. Notwithstanding anything to the contrary herein, in the event Seller makes a change to its Schedule on the actual date of delivery for any reason including Forced Outages (other than a scheduling change imposed by Buyer or CAISO) which results in a change to its deliveries (whether in part or in whole), Seller shall notify Buyer immediately by calling Buyer's on-duty Scheduling Coordinator. Seller shall notify Buyer and the CAISO of Forced Outages in accordance with Section 3.7. Seller shall keep Buyer informed of any developments that will affect either the duration of the outage or the availability of the Project during or after the end of the outage.

(g) *[For Dispatchable Product Only: Availability Notices.* During the Delivery Term, no later than two (2) Business Days before each Schedule day for the day-ahead market in accordance with WECC scheduling practices, Seller shall provide Buyer with an hourly Schedule of the capacity that the Project is expected to have available for each hour of such

Schedule day (the “Availability Notice”). Seller will notify Buyer immediately if the available capacity of the Project may change after Buyer’s receipt of an Availability Notice. Seller shall accommodate Buyer’s reasonable requests for changes in the time of delivery of Availability Notices. Seller shall provide Availability Notices using the form developed by the Parties under Section 3.9 by (in order of preference) electronic mail, facsimile transmission or, telephonically to Buyer personnel designated to receive such communications.]

(h) ***[For Dispatchable Product Only: Dispatch Notices.*** Buyer or the CAISO will have the right to dispatch the Project, seven days per week and 24 hours per day (including holidays), by providing Dispatch Notices and updated Dispatch Notices to Seller electronically, subject to the requirements and limitations set forth in this Agreement, including the system requirements under Section 3.4(b) and the Project operating restrictions set forth in Exhibit E. Each Dispatch Notice will be effective unless and until Buyer modifies such Dispatch Notice by providing Seller with an updated Dispatch Notice. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and updated Dispatch Notices will be made in accordance with the timelines as specified in the CAISO Tariff.]

3.4 Dispatch Notices.

(a) **General.** Seller shall adjust delivery amounts as directed by the CAISO, the Participating Transmission Owner, Buyer, or a Transmission Provider during any Dispatch Down Period.

(b) **System Requirements.** Seller shall acquire, install, and maintain such facilities, communications links and other equipment, and implement such protocols and practices, as necessary (i) for Seller to respond and follow instructions, including an electronic signal conveying real time instructions, to operate the Project as directed by the Buyer and/or the CAISO, including to implement a System Dispatch Down or an Economic Dispatch Down in accordance with the then-current methodology used to transmit such instructions as it may change from time to time, and (ii) for Buyer and/or the CAISO to control the quantity of Product generated by the Project in order to implement a System Dispatch Down or an Economic Dispatch Down, in each case, in accordance with the then-current methodology used to transmit such instructions as it may change from time to time. As of the Execution Date, the systems required to comply with clause (i) include at a minimum the CAISO’s Automatic Dispatch System (as described in the CAISO website) and the systems required to comply with clause (ii) include at a minimum the CAISO’S Application Programming Interfaces (as described in the CAISO website). If at any time during the Delivery Term Seller’s facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies, Seller shall take all commercially reasonable steps necessary to become compliant as soon as possible. Seller shall be liable pursuant to Section ***[For all Products other than Dispatchable Product: 3.4(c)(ii)] [For Dispatchable Product: 3.3(b)(ii)/(iii)]*** for failure to comply with an order directing a Dispatch Down Period, during the time that Seller’s facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies. For the avoidance of doubt, an order directing a Dispatch Down Period via such systems and facilities shall have the same force and effect on Seller as any other form of communication. If an electronic submittal is not possible, Buyer and/or the CAISO may provide Dispatch Notices by (in order of preference) electronic mail, telephonically, or facsimile transmission to Seller’s personnel designated to receive such

communications, as provided by Seller in writing and Seller shall maintain communications systems necessary to permit such transmittal of Dispatch Notices. The Parties shall describe with more specificity the Economic Dispatch Down process (including the automated communication process for Dispatch Notices) in the operating procedures developed by the Parties pursuant to Section 3.9.

(c) ***[For all Products other than Dispatchable Product: Economic Dispatch Down.*** Each of Buyer and the CAISO has the right to order Seller to curtail deliveries of Energy from the Project to the Delivery Point for Economic Dispatch Down purposes, seven days per week and 24 hours per day (including holidays), by providing Dispatch Notices and updated Dispatch Notices to Seller electronically via the communications systems described in Section 3.4(b), subject to the requirements and limitations set forth in this Agreement, including the Project operating restrictions set forth in Exhibit E. Each Dispatch Notice will be effective unless and until Buyer (or the CAISO) modifies such Dispatch Notice by providing Seller with an updated Dispatch Notice. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and updated Dispatch Notices will be made in accordance with the timelines as specified in the CAISO Tariff. Seller agrees to adjust the Project's Delivered Energy as set forth in a Dispatch Notice that meets the requirements of Economic Dispatch Down.]

(i) ***[Buyer Payments.*** Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which any such Economic Dispatch Down occurred an amount equal to the positive difference, if any, of (Y) the product of the Energy Price, times ***[For TOD Pricing Only:*** the weighted average TOD Factor for such period of Economic Dispatch Down, times] the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down ***[For Projects receiving PTCs:*** plus the product of the after tax value of any lost PTC benefits (in dollars per megawatt hour) that Seller has not been able to mitigate after use of reasonable efforts, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down], minus (Z) the product of the positive value of the Sales Price, if received, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down. ***[For Projects receiving PTCs:*** Seller shall provide Buyer with documentation that establishes to Buyer's reasonable satisfaction (A) that Seller would have been entitled to receive PTCs for the Deemed Bundled Green Energy if it had actually been generated; and (B) the after tax value of any lost PTC benefits (in dollars per megawatt hour) due under this Section 3.4(c)(i).]

(ii) ***[Failure to Comply.*** If Seller fails to comply with a Dispatch Notice that is in compliance with this Agreement, then, for the deviation between the Delivered Energy and the amount set forth in the Dispatch Notice, Seller shall pay Buyer an amount equal to the sum of (A) + (B) + (C), where: (A) is the amount, if any, paid to Seller by Buyer for any Delivered Energy in excess of the amount set forth in the Dispatch Notice (for example, the Energy Price adjusted by TOD Factors), and (B) is all Imbalance Energy costs or charges (excluding any revenues or credits), and (C) is any penalties or other charges resulting from Seller's failure to comply with the Dispatch Notice.]

3.5 Standards of Care.

(a) General Operation. Seller shall comply with all applicable requirements of Law, the CAISO, NERC and WECC relating to the Project (including those related to safety, construction, ownership and/or operation of the Project).

(b) CAISO and WECC Standards. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs and protocols of the CAISO, (ii) WECC scheduling practices and (iii) Good Industry Practices.

(c) Reliability Standard. Seller agrees to abide by all (i) NERC, WECC and CAISO reliability requirements, including all such reliability requirements for generator owners and generator operators, and, if applicable, CPUC General Order No.167, “Enforcement of Maintenance and Operation Standards for Electrical Generating Facilities,” and (ii) all applicable requirements regarding interconnection of the Project, including the requirements of the interconnected Transmission Provider.

(d) CAISO Interconnection. Seller shall perform all studies, pay all fees, obtain all necessary approvals and execute all necessary agreements with the CAISO and the Participating Transmission Owner to Schedule and deliver the Product from the Project to the Delivery Point [*For Projects Providing Resource Adequacy*: under “Full Capacity Deliverability Status” (as defined in the CAISO Tariff)].

(e) Permitting. Seller shall maintain all Governmental Approvals and other approvals necessary for the construction, operation, and maintenance of the Project.

(f) Diverse Business Entities. At Buyer’s request, Seller shall provide information to Buyer relating to Seller’s or Seller’s contractor’s use, during Project construction or operation, of “Women-Owned Businesses” or “Minority-Owned Businesses” or “Disabled Veteran Business Enterprises” as defined in CPUC General Order 156, and the number of new employees hired by Seller or Seller’s contractors and the number of women, minority, and disabled veterans trained or hired by Seller or Seller’s contractor’s as contemplated under Cal. Public Utilities Code §910(a)(8), as each such group of entities and individuals may be amended from time to time or further defined, supplemented, or superseded by applicable Law or replaced with similar designations or certifications. [*Include other covenants related to “women-owned business” or “minority-owned business” as may be applicable to the Seller’s RFO bid.*]

3.6 Metering.

(a) CAISO Revenue Meter. All output from the Project per the terms of this Agreement must be delivered through a single CAISO revenue meter and that meter must be dedicated exclusively to the Project described herein. All Product purchased under this Agreement must be measured by the Project’s CAISO revenue meter to be eligible for payment under this Agreement. Seller shall bear all costs relating to all metering equipment reasonably necessary to accommodate the Project. In addition, Seller hereby agrees to provide all meter data to Buyer in a form acceptable to Buyer, and consents to Buyer obtaining from the CAISO the CAISO meter data applicable to the Project and all inspection, testing and calibration data and reports. Seller shall grant Buyer the right to retrieve the meter reads from the CAISO meter reporting website

and/or directly from the CAISO meter(s) at the Project site. If the CAISO makes any adjustment to any CAISO meter data for a given time period, Seller agrees that it shall submit revised monthly invoices, pursuant to Section 6.2, covering the entire applicable time period in order to conform fully such adjustments to the meter data. Seller shall submit any such revised invoice no later than thirty (30) days from the date on which the CAISO provides to Seller such binding adjustment to the meter data.

(i) Testing and Calibration. Seller shall perform or cause to be performed, at its expense, annual testing and calibration of the electric meters in accordance with Good Industry Practice and the CAISO Tariff. Seller shall give Buyer reasonable advance notice of any inspection, testing or calibration of the electric meters. Buyer shall have the right to have a representative or designee present at such inspection, test or calibration of the electric meters. Buyer shall have the right to require, at Buyer's expense, except as required below, a test of any of the electric meters not more often than two (2) times every twelve (12) months.

(ii) Inaccurate Meters. If any of the electric meters is deemed to be inaccurate under the Meter Service Agreement, deliveries shall be measured by reference to Seller's check-meters, if any are installed and registering accurately, or the meter readings for the period of inaccuracy shall be adjusted as far as can be reasonably ascertained by Seller from the best available data, subject to review and approval by Buyer. If the period of the inaccuracy cannot be ascertained reasonably, any such adjustment shall be for a period equal to one-half of the time elapsed since the preceding test by applying the percentage of inaccuracy so found. Seller shall promptly cause such electric meters to be corrected and, where such inaccuracy was determined pursuant to a test required by Buyer, Seller shall bear the expense of any such test.

(iii) Delivered MWh Adjustments. In the event that, due to correction for inaccurate electric meters deemed to be inaccurate under the Meter Service Agreement, the Delivered Energy is increased or decreased, the revised Delivered Energy shall be used for purposes of calculating payments. If any of such amounts for any period have already been calculated using the previous amount of Delivered Energy, they shall be recalculated using the revised amount of Delivered Energy. If the recalculation changes the amount payable for the period in question, revised payments shall be made by Buyer or Seller, as applicable, in accordance with Section 6.2.

(b) Real Time Telemetry. Seller shall install, activate and maintain metering, communication and telemetry equipment for the Project in a centralized system to which Buyer shall have real time access. Seller shall link its system to Buyer via an approved Buyer communication network, utilizing existing industry standard network protocol, as reasonably approved by Buyer. Seller shall correct any problems with such equipment as soon as practicable.

(c) *[The following section is for As-Available Intermittent Products only]* Meteorological Station. Seller, at its own expense, shall install and maintain such stand-alone meteorological stations at the Project as may be required under the VER Forecasting Program and the CAISO Tariff to monitor and report weather data to both the CAISO and Buyer's weather station data collection system. Each station shall be equipped with instruments and equipment that meet the specifications of the VER Forecasting Program and shall measure, collect, record, format, and communicate the data required under the VER Forecasting Program. Seller shall submit to

Buyer for review and approval, which shall not be unreasonably withheld, its technical specifications for the meteorological station along with a site plan showing the location of the station within the Project. Seller shall correct any problems with such equipment as soon as practicable.

3.7 Outage Notification.

(a) Planned Outages. Seller shall schedule Planned Outages for the Project in accordance with Good Industry Practices and with the prior written consent of Buyer, which consent may not be unreasonably withheld or conditioned. The Parties acknowledge that in all circumstances, Good Industry Practices shall dictate when Planned Outages should occur. Seller shall notify Buyer of its proposed Planned Outage schedule for the Project for the following calendar year by submitting a written Planned Outage schedule no later than October 1st of each year during the Delivery Term. The Planned Outage schedule is subject to Buyer's approval, which approval may not be unreasonably withheld or conditioned. Buyer shall promptly respond with its approval or with reasonable modifications to the Planned Outage schedule and Seller shall use its best efforts in accordance with Good Industry Practices to accommodate Buyer's requested modifications. Notwithstanding the submission of the Planned Outage schedule described above, Seller shall also submit a completed Outage Notification Form to Buyer no later than fourteen (14) days prior to each Planned Outage and all appropriate outage information or requests to the CAISO in accordance with the CAISO Tariff. Seller shall contact Buyer with any requested changes to the Planned Outage schedule if Seller believes the Project must be shut down to conduct maintenance that cannot be delayed until the next scheduled Planned Outage consistent with Good Industry Practices. Seller shall not change its Planned Outage schedule without Buyer's approval, not to be unreasonably withheld or conditioned. Seller shall use its best efforts in accordance with Good Industry Practices not to schedule Planned Outages during the months of July, August, September and October. At Buyer's request, Seller shall use commercially reasonable efforts to reschedule Planned Outage so that it may deliver Product during CAISO declared or threatened emergency periods. Seller shall not substitute Energy from any other source for the output of the Project during a Planned Outage.

(b) Forced Outages. Within *[When Seller is the SC for the Project: Within two hours of any Forced Outage,] [When SDG&E is the SC for the Project: Within one-half of the notification time prescribed under the CAISO Tariff for Forced Outages,]* Seller shall submit a completed Outage Notification Form to the Buyer in accordance with the instructions shown on the form and shall submit outage information to the CAISO in accordance with the CAISO Tariff *[When SDG&E is the SC for the Project: and Section 3.3(b)(ii) above].* Seller shall not substitute Energy from any other source for the output of the Project during a Forced Outage.

(c) Coordination with CAISO. Seller shall be responsible *[When SDG&E is SC for the Project: in accordance with Section 3.3(b)(ii)]* for all outage coordination communications with the CAISO. Buyer shall cooperate with Seller in arranging and coordinating all Project outages with the CAISO.

3.8 Operations Logs and Access Rights.

(a) Operations Logs. Seller shall maintain a complete and accurate log of all material operations and maintenance information on a daily basis. Such log shall include, but not be limited to, information on power production, fuel consumption, efficiency, availability, maintenance performed, outages, results of inspections, manufacturer recommended services, replacements, electrical characteristics of the generators, control settings or adjustments of equipment and protective devices. Seller shall maintain this information for at least two (2) years and shall provide this information electronically to Buyer within one day of Buyer’s request.

(b) Access Rights. Buyer, its authorized agents, employees and inspectors shall have the right of ingress to and egress from the Project during normal business hours upon reasonable advance Notice and for any purposes reasonably connected with this Agreement.

3.9 Operating Procedures. No later than forty-five (45) days before the Initial Delivery Date, and from time to time as reasonably determined necessary by the Parties, the Parties shall meet to address how each Party will perform its respective obligations under this Agreement, including, but not limited to: (1) the method of day-to-day communications; (2) key personnel lists for each Party; (3) procedures for Forced Outage and Planned Outage reporting; (4) procedures for delivery forecasting; (5) procedures for record keeping; (6) Scheduling procedures; and (7) invoicing and payment procedures; provided, that the failure to agree on these operating procedures will not relieve the Parties of their respective obligations under this Agreement, and any failure to agree shall be resolved in accordance with the dispute resolution procedures in Article 12.

ARTICLE FOUR: COMPENSATION; MONTHLY PAYMENTS

4.1 *[For Dispatchable Product Only: Capacity Payment.*

(a) Capacity Price.

Contract Year	Capacity Price (\$/KW)
1	

(b) Monthly Capacity Payment. For each month, Buyer shall pay Seller for the Product the amount calculated as follows (“Monthly Capacity Payment”):

$$MCP = CC \times CP \times SF \times AAF$$

Where:

MCP is the Monthly Capacity Payment expressed in Dollars for such month of the Delivery Term.

CC is the Contract Capacity, expressed in kW, rounded to the nearest 100 kW.

CP is the Capacity Price expressed in Dollars per kW-year, for the applicable month.

SF is the Monthly Shaping Factor for the applicable month, as set forth in the following table:

Month	Monthly Shaping Factor (%)
January	6.7
February	5.0
March	5.0
April	5.8
May	6.3
June	8.3
July	15.8
August	17.5
September	11.7
October	5.8
November	5.8
December	6.3

AAF is the Availability Adjustment Factor for each month, expressed as a three-place decimal and determined as follows:

- (a) If the Equivalent Availability Factor (“EAF”) for the month is less than or equal to 0.980, then the AAF equals EAF / 0.98.
- (b) If the EAF for the month is greater than 0.980 but less than 0.990, then the AAF equals 1.0.
- (c) If the EAF for the month is greater than or equal to 0.990, then the AAF equals EAF / 0.99.

EAF is the Equivalent Availability Factor for each month determined as follows:

$$EAF = (PH - (EDH - EEDH)) / PH$$

Where:

PH is the number of period hours;

EDH is the number of equivalent derate hours calculated as the sum, for each derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the Contract Capacity divided by the Contract Capacity for the month. For the purposes of this calculation, a derate includes all outages for any reason, including without limitation, Forced Outages, Force Majeure events, Dispatch Down Periods, Planned Outages, Buyer’s failure to perform, and other times when any portion of the Contract Capacity is not available and when the Delivered Energy of the Project is less than the amount of Energy dispatched by Buyer; and

EEDH is the number of equivalent excused derate hours solely due to either Dispatch Down Periods or Buyer’s failure to perform (and for no other reason), calculated as the sum, for each excused derate, of the product of the number of hours of full or partial derate hours times the size of the reduction from the Contract Capacity, divided by the Contract Capacity for the month.

4.2 Energy Payment.

(a) Energy Price. The price for the Bundled Green Energy and Deemed Bundled Green Energy that is delivered to Buyer in each Contract Year shall be as follows (“Energy Price”):

Contract Year	Energy Price (\$/MWh)

provided, however, that:

(i) if Seller delivers Bundled Green Energy in the aggregate for any CAISO settlement interval (not to exceed one hour) in excess of the product of the Contract Capacity times the length of such settlement interval, expressed in hours, then the Energy Price for such excess Bundled Green Energy in such settlement interval shall be reduced to zero dollars (\$0), and if the real time Locational Marginal Price for the Delivery Point during such settlement interval is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times such excess Bundled Green Energy;

(ii) if Seller delivers Bundled Green Energy plus Deemed Bundled Green Energy in the aggregate for any Contract Year during the Delivery Term in excess of one hundred fifteen percent (115%) of the annual Contract Quantity, then the Energy Price for such excess Bundled Green Energy and Deemed Bundled Green Energy, if any, for each settlement interval for the remainder of that Contract Year shall be reduced to zero dollars (\$0) and Seller

shall be entitled to the CAISO revenues (including positive Locational Marginal Prices, credits and other payments) in respect of such excess amounts and Seller shall be responsible for the CAISO costs (including negative Locational Marginal Prices, penalties, sanctions and other charges) in respect of such excess amounts.

(iii) if Seller delivers Bundled Green Energy if Seller delivers Bundled Green Energy plus Deemed Bundled Green Energy in the aggregate for any TOD Period during the Delivery Term in excess of one hundred fifteen percent (115%) of the TOD Delivery Cap listed in the table below for that TOD Period (“TOD Delivery Cap”), then the Energy Price for such excess Bundled Green Energy and Deemed Bundled Green Energy, if any, in such TOD Period shall be reduced to zero dollars (\$0), and for each CAISO settlement interval during that time in which the real time Locational Marginal Price is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times the Bundled Green Energy delivered during such settlement interval:

TOD Period	TOD Delivery Cap
Winter On-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Winter Semi-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Winter Off-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Summer On-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]

Summer Semi-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Summer Off-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]

(b) ***[For TOD Pricing Only: TOD Factors and TOD Periods.*** In accordance with all other terms of this Article 4, the Energy Price shall be adjusted by the following Time of Delivery Factors (“TOD Factors”) for each of the specified Time of Delivery Periods (“TOD Periods”) in which Energy is delivered:]

[For Projects Providing Local Resource Adequacy:

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.638
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.541
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.823
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.943
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.819
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.963

[For Projects Providing System Resource Adequacy or For Projects Providing Resource Adequacy in Imperial Valley:

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.639
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.550
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.841
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.841
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.792
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.967

[For Projects Not Providing Resource Adequacy:

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.641
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.562
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.864
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.714
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.758

Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.971
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(c) Monthly Energy Payment. For each month, Buyer shall pay Seller for the Product an amount equal to the sum for each hour in the month of the product of the Energy Price **[For TOD Pricing Only: times the TOD Factor for the applicable TOD Period]** times the sum of Bundled Green Energy plus Deemed Bundled Green Energy in each hour (“Monthly Energy Payment”).

$$\text{Monthly Energy Payment} = \sum \text{Energy Price} \times \text{[For TOD Pricing Only: TOD Factor} \times \text{] (Bundled Green Energy} + \text{Deemed Bundled Green Energy)}$$

For any period where the quantity of Bundled Green Energy is less than the quantity of Delivered Energy and the quantity of Bundled Green Energy cannot practicably be determined for each settlement interval during such period (for example, where WREGIS does not specify in which settlement intervals Renewable Energy Credits were delivered or not delivered), then the quantity of Bundled Green Energy for any settlement interval during the entire period shall be equal to the product of the quantity of Delivered Energy for a settlement interval multiplied by the quotient of the aggregate quantity of Green Attributes that are delivered to Buyer during such entire period divided by the aggregate quantity of Delivered Energy that is delivered to Buyer during such entire period.

4.3 Imbalance Energy. Seller shall use commercially reasonable efforts to deliver Energy in accordance with the Scheduled Energy. Buyer and Seller recognize that from time to time the amount of Delivered Energy will deviate from the amount of Scheduled Energy. When Delivered Energy minus Scheduled Energy is a positive amount, it shall be considered “Positive Imbalance Energy;” when Delivered Energy minus Scheduled Energy is a negative amount, the absolute (i.e., positive) value of that amount shall be considered the “Negative Imbalance Energy.” **[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program:** Seller shall be responsible for settlement of Imbalance Energy with the CAISO and all fees, liabilities, assessments, or similar charges assessed by the CAISO in connection with Imbalance Energy.] Buyer and Seller shall cooperate to minimize charges and imbalances associated with Imbalance Energy to the extent possible. Seller shall promptly notify Buyer as soon as possible of any material imbalance that is occurring or has occurred. **[When SDG&E is SC for the Project and Project is in the VER Forecasting Program:** Buyer shall receive all Green Attributes for the Positive Imbalance Energy in all settlement intervals.]

[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program, include the following two paragraphs:

(a) Positive Imbalance Energy (Over Deliveries). In the event that Delivered Energy for any CAISO settlement interval is equal to or greater than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Positive Imbalance Energy. Buyer shall receive all Green Attributes for the Positive Imbalance Energy in such CAISO settlement interval regardless as to whether it was sold into the CAISO. Seller shall

be entitled to all payments or credits from the CAISO to Seller's SC and Seller shall make all payments to the CAISO in respect of the Positive Imbalance Energy.

(b) Negative Imbalance Energy (Under Deliveries). In the event that Delivered Energy for any CAISO settlement interval is less than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Negative Imbalance Energy. Seller shall make all payments to the CAISO and Seller shall be entitled to all payments or credits from the CAISO to Seller's SC in respect of the Negative Imbalance Energy required under the CAISO Tariff.]

4.4 Additional Compensation. To the extent not otherwise provided for in this Agreement, in the event that Seller is compensated by a third party for any Product produced by the Project, including, but not limited to, compensation for Resource Adequacy or Green Attributes, Seller shall remit all such compensation directly to Buyer; provided that for avoidance of doubt, nothing herein precludes Seller from retaining credits related to transmission upgrades funded by Seller.

ARTICLE FIVE: EVENTS OF DEFAULT; FORCE MAJEURE

5.1 Events of Default. An "Event of Default" shall mean,

(a) with respect to a Party that is subject to the Event of Default the occurrence of any of the following:

(i) the failure by such Party to make, when due, any payment required pursuant to this Agreement and such failure is not remedied within five (5) Business Days after Notice thereof;

(ii) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and such default is not remedied within thirty (30) days after Notice thereof;

(iii) the failure by such Party to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default, and except for such Party's unexcused failure to perform its obligations to Schedule, deliver, or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively no longer than thirty (30) days, the exclusive remedy for which is provided in Section 3.1(h)) and such failure is not remedied within thirty (30) days after Notice thereof;

(iv) the failure by such Party to perform its obligations to Schedule, deliver or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described in Section 3.1(h);

(v) such Party becomes Bankrupt;

(vi) such Party assigns this Agreement or any of its rights hereunder other than in compliance with Section 13.2; or

(vii) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of Law or pursuant to an agreement reasonably satisfactory to the other Party.

(b) with respect to Seller as the Defaulting Party, the occurrence of any of the following:

(i) if at any time, Seller delivers or attempts to deliver to the Delivery Point for sale under this Agreement Energy that was not generated by the Project *[If the Project is located outside of the CAISO: other than Imbalance Energy from the Transmission Provider]*;

(ii) *[For Baseload, Peaking, Dispatchable Product: the Contract Capacity at the Initial Delivery Date or at any other time pursuant to a Capacity Test is less than [] MW and such default is not remedied within thirty (30) days after Notice thereof;]*

(iii) *[For Baseload, Peaking, As-Available Product: the failure by Seller to achieve the Guaranteed Energy Production requirement during any Performance Measurement Period as set forth in Section 3.1(e) of this Agreement] [For Dispatchable Product: the Default Availability Factor of the Project is less than [] percent for any rolling twelve (12) consecutive calendar month period];*

(iv) failure by Seller to satisfy the collateral requirements pursuant to Sections 8.3 or 8.4 of this Agreement;

(v) with respect to any Guaranty provided for the benefit of Buyer, the failure by Seller to provide for the benefit of Buyer either (1) cash, (2) a replacement Guaranty from a different Guarantor meeting the criteria set forth in the definition of Guarantor, or (3) a replacement Letter of Credit from an issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:

(A) if any representation or warranty made by the Guarantor in connection with this Agreement is false or misleading in any material respect when made or when deemed made or repeated, and such default is not remedied within thirty (30) days after Notice thereof;

(B) the failure of the Guarantor to make any payment required or to perform any other material covenant or obligation in any Guaranty;

(C) the Guarantor becomes Bankrupt;

(D) the Guarantor shall fail to meet the criteria for an acceptable Guarantor as set forth in the definition of Guarantor;

(E) the failure of the Guaranty to be in full force and effect (other than in accordance with its terms) prior to the indefeasible satisfaction of all obligations of Seller hereunder; or

(F) the Guarantor shall repudiate, disaffirm, disclaim, or reject, in whole or in part, or challenge the validity of any Guaranty; or

(vi) with respect to any outstanding Letter of Credit provided for the benefit of Buyer that is not then required under this Agreement to be canceled or returned, the failure by Seller to provide for the benefit of Buyer either (1) cash, or (2) a substitute Letter of Credit from a different issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:

(A) the issuer of the outstanding Letter of Credit shall fail to maintain a Credit Rating of at least “A-” by S&P or “A3” by Moody’s;

(B) the issuer of such Letter of Credit becomes Bankrupt;

(C) the issuer of the outstanding Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit and such failure shall be continuing after the lapse of any applicable grace period permitted under such Letter of Credit;

(D) the issuer of the outstanding Letter of Credit shall fail to honor a properly documented request to draw on such Letter of Credit;

(E) the issuer of the outstanding Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit;

(F) such Letter of Credit fails or ceases to be in full force and effect at any time; or

(G) Seller shall fail to renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit and as provided in accordance with this Agreement, and in no event less than sixty (60) days prior to the expiration of the outstanding Letter of Credit.

5.2 Remedies; Declaration of Early Termination Date. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party (“Non-Defaulting Party”) shall have the right (a) to send Notice, designating a day, no earlier than the day such Notice is deemed to be received and no later than twenty (20) days after such Notice is deemed to be received, as an early termination date of this Agreement (“Early Termination Date”) that terminates this Agreement and ends the Delivery Term effective as of the Early Termination Date, to accelerate all amounts owing between the Parties, and to collect liquidated damages calculated in accordance with Section 5.3 below (“Termination Payment”); (b) to withhold any

payments due to the Defaulting Party under this Agreement; (c) to suspend performance; and (d) to exercise any other right or remedy available at law or in equity, including specific performance or injunctive relief, except to the extent such remedies are expressly limited under this Agreement.

5.3 Termination Payment. The Termination Payment for a Terminated Transaction shall be the aggregate of all Settlement Amounts plus any or all other amounts due to the Non-Defaulting Party netted into a single amount. Except in the case of a termination of this Agreement by the Non-Defaulting Party solely as a result of an Event of Default by the Defaulting Party under Section 5.1(a)(iv) [Bankruptcy], if the Non-Defaulting Party's aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement, the Termination Payment shall be zero. The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for the Terminated Transaction as of the Early Termination Date. Third parties supplying information for purposes of the calculation of Gains or Losses may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information. The Settlement Amount shall not include consequential, incidental, punitive, exemplary, indirect or business interruption damages; provided, however, that any lost Capacity Attributes and Green Attributes shall be deemed direct damages covered by this Agreement. Without prejudice to the Non-Defaulting Party's duty to mitigate, the Non-Defaulting Party shall not have to enter into replacement transactions to establish a Settlement Amount. Each Party agrees and acknowledges that (a) the actual damages that the Non-Defaulting Party would incur in connection with a Terminated Transaction would be difficult or impossible to predict with certainty, (b) the Termination Payment described in this section is a reasonable and appropriate approximation of such damages, and (c) the Termination Payment described in this section is the exclusive remedy of the Non-Defaulting Party in connection with a Terminated Transaction but shall not otherwise act to limit any of the Non-Defaulting Party's rights or remedies if the Non-Defaulting Party does not elect a Terminated Transaction as its remedy for an Event of Default by the Defaulting Party.

5.4 Notice of Payment of Termination Payment. As soon as practicable after a Terminated Transaction, Notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to the Non-Defaulting Party. The Notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party, as applicable, within ten (10) Business Days after such Notice is effective.

5.5 Disputes With Respect to Termination Payment. If the Defaulting Party disputes the Non-Defaulting Party's calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within five (5) Business Days of receipt of the Non-Defaulting Party's calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute. Disputes regarding the Termination Payment shall be determined in accordance with Article 12.

5.6 Rights And Remedies Are Cumulative. Except where liquidated damages are provided as the exclusive remedy, the rights and remedies of a Party pursuant to this Article 5 shall be cumulative and in addition to the rights of the Parties otherwise provided in this Agreement.

5.7 Mitigation. Any Non-Defaulting Party shall be obligated to mitigate its Costs, losses and damages resulting from any Event of Default of the other Party under this Agreement.

5.8 Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this Agreement and such Party gives Notice and details of the Force Majeure to the other Party as detailed below, then, the Party impacted by Force Majeure shall be excused from the performance of its obligations to the extent impacted. Within forty-eight (48) hours of commencement of an event of Force Majeure, the non-performing Party shall provide the other Party with oral notice of the event of Force Majeure, and within two (2) weeks of the commencement of an event of Force Majeure the non-performing Party shall provide the other Party with Notice in the form of a letter describing in detail the particulars of the occurrence giving rise to the Force Majeure claim. Seller shall not substitute Product from any other source for the output of the Project during an outage resulting from Force Majeure. The suspension of performance due to a claim of Force Majeure must be of no greater scope and of no longer duration than is required by the Force Majeure. Buyer shall not be required to make any payments for any Product that Seller fails to Schedule, deliver or provide as a result of Force Majeure during the term of a Force Majeure. This Agreement may be terminated by the non-claiming Party with no further obligation to the Force-Majeure-claiming Party if a Force Majeure event prevents the performance of a material portion of the obligations of the Force-Majeure-claiming Party hereunder and such Force Majeure event is not resolved within eight (8) months after the commencement of such Force Majeure event.

ARTICLE SIX: PAYMENT

6.1 Billing and Payment. On or about the tenth (10th) day of each month beginning with the second month of the first Contract Year and every month thereafter, and continuing through and including the first month following the end of the Delivery Term, Seller shall provide to Buyer (a) records of metered data, including CAISO metering and transaction data sufficient to document and verify the generation of Product by the Project for any CAISO settlement time interval during the preceding months, (b) access to any records, including invoices or settlement data from CAISO, necessary to verify the invoice; and (c) an invoice, in a format reasonably specified by Buyer, covering the services provided in the preceding month determined in accordance with Article 4 (which may include preceding months), with all component charges and unit prices identified and all calculations used to arrive at invoiced amounts described in reasonable detail. Buyer shall pay the undisputed amount of such invoices on or before thirty (30) days after receipt of the invoice. If either the invoice date or payment date is not a Business Day, then such invoice or payment shall be provided on the next following Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any undisputed amounts not paid by the due date will be deemed delinquent and will accrue interest at the Default Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full. Invoices may be sent by facsimile or e-mail.

6.2 Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. In the event an invoice or portion thereof,

or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two (2) Business Days of such resolution along with interest accrued at the Default Rate from and including the original due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived if the other Party is not notified in accordance with this Section 6.2 within twelve (12) months after the invoice is rendered or subsequently adjusted, except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after the twelve-month period. If an invoice is not rendered within twelve (12) months after the close of the month during which performance occurred, the right to payment for such performance is waived.

6.3 Netting of Payments. The Parties hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts owed by each Party to the other Party for the purchase and sale of Product during the monthly billing period under this Agreement, including any related damages calculated pursuant to Section 3.1(h), interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the Party who owes it.

ARTICLE SEVEN: LIMITATIONS

7.1 Limitation of Remedies, Liability and Damages. EXCEPT AS SET FORTH HEREIN, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION IN QUESTION PROVIDES THAT THE EXPRESS REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE. EXCEPT FOR A PARTY'S INDEMNITY OBLIGATION IN RESPECT OF THIRD PARTY CLAIMS OR AS OTHERWISE EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. UNLESS EXPRESSLY HEREIN PROVIDED, AND SUBJECT TO THE PROVISIONS OF SECTION 11.2 (INDEMNITIES), IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES

RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

ARTICLE EIGHT: CREDIT AND COLLATERAL REQUIREMENTS

8.1 Buyer Financial Information. If requested by Seller, Buyer shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Buyer's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Buyer's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Buyer diligently pursues the preparation, certification and delivery of the statements. Buyer shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available.

8.2 Seller Financial Information. Seller shall provide the following financial information:

(a) If requested by Buyer, Seller shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Seller's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Seller's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Seller diligently pursues the preparation, certification and delivery of the statements.

(b) ***[If a Guaranty may be provided:*** If a Guaranty is provided and if requested by Buyer, Seller shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Guarantor's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Guarantor's quarterly report containing unaudited consolidated financial statements for such fiscal quarter certified by an officer of Guarantor. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Guarantor diligently pursues the preparation, certification

and delivery of the statements. Seller shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available.]

8.3 Grant of Security Interest/Remedies. To secure its obligations under this Agreement and to the extent Seller delivers Performance Assurance hereunder, Seller hereby grants to Buyer a present and continuing first priority security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Buyer, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Buyer's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence and during the continuation of an Event of Default by Seller or an Early Termination Date as a result thereof, Buyer may do any one or more of the following: (i) exercise any of the rights and remedies of a secured party with respect to all Performance Assurance, including any such rights and remedies under Law then in effect; (ii) exercise its rights of setoff against such collateral and any and all proceeds resulting therefrom or from the liquidation thereof; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all or any portion of any Performance Assurance then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller. Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

8.4 Performance Assurance.

(a) *[For Agreements with Delivery Terms greater than two years: CPUC Approval Security,]* Pre-Delivery Term Security, Delivery Term Security. To secure its obligations under this Agreement Seller agrees to deliver to Buyer and maintain in full force and effect for the period set forth below, the following Performance Assurance:

(i) *[For Agreements with Delivery Terms greater than two years: CPUC Approval Security,* in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from the Execution Date of this Agreement until the return date specified in Section 8.4(b)(i) below;]

(ii) Pre-Delivery Term Security in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from *[For Agreements with Delivery Terms greater than two years: the CPUC Approval Date]* *[For all other Agreements: the Execution Date of this Agreement]* until the return date specified in Section 8.4(b)[(i)/(ii)] below;

(iii) Delivery Term Security in the amount of [] in the form of cash or a Letter of Credit [or a Guaranty] from the commencement of the Delivery Term until the return date specified in Section 8.4(b)[(ii)/(iii)] below.

Except as set forth in Section 2.2 as it pertains to [*For Agreements with Delivery Terms greater than two years*: the CPUC Approval Security and] the Pre-Delivery Term Security, any such Performance Assurance shall not be deemed a limitation of damages.

(b) Return of Performance Assurance.

(i) [*For Agreements with Delivery Terms greater than two years*: Buyer shall promptly return to Seller the unused portion of the CPUC Approval Security after the earlier of (A) the date on which Seller has delivered the Pre-Delivery Term Security or the Delivery Term Security, as applicable, and (B) termination of the Agreement under Section 2.4(b)(ii).

(ii) Buyer shall promptly return to Seller the unused portion of the Pre-Delivery Term Security after the earlier of (A) the date on which Seller has delivered the Delivery Term Security, (B) termination of the Agreement under Section 2.4(b)(ii), and (C) the date that all payment obligations of the Seller arising under this Agreement, including compensation for penalties, Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting) after an Early Termination Date.

(iii) Buyer shall promptly return to Seller the unused portion of the Delivery Term Security after the following have occurred: (A) the Delivery Term has expired or terminated early; and (B) all payment obligations of the Seller arising under this Agreement, including compensation for penalties, Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting).

8.5 Interest on Cash. If Seller provides Performance Assurance in the form of cash, Buyer shall pay interest on such cash held as [*For Agreements with Delivery Terms greater than two years*: CPUC Approval Security,] Pre-Delivery Term Security, or Delivery Term Security, as applicable, at the Interest Rate. On or before each Interest Payment Date, Buyer shall transfer the sum of all accrued and unpaid Interest Amounts due to Seller for such security in the form of cash by wire transfer to the bank account specified under “Wire Transfer” in the Cover Sheet.

8.6 Costs of Letter of Credit. If Seller provides Performance Assurance in the form of a Letter of Credit, in all cases, the reasonable costs and expenses of (including but not limited to the reasonable costs, expenses, and attorneys’ fees, including reasonably allocated costs of in-house counsel of the Buyer) establishing, renewing, substituting, canceling, increasing and reducing the amount of (as the case may be) one or more Letters of Credit shall be borne by the Seller.

ARTICLE NINE: GOVERNMENTAL CHARGES

9.1 Cooperation. Each Party shall use reasonable efforts to implement the provisions of and to administer this Agreement in accordance with the intent of the Parties to minimize all taxes, so long as neither Party is materially adversely affected by such efforts.

9.2 Governmental Charges. Seller shall pay or cause to be paid all taxes imposed by any governmental authority (“Governmental Charges”) on or with respect to the Product or the transaction under this Agreement arising prior to and at the Delivery Point, including, but not limited to, ad valorem taxes and other taxes attributable to the Project, land, land rights or interests

in land for the Project. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to the Product or the transaction under this Agreement from the Delivery Point. In the event Seller is required by Law or regulation to remit or pay Governmental Charges which are Buyer's responsibility hereunder, Buyer shall promptly reimburse Seller for such Governmental Charges. If Buyer is required by Law or regulation to remit or pay Governmental Charges which are Seller's responsibility hereunder, Buyer may deduct such amounts from payments to Seller with respect to payments under the Agreement; if Buyer elects not to deduct such amounts from Seller's payments, Seller shall promptly reimburse Buyer for such amounts upon request. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under the Law.

ARTICLE TEN: REPRESENTATIONS AND WARRANTIES; COVENANTS

10.1 General Representations and Warranties. On the Execution Date and the CP Satisfaction Date, each Party represents and warrants to the other Party that:

(a) it is duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;

(b) it has all Governmental Approvals necessary for it to perform its obligations under this Agreement, except for as of the Execution Date (i) CPUC Approval in the case of Buyer, and (ii) all Governmental Approvals necessary to construct, operate and maintain the Project and related interconnection facilities in the case of Seller;

(c) the execution, delivery and performance of this Agreement is within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law;

(d) this Agreement and each other document executed and delivered in accordance with this Agreement constitutes a legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses;

(e) it is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt;

(f) except as may be set forth in its reports filed with the SEC, there is not pending or, to its knowledge, threatened against it or any of its Affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;

(g) no Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;

(h) it is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so

doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement; and

(i) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or the ability to make or take delivery of the Product as provided in this Agreement.

10.2 Seller Representations and Warranties.

(a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that: (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource (“ERR”) as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the Project’s output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.

(b) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in CPUC Decision 08-08-028, and as may be modified by subsequent decision of the CPUC or by subsequent legislation. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.

(c) *[Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]*

10.3 Covenants.

(a) General Covenants. Each Party covenants that throughout the Delivery Term:

(i) it shall continue to be duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;

(ii) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all Governmental Approvals necessary for it to legally perform its obligations under this Agreement;

(iii) it shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law; and

(iv) it shall not dispute its status as a “forward contract merchant” within the meaning of the United States Bankruptcy Code.

(b) Seller Covenants.

(i) Seller covenants throughout the Delivery Term that it, or its permitted successors or assigns, shall maintain ownership of a fee, easement, long-term leasehold interest, or other similar asset ownership interest in the Project.

(ii) Seller covenants throughout the Delivery Term that it shall maintain market based rate authority from FERC to sell Product to Buyer under the terms of this Agreement.

(iii) If at any time during the Delivery Term, Seller's representations and warranties set forth in Section 10.2 become materially false or misleading, Seller covenants that it shall provide prompt Notice to Buyer describing such default along with a description of its efforts to cure such default.

(iv) *[Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]*

(v) *[Include other appropriate covenants regarding the use of contractors that may be diverse business enterprises.]*

ARTICLE ELEVEN: TITLE, RISK OF LOSS, INDEMNITIES

11.1 Title and Risk of Loss. Title to and risk of loss related to the Product shall transfer from Seller to Buyer at the Delivery Point. Seller warrants that it will deliver to Buyer the Product free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any person arising prior to or at the Delivery Point.

11.2 Indemnities.

(a) Indemnity by Seller. Seller shall release, indemnify, defend, and hold harmless Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all actions, suits, losses, costs, damages, injuries, liabilities, claims, demands, penalties and interest, including reasonable costs and attorneys' fees ("Claims") resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product delivered under this Agreement up to and at the Delivery Point, (ii) Seller's development, permitting, construction, ownership, operation and/or maintenance of the Project, (iii) the failure by Seller or the failure of the Project to comply with applicable Law, including without limitation the CAISO Tariff, (iv) any Governmental Charges for which Seller is responsible hereunder, or (v) any liens, security interests, encumbrances, or other adverse claims against the Product delivered hereunder made by, under, or through Seller, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives.

(b) Indemnity by Buyer. Buyer shall release, indemnify, defend, and hold harmless Seller, its Affiliates, and its and their directors, officers, employees, agents, and

representatives against and from any and all Claims resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product received by Buyer under this Agreement after the Delivery Point, (ii) the failure by Buyer to comply with applicable Law, including without limitation the CAISO Tariff, or (iii) any Governmental Charges for which Buyer is responsible hereunder, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives.

ARTICLE TWELVE: DISPUTE RESOLUTION

12.1 Intent of the Parties. Except as provided in the next sentence, the sole procedure to resolve any claim arising out of or relating to this Agreement or any related agreement is the dispute resolution procedure set forth in this Article 12. Either Party may seek a preliminary injunction or other provisional judicial remedy if such action is necessary to prevent irreparable harm or preserve the status quo, in which case both Parties nonetheless will continue to pursue resolution of the dispute by means of the dispute resolution procedure set forth in this Article 12.

12.2 Management Negotiations.

(a) The Parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement or any related agreements by prompt negotiations between each Party's authorized representative designated in writing as a representative of the Party (each a "Manager"). Either Manager may, by Notice to the other Party, request a meeting to initiate negotiations to be held within ten (10) Business Days of the other Party's receipt of such request, at a mutually agreed time and place (either in person or telephonically). If the matter is not resolved within fifteen (15) Business Days of their first meeting ("Initial Negotiation End Date"), the Managers shall refer the matter to the designated senior officers of their respective companies that have authority to settle the dispute ("Executive(s)"). Within five (5) Business Days of the Initial Negotiation End Date ("Referral Date"), each Party shall provide one another Notice confirming the referral and identifying the name and title of the Executive who will represent the Party.

(b) Within five (5) Business Days of the Referral Date, the Executives shall establish a mutually acceptable location and date, which date shall not be greater than thirty (30) days from the Referral Date, to meet. After the initial meeting date, the Executives shall meet, as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.

(c) All communication and writing exchanged between the Parties in connection with these negotiations shall be confidential and shall not be used or referred to in any subsequent binding adjudicatory process between the Parties.

(d) If the matter is not resolved within forty-five (45) days of the Referral Date, or if the Party receiving the Notice to meet, pursuant to Section 12.2(a) above, refuses or does not meet within the ten (10) Business Day period specified in Section 12.2(a) above, either Party may

initiate arbitration of the controversy or claim by providing Notice of a demand for binding arbitration at any time thereafter.

12.3 Arbitration. Any dispute that cannot be resolved by management negotiations as set forth in Section 12.2 above shall be resolved through binding arbitration by a retired judge or justice from the [AAA][JAMS] panel conducted in San Diego, California, administered by and in accordance with [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive][Streamlined] Arbitration Rules and Procedures] ("Arbitration").

(a) Any arbitrator shall have no affiliation with, financial or other interest in, or prior employment with either Party and shall be knowledgeable in the field of the dispute. The Parties shall cooperate with one another in selecting the arbitrator within sixty (60) days after Notice of the demand for arbitration. If, notwithstanding their good faith efforts, the Parties are unable to agree upon a mutually-acceptable arbitrator, the arbitrator shall be appointed as provided for in [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive][Streamlined] Arbitration Rules and Procedures].

(b) At the request of a Party, the arbitrator shall have the discretion to order depositions of witnesses to the extent the arbitrator deems such discovery relevant and appropriate. Depositions shall be limited to a maximum of three (3) per Party and shall be held within thirty (30) days of the making of a request. Additional depositions may be scheduled only with the permission of the arbitrator, and for good cause shown. Each deposition shall be limited to a maximum of six (6) hours duration unless otherwise permitted by the arbitrator for good cause shown. All objections are reserved for the Arbitration hearing except for objections based on privilege and proprietary and confidential information. The arbitrator shall also have discretion to order the Parties to exchange relevant documents. The arbitrator shall also have discretion to order the Parties to answer interrogatories, upon good cause shown.

(c) The arbitrator shall have no authority to award punitive or exemplary damages or any other damages other than direct and actual damages and the other remedies contemplated by this Agreement.

(d) The arbitrator shall prepare in writing and provide to the Parties an award including factual findings and the reasons on which their decision is based.

(e) The arbitrator's award shall be made within nine (9) months of the filing of the notice of intention to arbitrate (demand) and the arbitrator shall agree to comply with this schedule before accepting appointment. However, this time limit may be extended by agreement of the Parties or by the arbitrator, if necessary.

(f) Judgment on the award may be entered in any court having jurisdiction.

(g) The prevailing Party in this dispute resolution process is entitled to recover its costs. Until such award is made, however, the Parties shall share equally in paying the costs of the Arbitration.

(h) The arbitrator shall have the authority to grant dispositive motions prior to the commencement of or following the completion of discovery if the arbitrator concludes that there is no material issue of fact pending before the arbitrator.

(i) The existence, content, and results of any Arbitration hereunder is confidential information that is subject to the provisions of Section 13.1.

ARTICLE THIRTEEN: MISCELLANEOUS

13.1 Confidentiality.

(a) General. Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 13.1(b) of this Agreement; (v) in order to comply with any applicable Law, regulation, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 13.1(a) ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts to prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

(b) RPS Confidentiality. Notwithstanding Section 13.1(a) of this Agreement, at any time on or after the date on which the Buyer makes its filing seeking CPUC Approval for this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Term, Project location, Contract Capacity, anticipated Initial Delivery Date, Contract Quantity, and Delivery Point.

(c) Publicity. Except as otherwise agreed to in this Section 13.1 above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed.

13.2 Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld. For purposes hereof, the transfer of more than fifty percent (50%) of the equity ownership or voting interest of Seller (or any parent entity holding directly or indirectly at least fifty percent (50%) of the equity ownership or voting interest of Seller if such interest constitutes

more than twenty percent (20%) of the fair market value of the assets of such parent entity) to a person that is not an Affiliate of Seller shall also constitute an assignment of this Agreement requiring Buyer's prior written consent. Notwithstanding the foregoing, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), transfer, sell, pledge, encumber, or assign this Agreement or the accounts, revenues or proceeds hereof to its financing providers. In connection with any financing or refinancing of the Project by Seller, Buyer shall in good faith negotiate and agree upon a consent to collateral assignment of this Agreement in a form that is commercially reasonable and customary in the industry.

13.3 Audit. Each Party has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement including amounts of Delivered Energy or Scheduled Energy. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made promptly and shall bear interest calculated at the Default Rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any statement or payment will be made unless objection to the accuracy thereof was made prior to the lapse of twelve (12) months from the rendition thereof, and thereafter any objection shall be deemed waived except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after such twelve-month period. In addition, Buyer shall have the right, at its sole expense and during normal working hours, to examine the records of Seller to the extent reasonably necessary to verify Seller's compliance with its representations and warranties set forth in Section 10.2.

13.4 Sarbanes-Oxley and SEC Requirements. The Parties acknowledge that accounting principles generally accepted in the United States of America ("GAAP") and SEC rules require Buyer and its independent auditor to evaluate whether Buyer must consolidate Seller's financial information (but not financial information of Seller's constituent members unless deemed to be included in the entity under GAAP). Buyer may require access to information concerning Seller's organizational structure, including its debt/capital structure, as well as to personnel of Seller to determine if consolidated financial reporting is required. If Buyer and its independent auditor determine at any time that the Buyer must consolidate the Seller's financial statements to comply with GAAP and/or SEC rules regarding consolidated financial reporting, then:

(a) Buyer shall require from Seller and Seller agrees to provide to Buyer the following during the Term of this Agreement:

(i) Unaudited financial statements of the Seller prepared in accordance with GAAP as of the end of the quarterly period. The financial statements should include quarter to date and year to date information and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);

(ii) Unaudited financial schedules of the Seller, as deemed necessary for Buyer to prepare its consolidated financial statements and related footnotes to the financial statements in accordance with GAAP as of the end of the quarterly period. The financial schedules should include quarter to date and year to date information underlying the financial statements and

footnotes to the financial statements and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);

(iii) Access to Seller's accounting and other records, and accounting and management personnel as reasonably determined by both Buyer and Seller so that (A) Buyer's independent auditor or its internal auditors may conduct financial audits (in accordance with the standards of the Public Company Accounting Oversight Board (United States)) as well as internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002) and (B) Buyer can be provided analytical information, as needed, to enable Buyer to meet its SEC filing requirements, including but not limited to those under Item 2 on Form 10-Q, and Item 7 on Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operations;"

(iv) Upon the request of Buyer, such certifications by a duly authorized representative(s) of Seller as may be reasonably requested by Buyer (which certifications shall presumptively be reasonable if the certifications are substantially identical to those required by Buyer or its parent of business units of Buyer or its parent); and

(v) As reasonably requested by Buyer, such information or schedules, similar to the items noted in clauses (i)-(iv) above, to enable Buyer to prepare consolidated financial statements and schedules as may be required for Buyer to obtain financing or to prepare other reports as required by regulatory bodies, such as the SEC, for periods other than as of the end of the monthly, quarterly or year to date periods then ended.

(b) If Buyer (i) in its sole discretion determines that the financial statements of the Seller would be considered material to the Buyer or its parent company's financial statements, financial condition, or internal controls over financial reporting, and (ii) reasonably determines Seller's internal controls over financial reporting are not operating effectively or have resulted in a control deficiency, Buyer shall provide Notice to Seller. Upon receipt of such Notice, Seller will have thirty (30) days to remediate any deficiency in Seller's internal controls over financial reporting identified by the Buyer, which Buyer and Buyer's independent auditor deem to be necessary to ensure Seller's internal controls over financial reporting are adequate, during or as a result of the audits permitted under Section 13.4(a)(iii) or any other provision of this Agreement.

(c) As soon as possible, but in no event later than two (2) Business Days following any occurrence that would affect Seller in any material way, Seller shall provide to Buyer a Notice describing such occurrence in sufficient detail to permit the Buyer to file a report on SEC Form 8-K. Such occurrences include all reportable events on the then current Form 8-K that applies to Buyer and its parent company at such time, including but not limited to a material acquisition or disposition of assets, a material direct financial obligation or off-balance sheet financing arrangement, material litigation, and the execution or termination of a material contract.

(d) Any information provided to Buyer shall be treated as confidential except that it may be disclosed in connection with the preparation, review, certification and publication of Buyer's financial statements.

(e) Seller shall notify Buyer at any time during the term of this Agreement of any services provided or proposed to be provided to Seller by Buyer's independent auditor. Seller,

and any of Seller's Affiliates, are prohibited from engaging Buyer's independent auditor for any services or in any consulting agreement without the express written consent of partner in charge of Buyer's independent audit.

13.5 Entire Agreement. This Agreement, together with the Cover Sheet and each and every appendix, attachment, amendment, schedule and any written supplements hereto, if any, between the Parties constitutes the entire agreement between the Parties.

13.6 Recording. Unless a Party expressly objects to a Recording (defined below) at the beginning of a telephone conversation, each Party consents to the creation of a tape or electronic recording ("Recording") of all telephone conversations between the Parties to this Agreement, and that any such Recordings will be retained in confidence, secured from improper access, and may be submitted in evidence in any proceeding or action relating to this Agreement. Each Party waives any further notice of such monitoring or recording, and agrees to notify its officers and employees of such monitoring or recording and to obtain any necessary consent of such officers and employees.

13.7 Forward Contract. The Parties acknowledge and agree that this Agreement constitutes a "forward contract" within the meaning of the United States Bankruptcy Code.

13.8 Governing Law. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.

13.9 Attorneys' Fees. In any proceeding brought to enforce this Agreement or because of the breach by any Party of any covenant or condition herein contained, the prevailing Party shall be entitled to reasonable attorneys' fees (including reasonably allocated fees of in-house counsel) in addition to court costs and any and all other costs recoverable in said action.

13.10 General. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. Except to the extent provided for herein, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both Parties. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement). Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default. The headings used herein are for convenience and reference purposes only. This Agreement shall be binding on each Party's successors and permitted assigns.

13.11 Severability. If any provision in this Agreement is determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Agreement and the Parties

shall use their best efforts to modify this Agreement to give effect to the original intention of the Parties.

13.12 Counterparts. This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same Agreement. Delivery of an executed counterpart of this Agreement by fax will be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by facsimile will also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Agreement will not affect the validity or effectiveness of this Agreement.

13.13 Notices. Whenever this Agreement requires or permits delivery of a “Notice” (or requires a Party to “notify”), the Party with such right or obligation shall provide a written communication delivered personally, by a nationally recognized overnight courier, mailed by registered or certified mail (return receipt requested), or by facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice) to the receiving Party at the addresses identified on the Cover Sheet (or at such other addresses as such receiving Party shall identify by like Notice to the other Party); provided, however, that notices of Outages or other Scheduling or dispatch information or requests, shall be provided in accordance with the terms set forth in the relevant section of this Agreement. Invoices may be sent by facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice). A Notice delivered in accordance herewith shall be deemed received (i) on the date of delivery, if hand delivered, (ii) two Business Days after the date of sending, if sent by a nationally recognized overnight courier, or at such earlier time as is confirmed by the receiving Party, (iii) three Business Days after the date of mailing, if mailed by registered or certified mail, return receipt requested, or at such earlier time as is confirmed by the receiving Party, and (iv) on the Business Day on which such Notice was transmitted by facsimile transmission or e-mail (where permitted); provided, however, that a Notice delivered in accordance with this Section but received on any day other than a Business Day or after 5:00 p.m. in the place of receipt will be deemed received on the next Business Day. Each Party shall provide Notice to the other Party of the persons authorized to nominate and/or agree to a Schedule or Dispatch Order for the delivery or acceptance of the Product or make other Notices on behalf of such Party and specify the scope of their individual authority and responsibilities, and may change its designation of such persons from time to time in its sole discretion by providing Notice.

13.14 Mobile Sierra. Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party in seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to FERC pursuant to the provisions of Section 205, 206 or 306 of the Federal Power Act, or any other provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior agreement in writing by both Parties, the standard of review for changes to the rates, terms or conditions of service of this Agreement proposed by a Party, a non-Party or the FERC acting *sua sponte* shall be the “public interest” application of the “just and reasonable” standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 US 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 US 348 (1956) and clarified by *Morgan Stanley Capital Group Inc. v. Pub. Util. Dist. No. 1 of Snohomish County*, 128 S. Ct. 2733 (2008).

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the date first above written.

[_____]
a [_____]

SAN DIEGO GAS & ELECTRIC
COMPANY
a California corporation

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

Exhibit A

PROJECT DESCRIPTION INCLUDING DESCRIPTION OF SITE

PROJECT DESCRIPTION

Project name _____

Project Site name: _____

Project physical address: _____

Total number of electric generating units at the Project (committed and not committed to Buyer) _____

Technology Type: _____

Substation:

The term "Site" as defined in the Agreement means the following parcel description upon which the Project is located:

Latitude and Longitude of Project: _____.

The nameplate capacity of the Project is _____.

The electric generating units utilized as generation assets as part of the Project are described below:

[INSERT MAP]

Exhibit B

FORM OF LETTER OF CREDIT

[DATE]

To: San Diego Gas & Electric Company
555 W. Fifth Street
Mail Code: ML 18A3
Los Angeles, CA 90013

Re: Our Irrevocable Standby Letter of Credit No. _____
In the Amount of US _____

Ladies and Gentlemen:

We hereby open our irrevocable standby Letter of Credit Number _____ in favor of [name of Beneficiary] (“Beneficiary”), by order and for account of [name of Applicant] (“Applicant”), [address of Applicant], available at sight upon demand at our counters, at [location] for an amount of US\$ _____ [amount spelled out and xx/100 U.S. Dollars] against presentation one of the following documents:

1- Statement signed by a person purported to be an authorized representative of Beneficiary stating that: “[name of Applicant] (“Applicant”) is in default under the Power Purchase Agreement between Beneficiary and Applicant dated _____ or under any transaction contemplated thereby (whether by failure to perform or pay any obligation thereunder or by occurrence of a “default”, “event of default” or similar term as defined in such agreement, any other agreement between Beneficiary and Applicant, or otherwise). The amount due to Beneficiary is U.S. \$ _____.”

or

2- Statement signed by a person purported to be an authorized representative of Beneficiary stating that: “[name of Applicant] (“Applicant”) has forfeited all or part of its ***[For Agreements with Delivery Terms greater than two years: CPUC Approval Security or] Pre-Delivery Term Security*** as set forth and defined in the Power Purchase Agreement between Beneficiary and Applicant dated _____. The amount due to Beneficiary, whether or not a default has occurred, is U.S. \$ _____.”

or

3- Statement signed by a person purported to be an authorized representative of Beneficiary stating that: “as of the close of business on [insert date, which is less than 60 days prior to the expiration date of the Letter of Credit] you have provided written

notice to us indicating your election not to permit extension of this Letter of Credit beyond its current expiry date. The amount due to Beneficiary, whether or not a default has occurred, is U.S. \$ _____.”

Special Conditions:

- All costs and banking charges pertaining to this Letter of Credit are for the account of Applicant.
- Partial and multiple drawings are permitted.
- Fax of Document 1 or 2 or 3 above is acceptable. Notwithstanding anything to the contrary herein, any drawing hereunder may be requested by transmitting the requisite documents as described above to us by facsimile at _____ or such other number as specified from time to time by us. The facsimile transmittal shall be deemed delivered when received. It is understood that drawings made by facsimile transmittal are deemed to be the operative instrument without the need of originally signed documents.

This Letter of Credit expires on _____ at our counters.

We hereby engage with Beneficiary that upon presentation of a document as specified under and in compliance with the terms of this Letter of Credit, this Letter of Credit will be duly honored in the amount stated in Document 1, 2, or 3 above. If a document is so presented by 1:00 pm on any New York banking day, we will honor the same in full in immediately available New York funds on that day and, if so presented after 1:00 pm on a New York banking day, we will honor the same in full in immediately available New York funds by noon on the following New York banking day.

It is a condition of this Letter of Credit that it shall be deemed automatically extended without an amendment for a one year period beginning on the present expiry date hereof and upon each anniversary of such date, unless at least ninety (90) days prior to any such expiry date we have sent you written notice by regular and registered mail or courier service that we elect not to permit this Letter of Credit to be so extended beyond, and will expire on its then current expiry date. No presentation made under this Letter of Credit after such expiry date will be honored.

We agree that if this Letter of Credit would otherwise expire during, or within 30 days after, an interruption of our business caused by an act of god, riot, civil commotion, insurrection, act of terrorism, war or any other cause beyond our control or by any strike or lockout, then this Letter of Credit shall expire on the 30th day following the day on which we resume our business after the cause of such interruption has been removed or eliminated and any drawing on this Letter of Credit which could properly have been made but for such interruption shall be permitted during such extended period.

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision) International Chamber of Commerce, Publication No. 600 (“UCP”), except to the extent that the terms hereof are inconsistent with the provisions of the UCP, including but not limited to Articles 14(b) and 36 of the UCP, in which case the terms of this Letter of Credit shall

govern. Matters not covered by the UCP shall be governed and construed in accordance with the laws of the State of California.

[Name of Bank]

Authorized Signature(s)

Exhibit C

FORM OF GUARANTY

GUARANTY

In consideration of San Diego Gas & Electric Company (“Company”) entering into a power purchase agreement with [NAME OF COUNTERPARTY] (hereinafter referred to as “Applicant”), [NAME OF GUARANTOR], a [TYPE OF LEGAL ENTITY i.e. California corporation], (hereinafter referred to as “Guarantor”) agrees with Company as follows:

1. The term “Obligations” shall mean all obligations, liabilities and indebtedness of any kind whatsoever arising in connection with _____ or arising in connection with or under any security agreement or other agreement between the Company and Applicant. The amount of Obligations existing from time to time shall be calculated after giving effect to all contractual netting arrangements between Applicant and the Company.

2. Guarantor unconditionally and irrevocably guarantees to Company the full, prompt and faithful payment and performance when due of each and all of the Obligations.

3. This is a continuing guaranty relating to the Obligations. Guarantor acknowledges that there is a continuing consideration to Guarantor for this Guaranty and therefore Guarantor waives and relinquishes the right to revoke or terminate this Guaranty as provided in California Civil Code Section 2815.

4. Any of the Obligations may be amended, modified, waived, or increased (whether or not beyond any dollar limitation hereunder), further agreements may be entered into between Company and Applicant, Company may provide additional goods or services or credit to Applicant or increase or decrease the dollar value of such goods, services or credit, and further obligations (including, without limitation, the provision or pledging of security to Company for any obligation), indebtedness and liabilities may be entered into or incurred from time to time by Applicant and without further authorization from or notice to Guarantor and no such action shall terminate, release, impair, reduce, discharge, diminish or in any way affect any of the obligations of Guarantor hereunder or any security furnished by Guarantor or give Guarantor any recourse or defense against Company. Company need not inquire into the power of Applicant or the authority of its officers, directors, partners or agents acting or purporting to act in its behalf.

5. With respect to all Obligations, this is a guaranty of payment and performance and not of collection, and Guarantor waives and agrees not to assert or take advantage of:

(a) any right to require Company to proceed against Applicant or any other person or to resort to, proceed against or exhaust any security held by it at any time or to pursue any other remedy in its power before proceeding against any Guarantor;

(b) demand, presentment, protest and notice of any kind including, without limiting the generality of the foregoing, notice of nonperformance, protest, dishonor and acceptance of this Guaranty, notice under Section 9611 of the California Commercial Code, and

notice of the existence, creation or incurring of any new or additional indebtedness or obligation or of any action or non-action on the part of Applicant, Company, a guarantor under this or any other instrument, or creditor of Applicant or any other person whomsoever, in connection with any of the Obligations or any collateral for any of the Obligations or in connection with any of the Obligations; and

(c) any suretyship defenses and suretyship rights of every nature otherwise available under California law and the laws of any other state or jurisdiction, including, without limitation, all defenses and rights arising under Sections 2787 through 2855 of the California Civil Code (the “Suretyship Provisions”) and any successor provisions to those Sections. Without limiting the generality of the foregoing, Guarantor acknowledges his, her or its understanding that the Suretyship Provisions provide various partial or complete defenses to the recovery by Company from Guarantor and/or grant Guarantor rights the enforcement of which could reduce or eliminate entirely Guarantor’s liability hereunder to Company. Among the defenses and rights contained in the Suretyship Provisions are the following: (1) Section 2809 of the Civil Code, which provides, in part, that the obligation of a surety must not be either larger in amount or in other respects more burdensome than that of the principal; (2) Section 2810 of the Civil Code, which provides, in part, that a surety is not liable if for any reason other than the mere personal disability of the principal there is no liability upon the part of the principal at the time of execution of the contract, or the liability of the principal thereafter ceases; (3) Section 2819 of the Civil Code, which provides, in part, that a surety is exonerated if the creditor alters the original obligation of the principal without the consent of the surety; (4) Section 2845 of the Civil Code, which provides, in part, that a surety is exonerated to the extent that the creditor fails to proceed against the principal, or to pursue any other remedy in the creditor’s power which the surety cannot pursue and which would lighten the surety’s burden; (5) Section 2846 of the Civil Code, which provides that a surety may compel his principal to perform the obligation when due; (6) Section 2847 of the Civil Code, which provides, in part, that if a surety satisfies the principal obligation, or any part thereof, the principal is obligated to reimburse the surety for the amounts paid by the surety; (7) Section 2848 of the Civil Code, which provides, in part, that a surety, upon satisfaction of the obligation of the principal is entitled to enforce remedies which the creditor then has against the principal; (8) Section 2849 of the Civil Code, which provides, in part, that a surety is entitled to the benefit of security held by the creditor for the performance of the principal obligation held by the creditor; (9) Section 2850 of the Civil Code, which provides, in part, that whenever the property of a surety is hypothecated with property of the principal, the surety is entitled to have the property of the principal first applied to the discharge of the obligation; and (10) Section 2822 of the Civil Code, which provides, in part, for a right to have the principal designate the portion of any obligation to be satisfied by the surety in the event that the principal provides partial satisfaction of such obligation.

6. All existing and future indebtedness of Applicant to Guarantor (“Intercompany Obligations”) is subordinated to all Obligations hereby guaranteed. All of Guarantor’s right, title and interest in and to the Intercompany Obligations and rights to receive any payments of the Intercompany Obligations are hereby granted and assigned to Company as continuing security for the Obligations hereby guaranteed, and, in the event of any default in the payment of any of the Obligations when due and until the Obligations guaranteed hereby have been paid in full (a) at the Company’s request, Applicant shall forthwith pay to the Company all or any part of such Intercompany Obligations and any capital which Guarantor is entitled to withdraw until all of the

Obligations guaranteed hereby have been paid in full, and (b) Guarantor shall pay to Company immediately any payments of such Intercompany Obligations received by Guarantor.

7. Guarantor agrees to pay all attorneys' fees (including without limitation, reasonably allocated fees of in-house counsel) and all other costs and expenses which may be incurred by Company in the enforcement of this Guaranty against Guarantor.

8. This Guaranty is not assignable by Guarantor without Company's consent. This Guaranty shall inure to the benefit of Company and its successors and assigns, including the assignees of any Obligations, and bind the heirs, executors, administrators, successors and permitted (if any) assigns of Guarantor. This Guaranty is assignable by Company with respect to all or any portion of the Obligations, and when so assigned Guarantor shall be liable to the assignees under this Guaranty without in any manner affecting the liability of Guarantor hereunder with respect to any Obligations retained by Company.

9. This Guaranty shall be governed by and construed in accordance with the laws of the State of California, without reference to its choice of law provisions. Guarantor hereby irrevocably and unconditionally agrees that any legal action or proceeding against Guarantor or any of Guarantor's property with respect to this Guaranty may be brought in the courts of the State of California in the County of San Diego or the courts of the United States in the County of San Diego, as Company may elect, and by executing and delivering this Guaranty Guarantor hereby submits to and accepts with regard to any such action or proceeding for himself, herself or itself and in respect of his, her or its property, generally, irrevocably and unconditionally, the jurisdiction of the above mentioned courts. Guarantor hereby irrevocably appoints the Secretary of State of the State of California as his, her or its agent for service of process in any suit or proceeding if the Guarantor is located outside the State of California at the time of service or cannot reasonably be located by Company. The foregoing, however, shall not limit the right of Company as it may elect to bring any legal action or proceeding or to obtain execution of judgment in any other appropriate jurisdiction including but not limited to any other jurisdiction in which Guarantor or his, her or its property is located.

10. Except as provided in any other written agreement now or at any time hereafter in force between Company and Guarantor, this Guaranty shall constitute the entire agreement of Guarantor with Company with respect to the subject matter hereof and no representation, understanding, promise or condition concerning the subject matter hereof shall be binding upon Company unless expressed herein.

11. All notices, demands, requests and other communications required or permitted hereunder shall be in writing and shall be given personally, by certified or registered mail, postage prepaid, return receipt requested, or by reliable overnight courier to the address of the Company set forth below (or to such new address as Company may designate hereafter in a notice to Guarantor) in the case of a communication to the Company and to the address appearing next to Guarantor's signature on this Guaranty (or to such new address as Guarantor may designate hereafter in a notice to Company) in the case of a communication to Guarantor. Any notice served personally shall be deemed delivered upon receipt, and any notice served by certified or registered mail or by reliable overnight courier shall be deemed delivered on the date of receipt as shown on

the addressee's registry or certification of receipt or on the date receipt is refused as shown on the records or manifest of the U.S. Postal Service or such courier.

San Diego Gas & Electric Company
555 W. Fifth Street
Attn: Major Markets 18A3, Credit Manager
Los Angeles, CA 90013
Fax No.: (213) 244-8316

12. Until all of the Obligations guaranteed hereby have been satisfied in full, Guarantor shall have no right of subrogation or reimbursement from the Applicant which Guarantor may have as a result of any payment by Guarantor under this Guaranty, and waives any right to enforce any remedy which Company now has or may hereafter have against the Applicant as a result of such payment by Guarantor under this Guaranty and waives any right under section 2849 of the California Civil Code and any other benefit of or right to participate in any security now or hereafter held by Company.

13. All amounts payable by Guarantor hereunder shall be paid without set-off or counterclaim and without any deduction or withholding whatsoever unless and to the extent that Guarantor shall be prohibited by law from doing so, in which case Guarantor shall pay to Company such additional amount as shall be necessary to ensure that Company receives the full amount it would have received if no such deduction or withholding had been made.

14. If any portion of this Guaranty is held to be unenforceable by a court of competent jurisdiction, the remainder of this Guaranty shall remain in full force and effect.

IN WITNESS WHEREOF, the undersigned Guarantor has executed this Guaranty on [MONTH AND DAY], [YEAR].

GUARANTOR:
[NAME OF GUARANTOR]

Signature

Title

Printed Name of Person Signing for
Guarantor

Guarantor's Address

City, State, Zip

Guarantor's Phone No.

Exhibit D

OUTAGE NOTIFICATION FORM

OUTAGE NOTIFICATION FORM

This form may be used to comply with CAISO's outage notification requirements for both planned and forced outages. Report outages as soon as possible by submitting form via email to TSched@SempraUtilities.com or via fax at (858) 650-6191.

Request Type:

New Scheduled Maintenance Outage

Previous Notification (if applicable)

Date Sent: mm/dd/yyyy
Time Sent: hh:mm

Generator Name:
Location Code:
Address:

(For times, use 24hr format)

Today's Date: mm/dd/yyyy
Current Time: hh:mm

Contact Name:
Phone Number:
Email:

Outage Start Date: mm/dd/yyyy
Outage Start Time: hh:mm

Alternate Name:
Alternate Number:
Email:

Outage End Date: mm/dd/yyyy
Outage End Time: hh:mm

Outage Duration:
MW Available During Outage:
MW Unavailable During Outage:
RMR Unit? Yes/No

System (Select One)

- Boiler Codes 0010-1999
Generator Codes 4500-4899
Regulatory, Safety, Environmental Codes 9504-9720
Balance of Plant Codes 3110-3999
Pollution Control Equipment Codes 8000-8835
Others Codes 9900-9999
Steam Turbine Codes 4000-4499
External Codes 9000-9040

Cause Code Ranges / Affected Component

(Select One)

Cause Code / Component Problem

(Select One)

Comments

Comments section with multiple lines for text entry.

Exhibit E

PROJECT OPERATING RESTRICTIONS

Operational characteristics of the Project must be equal to or greater than the resource flexibility reflected in the resource Master File, as such term is defined in the CAISO Tariff. Buyer may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project and to ensure that the information provided by Seller is true and accurate. Seller agrees to coordinate with Buyer and any third party Scheduling Coordinator to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are actually based on physical characteristics of the resource. The Parties agree to make reasonable modifications to this Exhibit E to modify existing operating restrictions or add additional operating restrictions that may be necessary to address changes in the CAISO Tariff or applicable Law applicable to the Products provided from this Project.

- Nameplate capacity of the Project: ____MW
- Minimum operating capacity: ____MW
- Advance notification required for a Dispatch Notice: ____
- Ramp Rate: ____MW/minute



APPENDIX 8

2017 RPS RENEWABLE ENERGY CREDIT (“REC”) AGREEMENT

**E EI AGREEMENT
REC CONFIRMATION
BETWEEN
[]
AND
SAN DIEGO GAS & ELECTRIC COMPANY**

This REC Confirmation ("Confirmation") confirms the renewable energy credit transaction ("Transaction") between [] ("Seller") and San Diego Gas & Electric Company ("Buyer"), each individually a "Party" and together the "Parties", effective as of [], 20__ (the "Confirmation Effective Date"). This Transaction is governed by the EEI Master Power Purchase & Sale Agreement effective as of 4/25/00 (attached hereto as Exhibit A with [TO BE NEGOTIATED: all elections, including credit, confidentiality, and government entity language.](the "EEI Agreement"). The EEI Agreement and this Confirmation shall be collectively referred to herein as the "Agreement." Capitalized terms used but not otherwise defined in this Confirmation have the meanings ascribed to them in the EEI Agreement or in the RPS (as defined below).

**ARTICLE 1
COMMERCIAL TERMS**

Seller: _____		Buyer: San Diego Gas & Electric Company
Contact Information:	Name: (" <u>Seller</u> ")	Name: San Diego Gas & Electric Company (" <u>Buyer</u> ")
	All Notices: Attn: <u>Contract Administration</u> Phone: _____ Facsimile: _____ Duns: _____ Federal Tax ID Number: _____	All Notices: San Diego Gas & Electric Company Street: 8315 Century Park Court City: San Diego, CA Zip: 92123 Attn: Electric & Fuel Procurement Contract Administration Phone: (858) 650-6176 Facsimile: (858) 650-6190 Duns: 006911457 Federal Tax ID Number: 95-1184800
	Invoices: _____ _____ _____ Attn: _____ Phone: _____ Facsimile: _____	Invoices: San Diego Gas & Electric Company 8315 Century Park Ct. San Diego, California 92123-1593 Attn: Energy Accounting Manager Phone: (858) 650-6177 Facsimile: (858) 650-6190

	<p>Scheduling:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Attn: _____</p> <p>Phone: _____</p> <p>Facsimile: _____</p>	<p>Scheduling:</p> <p>San Diego Gas & Electric Company 8315 Century Park Ct. San Diego, California 92123-1593 Attn: Transaction Scheduling Manager Phone: (858) 650-6160 Facsimile: (858) 650-6191</p>
	<p>Payments:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Attn: _____</p> <p>Phone: _____</p> <p>Facsimile: _____</p>	<p>Payments:</p> <p>San Diego Gas & Electric Company PO Box 25110 Santa Ana, CA 92799-5110 Attn: Mail Payments Phone: (619) 696-4521 Facsimile: (619) 696-4899</p>
	<p>Wire Transfer:</p> <p>BNK: _____</p> <p>ABA: _____</p> <p>ACCT: _____</p> <p>Confirmation: _____</p> <p>FAX: _____</p>	<p>Wire Transfer:</p> <p>BNK: Union Bank of California for: San Diego Gas & Electric Company ABA: Routing # 122000496 ACCT: #4430000352 Confirmation: SDG&E, Major Markets FAX:(213) 244-8316</p>
	<p>Credit and Collections:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Attn: _____</p> <p>Phone: _____</p> <p>Facsimile: _____</p> <p>Defaults: With additional Notices of an Event of Default or Potential Event of Default to:</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>Attn: _____</p> <p>Phone: _____</p> <p>Facsimile: _____</p>	<p>Credit and Collections:</p> <p>San Diego Gas & Electric Company, Major Markets 555 W. Fifth Street, ML 10E3 Los Angeles, CA 90013-1011 Attn.: Major Markets, Credit and Collections Manager Fax No.: (213) 244-8316 Phone: (213) 244-4343</p> <p>Defaults: With additional Notices of an Event of Default or Potential Event of Default to:</p> <p>San Diego Gas & Electric Company 8330 Century Park Ct. San Diego, California 92123 Attn: General Counsel Phone: (858) 650-6141 Facsimile: (858) 650-6106</p>
<p>Product:</p>	<p>All California RPS-eligible RECs associated with the Contract Quantity and Green Attributes from the Project for the applicable Product Vintage. The obligation of Seller to deliver the Product exclusively to Buyer, for each of the applicable Product Vintage years, is as follows:</p> <p>Obligation: (Check One):</p> <p><input type="checkbox"/> Resource Contingent</p> <p><input type="checkbox"/> Firm</p>	
<p>Contract Quantity:</p>	<p>[[] MWh REC per month for all months of the Vintage specified herein.] [All RECs associated with [the entire output of the Project/[__%] of the output from the project] for all months of the Vintage specified herein.]</p>	

		mm/yy	mm/yy	mm/yy	mm/yy	Total																						
	# RECs																											
Contract Price:	[\$[]/MWh REC]																											
Product Vintage:	_____																											
Project:	<p>Name of Facility: Location: EIA Number: CEC ID: WREGIS ID: Certification Date: On-line Date:</p> <p>[For Pooled Facilities (for use only with Firm Product): All Product sold hereunder shall be from one or more of the <i>[type of generation]</i> facilities listed below:</p> <table border="1"> <thead> <tr> <th></th> <th>Name of Facility: []</th> <th>Name of Facility: []</th> </tr> </thead> <tbody> <tr> <td>Location:</td> <td></td> <td></td> </tr> <tr> <td>EIA Number:</td> <td></td> <td></td> </tr> <tr> <td>CEC ID:</td> <td></td> <td></td> </tr> <tr> <td>WREGIS ID:</td> <td></td> <td></td> </tr> <tr> <td>Certification Date:</td> <td></td> <td></td> </tr> <tr> <td>On-line Date:</td> <td></td> <td></td> </tr> </tbody> </table> <p>(collectively, the "Pooled Facilities")</p> <p>The Parties acknowledge and agree that the Project consists of the Pooled Facilities and Seller is permitted to utilize the Pooled Facilities in order to satisfy its obligations hereunder.</p> <p>The Parties further acknowledge and agree that, with respect to Section 3.1(a) of this Confirmation, Product shall solely be limited to the actual Product generated and delivered by the Pooled Facilities used to satisfy the Contract Quantity, and that Buyer is not entitled to any additional Product produced by the Pooled Facilities in the Project above and beyond the Contract Quantity.</p> <p>Each of the Pooled Facilities shall have been certified by the CEC as an RPS-eligible resource and Seller shall have obtained LORS Certification for each of the Pooled Facilities.]</p>								Name of Facility: []	Name of Facility: []	Location:			EIA Number:			CEC ID:			WREGIS ID:			Certification Date:			On-line Date:		
	Name of Facility: []	Name of Facility: []																										
Location:																												
EIA Number:																												
CEC ID:																												
WREGIS ID:																												
Certification Date:																												
On-line Date:																												
Renewable Energy Source:	_____																											

Term:	The Term of this Transaction shall commence upon the Confirmation Effective Date and shall continue until the later of (i) the expiration of the Delivery Period and (ii) the satisfaction of all obligations of the Parties under this Agreement.
Delivery Period:	The Delivery Period of this Transaction shall commence on [], 20[] and shall continue until [delivery by Seller to Buyer of the Product has been completed/[], 20[]].
Delivery Point:	Buyer's WREGIS account: SDG&E Account ID: 39
Conditions:	<p>The commencement of the Delivery Period shall be contingent upon satisfaction of the condition (the "Condition") that the Buyer obtain CPUC Approval of this Confirmation and the requested relief contained in the related advice letter filing.</p> <p>Both Parties shall take all reasonable action to satisfy this Condition.</p> <p>Either Party has the right to terminate this Agreement on notice, which will be effective five (5) Business Days after such notice is given, if the Condition has not been satisfied or waived by Buyer in its sole discretion within [] days after Buyer files its request for CPUC Approval and a notice of termination is given on or before the [] day after Buyer files the request for CPUC Approval.</p> <p>In the event of a termination under this section, neither Party shall be liable for any Termination Payment and Article 5 of the EEI Agreement shall not apply.</p>

ARTICLE 2 DEFINITIONS

"Accepted Electrical Practices" means (a) those practices, methods, applicable codes, and acts engaged in or approved by a significant portion of the electric power industry during the relevant time period, or (b) in the absence of such practices, methods, applicable codes, and acts, any of the practices, methods, and acts which, in exercise of reasonable judgment in light of the facts known at the time a decision is made, could have been expected to accomplish a desired result at reasonable cost consistent with good business practices, reliability, safety, and expedition. Acceptable Electrical Practices are not intended to be limited to the optimum practices, methods, or acts to the exclusion of other, but rather refers to a spectrum of practices, methods, and acts generally accepted, or approved by a significant portion of the electric power industry in the relevant region, during the relevant time period, as described in the immediately preceding sentence.

"CPUC" means the California Public Utilities Commission or its regulatory successor.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

- (a) Approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement; and
- (b) Finds that any procurement pursuant to this Agreement is procurement of Renewable Energy Credits that conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation, for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant

to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

“Delivered” or “Delivery” or “Deliver” means the transfer from Seller to Buyer of the Contract Quantity of the Product in accordance with the California RPS Program, including its regulations and procedures, necessary for recognition by WREGIS of the transfer to Buyer, or Seller’s delivery to Buyer of a WREGIS Certificate.

“Delivery Date” means the date or dates on which the Product is Delivered pursuant to this Confirmation.

“Delivery Term” means “Delivery Period”.

“Firm” means Seller has agreed to sell and Deliver, and Buyer has agreed to buy and receive the Contract Quantity of the Product during the Delivery Period consistent with the terms of this Confirmation without excuse for non-Delivery by Seller except for Force Majeure, and as such, if Seller fails to Deliver the Product for any reason other than for Force Majeure, then Seller shall be the non-performing Party as set forth in Section 4.1 of the EEI Agreement and Buyer shall be the performing Party and shall be entitled to receive from Seller an amount determined pursuant to Section 4.1 of the EEI Agreement.

“Green Attributes” means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as:

- (1) Any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SO_x), nitrogen oxides (NO_x), carbon monoxide (CO) and other pollutants;
- (2) Any avoided emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth’s climate by trapping heat in the atmosphere;¹
- (3) The reporting rights to these avoided emissions, such as Green Tag Reporting Rights.

Green Tag Reporting Rights are the right of a Green Tag Buyer to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Buyer’s discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of energy. Green Attributes do not include:

- (i) Any energy, capacity, reliability or other power attributes from the Project,
- (ii) Production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation,
- (iii) Fuel-related subsidies or “tipping fees” that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or
- (iv) Emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits.

¹ Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

If the Project is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project.

"LORS Certification" means certification by the CEC of an electric generation facility not located within the state of California that such facility meets California's environmental quality laws, ordinances, regulations, and standards as set forth in the CEC's RPS Eligibility Guidebook.

"Renewable Energy Credit" or "REC" has the meaning set forth in California Public Utilities Code Section 399.12(f) and CPUC Decision 10-03-021, as modified by CPUC Decision 11-01-025 and as may be amended from time to time or as further defined or supplemented by law.

"Renewable Energy Facility" means an electric generation unit or other facility or installation that produces electric energy using a Renewable Energy Source.

"Renewable Energy Source" means an energy source that is not fossil carbon-based, non-renewable or radioactive, and may include solar, wind, biomass, geothermal, landfill gas or wave, tidal and thermal ocean technologies.

"Reporting Year" means a twelve-month compliance period specified under WREGIS.

"Resource Contingent" means that Seller is obligated to Deliver the Product to the extent that the applicable Renewable Energy Source supports energy production by the applicable Renewable Energy Facility, subject to Force Majeure, curtailment ordered directly or indirectly from the CAISO, and the planned or forced outage of the Renewable Energy Facility (which is not the result of Seller's negligence or willful misconduct), ***[Insert the following provision if SDG&E is not purchasing 100% of the output:*** and further subject to Seller's obligation to allocate the production among all of its purchasers of Product from the Renewable Energy Facility during the Vintage [as follows: [insert].] If Seller otherwise fails to Deliver the Product, then Seller shall be the non-performing Party as set forth in Section 4.1 of the EEI Agreement and Buyer shall be the performing Party and shall be entitled to receive from Seller an amount determined pursuant to Section 4.1 of the EEI Agreement.

"RPS" means the California Renewables Portfolio Standard Program as codified at California Public Utilities Code Section 399.11 *et seq.*, and any decisions by the CPUC related thereto.

"Vintage" means the calendar year, Reporting Year or other period specified by the Parties or WREGIS in which the Product is created or first valid for use under the RPS.

"WREGIS" means the Western Renewable Energy Generation Information System or its successor organization recognized under applicable laws for the registration or recordation of Delivery, ownership or transfer of RECs.

"WREGIS Certificate" means "Certificate" as defined by WREGIS in the WREGIS Operating Rules.

"WREGIS Operating Rules" means the operating rules and requirements adopted by WREGIS.

ARTICLE 3 CONVEYANCE OF RENEWABLE ATTRIBUTES

3.1 Seller's Conveyance of Contract Quantity of the Product and Green Attributes

(a) Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project.

(b) For each month of the Delivery Period, Seller shall deliver and convey the Contract Quantity of the Product and the Green Attributes pursuant to this Article 3 within five (5) Business Days after the end of the month in which the WREGIS Certificates for such Contract Quantity of the Product

and the Green Attributes are created by properly transferring such WREGIS Certificates, in accordance with WREGIS Operating Rules, equivalent to Contract Quantity of the Product and the quantity of such Green Attributes, to Buyer into Buyer's WREGIS account such that all right, title and interest in and to such WREGIS Certificates shall transfer from Seller to Buyer.

3.2 WREGIS Registration

During the Term, Seller, at its own cost and expense, shall maintain its registration of the Project with WREGIS and shall use commercially reasonable efforts to ensure that the Contract Quantity of the Product and all Green Attributes transferred to Buyer under this Confirmation count towards Buyer's RPS requirements. The Project shall be certified by the CEC as an RPS-eligible resource and the Contract Quantity of the Product and all Green Attributes transferred by Seller hereunder shall be designated California RPS-compliant with WREGIS. Seller shall, at its sole expense, use WREGIS as required pursuant to the WREGIS Operating Rules to effectuate the transfer of the Contract Quantity of the Product and the Green Attributes to Buyer in accordance with WREGIS reporting protocols and WREGIS Operating Rules.

3.3 Cooperation on Delivery; Review of Records; and Audit Rights

(a) Upon either Party's receipt of notice from WREGIS that the transfer of any portion of the Product pursuant to this Confirmation will not be recognized, that Party will immediately so notify the other Party, providing a copy of such notice, and both Parties will cooperate in taking such actions as are necessary and commercially reasonable to cause such transfer to be recognized and the Delivery Obligation to be met. Each Party agrees to provide copies of its records to the extent reasonably necessary for WREGIS to perform the functions necessary pursuant to this Confirmation and to verify the accuracy of any fact, statement, charge or computation made pursuant hereto if requested by the other Party. If any fact, statement, charge or computation contained any inaccuracy, the necessary adjustments and any resulting payments will be made within 30 calendar days after the notification date, and the payments will bear interest at the Interest Rate from the date the overpayment or underpayment was made until paid.

(b) If Seller is not the owner or operator of the Project, Seller will cooperate with Buyer in any efforts to review the records of the original seller of such Product.

The obligations set forth in this Section shall terminate with respect to this Transaction on the later of 30 days following the last banking date under WREGIS for the Vintage of the Product Delivered, or the third anniversary of the Delivery Date.

(c) In addition to any audit rights that Buyer may have under the EEI Agreement, Seller shall, along with the initial invoice sent to Buyer by Seller under this Confirmation for any calendar year during the Term and at other times as may be requested by Buyer, provide documentation, including, but not limited to, meter data as recorded by a meter approved by the CAISO, sufficient to demonstrate that the Product has been conveyed and delivered, subject to the terms of this Confirmation, to Buyer. [**NOTE: CAISO meters may not be required for certain projects.**]

(d) Seller shall, at its own cost and expense, instruct WREGIS to provide Buyer with a WREGIS produced report of the generation activity from the Project following each month that the Project generates energy that is being used to Deliver the Product. Such information shall be limited to the amount of electric energy generated by the Project during the Term, and shall not include any information or reference to the transfer of WREGIS Certificates from Seller's account to any other entity.

ARTICLE 4 CPUC FILING AND APPROVAL

Buyer shall file with the CPUC the appropriate request for CPUC Approval of this Confirmation. Buyer shall expeditiously seek CPUC Approval, including promptly responding to any requests for information related to the request for CPUC Approval. Seller shall use commercially reasonable efforts to support

Buyer in obtaining CPUC Approval. Buyer has no obligation to seek rehearing or to appeal a CPUC decision which fails to approve this Confirmation or which contains findings required for CPUC Approval with conditions or modifications unacceptable to either Party.

ARTICLE 5 CREDIT AND COLLATERAL

5.1 General Provisions

[Both Parties agree that Sections 8.1(b) and 8.2(b) of the EEI Agreement shall not apply to this Confirmation. All implied rights relating to financial assurances arising from Section 2-609 of the Uniform Commercial Code or case law applying similar doctrines, are hereby waived.]**[Credit terms will follow the policy outlined in Section 12 of the RFO.]**

5.2 Seller Collateral Requirements

[Credit terms will follow the policy outlined in the Credit Section of the RFO.]

ARTICLE 6 REPRESENTATIONS, WARRANTIES AND COVENANTS

6.1 Seller's Representation, Warranties, and Covenants

(a) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

(b) Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.

For the avoidance of doubt, the term "contract" as used in the immediately preceding paragraph means this Agreement.

(c) In addition to the foregoing, Seller warrants, represents and covenants, as of the Confirmation Effective Date and throughout the Term that:

- (i) Seller has the contractual rights to sell all right, title, and interest in the Product agreed to be delivered hereunder;
- (ii) Seller has not sold the Product to be delivered under this Confirmation to any other person or entity;
- (iii) at the time of Delivery, all rights, title, and interest in the Product to be delivered under this Confirmation are free and clear of all liens, taxes, claims, security interests, or other encumbrances of any kind whatsoever; and
- (iv) Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy

Generation Information System will be taken prior to the first delivery under the contract.

6.2 Seller's Representation, Warranties, and Covenants Related to the Project

Seller warrants, represents and covenants that:

- (a) Seller will inspect, maintain, repair and operate the Project in accordance with applicable industry standards, the Project's permit requirements, and Accepted Electrical Practices; and
- (b) Seller will abide by all applicable laws in operating the Project.

ARTICLE 7 PAYMENT

For purposes of Article 6 of the EEI Agreement, Seller shall invoice Buyer for the payment amount calculated as: (a) the Contract Price multiplied by (b) the Contract Quantity of the applicable Product specified herein. Buyer shall remit payment for the full amount on the thirtieth day of the calendar month following the month in which Buyer has verified the transfer and Delivery of the Product.

ARTICLE 8 AMENDMENTS TO EEI AGREEMENT

8.1 Force Majeure

Notwithstanding Section 3.3 of the EEI Agreement to the contrary, Buyer and Seller agree that any failure by Seller to deliver the Product pursuant to this Confirmation due to any Force Majeure shall be deemed to be a failure by Seller to perform such delivery obligation if such failure continues for a period of [ninety (90) days] or more after the time such delivery was due to be made. Otherwise, the terms of Section 3.3 of the EEI Agreement shall apply to this Confirmation. Force Majeure may include the failure or disruption in Deliveries by WREGIS that is not the fault of the Party asserting the Force Majeure.”.

8.2 Governing Law/Waiver of Jury Trial/Venue

For purposes of this Confirmation, Section 10.6, Governing Law, of the EEI Agreement is amended by replacing the Section in its entirety with the following:

“GOVERNING LAW/WAIVER OF JURY TRIAL/VENUE. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT. IN THE EVENT OF ANY LITIGATION TO ENFORCE OR INTERPRET ANY TERMS OF THIS AGREEMENT, THE PARTIES AGREE THAT SUCH ACTION WILL BE BROUGHT IN THE SUPERIOR COURT OF THE COUNTY OF SAN DIEGO, CALIFORNIA (OR, IF THE FEDERAL COURTS HAVE EXCLUSIVE JURISDICTION OVER THE SUBJECT MATTER OF THE DISPUTE, IN THE U.S. DISTRICT COURT FOR THE SOUTHERN DISTRICT OF CALIFORNIA), AND THE PARTIES HEREBY SUBMIT TO

THE EXCLUSIVE JURISDICTION OF SUCH COURTS.”

8.3 Confidentiality Section 10.11, Confidentiality, of the EEI Agreement is amended by deleting Section 10.11 in its entirety and inserting the following:

“10.11(a) Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party’s Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer’s Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 10.11(b) of this Agreement; (v) in order to comply with any applicable Law, regulation, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party (“Disclosing Party”), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 10.11(a) (“Disclosure Order”) each Party shall, to the extent practicable, use reasonable efforts to prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

10.11(b) RPS Confidentiality. Notwithstanding Section 10.11(a) of this Agreement, at any time on or after the date on which the Buyer makes its filing seeking CPUC Approval of this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Period, Project location, Contract Quantity, and Delivery Point.

10.11(c) Publicity. Except as otherwise agreed to in Section 10.11(b) above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed.” Notwithstanding the foregoing, the Parties understand acknowledge and agree that Buyer is a California Public Agency and that certain actions and documents of Buyer are subject to public notice and/or disclosure under applicable laws and regulations, including, but not limited to, the California Public Records Act and/or the California Ralph M. Brown Act, and that Buyer is not obligated to seek prior approval of Seller when Buyer is complying, in its sole and absolute discretion, with such laws and regulations.”

**ARTICLE 9
GENERAL PROVISIONS**

9.1 Prevailing Wage

To the extent applicable, Seller shall comply with the prevailing wage requirements of Public Utilities Code Section 339.14, subdivision (h).

9.2 Facility Identification [If Project consists of Pooled Facilities]

Within five (5) Business Days after the end of each month during the Delivery Period, Seller shall (a) identify the facility(s) from the Pooled Facility that the Product was delivered from for that month; (b) provide estimates of the quantity of Product that will be provided in the next month and the facility(s) from which it will be provided.

**ARTICLE 10
TERMINATION**

Notwithstanding anything to the contrary in the EEI Agreement, including Section 7.1, the Parties shall determine the Termination Payment for this Transaction in accordance with Section 5 of the EEI Agreement. Furthermore, with respect to this Transaction only, the following language is to be added at the end of Section 5.2:

“If Buyer is the Non-Defaulting party and Buyer reasonably expects to incur penalties or fines from the CPUC, the California ISO or any other governmental entity for failure to meet RPS requirements due to Seller’s Event of Default, then Buyer may, in good faith, estimate the amount of those penalties or fines and include this estimate in its determination of the Termination Payment, subject to accounting to Seller when those penalties or fines are finally ascertained. The rights and obligations with respect to determining and paying any Termination Payment and any dispute resolution with respect thereto, shall survive termination of this Transaction and shall continue until after those penalties or fines are finally ascertained.”

**ARTICLE 11
ADDITIONAL EVENTS OF DEFAULT**

It shall constitute an Event of Default as to Seller under Section 5.1 of the EEI Agreement if:

- (a) Seller sells, assigns, or otherwise transfers, or commits to sell, assign, or otherwise transfer, the Product, or any portion thereof, or any benefits derived therefrom, to any party other than the Buyer; or
- (b) Seller or the Project owner fails to maintain CEC Certification or LORS Certification, as applicable, for the Project from the CEC.

ACKNOWLEDGED AND AGREED TO AS OF THE CONFIRMATION EFFECTIVE DATE:

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

Exhibit A

[attach EEI]



APPENDIX 9

2017 LEAST-COST BEST-FIT (“LCBF”)

SDG&E's RPS RFO Evaluation Methodology

Below is the assessment methodology and process to be taken by SDG&E and the Independent Evaluator (“IE”) to ensure that the bid selection process is transparent and does not favor any technology or counterparty, and is aligned with SDG&E’s compliance requirements. Although SDG&E has worked diligently with its IE to develop this methodology, this document may require adjustment before issuing of the RFO in order to account for potential market, regulatory, and/or business context changes.

1. Receive all bids prior to the closing date at Noon Pacific Standard Time:
 - a. Bids will be uploaded to the PowerAdvocate® website for any RPS RFO event, to which the IE will have access.
 - b. By Noon on the day after closing, SDG&E will accept bids that, because of technical difficulties, could not be uploaded to the PowerAdvocate® website. The IE makes the call of “no more bids.”
2. After the day after closing, organize bid data:
 - a. The IE and SDG&E will compare folder structures and file sizes to ensure the bid population of the IE is identical to the bid population to be analyzed by the SDG&E RFO team. To the extent the folders do not match, a reconciliation effort begins until folders match.
 - b. The relevant data of all bids is exported into a data table for analysis.
3. Initial Bid Assessment & Completeness Check:
 - a. A snapshot of the key statistics of the bids is produced for presentation to the PRG. These statistics will not include prices; at this stage of the process, bids have not been

checked for conformance vis-à-vis the RFO requirements. Bids are reviewed for completeness and certain eligibility requirements.

4. Bid Evaluation:

- a. **Determine Congestion Cost.** SDG&E will conduct a marginal analysis to determine the difference in locational pricing between the project's point of delivery and SDG&E's default load aggregation point ("DLAP"). SDG&E and the IE will add the relevant Congestion Charges to the Bids once derived or obtained from SDG&E Transmission.
 - i. In the event that a congestion study is required, SDG&E and the IE will jointly prepare the relevant data needed for the SDG&E Transmission Planning team to calculate Congestion Costs. This process will group together, on a no-name basis, the relevant data of bids (mainly anticipated generation and energy delivery profile) by interconnection points. The IE will then forward this information to SDG&E's Transmission Planning team.
 - ii. Transmission Planning will run studies to determine hourly congestion costs associated with each of the proposed offer groups and provide results to SDG&E's evaluation team and the IE.
- b. **Determine Transmission Cost.** For offers for new projects or projects proposing to increase the size of existing facilities, SDG&E performs an initial analysis of costs for transmission network upgrades or additions that are to be directly reimbursed to the bidder using the relevant transmission network upgrade cost studies submitted with the bids. Offers without transmission upgrade cost studies will be rejected as non-

conforming (unless the offer includes acceptable proof of an existing interconnection arrangement).

- i. The total reimbursable transmission upgrade cost specified in the project's transmission studies will be divided by the number of years in which the utility will reimburse the network transmission costs to the bidder to produce an annual transmission upgrade cost.
 - ii. The present value of the annual transmission upgrade costs will be divided by the present value of the estimated energy deliveries during the contract period to produce the Transmission Cost Charge.
 - iii. SDG&E and the IE will add the relevant Transmission Cost Charges to the Bids once they are determined from the transmission cost studies submitted with the Bids and confirmed by both SDG&E and the IE after mutual agreement.
- c. **Calculate the Levelized Post-TOD Contract Price.** Convert the Pre-TOD price to Post-TOD contract price by utilizing the appropriate TOD price factors (See Appendix 1).
- d. **Calculate the Energy Benefit.** The Energy Benefit is calculated based on forecasted SP-15 electricity prices for each contract year, adjusted by SDG&E's hourly energy weighting factors.
- e. **Calculate the Ancillary Services Benefit.** The Ancillary Services ("A/S") Benefit is calculated based on a 2-year historical ratio of A/S prices to energy prices. This ratio is applied to the forecasted SP-15 electricity price for each A/S type: Spin, Non-Spin, Regulation Up and Regulation Down, for each month to determine the forecasted A/S

prices. The forecasted A/S prices are multiplied by the product of the available A/S capacity for each of the A/S types and the expected commitment percentage to determine the A/S Benefit. The expected commitment percentage is a 2-year historical ratio of A/S capacity offered versus A/S awarded in the CAISO Day-Ahead Market for each of the A/S types.

- f. **Calculate the Capacity Benefit.** Capacity Benefit will be calculated as a percentage of Capacity Value as described below. Capacity Value is based on the estimated Net Qualifying Capacity (“NQC”) ratio for each technology multiplied by SDG&E’s forecasted capacity price. NQC will be calculated using both the existing exceedance methodology and the effective load carrying capacity methodology (“ELCC”).

For projects located in SDG&E’s service territory connecting to transmission or distribution facilities at a point that is electrically west of the ECO or Suncrest substations (“Local Area Projects”) bidding as fully deliverable:¹

$$\text{Capacity Benefit} = 100 \% \text{ of Capacity Value}$$

For projects that are in the greater Imperial Valley (“IV”) area as defined by the CAISO,² meaning those projects connecting to transmission or distribution facilities at a point that is at, or electrically east of, the ECO or Suncrest substations bidding as fully deliverable³ and for projects other than Local Area Projects or IV Area Projects that still qualify for Resource Adequacy pursuant to the CAISO Tariff (“System Area Projects”) bidding as fully deliverable:

¹ Projects connecting at the ECO or Boulevard Substation are considered to be IV Area Projects for these purposes.

² Please refer to the CAISO’s 2014 Local Capacity Technical Analysis, Final Report and Study Results, April 30, 2013.

³ Projects connected to the Imperial Valley, Drew, Ocotillo, ECO or Boulevard Substations are considered to be IV Area Projects for these purposes.

$$\text{Capacity Benefit} = \text{Capacity Value} \times 33.59\%$$

For all energy-only projects, or projects interconnected to non-California Balancing Authorities unable to provide resource adequacy benefits to SDG&E that are specific to the project being bid to SDG&E:

$$\text{Capacity Benefit} = 0$$

Resource adequacy substitutions will not be granted any non-zero Capacity Benefit projects under SDG&E's RPS bid process.

Calculate the Renewable Integration Cost Adder.⁴ The integration cost adder will be calculated using the adopted interim valuation methodology. This methodology calculates two components for the cost of integration:

1. Variable integration cost - \$4/MWh for wind, \$3/MWh for solar.
2. Fixed integration cost – the cost to SDG&E of procuring additional flexible and non-flexible RA over the contract period. This is a product of (a) and (b) below:
 - a. The monthly increase (or decrease) in flexible capacity requirement due to the increment of wind or solar being considered for the solicitation. Calculated based on the overall system flexible capacity requirement and then applies the percentage contribution from wind and solar.
 - b. The forecasted monthly flexible RA price.

⁴ SDG&E's valuation process does not lead to double-counting of the Integration Cost adder. The creation of SDG&E's price forecasts does not use the Integration Cost adder as an input. The Integration Cost adder is applied in the LCBF process during the NMV calculation, as a separate component that differentiates variable renewable energy resources from each other and other resource types. The calculated energy benefit attributed to renewable resources in the NMV calculation is the same with or without an Integration Cost adder, which is added later in the valuation process.

g. **Calculate Net Market Value.** For bundled product purchase offers, convert post-TOD adjusted Bid prices into the Net Market Value (NMV) prices as follows:

For bundled products $NMV = (\text{Energy Benefit} + \text{Ancillary Services Benefits} + \text{Capacity Benefits}) - (\text{Levelized Contract Cost} + \text{Transmission Cost} + \text{Congestion Cost}) - (\text{Integration Cost Adder})$

For unbundled RECs: the negative unbundled REC price measured in \$/MWh

5. Develop Short-List: SDG&E determines its RPS Compliance Period 3 and 4 Renewable Net Short (“RNS”) as described in its 2016 RPS Plan and ranks all the Bids by LCBF price until SDG&E has met its need. The Short-List ranking enables SDG&E to determine which offers are most attractive based on an NMV price.

Offers with deliveries outside the acceptable RPS delivery windows will be considered non-conforming, unless SDG&E’s need assessment has changed materially between the time of issuance of this 2016 RPS Plan and the determination of the shortlist.

6. Final Short-Lists:

a. The highest ranking bids are subjected to a detailed conformance screen before being added to the shortlist.⁵ To the extent offers are not conforming, SDG&E will likely discard (given the high number of anticipated offers) the bid or attempt to make it conforming via discussions with the counterparty provided that the non-conformance is minor.

⁵ Conformance check will start earlier if possible.

b. Qualitative Factors: SDG&E may review the qualitative factors of offers of similar cost,⁶ including: (in no particular order)

- Project Viability⁷
- Local reliability
- Benefits to Disadvantaged Communities: Disadvantaged communities are those identified as Environmental Justice (EJ) communities through California’s Environmental Protection Agency’s CalEnviroScreen 2.0. Offer documents must include any environmental or economic benefits that the proposed project would provide to EJ communities with high poverty or unemployment rates, and/or high emission levels of toxic air contaminants.
- Resource diversity
- Environmental stewardship
- Rate Impacts
- Workforce Development Assessment: Offer documents must include projected California employment growth during construction and operation, including: number of hires; duration of hire; and indication of whether the bidder has entered into Project Labor Agreements or Maintenance Labor Agreements in California for the proposed project.

⁶ The term “similar cost” is used to indicate expected indifference by the PRG and CPUC as to the cost of one offer or another. The PRG will have access to SDG&E’s evaluation and the quantitative and qualitative components of those offers prior to SDG&E’s recommendation filing to the CPUC.

⁷ SDG&E considers project viability as a qualitative factor and relies on the Energy Division’s Project Viability Calculator. For projects that SDG&E rejects due to low viability scores, SDG&E rescues the projects to affirm the bidder did not unfairly score itself too low. For projects that SDG&E shortlists, SDG&E rescues the project to affirm that the bidder did not unfairly score itself too high. Projects below a certain viability threshold will not be considered for the shortlist.

- c. SDG&E and the IE will then develop the preliminary Final Short-Lists that includes congestion costs and transmission cost study results. Qualitative factors may impact the Final Shortlist.
- d. The preliminary Final Shortlist is prepared and shared with the PRG during next viable meeting.
- e. After discussion with the PRG and the Energy Division, SDG&E will determine the final shortlist.

Appendix 1 – LOCAL FCDS TOD Factors and Periods⁸
SDG&E will utilize the following FCDS TOD Payment Factors for Local projects that have received full deliverability status.

TOD Period	Period Days and Hours	FCDS Time-of-day Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.638
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.541
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.823
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.943
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.819
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.963

⁸ SDG&E utilizes forward market conditions to calculate TOD factors used for LCBF analysis and determination of contract payments. As the forward market evolves, SDG&E will continue to assess and update the TOD factors and TOD periods as needed.

Appendix 1 – System and IV FCDS TOD Factors and Periods⁹
SDG&E will utilize the following FCDS TOD Payment Factors for System projects that have received full deliverability status.

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.639
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.550
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.841
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.841
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.792
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.967

⁹ SDG&E utilizes forward market conditions to calculate TOD factors used for LCBF analysis and determination of contract payments. As the forward market evolves, SDG&E will continue to assess and update the TOD factors and TOD periods as needed.

Appendix 1 – Energy Only TOD Factors and Periods¹⁰

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.641
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.562
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.864
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.714
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.758
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.971

¹⁰ SDG&E utilizes forward market conditions to calculate TOD factors used for LCBF analysis and determination of contract payments. As the forward market evolves, SDG&E will continue to assess and update the TOD factors and TOD periods as needed.



APPENDIX 10

2017 RPS SALES REQUEST FOR PROPOSALS (“RFP”)



SAN DIEGO GAS AND ELECTRIC COMPANY
ELECTRIC AND GAS PROCUREMENT DEPARTMENT
8315 CENTURY PARK COURT, CP21D
SAN DIEGO, CA 92123

2017

**REQUEST FOR PROPOSAL
FOR THE SALE OF
RENEWABLE ENERGY
PRODUCTS**

ISSUED

||

OFFERS DUE

||

RFP WEBSITE

||

EMAIL QUESTIONS/COMMENTS TO
renewablerfo@semprautilities.com

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1.0 SCOPE OF REQUEST

As authorized by D.17-12-007, San Diego Gas & Electric Company (“SDG&E”) is issuing this Request for Proposal (“RFP”) seeking proposals from third parties (“Respondents”) who are interested in purchasing energy products from eligible renewable resources under contract with SDG&E (“Resources”). By responding, Respondents are bound by the terms and conditions of this RFP. Energy products are derived from Resources that meet the California Renewables Portfolio Standard (“RPS”) eligibility criteria set forth by the California Energy Commission (“CEC”) (See Section 5.0 for additional information on RPS Program Parameters). This RFP solicits bids from financial institutions, energy service providers, utilities, municipal utilities, industrial end users, wholesale power marketers, and any other entity that would have a need to purchase bundled energy or REC’s.

Table 1 – Acceptable Product Types

Product Types:	RPS Categories: Bundled (Category 1) and REC (Category 3)
Minimum Term:	1 month
Maximum Term:	10 years (120 months)
Delivery Window:	Start no earlier than X, End no later than X+120 months ¹
Point of Delivery:	SP-15 EZ Gen Hub (Category 1) or WREGIS Account (Category 3)
Min Volume:	50 GWh

A. Definition of Products

SDG&E is required to serve its customers in the following manner: (a) with an average of 20% of retail sales from renewable resources between January 1, 2011 and December 31, 2013, inclusive² (“Compliance Period 1”); (b) with 25% of retail sales from renewable resources by December 31, 2016, with reasonable progress made in 2014 and 2016³ (“Compliance Period 2”); (c) with 33% of retail sales from renewable resources by December 31, 2020, with reasonable progress made in 2017, 2018 and 2019⁴ (“Compliance Period 3”); and (d) with 33% of retail sales from renewable resources in each year beyond 2020⁵ (“Post 2020 Compliance Period”).

SDG&E must meet these goals by procuring renewable resources that meet the requirements of the products outlined in Public Utilities Code 399.16(b). A summary of each product type is provided below:

Category 1 (Public Utilities Code 399.16(b)(1)(A-B)): Bundled Products

- Must have first point of interconnection (“POI”) with a California Balancing Authority (“CBA”); or

¹ Respondent to propose dates for purchase.

² Compliance towards Compliance Period 1 goals shall be measured as required by D.11-12-020, Ordering Paragraph (“OP”) 1.

³ Compliance towards Compliance Period 2 goals shall be measured as required by D.11-12-020, OP 2.

⁴ Compliance towards Compliance Period 3 goals shall be measured as required by D.11-12-020, OP 3.

⁵ Compliance towards Post 2020 Compliance Period goals shall be measured as required by D.11-12-020, OP 4.

- Must have first POI with distribution facilities used to serve end users within a CBA; **or**
- Must be scheduled from the eligible renewable resource (“ERR”) into a CBA without substituting electricity from another source⁶; **or**
- Have an agreement to dynamically transfer electricity to a CBA.

Category 3 (Public Utilities Code 399.16(b)(3): Unbundled Renewable Energy Credits (“RECs”))

- ERR products, or any fraction of the electricity generated, **including unbundled RECs**, that do not qualify under 399.16(b)(1-2).

The table below provides a high level overview of product categories being offered in this RFP. A more detailed discussion of RFP eligibility requirements is provided in Section 7.0 “Products & Eligibility Requirements.” SDG&E will also consider annual bids for less than the full compliance period (i.e. 2017 only, etc.), and bids for projects beyond Compliance Period 3.

Table 2 – Product Types by Compliance Period

	Compliance Period 2: January 1, 2014- December 31, 2016	Compliance Period 3: January 1, 2017- December 31, 2020	Compliance Period 4: January 1, 2021 Forward
Category 1	N/A	Volume As Bid	Volume As Bid
Category 3	Volume As Bid	Volume As Bid	Volume As Bid

SDG&E is not selling Resource Adequacy (“RA”) with any of these transactions. The final portfolio sale will be shaped as specified by the seller in the bid form. Offered resources may be:

- 1) Re-powered or existing facilities;
- 2) New facilities;
- 3) New facilities that are scheduled to come online during the years specified in this RFP; and/or
- 4) Other facilities.

B. Transaction Documents

- a) Category 1

⁶ If using another source to provide real-time ancillary services required to maintain an hourly or sub-hourly import schedule into a CBA is permitted, but only the fraction generated by the ERR will count as Category 1.

Respondents bidding on bundled energy (“Category 1”) products must sign an Edison Electric Institute (“EEI”) Confirmation. Any resulting agreement shall be subject to CPUC approval. Additional respondent criteria are described in Section 7.0 “Products & Eligibility Requirements.”

b) Unbundled REC Agreements

Respondents bidding on unbundled RECs (“Category 3”) products must sign SDG&E’s Model REC Agreement (See Section 4.0 RFP Response Instructions) to be provided to bidder upon shortlisting. Any resulting agreement shall be subject to CPUC approval. Additional eligibility requirements are described in Section 7.0 “Products & Eligibility Requirements.”

2.0 RFP WEBSITE AND COMMUNICATIONS

The RFP and all subsequent revisions and documents are available for download from the RFP Website []. Potential Respondents are responsible for monitoring the RFP Website for subsequent updates, notices and postings.

The RFP website contains RFP forms and documents, RFP Schedule, and a Question and Answer forum.

All questions or other communications regarding this RFP must be submitted via email to renewablerfo@semprautilities.com by the DEADLINE TO SUBMIT QUESTIONS as specified in Section 3.0 RFP Schedule. SDG&E will not accept questions or comments in any other form.

3.0 RFP SCHEDULE

The following schedule and deadlines apply to this RFP. SDG&E reserves the right to revise this schedule at any time and in SDG&E's sole discretion. Respondents are responsible for accessing the RFP Website for updated schedules and possible amendments to the RFP or the solicitation process.

N O.	ITEM	APPROX. DATE
1.	RFP Issued	[]
2.	Pre-Bid Conference (Webinar)	[]
3.	DEADLINE TO SUBMIT QUESTIONS Question submittal cut-off date. Answers to all questions will be posted on the website no later than 3 business days following question submittal cutoff date	[]
4.	CLOSING DATE: Offers must be emailed to and received by the RFP email inbox no later than NOON (Pacific Standard Time).	[]
5.	SDG&E notifies the CPUC (Executive Director) that the RFP has closed.	[]
6.	SDG&E notifies winning Bidder(s).	[]
7.	Letter due from winning Bidders indicating: a. Withdrawal from SDG&E's solicitation; OR b. Acceptance of the winning position and binding price confirmation.	[]
8.	SDG&E submits FINAL list of winning Bidders to Commission and PRG.	[]
9.	SDG&E issues appreciation notices to unsuccessful Bidders.	[]
10.	SDG&E commences with Transaction Document negotiations.	[]
11.	SDG&E submits Tier 1 or Tier 3 Advice Letter(s) with agreements for Commission approval.	[]

PRE-BID CONFERENCES

SDG&E will host one pre-bid webinar conference on []. While encouraged, participation in the pre-bid conference is NOT mandatory in order to submit an offer. Please monitor the RFP Website periodically. The venue and time will be posted as soon as arrangements are finalized.

Any party interested in attending this pre-bid conference and/or webinar should email the following information to renewablerfo@semprautilities.com. Please limit your participation to two representatives per organization.

- Company name
- Attendees' names, titles and contact information

4.0 RFP RESPONSE INSTRUCTIONS

Respondents may submit up to 10 bids into this solicitation by submitting the forms listed below. Forms are available on the RFP Website. The failure to provide the listed information may result in the bids being deemed non-conforming and may disqualify the proposal from further consideration.

Required Forms for Category 1 Offers:

- 1) **Participation Summary**
- 2) **Bid Form**
- 3) **Credit Application**
- 4) **Transaction Document** – Respondents shall populate and redline the Transaction Agreement.

Required Forms for Category 3 Offers:

- 1) **Participation Summary**
- 2) **REC Bid Form**
- 3) **Credit Application**
- 4) **Model REC Agreement** – To be provided to bidder by SDG&E at time of shortlisting.

The Participation Summary and redlines to the Transaction Document must be in Word or Word-compatible format (not in PDF). The Pricing Form must be in Excel or Excel-compatible format (not in PDF). The Credit Application must be submitted in Word or Word-Compatible format (or in PDF).

Submissions containing unsolicited materials, submissions in ZIP archives or other compressed formats, or submissions of individual bid documents in file formats other than the formats of the original bid forms, will be rejected. This RFP is an electronic only Solicitation; Respondents need not submit paper documents, or e-binders.

Any party interested in submitting an offer must submit the offer via electronic mail (email) to renewablerfo@semprautilities.com, which is the RPS RFP inbox, and attach all required forms and bid materials to the email. All offers must be emailed no later than 12:00 p.m. (i.e. Noon), Pacific Standard Time, on the CLOSING DATE (see RFP Schedule). The Subject line of the email should be as follows: Bid Submission for SDG&E's 2017 Request for Proposal for sale Eligible Renewable Resources. A reply email from the RPS RFO inbox will be sent to the email address submitting the offer to confirm receipt of the offer.

If Respondents encounter technical difficulties with emailing, they should provide evidence of such difficulties (e.g. a screen shot of the error message) and email the bid again to the RPS RFP inbox by 1:00 p.m., Pacific Standard Time, on the Closing Date. If the Respondent encounters further technical difficulties with the RPS RFO inbox, they should provide evidence of such difficulties (e.g. a screen shot of the error message or a sent email notice with a time stamp before 1:00 p.m. on the Closing Date) and submit a hard copy and a CD of the bid package to SDG&E and the Independent Evaluator at the addresses below by close of business on the day following the Closing Date.

San Diego Gas & Electric Company
Electric and Fuel Procurement Department
Attn: 2017 Request For Proposal for
Renewable Energy Products
8315 Century Park Court, CP21D
San Diego, CA 92123-1593

Independent Evaluator (IE)
To Be Determined

All offer materials submitted in accordance with the above Response Instructions shall be subject to the confidentiality provisions of Section 11 “Confidentiality” of this RFP.

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of any forms. During all stages of the RFP process, SDG&E reserves the right to request additional information from individual Respondents or to request any Respondent to submit supplemental materials in fulfillment of the content requirements of this RFP or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFP.

ALL BIDS SHOULD BE VALID AND BINDING UPON THE RESPONDENTS ACCEPTANCE OF THE WINNING POSITION. BIDS SHALL REMAIN VALID AND BINDING UNTIL CONTRACT EXECUTION.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFP PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E IN ITS SOLE DISCRETION.

5.0 RPS PROGRAM PARAMETERS

CALIFORNIA RPS PROGRAM

California's Renewable Portfolio Standard ("RPS") Program was adopted in 2002 and is codified at Public Utility Code sec 399.11, *et seq.*⁷ In adopting the RPS legislation, the Legislature specifically found and declared that increasing California's reliance on renewable energy resources promotes the purpose of and may accomplish each of the following:

- Increase the diversity, reliability, public health and environmental benefits of the energy mix
- Promote stable electricity prices
- Protect public health and improve environmental quality
- Stimulate sustainable economic development and create new employment opportunities
- Reduce reliance on imported fuels
- Ameliorate air quality problems
- Improve public health by reducing the burning of fossil fuels

Current law requires all California load-serving entities ("LSEs") to procure renewable energy in the amount of 33% of retail sales by 2020⁸. Unlike the prior annual RPS program, the 33% regime sets increasing targets for three multi-year Compliance Periods ("CPs"). The targets are set at 20% by the end of CP1 (2011-2013), 25% at the end of CP2 (2014-2016), and 33% by the end of CP3 (2017-2020). The CPUC issued its first decision implementing the RPS Program, D.03-06-071 on June 19, 2003. This decision established certain basic RPS Program parameters. The CPUC has subsequently issued several additional RPS-related decisions in rulemaking proceeding R.04-04-026, and successor proceedings R.06-02-012, R.06-05-027, R.08-08-009, R.11-05-005, and R.15-02-020. SDG&E will comply with all CPUC decisions governing RPS procurement. These decisions are publicly available on the CPUC's website at <http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>.

This RFP is being conducted in compliance with relevant statutory and regulatory directives. Requirements set forth within the law and all directives shall be incorporated herein by reference. A full text of the law and the above-mentioned CPUC decisions can be downloaded from the CPUC website. Respondents are encouraged to review all RPS-related, CPUC issued directives available on the same Internet websites and are responsible for understanding and abiding by all RPS provisions.

RPS ELIGIBILITY CRITERIA

Resources being offered in this solicitation are certifiable as an "eligible renewable resource" by the CEC. Eligibility criteria are set forth by the CEC in its [Renewable Portfolio Standard Eligibility Guidebook](http://www.energy.ca.gov/renewables/documents/index.html), which can be downloaded from the CEC's website at <http://www.energy.ca.gov/renewables/documents/index.html>. Respondents are encouraged to review all RPS-related, CEC issued directives available on the same Internet website and are

⁷ See, Senate Bill (SB) 1078 (Stats. 2002 Ch. 516), as amended by SB 107, (Stats. 2006, Ch. 464).

⁸ See, Senate Bill (SB) 2 (1x) (Simitian), stats. 2011, ch. 1

responsible for understanding and abiding by all RPS provisions. All requirements set forth within the CEC's guidebooks and all RPS-related documents shall be incorporated herein by reference.

PROCUREMENT REVIEW GROUP

The Procurement Review Group ("PRG"), a CPUC-endorsed entity, is composed of non-market participants such as ratepayers' advocacy groups, state energy and water commissions, power authorities, utility-related labor unions and other non-commercial, energy-related special interest groups. CPUC Decision D.03-06-071 established the role of the PRG. The PRG is charged with overseeing the IOU's procurement process, reviewing procedural fairness, examining overall procurement prudence and providing feedback during all stages. From RFP language development to offer evaluation to contract negotiation, IOUs brief the PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing confidential offer information to the PRG is required during PRG briefings in accordance with Section 11 ("Confidentiality"). Each Respondent must clearly identify, as part of its offer, what type of information it considers to be confidential.

INDEPENDENT EVALUATOR

The CPUC requires each IOU to use an Independent Evaluator to separately evaluate and report on the IOU's entire solicitation, evaluation, and selection process for this solicitation. This will serve as an independent review of SDG&E's implementation of the RFP process and final selections. The Independent Evaluator shall make periodic presentations regarding its findings to the IOU, and the IOU's PRG including the CPUC Energy Division staff. The intent is to preserve the independence of the Independent Evaluator by ensuring free and unfettered communication between the Independent Evaluator and the CPUC as well as an open, fair, and transparent process that the Independent Evaluator can affirm.

SDG&E is committed to ensuring an open and transparent solicitation, and to providing a fair, reasonable and competitive process.

6.0 SDG&E BACKGROUND

SDG&E provides electricity to 3.4 million consumers. It delivers the electricity through 1.4 million meters in San Diego County and an adjacent portion of southern Orange County. SDG&E also delivers natural gas through 855,000 meters in San Diego County and transports electricity and natural gas for others. The electric customer base comprises 89% residential and 11% commercial and industrial customers.

SDG&E's electric transmission network is comprised of 130 substations with 884 miles of 69-kV, 265 miles of 138-kV, 349 miles of 230-kV, and 215 miles of 500-kV transmission lines. Local ("on system") generating resources include the Encina plant (connected into SDG&E's grid at 138 kV and 230 kV), the Palomar Energy Center (connected at 230kV) and a number of combustion turbine facilities located around the service area (connected at 69 kV). Imported resources are received via the Miguel Substation as the delivery point for power flow on the Southwest Power Link, which is SDG&E's 500-kV transmission line that runs from Arizona to San Diego along the U.S./Mexico border, and via the San Onofre Nuclear Generating Station 230-kV switchyard.

The figure below shows a simplified diagram of existing SDG&E's service area, which encompasses an area of 4,100 square-miles and spans 2 counties and 25 communities.



For a map California IOU service territories please visit:

http://www.energy.ca.gov/maps/serviceareas/electric_service_areas.html

7.0 PRODUCTS & ELIGIBILITY REQUIREMENTS

A. Compliance Periods.

In this RFP, SDG&E intends to offer short and medium term Category 1 and 3 for the periods defined in Table 2 of the this document. Such products are defined below.

I. Category 1 Products

- a. Term: 10 years or less
- b. Pricing: SP-15 EZ Gen Hub day ahead index price plus premium expressed in \$/MWh
- c. Volume: To be bid in

II. Category 3 Products

- a. Term: 10 years or less
- b. Pricing: Bid REC price expressed in \$/MWh
- c. Volume: To be bid in

Eligibility Requirements

1. WRIGIS Account; and
2. Credit Capability (See Section 12.0 “Credit Terms and Conditions”).

8.0 EVALUATION CRITERIA AND SHORTLISTING

All incoming Bids will be assessed for conformance. Respondents shall conform to the minimum eligibility criteria in order to be considered, please see RFP Response Instructions.

SDG&E will utilize all the information provided in the required forms and narratives to evaluate all Bids. Respondents are responsible for the accuracy of all information provided in response to this RFP.

SDG&E will periodically brief the members of the PRG during the various stages of evaluation. Upon completion of SDG&E's evaluation process, SDG&E will brief the PRG members regarding SDG&E's recommendations for its short-list. Based upon the comments and recommendations received from the PRG, SDG&E may modify the preliminary list of winning bids.

QUANTITATIVE EVALUATION

SDG&E evaluates and ranks bids based on the pricing, volume and term information provided by the Bidders. SDG&E's analysis evaluates both quantitative and qualitative aspects of each bid to estimate its value to SDG&E's customers and its relative value in comparison to other Offers. SDG&E considers the value of selling surplus Renewable Energy as compared to the potential value of using surplus Renewable Energy to defer future RPS purchases to meet RPS compliance targets through banking. The quantitative valuation of an Offer takes into account SDG&E's RPS position and any opportunity costs associated with each transaction. A bid that minimizes overall cost to SDG&E's customers and satisfies all volumetric and timing constraints will be selected. The Offer will be accepted if it fulfills the quantitative and qualitative criteria and SDG&E decides to move forward to close a transaction.

QUALITATIVE EVALUATION

Qualitative factors and benefits may be used to determine advancement onto the short list or evaluate tie-breakers, if any.

ADHERENCE TO TERMS AND CONDITIONS

Respondents may not make material modification to the supplied Transaction Documents. SDG&E will review modifications of any terms and conditions proposed in the Offer and consider the materiality of these changes. Material changes will result in disqualification.

BID CONFORMANCE EVALUATION

In addition to the elements described above, SDG&E may also reject a Bid if:

1. SDG&E uncovers evidence of market manipulation in the bid preparation and Offer process;
2. The Respondent does not provide adequate evidence it meets minimum participation criteria;
3. If there is a question as to whether or not the bids meet minimum eligibility criteria;
4. If the Respondent cannot fulfill the terms and conditions of the supplied Transaction Documents;

5. If the Respondent is unable to comply with RFP timing and other solicitation requirements; and/or
6. Respondent in SDG&E's sole judgment may not be able to provide or maintain the level of security of the transaction.

9.0 REJECTION OF OFFERS

SDG&E SHALL TREAT ALL RESPONDENTS FAIRLY AND EQUALLY AND SHALL EVALUATE ALL BIDS IN GOOD FAITH. WHILE SDG&E IS MINDFUL OF THE BENEFITS OF THIS RFP, IT MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFP EVEN AFTER A BID HAS BEEN SHORTLISTED. IN ADDITION, SDG&E NOTES THAT SHORTLISTING A BID DOES NOT CONSTITUTE SDG&E ACCEPTANCE OF ALL REDLINED CHANGES TO THE REQUIRED TRANSACTION AGREEMENT. SDG&E RESERVES THE RIGHT AT ANY TIME, AT ITS SOLE DISCRETION, TO ABANDON THIS RFP PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF BIDS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT ANY BID OR TO ENTER INTO ANY DEFINITIVE AGREEMENT, TO EVALUATE THE QUALIFICATIONS OF ANY RESPONDENT OR THE TERMS AND CONDITIONS OF ANY BID, OR TO REJECT ANY OR ALL BIDS, ALL WITHOUT NOTICE AND WITHOUT ASSIGNING ANY REASONS AND WITHOUT LIABILITY OF SEMPRA ENERGY, SDG&E, OR ANY OF THEIR SUBSIDIARIES, AFFILIATES, OR REPRESENTATIVES TO ANY RESPONDENT. SDG&E SHALL HAVE NO OBLIGATION TO CONSIDER ANY BID.

10.0 CONFIDENTIALITY

EXCEPT AS STATED BELOW OR WITH THE PRIOR WRITTEN CONSENT OF SDG&E, RESPONDENTS MAY NOT DISCLOSE (OTHER THAN BY ATTENDANCE ALONE AT ANY MEETING TO WHICH MORE THAN ONE RESPONDENT IS INVITED BY SDG&E) TO ANY OTHER RESPONDENT OR POTENTIAL RESPONDENT THEIR PARTICIPATION IN THIS RFP, AND RESPONDENTS MAY NOT DISCLOSE, COLLABORATE ON, OR DISCUSS WITH ANY OTHER RESPONDENT, OFFER STRATEGIES OR THE SUBSTANCE OF OFFERS, INCLUDING WITHOUT LIMITATION THE PRICE OR ANY OTHER TERMS OR CONDITIONS OF ANY INDICATIVE OR FINAL OFFER. RESPONDENT MAY DISCLOSE THEIR PARTICIPATION IN THIS RFP, THEIR OFFER INFORMATION, AND THE NEGOTIATION PROCESS, TO THE CPUC, ITS STAFF, THE PRG AND THE IE UNDER APPROPRIATE CONFIDENTIALITY PROTECTIONS.

SDG&E WILL USE THE HIGHER OF THE SAME STANDARD OF CARE IT USES WITH RESPECT TO ITS OWN PROPRIETARY OR CONFIDENTIAL INFORMATION OR A REASONABLE STANDARD OF CARE TO PREVENT DISCLOSURE OR UNAUTHORIZED USE OF RESPONDENT'S CONFIDENTIAL AND PROPRIETARY INFORMATION THAT IS LABELED AS "PROPRIETARY AND CONFIDENTIAL" ON THE OFFER PAGE ON WHICH THE PROPRIETARY INFORMATION APPEARS ("CONFIDENTIAL INFORMATION"). RESPONDENT SHALL SUMMARIZE ELEMENTS OF THE OFFER(S) IT DEEMS CONFIDENTIAL. THE SUMMARY MUST CLEARLY IDENTIFY WHETHER OR NOT PRICE, PROJECT NAME, LOCATION, SIZE, TERM OF DELIVERY AND TECHNOLOGY TYPE (EITHER COLLECTIVELY OR INDIVIDUALLY) ARE TO BE CONSIDERED CONFIDENTIAL INFORMATION. CONFIDENTIAL INFORMATION MAY BE MADE AVAILABLE ON A "NEED TO KNOW" BASIS TO SDG&E'S DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS, CONSULTANTS, THE INDEPENDENT EVALUATOR, AGENTS AND ADVISORS ("REPRESENTATIVES") FOR THE PURPOSE OF EVALUATING RESPONDENT'S OFFER, BUT SUCH REPRESENTATIVES SHALL BE REQUIRED TO OBSERVE THE SAME CARE WITH RESPECT TO DISCLOSURE AS SDG&E.

NOTWITHSTANDING THE FOREGOING, SDG&E MAY DISCLOSE ANY OF THE CONFIDENTIAL INFORMATION TO COMPLY WITH ANY LAW, RULE, OR REGULATION OR ANY ORDER, DECREE, SUBPOENA OR RULING OR OTHER SIMILAR PROCESS OF ANY COURT, SECURITIES EXCHANGE, CONTROL AREA OPERATOR, GOVERNMENTAL AGENCY OR GOVERNMENTAL OR REGULATORY AUTHORITY AT ANY TIME EVEN IN THE ABSENCE OF A PROTECTIVE ORDER, CONFIDENTIALITY AGREEMENT OR NON-DISCLOSURE AGREEMENT, AS THE CASE MAY BE, WITHOUT NOTIFICATION TO THE RESPONDENT AND WITHOUT LIABILITY OR ANY RESPONSIBILITY OF SDG&E TO THE RESPONDENT.

IT IS EXPRESSLY CONTEMPLATED THAT MATERIALS SUBMITTED BY A RESPONDENT IN CONNECTION WITH THIS RFP WILL BE PROVIDED TO THE CPUC, ITS STAFF, THE CEC, ITS STAFF, AND THE PRG. SDG&E WILL SEEK CONFIDENTIAL TREATMENT PURSUANT TO CPUC DECISION NUMBER 06-06-066, PUBLIC UTILITIES

CODE SECTION 583 AND GENERAL ORDER 66-D OF THE CPUC, WITH RESPECT TO ANY RESPONDENT CONFIDENTIAL INFORMATION SUBMITTED BY SDG&E TO THE CPUC FOR THE PURPOSES OF OBTAINING REGULATORY APPROVAL. SDG&E WILL ALSO SEEK CONFIDENTIALITY PROTECTION FROM THE CEC FOR RESPONDENT'S CONFIDENTIAL INFORMATION AND WILL SEEK CONFIDENTIALITY AND/OR NON-DISCLOSURE AGREEMENTS WITH THE PRG. SDG&E CANNOT, HOWEVER, ENSURE THAT THE CPUC OR CEC WILL AFFORD CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT CONFIDENTIALITY AGREEMENTS OR ORDERS WILL BE OBTAINED FROM AND/OR HONORED BY THE PRG, CEC, OR CPUC.

SDG&E, ITS REPRESENTATIVES, SEMPra ENERGY, AND ANY OF THEIR SUBSIDIARIES DISCLAIM ANY AND ALL LIABILITY TO A RESPONDENT FOR DAMAGES OF ANY KIND RESULTING FROM DISCLOSURE OF ANY OF RESPONDENT'S INFORMATION.

11.0 CREDIT TERMS AND CONDITIONS

SDG&E has the unilateral right to evaluate and determine the credit-worthiness of the Respondent relative to this RFP. The Respondent is required to complete, execute and submit the RFP credit application as part of its offer. The application requests financial and other relevant information needed to demonstrate creditworthiness. Respondents may download the application from the RFP Website.

All credit support arrangements (e.g., parent guaranty, deed of trust, letter of credit) must be negotiated prior to an offer being accepted as a winning offer. The form of the security (e.g. parent guaranty, deed of trust, letter of credit) will be at SDG&E's sole discretion and will depend on various factors including Respondent's credit worthiness, product type, the volume and the term of the agreement. A model guaranty and a model letter of credit may be downloaded from the RFP Website as separate attachment to the Transaction Document.

12.0 CPUC APPROVAL

SDG&E shall submit all signed agreements to the CPUC for approval. CPUC approval that is final and non-appealable will be required as a condition precedent to the effectiveness of any contract resulting from this RFP, however, the winning bidder, in its sole discretion, may choose to take deliveries prior to such approval.



APPENDIX 10.A

2017 RPS SALES MODEL PPA

Draft: for discussion purposes only.
SDG&E may insist on using the EEI master agreement depending on the credit evaluation.

**WSPP AGREEMENT
CONFIRMATION
BETWEEN
SAN DIEGO GAS & ELECTRIC COMPANY
AND
[INSERT NAME]**

This confirmation letter ("Confirmation") confirms the transaction ("Transaction") between **San Diego Gas & Electric Company** ("Seller" or "SDG&E" "Party B") and _____ ("Buyer" or "Party A"), each individually a "Party" and together the "Parties", effective as of _____, 2014 (the "Confirmation Effective Date"). This Transaction is governed by the WSPP Agreement effective as of May 9, 2013, along with any amendments and annexes executed between the Parties thereto (the "Master Agreement"). The Master Agreement and this Confirmation shall be collectively referred to herein as the "Agreement." Capitalized terms used but not otherwise defined in this Confirmation have the meanings ascribed to them in the Master Agreement or in the RPS (as defined below). If any term in this Confirmation conflicts with the Master Agreement, the definitions set forth in this Confirmation shall supersede.

Buyer:		Seller: San Diego Gas & Electric Company
Contact Information:	Name: (" <u>Buyer</u> ")	Name: San Diego Gas & Electric Company (" <u>Seller</u> ")
	All Notices: Attn: Phone: Facsimile: Duns: Federal Tax ID Number:	All Notices: San Diego Gas & Electric Company Street: 8315 Century Park Court City: San Diego, CA Zip: 92123 Attn: Electric & Fuel Procurement Contract Administration Phone: (858) 650-5536 Facsimile: (858) 650-6190 Duns: 006911457 Federal Tax ID Number: 95-1184800
	Invoices:	Invoices: San Diego Gas & Electric Company 8315 Century Park Ct. San Diego, California 92123-1593 Attn: Energy Accounting Manager Phone: (858) 650-6177 Facsimile: (858) 650-6190
	Scheduling Agent:	Scheduling: San Diego Gas & Electric Company 8315 Century Park Ct. San Diego, California 92123-1593 Attn: Transaction Scheduling Manager Phone: (858) 650-6160 Facsimile: (858) 650-6191

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	Payments:	<p align="center">Payments:</p> <p>San Diego Gas & Electric Company PO Box 25110 Santa Ana, CA 92799-5110 Attn: Mail Payments Phone: (619) 696-4521 Facsimile: (619) 696-4899</p>
	Wire Transfer:	<p align="center">Wire Transfer:</p> <p>BNK: Union Bank of California for: San Diego Gas & Electric Company ABA: Routing # 122000496 ACCT: #4430000352 Confirmation: SDG&E, Major Markets FAX:(213) 244-8316</p>
	Credit and Collections:	<p align="center">Credit and Collections:</p> <p>San Diego Gas & Electric Company, Major Markets 555 W. Fifth Street, ML 10E3 Los Angeles, CA 90013-1011 Attn.: Major Markets, Credit and Collections Manager Fax No.: (213) 244-8316 Phone: (213) 244-4343</p>
	Defaults: With additional Notices of an Event of Default or Potential Event of Default to:	<p align="center">Defaults:</p> <p>With additional Notices of an Event of Default or Potential Event of Default to: San Diego Gas & Electric Company 8330 Century Park Ct. San Diego, California 92123 Attn: General Counsel Phone: (858) 650-6141 Facsimile: (858) 650-6106</p>

The Parties hereby agree that the General Terms and Conditions are incorporated herein, and to the following provisions as provided for in the General Terms and Conditions:

**ARTICLE 1
 COMMERCIAL TERMS**

FIRM DELIVERY OBLIGATION

Seller: SAN DIEGO GAS & ELECTRIC COMPANY	Buyer:
Scheduling:	<p><u>Seller</u> Day Ahead: 858-650-6178</p> <p><u>Buyer</u> Day Ahead:</p> <p>SCID: SCID: Contact information is for convenience and is subject to change by notice.</p>

Draft: for discussion purposes only.

SDG&E may insist on using the EEI master agreement depending on the credit evaluation.

Product:	<p>The Product is a Firm Delivery Obligation of all California Energy Commission-certified RPS Bundled Electric Energy and associated Green Attributes which meets the definition of a Category 1 Transaction in the Contract Quantity.</p> <p>During the Delivery Period, Seller shall deliver and sell, and Buyer shall purchase and receive, this Product, subject to the terms and conditions of this Confirmation. Seller shall not substitute or purchase any Green Attributes from any generating resource other than the Project for delivery hereunder.</p>
Project:	<p>All Product sold hereunder shall be from one or more of the facilities, each meeting the requirement of 6.1(a) and as listed in Exhibit A, as may be updated from time to time by written notice from Seller to Buyer (collectively, the "Project").</p> <p>The Parties acknowledge and agree that the Project consists of a pool of facilities physically located in California and that Seller is permitted to utilize one or more of these pooled facilities in order to satisfy its obligations hereunder.</p> <p>The Parties further acknowledge and agree that, with respect to Section 3.3(a) of this Confirmation, Product shall solely be limited to the actual Product generated and delivered by the pooled facilities used to satisfy the Contract Quantity, and that Buyer is not entitled to any additional Product produced by the pooled facilities in the Project above and beyond the Contract Quantity.</p>
Contract Capacity	<p>In any hour, as determined by Seller in accordance with the Scheduling Obligations section of this Confirmation</p>
Contract Quantity:	<p>"Contract Quantity" shall be equal to [] MWhs per calendar month for a total of [] MWhs in 20[XX] and [] MWhs in 20[XX]. In the event Seller does not deliver any of the above specified quantities in a particular calendar month for any reason, except as excused by Uncontrollable Force, the Parties shall agree upon the make-up schedules for any undelivered quantities. If the Parties are unable to come to agreement on such make-up schedule, Buyer shall deliver the quantities to Seller in a reasonable manner and within a reasonable time.</p>
Contract Price:	<p>Index plus \$[XX.XX] MWh</p>
Term:	<p>The Term of this Transaction shall commence upon the Confirmation Effective Date and shall continue until delivery by Seller to Buyer of the Contract Quantity of the Product has been completed and all other obligations of the Parties under this Agreement have been satisfied, unless terminated earlier due to failure to satisfy the Condition Subsequent or as otherwise provided in the Agreement.</p>
Delivery Period:	<p>The Delivery Period of this Transaction shall commence on [] and shall end at midnight on [], unless extended for make-up deliveries as specified in the Contract Quantity Section or terminated in accordance with the terms herein.</p>
Delivery Point:	<p>TH_SP15_GEN-APND</p>
Firm Delivery Obligation:	<p>"Firm Delivery Obligation" shall have the following meaning:</p> <p>The obligation to provide the Contract Quantity is a firm obligation in that Seller shall deliver the quantity of the Product from the Project consistent with the terms of this Confirmation without excuse other than Uncontrollable Force. If a failure by Seller to deliver the quantity from the Project is not excused by Uncontrollable Force, Seller shall make up such failure in accordance with the "Contract Quantity" Section.</p>

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Scheduling Obligations:	<p>Seller shall notify Purchaser of the quantity of energy to be delivered for each hour, prior to the beginning of each month and such quantity may be adjusted by Seller with notice to Purchaser at least twenty-four (24) hours prior to the Tariff's deadline to submit ISTs on a day-ahead basis in the IST-APN Integrated Forward Market, which amount shall be the "Designated Contract Capacity". For each hour of each day in the Delivery Period, Seller shall schedule to the Purchaser the Designated Contract Capacity, if any, as an IST-APN in the Integrated Forward Market at the Delivery Point on a day-ahead basis in accordance with the Tariff.</p> <p>In the event all of the scheduled quantity of the Product is not delivered after the IST has been scheduled between the Buyer and Seller, Buyer shall pay Seller the price paid to Buyer from the CAISO applicable to each hour times the IST quantity in that hour that exceeds the Product quantity actually delivered in that hour.</p>
Scheduling Period:	<p>In accordance with this Confirmation, Seller shall schedule and deliver to Purchaser the CAISO Energy in the Designated Contract Capacity amount, if any, for each hour during the Delivery Period.</p>
Condition Precedent:	<p>The commencement of delivery of the Green Attributes in accordance with Section 3.3 below shall be contingent upon the Seller obtaining or waiving approval by the CPUC of this Confirmation. Either Party has the right to terminate this Confirmation upon notice in accordance with Section 12 of the WSPP Agreement, which will be effective five (5) Business Days after such notice is given, if: (i) the CPUC does not issue a final and non-appealable order approving this Agreement or the requested relief contained in the related advice letter filing, both in their entirety, (ii) the CPUC issues a final and non-appealable order which contains conditions or modifications unacceptable to either Party, or (iii) the final and non-appealable approval by the CPUC has not been obtained by Seller, on or before [INSERT DEADLINE DATE].</p> <p>The date on which approval of the CPUC of this Confirmation has been obtained or waived, by Seller, in its sole discretion, shall hereinafter be the "Condition Precedent Satisfaction Date."</p> <p>Any termination made by a Party under this section shall be without liability or obligation to the other Party.</p> <p>Notwithstanding any other provision in this Confirmation, Seller will have no obligation to transfer Green Attributes to Purchaser unless the Condition Precedent Satisfaction Date has occurred.</p>

ARTICLE 2 DEFINITIONS

"Buyer" means "Purchaser".

"CAISO" means the California Independent System Operator.

"CAISO Energy" means "Energy" as defined in the Tariff.

"California Energy Commission-certified RPS Bundled Electric Energy" means electric energy from an Eligible Renewable Energy Resource, as such term is defined in Public Utilities Code Section 399.12 and 399.16.

"Category 1 Transaction" means procurement of product that meets the product content requirements under Public Utilities Code Section 399.16(b)(1) as adopted in Senate Bill 2 (1x), enacted on April 12, 2011 in the First Extraordinary Session of the Legislature in a manner consistent with Section 3203 (a) of the Enforcement Procedure for the Renewable Portfolio

SDG&E may insist on using the EEI master agreement depending on the credit evaluation.

Standard for Local Publicly Owned Electric Utilities, as adopted by the California Energy Commission on June 12, 2013, as may be further amended.

"Condition Subsequent Satisfaction Date" means the date on which CPUC approval, as fully described in the "Condition Subsequent" provision, has been obtained or waived, by Seller, in its sole discretion.

"CPUC" means the California Public Utilities Commission or its regulatory successor.

"CPUC Approval" means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

- (a) Approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer's administration of the Agreement; and
- (b) Finds that any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer's compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

Notwithstanding the foregoing, if a Tier 2 or Tier 3 advice letter process is used to obtain CPUC Approval of this Agreement, CPUC Approval will also be deemed to have occurred on the date that a CPUC Energy Division disposition which contains such findings or deems approved an advice letter requesting such findings becomes final and non-appealable.

"Day-Ahead" has the meaning set forth in the Tariff.

"Delivery Period" means "Delivery Term".

"Designated Contract Capacity" means the amount determined by Seller in accordance with the Scheduling Obligations section of this Confirmation.

"Green Attributes" means any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as:

- (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SO_x), nitrogen oxides (NO_x), carbon monoxide (CO) and other pollutants;
- (2) any avoided emissions of carbon dioxide (CO₂), methane (CH₄), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by law, to contribute to the actual or potential threat of altering the Earth's climate by trapping heat in the atmosphere;¹
- (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser's discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local law, regulation or bill, and international or foreign emissions trading program. Green Tags are

¹ Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

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accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy.

Green Attributes do not include;

- (i) any energy, capacity, reliability or other power attributes from the Project,
- (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation,
- (iii) fuel-related subsidies or "tipping fees" that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or
- (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits.

If the Project is a biomass or biogas facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project.

"Index" means the CAISO Integrated Forward Market Day-Ahead price (as such term is defined in the Tariff) for the Delivery Point for each applicable hour as published by the CAISO on the CAISO website; or any successor thereto, unless a substitute publication and/or index is mutually agreed to by the Parties, averaged for the quantity of energy that is delivered under this Confirmation for each Scheduling Period.

"Integrated Forward Market" has the meaning set forth in the Tariff.

"Monthly Contract Capacity" has the meaning set forth in the "Contract Capacity" section of this Confirmation.

"Off-Peak Period" means any hour that is not an On-Peak Period.

"On-Peak Period" has the meaning established by the North American Energy Standards Board, as may be updated from time to time.

"RPS" means the California Renewable Portfolio Standard Program as codified at California Public Utilities Code Section 399.11 *et seq.*, the Enforcement Procedures for the Renewable Portfolio Standard for Local Publicly Owned Electric Utilities, as adopted by the California Energy Commission on June 12, 2013, as may be further amended.

"Tariff" means the tariff and protocol provisions, including any current CAISO-published "Operating Procedures" and "Business Practice Manuals," as amended or supplemented from time to time, of the CAISO.

"Vintage" means the calendar year and month during the Delivery Period in which the WREGIS Certificate is created through the generation of the Product.

"WREGIS" means the Western Renewable Energy Generation Information System or other process recognized under applicable laws for the registration, transfer or ownership of Green Attributes.

"WREGIS Certificate" means "Certificate" as defined by WREGIS in the WREGIS Operating Rules.

"WREGIS Operating Rules" means the operating rules and requirements adopted by WREGIS.

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ARTICLE 3 CONVEYANCE OF RENEWABLE ENERGY

3.1 Seller's Conveyance Of Electric Energy

Except as stated in this Section 3.1 and beginning on the first day of the Delivery Period and throughout all applicable months of the Delivery Period, Seller shall deliver and sell, and Buyer shall purchase and receive, the Product, subject to the terms and conditions of this Confirmation. Seller will not be obligated to sell or replace any Product that is not or cannot be delivered as a result of Uncontrollable Force.

Should any electric energy provided by Seller under this Confirmation be determined to have originated from a resource other than the Project, Seller shall remedy such failure in a manner reasonably acceptable to Buyer within a reasonable period of time after written notice of such failure is given to the Seller by the Buyer.

3.2 Reserved

3.3 Seller's Conveyance Of Green Attributes

(a) Green Attributes. Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project.

The Green Attributes are delivered and conveyed upon completion of all actions described in Section 3.3(b) below.

(b) Green Attributes Initially Credited to Seller's WREGIS Account

(A) During the Delivery Period, Seller, at its own cost and expense, shall maintain its registration with WREGIS. All Green Attributes transferred by Seller hereunder shall be designated California RPS-compliant with WREGIS. Seller shall, at its sole expense, use WREGIS as required pursuant to the WREGIS Operating Rules to effectuate the transfer of Green Attributes to Buyer in accordance with WREGIS reporting protocols and WREGIS Operating Rules.

(B) For each applicable month of the Delivery Period, Seller shall deliver and convey the Green Attributes associated with the electric energy delivered in Section 3.1 within five (5) Business Days after the end of the month in which the WREGIS Certificates for the Green Attributes are created by properly transferring such WREGIS Certificates, in accordance with the rules and regulations of WREGIS, equivalent to the quantity of Green Attributes to Purchaser into Purchaser's WREGIS account such that all right, title and interest in and to the WREGIS Certificates shall transfer from Seller to Purchaser. Provided, however, that Seller shall not be obligated to deliver and convey any Green Attributes or the associated WREGIS Certificates prior to the Condition Subsequent Satisfaction Date. Upon the Condition Subsequent Satisfaction Date, Seller shall deliver and convey the Green Attributes associated with the electric energy delivered in Section 3.1 within five (5) Business Days after the Condition Subsequent Satisfaction Date (and after the WREGIS Certificates for the Green Attributes are created) by properly transferring the WREGIS Certificates for such Green Attributes, in accordance with the rules and regulations of WREGIS, into Purchaser's WREGIS account such that all right, title and interest in and to the WREGIS Certificates shall transfer from Seller to Purchaser.

(C) In addition to its other obligations under this Section 3.3, Seller shall convey to Buyer WREGIS Certificates from the Project that are of the same Vintage as the Product that was

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provided under Section 3.1 of this Confirmation.

**ARTICLE 4
CPUC FILING AND APPROVAL**

Within [INSERT] days after the Confirmation Effective Date, Seller shall file with the CPUC the appropriate request for CPUC approval of this Agreement and possibly other agreements. Seller shall seek CPUC approval of the filing, including promptly responding to any requests for information related to the request for CPUC approval. Buyer shall use commercially reasonable efforts to support Seller in obtaining CPUC approval. Seller and Buyer have no obligation to seek rehearing or to appeal a CPUC decision which fails to approve this Agreement, or which fails to meet the requirements contained in the Condition Subsequent section.

**ARTICLE 5
COMPENSATION**

Purchaser will pay Seller as follows:

Calculation Period:	Each calendar month during the Delivery Period.
Monthly Cash Settlement Amount:	The Monthly Cash Settlement Amount for the period prior to the Condition Subsequent Satisfaction Date and for the period after the Condition Subsequent Satisfaction Date shall be as follows:
Interim Period (Prior to Condition Subsequent Satisfaction Date):	For each Calculation Period that occurs prior to the Condition Subsequent Satisfaction Date ("Interim Period"), Purchaser shall pay Seller the Monthly Cash Settlement Amount, in arrears, in the amount equal to the sum of the following: the product, for each hour of the Calculation Period, of the applicable Index Price for each hour, multiplied by the quantity of CAISO Energy scheduled, delivered and received by Purchaser pursuant to Section 3.1 during that hour.
Upon Condition Subsequent Satisfaction Date:	Upon the Condition Subsequent Satisfaction Date, Purchaser shall make a one-time payment to Seller for the Green Attributes associated with the CAISO Energy delivered pursuant to Section 3.1 during Calculation Periods during the Interim Period (the "Adjustment Amount") in the amount equal to the product of the following: (a) [XX.XX] multiplied by (b) the quantity of Green Attributes (in MWhs) associated with the CAISO Energy delivered during the Interim Period. If the Condition Subsequent Satisfaction Date does not occur prior to the end of the Delivery Term, Seller shall not deliver title to any accrued Green Attributes to Purchaser and Purchaser shall have no payment obligation to Seller for any Green Attributes.

After Condition Subsequent

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Satisfaction Date:

After the Condition Subsequent Satisfaction Date, Purchaser shall pay Seller the Monthly Cash Settlement Amount, in arrears, for each Calculation Period in the amount equal to the sum of the following: (a) the sum, over all hours of the Calculation Period, of the product for each such hour of the applicable Index price for each hour, multiplied by the quantity of CAISO Energy scheduled, delivered and received by Purchaser pursuant to Section 3.1 during that hour; plus (b) the product of \$[XX.XX] multiplied by the quantity of Green Attributes (in MWhs) delivered or credited to Purchaser's WREGIS account pursuant to Section 3.3 during the applicable Calculation Period.

Payment Date:

Notwithstanding any provision to the contrary in Section 9.2 of the Master Agreement, payments of each Monthly Cash Settlement Amount by Purchaser to Seller under this Confirmation shall be due and payable on or before the later of the twentieth (20th) day of the month in which the Purchaser receives from Seller an invoice for the Calculation Period to which the Monthly Cash Settlement Amount pertains, or within ten (10) Business Days, or, if such day is not a Business Day, then on the next Business Day, following receipt of an invoice issued by Seller for the applicable Calculation Period. The invoice shall include a statement detailing the portion of Product transferred to Purchaser during the applicable Calculation Period.

Invoices to Buyer will be sent by hard copy and PDF format to: **[TO BE INSERTED]**

Attn:
Address:
Email:
Phone:
Facsimile:

For purposes of this Confirmation, Buyer shall be deemed to have received an invoice upon the receipt of either the hard copy or PDF format of the invoice, whichever comes first.

Payment to Seller shall be made by electronic funds transfer pursuant to the following:

BNK: Union Bank of California
For: San Diego Gas & Electric Company
ABA: Routing # 122000496
ACCT: #4430000352
Confirmation: SDG&E, Major Markets
FAX :(213) 244-8316

With a copy to:

San Diego Gas & Electric Company
8315 Century Park Ct.
San Diego, California 92123-1593

SDG&E may insist on using the EEI master agreement depending on the credit evaluation.

Attn: Energy Accounting Manager
Phone: (858) 650-6177
Facsimile: (858) 650-6190

ARTICLE 6 REPRESENTATIONS, WARRANTIES AND COVENANTS

6.1 Seller's Representation, Warranties, and Covenants Related to Green Attributes

- (a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that:
- (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource ("ERR") as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and
 - (ii) the Project's output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

(b) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in California Public Utilities Commission Decision 08-08-028, and as may be modified by subsequent decision of the California Public Utilities Commission or by subsequent legislation.

To the extent a change in law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in law.

The term "commercially reasonable efforts" as set forth in Sections 6.1 (a) and (b) above shall not require Seller to incur out-of-pocket expenses in excess of \$25,000 in the aggregate in any one calendar year between the Confirmation Effective Date and the last day of the Term.

(c) Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in the Western Renewable Energy Generation Information System will be taken prior to the first delivery under the contract.

For the avoidance of doubt, the term "contract" as used in the immediately preceding paragraph means this Agreement.

(d) In addition to the foregoing, Seller warrants, represents and covenants, as of the Confirmation Effective Date and throughout the Delivery Period, that:

- (i) Seller has the contractual rights to sell all right, title, and interest in the Product agreed to be delivered hereunder;
- (ii) Seller has not sold the Product to be delivered under this Confirmation to any other person or entity; and
- (iii) at the time of delivery, all rights, title, and interest in the Product to be delivered under this Confirmation are free and clear of all liens, taxes, claims, security interests,

Draft: for discussion purposes only.

SDG&E may insist on using the EEI master agreement depending on the credit evaluation.

or other encumbrances of any kind whatsoever.

ARTICLE 7 GENERAL PROVISIONS

7.1 Facility Identification

Upon Buyer's reasonable request, within ten (10) Business Days after the end of each month during the Delivery Period, Seller shall provide indicative identification, based on preliminary meter data, of the facility(s) from the pooled facility that the Product was delivered from for that month.

ARTICLE 8 GOVERNING LAW

Section 8.2 Governing Law/Venue

THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT. The Parties hereby irrevocably and unconditionally agrees that any legal action or proceeding with respect to this Agreement shall be brought in the courts of the State of California in the County of San Diego or the courts of the United States in the County of San Diego, and by executing and delivering this Agreement, both Parties hereby submit to and accept irrevocably and unconditionally, the jurisdiction of the above mentioned courts. The foregoing, however, shall not limit the right of either Party as it may elect to bring any legal action or proceeding or to obtain execution of judgment in any other appropriate jurisdiction.

ARTICLE 9 SOVEREIGN IMMUNITY

[NOTE TO BIDDERS: insert only if applicable to governmental agencies, etc.] For purposes of this Confirmation only, the WSPP Agreement is amended by adding the following new provision: "Purchaser hereby waives sovereign immunity with regard to disputes relating to this Confirmation."

ARTICLE 10 CONFIDENTIALITY

10.1 Amendment to WSPP Agreement. Changes to the WSPP shall apply to this Confirmation only. For purposes of this Confirmation, Section 30 (Confidentiality) of the WSPP Agreement is deleted in its entirety and replaced with the following:

"30.1(a) Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of

Draft: for discussion purposes only.

SDG&E may insist on using the EEI master agreement depending on the credit evaluation.

terms specified in and pursuant to Section 30.1(b) of this Agreement; (v) in order to comply with any applicable law, regulation, including, but not limited to, the California Public Records Act and/or the California Ralph M Brown Act, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party (“Disclosing Party”), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 30.1(a) (“Disclosure Order”) each Party shall, to the extent practicable, use reasonable efforts within its sole and absolute discretion to pursue rights under such applicable laws, regulations, rules or orders which allow for the prevention or limitation of such disclosure. The Disclosing Party’s determination of what efforts might be reasonable shall not be subject to challenge by the other Party. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

(b) RPS Confidentiality. Notwithstanding Section 30.1(a) of this Agreement, at any time on or after the date on which the Seller makes its filing seeking CPUC approval for this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Term, project location, Contract Capacity, Contract Quantity, and Delivery Point.

(c) Publicity. Except as otherwise agreed to in this Section 30.1 above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed.” Notwithstanding the foregoing, the Parties understand acknowledge and agree that Buyer is a California Public Agency and that certain actions and documents of Buyer are subject to public notice and/or disclosure under applicable laws and regulations, including, but not limited to, the California Public Records Act and/or the California Ralph M. Brown Act, and that Buyer is not obligated to seek prior approval of Seller when Buyer is complying, in its sole and absolute discretion, with such laws and regulations.

ACKNOWLEDGED AND AGREED TO AS OF THE CONFIRMATION EFFECTIVE DATE:

SAN DIEGO GAS & ELECTRIC COMPANY

[INSERT NAME OF PURCHASER]

BY: _____

BY: _____

NAME:

NAME:

TITLE: Vice President-
Electric & Fuel Procurement

TITLE:

_____ APPROVED AS TO LEGAL FORM

Draft: for discussion purposes only.
SDG&E may insist on using the EEI master agreement depending on the credit evaluation.

EXHIBIT A

**TO THE CONFIRMATION BETWEEN _____ AND SAN DIEGO GAS & ELECTRIC
COMPANY DATED: _____**

[NOTE: Exhibits to be added before execution]

DRAFT



APPENDIX 10.B

2017 FRAMEWORK FOR ASSESSING POTENTIAL RPS SALES

SDG&E's Framework for Assessing Potential RPS Sales

SDG&E's 2017 RPS Plan addresses the potential sale of excess renewable generation, stating that SDG&E will address opportunities as they arise, and SDG&E will bank or sell based on whether such a sale is beneficial for its ratepayers.¹ SDG&E has previously been directed by the Commission to include a Sales RFP and Sales PPA (attached hereto as Appendices 10 and 10.A) if its RPS Plan contemplates selling eligible renewable energy products.² The ACR for the 2017 Plan contains this directive and also requires the inclusion of a Sales Framework describing how the quantity, target price, and price floor will be determined. This document describes the various factors SDG&E will consider as it evaluates any potential sales opportunity, with the goal of identifying the best outcome for its ratepayers.

I. Products

SDG&E could sell bundled energy and renewable attributes (PCC1), a firm and shaped product (PCC2) or a Renewable Energy Credit only (PCC3) from its portfolio. For buyers interested in PCC1 or PCC2 products, SDG&E could sell PCC1 or PCC2 products not generated prior to the effective date of the resale contract (that is, generated on a go-forward basis), and the buyer would be able to retain the product's categorization for RPS compliance reporting purposes.³ For buyers interested in PCC3 products, SDG&E could sell RECs from any contract in its portfolio classified as PCC3, or SDG&E could unbundle and sell RECs from any contract within its portfolio.⁴

II. Criteria

SDG&E will consider both quantitative and qualitative criteria when determining whether to bank or sell excess renewable generation. As a threshold matter, if the results of this analysis indicate that a sales scenario would provide the greatest value to ratepayers, then a sale may be pursued. If the banking vs. sales analysis indicates that banking provides the greatest ratepayer value, then the excess generation will likely be banked.

¹ See Section II.A of Attachment A.

² 2016 ACR, p. 13.

³ D.11-12-052, pp. 37, 52.

⁴ D.11-12-052, pp. 36, 56.

- Quantitative Criteria
 - Banking vs. Sales Analysis: As described in more detail under Section II.B in Attachment A, SDG&E will consider the time value of revenues from the potential sale, and the potential replacement cost when evaluating potential sales opportunities.
 - Impact on Rates: Another consideration is the magnitude of the impact a potential sale will have on ratepayer bills.

- Qualitative Criteria
 - RPS Position: SDG&E will consider any change in the point at which it may need to procure to fill a future need as a result of either selling or banking excess renewable generation.
 - Market Liquidity: It is important to SDG&E that the market for renewable products remains liquid so that sales and purchases on behalf of customers can be made at competitive prices. As one of the three largest retail sellers in the State, SDG&E also has one of the three largest RPS portfolios in the State, and therefore it must consider possible impacts on the market of any potential sales volumes.
 - Accounting Rules: SDG&E will consider the potential accounting impacts of selling excess renewable generation. Such impacts may include a scenario in which both the sales contract and the underlying contract(s) supplying the energy for the sales contract are marked to market value in each reporting period in accordance with generally accepted accounting principles. Due to market volatility, the mark to market adjustment may create volatility in SDG&E's financial statements.
 - Impact on GHG Reduction Goals and IRP Targets: With the passage of SB 350, the State is moving toward a more holistic planning process with the goal of reducing GHG emissions through a suite of tools, one of which is the RPS program.⁵ As described under Section I of Attachment A, SDG&E has taken a strong leadership position with respect to the State's RPS targets, and in doing so has inherently advanced the goals of the IRP. Although the IRP framework is still under

⁵ See Section II.C of Attachment A.

- development, the impact of any potential sale as it relates to SDG&E's progress towards IRP goals will be incorporated into SDG&E's analysis as appropriate.
- Uncertainty: SDG&E's analysis involves assumptions regarding future market pricing and structure, regulatory framework, and legislative goals many years into the future. While SDG&E believes its assumptions to be reasonable, it acknowledges that markets change over time and the future cannot be known; therefore, this risk must be considered when evaluating any potential sale.

Additionally, SDG&E, along with all other public utilities, is required by law to seek and receive authorization from the Commission to sell assets valued above five million dollars that are useful in its services to the public.⁶ In other words, SDG&E's quantitative and qualitative evaluation must determine that the excess generation being sold through the potential resale contract is in fact not needed by ratepayers.⁷

III. Buyers

Potential buyers could contract with SDG&E under various scenarios. One scenario would be by responding to a Sales RFP that SDG&E may issue. As mentioned above, SDG&E's 2017 Plan includes a Sales RFP that SDG&E may choose to issue, and if so, it would receive and evaluate purchase proposals from the market. Another scenario would be through a bilateral transaction. In this scenario, a counterparty may approach SDG&E with an unsolicited proposal, or may be approached by SDG&E. Section II.B of Attachment A describes the potential benefits of a bilateral transaction, which is a valuable tool for both purchases and sales due to its flexibility in addressing situations that involve timing constraints and/or complex terms.

IV. Pricing

The overarching goal of SDG&E's sales framework is to identify the best possible outcome for its ratepayers. Given the host of considerations listed above, particularly the intrinsic market uncertainty, establishing either an absolute price target or floor at this juncture would be premature. As with SDG&E's past Commission-approved sales transactions, the

⁶ Section 851.

⁷ For example, see Commission Resolution E-4741.

appropriate price thresholds of any potential sales opportunity will be dependent upon the results of SDG&E's quantitative and qualitative evaluation at the time of the transaction, and its reasonableness will be determined by the Commission as it acts on SDG&E's advice letter requesting approval of the transaction.



APPENDIX 11

2017 GREEN TARIFF (“GT”) RENEWABLE AUCTION MECHANISM (“RAM”) REQUEST FOR OFFERS (“RFO”)



SAN DIEGO GAS AND ELECTRIC COMPANY
ELECTRIC AND FUELS PROCUREMENT DEPARTMENT
8315 CENTURY PARK COURT, CP21D
SAN DIEGO, CA 92123

**SDG&E's [] REQUEST FOR OFFERS
SEEKING
ECOCHOICE (GREEN TARIFF) PROJECTS**

ISSUED

||

OFFERS DUE

||

RFO WEBSITE

||

EMAIL QUESTIONS/COMMENTS TO

||

INDEPENDENT EVALUATOR (IE)

||

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1.0 BACKGROUND

In accordance with Decision (D.)16-05-006, D.15-01-051, and Resolution 4734 (together the Green Tariff Shared Renewables Decisions or GTSR Decisions) issued by the California Public Utilities Commission (CPUC or Commission), San Diego Gas & Electric Company (SDG&E) is issuing this EcoChoice (i.e. Green Tariff) Request for Offers (RFO or the solicitation) seeking contracts with facilities that produce Renewable Portfolio Standard (RPS)-eligible energy for the purpose of implementing its EcoChoice program.

The GTSR Decisions require SDG&E to implement two programs: (1) a Green Tariff (“EcoChoice”) program, allowing customers to choose a higher percentage of renewable generation; and (2) an Enhanced Community Renewables (“EcoShare”) program, allowing customers to participate in community-based projects. These programs are intended to: 1) make clean, renewable energy available to all customers, whether they own a home and/or can afford a significant capital investment or not; (2) increase the overall volume of renewable energy in the San Diego area; and (3) increase options for institutional, commercial and residential customers to meet their renewable energy goals.

This solicitation is not requesting bids for feed-in-tariff projects (e.g. Re-MAT, Bio-MAT), BioRAM, or other RPS procurement activities that currently exist or are being contemplated, but rather is seeking bids for the EcoChoice portion of GTSR.

Participation from Diverse Business Enterprises:

SDG&E encourages Diverse Business Enterprises (DBEs), as defined in G.O. 156¹, to participate in this RFO. Additional information on SDG&E’s DBE program can be found at: <http://www.sempra.com/about/supplier-diversity/> and <http://www.cpuc.ca.gov/puc/supplierdiversity/>

SDG&E’s DBE Program representatives will provide a presentation during the bidder’s conference and DBEs can request additional information by contacting SDG&E at vendorrelations@semprautilities.com.

Products and Procurement Targets for the EcoChoice Solicitation:

Overall, SDG&E’s GTSR program is designed to ensure sufficient eligible capacity is available to meet customer demand of up to 59 MW, with 10 MW of the total program capacity being set aside for projects located in designated Environmental Justice areas. SDG&E will solicit EcoChoice projects that are classified as eligible renewable resources². For EcoChoice, this product must be located within the service territory of SDG&E or in the Imperial Valley and either directly connected

¹ See <http://www.thesupplierclearinghouse.com/eligibility/default.asp> for the definition of a DBE.

² D.16-05-006 approves procurement of any RPS-eligible renewable generation.

or dynamically transferred via pseudo-tie into SDG&E’s service territory by the California Independent System Operator (CAISO).

The procurement target for this RFO is listed in Table 2. As required by the GTSR Decisions, SDG&E will reserve 10 MW of its program target for projects sized between 500kW and 1 MW located in areas previously identified by the California Environmental Protection Agency as the most impacted and disadvantaged communities (Environmental Justice or EJ Reservation).³

Table 1. Summary of RFO Products being sought in this solicitation

Product	Description
Renewable Portfolio Standard-eligible renewable resource of any technology	“Eligible renewable resource” is defined by the California Energy Commission (CEC). Eligibility criteria are set forth by the CEC in its Renewable Portfolio Standard Eligibility Guidebook.

Table 2. RFO Procurement Targets

Product	Target Capacity (MW)
EcoChoice	[] ⁴
Environmental Justice (EJ)	[] MW

All Respondents must incorporate all estimated non-reimbursable interconnection costs that are allocated to the project in their offer pricing.

Deliverability – General:

Respondents may provide bids for projects that will achieve Full Capacity Deliverability Status (FCDS), as defined by the CAISO Tariff and determined by the CAISO, or for projects that will not achieve FCDS, provide bids for Energy Only. Respondents may also choose to provide both FCDS and Energy Only bids for the same project. Note, however, EcoChoice projects located in the Imperial Valley and dynamically transferred via pseudo-tie into SDG&E’s service territory by the CAISO must submit Energy Only bids (see below for more detail). SDG&E intends that FCDS projects will count towards SDG&E’s Resource Adequacy (RA) obligations when possible. To achieve FCDS, a project must apply for a deliverability study to be conducted by the CAISO. Respondents with winning bids for FCDS projects must demonstrate that: (1) the project has been assessed for deliverability; or (2) the Respondent will request a deliverability assessment through the next available CAISO cluster window. This condition must be met for winning bids that will interconnect at either the distribution or transmission level. For winning FCDS project bids that result in an executed and approved PPA, during the project development process, the project is at a

³ D.16-05-006 at 12

⁴ Overall maximum target for this solicitation is 25 MW, however, the maximum individual project size limit is 20 MW. See section 3.0 for further details.

minimum required to obtain final interconnection studies (i.e. for transmission level projects, a final Phase II interconnection study report, or for distribution level projects, a final interconnection facilities study report (or equivalent)).

Deliverability – Imperial Valley Dynamic Transfer Projects Only:

EcoChoice projects located in the Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO must submit Energy Only bids. The Maximum Import Capability (MIC) for SDG&E from the Imperial Valley Substation is variable, and any increase in MIC allocations from current levels out of the Imperial Valley Substation is dependent on yet to be built projects and transmission upgrades in the Imperial Valley and CAISO areas. With no MIC allocation, projects in Imperial Valley would not qualify for RA.

Interconnection Site Map:

To help potential Respondents assess the feasibility of project sites, SDG&E has established an interactive website. The website contains SDG&E's transmission system (69 kV and above), distribution system, and circuit and substation area maps that Respondents may use to research approximate locations for project interconnection sites. SDG&E does not guarantee that projects can interconnect at any illustrated map location. The map is only one tool to help respondents identify potential project interconnection sites. There are numerous factors that must be considered regarding interconnection, including project rated size, specific circuit and substation load, percent of generation on the circuit and substation, voltage, reactive power (VAR) and power factor considerations. Actual interconnection requirements and costs will be determined after detailed studies are performed for the specific location and project size. To view the interactive map, parties complete the registration form that can be accessed at: <http://sdge.com/builderservices/dgmap/>.

PPA/CPUC Approval:

Selected bidders will execute the PPA, which is non-modifiable, and shall be subject to CPUC approval. SDG&E reserves the right to seek CPUC approval for contracts individually or to file multiple contracts in one advice letter.

2.0 PROCUREMENT PROCESS

Respondents to this solicitation shall comply with the requirements described in this RFO document. By responding, Respondents are bound by the terms of this RFO. All conforming offers will be evaluated in accordance with the Evaluation Criteria listed in the RFO.

SDG&E plans to select up to [] MW of capacity in this EcoChoice RFO. SDG&E will consider the highest value EcoChoice-eligible bids first.

If the volume of bid capacity exceeds the capacity offered by SDG&E in the solicitation, capacity will be awarded first to the highest value Environmental Justice projects, up to the 10 MW EJ reservation amount⁵, and then all remaining projects which will be evaluated against one another on a LCBF basis. SDG&E reserves the right to not offer a PPA if capacity targets have been met.

SDG&E recognizes the impact of interconnection costs on successful project development. Distribution level interconnection costs and/or any transmission level interconnection costs allocated to the project and to be paid by the Respondent (i.e. non-reimbursable costs) should be incorporated in the offer price based on the estimates provided in the most recent completed interconnection agreement, interconnection study, or equivalent estimates provided pursuant to the Fast Track process if applicable.

Reimbursable network upgrade costs are ultimately borne by ratepayers and therefore should not be included in a Respondent's offer price. As described in the evaluation section, SDG&E will add the estimated reimbursable network upgrade costs (except for area deliverability network upgrades) resulting from the most recent completed interconnection agreement or interconnection study to the respondent's bid price when ranking bids.

SDG&E recognizes the importance of distinguishing between projects that provide FCDS value and those that do not. Respondents may provide bids for FCDS projects or Energy Only projects, as described above. Respondents may also choose to provide both FCDS and Energy Only pricing options for the same project. Note, however, projects located in the Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by CAISO must submit Energy-Only bids.

For FCDS bids, Respondents must have obtained or plan to obtain a deliverability study from the CAISO to determine what, if any, upgrades are required for the project to achieve FCDS. SDG&E will incorporate the value of FCDS in its evaluation process.

If a bid that includes FCDS value is selected, the Respondent must demonstrate that: (1) the project has been assessed for deliverability; or (2) the Respondent will request a deliverability assessment through the next available CAISO cluster window. For winning FCDS project bids that result in an executed and approved PPA, during the project development process, the project is at a minimum required to obtain final interconnection studies (i.e. for transmission level projects, a final Phase II interconnection study report, or for distribution level projects, a final interconnection

⁵ SDG&E's EJ reservation amount was set in D.15-01-051

facilities study report (or equivalent)). Costs to facilitate such studies will be borne by the Respondent at no additional cost to SDG&E.

The PPA for FCDS projects will provide for one price to be paid before the product achieves FCDS (which is less the Deliverability Value, i.e., the Energy Only Price) and a second (higher) price to be paid after the project achieves FCDS (FCDS Price). The PPA will also require that the project must achieve FCDS by January 1, . Respondents that are not confident of their ability to achieve FCDS by January 1, should bid as Energy Only.

For bids that will not include FCDS value, Respondents do not need to obtain a deliverability study, and instead can proceed through the interconnection process as an Energy Only project. SDG&E will not include deliverability value in its evaluation of Energy Only bids, as described in Section 5 below. If selected, SDG&E would pay an Energy Only price for this product.

Bids that are selected will receive from SDG&E an unexecuted PPA (which is available on SDG&E's RFO Website) that is redlined to reflect the relevant provisions that are applicable to the proposed project as indicated by the Respondent in their Project Description Form. The executed PPAs will be filed for Approval with the CPUC via a Tier 2 advice letter.

3.0 REQUIREMENTS

Respondents to this solicitation shall comply with the requirements herein. SDG&E, at its sole discretion, may change the terms, requirements and schedule of the solicitation. Respondents shall visit the RFO Website for announcements regarding any changes.

A. PARTICIPATION/ELIGIBILITY CRITERIA

Terms of participation are listed below. Respondents not meeting all minimum participation criteria shall be deemed ineligible and their offers will not be considered.

Resource:

1. Resources must be new facilities;
2. Resources must be an Eligible Renewable Energy Resource as defined in PUC Section 399.12.
3. Resources must be CEC-certifiable as an eligible renewable resource by the commercial operation date;
4. Resources must utilize a commercially proven technology;
5. Resources must sell its entire output and all plant attributes to SDG&E (full buy/sell) or sell all output and all plant attributes in excess of onsite load to SDG&E (excess sales);
6. The maximum project capacity for this solicitation is 20 MWs; the full output from the facility must be sold to SDG&E. That is, in this solicitation, SDG&E will not consider purchasing a portion of a project larger than 20 MW.
7. All renewable energy resources procured in this solicitation shall comply with the California Air Resources Board's (CARB) Voluntary Renewable Electricity (VRE) Program.
8. Each EcoChoice Project must meet Green-e[®] Energy eligibility criteria throughout the Delivery Term of the PPA. An EcoChoice respondent must provide to SDG&E an attestation stating that the Project meets the requirements of the Green-e[®] Energy Program to be able to produce Green-e[®] Energy eligible product in accordance with the Green-e[®] Energy National Standard in effect at the time of PPA execution. The Respondent must agree to adhere to the Green-e[®] Energy program's requirements as specified in the Green-e[®] Energy program website, the PPA and/or SDG&E's website, which includes being subject to audits to ensure compliance with the Green-e[®] Energy Program. The Respondent must agree in the PPA that it will complete, sign and return, on an annual basis or whenever required by SDG&E or the Center for Resource Solutions, the Green-e[®] Energy Attestation Form Generator Participating in a Tracking System form, or its successor form, to SDG&E. The Respondent will, throughout the Delivery Term of the PPA, be responsible for all costs incurred to obtain and maintain Green-e[®] Energy certification and compliance.
9. To qualify as an Environmental Justice project, the generating facility must be located in one of the census tracts listed on SDG&E's website (<http://www.sdge.com/documents/list-eligible-census-tracts-environmental-justice-projects>) and meet the project capacity requirements below.

Project Capacity:

1. Project contract minimum size is 0.5 MWac nameplate capacity; and
2. Project contract maximum size is 20 MWac nameplate capacity.
3. EJ Project contract minimum size is 0.5 MWac nameplate capacity;
4. EJ Project contract maximum size is 1 MWac nameplate capacity.
5. SDG&E may, at its sole discretion, determine that the Project appears to be part of an installation larger than 20 MW in the same general location that has been or is being developed by the respondent or the respondent's Affiliates, or appears to be sharing facilities with one or more projects.

Location/Site Control:

1. Projects must be located within the service territory of SDG&E or located in the Imperial Valley and either directly connected or dynamically transferred via pseudo-tie into SDG&E's service territory at the Imperial Valley substation by the CAISO; and
2. The Respondent must have, at time of bidding, site control for the duration of the 10, 15 or 20-year power purchase agreement being bid. A copy of one of the following forms of site control must be provided:
 - a. direct ownership
 - b. a lease
 - c. an option to lease or purchase upon PPA approval. The option must be an exclusive option to the Bidder that will last until the completion of the RFO cycle.

Note: If notified of contract award, Respondent's site control documents must be: 1) in the name of the same entity that will execute the PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.

Interconnection:

Respondents must have completed a Phase II interconnection study (or distribution level equivalent) or executed an interconnection agreement or have passed the Wholesale Distribution Access Tariff (WDAT) or California Independent System Operator (CAISO) Fast Track screens and provide:

1. A copy of the most recent completed interconnection agreement or Phase II interconnection study with their offer, or Evidence of having passed the WDAT or CAISO Fast Track screen
2. Transmission level projects that that have a Phase II interconnection study but do not yet have a completed interconnection agreement are required to apply for interconnection through the CAISO process to obtain an interconnection agreement.
3. Distribution level projects that do not yet have a completed interconnection agreement will be required to apply through SDG&E's WDAT process.
4. For projects located in the Imperial Valley and dynamically transferred via pseudo-tie into the CAISO at the Imperial Valley substation, Respondents must have completed a Phase

II interconnection study and provide documentation certifying the existence of dynamic transfer arrangements. Such documentation must have a sufficient level of detail for SDG&E to determine conformance with Category 1 content specifications, RFO requirements, and to ensure that the dynamic transfer arrangement conforms with all other California state laws and decisions issued by the California Public Utilities Commission, the California Energy Commission, and any other regulatory authorities with jurisdiction over utility procurement in California.

Note: If shortlisted, Respondent's interconnection documents must be: 1) in the name of the same entity that will execute the PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.

Respondent Experience:

1. The Respondent and/or members of the project development team must provide evidence of having completed, or begun construction, of a project using a technology similar to the offered technology, that is at least 500 kW nameplate capacity; and
2. The Respondent must maintain contractual control of the facilities and be responsible for development, land acquisition, permitting, financing and construction for the facilities. Respondents must provide a description of how operational control will be maintained.

Project Start Date:

1. Respondents must provide an anticipated delivery start date that is within 36 months after the expected CPUC Approval date (as indicated in the RFO schedule).

Other Incentives Not Permitted:

1. Respondents shall not have sought California Solar Initiative (CSI) incentives for the projects being offered and shall not plan to seek CSI incentives for the entire term of the PPA;
2. Respondents shall not have participated in the Net Energy Metering (NEM) Program for the projects being offered and shall not participate in the NEM Program for the entire term of the PPA; and
3. Respondents shall not have sought or received any other benefits from the small generator incentive programs, such as the Self-Generation Incentive Program, offered by the State of California or California utilities.

B. POWER PURCHASE AGREEMENT CRITERIA

The PPA is non-negotiable, no changes will be accepted, other than for designated project specific options. Respondents must use the PPA as is and will accept all terms within.

C. CREDIT TERMS AND CONDITIONS

SDG&E has the unilateral right to evaluate and determine the credit-worthiness of the Respondent relative to this RFO. SDG&E's anticipated credit requirements are provided below. CPUC Approval Security is due **before or on** the signing date of the PPA. **If selected for the shortlist, Respondents must be prepared to post the CPUC Approval Security by the date the PPA is signed.** Credit support may be in the form of a Letter of Credit or cash. A pro forma Letter of Credit is contained within the PPA.

Collateral to Support PPAs	From	To	Security Amount
CPUC Approval Security	Contract Execution	CPUC Approval Date	The greater of \$100,000 or \$2.50/MWh multiplied by 2 times expected annual generation
Development Period Security	CPUC Approval Date	Date on which all Conditions Precedent are satisfied or waived	\$5.00/MWh multiplied by 2 times expected annual generation
Construction Period Security	Date on which all Conditions Precedent are satisfied or waived	COD	\$10.00/MWh multiplied by 2 times expected annual generation
Delivery Term Security	COD	End of Term	\$20.00/MWh multiplied by 2 times expected annual generation

4.0 RFO RESPONSE INSTRUCTIONS

Respondents must submit the offer electronically via PowerAdvocate®, and attach all required forms and bid materials to the offer. Offerors intending to submit an Offer but who do not yet have an existing account must first register to create a username/password to receive access to the event. See below for instructions to log in/register:

Logging In

You access the PowerAdvocate platform via a web browser.

To log in

1. Open a web browser and go to www.poweradvocate.com.
PowerAdvocate functions in most web browsers; however, using browsers other than Internet Explorer (IE) version 6 or higher may cause certain functionality to work unexpectedly. Should you encounter problems, PowerAdvocate support may be unable to provide assistance until the issue has been replicated in a supported version of Internet Explorer.
2. Click **Login**.
The Login page appears; you may wish to bookmark it for quick access.
3. Enter your account **User Name** and **Password**.
Both are case-sensitive.
If you do not have an account, go to poweradvocate.com and click the **Registration** link at the top of the page.
If you have an account but do not remember your user information, click **Forgot User Name** or **Forgot Password** and they will be emailed to you.
4. Click **Login**.

First-time users must register as a Supplier using the instructions above and the referral information below to access the RFO event:

Referral Information

Are you registering for a specific Event: * Yes
 No, I would simply like to register.

Who referred you to this Event: *

Name of that individual's company: *

Name or description of the Event: *

Users with an existing account may request access to the event using the link below:



Required Forms and Bid Materials:

If the Respondent is submitting offers for more than one project, each project must be submitted in a separate compressed ZIP archive with its required forms. Forms and compressed ZIP archives must be clearly labeled to identify the project name and the submitted forms. All forms are located on the RFO website.

1. **Offer Form** – There is no limit on the number of Forms that can be submitted. Therefore, respondents are encouraged, but not required, to submit additional offers for our consideration with shorter tenors or with escalators.
2. **Interconnection Agreement, Phase II Interconnection Study (or distribution level equivalent), and / or Fast Track Documentation** – Submit a copy of the interconnection agreement, most recent study results or equivalent Fast Track documentation. For Projects located in Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO, submit copies of a completed System Impact Study or Facility Study or equivalent and provide documentation certifying the existence of the dynamic transfer arrangements.
3. **Site Control Documentation** – Submit copies of site control documents demonstrating: a) direct ownership; b) a lease; or c) an option to lease or purchase upon PPA approval (must be an exclusive option to the Bidder that will last until the completion of the RFO cycle).
4. **Site Maps** – Submit copies of all project maps showing location, facilities, layout, Interconnection, etc. and the Project single line diagram.
5. **Resource Report** - please submit a verifiable fuel resource plan
6. **Full PVSyst Model (Solar Only)** – the full PVSyst file must be submitted by exporting the entire project that contains the prj, met, inv, pan, etc. files

The Offer Form must be in Excel format (not in PDF). The interconnection, maps, and site control documentation must be submitted in PDF format.

All offer materials submitted shall be subject to the confidentiality provisions of Section 9 Confidentiality of this RFO.

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of any forms. During all stages of the RFO process, SDG&E reserves the right to request additional information from individual Respondents or to request any Respondent to submit supplemental materials in fulfillment of the content requirements of this RFO or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFO.

Respondents offering the same projects to multiple solicitations or other contracting opportunities are hereby advised that if SDG&E notifies Respondent that their offer is selected as a winning bid, the Respondent must decide bidder's acceptance date list in the RFO, whether to accept its standing as a winning bidder and immediately withdraw their offer from all other solicitations/contracting opportunities or risk being disqualified from continuing participation in the program. Respondents shall confirm such withdrawal by submitting to SDG&E a copy of the written

correspondence sent to all other solicitations/opportunities pertaining to such withdrawal while granting SDG&E permission to contact the other solicitors to confirm the withdrawal. ALL OFFERS SHALL BE VALID AND BINDING UPON THE RESPONDENT AFTER BEING SELECTED AS A WINNING BIDDER UNTIL CONTRACT EXECUTION.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFO PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E IN ITS SOLE DISCRETION.

5.0 EVALUATION CRITERIA

SDG&E will utilize all required forms and narratives, as provided pursuant to Section 4, to evaluate all offers. Respondents are responsible for the accuracy of all discussions, figures and calculations they submit. Errors discovered during evaluation may impact a Respondent's standing on the short-list.

Respondents must conform to minimum participation criteria and minimum resource criteria to be considered. Each Respondent will submit an offer for the Product, described in Table 1. Every offer submitted in response to this RFO will go through a conformance check to ensure that the requirements are met. Conforming offers will then go through a Least-Cost / Best-Fit (LCBF) / Net Market Value ("NMV") analysis.

SDG&E will periodically brief the members of the PRG and / or CAM PRG during the various stages of evaluation. Upon completion of SDG&E's evaluation process, SDG&E will brief the PRG and/or CAM PRG members regarding SDG&E's recommendations for its short-list. Based upon the comments and recommendations received from the PRG, SDG&E may modify the preliminary short-list as necessary.

A bid may be rejected due to nonconformance of requirements. SDG&E may require clarifying information for certain projects in addition to those specified above; failure to provide such clarifying information timely, or providing information which conflicts with original bid documents, may also result in a bid being rejected due to nonconformance.

QUANTITATIVE EVALUATION

SDG&E evaluates and ranks offers based on Least-Cost/Best-Fit ("LCBF") principles. The LCBF analysis evaluates both quantitative and qualitative aspects of each offer to estimate its value to SDG&E's customers and its relative value in comparison to other offers. The valuation of an offer considers both benefits and costs. The primary quantitative metric used in SDG&E's LCBF process is a Net Market Value ("NMV") calculation. The NMV calculation is a quantification of the value of an offer when compared to a set of price benchmarks for capacity, electrical energy, ancillary services, natural gas, renewable attributes and Green House Gas ("GHG") compliance, as applicable. Additionally, SDG&E may consider portfolio effects (costs or benefits) associated with the offer on the portfolio. These benefit and cost components are netted and discounted to yield a NMV for each offer. The NMV of an offer is compared to the NMV of other offers to determine whether that offer is one of the highest ranked.

SDG&E evaluates the quantifiable attributes of each offer individually. These individual attributes will include: capacity benefits, energy benefits, renewable attribute benefits, ancillary service benefits, contract payments, GHG emissions and costs, congestion costs, and transmission losses and costs. Each of these attributes is described below.

A. NET CAPACITY BENEFITS (INCLUDING DELIVERABILITY VALUE)

Capacity benefits are calculated by comparing the capacity costs in the offer to the capacity value to SDG&E.

B. NET ENERGY AND ANCILLARY SERVICES BENEFITS

The energy benefit valuation is an optimized energy dispatch profile multiplied by the corresponding energy forward price curves. The benefits provided by resources with greater flexibility will be reflected here as they can be dispatched to capture the most beneficial price increments. These benefits are netted against the variable costs associated with generating the energy such as fuel costs and variable O&M to produce the Net Energy Benefit.

C. TRANSMISSION/DISTRIBUTION SYSTEM IMPACTS

Non-reimbursable interconnection costs must be incorporated in the offer pricing, and reimbursable network upgrade costs (Network Upgrade Costs) that benefit the grid broadly and are ultimately borne by ratepayers will be considered in the economic evaluation of the offer. SDG&E requires at least Phase II study (or distribution level equivalent) results as the basis for including appropriate interconnection cost estimates in its evaluation.

D. CONTRACT COSTS

The contract costs are determined by multiplying the TOD-adjusted Offer Price by the expected delivered energy profile for each year.

E. RICA

D.14-11-042 requires the use of a Renewable Integration Cost Adder as part of SDG&E's LCBF for RPS procurement. Currently, the Interim RICA, set forth in the Decision is being used. The RICA currently applies only to Solar and Wind resources. This "cost" component of the NMV represents the expected increase in SDG&E's Flex RA procurement that would be required by adding the resource to SDG&E's portfolio.

QUALITATIVE EVALUATION

Qualitative factors and benefits will be used to determine the projects that are the "Best Fit" for SDG&E's portfolio. Such considerations as resource and/or project viability and developer experience will be considered, among other criteria or factors. SDG&E may use these factors to determine advancement onto the short list or evaluate tie-breakers, if any. Based on these factors, SDG&E reserves the right to select a bid out of rank order.⁶

BID SELECTION PROCESS

⁶ SDG&E's Least-Cost Best-Fit Analysis "...is intended to optimize SDG&E's procurement decisions by minimizing costs and maximizing value." SDG&E's Final 2015 RPS Plan, p. 19. *See also* Appendix 9 Least-Cost Best-Fit, p. 7 of SDG&E's 2015 RPS Plan which allows SDG&E to differentiate between offers by reviewing their rate impacts and portfolio fit.

(footnote continued)

Offers will be awarded first to the most highly ranked (LCBF) Enhanced Community Renewables-Environmental Justice projects, within the price cap, up to the 10 MW EJ reservation amount⁷, and then all remaining projects which will be evaluated against one another on an LCBF basis using the LCBF methodology as described above. SDG&E reserves the right to not offer a PPA if capacity targets have been met, regardless of whether those projects are within the CPUC caps.

BID CONFORMANCE EVALUATION

In addition to the quantitative elements described above, SDG&E may also reject an offer if:

1. SDG&E uncovers evidence of market manipulation in the auction process;
2. SDG&E cannot confirm the projected deliveries;
3. The Respondent does not provide adequate evidence it meets minimum participation criteria, or it appears that Respondent subdivided a larger project to circumvent the 20 MW project size limit. SDG&E will not enter into PPAs with multiple projects that utilize the same interconnection queue number. In other words, SDG&E will not execute more than one PPA if any of the other capacity utilizing the same interconnection study or queue position is already under contract through RAM or another program;
4. There is a question as to whether the projects meet minimum resource criteria;
5. Acceptance of the offer would cause excessive reliance upon a single provider in the solicitation, or in SDG&E's overall renewable energy portfolio (SDG&E shall provide any details of such seller concentration limit in the Tier 2 advice letter containing the executed contracts);
6. The Respondent cannot fulfill the terms and conditions of the PPA and; and/or,
7. The Respondent is unable to comply with RFO timing and other solicitation requirements.

⁷ SDG&E's EJ reservation amount was set in D.15-01-051

6.0 ECOCHOICE RFO SCHEDULE

The following schedule and deadlines apply to this RFO. **SDG&E reserves the right to revise this schedule at any time and in SDG&E's sole discretion.** Respondents are responsible for monitoring the RFO Website for updated schedules and possible amendments to the RFO or the solicitation process.

NO.	ITEM	DATE
1.	RFO Issued	<input type="checkbox"/>
2.	Bidder's Conference; 1:00 PM to 4:00 PM, PPT	<input type="checkbox"/>
3.	DEADLINE TO SUBMIT QUESTIONS	<input type="checkbox"/>
4.	Answers to all questions will be posted on SDG&E's website	<input type="checkbox"/>
5.	DEADLINE TO SUBMIT OFFERS/CLOSING DATE Offers must be uploaded to PowerAdvocate® by no later than 12 P.M. (i.e. NOON) Pacific Standard Time	<input type="checkbox"/>
6.	NOTIFICATION TO WINNING AND CONTINGENT BIDDERS	<input type="checkbox"/>
7.	WINNING BIDDERS ACCEPTANCE/WITHDRAWAL LETTER due from Winning Bidders indicating: a) Withdrawal from SDG&E's solicitation; OR b) Acceptance of standing as a winning bid; withdrawal from participating in any other solicitation and evidence of withdrawal notice to all other solicitors	<input type="checkbox"/>
8.	SDG&E issues appreciation notices to unsuccessful Respondents	<input type="checkbox"/>
9.	Execute PPAs	<input type="checkbox"/>
10.	SDG&E submits Tier 2 Advice Letter with PPAs to CPUC for approval	<input type="checkbox"/>
11.	Anticipated CPUC approval (prior to any appeal and/or suspension)	<input type="checkbox"/>

CONTINGENT BIDDERS

At the time of notification to winning bidders, SDG&E may also notify certain contingent bidders of their status. Such contingent bidders may be offered PPAs if selected winning bidders decline their winning position with SDG&E. Should a contingent bidder be selected and offered a PPA, the contingent bidder will have the same amount of time for each of the following steps as if it was notified originally.

BIDDER'S CONFERENCE

SDG&E will host one bidder's conference as listed on the RFO schedule and RFP website via web conference (e.g. WebEx). Participation is NOT mandatory to submit an offer. Please monitor the RFO Website periodically for updates and participation instructions.

7.0 RFO WEBSITE AND COMMUNICATION

The RFO and all subsequent revisions and documents are available for download from the RFO Website. Potential Offerors are responsible for monitoring the RFO Website and for subsequent updates, notices and postings.

All questions or other communications regarding this RFO must be submitted via email to email address listed below and MUST CC the IE. SDG&E will not accept questions or comments in any other form. SDG&E will not accept questions or comments in any other form, except at the bidder's Conference. Question submitted after the deadline as specified in RFO Schedule will only be answered at the sole discretion of SDG&E or the IE. All questions and their answers will be posted publicly on this website anonymously soon after receipt. We cannot respond directly to or confidentially to any questions.

8.0 REJECTION OF OFFERS

SDG&E SHALL TREAT ALL RESPONDENTS FAIRLY AND EQUALLY AND SHALL EVALUATE ALL OFFERS IN GOOD FAITH. SDG&E MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFO EVEN AFTER AN OFFER HAS BEEN SELECTED AS A WINNING BID. SDG&E RESERVES THE RIGHT AT ANY TIME, AT ITS SOLE DISCRETION, TO ABANDON THIS RFO PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF OFFERS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT ANY OFFER OR TO ENTER INTO ANY DEFINITIVE AGREEMENT, TO EVALUATE THE QUALIFICATIONS OF ANY RESPONDENT OR THE TERMS AND CONDITIONS OF ANY OFFER, OR TO REJECT ANY OR ALL OFFERS, ALL WITHOUT NOTICE AND WITHOUT ASSIGNING ANY REASONS AND WITHOUT LIABILITY OF SEMPRA ENERGY, SDG&E, OR ANY OF THEIR SUBSIDIARIES, AFFILIATES, OR REPRESENTATIVES TO ANY RESPONDENT. SDG&E SHALL HAVE NO OBLIGATION TO CONSIDER ANY OFFER.

9.0 CONFIDENTIALITY

EXCEPT WITH THE PRIOR WRITTEN CONSENT OF SDG&E, RESPONDENTS MAY NOT DISCLOSE (OTHER THAN BY ATTENDANCE ALONE AT ANY MEETING TO WHICH MORE THAN ONE RESPONDENT IS INVITED BY SDG&E) TO ANY OTHER RESPONDENT OR POTENTIAL RESPONDENT THEIR PARTICIPATION IN THIS RFO, AND RESPONDENTS MAY NOT DISCLOSE, COLLABORATE ON, OR DISCUSS WITH ANY OTHER RESPONDENT, OFFER STRATEGIES OR THE SUBSTANCE OF OFFERS, INCLUDING WITHOUT LIMITATION THE PRICE OR ANY OTHER TERMS OR CONDITIONS OF ANY INDICATIVE OR FINAL OFFER.

SDG&E WILL USE THE HIGHER OF THE SAME STANDARD OF CARE IT USES WITH RESPECT TO ITS OWN PROPRIETARY OR CONFIDENTIAL INFORMATION OR A REASONABLE STANDARD OF CARE TO PREVENT DISCLOSURE OR UNAUTHORIZED USE OF RESPONDENT'S CONFIDENTIAL AND PROPRIETARY INFORMATION THAT IS LABELED AS "PROPRIETARY AND CONFIDENTIAL" ON THE OFFER PAGE ON WHICH THE PROPRIETARY INFORMATION APPEARS ("CONFIDENTIAL INFORMATION"). RESPONDENT SHALL SUMMARIZE ELEMENTS OF THE OFFER(S) IT DEEMS CONFIDENTIAL. CONFIDENTIAL INFORMATION MAY BE MADE AVAILABLE ON A "NEED TO KNOW" BASIS TO SDG&E'S DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS, CONSULTANTS, THE INDEPENDENT EVALUATOR, AGENTS AND ADVISORS ("REPRESENTATIVES") FOR THE PURPOSE OF EVALUATING RESPONDENT'S OFFER, BUT SUCH REPRESENTATIVES SHALL BE REQUIRED TO OBSERVE THE SAME CARE WITH RESPECT TO DISCLOSURE AS SDG&E.

NOTWITHSTANDING THE FOREGOING, EACH RAM PARTICIPANT ACKNOWLEDGES AND EXPRESSLY AUTHORIZES SDG&E TO PUBLICLY DISCLOSE THE FOLLOWING INFORMATION IN THE ADVICE LETTER SEEKING APPROVAL OF RAM PPAs, AS REQUIRED BY THE CPUC: (1) NAMES OF THE COMPANIES THAT SUBMITTED OFFERS INTO SDG&E'S RAM RFO; (2) NUMBER OF OFFERS RECEIVED BY EACH COMPANY; (3) NUMBER OF OFFERS RECEIVED AND SELECTED AS WINNING BIDS BY SDG&E; (4) PROJECT SIZE; (5) PARTICIPATING TECHNOLOGIES; (6) THE NUMBER OF PROJECTS THAT PASSED THE PROJECT VIABILITY SCREEN; (7) LOCATION OF BIDS BY COUNTY LEVEL SHOWN IN A MAP FORMAT; AND (8) THE PROGRESSION OF EACH EXECUTED CONTRACT'S PROJECT DEVELOPMENT MILESTONES. SDG&E MAY DISCLOSE ANY OF THE CONFIDENTIAL INFORMATION TO COMPLY WITH ANY LAW, RULE, OR REGULATION OR ANY ORDER, DECREE, SUBPOENA OR RULING OR OTHER SIMILAR PROCESS OF ANY COURT, SECURITIES EXCHANGE, CONTROL AREA OPERATOR, GOVERNMENTAL AGENCY OR GOVERNMENTAL OR REGULATORY AUTHORITY AT ANY TIME EVEN IN THE ABSENCE OF A PROTECTIVE ORDER, CONFIDENTIALITY AGREEMENT OR NON-DISCLOSURE AGREEMENT, AS THE CASE MAY BE, WITHOUT NOTIFICATION

TO THE RESPONDENT AND WITHOUT LIABILITY OR ANY RESPONSIBILITY OF SDG&E TO THE RESPONDENT.

IT IS EXPRESSLY CONTEMPLATED THAT MATERIALS SUBMITTED BY A RESPONDENT IN CONNECTION WITH THIS RFO WILL BE PROVIDED TO THE CPUC, THE CEC, AND/OR SDG&E'S PROCUREMENT REVIEW GROUP (PRG). SDG&E WILL REQUEST CONFIDENTIAL TREATMENT PURSUANT TO APPLICABLE LAW, OF ANY CONFIDENTIAL INFORMATION PROVIDED TO SDG&E BY RESPONDENT IN CONNECTION WITH THE RFO AND SUBMITTED BY SDG&E TO THE CPUC AND/OR CEC FOR THE PURPOSES OF OBTAINING REGULATORY APPROVAL. SDG&E WILL PROVIDE SUCH INFORMATION TO ITS PRG SUBJECT TO THE TERMS OF ITS NON-DISCLOSURE AGREEMENT WITH ITS PRG. SDG&E CANNOT, HOWEVER, ENSURE THAT THE CPUC OR CEC WILL AFFORD CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT MEMBERS OF ITS PRG WILL COMPLY WITH THE TERMS OF THE APPLICABLE NON-DISCLOSURE AGREEMENT.

SDG&E, ITS REPRESENTATIVES, SEMBRA ENERGY, AND ANY OF THEIR SUBSIDIARIES DISCLAIM ANY AND ALL LIABILITY TO A RESPONDENT FOR DAMAGES OF ANY KIND RESULTING FROM DISCLOSURE OF ANY OF RESPONDENT'S CONFIDENTIAL INFORMATION.

10.0 RPS PROGRAM PARAMETERS

CALIFORNIA RPS PROGRAM

California's Renewable Portfolio Standard (RPS) Program was originally adopted in 2002 and is codified at Public Utility Code sec 399.11, *et seq.*⁸ in adopting the RPS legislation, the Legislature specifically found and declared that increasing California's reliance on renewable energy resources promotes the purpose of and may accomplish each of the following: This program supplements the RPS Program goals to:

- Increase the diversity, reliability, public health and environmental benefits of the energy mix
- Promote stable electricity prices
- Protect public health and improve environmental quality
- Stimulate sustainable economic development and create new employment opportunities
- Reduce reliance on imported fuels
- Ameliorate air quality problems
- Improve public health by reducing the burning of fossil fuels

Current law requires Investor Owned Utilities (IOUs) to serve 33% of its retail sales load with RPS-eligible renewable energy by 2020. SDG&E will comply with all CPUC decisions governing RPS procurement. These decisions are publicly available on the CPUC's website at <http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>.

This RFO is being conducted in compliance with D.14-11-042 and all relevant statutory and regulatory directives, including D.15-01-051 and D.16-06-006 (the GTSR Decisions). Requirements set forth within the law and all directives shall be incorporated herein by reference. A full text of the law and relevant CPUC decisions can be downloaded from the CPUC website. Respondents are encouraged to review all RPS, RAM, and GTSR-related CPUC issued directives available on the same Internet website, and are responsible for understanding and abiding by all RPS, RAM, and GTSR provisions.

RPS ELIGIBILITY CRITERIA

Respondents successfully signing agreements with SDG&E must warrant that the resources being offered in response to this solicitation are certifiable as an "eligible renewable resource" by the California Energy Commission (CEC). Eligibility criteria are set forth by the CEC in its Renewable Portfolio Standard Eligibility Guidebook. The CEC guidebook can be downloaded from the following internet website: <http://www.energy.ca.gov/renewables/documents/index.html>. Respondents are encouraged to review all RPS-related, CEC issued directives available on the same Internet website and are responsible for understanding and abiding by all RPS provisions. All requirements set forth within the CEC's guidebooks and all RPS-related documents shall be incorporated herein by reference.

⁸ See, Senate Bill (SB) 1078 (Stats. 2002 Ch. 516), as amended by SB 107, (Stats. 2006, Ch. 464).

Respondents are encouraged, although not required, to apply for pre-certification from the CEC in advance of submitting an offer. Pre-certification forms are available from the above-entitled guidebook. An excerpt of the eligibility requirements is provided at the end of this section.

PROCUREMENT REVIEW GROUP

The Procurement Review Group (PRG), a CPUC-endorsed entity, is composed of non-market bidders such as ratepayers' advocacy groups, state energy and water commissions, power authorities, utility-related labor unions and other non-commercial, energy-related special interest groups. Each IOU has its own PRG. The PRG is charged with overseeing the IOU's procurement process, reviewing procedural fairness, examining overall procurement prudence and providing feedback during all stages. From RFO language development to Offer evaluation to contract negotiation, each IOU briefs its PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing confidential Offer information to the PRG is required during PRG briefings in accordance with Section 9 ("Confidentiality"). Each Respondent must clearly identify, as part of its Offer, what type of information it considers to be confidential.

INDEPENDENT EVALUATOR

The CPUC requires each IOU to use an Independent Evaluator ("IE") to evaluate and report on the IOU's entire solicitation, evaluation, and selection process. The IE will review SDG&E's implementation of the RFO process and final selections. The IE also makes periodic presentations regarding its findings to the IOU and the IOU's PRG, including the CPUC Energy Division staff. The intent of these IE presentations is to preserve the independence of the IE by ensuring free and unfettered communication between the IE and the CPUC, as well as an open, fair, and transparent process that the IE can affirm.

SDG&E is committed to ensuring an open and transparent solicitation, and to providing a fair, reasonable and competitive process. All correspondences regarding this RFO MUST cc the IE.

The IE will review and validate methods of processing the Offer information and evaluating Offers to ensure that the evaluation is done fairly with no preferential treatment to any Offeror, monitoring IOU solicitation and discussion processes, valuation methodologies, selection processes, reviewing Offers to assure competitive process and no market collusion or market manipulation by some Offerors, and reporting to the Commission on the auction process. The IE is privy to viewing all Offers, invited to participate in all discussions, reviews all Offers, reviews Offer scoring and selection, and must be copied on all correspondence between each IOU and their Offerors.

Affiliate Offers will be closely examined to ensure the Offer is evaluated in the same manner as the other Offers. If an Affiliate Offer were to make the short-list, then all communications and negotiations will be closely monitored and assessed by the IE to ensure no preferential terms and conditions are included in the Offer. An Affiliate Offer is one where the Offeror is an affiliate or if the Scheduling Coordinator of the Offeror is an affiliate.

11.0 SDG&E BACKGROUND

[SDG&E](#) is a regulated public utility that provides safe and reliable energy service to 3.4 million consumers through 1.4 million electric meters and 868,000 natural gas meters in San Diego and southern Orange counties. The utility's area spans 4,100 square miles. SDG&E is committed to creating ways to help customers save energy and money every day. SDG&E is a subsidiary of [Sempra Energy](#) (NYSE: SRE), a Fortune 500 energy services holding company based in San Diego. Connect with SDG&E's Customer Contact Center at 800-411-7343, on [Twitter](#) (@SDGE) and [Facebook](#).





APPENDIX 11.A

2017 GT RAM PPA

[Form of PPA for Green Tariff]

GREEN TARIFF POWER PURCHASE AGREEMENT

Between

SAN DIEGO GAS & ELECTRIC COMPANY
(as "Buyer")

and

(as "Seller")

GREEN TARIFF POWER PURCHASE AGREEMENT

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COVER SHEET

This Green Tariff Power Purchase Agreement is made as of the following date: [_____]. This Green Tariff Power Purchase Agreement and all exhibits, schedules, appendices, and any written supplements hereto, any designated collateral, credit support or margin agreement or similar arrangement between the Parties as well as all written and signed amendments and modifications thereto shall be a part of, and shall be referred to as, the "Agreement." The Parties to this Agreement (hereinafter individually a "Party" and collectively the "Parties") are the following:

Name: _____ ("Seller")

All Notices:

Street: _____
City: _____ Zip: _____
Attn: Contract Administration
Phone: _____
Facsimile: _____
Duns: _____
Federal Tax ID Number: _____

Invoices:

Attn: _____
Phone: _____
Facsimile: _____

Scheduling:

Attn: _____
Phone: _____
Facsimile: _____

Payments:

Attn: _____
Phone: _____
Facsimile: _____

Wire Transfer:

BNK: _____
ABA: _____
ACCT: _____
Confirmation: _____
FAX: _____

Credit and Collections:

Name: San Diego Gas & Electric Company ("Buyer")

All Notices:

Street: 8315 Century Park Court
City: San Diego, CA Zip: 92123
Attn: Electric & Fuel Procurement - Contract Administration
Phone: (858) 636-5536
Facsimile: (858) 650-6190
Duns: 006911457
Federal Tax ID Number: 95-1184800

Invoices:

San Diego Gas & Electric Company
8315 Century Park Ct.
San Diego, California 92123-1593
Attn: Electric & Fuel Procurement – Invoicing and Reporting
Phone: (858) 650-6187
Facsimile: (858) 650-6190

Scheduling:

San Diego Gas & Electric Company
8315 Century Park Ct.
San Diego, California 92123-1593
Attn: Transaction Scheduling Manager
Phone: (858) 650-6160
Facsimile: (858) 650-6191

Payments:

San Diego Gas & Electric Company
PO Box 25110
Santa Ana, CA 92799-5110
Attn: Mail Payments
Phone: (619) 696-4521
Facsimile: (619) 696-4899

Wire Transfer:

BNK: Union Bank of California
for: San Diego Gas & Electric Company
ABA: Routing # 122000496
ACCT: #4430000352
Confirmation: SDG&E, Major Markets
FAX:(213) 244-8316

Credit and Collections:

San Diego Gas & Electric Company, Major Markets
555 W. Fifth Street, ML 18A3

Attn: _____
Phone: _____
Facsimile: _____

With additional Notices of an Event of Default or
Potential Event of Default to:

Attn: _____
Phone: _____
Facsimile: _____

Los Angeles, CA 90013-1011
Attn.: Major Markets, Credit and Collections
Manager
Fax No.: (213) 244-8316
Phone: (213) 244-4343

With additional Notices of an Event of Default or
Potential Event of Default to:

San Diego Gas & Electric Company
8330 Century Park Ct.
San Diego, California 92123
Attn: General Counsel
Phone: (858) 650-6141
Facsimile: (858) 650-6106

GENERAL TERMS AND CONDITIONS

ARTICLE ONE: GENERAL DEFINITIONS

1.1 General. The following terms shall have the following meaning for purposes of this Agreement.

“JAMS” means JAMS, Inc.

“Affiliate” means, with respect to any person, any other person (other than an individual) that, directly or indirectly, through one or more intermediaries, controls, or is controlled by, or is under common control with, such person. For this purpose, “control” means the direct or indirect ownership of fifty percent (50%) or more of the outstanding capital stock or other equity interests having ordinary voting power.

“Agreement” has the meaning set forth in the preamble to the Cover Sheet.

“Arbitration” has the meaning set forth in Section 12.3.

[For As-Available Product only: “As-Available” means a Product for which, subject to the terms of this Agreement, Seller is excused from selling and delivering the Product to Buyer, and Seller shall not be liable to Buyer for any damages determined pursuant to Section 3.1(h) of the Agreement, in the event that Seller fails to deliver the Product to Buyer for any of the following reasons:

- (a) if the Project is unavailable as a result of a Forced Outage and such Forced Outage is not the result of Seller’s negligence or willful misconduct;
- (b) Force Majeure;
- (c) by the Buyer’s failure to perform;
- (d) by a Planned Outage of the Project;
- (e) a reduction in output as ordered under Dispatch Down Periods; or
- (f) [the unavailability of landfill gas which was not anticipated as of the Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such landfill gas to the Project, and which by the exercise of reasonable due diligence, Seller is unable to overcome or avoid or causes to be avoided.] OR [insufficient wind power for the Project to generate energy as determined by the best wind speed and direction standards utilized by other wind producers or purchasers in the vicinity of the Project or if wind speeds exceed the Project’s technical specifications.] OR [the unavailability of water or the unavailability of sufficient pressure required for operation of the hydroelectric turbine-generator as reasonably determined by Seller within its operating procedures, neither of which was anticipated as of the

Execution Date, which is not within the reasonable control of, or the result of negligence of, Seller or the party supplying such water to the Project, and which by the exercise of due diligence, such Seller or the party supplying the water is unable to overcome or avoid or causes to be avoided.] OR [insufficient solar power for the Project to generate energy as determined by the best solar standards utilized by other solar producers or purchasers in the vicinity of the Project.]

“Availability Incentive Payments” shall mean Availability Incentive Payments as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

“Availability Standards” shall mean Availability Standards as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

“Bankrupt” means with respect to any entity, such entity that (a) files a petition or otherwise commences, authorizes or acquiesces in the commencement of a proceeding or cause of action under any bankruptcy, insolvency, reorganization or similar Law, (b) has any such petition filed or commenced against it which remains unstayed or undismissed for a period of sixty (60) days, (c) makes an assignment or any general arrangement for the benefit of creditors, (d) otherwise becomes bankrupt or insolvent (however evidenced), (e) has a liquidator, administrator, receiver, trustee, conservator or similar official appointed with respect to it or any substantial portion of its property or assets, or (f) is generally unable to pay its debts as they fall due.

“Bundled Green Energy” means Energy, Green Attributes, and any other Product, the quantity of which is measured based on the amount of Delivered Energy, in each case, that are produced by or associated with the Project. The quantity of Bundled Green Energy shall be equal to the lesser of the quantity of (i) ***[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: Contract Energy] [When SDG&E is SC for the Project and Project is in the VER Forecasting Program: Delivered Energy]*** (ii) Green Attributes that are delivered to Buyer, and (iii) any other Product that is delivered to Buyer, the quantity of which is measured based on the amount of Delivered Energy. For example, if the quantity of Renewable Energy Credits that are delivered to Buyer is less than the quantity of the ***[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: Contract Energy] [When SDG&E is SC for the Project and Project is in the VER Forecasting Program: Delivered Energy]***, then the quantity of Bundled Green Energy shall be equal to the quantity of Renewable Energy Credits that are delivered to Buyer.

“Business Day” means any day except a Saturday, Sunday, or a Federal Reserve Bank holiday and shall be between the hours of 8:00 a.m. and 5:00 p.m. local time for the relevant Party’s principal place of business where the relevant Party, in each instance unless otherwise specified, shall be the Party from whom the Notice, payment or delivery is being sent and by whom the Notice or payment or delivery is to be received.

“Buyer” has the meaning set forth on the Cover Sheet.

“CAISO” means the California Independent System Operator Corporation or any successor entity performing similar functions.

[When SDG&E is the SC for the Project: “CAISO Charges Invoice” has the meaning set forth in Section 3.3([a/b])(iv).]

“CAISO Grid” means the system of transmission lines and associated facilities of the Participating Transmission Owners that have been placed under the CAISO’s operational control.

“CAISO Tariff” means the CAISO Operating Agreement and Tariff, including the rules, protocols, procedures and standards attached thereto, as the same may be amended or modified from time-to-time and approved by FERC.

“California Renewables Portfolio Standard” means the Renewables Portfolio Standard of California under California Senate Bills 1078 and 107, as codified in California Public Utilities Code Sections 387, 390.1, and Article 16 (commencing with Section 399.11) of Chapter 2.3 of Part 1 of Division 1, as such provisions are amended or supplemented from time to time.

[For FCDS bids: “Capacity Attributes” means any current or future defined characteristic, certificate, tag, credit, or ancillary service attribute, whether general in nature or specific as to the location or any other attribute of the Project intended to value any aspect of the capacity of the Project to produce Energy or ancillary services, including but not limited to any accounting construct so that the Contract Capacity of the Project may be counted toward a Resource Adequacy obligation or similar measure in respect to the capacity of the Project to generate Energy by the CPUC, the CAISO, the FERC, or any other entity vested with the authority under federal or state Law, to require Buyer to procure, or to procure at Buyer’s expense, Resource Adequacy or other similar products.]

“CEC” means the California Energy Commission or its successor agency.

“CEC Certification and Verification” means that the CEC has certified (or, with respect to periods before the Project has been constructed, that the CEC has pre-certified) that the Project is an ERR for purposes of the California Renewables Portfolio Standard and that all Energy produced by the Project qualifies as generation from an ERR for purposes of the Agreement.

“Claims” has the meaning set forth in Section 11.2(a).

“Commercial Operation” means that (a) the Project is operating and able to produce and deliver the Product to Buyer pursuant to the terms of this Agreement; (b) Seller shall have satisfied the requirements set forth in the Commercial Operation Certificate in the form attached as Exhibit D; (c) Seller shall have delivered a true, correct, and complete Commercial Operation Certificate from Seller, the Renewable Generation Equipment Supplier, the EPC Contractor, and a Licensed Professional Engineer; (d) Seller shall have delivered to Buyer the Delivery Term Security required under Article 8; (e) Seller has received all local, state and federal Governmental Approvals and other approvals as may be required by Law for the construction, operation and maintenance of the Project, including approvals, if any, required under the California Environmental Quality Act for the Project and related interconnection facilities

“Commercial Operation Date” means the date on which Seller achieves Commercial Operation for the Project.

“Conditions Precedent” has the meaning set forth in Section 2.3.

“Construction Period Security” shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(ii)/(iii)] to secure performance of its obligations hereunder.

“Contract Capacity” has the meaning set forth in Section 3.1(f).

[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: “Contract Energy” means the lower of Delivered Energy or Scheduled Energy for any given period in each case net of all Electrical Losses.]

“Contract Quantity” has the meaning set forth in Section 3.1(e).

“Contract Year” means a period of twelve (12) consecutive months (except in the case of the first Contract Year which may be longer) with the first Contract Year commencing on the Commercial Operation Date and each subsequent Contract Year commencing on the anniversary of the first day of the month following the Commercial Operation Date.

“Costs” means, with respect to the Non-Defaulting Party, brokerage fees, commissions and other similar third party transaction costs and expenses reasonably incurred by such Party either in terminating any arrangement pursuant to which it has hedged its obligations or entering into new arrangements which replace a Terminated Transaction; and all reasonable attorneys’ fees and expenses incurred by the Non-Defaulting Party in connection with such Terminated Transaction.

“Cover Sheet” means the document that precedes Article 1: General Definitions to this Agreement.

“CP Satisfaction Date” shall mean the date on which all of the Conditions Precedent have been satisfied (or waived in writing by the Party described in Section 2.4).

“CPUC” or “Commission or successor entity” means the California Public Utilities Commission, or successor entity.

“CPUC Approval” means a final and non-appealable order of the CPUC, without conditions or modifications unacceptable to the Parties, or either of them, which contains the following terms:

(a) approves this Agreement in its entirety, including payments to be made by the Buyer, subject to CPUC review of the Buyer’s administration of the Agreement; and

(b) finds that any procurement pursuant to this Agreement is procurement from an eligible renewable energy resource for purposes of determining Buyer’s compliance with any obligation that it may have to procure eligible renewable energy resources pursuant to the

California Renewables Portfolio Standard (Public Utilities Code Section 399.11 *et seq.*), Decision 03-06-071, or other applicable Law.

CPUC Approval will be deemed to have occurred on the date that a CPUC decision containing such findings becomes final and non-appealable.

“CPUC Approval Date” shall mean the date on which the Conditions Precedent set forth in Section 2.3(a) have been satisfied (or waived in writing by the beneficiary Party described in Section 2.4).

“CPUC Approval Security” shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)(i) to secure performance of its obligations hereunder.]

“Credit Rating” means, with respect to any entity, the rating then assigned to such entity’s unsecured, senior long-term debt obligations (not supported by third party credit enhancements) by S&P or Moody’s.

“Day-Ahead Forecast” has the meaning set forth in Section 3.3([d/e]).

[For As-Available and Baseload Products only: “Deemed Bundled Green Energy” means the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was prevented from delivering to Buyer by reason of Economic Dispatch Down. The quantity of Deemed Bundled Green Energy shall be equal to **[For As-Available Products:** (a) the Deemed Delivery Forecast of Energy corresponding to the applicable Economic Dispatch Down periods, whether or not Seller is participating in the VER Forecasting Program during such events, less the amount of Energy scheduled under Economic Dispatch Down as specified in the Dispatch Notice during such periods, and less any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault but only to the extent the Deemed Delivery Forecast does not already reflect the foregoing *provided that*, if the applicable amount calculated pursuant to this clause (a) is negative, the Deemed Bundled Green Energy shall be zero (0), or (b) if there is no such Deemed Delivery Forecast available during the applicable Economic Dispatch Down periods or if the Bundled Green Energy amount has historically not been determined based on clause (i) of the definition of Bundled Green Energy, the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was prevented from delivering to Buyer as a result of Economic Dispatch Down as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.] **[For Baseload Products:** the amount of Bundled Green Energy that Seller could reasonably have delivered to Buyer but was prevented from delivering to Buyer during the applicable Economic Dispatch Down periods, as determined by Buyer in a commercially reasonable manner, which amount shall not include any amount of Energy that was not delivered associated with any concurrent Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.]]

[For As-Available only: “Deemed Delivery Forecast” means the forecast of the Energy to be produced by the Project prepared by the CAISO or its agent in accordance with the VER Forecasting Program and communicated to the Scheduling Coordinator, which forecast is the last such forecast prepared by the CAISO that does not reflect curtailed production as a result of Economic Dispatch Down periods. As of the Execution Date, such Deemed Delivery Forecast is the CAISO forecast generated through its Resource Specific VER Forecast Usage Report

“Defaulting Party” means the Party that is subject to an Event of Default.

“Default Rate” means for any date, the lesser of (a) the per annum rate of interest equal to the prime lending rate as may from time to time be published in *The Wall Street Journal* under “Money Rates” on such day (or if not published on such day on the most recent preceding day on which published), plus two percent (2%) and (b) the maximum rate permitted by applicable Law.

“Deliverability Value” means the amount stated in Section 4.1(c).

“Delivered Energy” means all Energy produced from the Project and delivered to Buyer at the Delivery Point as measured in MWh at the CAISO revenue meter of the Project based on a power factor of precisely one (1) and net of all Electrical Losses.

“Delivery Point” means the point at which Buyer receives Seller’s Product, as set forth in Section 3.1(d).

“Delivery Term” has the meaning set forth in Section 3.1(c).

“Delivery Term Security” shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(iii)/(iv)] to secure performance of its obligations hereunder.

“Development Period Security” shall mean the Performance Assurance that Seller is required to maintain during the period and as otherwise specified in Section 8.4(a)[(i)/(ii)] to secure performance of its obligations hereunder.

“Disclosing Party” has the meaning set forth in Section 13.1(a).

“Disclosure Order” has the meaning set forth in Section 13.1(a).

“Dispatch Down Period” means the period of curtailment of delivery of Product from the Project resulting from System Dispatch Down or Economic Dispatch Down.

“Dispatch Notice” means the operating instruction, and any subsequent updates given either by Buyer to Seller or by the CAISO to Seller, directing Seller to operate the Project at a specified megawatt output for the period of time set forth in such order.

“Distribution Upgrades” has the meaning set forth in the CAISO Tariff.

“DUNS” means the Data Universal Numbering System, which is a unique nine character identification number provided by Dun and Bradstreet.

[For Green Tariff Projects located outside of the CAISO: “Dynamic Scheduling Agreement” means the agreement between the CAISO and Buyer or Seller, as Scheduling Coordinator (as applicable), with respect to the duties and responsibilities of the Scheduling Coordinator with respect to facilities located outside the CAISO balancing area and whose product is dynamically transferred via a pseudo-tie to the CAISO, in form and substance reasonably acceptable to the parties thereto.]

“Early Termination Date” has the meaning set forth in Section 5.2.

“Economic Dispatch Down” means curtailment of delivery of Product from the Project that is the result of economic curtailment where Buyer (as the Scheduling Coordinator) or a third party Scheduling Coordinator (in accordance with Buyer’s directions) either submits a self-schedule with a binding Product quantity or an economic bid in the applicable CAISO market or fails to submit any such schedule or bid, in either case, that when implemented by the CAISO results in an otherwise available Product quantity not being scheduled or awarded in such CAISO market and such curtailment is not concurrently the result of a Planned Outage, Forced Outage, Force Majeure, System Dispatch Down, and/or CAISO fault.

“Electrical Losses” means all electrical losses associated with the transmission of Product to the Delivery Point, including if applicable, but not limited to, any transmission or transformation losses between the CAISO revenue meter and the Delivery Point.

“Electrical Interconnection Upgrades” means the facilities to which Seller shall be able to interconnect and deliver Energy from the Project to and at the Delivery Point and Buyer shall be able to transmit Energy from the Delivery Point and the facilities that protect the Participating Transmission Owner’s, Transmission Provider’s, distribution operator’s, ***[For Green Tariff Projects located outside of the CAISO:*** Native Balancing Authority’s,] or other affected system owner’s, as applicable, electric system (or other systems to which such electric systems are connected, including the CAISO Grid) and the Participating Transmission Owner’s, Transmission Provider’s, distribution operator’s, ***[For Green Tariff Projects located outside of the CAISO:*** Native Balancing Authority’s,] or other affected system owner’s, as applicable, customers from faults occurring at the Project, including, but not limited to, all network, distribution, connection, transformation, switching, metering, communications, control, and safety equipment, as such equipment may be required pursuant to Good Industry Practices or in accordance with the Participating Transmission Owner’s, Transmission Provider’s, distribution operator’s, ***[For Green Tariff Projects located outside of the CAISO:*** Native Balancing Authority’s,] or other affected system owner’s, as applicable, facility connection requirements. Such Electrical Interconnection Upgrades include all Network Upgrades, Distribution Upgrades, Interconnection Facilities, and other network upgrades, distribution upgrades, or interconnection facilities on ***[For Green Tariff Projects located outside of the CAISO:*** the Native Balancing Authority’s, or] any other affected system owner’s electrical system that are determined to be necessary by the CAISO, Participating Transmission Owner, ***[For Green Tariff Projects located outside of the CAISO:*** Native Balancing Authority,] other affected system owner, as applicable, to physically and electrically interconnect the Project to ***[For Green Tariff Projects located outside of the CAISO:*** the Native Balancing Authority’s system and] the Participating Transmission Owner’s electric system so as to allow Seller to deliver Energy from the Project to the Delivery Point and Buyer to be able to transmit Energy from the Delivery Point.

“Eligible Renewable Energy Resource” or “ERR” has the meaning set forth in California Public Utilities Code Section 399.11, *et seq.*, as amended or supplemented from time to time.

“Energy” means electric energy measured in MWh and net of Station Service (unless otherwise specified).

“Energy Price” has the meaning set forth in Section 4.[1/2](a).

“EPC Contract” means the Seller’s engineering, procurement and construction contract with the EPC Contractor.

“EPC Contractor” means an engineering, procurement, and construction contractor, selected by Seller, with substantial experience in the engineering, procurement, and construction of power plants of the same type of facility as Seller’s.

“Equitable Defenses” means any bankruptcy, insolvency, reorganization or other Laws affecting creditors’ rights generally and, with regard to equitable remedies, the discretion of the court before which proceedings may be pending to obtain same.

“Event of Default” has the meaning set forth in Section 5.1.

“Execution Date” means the date hereof as set forth in the preamble of the Cover Sheet.

“Executive(s)” has the meaning set forth in Section 12.2(a).

“FCDS” has the meaning set forth in Section 4.1(c).

“FERC” means the Federal Energy Regulatory Commission or any successor government agency.

“Force Majeure” means any event or circumstance which wholly or partly prevents or delays the performance of any material obligation arising under this Agreement but only to the extent (1) such event is not within the reasonable control, directly or indirectly, of the Party seeking to have its performance obligation(s) excused thereby, (2) the Party seeking to have its performance obligation(s) excused thereby has taken all reasonable precautions and measures in order to prevent or avoid such event or mitigate the effect of such event on such Party’s ability to perform its obligations under this Agreement and which by the exercise of due diligence such Party could not reasonably have been expected to avoid and which by the exercise of due diligence it has been unable to overcome, and (3) such event is not the direct or indirect result of the fault or negligence of the Party seeking to have its performance obligations excused thereby.

(a) Subject to the foregoing, events that could qualify as Force Majeure include, but are not limited to the following:

(i) acts of God, flooding, lightning, landslide, earthquake, fire, drought, explosion, epidemic, quarantine, storm, hurricane, tornado, volcano, other natural disaster or unusual or extreme adverse weather-related events;

(ii) war (declared or undeclared), riot or similar civil disturbance, acts of the public enemy (including acts of terrorism), sabotage, blockade, insurrection, revolution, expropriation or confiscation; or

(iii) except as set forth in subpart (b)(vii) below, strikes, work stoppage or other labor disputes (in which case the affected Party shall have no obligation to settle the strike or labor dispute on terms it deems unreasonable).

(b) Force Majeure shall not be based on:

(i) Buyer's inability economically to use or resell the Product purchased hereunder;

(ii) Seller's ability to sell the Product at a price greater than the price set forth in this Agreement;

(iii) Seller's inability to obtain Governmental Approvals or other approvals of any type for the construction, operation, or maintenance of the Project;

(iv) a lack of wind, sun or other fuel source of an inherently intermittent nature;

(v) Seller's inability to obtain sufficient labor, equipment, materials, or other resources to build or operate the Project, except to the extent Seller's inability to obtain sufficient labor, equipment, materials, or other resources is caused by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above;

(vi) Seller's failure to obtain financing or other funds, including funds authorized by a state or the federal government or agencies thereof to supplement the payments made by Buyer pursuant to this Agreement;

(vii) a strike, work stoppage or labor dispute limited only to any one or more of Seller, Seller's Affiliates, the EPC Contractor or subcontractors thereof or any other third party employed by Seller to work on the Project; or

(viii) any equipment failure except if such equipment failure is caused solely by an event of Force Majeure of the specific type described in any of subsections (a)(i) through (a)(iii) above.

"Forced Outage" means any unplanned reduction or suspension of production of Product from the Project or unavailability of the Project in whole or in part that is not a Planned Outage or a willful withholding of Product when the Project is otherwise capable of delivering Product under Good Industry Practices.

"GAAP" has the meaning set forth in Section 13.4.

"Gains" means with respect to any Party, an amount equal to the present value of the economic benefit to it, if any (exclusive of Costs), resulting from the termination of this Agreement

for the remaining Delivery Term, determined in a commercially reasonable manner, subject to Section 5.2 hereof. Factors used in determining economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties, including, without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g., NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

“Good Industry Practice” means those practices, methods and acts that would be implemented and followed by prudent operators of electric transmission facilities (with respect to Buyer) or prudent operators of electric generation facilities similar to the Project (with respect to Seller) in the Western United States during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety, and shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers’ warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO [*For Green Tariff Projects located outside of the CAISO:* , the Native Balancing Authority,] and applicable Law. Good Industry Practice is not intended to be the optimum practice, method or act to the exclusion of all others, but rather is intended to be any of the practices, methods and/or actions generally accepted in the region.

“Governmental Approval” means all authorizations, consents, approvals, waivers, exceptions, variances, filings, permits, orders, licenses, exemptions and declarations of or with any governmental entity and, with respect to the Seller, shall include those siting and operating permits and licenses, and any of the foregoing under any applicable environmental Law, that are required for the construction, use, and operation of the Project.

“Governmental Authority” means any federal, state, local or municipal government, governmental department, commission, board, bureau, agency, or instrumentality, or any judicial, regulatory or administrative body, having jurisdiction as to the matter in question.

“Governmental Charges” has the meaning set forth in Section 9.2.

“Green Attributes” means, subject to the limitations in the final sentence of this definition, any and all credits, benefits, emissions reductions, offsets, and allowances, howsoever entitled, attributable to the generation from the Project, and its avoided emission of pollutants. Green Attributes include but are not limited to Renewable Energy Credits, as well as: (1) any avoided emission of pollutants to the air, soil or water such as sulfur oxides (SOx), nitrogen oxides (NOx), carbon monoxide (CO) and other pollutants; (2) any avoided emissions of carbon dioxide (CO2), methane (CH4), nitrous oxide, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride and other greenhouse gases (GHGs) that have been determined by the United Nations Intergovernmental Panel on Climate Change, or otherwise by Law, to contribute to the actual or

potential threat of altering the Earth’s climate by trapping heat in the atmosphere;¹ and (3) the reporting rights to these avoided emissions, such as Green Tag Reporting Rights. Green Tag Reporting Rights are the right of a Green Tag Purchaser to report the ownership of accumulated Green Tags in compliance with federal or state Law, if applicable, and to a federal or state agency or any other party at the Green Tag Purchaser’s discretion, and include without limitation those Green Tag Reporting Rights accruing under Section 1605(b) of The Energy Policy Act of 1992 and any present or future federal, state, or local Law, regulation or bill, and international or foreign emissions trading program. Green Tags are accumulated on a MWh basis and one Green Tag represents the Green Attributes associated with one (1) MWh of Energy. Green Attributes do not include (i) any energy, capacity, reliability or other power attributes from the Project, (ii) production tax credits associated with the construction or operation of the Project and other financial incentives in the form of credits, reductions, or allowances associated with the Project that are applicable to a state or federal income taxation obligation, (iii) fuel-related subsidies or “tipping fees” that may be paid to Seller to accept certain fuels, or local subsidies received by the generator for the destruction of particular preexisting pollutants or the promotion of local environmental benefits, or (iv) emission reduction credits encumbered or used by the Project for compliance with local, state, or federal operating and/or air quality permits. If the Project is a biomass facility and Seller receives any tradable Green Attributes based on the greenhouse gas reduction benefits or other emission offsets attributed to its fuel usage, it shall provide Buyer with sufficient Green Attributes to ensure that there are zero net emissions associated with the production of electricity from the Project and for all electric generation using biomethane as fuel, Seller shall transfer to Buyer sufficient Green Attributes of biomethane production and capture to ensure that there are zero net emissions associated with the production of electricity from the Project using the biomethane.

“Guaranteed Commercial Operation Date” or “GCOD” means the date that is thirty-six (36) months after the date of satisfaction or waiver of the Condition Precedent in Section 2.3(a), as may be extended pursuant to Section 3.9(c)(ii).

“Guaranteed Energy Production” has the meaning set forth in Section 3.1(e).

“Imbalance Energy” means the amount of Energy, in any given settlement interval, by which the amount of Delivered Energy deviates from the amount of Scheduled Energy.

“Initial Negotiation End Date” has the meaning set forth in Section 12.2(a).

[For Green Tariff Projects located outside of the CAISO: “Interconnected Balancing Authority Agreement” means an agreement between the Native Balancing Authority and the CAISO to govern operation of their interconnected electric systems, including the dynamic transfer of Project output via a pseudo-tie from the Native Balancing Authority and the CAISO, in form and substance reasonably acceptable to the parties thereto.]

¹ Avoided emissions may or may not have any value for GHG compliance purposes. Although avoided emissions are included in the list of Green Attributes, this inclusion does not create any right to use those avoided emissions to comply with any GHG regulatory program.

“Interconnection Facilities” has the meaning set forth in the CAISO Tariff.

“Interest Amount” means, with respect to an Interest Period, the amount of interest derived from the product of (a) the sum of (i) the principal amount of Performance Assurance in the form of cash held by Buyer during that Interest Period, and (ii) the sum of all accrued and unpaid Interest Amounts accumulated prior to such Interest Period; multiplied by (b) the Interest Rate in effect on the first day of the Interest Period; multiplied by (c) the number of days in that Interest Period; divided by (d) 360.

“Interest Payment Date” means the date on which cash held as Performance Assurance is returned pursuant to the terms of this Agreement.

“Interest Period” means the monthly period beginning on the first day of each month and ending on the last day of each month or the shorter period during which Performance Assurance in the form of cash is held by Buyer.

“Interest Rate” means for any date the rate per annum equal to the Commercial Paper (non-financial, 3 months) rate as published the prior month in the Federal Reserve Statistical Release, H.15. Should publication of the interest rate on Commercial Paper (non-financial, 3 months) be discontinued, then the interest rate on commercial paper, which most closely approximates the discontinued rate, published the prior month in the Federal Reserve Statistical Release, H.15, or its successor publication.

“[Large/Small/Rule 21/Native Balancing Authority] Generator Interconnection Agreement” has the meaning set forth in the [CAISO/Wholesale Open Access Distribution/Rule 21/Native Balancing Authority’s] Tariff.

“Law” means any statute, law, treaty, rule, regulation, ordinance, code, Governmental Approval, enactment, injunction, order, writ, decision, authorization, judgment, decree or other legal or regulatory determination or restriction by a court or Governmental Authority of competent jurisdiction, including any of the foregoing that are enacted, amended, or issued after the Execution Date, and which become effective prior to the end of the Delivery Term; or any binding interpretation of the foregoing by a Governmental Authority.

“Letter(s) of Credit” means one or more irrevocable, standby letters of credit issued by a U.S. commercial bank or a foreign bank with a U.S. branch with such bank having a Credit Rating of at least A- with an outlook designation of “stable” from S&P or A3 with an outlook designation of “stable” from Moody’s, in substantially the form as contained in Exhibit C to this Agreement.

“Licensed Professional Engineer” means a person acceptable to Buyer in its reasonable judgment who (a) is licensed to practice engineering in California, (b) has training and experience in the power industry specific to the technology of the Project, (c) has no economic relationship, association, or nexus with Seller or Buyer, other than to meet the obligations of Seller pursuant to this Agreement, (d) is not a representative of a consultant, engineer, contractor, designer or other individual involved in the development of the Project or of a manufacturer or supplier of any equipment installed at the Project, and (e) is licensed in an appropriate engineering discipline for the required certification being made.

“Locational Marginal Price” has the meaning set forth in the CAISO Tariff.

“Losses” means with respect to any Party, an amount equal to the present value of the economic loss to it, if any (exclusive of Costs), resulting from a Terminated Transaction for the remaining term of this Agreement, determined in a commercially reasonable manner. Factors used in determining the loss of economic benefit may include, without limitation, reference to information either available to it internally or supplied by one or more third parties including without limitation, quotations (either firm or indicative) of relevant rates, prices, yields, yield curves, volatilities, spreads or other relevant market data in the relevant markets, market referent prices for renewable power set by the CPUC, comparable transactions, forward price curves based on economic analysis of the relevant markets, settlement prices for comparable transactions at liquid trading hubs (e.g. NYMEX), all of which should be calculated for the remaining term of this Agreement and include the value, if any, of Capacity Attributes, and Green Attributes.

“Manager” has the meaning set forth in Section 12.2(a).

“Milestones” has the meaning set forth in Section 3.9(b)(i).

“Monthly Energy Payment” has the meaning set forth in Section 4.[1/2]([b/c]).

“Moody’s” means Moody’s Investor Services, Inc., or its successor.

“MWh” means megawatt-hour.

[For Green Tariff Projects located outside of the CAISO: “Native Balancing Authority” means the balancing authority for the balancing authority area where the Project is physically interconnected to the electric system. As of the Execution Date, the Native Balancing Authority is [*insert name*].]

[For Green Tariff Projects located outside of the CAISO: “NBA Generator Agreement” means the agreement between the Native Balancing Authority and Seller with respect to Seller’s obligations to the Native Balancing Authority in connection with the Native Balancing Authority’s duties and obligations under the Interconnected Balancing Authority Agreement, in form and substance reasonably acceptable to the parties thereto.]

“Negative Imbalance Energy” has the meaning set forth in Section 4.[2/3].

“NERC” means the North American Electric Reliability Corporation or a successor organization that is responsible for establishing reliability criteria and protocols.

“NERC Holiday” means any of the following holidays: New Year’s Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day. Three of these days, Memorial Day, Labor Day, and Thanksgiving Day, occur on the same day each year. Memorial Day is the last Monday in May; Labor Day is the first Monday in September; and Thanksgiving Day is the fourth (4th) Thursday in November. New Year’s Day, Independence Day, and Christmas Day occur on the same date each year, but in the event any of these holidays occur on a Sunday, the “NERC Holiday” is celebrated on the Monday immediately following that Sunday; and if any of these holidays occur on a Saturday, the “NERC Holiday” remains on that Saturday.

“Network Upgrades” has the meaning set forth in the CAISO Tariff.

“Non-Availability Charges” shall mean Non-Availability Charges as defined in FERC filing ER09-1064 or such other similar term as modified and approved by FERC thereafter to be incorporated in the CAISO Tariff or otherwise applicable to CAISO.

“Non-Defaulting Party” has the meaning set forth in Section 5.2.

“Notice” shall, unless otherwise specified in the Agreement, mean written communications by a Party to be delivered by hand delivery, United States mail, overnight courier service, facsimile or electronic messaging (e-mail).

“Notice to Proceed” or “NTP” means the notice provided by Seller to the EPC Contractor following execution of the EPC Contract between Seller and such EPC Contractor and satisfaction of all conditions precedent to performance of such contract, by which Seller authorizes such EPC Contractor to commence and complete full performance of the work under the EPC Contract without any delay or waiting periods.

“Outage Notification Form” means the completed document from Seller notifying Buyer of an outage of the Project substantially in the form attached hereto as Exhibit G. Buyer reserves the right to reasonably revise or change the form upon Notice to Seller.

[For intermittent As-Available Product: “Participating Intermittent Resource” shall have the meaning set forth in the CAISO Tariff.]

“Participating Transmission Owner” or “Participating TO” means an entity that (a) owns, operates and maintains transmission lines and associated facilities and/or has entitlements to use certain transmission lines and associated facilities that are interconnected to the Delivery Point and (b) has transferred to the CAISO operational control of such facilities and/or entitlements to be made part of the CAISO Grid. As of the Execution Date, the Participating Transmission Owner is **[San Diego Gas & Electric Company]**.

“Party” or “Parties” means the Buyer or Seller individually, or to both collectively.

“Performance Assurance” means collateral provided by Seller to Buyer to secure Seller’s obligations hereunder and includes CPUC Approval Security, Development Period Security, Construction Period Security, and Delivery Term Security.

[For As-Available, Baseload, Peaking Product: “Performance Measurement Period” has the meaning set forth in Section 3.1(e).]

“Planned Outage” means any planned reduction or suspension of the electrical output from the Project or unavailability of the Project in whole or in part as a result of the inspection, maintenance, or repair of equipment that is scheduled in accordance with Section 3.7(a).

“PNode” has the meaning set forth in the CAISO Tariff.

“Positive Imbalance Energy” has the meaning set forth in Section 4.[2/3].

“Product” has the meaning set forth in Section 3.1(a).

“Project” means all of the *[insert technology]* electric generating units, the Site at which the generating facility is located, the utility interconnection facilities up to the point of change in ownership to the applicable utility’s facilities, and the other assets, tangible and intangible, that compose the generation facility as more particularly described on Exhibit A.

“Project Cure Period” has the meaning set forth in Section 3.9(c)(ii).

“Quarterly Progress Report” means the report similar in form and content attached hereto as Exhibit F, as may be modified from time to time to meet applicable CPUC requirements.

[For Green Tariff Projects located outside of the CAISO: “Pseudo Participating Generator Agreement” means an agreement between CAISO and Seller that is the equivalent of a Participating Generator Agreement (as defined in the CAISO Tariff) for generators interconnected to a Native Balancing Authority other than CAISO and whose output is dynamically transferred via a pseudo-tie to the CAISO, in form and substance reasonably acceptable to the parties thereto.]

[For Green Tariff Projects located outside of the CAISO: “Pseudo Tie Agreements” means the Interconnected Balancing Authority Agreement, the Dynamic Scheduling Agreement, the Pseudo Participating Generator Agreement, and the NBA Generator Agreement, or equivalent agreements that may be adopted by the CAISO or included in the CAISO Tariff, which are intended to permit and facilitate the dynamic transfer of the output of the Project via a pseudo-tie from its Native Balancing Authority to the CAISO.]

“Recording” has the meaning set forth in Section 13.6.

“Reductions” has the meaning set forth in Section 3.2(c).

“Referral Date” has the meaning set forth in Section 12.2(a).

“Remedial Action Plan” has the meaning provided in Section 3.9(b)(ii)

“Renewable Energy Credit” has the meaning set forth in California Public Utilities Code Section 399.12(h) and CPUC Decision 08-08-028, as each may be amended from time to time or as further defined or supplemented by Law.

“Renewable Generation Equipment Supplier” means the supplier of the [electric generating [wind] [gas] [steam] turbine(s)] [solar electric generating equipment] for the Project, selected by Seller.

“Replacement Price” means the price (in dollars per megawatt hour) at which Buyer, acting in a commercially reasonable manner, purchases for delivery at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) a replacement for any Product (including its associated Green Attributes) that was not Scheduled and delivered by Seller, plus (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Buyer in purchasing such replacement Product and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Buyer for such replacement Product, or absent a purchase,

the market price at the Delivery Point (or any other reasonably equivalent delivery point for Buyer) for such replacement Product for the hours impacted by such failure to Schedule or deliver such Product as determined by Buyer in a commercially reasonable manner. The Replacement Price also shall include all CAISO [*For Green Tariff Projects located outside of the CAISO:* , Native Balancing Authority,] and other charges and penalties calculated in dollars per megawatt hour with respect to the deviation from the Scheduled supply resulting from Seller's failure to Schedule or deliver; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Buyer be required to utilize or change its utilization of its owned or controlled assets or market positions to minimize Seller's liability. For the purposes of this definition, Buyer shall be considered to have purchased replacement Product to the extent Buyer shall have entered into one or more arrangements in a commercially reasonable manner whereby Buyer repurchases its obligation to sell and deliver the Product to another party. If for any reason a Replacement Price is unavailable when Seller fails to deliver or Schedule Product, then the Replacement Price for the hours when a Replacement Price is unavailable shall be the last available Replacement Price together with any charges and penalties allocated to Buyer during such time.

[For FCDS bids: "Resource Adequacy" means the procurement obligation of load serving entities, including Buyer, as such obligations are described in CPUC Decisions 04-01-050, 04-10-035, 05-10-042, 06-04-040, 06-06-064, 06-07-031, 07-06-029, 08-06-031, 09-06-028, 10-06-036, 11-06-022, 12-06-025, 13-06-024, and subsequent CPUC decisions addressing Resource Adequacy issues, as those obligations may be altered from time to time in the CPUC Resource Adequacy Rulemakings (R.) 04-04-003 and (R.) 05-12-013 or by any successor proceeding, and all other Resource Adequacy obligations established by any other entity, including the CAISO.]

"Sales Price" means the price (in dollars per megawatt hour) at which Seller, acting in a commercially reasonable manner, resells any Product not Scheduled and received by Buyer, deducting from such proceeds any (a) costs (calculated in dollars per megawatt hour) reasonably incurred by Seller in reselling such Product including all costs charged by CAISO [*For Green Tariff Projects located outside of the CAISO:* and the Native Balancing Authority,] to Schedule and deliver the Product into the CAISO System [*For Green Tariff Projects located outside of the CAISO:* or the Native Balancing Authority's system], and (b) additional transmission charges (calculated in dollars per megawatt hour), if any, reasonably incurred by Seller in Scheduling and delivering such Product to the third party purchasers, or absent a sale despite commercially reasonable efforts to resell the Product, zero. The Sales Price shall also be reduced by all CAISO [*For Green Tariff Projects located outside of the CAISO:* , Native Balancing Authority,] and other costs, charges and penalties with respect to the deviation from the Scheduled supply, in each case, resulting from Buyer's failure to take Product and calculated in dollars per megawatt hour; provided, however, in no event shall such price include any ratcheted demand or similar charges, nor shall Seller be required to utilize or change its utilization of its owned or controlled assets, including contractual assets, or market positions to minimize Buyer's liability. The Sales Price may be less than zero.

"S&P" means the Standard & Poor's Rating Group (a division of McGraw-Hill, Inc.) or its successor.

“Schedule” means the actions of Seller, Buyer and/or their designated representatives, or Scheduling Coordinators, including each Party’s Transmission Providers, if applicable, of notifying, requesting and confirming to each other and the CAISO the quantity and type of Product to be delivered on any given day or days at a specified Delivery Point.

“Scheduling Coordinator” or “SC” means an entity certified by the CAISO as qualifying as a Scheduling Coordinator pursuant to the CAISO Tariff, for the purposes of undertaking the functions specified in “Responsibilities of a Scheduling Coordinator,” of the CAISO Tariff, as amended from time-to-time.

“Scheduled Energy” means the Energy that clears under the applicable CAISO market based on the final Schedule developed in accordance with this Agreement, the operating procedures developed by the Parties pursuant to Section 3.10, and the applicable CAISO Tariff, protocols and Scheduling practices.

“SEC” means the U.S. Securities and Exchange Commission.

“Seller” shall have the meaning set forth on the Cover Sheet.

“Settlement Amount” means, with respect to the Non-Defaulting Party, the Losses or Gains, and Costs, expressed in U.S. Dollars, which such Party incurs as a result of the liquidation of a Terminated Transaction pursuant to Sections 5.2 and 5.3.

“Site” shall mean the location of the Project as described in Exhibit A.

“Station Service” means the electric energy produced by the Project that is used within the Project to power the lights, motors, control systems and other auxiliary electrical loads that are necessary for operation of the Project [*For Excess Sales bids*: and electric energy produced by the Project that is used to service onsite load which is subtracted from the CAISO revenue meter/].

“System Dispatch Down” means curtailment of delivery of Product from the Project resulting from (a) curtailment ordered by the CAISO (whether directly or through the Scheduling Coordinator or the Participating Transmission Owner), for any reason, including, but not limited to, an Exceptional Dispatch (as defined in the CAISO Tariff), any system emergency as defined in the CAISO Tariff (“System Emergency”), any warning of an anticipated System Emergency, or any warning of an imminent condition or situation which could jeopardize the CAISO’s or Participating Transmission Owner’s electric system integrity or the integrity of other systems to which the CAISO or Participating Transmission Owner is connected, any warning, forecast, or anticipated overgeneration conditions, including a request from CAISO to manage over-generation conditions; (b) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) for reasons including, but not limited to, (i) any situation that affects normal function of the electric system including, but not limited to, any abnormal condition that requires action to prevent circumstances such as equipment damage, loss of load, or abnormal voltage conditions, (ii) any warning, forecast or anticipation of conditions or situations that jeopardize the Participating Transmission Owner’s electric system integrity or the integrity of other systems to which the Participating Transmission Owner is connected; (c) curtailment ordered by the Participating Transmission Owner or distribution operator (if interconnected to distribution or sub-transmission system) as a result of

scheduled or unscheduled maintenance or construction on the Participating Transmission Owner's transmission facilities or distribution operator's facilities (if interconnected to distribution or sub-transmission system) that prevents the delivery or receipt of Delivered Energy to or at the Delivery Point, (d) curtailment in accordance with Seller's obligations under its interconnection agreement with the Participating Transmission Owner or distribution operator, ***[For Green Tariff projects located outside of the CAISO:*** or Native Balancing Authority; or (e) curtailment ordered by the Native Balancing Authority or another Transmission Provider of Seller provided, that Seller has contracted for firm transmission or equivalent arrangements with the Native Balancing Authority or such Transmission Provider for the Product to be delivered to the Delivery Point and such curtailment is due to "force majeure" or "uncontrollable force" or a similar term as defined under the Transmission Provider's tariff]; provided, however, that System Dispatch Down shall not include Economic Dispatch Down].

"Terminated Transaction" means the termination of this Agreement in accordance with Section 5.2 of this Agreement.

"Termination Payment" has the meaning set forth in Section 5.2.

[For TOD Pricing Only: "TOD Delivery Cap" has the meaning set forth in Section 4.[1/2](a).]

[For TOD Pricing Only: "TOD Factors" has the meaning set forth in Section 4.[1/2](b).]

[For TOD Pricing Only: "TOD Period" has the meaning set forth in Section 4.[1/2](b).]

"Transmission Provider" means any entity or entities transmitting or transporting the Product on behalf of Seller or Buyer to or from the Delivery Point.

"VER Forecasting Program" means the rules, protocols, procedures and standards for Participating Intermittent Resources under the CAISO's Eligible Intermittent Resource Protocol, as may be amended from time to time, as set forth in the CAISO Tariff.]

"WECC" means the Western Electricity Coordinating Council or successor agency.

"WREGIS" means the Western Renewable Energy Generating Information System or any successor renewable energy tracking program.

1.2 Interpretation. The following rules of interpretation shall apply:

(a) The term "month" shall mean a calendar month unless otherwise indicated, and a "day" shall be a 24-hour period beginning at 12:00:01 a.m. Pacific Prevailing Time and ending at 12:00:00 midnight Pacific Prevailing Time; provided that a "day" may be 23 or 25 hours on those days on which daylight savings time begins and ends.

(b) Unless otherwise specified herein, all references herein to any agreement or other document of any description shall be construed to give effect to amendments, supplements, modifications or any superseding agreement or document as then exist at the applicable time to which such construction applies.

(c) Capitalized terms used in this Agreement, including the appendices hereto, shall have the meaning set forth in Article 1, unless otherwise specified.

(d) Unless otherwise specified herein, references in the singular shall include references in the plural and vice versa, pronouns having masculine or feminine gender will be deemed to include the other, and words denoting natural persons shall include partnerships, firms, companies, corporations, joint ventures, trusts, associations, organizations or other entities (whether or not having a separate legal personality). Other grammatical forms of defined words or phrases have corresponding meanings.

(e) The term “including” when used in this Agreement shall be by way of example only and shall not be considered in any way to be in limitation.

(f) References to a particular article, section, subsection, paragraph, subparagraph, appendix or attachment shall, unless specified otherwise, be a reference to that article, section, subsection, paragraph, subparagraph, appendix or attachment in or to this Agreement.

(g) Any reference in this Agreement to any natural person, Governmental Authority, corporation, partnership or other legal entity includes its permitted successors and assigns or to any natural person, Governmental Authority, corporation, partnership or other legal entity succeeding to its functions.

(h) All references to dollars are to U.S. dollars.

ARTICLE TWO: EFFECTIVENESS OF AGREEMENT; CONDITIONS PRECEDENT

2.1 Effectiveness of Agreement Prior to CP Satisfaction Date. Commencing on the Execution Date until the CP Satisfaction Date, this Agreement shall be in full force and effect, enforceable and binding only to the extent required to give full effect to, and enforce, the rights and obligations of the Parties under this Article 2, including, as it relates to Article 2, the rights and obligations under Articles 1, 5, 7, 8, 9, 10, 11, 12, and 13.

2.2 Obligations of the Parties. The Parties shall cooperate with each other to cause the Conditions Precedent to be satisfied as soon as reasonably practical.

(a) Seller’s Obligations. Prior to the CP Satisfaction Date, Seller shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections [], (ii) diligently pursue development of the Project in accordance with Section 3.9, (iii) comply with Section 3.9(b) in achieving the applicable Milestones that have due dates occurring prior to the CP Satisfaction Date, reporting completion of such Milestones, and delivering Remedial Action Plans in respect of missed Milestones as more fully described therein, (iv) deliver the Quarterly Progress Report in accordance with Section 3.9(a), and (v) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. Upon an Event of Default of Seller prior to the CPUC Approval Date, Buyer may terminate this Agreement in which case Seller shall owe Buyer liquidated damages in the amount of the CPUC Approval Security. Upon an Event of Default of Seller on or after the CPUC Approval Date but prior to the CP Satisfaction Date, Buyer may terminate this Agreement in which case Seller shall

owe Buyer liquidated damages in the amount of the Development Period Security. Buyer may retain such Performance Assurances to pay such liquidated damages. Each Party agrees and acknowledges that (a) the actual damages that Buyer would incur due to an Event of Default of Seller prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Seller prior to the CP Satisfaction Date.

(b) Buyer's Obligations. Prior to the CP Satisfaction Date, Buyer shall (i) use commercially reasonable efforts to pursue satisfaction of the Conditions Precedent set forth in Sections 2.3(a), and (ii) otherwise comply with its obligations, covenants, representations, and warranties under Articles 7-13. Upon an Event of Default of Buyer prior to the CPUC Approval Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the CPUC Approval Security. Upon an Event of Default of Buyer on or after the CPUC Approval Date but prior to the CP Satisfaction Date, Seller may terminate this Agreement in which case Buyer shall owe Seller liquidated damages in the amount of the Development Period Security. Each Party agrees and acknowledges that (a) the actual damages that Seller would incur due to an Event of Default of Buyer prior to the CP Satisfaction Date would be difficult or impossible to predict with certainty, (b) the liquidated damages set forth in this section are a reasonable and appropriate approximation of such damages, and (c) the liquidated damages set forth in this section are the exclusive remedy for an Event of Default of Buyer prior to the CP Satisfaction Date.

2.3 Conditions Precedent. Subject to Section 2.1, the effectiveness of the remainder of this Agreement is conditioned upon the satisfaction (or waiver by the Party described in Section 2.4) of all of the following conditions precedent ("Conditions Precedent") by the deadline dates set forth below for each Condition Precedent without extension for Force Majeure or any other reason:

(a) CPUC Approval. No later than [_____], Buyer shall have obtained CPUC Approval. Prior to this deadline, should the CPUC issue an order approving this Agreement but with conditions or modifications that materially alter the commercial aspects of this Agreement, the Parties agree to use good faith efforts to renegotiate this Agreement and file the amended agreement with the CPUC seeking CPUC Approval therefor. If, no later than the earlier of (i) sixty (60) days after such order or (ii) the deadline date above, no agreement is reached, either Party may terminate this Agreement upon delivery of Notice to the other Party.

(b) Electrical Interconnection. No later than [_____], Seller shall have entered into a [Large/Small/Rule 21/Native Balancing Authority] Generator Interconnection Agreement [*For Green Tariff Projects located outside of the CAISO:* along with any supplemental arrangements with the CAISO as an affected system owner] providing for the construction of the Electrical Interconnection Upgrades necessary to maintain the "[Full Capacity] [Energy Only] Deliverability Status" (as defined in the CAISO Tariff) of the Project and setting forth:

(i) an estimated in-service interconnection date for the "Participating TO's Interconnection Facilities," the "Network Upgrades," and the "Distribution Upgrades" (as each term is defined in the [CAISO Tariff/Wholesale Distribution Access/Rule 21]) of no later

than [] months after Seller provides the [CAISO/Participating Transmission Owner/distribution system owner/Native Balancing Authority/or any other affected transmission provider] with the appropriate security and written authorization to proceed under its [Large/Small/Rule 21/Native Balancing Authority] Generator Interconnection Agreement for the Project ***[For Green Tariff Projects located outside of the CAISO:*** and its supplemental arrangements with the CAISO as an affected system owner], and,

(ii) a refundable cost for [Note: add “reliability” here for Energy Only interconnection agreements which bid FCDS] “Network Upgrades” (as defined in the CAISO Tariff) that Seller would be obligated to pay and would be entitled to reimbursement from the CAISO, a Participating Transmission Owner, or any other affected transmission provider as provided thereunder not exceeding \$[], and

(iii) a nonrefundable cost that Seller would be obligated to pay thereunder not exceeding \$[] (or such greater amount as Seller may approve, in its sole discretion).

(c) ***[Others, Major Governmental Approvals, Financing, etc.]***

2.4 Failure to Meet All Conditions Precedent.

(a) Beneficiary Party.

(i) Both of the Parties are the beneficiaries of the Conditions Precedent set forth in Sections 2.3(a), 2.3(b)(i)-(ii) ***[Others]***, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, both of the Parties must waive (in their sole discretion) non-satisfaction by the deadline date therefor.

(ii) Buyer shall be the sole beneficiary of the Conditions Precedent set forth in Sections ***[List]***, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Buyer alone must waive (in its sole discretion) non-satisfaction by the deadline date therefor.

(iii) Seller shall be the sole beneficiary of the Conditions Precedent set forth in Sections 2.3(b)(iii) ***[Others]***, and in order for a waiver of non-satisfaction of such Conditions Precedent to be effective, Seller alone must waive (in its sole discretion) non-satisfaction by the deadline date therefor.

(b) Termination. If any of the Conditions Precedent is not satisfied or waived in writing by the beneficiary Parties thereto on or before the date that is fifteen (15) days after the applicable deadline date therefor, then this Agreement shall automatically terminate with no further obligation to either Party (other than as set forth in Sections 2.4(b)(i)-(ii) below and any other payment obligations which are accrued and payable at the time of termination).

(i) Upon a termination of this Agreement for any reason under Section 2.4 other than as described in Section 2.4(b)(ii) below, Seller shall forfeit to Buyer an amount equal to the Performance Assurance then required to be delivered to Buyer hereunder. Buyer may retain such Performance Assurance to pay such amount.

(ii) Upon a termination of this Agreement under this Section 2.4 as a result of the failure of the Conditions Precedent set forth in Sections 2.3(a) to be satisfied (or waived by both Parties) or as a result of the failure of the Conditions Precedent set forth in Sections 2.3(b)(i)-(ii) to be satisfied or waived by Buyer, Buyer shall return to Seller the Performance Assurances then held by Buyer.

2.5 Effectiveness of Agreement on and after CP Satisfaction Date. This Agreement shall be in full force and effect, enforceable and binding in all respects as of the CP Satisfaction Date until the conclusion of the Delivery Term or earlier termination pursuant to the terms of this Agreement; provided however, that this Agreement shall remain in effect until (i) the Parties have fulfilled all obligations under this Agreement, including payment in full of amounts due for the Product delivered prior to the end of the Delivery Term, the Settlement Amount, indemnification payments or other damages (whether directly or indirectly such as through set-off or netting) and (ii) the undrawn portion of the CPUC Approval Security, Development Period Security, Construction Period Security, or Delivery Term Security, as applicable, is released and/or returned as applicable (if any is due). All indemnity rights shall survive the termination or expiration of this Agreement for the longer of twelve (12) months or the expiration of the statute of limitations period of the claim underlying the indemnity obligation.

ARTICLE THREE: OBLIGATIONS AND DELIVERIES

3.1 Transaction.

(a) Product. The “Product” to be delivered and sold by Seller and received and purchased by Buyer under this Agreement is ***[Seller to select: As-Available, Baseload, Peaking, or Dispatchable] Energy, [Delete for Energy Only Bids, except for Green Tariff Projects located outside of the CAISO: Capacity Attributes.] Green Attributes, and other ancillary products, services or attributes similar to the foregoing which are or can be produced by or associated with the Project (net of Station Service) in accordance with the terms hereof.***

(b) Transaction. Unless specifically excused by the terms of this Agreement during the Delivery Term, Seller shall sell and deliver, or cause to be delivered, and Buyer shall purchase and receive, or cause to be received, the Product at the Delivery Point, and Buyer shall pay Seller for the Product in accordance with the terms hereof. In no event shall Seller have the right to procure any element of the Product from sources other than the Project for sale or delivery to Buyer under this Agreement ***[If the Project is located outside of the CAISO: except with respect to Imbalance Energy from the Transmission Provider].***

(c) Delivery Term. The Parties agree that the period of Product delivery is ***[insert: “ten (10)”, “fifteen (15), or “twenty (20)”] Contract Years.*** As used herein, “Delivery Term” shall mean the period of Contract Years specified above beginning on the Commercial Operation Date and continuing until the end of the last Contract Year unless terminated earlier as provided by the terms of this Agreement.

(d) Delivery Point. ***[For Project with transmission level interconnection, insert: “The Delivery Point shall be the point of interconnection of the Project to the CAISO Grid (and, for payment purposes, the corresponding PNode for the Project).”] [For Project with***

distribution level interconnection, insert: “The Delivery Point shall be the point on the CAISO Grid where the Participating Transmission Owner’s distribution system interconnects to the CAISO Grid as set forth in their Meter Services Agreement, as may be acceptable to Buyer in its reasonable discretion (and, for payment purposes, the corresponding PNode for the Project).”/ ***[For Green Tariff Projects located outside of the CAISO, insert:*** “The Delivery Point shall be the point on the CAISO Grid where the Native Balancing Authority’s grid is interconnected to the CAISO Grid at the [*identify the local CAISO substation to which the Project has firm transmission rights*] Substation (and, for payment purposes, the corresponding PNode for the Project, or if none exists, the PNode corresponding to the point on the CAISO Grid where the Native Balancing Authority’s grid is interconnected to the CAISO Grid at the Delivery Point).”/ The Delivery Point shall be [the point of interconnection of the Project to the CAISO Grid] ***[Seller may specify another delivery point; for a Project located outside the CAISO Grid, the Delivery Point should be a CAISO Scheduling Point as defined by the CAISO]*** and for financial settlement purposes under the applicable CAISO market, the PNode corresponding to such point.

(e) ***[For Baseload, Peaking, As-Available Product: Contract Quantity and Guaranteed Energy Production.*** The quantity of Bundled Green Energy that Seller expects to be able to deliver to Buyer during each Contract Year is [_____] MWh (“Contract Quantity”). Throughout the Delivery Term, Seller shall be required to deliver to Buyer no less than the Guaranteed Energy Production (as defined below) in any [twelve (12)] [twenty-four (24)] consecutive calendar month period during the Delivery Term (“Performance Measurement Period”). “Guaranteed Energy Production” means an amount of Bundled Green Energy, as measured in MWh, equal to [two times] [_____] % of the Contract Quantity. Notwithstanding the excuses to performance set forth in the definition of the Product type (as such Product type is specified in Section 3.1(a)), Seller shall be excused from achieving the Guaranteed Energy Production during any Performance Measurement Period only to the extent of any Force Majeure events, Buyer’s failure to perform, or Dispatch Down Periods. For purposes of determining whether Seller has achieved the Guaranteed Energy Production, Seller shall be deemed to have delivered to Buyer an amount of Bundled Green Energy that it could reasonably have delivered to Buyer but was prevented from delivering to Buyer by reason of any Force Majeure events, Buyer’s failure to perform, or Dispatch Down Periods.

(f) ***Contract Capacity.*** The “Contract Capacity” is the full generation capacity of the Project net of all Station Service which shall be [___MWac] and [___MWdc]. Throughout the Delivery Term, Seller shall sell and Schedule all Product associated with the Contract Capacity of the Project ***[For FCDS bids and for Green Tariff Projects located outside of the CAISO insert: ,including Capacity Attributes,]*** solely to Buyer, except in the case of an Event of Default of Buyer or an unexcused failure by Buyer to Schedule, receive, and pay for Product under Section 3.1(h)(ii).

(g) ***Project.*** All Product provided by Seller pursuant to this Agreement shall be supplied from the Project only. Other than maintenance in accordance with Good Industry Practices, Seller shall not make any alteration or modification to the Project which results in a change to the Contract Capacity of the Project or any other material changes to the Project without Buyer’s prior written consent. The Project is further described in Exhibit A.

(h) ***Performance Excuses.***

(i) Seller Excuses. The performance of Seller to Schedule, deliver, and sell the Product shall be excused only for the reasons set forth in the definition of “As-Available”. If Seller fails to Schedule, deliver, or sell all or part of the Product for a period or a series of periods that is cumulatively longer than thirty (30) days, and such failure is not excused as described above, then such failure shall be an Event of Default. If Seller fails to Schedule, deliver, or sell all or part of the Product for any period prior to an Early Termination Date, and such failure is not excused as described above, then Seller shall pay Buyer, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency equal to the positive difference, if any, obtained by subtracting (A) the product of the Energy Price [*For FCDS Projects located in the CAISO*: (or for each month during which Seller has not achieved FCDS as determined by the CAISO, the Energy Price minus the Deliverability Value)] [*TOD Pricing Only*: times the weighted average TOD Factor for such period of Product deficiency] times the Product deficiency, from (B) the product of the Replacement Price times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

(ii) Buyer Excuses. The performance of Buyer to Schedule, receive, and pay for the Product shall be excused only (A) during periods of Force Majeure, (B) by Seller’s failure to perform or (C) during Dispatch Down Periods [*For all Products other than Dispatchable Product*: (except that Buyer shall not be excused from paying for the Product as required under Section 3.4 during periods of Economic Dispatch Down)]. If Buyer fails to Schedule, receive, or purchase all or part of the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described above, then such failure shall be an Event of Default. If Buyer fails to Schedule, receive, or purchase all or part of the Product for any period prior to an Early Termination Date and such failure is not excused as described above, then Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which the failure occurred an amount for such Product deficiency equal to the positive difference, if any, obtained by subtracting (Y) the product of the Sales Price times the Product deficiency from (Z) the product of the Energy Price [*For FCDS located in the CAISO*: (or, for each month during which Seller has not achieved FCDS as determined by the CAISO, the Energy Price minus the Deliverability Value)] [*TOD Pricing Only*: times the weighted average TOD Factor for such period of Product deficiency] times the Product deficiency. The invoice for such amount shall include a written statement explaining in reasonable detail the calculation of such amount.

(i) Green Attributes. Seller hereby provides and conveys all Green Attributes associated with all electricity generation from the Project to Buyer as part of the Product being delivered. Seller represents and warrants that Seller holds the rights to all Green Attributes from the Project, and Seller agrees to convey and hereby conveys all such Green Attributes to Buyer as included in the delivery of the Product from the Project. [*For Green Tariff Projects only*: During the Delivery Term, Seller shall register, provide and maintain a Green-e Energy Renewable Generator Registration Form and Attestation.] For all electric generation using biomethane as fuel, neither Buyer nor Seller may make a marketing, regulatory, or retail claim that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane if the capture and destruction is required by Law. If the capture and destruction of the biomethane is not required by Law, neither Buyer nor Seller may make a marketing, regulatory, or retail claim

that asserts that a procurement contract to which that entity was a party resulted, or will result, in greenhouse gas reductions related to the destruction of methane, unless the environmental attributes associated with the capture and destruction of the biomethane pursuant to that contract are transferred to Buyer and retired on behalf of the retail customers consuming the electricity associated with the use of that biomethane, or unless Seller's procurement contract with the source of biomethane prohibits the source of biomethane from separately marketing the environmental attributes associated with the capture and destruction of the biomethane sold pursuant to that contract, and such attributes have been retired.

(j) ***[Delete and replace with "Reserved" for Energy Only Bids, except for Green Tariff Projects located outside of the CAISO: Resource Adequacy.*** During the Delivery Term, Seller grants, pledges, assigns and otherwise commits to Buyer all of the Project's Contract Capacity, including Capacity Attributes, from the Project for Buyer to use in meeting its Resource Adequacy or successor program requirements, as the CPUC, CAISO or other regional entity may prescribe. Seller understands that the CPUC is currently in the process of developing requirements for Resource Adequacy and these requirements and the implementation thereof have not been finalized. Seller agrees that it shall take all commercially reasonable actions and execute any and all documents or instruments reasonably necessary to enable Buyer to use all of the Contract Capacity, including Capacity Attributes, to be committed by Seller to Buyer pursuant to this Agreement for the Resource Adequacy requirements of Buyer, including for necessary deliverability Network Upgrades. ***[For Green Tariff Projects located within the CAISO who bid FCDS but have an Energy Only Interconnection Agreement (and Phase II study) at the time of contract execution:*** If the Generator Interconnection Agreement requires an amendment to achieve FCDS and there are deliverability Network Upgrades, Buyer can request that Seller elect to fund or elect not to fund all deliverability Network Upgrades. However, if Seller elects to fund all deliverability Network Upgrades after Buyer's request that Seller not fund such deliverability Network Upgrades, Buyer shall have the right to declare a termination, and Seller shall owe Buyer a Termination Payment. If Buyer requests that Seller fund certain deliverability Network Upgrades and Seller elects to fund, but the Project does not obtain Full Capacity Deliverability Status on or before January 1, 2027, Buyer shall have the right to declare a termination, and Seller shall owe Buyer a Termination Payment. If the Seller is required to provide Resource Adequacy hereunder, Seller agrees that the Project is subject to the terms of the Availability Standards.] ***[For Green Tariff Projects located outside of the CAISO insert:*** Seller acknowledges that in order for the Project, as a generator that is dynamically transferred via a pseudo-tie to the CAISO, to qualify its Capacity Attributes as Resource Adequacy capacity, Seller will need, among other things, to maintain firm transmission service to the Delivery Point or equivalent arrangements, to maintain as effective the Pseudo-Tie Agreements, to establish a "Qualifying Capacity" (or its equivalent) periodically with the CPUC, to establish a "Net Qualifying Capacity" (or its equivalent) periodically with the CAISO, and to submit through Seller's Scheduling Coordinator a Resource Adequacy supply plan periodically to the CAISO. Seller acknowledges that (i) Buyer may allocate its share of import capability on the CAISO Grid to any CAISO import scheduling point on the CAISO Grid as it deems appropriate in its sole discretion, and (ii) Buyer may allocate its share, if any, of import capability at the CAISO import scheduling point corresponding to the Delivery Point to any resource at such CAISO import scheduling point as it deems appropriate in its sole discretion, even if, in either case, Buyer's allocation of such import capability, if any, to the CAISO

import scheduling point corresponding to the Delivery Point or to the Project may not be sufficient for the Capacity Attributes from the Project to be accepted and approved by the CPUC and the CAISO as qualifying for the determination of, and as satisfying Buyer's requirement for demonstrating its procurement of, Resource Adequacy capacity. If there are determined to be deliverability Network Upgrade costs on the CAISO Grid as an affected system of the Native Balancing Authority as a result of this Project, Buyer can request that Seller elect to fund or elect not to fund all deliverability Network Upgrades. If Seller elects to fund any such deliverability Network Upgrades after Buyer's request that Seller not fund such deliverability Network Upgrades, Buyer shall have the right to declare a termination, and Seller shall owe Buyer a Termination Payment. If Buyer requests that Seller fund certain deliverability Network Upgrades, but Seller does not fund such deliverability Network Upgrades, Buyer shall have the right to declare a termination, and Seller shall owe Buyer a Termination Payment. If the Seller is required to provide Resource Adequacy hereunder, Seller agrees that the Project is subject to the terms of the Availability Standards.//

(k) WREGIS. Prior to the initial delivery of Energy to Buyer, Seller shall register the Project in WREGIS, execute a CAISO Qualified Reporting Entity Service Agreement to allow CAISO, on the Seller's behalf, to upload generation information directly into WREGIS, and take all other actions necessary to ensure that the Green Attributes produced from the Project in an amount equal to the amount of Delivered Energy are issued and tracked for purposes of satisfying the requirements of the California Renewable Portfolio Standard and transferred to Buyer, including payment of all fees required to register the facility in WREGIS, issue WREGIS certificates, and transfer such certificates to Buyer. Seller warrants that all necessary steps to allow the Renewable Energy Credits transferred to Buyer to be tracked in WREGIS will be taken prior to the first delivery under the Agreement.

(l) Prevailing Wage. To the extent applicable, Seller shall comply with the prevailing wage requirements of California Public Utilities Code Section 399.13, subdivision (h).

3.2 Transmission.

(a) Seller's Transmission Service Obligations. During the Delivery Term, Seller shall arrange and be responsible for transmission service for delivery of the Product to and at the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission and distribution losses, and any transmission or distribution level outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods. ***[For Green Tariff Projects located outside of CAISO:*** Seller shall obtain and maintain during the Delivery Term firm transmission service or equivalent arrangements to deliver the Product from the Site to the Delivery Point from all intermediary Transmission Providers between the Site and the Delivery Point. At Buyer's request, Seller shall provide to Buyer a copy of all firm transmission service agreements or equivalent arrangements and any amendments thereto.] Seller shall fulfill all contractual, metering and applicable interconnection requirements, including those set forth in ***[For Green Tariff Projects located outside of CAISO:*** the Native Balancing Authority's applicable tariffs,] the Participating Transmission Owner's applicable tariffs, the CAISO Tariff and implementing CAISO standards and requirements, including, but not limited to, executing applicable interconnection agreements, Participating Generator Agreement and Meter Service

Agreement *[For Green Tariff Projects located outside of CAISO:* (or equivalent arrangements (such as a Pseudo-Participating Generator Agreement) for projects located outside the CAISO whose output is dynamically transferred via a pseudo-tie to the CAISO)] so as to be able to deliver Energy to the CAISO Grid. *[For Green Tariff Project located within the CAISO:* Seller shall arrange for any interconnection agreement with the CAISO (or the Participating Transmission Owner, for distribution level interconnections).] *[For Green Tariff Projects located outside of CAISO:* Seller shall arrange for and maintain, or cause to be maintained, during the Delivery Term appropriate interconnection agreements with the Native Balancing Authority and appropriate Pseudo Tie Agreements among the parties thereto that permit and facilitate the dynamic transfer of the output of the Project via a pseudo-tie from the Native Balancing Authority to the CAISO.] Any and such interconnection agreement is separate and not a part of this Agreement.

(b) Buyer's Transmission Service Obligations. During the Delivery Term, Buyer shall arrange and be responsible for transmission service for delivery of the Product from the Delivery Point and bear all risks and costs associated with such transmission service, including, but not limited to, all Transmission Provider costs and charges, electric transmission losses, and any transmission outages or curtailment, except as provided otherwise in this Agreement in respect of Dispatch Down Periods.

(c) Congestion Charges. Seller shall be responsible for all costs of congestion for transmission of the Product up to and at the Delivery Point. Buyer shall be responsible for all costs of congestion for transmission of the Product from the Delivery Point. To the extent that Seller is reimbursed for or receives any refunds, credits, or benefits from the CAISO for congestion charges or losses in respect of transmission of the Product from the Delivery Point, whether due to differences between the locational marginal pricing at the Delivery Point and Buyer's load aggregation point or any other point downstream of the Delivery Point, congestion revenue rights associated with any transmission path downstream of the Delivery Point, or any other hedging instruments associated with the transmission of the Product from the Delivery Point (collectively, any such refunds, credits or benefits are referred to as "Reductions"), then, at Buyer's option, either (i) Seller shall transfer any such Reductions and their related rights to Buyer; or (ii) Buyer shall reduce payments due to Seller under this Agreement in amounts equal to the Reductions and Seller shall retain the Reductions.

3.3 Scheduling.

(a) VER Forecasting Program Requirements. Seller shall cause the Project to become a Participating Intermittent Resource including executing all necessary documents to become a Participating Intermittent Resource. Seller shall be responsible for all CAISO forecasting fees and related charges associated with the Project becoming a Participating Intermittent Resource and participating in the VER Forecasting Program. Seller and Buyer shall comply with the VER Forecasting Program, and all additional protocols issued by the CAISO relating to Participating Intermittent Resources, including the VER Forecasting Program, for the Delivery Term. Seller shall provide Buyer with a copy of the notice from the CAISO certifying the Project as a Participating Intermittent Resource prior to the Commercial Operation Date. In the event that the VER Forecasting Program or the CAISO Tariff and/or any protocols relating thereto are changed, amended, modified replaced or terminated, Seller and Buyer agree to comply

with such revisions and, to the extent practical, to implement such revisions in a manner that maintains the relative economic positions of the Parties as of the date of this Agreement.]

(b) Scheduling Coordinator.

[When Seller is SC for the Project, include the following two paragraphs:

(i) Seller as Scheduling Coordinator for the Project. During the Delivery Term, Seller shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to Schedule and deliver the Product to the Delivery Point and Buyer shall be its own Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with its Transmission Provider to Schedule and receive the Product at the Delivery Point. Throughout the Delivery Term, Buyer and Seller shall submit inter-SC trades for scheduling all Product from the Project at the Delivery Point (including Energy, Integrated Forward Market Load Uplift Obligations in respect of self-scheduled Energy, and other Product from time to time contemplated under the CAISO Tariff to be subject to inter-SC trades), based on a final Schedule developed in compliance with this Agreement. During the Delivery Term, each Party or each Party's SC shall conduct all Scheduling in accordance with the operating procedures developed by the Parties pursuant to Section 3.10 and in full compliance with the applicable CAISO Tariff, protocols and Scheduling practices for Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. ***[For As-Available intermittent Product only:*** Whenever the VER Forecasting Program is available, Seller shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program.] In all cases, ***[For all Products other than Dispatchable:*** consistent with its Economic Dispatch Down curtailment rights,] Buyer may direct the Scheduling Coordinator to submit, and Seller shall cause the Scheduling Coordinator to submit in accordance with such Buyer's directions, a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO. It is the intent of the Parties that neither Party be subject to a double payment or a double charge for Product from the Project through this Agreement and CAISO settlement process and that the more detailed Scheduling and operating procedures developed pursuant to Section 3.10 complement the CAISO settlement process to produce a final economic result between them that is consistent with the fundamental transaction of this Agreement.

(ii) CAISO Costs and Revenues. Seller shall be responsible for CAISO costs (including penalties and other charges) and shall be entitled to all CAISO revenues (including credits and other payments) as the Scheduling Coordinator for the Project, in each case, associated with Imbalance Energy, including all CAISO charges or penalties incurred as a consequence of the Project not being available, the Seller not notifying the CAISO and Buyer of outages in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7), any other failure by Seller to abide by the CAISO Tariff, and any other deviations between Delivered Energy and Scheduled Energy that are attributable to Seller, the Project, or any event, circumstance, act, or incident occurring prior to or at the Delivery Point, including without limitation uninstructed deviation penalties. The Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the

CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, the cost of the sanctions or penalties shall be the Seller's responsibility. Buyer shall be entitled to all credits, payments, or revenues from the CAISO in respect of the Contract Energy from the Project, including revenues associated with CAISO dispatches, inter-SC trade credits, and bid cost recovery.]

[When SDG&E is SC for the Project and for Green Tariff Projects located outside of the CAISO, include the following seven paragraphs:

(iii) Buyer as Scheduling Coordinator for the Project. [During the Delivery Term] [Upon initial synchronization of the Project to the CAISO Grid], Buyer shall be the Scheduling Coordinator or designate a qualified third party to provide Scheduling Coordinator services with the CAISO for the Project for both the delivery and the receipt of the Product at the Delivery Point. At least thirty (30) days prior to the [Commercial Operation Date of the Project] [initial synchronization of the Project to the CAISO Grid], Seller shall take all actions and execute and deliver to Buyer and the CAISO all documents necessary to authorize or designate Buyer as Seller's Scheduling Coordinator for the Project effective as of [the beginning of the Delivery Term] [initial synchronization of the Project to the CAISO Grid]. [During the Delivery Term] [On and after initial synchronization of the Project to the CAISO Grid], Seller shall not authorize or designate any other party to act as Seller's Scheduling Coordinator, nor shall Seller perform for its own benefit the duties of Scheduling Coordinator, and Seller shall not revoke Buyer's authorization to act as Seller's Scheduling Coordinator unless agreed to by Buyer. Buyer (as Seller's SC) shall submit Schedules to the CAISO based on the final Schedule developed in accordance with this Agreement, the operating procedures developed by the Parties pursuant to Section 3.10, and the applicable CAISO Tariff, protocols and Scheduling practices for Product on a day-ahead, hour-ahead, or real time basis, as determined by Buyer. ***[For As-Available intermittent Product only:*** Buyer (as Seller's SC) shall submit Schedules and any updates to such Schedules to the CAISO based on the most current forecast of Delivered Energy consistent with the VER Forecasting Program whenever the VER Forecasting Program is available, and consistent with Buyers' best estimate based on the information reasonably available to Buyer including Buyer's forecast whenever the VER Forecasting Program is not available.] In all cases, ***[For all Products other than Dispatchable:*** consistent with its Economic Dispatch Down curtailment rights,] Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO.

(iv) Notices. Buyer (as Seller's SC) shall provide Seller with access to a web based system through which Seller shall submit to Buyer and the CAISO all notices and updates required under the CAISO Tariff regarding the Project's status, including, but not limited to, all outage requests, forced outages, forced outage reports, clearance requests, or must offer waiver forms. In accordance with Section 3.7 and this Section 3.2, Seller will cooperate with Buyer to provide such notices and updates. If the web based system is not available, Seller shall promptly submit such information to Buyer and the CAISO (in order of preference) telephonically, by electronic mail, or facsimile transmission to the personnel designated to receive such information.

(v) CAISO Costs and Revenues. Except as otherwise set forth below, *[For all Products other than Dispatchable Product: in Section 3.4(c)(ii),]* and elsewhere in this Agreement, Buyer (as Seller's SC) shall be responsible for CAISO costs (including penalties, *[For As-Available Product VER Forecasting Program Participants only: Negative Imbalance Energy costs or revenues,]* and other charges) and shall be entitled to all CAISO revenues (including credits, *[For As-Available Product VER Forecasting Program Participants only: Positive Imbalance Energy revenues or costs,]* and other payments) as the Scheduling Coordinator for the Project, including revenues associated with CAISO dispatches, bid cost recovery, inter-SC trade credits, or other credits in respect of the Product Scheduled or delivered from the Project; provided, however that during periods when the Project is under curtailment for both System Dispatch Down and Economic Dispatch Down during the same CAISO settlement interval, Imbalance Energy costs and revenues shall be allocated in accordance with Section 3.4(c)(ii). *[For As-Available Product VER Forecasting Program Participants only: Seller shall be responsible for all CAISO charges or penalties net of credits and payments (including without limitation all Imbalance Energy costs), in each case, resulting from the Seller not notifying the CAISO and Buyer (as Seller's SC) of outages or other unavailability of Project capacity in a timely manner (in accordance with the CAISO Tariff and as set forth in Section 3.7) or any other failure by Seller to abide by the CAISO Tariff.]* The Parties agree that any Availability Incentive Payments are for the benefit of the Seller and for Seller's account and that any Non-Availability Charges or other CAISO charges associated with the Project not providing sufficient Resource Adequacy capacity are the responsibility of the Seller and for Seller's account. In addition, if during the Delivery Term, the CAISO implements or has implemented any sanction or penalty related to scheduling, outage reporting, or generator operation, and any such sanctions or penalties are imposed upon the Project or to Buyer as Scheduling Coordinator due to the actions or inactions of Seller, the cost of the sanctions or penalties shall be the Seller's responsibility.

(vi) CAISO Settlements. Buyer (as Seller's SC) shall be responsible for all settlement functions with the CAISO related to the Project. Buyer shall render a separate invoice to Seller for any CAISO charges or penalties ("CAISO Charges Invoice") for which Seller is responsible under this Agreement. CAISO Charges Invoices shall be rendered after settlement information becomes available from the CAISO that identifies any CAISO charges. Notwithstanding the foregoing, Seller acknowledges that the CAISO will issue additional invoices reflecting CAISO adjustments to such CAISO charges. Seller shall pay the amount of CAISO Charges Invoices within ten Business Days of Seller's receipt of the CAISO Charges Invoice. If Seller fails to pay such CAISO Charges Invoice within that period, Buyer may net or offset any amounts owing to it for these CAISO Charges Invoices against any future amounts it may owe to Seller under this Agreement. The obligations under this section with respect to payment of CAISO Charges Invoices shall survive the expiration or termination of this Agreement.

(vii) Dispute Costs. Buyer (as Seller's SC) may be required to dispute CAISO settlements in respect of the Project. Seller agrees to pay Buyer's costs and expenses (including reasonable attorneys' fees, including reasonably allocated costs of in-house counsel of the Buyer) associated with its involvement with such CAISO disputes. In no event shall Buyer (or its third party designee, as Scheduling Coordinator) be liable to Seller for the actions, inactions, errors, or omissions of the CAISO or its agents in the performance of their scheduling functions and/or market operations.

(viii) Terminating Buyer's Designation as Scheduling Coordinator. At least thirty (30) days prior to expiration of this Agreement or as soon as reasonably practicable upon an earlier termination of this Agreement, the Parties will take all actions necessary to terminate the designation of Buyer as Scheduling Coordinator for the Project as of 11:59 p.m. on such expiration date.

(ix) Master File and Resource Data Template. Seller shall provide the data to the CAISO (and to Buyer) that is required for the CAISO's Master File and Resource Data Template (or successor data systems) for this Project consistent with this Agreement. Neither Party shall change such data without the other Party's prior written consent.]

(c) Annual Delivery Schedules. No later than forty-five (45) days before (A) the first day of the first Contract Year of the Delivery Term and (B) the beginning of each calendar year for every subsequent Contract Year during the Delivery Term, Seller shall provide a non-binding forecast of each month's average-day expected Delivered Energy, by hour, for the following calendar year.

(d) Monthly Delivery Schedules. Ten (10) Business Days before the beginning of each month during the Delivery Term, Seller shall provide a non-binding forecast of each day's average expected Delivered Energy, by hour, for the following month ("Monthly Delivery Forecast").

(e) Daily Delivery Schedules. By 5:30 AM Pacific Prevailing Time on the Business Day immediately preceding the date of delivery, Seller shall *[When Seller is SC for the Project: cause its Scheduling Coordinator to]* provide Buyer with a *[For As-Available intermittent Product only: non-binding forecast of the Project's available capacity (or if the VER Forecasting Program is not available for any reason, the expected Delivered Energy)]* *[For all Products other than As-Available intermittent: binding forecast of the expected Delivered Energy]* for each hour of the immediately succeeding day ("Day-Ahead Forecast") *[For all Products other than As-Available intermittent: [When Seller is SC for the Project: concurrent with delivery to the CAISO] [When SDGE is SC for the Project: and Buyer shall submit a Schedule to the CAISO consistent with such Day-Ahead Forecast], it being understood that, [For all Products other than Dispatchable: consistent with its Economic Dispatch Down curtailment rights,]* Buyer (as the Scheduling Coordinator) may, or may direct the third party Scheduling Coordinator to, submit a self-schedule or an economic bid in the applicable CAISO market in order to Schedule the Product with the CAISO]. A Day-Ahead Forecast provided in a day prior to any non-Business Day(s) shall include Schedules for the immediate day, each succeeding non-Business Day and the next Business Day. Each Day-Ahead Forecast shall clearly identify, for each hour, Seller's best estimate of *[For As-Available intermittent Product only: the Project's available capacity (or if the VER Forecasting Program is not available for any reason, the expected Delivered Energy)]* *[For all Products other than As-Available intermittent: the expected Delivered Energy]*. Seller may not change such Schedule past the deadlines provided in this section except in the event of a Forced Outage or Schedule change imposed by Buyer or the CAISO, in which case Seller shall promptly provide Buyer with a copy of any and all updates to such Schedule indicating changes from the then-current Schedule. These notices and changes to the Schedules shall be sent to Buyer's on-duty Scheduling Coordinator. If Seller fails to provide Buyer with a Day-Ahead Forecast as required herein, then for such unscheduled delivery period only Buyer shall rely on the

delivery Schedule provided in the Monthly Delivery Forecast or Buyer's best estimate based on information reasonably available to Buyer and Seller shall be liable for Scheduling and delivery based on such Monthly Delivery Forecast or Buyer's best estimate.

(f) Real Time Delivery Schedules. Notwithstanding anything to the contrary herein, in the event Seller makes a change to its Schedule on the actual date of delivery for any reason including Forced Outages (other than a scheduling change imposed by Buyer or CAISO) which results in a change to its deliveries (whether in part or in whole), Seller shall notify Buyer immediately by calling Buyer's on-duty Scheduling Coordinator. Seller shall notify Buyer and the CAISO of Forced Outages in accordance with Section 3.7. Seller shall keep Buyer informed of any developments that will affect either the duration of the outage or the availability of the Project during or after the end of the outage.

(g) [For Green Tariff Projects located outside of CAISO: Scheduling with the Native Balancing Authority]. Seller shall be responsible for all communications of generation scheduling for the Project, if any are required, with the Native Balancing Authority.]

3.4 Dispatch Notices.

(a) General. Seller shall adjust delivery amounts as directed by the CAISO, the Participating Transmission Owner, Buyer, [For Green Tariff Projects located outside of CAISO: the Native Balancing Authority,] or a Transmission Provider during any Dispatch Down Period.

(b) System Requirements. Seller shall acquire, install, and maintain such facilities, communications links and other equipment, and implement such protocols and practices, as necessary (i) for Seller to respond and follow instructions, including an electronic signal conveying real time instructions, to operate the Project as directed by the Buyer and/or the CAISO, including to implement a System Dispatch Down or an Economic Dispatch Down in accordance with the then-current methodology used to transmit such instructions as it may change from time to time, and (ii) for Buyer and/or the CAISO to control the quantity of Product generated by the Project in order to implement a System Dispatch Down or an Economic Dispatch Down, in each case, in accordance with the then-current methodology used to transmit such instructions as it may change from time to time. As of the Execution Date, the systems required to comply with clause (i) include at a minimum the CAISO's Automatic Dispatch System (as described in the CAISO website) and the systems required to comply with clause (ii) include at a minimum the CAISO'S Application Programming Interfaces (as described in the CAISO website). If at any time during the Delivery Term Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies, Seller shall take all commercially reasonable steps necessary to become compliant as soon as possible. Seller shall be liable pursuant to Section [For all Products other than Dispatchable Product: 3.4(c)(ii)] [For Dispatchable Product: 3.3(b)((ii)/(iii))] for failure to comply with an order directing a Dispatch Down Period, during the time that Seller's facilities, communications links or other equipment, protocols or practices are not in compliance with then-current methodologies. For the avoidance of doubt, an order directing a Dispatch Down Period via such systems and facilities shall have the same force and effect on Seller as any other form of communication. If an electronic submittal is not possible, Buyer and/or the CAISO may provide Dispatch Notices by (in order of preference) electronic mail, telephonically, or facsimile transmission to Seller's personnel designated to receive such

communications, as provided by Seller in writing and Seller shall maintain communications systems necessary to permit such transmittal of Dispatch Notices. The Parties shall describe with more specificity the Economic Dispatch Down process (including the automated communication process for Dispatch Notices) in the operating procedures developed by the Parties pursuant to Section 3.10.

(c) ***[For all Products other than Dispatchable Product: Economic Dispatch Down. [For Projects where SDG&E purchases Test Energy:*** Before or after the Commercial Operation Date,] each of Buyer and the CAISO has the right to order Seller to curtail deliveries of Energy from the Project to the Delivery Point for Economic Dispatch Down purposes, seven days per week and 24 hours per day (including holidays), by providing Dispatch Notices and updated Dispatch Notices to Seller electronically via the communications systems described in Section 3.4(b), subject to the requirements and limitations set forth in this Agreement, including the Project operating restrictions set forth in Exhibit H. Each Dispatch Notice will be effective unless and until Buyer (or the CAISO) modifies such Dispatch Notice by providing Seller with an updated Dispatch Notice. In addition to any other requirements set forth or referred to in this Agreement, all Dispatch Notices and updated Dispatch Notices will be made in accordance with the timelines as specified in the CAISO Tariff. Seller agrees to adjust the Project's Delivered Energy as set forth in a Dispatch Notice that meets the requirements of Economic Dispatch Down.]

(i) ***[Buyer Payments. [For Projects where SDG&E purchases Test Energy:*** On and after the Commercial Operation Date], Buyer shall pay Seller, on the date payment would otherwise be due in respect of the month in which any such Economic Dispatch Down occurred an amount equal to the positive difference, if any, of (Y) the product of the Energy Price, times ***[For TOD Pricing Only:*** the weighted average TOD Factor for such period of Economic Dispatch Down, times] the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down ***[For Projects receiving PTCs:*** plus the product of the after tax value of any lost PTC benefits (in dollars per megawatt hour) that Seller has not been able to mitigate after use of reasonable efforts, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down], minus (Z) the product of the positive value of the Sales Price, if received, times the amount of Deemed Bundled Green Energy resulting from such Economic Dispatch Down. ***[For Projects receiving PTCs:*** Seller shall provide Buyer with documentation that establishes to Buyer's reasonable satisfaction (A) that Seller would have been entitled to receive PTCs for the Deemed Bundled Green Energy if it had actually been generated; and (B) the after tax value of any lost PTC benefits (in dollars per megawatt hour) due under this Section 3.4(c)(i).]]

(ii) ***[Failure to Comply.*** If Seller fails to comply with a Dispatch Notice that is in compliance with this Agreement, then, for the deviation between the Delivered Energy and the amount set forth in the Dispatch Notice, Seller shall pay Buyer an amount equal to the sum of (A) + (B) + (C), where: (A) is the amount, if any, paid to Seller by Buyer for any Delivered Energy in excess of the amount set forth in the Dispatch Notice (for example, the Energy Price ***[For TOD Pricing Only:*** adjusted by TOD Factors]), and (B) is all Imbalance Energy costs or charges (excluding any revenues or credits), and (C) is any penalties or other charges resulting from Seller's failure to comply with the Dispatch Notice.]

3.5 Standards of Care.

(a) General Operation. Seller shall comply with all applicable requirements of Law, the CAISO, *[For Green Tariff Projects located outside of CAISO: the Native Balancing Authority,]* NERC and WECC relating to the Project (including those related to safety, construction, ownership and/or operation of the Project).

(b) CAISO and WECC Standards. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs and protocols of the CAISO *[For Green Tariff Projects located outside of CAISO: and the Native Balancing Authority]*, (ii) WECC scheduling practices and (iii) Good Industry Practices.

(c) Reliability Standard. Seller agrees to abide by all (i) NERC, WECC and CAISO reliability requirements, including all such reliability requirements for generator owners and generator operators, and, if applicable, CPUC General Order No.167, "Enforcement of Maintenance and Operation Standards for Electrical Generating Facilities," and (ii) all applicable requirements regarding interconnection of the Project, including the requirements of the interconnected Transmission Provider *[For Green Tariff Projects located outside of CAISO: and the Native Balancing Authority]*.

3.6 Metering.

(a) CAISO Revenue Meter. All output from the Project per the terms of this Agreement must be delivered through a single CAISO revenue meter and that meter must be dedicated exclusively to the Project described herein. All Product purchased under this Agreement must be measured by the Project's CAISO revenue meter to be eligible for payment under this Agreement. Seller shall bear all costs relating to all metering equipment reasonably necessary to accommodate the Project. In addition, Seller hereby agrees to provide all meter data to Buyer in a form acceptable to Buyer, and consents to Buyer obtaining from the CAISO the CAISO meter data applicable to the Project and all inspection, testing and calibration data and reports. Seller shall grant Buyer the right to retrieve the meter reads from the CAISO meter reporting website and/or directly from the CAISO meter(s) at the Project site. If the CAISO makes any adjustment to any CAISO meter data for a given time period, Seller agrees that it shall submit revised monthly invoices, pursuant to Section 6.2, covering the entire applicable time period in order to conform fully such adjustments to the meter data. Seller shall submit any such revised invoice no later than thirty (30) days from the date on which the CAISO provides to Seller such binding adjustment to the meter data.

(i) Testing and Calibration. Seller shall perform or cause to be performed, at its expense, annual testing and calibration of the electric meters in accordance with Good Industry Practice and the CAISO Tariff. Seller shall give Buyer reasonable advance notice of any inspection, testing or calibration of the electric meters. Buyer shall have the right to have a representative or designee present at such inspection, test or calibration of the electric meters. Buyer shall have the right to require, at Buyer's expense, except as required below, a test of any of the electric meters not more often than two (2) times every twelve (12) months.

(ii) Inaccurate Meters. If any of the electric meters is deemed to be inaccurate under the Meter Service Agreement, deliveries shall be measured by reference to

Seller's check-meters, if any are installed and registering accurately, or the meter readings for the period of inaccuracy shall be adjusted as far as can be reasonably ascertained by Seller from the best available data, subject to review and approval by Buyer. If the period of the inaccuracy cannot be ascertained reasonably, any such adjustment shall be for a period equal to one-half of the time elapsed since the preceding test by applying the percentage of inaccuracy so found. Seller shall promptly cause such electric meters to be corrected and, where such inaccuracy was determined pursuant to a test required by Buyer, Seller shall bear the expense of any such test.

(iii) Delivered MWh Adjustments. In the event that, due to correction for inaccurate electric meters deemed to be inaccurate under the Meter Service Agreement, the Delivered Energy is increased or decreased, the revised Delivered Energy shall be used for purposes of calculating payments. If any of such amounts for any period have already been calculated using the previous amount of Delivered Energy, they shall be recalculated using the revised amount of Delivered Energy. If the recalculation changes the amount payable for the period in question, revised payments shall be made by Buyer or Seller, as applicable, in accordance with Section 6.2.

(b) Real Time Telemetry. Seller shall install, activate and maintain metering, communication and telemetry equipment for the Project in a centralized system to which Buyer shall have real time access. Seller shall link its system to Buyer via an approved Buyer communication network, utilizing existing industry standard network protocol, as reasonably approved by Buyer. Seller shall correct any problems with such equipment as soon as practicable.

(c) *[The following section is for As-Available Intermittent Products only]* Meteorological Station. Seller, at its own expense, shall install and maintain such stand-alone meteorological stations at the Project as may be required under the VER Forecasting Program and the CAISO Tariff to monitor and report weather data to both the CAISO and Buyer's weather station data collection system. Each station shall be equipped with instruments and equipment that meet the specifications of the VER Forecasting Program and shall measure, collect, record, format, and communicate the data required under the VER Forecasting Program. Seller shall submit to Buyer for review and approval, which shall not be unreasonably withheld, its technical specifications for the meteorological station along with a site plan showing the location of the station within the Project. Seller shall correct any problems with such equipment as soon as practicable.

3.7 Outage Notification.

(a) Planned Outages. Seller shall schedule Planned Outages for the Project in accordance with Good Industry Practices and with the prior written consent of Buyer, which consent may not be unreasonably withheld or conditioned. The Parties acknowledge that in all circumstances, Good Industry Practices shall dictate when Planned Outages should occur. Seller shall notify Buyer of its proposed Planned Outage schedule for the Project for the following calendar year by submitting a written Planned Outage schedule no later than October 1st of each year during the Delivery Term. The Planned Outage schedule is subject to Buyer's approval, which approval may not be unreasonably withheld or conditioned. Buyer shall promptly respond with its approval or with reasonable modifications to the Planned Outage schedule and Seller shall use its best efforts in accordance with Good Industry Practices to accommodate Buyer's requested

modifications. Notwithstanding the submission of the Planned Outage schedule described above, Seller shall also submit a completed Outage Notification Form to Buyer no later than fourteen (14) days prior to each Planned Outage and all appropriate outage information or requests to the CAISO in accordance with the CAISO Tariff. Seller shall contact Buyer with any requested changes to the Planned Outage schedule if Seller believes the Project must be shut down to conduct maintenance that cannot be delayed until the next scheduled Planned Outage consistent with Good Industry Practices. Seller shall not change its Planned Outage schedule without Buyer's approval, not to be unreasonably withheld or conditioned. Seller shall use its best efforts in accordance with Good Industry Practices not to schedule Planned Outages during the months of July, August, September and October. At Buyer's request, Seller shall use commercially reasonable efforts to reschedule Planned Outage so that it may deliver Product during CAISO declared or threatened emergency periods. Seller shall not substitute Energy from any other source for the output of the Project during a Planned Outage.

(b) Forced Outages. Within *[When Seller is the SC for the Project: Within two hours of any Forced Outage,]* *[When SDG&E is the SC for the Project: Within one-half of the notification time prescribed under the CAISO Tariff for Forced Outages,]* Seller shall submit a completed Outage Notification Form to the Buyer in accordance with the instructions shown on the form and shall submit outage information to the CAISO in accordance with the CAISO Tariff *[When SDG&E is the SC for the Project: and Section 3.3(b)(ii) above]*. Seller shall not substitute Energy from any other source for the output of the Project during a Forced Outage.

(c) Coordination with CAISO. Seller shall be responsible *[When SDG&E is SC for the Project: in accordance with Section 3.3(b)(ii)]* for all outage coordination communications with the CAISO. Buyer shall cooperate with Seller in arranging and coordinating all Project outages with the CAISO.

3.8 Operations Logs and Access Rights.

(a) Operations Logs. Seller shall maintain a complete and accurate log of all material operations and maintenance information on a daily basis. Such log shall include, but not be limited to, information on power production, fuel consumption, efficiency, availability, maintenance performed, outages, results of inspections, manufacturer recommended services, replacements, electrical characteristics of the generators, control settings or adjustments of equipment and protective devices. Seller shall maintain this information for at least two (2) years and shall provide this information electronically to Buyer within one day of Buyer's request.

(b) Access Rights. Buyer, its authorized agents, employees and inspectors shall have the right of ingress to and egress from the Project during normal business hours upon reasonable advance Notice and for any purposes reasonably connected with this Agreement.

3.9 New Generation Facility.

(a) Project Development. Seller, at no cost to Buyer, shall:

(i) Design and construct the Project.

(ii) Perform all studies, pay all fees, obtain all necessary approvals and execute all necessary agreements with the CAISO [*For Green Tariff Projects located outside of CAISO*: ,the Native Balancing Authority,] and the Participating Transmission Owner for the Electrical Interconnection Upgrades to Schedule and deliver the Product from the Project [*For FCDS bids, insert*: “under “Full Capacity Deliverability Status” (as defined in the CAISO Tariff), except when construction of deliverability Network Upgrades is not required under Section 3.1(j).”] [*For Green Tariff Projects located outside of CAISO*: “in a manner that enables the Capacity Attributes from the Project to be accepted and approved by the CPUC and the CAISO as qualifying for the determination of, and as satisfying Buyer’s requirement for demonstrating its procurement of, Resource Adequacy capacity.”] Following satisfaction or waiver of the Conditions Precedent set forth in Section 2.3(b), Seller shall not request from the CAISO or the Participating Transmission Owner or the distribution system operator any changes to its plan of interconnection that are inconsistent with the plan of interconnection that was evaluated in connection with the satisfaction or waiver of the Conditions Precedent in Section 2.3(b) without Buyer’s prior written consent, except in accordance with Section 3.1(j).

(iii) Acquire all Governmental Approvals and other approvals necessary for the construction, operation, and maintenance of the Project.

(iv) Complete all environmental impact studies necessary for the construction, operation, and maintenance of the Project, including all environmental analysis required under the California Environmental Quality Act for the Project and related interconnection facilities.

(v) At Buyer’s request, provide to Buyer Seller’s electrical specifications and design drawings pertaining to the Project.

(vi) Within fifteen (15) days after the close of each calendar quarter following the Execution Date until the Commercial Operation Date, provide to Buyer a Quarterly Progress Report and agree to regularly scheduled meetings between representatives of Buyer and Seller to review such reports and discuss Seller’s construction progress. The Quarterly Progress Report shall identify the Milestones and indicate whether Seller has met or is on target to meet such Milestones.

(vii) Provide access to Buyer, its authorized agents, employees and inspectors for purpose of inspecting the Project’s construction site or on-site Seller data and information pertaining to the Project during normal business hours upon reasonable advance Notice.

(viii) At Buyer’s request, provide information to Buyer relating to Seller’s or Seller’s contractor’s use, during Project construction, of “Women-Owned Businesses” or “Minority-Owned Businesses” or “Disabled Veteran Business Enterprises” as defined in CPUC General Order 156, and the number of new employees hired by Seller or Seller’s contractors and the number of women, minority, and disabled veterans trained or hired by Seller or Seller’s contractor’s as contemplated under Cal. Public Utilities Code §910(a)(8), as each such group of entities and individuals may be amended from time to time or further defined, supplemented, or superseded by applicable Law or replaced with similar designations or certifications. [*Include*

other covenants related to “women-owned business” or “minority-owned business” as may be applicable to the Seller’s RFO bid.]

(b) Construction Milestones.

(i) The Parties agree time is of the essence in regards to this Agreement. As such, the Parties also agree certain milestones for the construction of the Project as set forth in the Milestone schedule attached hereto as Exhibit B (“Milestones”) must be achieved in a timely fashion or Buyer will suffer damages.

(ii) Within seven (7) days after completion of each Milestone, Seller shall provide Buyer with Notice along with accompanying documentation (including reasonably redacted copies of applicable agreements, Governmental Approvals, and certificates) to reasonably demonstrate the achievement of such Milestone. If Seller misses the deadline date for three (3) or more Milestones or misses the deadline date for any one Milestone by more than ninety (90) days, Seller shall submit to Buyer, within ten (10) Business Days of such missed Milestone completion date, a remedial action plan (“Remedial Action Plan”) that describes in detail a reasonable course of action and plan (including accelerating the work, for example, by using additional shifts, overtime, additional crews or resequencing of the work, as applicable) to achieve the missed Milestones and all subsequent Milestones no later than the Guaranteed Commercial Operation Date (as it may be extended under Section 3.9(c)(ii)); provided, that delivery of any Remedial Action Plan shall not relieve Seller of its obligation to meet any subsequent Milestones and the Guaranteed Commercial Operation Date.

(c) Guaranteed Commercial Operation.

(i) COD. Seller shall cause the Project to achieve the Commercial Operation Date by the Guaranteed Commercial Operation Date, unless extended in accordance with Section 3.9(c)(ii).

(ii) Extensions. The Guaranteed Commercial Operation Date may be extended one time for no more than a six (6) month period (the “Project Cure Period”) for cumulative delays if Seller demonstrates to Buyer’s reasonable satisfaction after giving written notice as soon as reasonably possible but at least at sixty (60) days prior to the original Guaranteed Commercial Operation Date, which includes a feasible remedial action plan, if any of the following have occurred:

(A) Seller has used commercially reasonable efforts (including but not limited to Seller’s timely filing of required documents and payment of all applicable fees) to obtain permits necessary for the construction and operation of the Project, but is unable to obtain such permits due to delays beyond Seller’s reasonable control;

(B) ***[For all Projects other than Green Tariff Projects located outside of CAISO:*** Seller has used commercially reasonable efforts (including but not limited to Seller’s timely filing of required documents and payment of all applicable fees) to have the Project physically interconnected to the CAISO Grid, or to the Participating Transmission Owner’s distribution system, as applicable, and to complete all Electrical Interconnection Upgrades needed, if any, in order to interconnect the Project, as required herein, to the CAISO

Grid, but fails to secure any necessary commitments from CAISO or the Participating Transmission Owner for such interconnection and upgrades due to delays beyond Seller’s reasonable control; or/ ***[For Green Tariff Projects located outside of CAISO:*** Seller has used commercially reasonable efforts (including but not limited to Seller’s timely filing of required documents and payment of all applicable fees) to have the Project physically interconnected to the Native Balancing Authority’s transmission system and to complete all Electrical Interconnection Upgrades needed, if any, in order to interconnect, as required herein, the Project to the Native Balancing Authority’s transmission system and the Native Balancing Authority’s transmission system to the CAISO Grid, and to commence firm transmission service from the Project to the Delivery Point under the firm transmission service agreement with the applicable Transmission Provider, but Seller has been unable to secure any necessary commitments from the Native Balancing Authority, the CAISO, the Participating Transmission Owner, or the Transmission Provider for such interconnection and upgrades due to delays beyond Seller’s reasonable control; or/

(C) an event of Force Majeure has occurred; provided that Seller works diligently to resolve the effect of the Force Majeure and provides evidence of its efforts promptly to Buyer upon Buyer’s written request.

3.10 Operating Procedures. No later than forty-five (45) days before the Commercial Operation Date, and from time to time as reasonably determined necessary by the Parties, the Parties shall meet to address how each Party will perform its respective obligations under this Agreement, including, but not limited to: (1) the method of day-to-day communications; (2) key personnel lists for each Party; (3) procedures for Forced Outage and Planned Outage reporting; (4) procedures for delivery forecasting; (5) procedures for record keeping; (6) Scheduling procedures; and (7) invoicing and payment procedures; provided, that the failure to agree on these operating procedures will not relieve the Parties of their respective obligations under this Agreement, and any failure to agree shall be resolved in accordance with the dispute resolution procedures in Article 12.

ARTICLE FOUR: COMPENSATION; MONTHLY PAYMENTS

4.1 Energy Payment.

(a) Energy Price. The price for the Bundled Green Energy and Deemed Bundled Green Energy that is delivered to Buyer in each Contract Year shall be as follows (“Energy Price”):

Contract Year	Energy Price (\$/MWh)

provided, however, that:

(i) if Seller delivers Bundled Green Energy in the aggregate for any CAISO settlement interval (not to exceed one hour) in excess of the product of the Contract

Capacity times the length of such settlement interval, expressed in hours, then the Energy Price for such excess Bundled Green Energy in such settlement interval shall be reduced to zero dollars (\$0), and if the real time Locational Marginal Price for the Delivery Point during such settlement interval is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times such excess Bundled Green Energy;

(ii) if Seller delivers Bundled Green Energy plus Deemed Bundled Green Energy, in the aggregate, for any Contract Year during the Delivery Term in excess of one hundred fifteen percent (115%) of the annual Contract Quantity, then the Energy Price for such excess Bundled Green Energy and Deemed Bundled Green Energy, if any, for each settlement interval for the remainder of that Contract Year shall be reduced to zero dollars (\$0) and Seller shall be entitled to the CAISO revenues (including positive Locational Marginal Prices, credits and other payments) in respect of such excess amounts and Seller shall be responsible for the CAISO costs (including negative Locational Marginal Prices, penalties, sanctions and other charges) in respect of such excess amounts.

(iii) **[For TOD Pricing Only:** if Seller delivers Bundled Green Energy plus Deemed Bundled Green Energy in the aggregate for any TOD Period during the Delivery Term in excess of one hundred fifteen percent (115%) of the TOD Delivery Cap listed in the table below for that TOD Period (“TOD Delivery Cap”), then the Energy Price for such excess Bundled Green Energy and Deemed Bundled Green Energy, if any, in such TOD Period shall be reduced to zero dollars (\$0), and for each CAISO settlement interval during that time in which the real time Locational Marginal Price is less than zero dollars (\$0), Seller shall pay to Buyer an amount equal to the absolute value of such negative Locational Marginal Price times the Bundled Green Energy and Deemed Bundled Green Energy, if any, delivered during such settlement interval:

TOD Period	TOD Delivery Cap
Winter On-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Winter Semi-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]

Winter Off-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Summer On-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Summer Semi-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]
Summer Off-Peak	[Insert number which is derived from multiplying annual Contract Quantity times the TOD delivery profile ratio contained in bid form]

(b) ***[For TOD Pricing Only: TOD Factors and TOD Periods.*** In accordance with all other terms of this Article 4, the Energy Price shall be adjusted by the following Time of Delivery Factors (“TOD Factors”) for each of the specified Time of Delivery Periods (“TOD Periods”) in which Energy is delivered.:/

[For FCDS bids only with Projects Located in the CAISO Providing Local Resource Adequacy:

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.638
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.541

Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.823
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.943
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.819
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.963

[For Energy Only bids and for Green Tariff Projects located outside of the CAISO:

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.641
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.562
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.864
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.714
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.758
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.971

(c) **[For FCDS bids (excluding Green Tariff Projects located outside of the CAISO): Monthly Energy Payment.** For each month during which Seller has achieved “Full Capacity Deliverability Status,” as defined in the CAISO Tariff (“FCDS”) as determined by the CAISO, Buyer shall pay Seller for the Product an amount equal to the sum for each hour in the month of the product of the Energy Price **[For TOD Pricing Only:** times the TOD Factor for the applicable TOD Period] times the sum of Bundled Green Energy plus Deemed Bundled Green

Energy in each hour (“Monthly Energy Payment”). For each month during which Seller has not achieved FCDS as determined by the CAISO, Buyer shall pay Seller for the Product an amount equal to the sum for each hour in the month of the product of (i) the Energy Price minus *[insert the \$/MWh equal to the Deliverability Value]* (“Deliverability Value”) times (ii) the TOD Factor for the applicable TOD Period times (iii) the sum of Bundled Green Energy plus Deemed Bundled Green Energy (together, the “Monthly Energy Payment”).

[When the Project has achieved FCDS: Monthly Energy Payment for months that Seller has obtained FCDS = \sum Energy Price x [For TOD Pricing Only: TOD Factor x] (Bundled Green Energy + Deemed Bundled Green Energy)

[When the Project has not achieved FCDS: Monthly Energy Payment for months that Seller has not obtained FCDS = \sum ([Energy Price – Deliverability Value] [For TOD Pricing Only: x TOD Factor x (Bundled Green Energy + Deemed Bundled Green Energy)])]

[For Energy Only bids and Green Tariff Projects located outside of the CAISO: Monthly Energy Payment. For each month, Buyer shall pay Seller for the Product an amount equal to the sum for each hour in the month of the product of the Energy Price [For TOD Pricing Only: times the TOD Factor for the applicable TOD Period] times the sum of Bundled Green Energy plus Deemed Bundled Green Energy in each hour (“Monthly Energy Payment”).

Monthly Energy Payment = \sum Energy Price [For TOD Pricing Only: x TOD Factor] x (Bundled Green Energy + Deemed Bundled Green Energy)]

For any period where the quantity of Bundled Green Energy is less than the quantity of Delivered Energy and the quantity of Bundled Green Energy cannot practicably be determined for each settlement interval during such period (for example, where WREGIS does not specify in which settlement intervals Renewable Energy Credits were delivered or not delivered), then the quantity of Bundled Green Energy for any settlement interval during the entire period shall be equal to the product of the quantity of Delivered Energy for a settlement interval multiplied by the quotient of the aggregate quantity of Green Attributes that are delivered to Buyer during such entire period divided by the aggregate quantity of Delivered Energy that is delivered to Buyer during such entire period.

4.2 Imbalance Energy. Seller shall use commercially reasonable efforts to deliver Energy in accordance with the Scheduled Energy. Buyer and Seller recognize that from time to time the amount of Delivered Energy will deviate from the amount of Scheduled Energy. When Delivered Energy minus Scheduled Energy is a positive amount, it shall be considered “Positive Imbalance Energy;” when Delivered Energy minus Scheduled Energy is a negative amount, the absolute (i.e., positive) value of that amount shall be considered the “Negative Imbalance Energy.” *[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program: Seller shall be responsible for settlement of Imbalance Energy with the CAISO and all fees, liabilities, assessments, or similar charges assessed by the CAISO in connection with Imbalance Energy.]* Buyer and Seller shall cooperate to minimize charges and imbalances associated with Imbalance Energy to the extent possible. Seller shall promptly notify Buyer as soon as possible

of any material imbalance that is occurring or has occurred. ***[When SDG&E is SC for the Project and Project is in the VER Forecasting Program:*** Buyer shall receive all Green Attributes for the Positive Imbalance Energy in all settlement intervals.]

[When Seller is SC for the Project or when Buyer is SC but Project is not in the VER Forecasting Program, include the following two paragraphs:

(a) Positive Imbalance Energy (Over Deliveries). In the event that Delivered Energy for any CAISO settlement interval is equal to or greater than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Positive Imbalance Energy. Buyer shall receive all Green Attributes for the Positive Imbalance Energy in such CAISO settlement interval regardless as to whether it was sold into the CAISO. Seller shall be entitled to all payments or credits from the CAISO to Seller's SC and Seller shall make all payments to the CAISO in respect of the Positive Imbalance Energy.

(b) Negative Imbalance Energy (Under Deliveries). In the event that Delivered Energy for any CAISO settlement interval is less than Scheduled Energy for such CAISO settlement interval, Buyer shall have no payment obligation in respect of the Negative Imbalance Energy. Seller shall make all payments to the CAISO and Seller shall be entitled to all payments or credits from the CAISO to Seller's SC in respect of the Negative Imbalance Energy required under the CAISO Tariff.]

4.3 Additional Compensation. To the extent not otherwise provided for in this Agreement, in the event that Seller is compensated by a third party for any Product produced by the Project, including, but not limited to, compensation for ***[For FCDS bids:*** Resource Adequacy or] Green Attributes, Seller shall remit all such compensation directly to Buyer; provided that for avoidance of doubt, nothing herein precludes Seller from retaining credits related to transmission upgrades funded by Seller.

4.4 Energy Sales Prior to Commercial Operation Date. For each month prior to the Commercial Operation Date, as compensation for the Product delivered to Buyer, (i) Buyer shall pay Seller for the Product an amount equal to the product of [*SDG&E to insert REC value amount in \$/MWh*] times the total Bundled Green Energy delivered to Buyer in such month, and (ii) Seller shall be entitled to all CAISO revenues (including credits, Imbalance Energy revenues, and other payments), including revenues associated with CAISO dispatches, bid cost recovery, inter-SC trade credits, or other credits in respect of the Product Scheduled or delivered from the Project, and Seller shall be responsible for all CAISO costs (including penalties, Imbalance Energy costs, and other charges) including all CAISO charges or penalties, in each case, resulting from the Project not being available, the Seller not notifying the CAISO of outages in a timely manner, and any other failure by Seller to abide by the CAISO Tariff, including without limitation uninstructed deviation penalties. ***[When Buyer is SC for the Project, include the following:*** Each month, Buyer (as the SC for the Project) shall deliver an invoice to Seller including a statement of all such CAISO revenues and charges within thirty (30) days after the CAISO final settlement data is available to Buyer for such deliveries.]

ARTICLE FIVE: EVENTS OF DEFAULT; FORCE MAJEURE

5.1 Events of Default. An “Event of Default” shall mean,

(a) with respect to a Party that is subject to the Event of Default the occurrence of any of the following:

(i) the failure by such Party to make, when due, any payment required pursuant to this Agreement and such failure is not remedied within five (5) Business Days after Notice thereof;

(ii) any representation or warranty made by such Party herein is false or misleading in any material respect when made or when deemed made or repeated, and such default is not remedied within thirty (30) days after Notice thereof;

(iii) the failure by such Party to perform any material covenant or obligation set forth in this Agreement (except to the extent constituting a separate Event of Default, and except for such Party’s unexcused failure to perform its obligations to Schedule, deliver, or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively no longer than thirty (30) days, the exclusive remedy for which is provided in Section 3.1(h)) and such failure is not remedied within thirty (30) days after Notice thereof;

(iv) the failure by such Party to perform its obligations to Schedule, deliver or receive (as applicable), or sell or purchase (as applicable) the Product for a period or a series of periods that is cumulatively longer than thirty (30) days and such failure is not excused as described in Section 3.1(h);

(v) such Party becomes Bankrupt;

(vi) such Party assigns this Agreement or any of its rights hereunder other than in compliance with Section 13.2; or

(vii) such Party consolidates or amalgamates with, or merges with or into, or transfers all or substantially all of its assets to, another entity and, at the time of such consolidation, amalgamation, merger or transfer, the resulting, surviving or transferee entity fails to assume all the obligations of such Party under this Agreement to which it or its predecessor was a party by operation of Law or pursuant to an agreement reasonably satisfactory to the other Party.

(b) with respect to Seller as the Defaulting Party, the occurrence of any of the following:

(i) if at any time, Seller delivers or attempts to deliver to the Delivery Point for sale under this Agreement Energy that was not generated by the Project [*If the Project is located outside of the CAISO*: other than Imbalance Energy from the Transmission Provider];

(ii) the failure by Seller to achieve the Commercial Operation Date no later than the Guaranteed Commercial Operation Date;

(iii) *[For Baseload, Peaking, As-Available Product:* the failure by Seller to achieve the Guaranteed Energy Production requirement during any Performance Measurement Period as set forth in Section 3.1(e) of this Agreement];

(iv) the failure by Seller to deliver a Remedial Action Plan that reasonably demonstrates in detail how Seller will achieve the Commercial Operation Date no later than the Guaranteed Commercial Operation Date, if such failure is not remedied within ten (10) days after Notice;

(v) failure by Seller to satisfy the collateral requirements pursuant to Sections 8.3 or 8.4 of this Agreement; or

(vi) with respect to any outstanding Letter of Credit provided for the benefit of Buyer that is not then required under this Agreement to be canceled or returned, the failure by Seller to provide for the benefit of Buyer either (1) cash, or (2) a substitute Letter of Credit from a different issuer meeting the criteria set forth in the definition of Letter of Credit, in each case, in the amount required hereunder within five (5) Business Days after Seller receives Notice of the occurrence of any of the following events:

(A) the issuer of the outstanding Letter of Credit shall fail to maintain a Credit Rating of at least “A-” by S&P or “A3” by Moody’s;

(B) the issuer of such Letter of Credit becomes Bankrupt;

(C) the issuer of the outstanding Letter of Credit shall fail to comply with or perform its obligations under such Letter of Credit and such failure shall be continuing after the lapse of any applicable grace period permitted under such Letter of Credit;

(D) the issuer of the outstanding Letter of Credit shall fail to honor a properly documented request to draw on such Letter of Credit;

(E) the issuer of the outstanding Letter of Credit shall disaffirm, disclaim, repudiate or reject, in whole or in part, or challenge the validity of, such Letter of Credit;

(F) such Letter of Credit fails or ceases to be in full force and effect at any time; or

(G) Seller shall fail to renew or cause the renewal of each outstanding Letter of Credit on a timely basis as provided in the relevant Letter of Credit and as provided in accordance with this Agreement, and in no event less than sixty (60) days prior to the expiration of the outstanding Letter of Credit.

5.2 Remedies; Declaration of Early Termination Date. If an Event of Default with respect to a Defaulting Party shall have occurred and be continuing, the other Party (“Non-Defaulting Party”) shall have the right (a) to send Notice, designating a day, no earlier than the day such

Notice is deemed to be received and no later than twenty (20) days after such Notice is deemed to be received, as an early termination date of this Agreement (“Early Termination Date”) that terminates this Agreement and ends the Delivery Term effective as of the Early Termination Date, to accelerate all amounts owing between the Parties, and to collect liquidated damages calculated in accordance with Section 5.3 below (“Termination Payment”); (b) to withhold any payments due to the Defaulting Party under this Agreement; (c) to suspend performance; and (d) to exercise any other right or remedy available at law or in equity, including specific performance or injunctive relief, except to the extent such remedies are expressly limited under this Agreement.

5.3 Termination Payment. The Termination Payment for a Terminated Transaction shall be the aggregate of all Settlement Amounts plus any or all other amounts due to the Non-Defaulting Party netted into a single amount. Except in the case of a termination of this Agreement by the Non-Defaulting Party solely as a result of an Event of Default by the Defaulting Party under Section 5.1(a)(iv) [Bankruptcy], if the Non-Defaulting Party’s aggregate Gains exceed its aggregate Losses and Costs, if any, resulting from the termination of this Agreement, the Termination Payment shall be zero. The Non-Defaulting Party shall calculate, in a commercially reasonable manner, a Settlement Amount for the Terminated Transaction as of the Early Termination Date. Third parties supplying information for purposes of the calculation of Gains or Losses may include, without limitation, dealers in the relevant markets, end-users of the relevant product, information vendors and other sources of market information. The Settlement Amount shall not include consequential, incidental, punitive, exemplary, indirect or business interruption damages; provided, however, that any lost Capacity Attributes and Green Attributes shall be deemed direct damages covered by this Agreement. Without prejudice to the Non-Defaulting Party’s duty to mitigate, the Non-Defaulting Party shall not have to enter into replacement transactions to establish a Settlement Amount. Each Party agrees and acknowledges that (a) the actual damages that the Non-Defaulting Party would incur in connection with a Terminated Transaction would be difficult or impossible to predict with certainty, (b) the Termination Payment described in this section is a reasonable and appropriate approximation of such damages, and (c) the Termination Payment described in this section is the exclusive remedy of the Non-Defaulting Party in connection with a Terminated Transaction but shall not otherwise act to limit any of the Non-Defaulting Party’s rights or remedies if the Non-Defaulting Party does not elect a Terminated Transaction as its remedy for an Event of Default by the Defaulting Party.

5.4 Notice of Payment of Termination Payment. As soon as practicable after a Terminated Transaction, Notice shall be given by the Non-Defaulting Party to the Defaulting Party of the amount of the Termination Payment and whether the Termination Payment is due to the Non-Defaulting Party. The Notice shall include a written statement explaining in reasonable detail the calculation of such amount and the sources for such calculation. The Termination Payment shall be made to the Non-Defaulting Party, as applicable, within ten (10) Business Days after such Notice is effective.

5.5 Disputes With Respect to Termination Payment. If the Defaulting Party disputes the Non-Defaulting Party’s calculation of the Termination Payment, in whole or in part, the Defaulting Party shall, within five (5) Business Days of receipt of the Non-Defaulting Party’s calculation of the Termination Payment, provide to the Non-Defaulting Party a detailed written explanation of the basis for such dispute. Disputes regarding the Termination Payment shall be determined in accordance with Article 12.

5.6 Rights And Remedies Are Cumulative. Except where liquidated damages are provided as the exclusive remedy, the rights and remedies of a Party pursuant to this Article 5 shall be cumulative and in addition to the rights of the Parties otherwise provided in this Agreement.

5.7 Mitigation. Any Non-Defaulting Party shall be obligated to mitigate its Costs, losses and damages resulting from any Event of Default of the other Party under this Agreement.

5.8 Force Majeure. To the extent either Party is prevented by Force Majeure from carrying out, in whole or part, its obligations under this Agreement and such Party gives Notice and details of the Force Majeure to the other Party as detailed below, then, the Party impacted by Force Majeure shall be excused from the performance of its obligations to the extent impacted. Within forty-eight (48) hours of commencement of an event of Force Majeure, the non-performing Party shall provide the other Party with oral notice of the event of Force Majeure, and within two (2) weeks of the commencement of an event of Force Majeure the non-performing Party shall provide the other Party with Notice in the form of a letter describing in detail the particulars of the occurrence giving rise to the Force Majeure claim. Seller shall not substitute Product from any other source for the output of the Project during an outage resulting from Force Majeure. The suspension of performance due to a claim of Force Majeure must be of no greater scope and of no longer duration than is required by the Force Majeure. Buyer shall not be required to make any payments for any Product that Seller fails to Schedule, deliver or provide as a result of Force Majeure during the term of a Force Majeure. This Agreement may be terminated by the non-claiming Party with no further obligation to the Force-Majeure-claiming Party if a Force Majeure event prevents the performance of a material portion of the obligations of the Force-Majeure-claiming Party hereunder and such Force Majeure event is not resolved within eight (8) months after the commencement of such Force Majeure event.

ARTICLE SIX: PAYMENT

6.1 Billing and Payment. On or about the tenth (10th) day of each month beginning with the second month of the first Contract Year and every month thereafter, and continuing through and including the first month following the end of the Delivery Term, Seller shall provide to Buyer (a) records of metered data, including CAISO metering and transaction data sufficient to document and verify the generation of Product by the Project for any CAISO settlement time interval during the preceding months, (b) access to any records, including invoices or settlement data from CAISO, necessary to verify the invoice; and (c) an invoice, in a format reasonably specified by Buyer, covering the services provided in the preceding month determined in accordance with Article 4 (which may include preceding months), with all component charges and unit prices identified and all calculations used to arrive at invoiced amounts described in reasonable detail. Buyer shall pay the undisputed amount of such invoices on or before thirty (30) days after receipt of the invoice. If either the invoice date or payment date is not a Business Day, then such invoice or payment shall be provided on the next following Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any undisputed amounts not paid by the due date will be deemed delinquent and will accrue interest at the Default Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full. Invoices may be sent by facsimile or e-mail.

6.2 Disputes and Adjustments of Invoices. A Party may, in good faith, dispute the correctness of any invoice or any adjustment to an invoice, rendered under this Agreement or adjust any invoice for any arithmetic or computational error within twelve (12) months of the date the invoice, or adjustment to an invoice, was rendered. In the event an invoice or portion thereof, or any other claim or adjustment arising hereunder, is disputed, payment of the undisputed portion of the invoice shall be required to be made when due. Any invoice dispute or invoice adjustment shall be in writing and shall state the basis for the dispute or adjustment. Payment of the disputed amount shall not be required until the dispute is resolved. Upon resolution of the dispute, any required payment shall be made within two (2) Business Days of such resolution along with interest accrued at the Default Rate from and including the original due date to but excluding the date paid. Inadvertent overpayments shall be returned upon request or deducted by the Party receiving such overpayment from subsequent payments, with interest accrued at the Interest Rate from and including the date of such overpayment to but excluding the date repaid or deducted by the Party receiving such overpayment. Any dispute with respect to an invoice is waived if the other Party is not notified in accordance with this Section 6.2 within twelve (12) months after the invoice is rendered or subsequently adjusted, except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after the twelve-month period. If an invoice is not rendered within twelve (12) months after the close of the month during which performance occurred, the right to payment for such performance is waived.

6.3 Netting of Payments. The Parties hereby agree that they shall discharge mutual debts and payment obligations due and owing to each other on the same date through netting, in which case all amounts owed by each Party to the other Party for the purchase and sale of Product during the monthly billing period under this Agreement, including any related damages calculated pursuant to Section 3.1(h), interest, and payments or credits, shall be netted so that only the excess amount remaining due shall be paid by the Party who owes it.

ARTICLE SEVEN: LIMITATIONS

7.1 Limitation of Remedies, Liability and Damages. EXCEPT AS SET FORTH HEREIN, THERE IS NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND ANY AND ALL IMPLIED WARRANTIES ARE DISCLAIMED. THE PARTIES CONFIRM THAT THE EXPRESS REMEDIES AND MEASURES OF DAMAGES PROVIDED IN THIS AGREEMENT SATISFY THE ESSENTIAL PURPOSES HEREOF. FOR BREACH OF ANY PROVISION FOR WHICH AN EXPRESS REMEDY OR MEASURE OF DAMAGES IS PROVIDED, SUCH EXPRESS REMEDY OR MEASURE OF DAMAGES SHALL BE THE SOLE AND EXCLUSIVE REMEDY, THE OBLIGOR'S LIABILITY SHALL BE LIMITED AS SET FORTH IN SUCH PROVISION AND ALL OTHER REMEDIES OR DAMAGES AT LAW OR IN EQUITY ARE WAIVED, UNLESS THE PROVISION IN QUESTION PROVIDES THAT THE EXPRESS REMEDIES ARE IN ADDITION TO OTHER REMEDIES THAT MAY BE AVAILABLE. EXCEPT FOR A PARTY'S INDEMNITY OBLIGATION IN RESPECT OF THIRD PARTY CLAIMS OR AS OTHERWISE EXPRESSLY HEREIN PROVIDED, NEITHER PARTY SHALL BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, PUNITIVE, EXEMPLARY OR INDIRECT DAMAGES, LOST PROFITS OR OTHER BUSINESS INTERRUPTION DAMAGES, BY STATUTE, IN TORT OR CONTRACT, UNDER ANY INDEMNITY PROVISION OR OTHERWISE. UNLESS EXPRESSLY HEREIN

PROVIDED, AND SUBJECT TO THE PROVISIONS OF SECTION 11.2 (INDEMNITIES), IT IS THE INTENT OF THE PARTIES THAT THE LIMITATIONS HEREIN IMPOSED ON REMEDIES AND THE MEASURE OF DAMAGES BE WITHOUT REGARD TO THE CAUSE OR CAUSES RELATED THERETO, INCLUDING THE NEGLIGENCE OF ANY PARTY, WHETHER SUCH NEGLIGENCE BE SOLE, JOINT OR CONCURRENT, OR ACTIVE OR PASSIVE. TO THE EXTENT ANY DAMAGES REQUIRED TO BE PAID HEREUNDER ARE LIQUIDATED, THE PARTIES ACKNOWLEDGE THAT THE DAMAGES ARE DIFFICULT OR IMPOSSIBLE TO DETERMINE, OR OTHERWISE OBTAINING AN ADEQUATE REMEDY IS INCONVENIENT AND THE DAMAGES CALCULATED HEREUNDER CONSTITUTE A REASONABLE APPROXIMATION OF THE HARM OR LOSS.

ARTICLE EIGHT: CREDIT AND COLLATERAL REQUIREMENTS / INSURANCE

8.1 Buyer Financial Information. If requested by Seller, Buyer shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Buyer's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Buyer's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Buyer diligently pursues the preparation, certification and delivery of the statements. Buyer shall be deemed to have satisfied such delivery requirement if the applicable report is publicly available.

8.2 Seller Financial Information. If requested by Buyer, Seller shall deliver (i) within one hundred twenty (120) days following the end of each fiscal year, a copy of Seller's annual report containing audited consolidated financial statements for such fiscal year and (ii) within sixty (60) days after the end of each of its first three fiscal quarters of each fiscal year, a copy of Seller's quarterly report containing unaudited consolidated financial statements for such fiscal quarter. In all cases the statements shall be for the most recent accounting period and prepared in accordance with generally accepted accounting principles; provided, however, that should any such statements not be available on a timely basis due to a delay in preparation or certification, such delay shall not be an Event of Default so long as Seller diligently pursues the preparation, certification and delivery of the statements.

8.3 Grant of Security Interest/Remedies. To secure its obligations under this Agreement and to the extent Seller delivers Performance Assurance hereunder, Seller hereby grants to Buyer a present and continuing first priority security interest in, and lien on (and right of setoff against), and assignment of, all cash collateral and cash equivalent collateral and any and all proceeds resulting therefrom or the liquidation thereof, whether now or hereafter held by, on behalf of, or for the benefit of, Buyer, and each Party agrees to take such action as the other Party reasonably requires in order to perfect the Buyer's first-priority security interest in, and lien on (and right of setoff against), such collateral and any and all proceeds resulting therefrom or from the liquidation thereof. Upon or any time after the occurrence and during the continuation of an Event of Default by Seller or an Early Termination Date as a result thereof, Buyer may do any one or more of the following: (i) exercise any of the rights and remedies of a secured party with respect to all

Performance Assurance, including any such rights and remedies under Law then in effect; (ii) exercise its rights of setoff against such collateral and any and all proceeds resulting therefrom or from the liquidation thereof; (iii) draw on any outstanding Letter of Credit issued for its benefit; and (iv) liquidate all or any portion of any Performance Assurance then held by or for the benefit of Buyer free from any claim or right of any nature whatsoever of Seller, including any equity or right of purchase or redemption by Seller. Buyer shall apply the proceeds of the collateral realized upon the exercise of any such rights or remedies to reduce the Seller's obligations under the Agreement (Seller remaining liable for any amounts owing to Buyer after such application), subject to Buyer's obligation to return any surplus proceeds remaining after such obligations are satisfied in full.

8.4 Performance Assurance.

(a) CPUC Approval Security, Development Period Security, Construction Period Security, Delivery Term Security. To secure its obligations under this Agreement Seller agrees to deliver to Buyer and maintain in full force and effect for the period set forth below, the following Performance Assurance:

(i) CPUC Approval Security, in the amount of [] in the form of cash or a Letter of Credit from the Execution Date of this Agreement until the return date specified in Section 8.4(b)(i) below;

(ii) Development Period Security in the amount of [] in the form of cash or a Letter of Credit from CPUC Approval Date until the return date specified in Section 8.4(b)[(i)/(ii)] below;

(iii) Construction Period Security in the amount of [] in the form of cash or a Letter of Credit from the CP Satisfaction Date until the return date specified in Section 8.4(b)[(ii)/(iii)] below; and

(iv) Delivery Term Security in the amount of [] in the form of cash or a Letter of Credit from the commencement of the Delivery Term until the return date specified in Section 8.4(b)[(iii)/(iv)] below.

Except as set forth in Section 2.2 as it pertains to the CPUC Approval Security and the Development Period Security, any such Performance Assurance shall not be deemed a limitation of damages.

(b) Return of Performance Assurance.

(i) Buyer shall promptly return to Seller the unused portion of the CPUC Approval Security after the earlier of (A) the date on which Seller has delivered the Development Period Security or the Construction Period Security, as applicable, and (B) termination of the Agreement under Section 2.4(b)(ii).

(ii) Buyer shall promptly return to Seller the unused portion of the Development Period Security after the earlier of (A) the date on which Seller has delivered the Construction Period Security, and (B) termination of the Agreement under Section 2.4(b)(ii).

(iii) Buyer shall promptly return to Seller the unused portion of the Construction Period Security after the earlier of (A) the date on which Seller has delivered the Delivery Term Security, and (B) the date that all payment obligations of the Seller arising under this Agreement, including compensation for penalties, Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting) after an Early Termination Date.

(iv) Buyer shall promptly return to Seller the unused portion of the Delivery Term Security after the following have occurred: (A) the Delivery Term has expired or terminated early; and (B) all payment obligations of the Seller arising under this Agreement, including compensation for penalties, Termination Payment, indemnification payments or other damages are paid in full (whether directly or indirectly such as through set-off or netting).

8.5 Interest on Cash. If Seller provides Performance Assurance in the form of cash, Buyer shall pay interest on such cash held as CPUC Approval Security, Development Period Security, Construction Period Security, or Delivery Term Security, as applicable, at the Interest Rate. On or before each Interest Payment Date, Buyer shall transfer the sum of all accrued and unpaid Interest Amounts due to Seller for such security in the form of cash by wire transfer to the bank account specified under “Wire Transfer” in the Cover Sheet.

8.6 Costs of Letter of Credit. If Seller provides Performance Assurance in the form of a Letter of Credit, in all cases, the reasonable costs and expenses of (including but not limited to the reasonable costs, expenses, and attorneys’ fees, including reasonably allocated costs of in-house counsel of the Buyer) establishing, renewing, substituting, canceling, increasing and reducing the amount of (as the case may be) one or more Letters of Credit shall be borne by the Seller.

8.7 Insurance. In connection with Seller’s performance of its duties and obligations under this Agreement, Producer shall maintain, from the CP Satisfaction date until the end of the term of this Agreement, insurance in accordance with Exhibit E.

ARTICLE NINE: GOVERNMENTAL CHARGES

9.1 Cooperation. Each Party shall use reasonable efforts to implement the provisions of and to administer this Agreement in accordance with the intent of the Parties to minimize all taxes, so long as neither Party is materially adversely affected by such efforts.

9.2 Governmental Charges. Seller shall pay or cause to be paid all taxes imposed by any governmental authority (“Governmental Charges”) on or with respect to the Product or the transaction under this Agreement arising prior to and at the Delivery Point, including, but not limited to, ad valorem taxes and other taxes attributable to the Project, land, land rights or interests in land for the Project. Buyer shall pay or cause to be paid all Governmental Charges on or with respect to the Product or the transaction under this Agreement from the Delivery Point. In the event Seller is required by Law or regulation to remit or pay Governmental Charges which are Buyer’s responsibility hereunder, Buyer shall promptly reimburse Seller for such Governmental Charges. If Buyer is required by Law or regulation to remit or pay Governmental Charges which are Seller’s responsibility hereunder, Buyer may deduct such amounts from payments to Seller with respect to payments under the Agreement; if Buyer elects not to deduct such amounts from

Seller's payments, Seller shall promptly reimburse Buyer for such amounts upon request. Nothing shall obligate or cause a Party to pay or be liable to pay any Governmental Charges for which it is exempt under the Law.

ARTICLE TEN: REPRESENTATIONS AND WARRANTIES; COVENANTS

10.1 General Representations and Warranties. On the Execution Date and the CP Satisfaction Date, each Party represents and warrants to the other Party that:

(a) it is duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;

(b) it has all Governmental Approvals necessary for it to perform its obligations under this Agreement, except for as of the Execution Date (i) CPUC Approval in the case of Buyer, and (ii) all Governmental Approvals necessary to construct, operate and maintain the Project and related interconnection facilities in the case of Seller;

(c) the execution, delivery and performance of this Agreement is within its powers, have been duly authorized by all necessary action and do not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law;

(d) this Agreement and each other document executed and delivered in accordance with this Agreement constitutes a legally valid and binding obligation enforceable against it in accordance with its terms, subject to any Equitable Defenses;

(e) it is not Bankrupt and there are no proceedings pending or being contemplated by it or, to its knowledge, threatened against it which would result in it being or becoming Bankrupt;

(f) except as may be set forth in its reports filed with the SEC, there is not pending or, to its knowledge, threatened against it or any of its Affiliates any legal proceedings that could materially adversely affect its ability to perform its obligations under this Agreement;

(g) no Event of Default with respect to it has occurred and is continuing and no such event or circumstance would occur as a result of its entering into or performing its obligations under this Agreement;

(h) it is acting for its own account, has made its own independent decision to enter into this Agreement and as to whether this Agreement is appropriate or proper for it based upon its own judgment, is not relying upon the advice or recommendations of the other Party in so doing, and is capable of assessing the merits of and understanding, and understands and accepts, the terms, conditions and risks of this Agreement; and

(i) it has entered into this Agreement in connection with the conduct of its business and it has the capacity or the ability to make or take delivery of the Product as provided in this Agreement.

10.2 Seller Representations and Warranties.

(a) Seller, and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that: (i) the Project qualifies and is certified by the CEC as an Eligible Renewable Energy Resource (“ERR”) as such term is defined in Public Utilities Code Section 399.12 or Section 399.16; and (ii) the Project’s output delivered to Buyer qualifies under the requirements of the California Renewables Portfolio Standard. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.

(b) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement the Renewable Energy Credits transferred to Buyer conform to the definition and attributes required for compliance with the California Renewables Portfolio Standard, as set forth in CPUC Decision 08-08-028, and as may be modified by subsequent decision of the CPUC or by subsequent legislation. To the extent a change in Law occurs after execution of this Agreement that causes this representation and warranty to be materially false or misleading, it shall not be an Event of Default if Seller has used commercially reasonable efforts to comply with such change in Law.

(c) Seller and, if applicable, its successors, represents and warrants that throughout the Delivery Term of this Agreement that the Project qualifies as a Green-e® Energy Certified product.

(d) *[Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]*

10.3 Covenants.

(a) General Covenants. Each Party covenants that throughout the Delivery Term:

(i) it shall continue to be duly organized, validly existing and in good standing under the Laws of the jurisdiction of its formation;

(ii) it shall maintain (or obtain from time to time as required, including through renewal, as applicable) all Governmental Approvals necessary for it to legally perform its obligations under this Agreement;

(iii) it shall perform its obligations under this Agreement in a manner that does not violate any of the terms and conditions in its governing documents, any contracts to which it is a party or any applicable Law; and

(iv) it shall not dispute its status as a “forward contract merchant” within the meaning of the United States Bankruptcy Code.

(b) Seller Covenants.

(i) Seller covenants throughout the Delivery Term that it, or its permitted successors or assigns, shall maintain ownership of a fee, easement, long-term leasehold interest, or other similar asset ownership interest in the Project.

(ii) Seller covenants throughout the Delivery Term that it shall maintain market based rate authority from FERC to sell Product to Buyer under the terms of this Agreement.

(iii) If at any time during the Delivery Term, Seller's representations and warranties set forth in Section 10.2 become materially false or misleading, Seller covenants that it shall provide prompt Notice to Buyer describing such default along with a description of its efforts to cure such default.

(iv) *[Include other appropriate representations, warranties, and covenants to satisfy the California RPS content category requirements.]*

(v) *[Include other appropriate covenants regarding the use of contractors that may be diverse business enterprises.]*

ARTICLE ELEVEN: TITLE, RISK OF LOSS, INDEMNITIES

11.1 Title and Risk of Loss. Title to and risk of loss related to the Product shall transfer from Seller to Buyer at the Delivery Point. Seller warrants that it will deliver to Buyer the Product free and clear of all liens, security interests, claims and encumbrances or any interest therein or thereto by any person arising prior to or at the Delivery Point.

11.2 Indemnities.

(a) Indemnity by Seller. Seller shall release, indemnify, defend, and hold harmless Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all actions, suits, losses, costs, damages, injuries, liabilities, claims, demands, penalties and interest, including reasonable costs and attorneys' fees ("Claims") resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product delivered under this Agreement up to and at the Delivery Point, (ii) Seller's development, permitting, construction, ownership, operation and/or maintenance of the Project, (iii) the failure by Seller or the failure of the Project to comply with applicable Law, including without limitation the CAISO Tariff, (iv) any Governmental Charges for which Seller is responsible hereunder, or (v) any liens, security interests, encumbrances, or other adverse claims against the Product delivered hereunder made by, under, or through Seller, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Buyer, its Affiliates, and its and their directors, officers, employees, agents, and representatives.

(b) Indemnity by Buyer. Buyer shall release, indemnify, defend, and hold harmless Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives against and from any and all Claims resulting from, or arising out of or in any way connected with (i) any event, circumstance, act, or incident relating to the Product received by

Buyer under this Agreement after the Delivery Point, (ii) the failure by Buyer to comply with applicable Law, including without limitation the CAISO Tariff, or (iii) any Governmental Charges for which Buyer is responsible hereunder, in all cases including, without limitation, any Claim for or on account of injury, bodily or otherwise, to or death of persons, or for damage to or destruction of property belonging to Buyer, Seller, or others, excepting only such Claim to the extent caused by the willful misconduct or gross negligence of Seller, its Affiliates, and its and their directors, officers, employees, agents, and representatives.

ARTICLE TWELVE: DISPUTE RESOLUTION

12.1 Intent of the Parties. Except as provided in the next sentence, the sole procedure to resolve any claim arising out of or relating to this Agreement or any related agreement is the dispute resolution procedure set forth in this Article 12. Either Party may seek a preliminary injunction or other provisional judicial remedy if such action is necessary to prevent irreparable harm or preserve the status quo, in which case both Parties nonetheless will continue to pursue resolution of the dispute by means of the dispute resolution procedure set forth in this Article 12.

12.2 Management Negotiations.

(a) The Parties will attempt in good faith to resolve any controversy or claim arising out of or relating to this Agreement or any related agreements by prompt negotiations between each Party's authorized representative designated in writing as a representative of the Party (each a "Manager"). Either Manager may, by Notice to the other Party, request a meeting to initiate negotiations to be held within ten (10) Business Days of the other Party's receipt of such request, at a mutually agreed time and place (either in person or telephonically). If the matter is not resolved within fifteen (15) Business Days of their first meeting ("Initial Negotiation End Date"), the Managers shall refer the matter to the designated senior officers of their respective companies that have authority to settle the dispute ("Executive(s)"). Within five (5) Business Days of the Initial Negotiation End Date ("Referral Date"), each Party shall provide one another Notice confirming the referral and identifying the name and title of the Executive who will represent the Party.

(b) Within five (5) Business Days of the Referral Date, the Executives shall establish a mutually acceptable location and date, which date shall not be greater than thirty (30) days from the Referral Date, to meet. After the initial meeting date, the Executives shall meet, as often as they reasonably deem necessary, to exchange relevant information and to attempt to resolve the dispute.

(c) All communication and writing exchanged between the Parties in connection with these negotiations shall be confidential and shall not be used or referred to in any subsequent binding adjudicatory process between the Parties.

(d) If the matter is not resolved within forty-five (45) days of the Referral Date, or if the Party receiving the Notice to meet, pursuant to Section 12.2(a) above, refuses or does not meet within the ten (10) Business Day period specified in Section 12.2(a) above, either Party may initiate arbitration of the controversy or claim by providing Notice of a demand for binding arbitration at any time thereafter.

12.3 Arbitration. Any dispute that cannot be resolved by management negotiations as set forth in Section 12.2 above shall be resolved through binding arbitration by a retired judge or justice from the [AAA][JAMS] panel conducted in San Diego, California, administered by and in accordance with [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive]][Streamlined] Arbitration Rules and Procedures] ("Arbitration").

(a) Any arbitrator shall have no affiliation with, financial or other interest in, or prior employment with either Party and shall be knowledgeable in the field of the dispute. The Parties shall cooperate with one another in selecting the arbitrator within sixty (60) days after Notice of the demand for arbitration. If, notwithstanding their good faith efforts, the Parties are unable to agree upon a mutually-acceptable arbitrator, the arbitrator shall be appointed as provided for in [AAA's Commercial Arbitration Rules] [JAMS [Comprehensive]][Streamlined] Arbitration Rules and Procedures].

(b) At the request of a Party, the arbitrator shall have the discretion to order depositions of witnesses to the extent the arbitrator deems such discovery relevant and appropriate. Depositions shall be limited to a maximum of three (3) per Party and shall be held within thirty (30) days of the making of a request. Additional depositions may be scheduled only with the permission of the arbitrator, and for good cause shown. Each deposition shall be limited to a maximum of six (6) hours duration unless otherwise permitted by the arbitrator for good cause shown. All objections are reserved for the Arbitration hearing except for objections based on privilege and proprietary and confidential information. The arbitrator shall also have discretion to order the Parties to exchange relevant documents. The arbitrator shall also have discretion to order the Parties to answer interrogatories, upon good cause shown.

(c) The arbitrator shall have no authority to award punitive or exemplary damages or any other damages other than direct and actual damages and the other remedies contemplated by this Agreement.

(d) The arbitrator shall prepare in writing and provide to the Parties an award including factual findings and the reasons on which their decision is based.

(e) The arbitrator's award shall be made within nine (9) months of the filing of the notice of intention to arbitrate (demand) and the arbitrator shall agree to comply with this schedule before accepting appointment. However, this time limit may be extended by agreement of the Parties or by the arbitrator, if necessary.

(f) Judgment on the award may be entered in any court having jurisdiction.

(g) The prevailing Party in this dispute resolution process is entitled to recover its costs. Until such award is made, however, the Parties shall share equally in paying the costs of the Arbitration.

(h) The arbitrator shall have the authority to grant dispositive motions prior to the commencement of or following the completion of discovery if the arbitrator concludes that there is no material issue of fact pending before the arbitrator.

(i) The existence, content, and results of any Arbitration hereunder is confidential information that is subject to the provisions of Section 13.1.

ARTICLE THIRTEEN: MISCELLANEOUS

13.1 Confidentiality.

(a) General. Neither Party shall disclose the non-public terms or conditions of this Agreement or any transaction hereunder to a third party, other than (i) the Party's Affiliates and its and their officers, directors, employees, lenders, counsel, accountants or advisors who have a need to know such information and have agreed to keep such terms confidential, (ii) for disclosure to the Buyer's Procurement Review Group, as defined in CPUC Decision (D) 02-08-071, subject to a confidentiality agreement, (iii) to the CPUC under seal for purposes of review, (iv) disclosure of terms specified in and pursuant to Section 13.1(b) of this Agreement; (v) in order to comply with any applicable Law, regulation, or any exchange, control area or CAISO rule, or order issued by a court or entity with competent jurisdiction over the disclosing Party ("Disclosing Party"), other than to those entities set forth in subsection (vi); or (vi) in order to comply with any applicable regulation, rule, or order of the CPUC, CEC, or the Federal Energy Regulatory Commission. In connection with requests made pursuant to clause (v) of this Section 13.1(a) ("Disclosure Order") each Party shall, to the extent practicable, use reasonable efforts to prevent or limit such disclosure. After using such reasonable efforts, the Disclosing Party shall not be: (i) prohibited from complying with a Disclosure Order or (ii) liable to the other Party for monetary or other damages incurred in connection with the disclosure of the confidential information. Except as provided in the preceding sentence, the Parties shall be entitled to all remedies available at law or in equity to enforce, or seek relief in connection with, this confidentiality obligation.

(b) RPS Confidentiality. Notwithstanding Section 13.1(a) of this Agreement, at any time on or after the date on which the Buyer makes its filing seeking CPUC Approval for this Agreement, either Party shall be permitted to disclose the following terms with respect to this Agreement: Party names, resource type, Delivery Term, Project location, Contract Capacity, anticipated Commercial Operation Date, Contract Quantity, and Delivery Point.

(c) Publicity. Except as otherwise agreed to in this Section 13.1 above, no announcement, publicity, advertising, press release, promotional or marketing materials regarding the arrangement contemplated under this Agreement, including the existence hereof, shall be made by either Party without the prior written approval of the other Party which approval shall not be unreasonably withheld or delayed.

13.2 Assignment. Neither Party shall assign this Agreement or its rights hereunder without the prior written consent of the other Party, which consent shall not be unreasonably withheld. For purposes hereof, the transfer of more than fifty percent (50%) of the equity ownership or voting interest of Seller (or any parent entity holding directly or indirectly at least fifty percent (50%) of the equity ownership or voting interest of Seller if such interest constitutes more than twenty percent (20%) of the fair market value of the assets of such parent entity) to a person that is not an Affiliate of Seller shall also constitute an assignment of this Agreement requiring Buyer's prior written consent. Notwithstanding the foregoing, either Party may, without the consent of the other Party (and without relieving itself from liability hereunder), transfer, sell,

pledge, encumber, or assign this Agreement or the accounts, revenues or proceeds hereof to its financing providers. In connection with any financing or refinancing of the Project by Seller, Buyer shall in good faith negotiate and agree upon a consent to collateral assignment of this Agreement in substantially the same form as Exhibit E.

13.3 Audit. Each Party has the right, at its sole expense and during normal working hours, to examine the records of the other Party to the extent reasonably necessary to verify the accuracy of any statement, charge or computation made pursuant to this Agreement including amounts of Delivered Energy or Scheduled Energy. If any such examination reveals any inaccuracy in any statement, the necessary adjustments in such statement and the payments thereof will be made promptly and shall bear interest calculated at the Default Rate from the date the overpayment or underpayment was made until paid; provided, however, that no adjustment for any statement or payment will be made unless objection to the accuracy thereof was made prior to the lapse of twelve (12) months from the rendition thereof, and thereafter any objection shall be deemed waived except to the extent any misinformation was from a third party not Affiliated with any Party and such third party corrects its information after such twelve-month period. In addition, Buyer shall have the right, at its sole expense and during normal working hours, to examine the records of Seller to the extent reasonably necessary to verify Seller's compliance with its representations and warranties set forth in Section 10.2.

13.4 Sarbanes-Oxley and SEC Requirements. The Parties acknowledge that accounting principles generally accepted in the United States of America ("GAAP") and SEC rules require Buyer and its independent auditor to evaluate whether Buyer must consolidate Seller's financial information (but not financial information of Seller's constituent members unless deemed to be included in the entity under GAAP). Buyer require access to information concerning Seller's organizational structure, including its debt/capital structure, as well as to personnel of Seller to determine if consolidated financial reporting is required. If Buyer and its independent auditor determine at any time that the Buyer must consolidate the Seller's financial statements to comply with GAAP and/or SEC rules regarding consolidated financial reporting, then:

(a) Buyer shall require from Seller and Seller agrees to provide to Buyer the following during the Term of this Agreement:

(i) Unaudited financial statements of the Seller prepared in accordance with GAAP as of the end of the quarterly period. The financial statements should include quarter to date and year to date information and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);

(ii) Unaudited financial schedules of the Seller, as deemed necessary for Buyer to prepare its consolidated financial statements and related footnotes to the financial statements in accordance with GAAP as of the end of the quarterly period. The financial schedules should include quarter to date and year to date information underlying the financial statements and footnotes to the financial statements and are to be provided within fifteen (15) calendar days of the end of the applicable reporting period (or the Business Day thereafter);

(iii) Access to Seller's accounting and other records, and accounting and management personnel as reasonably determined by both Buyer and Seller so that (A) Buyer's

independent auditor or its internal auditors may conduct financial audits (in accordance with the standards of the Public Company Accounting Oversight Board (United States)) as well as internal control audits (in accordance with Section 404 of the Sarbanes-Oxley Act of 2002) and (B) Buyer can be provided analytical information, as needed, to enable Buyer to meet its SEC filing requirements, including but not limited to those under Item 2 on Form 10-Q, and Item 7 on Form 10-K, "Management's Discussion and Analysis of Financial Condition and Results of Operations;"

(iv) Upon the request of Buyer, such certifications by a duly authorized representative(s) of Seller as may be reasonably requested by Buyer (which certifications shall presumptively be reasonable if the certifications are substantially identical to those required by Buyer or its parent of business units of Buyer or its parent); and

(v) As reasonably requested by Buyer, such information or schedules, similar to the items noted in clauses (i)-(iv) above, to enable Buyer to prepare consolidated financial statements and schedules as may be required for Buyer to obtain financing or to prepare other reports as required by regulatory bodies, such as the SEC, for periods other than as of the end of the monthly, quarterly or year to date periods then ended.

(b) If Buyer (i) in its sole discretion determines that the financial statements of the Seller would be considered material to the Buyer or its parent company's financial statements, financial condition, or internal controls over financial reporting, and (ii) reasonably determines Seller's internal controls over financial reporting are not operating effectively or have resulted in a control deficiency, Buyer shall provide Notice to Seller. Upon receipt of such Notice, Seller will have thirty (30) days to remediate any deficiency in Seller's internal controls over financial reporting identified by the Buyer, which Buyer and Buyer's independent auditor deem to be necessary to ensure Seller's internal controls over financial reporting are adequate, during or as a result of the audits permitted under Section 13.4(a)(iii) or any other provision of this Agreement.

(c) As soon as possible, but in no event later than two (2) Business Days following any occurrence that would affect Seller in any material way, Seller shall provide to Buyer a Notice describing such occurrence in sufficient detail to permit the Buyer to file a report on SEC Form 8-K. Such occurrences include all reportable events on the then current Form 8-K that applies to Buyer and its parent company at such time, including but not limited to a material acquisition or disposition of assets, a material direct financial obligation or off-balance sheet financing arrangement, material litigation, and the execution or termination of a material contract.

(d) Any information provided to Buyer shall be treated as confidential except that it may be disclosed in connection with the preparation, review, certification and publication of Buyer's financial statements.

(e) Seller shall notify Buyer at any time during the term of this Agreement of any services provided or proposed to be provided to Seller by Buyer's independent auditor. Seller, and any of Seller's Affiliates, are prohibited from engaging Buyer's independent auditor for any services or in any consulting agreement without the express written consent of partner in charge of Buyer's independent audit.

13.5 Entire Agreement. This Agreement, together with the Cover Sheet and each and every appendix, attachment, amendment, schedule and any written supplements hereto, if any, between the Parties constitutes the entire agreement between the Parties.

13.6 Recording. Unless a Party expressly objects to a Recording (defined below) at the beginning of a telephone conversation, each Party consents to the creation of a tape or electronic recording (“Recording”) of all telephone conversations between the Parties to this Agreement, and that any such Recordings will be retained in confidence, secured from improper access, and may be submitted in evidence in any proceeding or action relating to this Agreement. Each Party waives any further notice of such monitoring or recording, and agrees to notify its officers and employees of such monitoring or recording and to obtain any necessary consent of such officers and employees.

13.7 Forward Contract. The Parties acknowledge and agree that this Agreement constitutes a “forward contract” within the meaning of the United States Bankruptcy Code.

13.8 Governing Law. THIS AGREEMENT AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS AGREEMENT.

13.9 Attorneys’ Fees. In any proceeding brought to enforce this Agreement or because of the breach by any Party of any covenant or condition herein contained, the prevailing Party shall be entitled to reasonable attorneys’ fees (including reasonably allocated fees of in-house counsel) in addition to court costs and any and all other costs recoverable in said action.

13.10 General. This Agreement shall be considered for all purposes as prepared through the joint efforts of the Parties and shall not be construed against one Party or the other as a result of the preparation, substitution, submission or other event of negotiation, drafting or execution hereof. Except to the extent provided for herein, no amendment or modification to this Agreement shall be enforceable unless reduced to writing and executed by both Parties. This Agreement shall not impart any rights enforceable by any third party (other than a permitted successor or assignee bound to this Agreement). Waiver by a Party of any default by the other Party shall not be construed as a waiver of any other default. The headings used herein are for convenience and reference purposes only. This Agreement shall be binding on each Party’s successors and permitted assigns.

13.11 Severability. If any provision in this Agreement is determined to be invalid, void or unenforceable by any court having jurisdiction, such determination shall not invalidate, void, or make unenforceable any other provision, agreement or covenant of this Agreement and the Parties shall use their best efforts to modify this Agreement to give effect to the original intention of the Parties.

13.12 Counterparts. This Agreement may be executed in one or more counterparts each of which shall be deemed an original and all of which shall be deemed one and the same Agreement. Delivery of an executed counterpart of this Agreement by fax will be deemed as effective as delivery of an originally executed counterpart. Any Party delivering an executed counterpart of this Agreement by facsimile will also deliver an originally executed counterpart, but the failure of any Party to deliver an originally executed counterpart of this Agreement will not affect the validity or effectiveness of this Agreement.

13.13 Notices. Whenever this Agreement requires or permits delivery of a “Notice” (or requires a Party to “notify”), the Party with such right or obligation shall provide a written communication delivered personally, by a nationally recognized overnight courier, mailed by registered or certified mail (return receipt requested), or by facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice) to the receiving Party at the addresses identified on the Cover Sheet (or at such other addresses as such receiving Party shall identify by like Notice to the other Party); provided, however, that notices of Outages or other Scheduling or dispatch information or requests, shall be provided in accordance with the terms set forth in the relevant section of this Agreement. Invoices may be sent by facsimile or e-mail (if facsimile numbers or e-mail addresses are identified on the Cover Sheet or by subsequent Notice). A Notice delivered in accordance herewith shall be deemed received (i) on the date of delivery, if hand delivered, (ii) two Business Days after the date of sending, if sent by a nationally recognized overnight courier, or at such earlier time as is confirmed by the receiving Party, (iii) three Business Days after the date of mailing, if mailed by registered or certified mail, return receipt requested, or at such earlier time as is confirmed by the receiving Party, and (iv) on the Business Day on which such Notice was transmitted by facsimile transmission or e-mail (where permitted); provided, however, that a Notice delivered in accordance with this Section but received on any day other than a Business Day or after 5:00 p.m. in the place of receipt will be deemed received on the next Business Day. Each Party shall provide Notice to the other Party of the persons authorized to nominate and/or agree to a Schedule or Dispatch Order for the delivery or acceptance of the Product or make other Notices on behalf of such Party and specify the scope of their individual authority and responsibilities, and may change its designation of such persons from time to time in its sole discretion by providing Notice.

13.14 Mobile Sierra. Notwithstanding any provision of this Agreement, neither Party shall seek, nor shall they support any third party in seeking, to prospectively or retroactively revise the rates, terms or conditions of service of this Agreement through application or complaint to FERC pursuant to the provisions of Section 205, 206 or 306 of the Federal Power Act, or any other provisions of the Federal Power Act, absent prior written agreement of the Parties. Further, absent the prior agreement in writing by both Parties, the standard of review for changes to the rates, terms or conditions of service of this Agreement proposed by a Party, a non-Party or the FERC acting *sua sponte* shall be the “public interest” application of the “just and reasonable” standard of review set forth in *United Gas Pipe Line Co. v. Mobile Gas Service Corp.*, 350 US 332 (1956) and *Federal Power Commission v. Sierra Pacific Power Co.*, 350 US 348 (1956) and clarified by *Morgan Stanley Capital Group Inc. v. Pub. Util. Dist. No. 1 of Snohomish County*, 128 S. Ct. 2733 (2008).

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the date first above written.

[_____]
a [_____]

SAN DIEGO GAS & ELECTRIC
COMPANY
a California corporation

By: _____
Name: _____
Title: _____

By: _____
Name: _____
Title: _____

Exhibit A

PROJECT DESCRIPTION INCLUDING DESCRIPTION OF SITE

PROJECT DESCRIPTION

Project name: _____

Project Site name: _____

Project physical address: _____

Total number of electric generating units at the Project (committed and not committed to Buyer) _____

Technology Type: _____

Point of Interconnection of the Project (Substation and PNode): _____

The term "Site" as defined in the Agreement means the following parcel description upon which the Project is located:

Latitude and Longitude of Project: _____.

The nameplate capacity of the Project is: _____.

[For Excess Sales bids: include details on onsite load estimates and meter configuration (if CAISO meter reflects subtraction of customer onsite load from Project output.)

[INSERT MAP]

The electric generating units utilized as generation assets as part of the Project are described below:

<u>Project Specifications</u>	
<u>Project Size (MWdc)</u>	
<u>Mounting technology</u>	
<u>Module model</u>	
<u>Module size (W)</u>	
<u>Number of modules</u>	
<u>Inverter model</u>	
<u>Inverter size (kW)</u>	
<u>Number of inverters</u>	
<u>Medium voltage transformer (M.V.T.) size</u>	
<u>Number of M.V.T.s</u>	
<u>Step-up transformer (S.T.) size</u>	
<u>Number of S.T.s</u>	

Exhibit B

MILESTONE SCHEDULE

	<i>Date</i>	<i>Project Name</i>
1.		Obtains control of all lands and rights-of-way comprising the Site.
2.		Files a CEC Pre-Certification and Verification application.
3.		Files CEQA/NEPA application with appropriate agency(ies).
4.		Executes interconnection agreement and/or transmission agreement and receives FERC approval.
5.		Obtain a final draft of the amendment to the Generator Interconnection Agreement which allows the Project to achieve FCDS. [To be included for Energy Only interconnection agreements which bid FCDS.]
6.		Receives CEQA/NEPA approval/permit
7.		Executes a supply contract.
8.		Executes an Engineering, Procurement and Construction (“EPC”) contract.
9.		Delivers full NTP under EPC contract and begins construction of the Project.
10.		<i>[For all Projects other than Green Tariff Projects located outside of the CAISO: Executes Meter Service Agreement and Participating Generator Agreement.] [For Green Tariff Projects located outside of the CAISO: Executes or causes to be executed all Pseudo Tie Agreements.]</i>
11.		Delivers Energy to the Transmission Provider to which the Project is physically interconnected.
12.		Receives all Governmental Approvals necessary to achieve COD.
13.		Receives CEC Certification and Verification.

Exhibit C

FORM OF LETTER OF CREDIT

[DATE]

To: San Diego Gas & Electric Company
555 W. Fifth Street
Mail Code: ML 18A3
Los Angeles, CA 90013

Re: Our Irrevocable Standby Letter of Credit No. _____
In the Amount of US _____

Ladies and Gentlemen:

We hereby open our irrevocable standby Letter of Credit Number _____ in favor of [name of Beneficiary] (“Beneficiary”), by order and for account of [name of Applicant] (“Applicant”), [address of Applicant], available at sight upon demand at our counters, at [location] for an amount of US\$ _____ [amount spelled out and xx/100 U.S. Dollars] against presentation one of the following documents:

1- Statement signed by a person purported to be an authorized representative of Beneficiary stating that: “[name of Applicant] (“Applicant”) is in default under the Green Tariff Power Purchase Agreement between Beneficiary and Applicant dated _____ or under any transaction contemplated thereby (whether by failure to perform or pay any obligation thereunder or by occurrence of a “default”, “event of default” or similar term as defined in such agreement, any other agreement between Beneficiary and Applicant, or otherwise). The amount due to Beneficiary is U.S. \$ _____.”

or

2- Statement signed by a person purported to be an authorized representative of Beneficiary stating that: “[name of Applicant] (“Applicant”) has forfeited all or part of its CPUC Approval Security or Development Period Security as set forth and defined in the Green Tariff Power Purchase Agreement between Beneficiary and Applicant dated _____. The amount due to Beneficiary, whether or not a default has occurred, is U.S. \$ _____.”

or

3- Statement signed by a person purported to be an authorized representative of Beneficiary stating that: “as of the close of business on [insert date, which is less than 60 days prior to the expiration date of the Letter of Credit] you have provided written notice to us indicating your election not to permit extension of this Letter of Credit

beyond its current expiry date. The amount due to Beneficiary, whether or not a default has occurred, is U.S. \$_____.”

Special Conditions:

- All costs and banking charges pertaining to this Letter of Credit are for the account of Applicant.
- Partial and multiple drawings are permitted.
- Fax of Document 1 or 2 or 3 above is acceptable. Notwithstanding anything to the contrary herein, any drawing hereunder may be requested by transmitting the requisite documents as described above to us by facsimile at _____ or such other number as specified from time to time by us. The facsimile transmittal shall be deemed delivered when received. It is understood that drawings made by facsimile transmittal are deemed to be the operative instrument without the need of originally signed documents.

This Letter of Credit expires on _____ at our counters.

We hereby engage with Beneficiary that upon presentation of a document as specified under and in compliance with the terms of this Letter of Credit, this Letter of Credit will be duly honored in the amount stated in Document 1, 2, or 3 above. If a document is so presented by 1:00 pm on any New York banking day, we will honor the same in full in immediately available New York funds on that day and, if so presented after 1:00 pm on a New York banking day, we will honor the same in full in immediately available New York funds by noon on the following New York banking day.

It is a condition of this Letter of Credit that it shall be deemed automatically extended without an amendment for a one year period beginning on the present expiry date hereof and upon each anniversary of such date, unless at least ninety (90) days prior to any such expiry date we have sent you written notice by regular and registered mail or courier service that we elect not to permit this Letter of Credit to be so extended beyond, and will expire on its then current expiry date. No presentation made under this Letter of Credit after such expiry date will be honored.

We agree that if this Letter of Credit would otherwise expire during, or within 30 days after, an interruption of our business caused by an act of god, riot, civil commotion, insurrection, act of terrorism, war or any other cause beyond our control or by any strike or lockout, then this Letter of Credit shall expire on the 30th day following the day on which we resume our business after the cause of such interruption has been removed or eliminated and any drawing on this Letter of Credit which could properly have been made but for such interruption shall be permitted during such extended period.

This Letter of Credit is subject to the Uniform Customs and Practice for Documentary Credits (2007 Revision) International Chamber of Commerce, Publication No. 600 (“UCP”), except to the extent that the terms hereof are inconsistent with the provisions of the UCP, including but not limited to Articles 14(b) and 36 of the UCP, in which case the terms of this Letter of Credit shall

govern. Matters not covered by the UCP shall be governed and construed in accordance with the laws of the State of California.

[Name of Bank]

Authorized Signature(s)

Exhibit D

COMMERCIAL OPERATION CERTIFICATE

The undersigned, _____ (“EPC Contractor”), _____ (“Renewable Generation Equipment Supplier”), _____ (“Licensed Professional Engineer”) and [_____] (“Owner”) make the following certifications to San Diego Gas & Electric Company (“SDG&E”), dated as of _____. All capitalized terms not otherwise defined herein shall have the meaning given to them in the Green Tariff Power Purchase Agreement dated _____ between Owner and SDG&E (the “Agreement”).

Renewable Generation Equipment Supplier hereby certifies that:

1. The [_____] comprising the Project have been erected and installed at the project site and have been commissioned as required under the Supply and Installation Agreement (“[_____] Supply Agreement”) dated as of _____, by and between Renewable Generation Equipment Supplier and Owner and each such [_____] has passed the performance testing required to be performed pursuant to the [_____] Supply Agreement.
2. The Warranty Period under the Warranty Agreement (“Warranty Agreement”) dated as of _____, by and between Renewable Generation Equipment Supplier and Owner has commenced.

EPC Contractor hereby certifies that:

All requirements necessary to achieve [Commercial Operation/Substantial Completion] as set forth in the agreement between the EPC Contractor and Owner dated _____ (“EPC Contract”) have been completed and the Project has successfully passed all performance tests at a level that demonstrates satisfaction of at least the [minimum performance guarantees].

Owner hereby certifies that:

1. Except for punch list items that would not materially affect the performance, reliability or safe operation of the Project, the Project has been completed in accordance with all applicable specifications and is ready for continuous commercial operation in compliance with all applicable laws and governmental approvals. The Project has successfully passed all performance tests at a level that demonstrates satisfaction of at least the [insert minimum performance guarantees], and complete test reports have been submitted to Buyer.
2. The Operation and Maintenance Agreement (O&M Agreement), by and between Owner and _____ dated as of _____ has commenced.

3. Owner has a valid leasehold or real property interest in the Project Site for a term of at least [] years from the Commercial Operation date.
4. The interconnection facilities have been completed in accordance with applicable specifications, tariffs, laws and governmental approvals to enable power generated by the Project to be received at the Delivery Point.
5. Owner has obtained all governmental approvals necessary for the continuous commercial operation of the Project and the Project is in compliance with all such governmental approvals and all other applicable laws.
6. The Contract Capacity of the Project is [] MWac and [] MWdc at [] conditions.

Licensed Professional Engineer certifies that:

1. We have read the Agreement, the [] Supply Contract, and the EPC Contract and we understand the requirements for Commercial Operation under the Agreement, the specifications and performance testing requirements under the [] Supply Contract, and the requirements for [Commercial Operation/Substantial Completion] under the EPC Contract.
2. We have reviewed the material and data made available to us by the Owner, the Renewable Generation Equipment Supplier, and the EPC Contractor for the Project.
3. To the extent practical, we have reviewed the engineering, procurement, construction and performance testing for the Project and in the course of this review we have not discovered any material errors or omissions in the work performed to date.
4. We have reviewed the certificates of Owner, Renewable Generation Equipment Supplier, and EPC Contractor above, and find the representations provided to be correct in all material respects.
5. We have reviewed all Governmental Approvals and permits identified by the Owner as being required for the construction and operation of the Project and are of the opinion that the Project as completed is in compliance in all material respects with the environmental and technical requirements contained therein.
6. Based on our review of the aforementioned information and of information provided to us by others which we have not independently verified, we are of the opinion that, as of, Commercial Operation has occurred as defined in the Agreement.

Executed this ___ day of ___, 20__

**RENEWABLE GENERATION EQUIPMENT
SUPPLIER**

**[Name of Renewable Generation
Supplier]**

a _____ corporation

By: _____

Name:

Title:

EPC CONTRACTOR

[Name of EPC Contractor]

a _____ corporation

By: _____

Name:

Title:

OWNER

[Name of Owner]

a _____ limited liability company

By: _____

Name:

Title:

LICENSED PROFESSIONAL ENGINEER:

[Name of Licensed Professional Engineer]

a _____

By: _____

Name:

Title:

ACCEPTED BY SAN DIEGO GAS & ELECTRIC COMPANY

By: _____

Name: _____

Title: _____

Date: _____

Exhibit E

CONSENT AND AGREEMENT

This CONSENT AND AGREEMENT (“Consent”) is entered into as of [Date] among San Diego Gas & Electric Company (“SDG&E”), [_____] (the “Assignor”), and [Name of Lender/Agent for the Financing Parties] (the “Assignee”).

RECITALS

WHEREAS, pursuant to the RAM Power Purchase Agreement made as of [Date] (the “Assigned Agreement”), between the Assignor and SDG&E, SDG&E has agreed to purchase output from the Assignor’s [_____] MW [_____] electric generating facility] (the “Project”) as further specified in therein;

WHEREAS, pursuant to a [Security Agreement] dated as of [Date] (the “Security Agreement”), the Assignor has granted to the Assignee a lien on and a security interest in, to and under all of its right, title and interest in the Assigned Agreement, as collateral security for the Assignor’s obligations under that certain [Credit Agreement] dated as of the date of the Security Agreement among the Assignor, [_____] (“Lenders”) and the related financing documents (the “Credit Agreement” and collectively, the “Financing Documents”) pursuant to which the Lenders have agreed to loan funds to the Assignor in connection with the Project.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which hereby are acknowledged, the parties hereto agree as follows:

Section 1. Definitions. Any capitalized term used but not defined herein shall have the meaning specified for such term in the Assigned Agreement.

Section 2. Consent to Assignment.

(a) Under the terms and conditions set forth in this Consent, SDG&E hereby consents to (i) the assignment by the Assignor of all its right, title and interest in, to and under the Assigned Agreement to the Assignee, as collateral security for the obligations as and to the extent provided in the Security Agreement, and (ii) the assignment by the Assignor to any transferee or assignee of, or successor to, the Assignee (provided that any transferee or nominee satisfies the requirements of Article 8 (*credit support*) of the Assigned Agreement and is otherwise a Qualified Transferee. “Qualified Transferee” shall mean any transferee or assignee of, or successor to, the Assignee that (x) has (or has entered into contracts for the provision of services with an entity that has) substantial experience in the construction and/or operation of [wind/geothermal/solar generating facilities] of a type similar to the Project and (y) has the financial capability to perform under the Assigned Agreement (taking into account the fact that such transferee or nominee may be a special purpose vehicle whose sole asset may be the Project), in each case as reasonably determined by SDG&E.

(b) The Assignor agrees that it shall remain liable to SDG&E for all obligations of the Assignor under the Assigned Agreement, notwithstanding the collateral assignment contemplated in the Security Agreement.

(c) If the Assignee elects to exercise its remedies under the Security Agreement to foreclose on its lien in the Assigned Agreement, the Assignee shall notify SDG&E pursuant to Section 6(f) of this Consent. Upon completion of such foreclosure, the Assignee (or its permitted assignee or transferee or successor thereof) (i) shall be entitled to all of the benefits of the Assigned Agreement, (ii) shall assume in writing and be liable for each and every duty, obligation and liability of the Assignor under the Assigned Agreement, including but not limited to the duties and obligations that arose or accrued prior to the date of execution of this Consent, and (iii) shall cure any and all then existing Seller Events of Default that have arisen prior to the date of the assumption of the Assigned Agreement by Assignee (or its permitted assignee or transferee or successor thereof) except for any Seller Events of Default that, by their nature, are not capable of being cured by Assignee (or its permitted assignee or transferee or successor thereof).

Section 3. Representations and Warranties. SDG&E hereby represents and warrants to the Assignee that, as of the date of this Consent:

(a) The execution and delivery by SDG&E of the Assigned Agreement and this Consent, and the performance by SDG&E of its obligations under the Assigned Agreement and this Consent, have been duly authorized by all necessary corporate action, and do not and will not require any further consents or approvals which have not been obtained, or violate any provision of any law, regulation, order, judgment, injunction or similar matters or breach any material agreement presently in effect with respect to or binding upon SDG&E.

(b) All government approvals necessary for the execution and delivery by SDG&E of the Assigned Agreement and this Consent, and the performance by SDG&E of its obligations under the Assigned Agreement and this Consent, have been obtained and are in full force and effect.

(c) This Consent and the Assigned Agreement have been duly executed and constitute legal, valid and binding obligations of SDG&E, enforceable against it in accordance with their respective terms, except as such enforcement may be limited by bankruptcy, insolvency or similar laws of general application relating to the enforcement of creditors' rights generally or by general principles of equity, regardless of whether such enforceability is considered in a proceeding in equity or at law, or by principles of public policy.

(d) To the knowledge of SDG&E, the Assignor is not in default under any material covenant or obligation under the Assigned Agreement, and no events have occurred that, with the giving of notice or the passage of time, would constitute a default by the Assignor under the Assigned Agreement, and the Assigned Agreement is in full force and effect and has not been amended.

Section 4. Consent and Agreement.

SDG&E and the Assignor hereby agree that, so long as any obligations of the Assignor under the Credit Agreement and the Security Agreement remain outstanding:

(a) No Material Amendments. SDG&E and the Assignor will not enter into any material amendment, supplement or other modification of the Assigned Agreement (an "Amendment") until after the Assignee has been given at least fifteen (15) Business Days' prior written notice of the proposed Amendment by the Assignor (a copy of which notice will be provided to SDG&E by the Assignor), and will not then enter into such Amendment if SDG&E has, within such fifteen (15) Business Day period, received a copy of (a) the Assignee's objection to such Amendment or (b) the Assignee's request to the Assignor for additional information with respect to such Amendment.

(b) Notices of Default and Right to Cure.

(i) SDG&E shall deliver to the Assignee at the address set forth on the signature pages hereof, or at such other address as the Assignee may designate in writing from time to time to SDG&E, concurrently with the delivery thereof to the Assignor, a copy of each notice of default under the Assigned Agreement. Notwithstanding anything to the contrary contained in the Assigned Agreement, such notice shall be coupled with an opportunity to cure any such default within the longer of the cure period available to the Assignor in the Assigned Agreement or thirty (30) days after notice thereof (except with respect to payment defaults, which cure must be made within five (5) Business Days after the last day of the cure period available to the Assignor in the Assigned Agreement with respect to payment defaults), such cure period shall commence upon receipt of notice by the Assignee). If possession of the Facility is necessary to cure any Default by the Assignor under the Assigned Agreement, and the Assignee commences foreclosure proceedings against the Assignor, the Assignee will be allowed an additional sixty (60) days to complete such proceedings. In order for the Assignee to cure a default under Section 5.1(d) of the Assigned Agreement, the Assignee shall secure, as soon as reasonably practical after such default, an order from the court (the "Bankruptcy Court") administering the proceeding under which the Assignor is a debtor in a proceeding under Title 11 of the United States Code, as amended (the "Bankruptcy Code") in a form reasonably acceptable to SDG&E which authorizes (a) the Assignor to pledge collateral to secure the Assignor's obligations under the Assigned Agreement (whether by the maintenance or provision of a Letter of Credit or otherwise) whether such obligations arose prior or following the Section 5.1(d) default of the Assigned Agreement, (b) the right of SDG&E to terminate the Assigned Agreement upon a subsequent default and expiration of cure periods described herein with respect to the Assignor (including, without limitation, the conversion of a case under Chapter 11 of the Bankruptcy Code to a case under Chapter 7 of the Bankruptcy Code), and to exercise rights of netting or setoff of obligations upon such termination, in each case without regard to Section 362 of the Bankruptcy Code and without regard to whether the amounts to be netted or setoff were incurred pre-petition or post-petition, (c) that the rights of SDG&E specified in the foregoing clause (b) not be subject to being modified, stayed, avoided or otherwise limited by any further order of the Bankruptcy Court or any court proceeding under the Bankruptcy Code, and (d) the assumption by Assignor of the Assigned Agreement (a "Bankruptcy Order"). It being further understood that if such Bankruptcy Order is not timely obtained, Buyer shall have

the right to declare an Early Termination Date in accordance with Article 5 of the Assigned Agreement.

(ii) Except to the extent that automatic cancellation, suspension or termination occurs pursuant to the Assigned Agreement, no cancellation, suspension or termination of the Assigned Agreement by SDG&E, shall be binding upon the Assignee without such notice and the opportunity to cure during the applicable extended cure periods specified in this Section 4(b). If the Assignee fails to cure or rectify the effect of a default within the extended cure periods specified in this Section 4(b), SDG&E shall have all its rights and remedies with respect to such default, action or omission as set forth in the Assigned Agreement.

(c) **Payments to Designated Account.** The Assignor and SDG&E acknowledge and agree that all payments to be made by SDG&E to the Assignor (if any) under the Assigned Agreement shall be made in lawful money of the United States of America in immediately available funds, to the following account:

[name and details for account designated by the Assignee]

or to such other person or entity and/or at such other address as the Assignee may from time to time specify in writing to SDG&E. In making such payments, SDG&E shall be entitled to rely conclusively on instructions that it may receive from time to time from the Assignee without any duty to make inquiry into the authority of the Assignee to give such instructions or the authenticity of any signatures placed upon such instructions.

Section 5. Damages Limitation.

NO PARTY SHALL BE LIABLE TO ANY OTHER PARTY UNDER THIS CONSENT FOR ANY CONSEQUENTIAL, EXEMPLARY, PUNITIVE, REMOTE, OR SPECULATIVE DAMAGES OR LOST PROFITS.

Section 6. Miscellaneous.

(a) This Consent shall be binding upon the successors and permitted assigns of each party and shall inure, together with the rights and remedies of the Assignee hereunder, to the benefit of the successors and permitted assigns of the parties hereto, including the Financing Parties and their respective permitted successors, transferees and assigns.

(b) No amendment or waiver of any provisions of this Consent or consent to any departure by any party hereto from any provisions of this Consent shall in any event be effective unless the same shall be in writing and signed by the Assignee and SDG&E.

(c) This Consent shall be governed by, and construed under, the laws of the State of California applicable to contracts made and to be performed in such State and without reference to conflicts of laws. The parties hereto agree that any legal action or proceeding arising out of this Consent may be brought in the courts of the State of California, in and for the County of San Diego, or of the United States of America for the Southern District of California. By execution and delivery of this Consent, the parties hereto accept, for themselves and in

respect of their property, generally and unconditionally, the jurisdiction of the aforesaid courts. The parties hereto irrevocably consent to the service of process out of any of the aforementioned courts in any such action or proceeding by the mailing of copies thereof by registered or certified airmail, postage prepaid, to the Assignee, SDG&E and the Assignor, as the case may be, at their respective addresses for notices as specified herein and that such service shall be effective five (5) business days after such mailing. Nothing herein shall affect the right to serve process in any other manner permitted by law or the right of the Assignee or SDG&E to bring legal action or proceedings in any other competent jurisdiction. The parties hereto hereby waive any right to stay or dismiss any action or proceeding under or in connection with any or all of this Consent or the transactions contemplated hereby brought before the foregoing courts on the basis of *forum non-conveniens*.

(d) EACH OF SDG&E, THE ASSIGNEE AND THE ASSIGNOR HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS CONSENT AND AGREEMENT.

(e) This Consent may be executed in one or more counterparts with the same effect as if such signatures were upon the same instrument. This Consent may be delivered by facsimile transmission.

(f) All notices to be given under this Consent shall be in writing and shall be delivered personally, sent by certified mail return receipt requested or registered first-class mail, postage prepaid, or sent by facsimile, or courier to the intended recipient at its address as set forth on the signature pages below, and all payments to be made under this Consent shall be made by wire transfer of immediately available funds or check representing immediately collectible funds to the account or address of the intended recipient as set forth on the signature pages hereto, unless the recipient has given notice of another address or account for receipt of notices or payments.

(g) This Consent shall terminate in its entirety upon the earlier of (i) the indefeasible payment in full in cash of all obligations of the Assignor under the Credit Agreement, and (ii) the termination of the Credit Agreement in accordance with the terms thereof and the terms of this Consent. The Assignee agrees to give prompt written notice to the Assignor and SDG&E of the occurrence of either such event.

(h) The captions or headings at the beginning of each Section of this Consent are for convenience only and are not a part of this Consent.

IN WITNESS WHEREOF, each of SDG&E, the Assignee and the Assignor has duly executed this Consent and Agreement as of the date first above written.

SAN DIEGO GAS & ELECTRIC
COMPANY

By: _____
Name:
Title:

[Address for Notices:]

[ASSIGNOR]

By: _____
Name:
Title:

[Address for Notices:]

[ASSIGNEE]

By: _____
Name:
Title:

[Address for Notices:]

Exhibit F

FORM OF QUARTERLY PROGRESS REPORT

**Quarterly Progress Report
of**

[_____]

(“Seller”)

**provided to
San Diego Gas & Electric Company**

[Date]

Table of Contents

[Insert Table of Contents]

1.0 Instructions.

All capitalized terms used in this report shall have the meanings set forth below and any capitalized terms used in this report which are not defined below shall have the meanings ascribed thereto in the Green Tariff Power Purchase Agreement by and between _____ (“Seller”) and San Diego Gas & Electric Company dated _____, ____ (the “Agreement”).

Seller shall review the status of each significant element of the Project schedule and Seller shall identify such matters referenced in clauses (i)-(v) below as known to Seller and which in Seller’s reasonable judgment are expected to adversely affect the Project or the Project schedule, and with respect to any such matters, shall state the actions which Seller intends to take to ensure that Conditions Precedent and the Milestones will be attained by their required dates. Such matters may include, but shall not be limited to:

(i) Any material matter or issue arising in connection with a Governmental Approval, or compliance therewith, with respect to which there is an actual or threatened dispute over the interpretation of a law or regulation, actual or threatened opposition to the granting of a necessary Governmental Approval, any organized public opposition, any action or expenditure required for compliance or obtaining approval that Seller is unwilling to take or make, or in each case which could reasonably be expected to materially threaten or prevent financing of the Project, attaining any Condition or Milestone, or obtaining any contemplated agreements with other parties which are necessary for attaining any Condition or Milestone or which otherwise reasonably could be expected to materially threaten Seller’s ability to attain any Condition or Milestone;

(ii) Any development or event in the financial markets or the independent power industry, any change in taxation or accounting standards or practices or in Seller’s business or prospects which reasonably could be expected to materially threaten financing of the Project, attainment of any Condition or Milestone or materially threaten any contemplated agreements with other parties which are necessary for attaining any Condition or Milestone or could otherwise reasonably be expected to materially threaten Seller’s ability to attain any Condition or Milestone;

(iii) A change in, or discovery by Seller of, any legal or regulatory requirement which would reasonably be expected to materially threaten Seller’s ability to attain any Condition or Milestone;

(iv) Any material change in the Seller’s schedule for initiating or completing any material aspect of Project;

(v) The status of any matter or issue identified as outstanding in any prior Quarterly Report and any material change in the Seller’s proposed actions to remedy or overcome such matter or issue.

Seller shall complete, certify, and deliver this form Quarter Quarterly Progress Report to [____], together with all attachments and exhibits, with [3] copies of the Report delivered to [____] and [_____].

2.0 Executive Summary.

2.1 Major activities to be performed for each aspect of the Project during the current calendar quarter.

Please provide a brief summary of the Major² activities to be performed for each of the following aspects of the Project during the current calendar quarter:

- 2.1.1 Design
- 2.1.2 Engineering
- 2.1.3 Major Equipment procurement
- 2.1.4 Construction
- 2.1.5 Milestone report
- 2.1.6 Permitting (See Section 3.0)

2.2 Major activities scheduled to be performed in the previous calendar quarter but not completed as scheduled.

Please provide a brief summary of the Major activities which were scheduled to be performed in the previous calendar quarter and their status, including those activities that were not completed as scheduled:

- 2.2.1 Design
- 2.2.2 Engineering
- 2.2.3 Major Equipment procurement
- 2.2.4 Construction
- 2.2.5 Milestone report
- 2.2.6 Permitting

² For Purposes of this Report, “Major” shall mean any activity, event, or occurrence which may have a material adverse impact on the construction of the Facility or completion of the Project on a timely basis if such activity, event, or occurrence occurs or if such activity, event, or occurrence fails to occur as anticipated or scheduled, which material adverse impact includes, but is not limited to, Seller’s inability to achieve a Milestone Date.

3.0 Permitting.

The following describes each of the major Governmental Approvals required for the construction of the Project and the status of each:

3.1 State and/or federal Governmental Approvals.

Please describe each of the Major state and/or federal Governmental Approval (including the Permit to Construct issued by the San Diego County Air Pollution Control District) to be obtained by Seller (or EPC Contractor) and the status of each.

DESCRIPTION	STATUS

3.2 Local and/or county Governmental Approvals.

Please describe each of the Major local and/or county Governmental Approvals to be obtained by Seller and the status of each.

DESCRIPTION	STATUS

3.3 Permitting activities which occurred during the previous calendar quarter.

Please list all permitting activities which occurred during the previous calendar quarter.

3.4 Permitting activities occurring during the current calendar quarter.

Please list all permitting activities which are expected to occur during the current calendar quarter.

3.5 Permitting Notices received from EPC Contractor.

Please attach to this Quarterly Progress Report copies of any notices related to permitting activities received from EPC Contractor during the previous calendar quarter.

4.0 Design Activities.

4.1 Table of design schedule to be followed by Seller and its subcontractors.

The following table lists the design schedule to be followed by Seller and its subcontractors.

ACTIVITY	CONTRACTOR/ SUBCONTRACTOR	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE

4.2 Design activities to be performed during the current calendar quarter.

Please explain in detail the design activities which are expected to be performed during the current calendar quarter.

4.3 Table of design activities completed during the previous calendar quarter.

Please explain in detail the design activities which were completed during the previous calendar quarter.

5.0 Engineering Activities.

5.1 Table of engineering schedule to be followed by Seller and its subcontractors.

The following table lists the engineering schedule to be followed by Seller and its subcontractors:

ACTIVITY	CONTRACTOR/ SUBCONTRACTOR	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE

5.2 Engineering activities to be performed during the current calendar quarter.

Please explain in detail the engineering activities which are expected to be performed during the current calendar quarter.

5.3 Engineering activities completed during the previous calendar month.

Please explain in detail the engineering activities which were completed during the previous calendar quarter.

5.4 Three-month look-ahead engineering schedule.

Please provide a three-month look ahead engineering schedule.

6.0 Major Equipment Procurement.

6.1 Table of major equipment to be procured by Seller and its subcontractors.

The following table lists major equipment to be procured by Seller and its subcontractors:

EQUIPMENT DESCRIPTION	MANUFACTURER	MODEL	CONTRACTED DELIVERY DATE	ACTUAL DELIVERY DATE	PROJECTED INSTALLATION DATE	ACTUAL INSTALLATION DATE

6.2 Major Equipment procurement activities to be performed during the current calendar quarter.

Please explain in detail the major equipment procurement activities which are expected to be performed during the current calendar quarter.

6.3 Major Equipment procurement activities completed during the previous calendar quarter.

Please explain in detail the major equipment procurement activities which were completed during the previous calendar quarter.

7.0 Construction Activities.

7.1 Table of construction activities to be performed by Seller and its subcontractors.

The following tables lists construction activities to be performed by Seller and its subcontractors:

ACTIVITY	CONTRACTOR/ SUBCONTRACTOR	SCHEDULED COMPLETION DATE	ACTUAL COMPLETION DATE
Civil Progress			
Structural Progress			
[Steam] Generator Progress			
Piping Progress			
IC and Electrical Progress			
Subcontractor Progress			

7.2 Construction activities to be performed during the current calendar quarter.

Please explain in detail the construction activities which are expected to be performed during the current calendar quarter.

7.3 Construction activities completed during the previous calendar quarter.

Please explain in detail the construction activities which are expected to be performed during the previous calendar quarter.

7.4 EPC Contractor Monthly Progress Report.

Please attach a copy of the Monthly Progress Reports received during the previous calendar quarter from the EPC Contractor pursuant to the EPC Contract, certified by the EPC Contractor as being true and correct as of the date issued.

7.5 Three-month look-ahead construction schedule.

Please provide a three-month look ahead construction schedule.

8.0 Milestones.

8.1 Milestone schedule.

Please state the status and progress of each Milestone and identify any completed Milestone(s) for the previous calendar quarter.

8.2 Remedial Action Plan (applicable if Seller fails to achieve Milestone by the Milestone Date).

Please explain in detail each of the following aspects of Seller's remedial action plan:

8.2.1 Missed Milestone

8.2.2 Plans to achieve missed Milestone

8.2.3 Plans to achieve subsequent Milestone

8.2.4 Delays in engineering schedule

Please explain in detail any delays beyond the scheduled Milestone Dates stated in Section 5.1, any impact from the delays on the engineering schedule, and Seller's plans to remedy such impact.

8.2.5 Delays in Major Equipment procurement

Please explain in detail any delays beyond the contracted delivery date and/or the projected installation date stated in Section 6.1, any impact from the delays on Major Equipment procurement schedule, and Seller's plans to remedy such impact.

8.2.6 Delays in construction schedule

Please explain in detail any delays beyond the scheduled completion dates stated in Section 7.1, any impact from the delays on the construction schedule, and Seller's plans to remedy such impact.

9.0 Safety and Health Reports

9.1 Please list all accidents from the previous calendar quarter:

9.2 Any work stoppage from the previous calendar quarter:

9.3 Work stoppage impact on construction of the Project:

I, _____, on behalf of and as an authorized representative of, do hereby certify that any and all information contained in the attached Seller's Quarterly Progress Report is true and accurate, and reflects, to the best of my knowledge, the current status of the construction of the Project as of the date specified below.

By: _____

Name: _____

Title: _____

Date: _____

RPS Project Development Status Report

Project Name
Date

Date of Latest Construction Progress Report from Counterparty:

Project Owner/Counterparty:

Technology:

Capacity (MW):

Annual Energy (GWh/year):

On-Line Date:

Term/Duration (years):

Construction Start Date:

Point of Delivery:

Location:

Status At-A-Glance

The below to be filled in w/ either: Completed, Acceptable, Unknown, or Concern. See Section B for a description of milestones. When the answer is "Concern" the milestone should be flagged with a notation number where additional detail is provided in Section A.

Milestones	Status	Initial Completion Date	Projected Completion Date
Fuel/Resource Supply:			
Financing:			
Corporate Financing			
Project Financing			
Site Control (100%):			
Permitting:			
Engineering:			
Major Equipment Procurement:			
Construction:			
Startup Testing and Commissioning:			
Transmission:			

Transmission - Detail (see Section C)

Dependent Transmission Upgrade(s):

Scheduled Completion:

Point of Interconnection:

Early Interconnection:

Gen-Tie Length:

Gen-Tie Voltage:

ISO Queue Position:

Feasibility Study (FS):

System Impact Study (SIS):

Facilities Study (FAS):

Remedial Action Plan:

Additional Comments:

Date of Preparation:

Exhibit G

OUTAGE NOTIFICATION FORM

OUTAGE NOTIFICATION FORM

This form may be used to comply with CAISO's outage notification requirements for both planned and forced outages. Report outages as soon as possible by submitting form via email to TSched@SempraUtilities.com or via fax at (858) 650-6191.

Request Type:

New Scheduled Maintenance Outage

Previous Notification (if applicable)

Date Sent: mm/dd/yyyy
Time Sent: hh:mm

Generator Name:

Location Code:

Address:

(For times, use 24hr format)

Today's Date: mm/dd/yyyy

Current Time: hh:mm

Contact Name:

Phone Number:

Email:

Outage Start Date: mm/dd/yyyy

Outage Start Time: hh:mm

Outage End Date: mm/dd/yyyy

Outage End Time: hh:mm

Alternate Name:

Alternate Number:

Email:

Outage Duration:

MW Available During Outage:

MW Unavailable During Outage:

RMR Unit? Yes/No

System (Select One)

- Boiler Codes 0010-1999
Generator Codes 4500-4899
Regulatory, Safety, Environmental Codes 9504-9720
Balance of Plant Codes 3110-3999
Pollution Control Equipment Codes 8000-8835
Others Codes 9900-9999
Steam Turbine Codes 4000-4499
External Codes 9000-9040

Cause Code Ranges / Affected Component

(Select One)

Cause Code / Component Problem

(Select One)

Comments

Multiple horizontal lines for text input.

Exhibit H

PROJECT OPERATING RESTRICTIONS

Operational characteristics of the Project must be equal to or greater than the resource flexibility reflected in the resource Master File, as such term is defined in the CAISO Tariff. Buyer may request that CAISO modify the Master File for the Project to reflect the findings of a CAISO audit of the Project and to ensure that the information provided by Seller is true and accurate. Seller agrees to coordinate with Buyer and any third party Scheduling Coordinator to ensure all information provided to the CAISO regarding the operational and technical constraints in the Master File for the Project are accurate and are actually based on physical characteristics of the resource. The Parties agree to make reasonable modifications to this Exhibit H to modify existing operating restrictions or add additional operating restrictions that may be necessary to address changes in the CAISO Tariff or applicable Law applicable to the Products provided from this Project.

- Nameplate capacity of the Project: ____MW
- Minimum operating capacity: ____MW
- Advance notification required for a Dispatch Notice: ____
- Ramp Rate: ____MW/minute

Exhibit I
INSURANCE

In connection with Seller's performance of its duties and obligations under this Agreement, Seller shall maintain, from the CP Satisfaction Date until the end of the term of this Agreement, general liability insurance with a combined single limit of not less than Two million dollars (\$2,000,000) for each occurrence.

Such general liability insurance shall include coverage for "Premises-Operations, Owners and Contractors Protective, Products/Completed Operations Hazard, Explosion, Collapse, Underground, Contractual Liability, and Broad Form Property Damage including Completed Operations."

The general liability insurance required herein shall, by endorsement to the policy or policies, (a) include Buyer as an additional insured; (b) contain a severability of interest clause or cross-liability clause; (c) provide that Buyer shall not by reason of its inclusion as an additional insured incur liability to the insurance carrier for payment of premium for such insurance; and (d) provide for thirty (30) calendar days' written notice to Buyer prior to cancellation, termination, alteration, or material change of such insurance.

Evidence of the insurance required herein shall state that coverage provided is primary and is not in excess to or contributing with any insurance or self-insurance maintained by Buyer.

Seller agrees to furnish the required certificates and endorsements to Buyer prior to initial deliveries of test energy. Buyer shall have the right to inspect or obtain a copy of the original policy or policies of insurance.

If Seller is self-insured with an established record of self-insurance, Seller may comply with the following in lieu of the third-party insurance if:

- (a) Seller shall provide to Buyer, at least thirty (30) calendar days prior to the date of initial deliveries of test energy, evidence of an acceptable plan to self-insure to a level of coverage equivalent to that required by third party insurance providers as stated herein.
- (b) If Seller ceases to self-insure to the level required hereunder, or if Seller is unable to provide continuing evidence of Seller's ability to self-insure, Seller agrees to immediately obtain the third-party insurance coverage required hereunder.

All insurance certificates, statements of self-insurance, endorsements, cancellations, terminations, alterations, and material changes of such insurance shall be issued, clearly labeled with agreement ID number and submitted to the following:

San Diego Gas & Electric Company
Attention: Director, Procurement and Portfolio Design
Address: 8315 Century Park Court, CP21D
City: San Diego, CA 92123



APPENDIX 11.B

2017 GT RAM OFFER FORM

Renewable Products Offer Form



General Instructions

Form Field Key:

Free Form Field
Pull Down Menu
Calculated Field
Comment Field

Instructions:

- Follow instructions as they appear in each fields' comments or pop-up messages
- Complete all fields. Enter N/A if the question is not applicable
- Fill out all fields in the units requested
- Do not add, change, or move any cells, rows, columns or worksheets in the workbook
- **Confidential Information should be entered in Red Font**
- Limit and focus the discussions of the free form fields
- Submit One Offer Form per submission
- There are no limits on the number of submissions and they can vary by pricing structure, PPA structure, term, etc.

Renewable Products Offer Form



Company Information

Company Name Submitting Offer:	
Company Name on Potential Contract:	
Company Address:	
Company City:	
Company State:	
Company Zip:	
Company is Women/Minority/Disabled Veteran owned Business Enterprise as per CPUC General Order 156?	
How did the company hear of the RFO? (SDG&E website, SDG&E email, Colleague, Other (please elaborate))	

Company Representative

	Primary Contact	Secondary Contact
Contact Name:		
Contact Title:		
Office Number:		
Cell Number:		
Email:		
Is the Bidder or Contact listed above an affiliate of SDG&E?		
Does the Bidder or Contact listed above has one or more contracts with SDG&E?		

Corporate Profile and Experience

Describe your corporate background and organizational structure for the project.	
Describe project team's background and experience developing projects of a similar nature and technology. How many MW total are currently under construction?	
List and describe other projects of a similar nature and technology developed by Respondent currently in operation. What are the total MW of projects installed.	

Renewable Products Offer Form



Project Information

	Project Name:	
	Site Name	
	Project Latitude	
	Project Longitude	
	Project Parcel Number	
	Project Address	
	Project City	
	Project State	
	Project Zip	
	Which Solicitation Product is this for?	

Quantitative Description

	Technology :	
	Expected Number of Solar Panels or Wind Turbines:	
	Turbine/Panel Manufacturer and rating	
	Total Solar Panel Nameplate Capacity (MWdc), Total Maximum Wind Turbine Power Curve Output (MWac), Total Maximum Generator Output (MWac):	
	Total Inverter Nameplate AC Capacity (MWac) or Nameplate Turbine Output (MWac):	
	Contract Capacity at the point of interconnect net of all plant losses (MWac):	
	Capacity Factor:	
	Solar Tracking system Manufacturer and Model Number (Solar Only):	
	Total Project Area (acres):	
	Operation Type	
	IOU Service Area Project is interconnected to:	
	Resource Origin:	

Qualitative Description	
Describe merits of proposed site/location.	
<u>Discuss status of site control, including required easements. Site control documentation should be in the name of the entity that will sign the PPA. If not, please provide explanation. <i>Note: if shortlisted, Respondent's site control documents must be: 1) in the name of the same entity that will execute the PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.</i></u>	
<u>State and explain the percentage of site control that has been achieved.</u>	
<u>Discuss the viability of proposed technology and credibility of the manufacturer:</u>	
<u>Discuss operational reliability of proposed technology and manufacturer:</u>	
<u>How many projects and MWs with proposed technology have been installed worldwide?</u>	
<u>Discuss year(s) of installation, project locations, project size at each location and operational success.</u>	
<u>Discuss and provide published reports demonstrating that the proposed technology is commercially proven.</u>	
<u>Described the warranty of major components, including panels and inverters.</u>	
<u>Explain how the Respondent has operational control of the project. <i>Either through contractual operational control of the project, or if the Respondent is the project operator.</i></u>	
<u>Discuss the project's financing plan and status, including on-going debt/equity ratio to be carried by the project during construction (if a new facility) and during operation, sources of debt and equity, equity percentage by sponsor, financing organizations (including rates and terms), level of commitment by investors and lenders. If anticipating the need for subsidies, grants, Production Tax Credits, Investment Tax Credits or any other third party monetary awards, detail finances associated with monetary awards and discuss how the lack of funding shall impact the offer and deadlines for obtaining such awards.</u>	
<u>Discuss operational characteristics including required maintenance, delivery profile (peak and off-peak, hourly, daily, seasonal, annual), curtailability and dispatchability.</u>	
<u>For excess sales bids: include details on onsite load estimates and meter configuration (if CAISO meter reflects subtraction of customer onsite load from Project output).</u>	
<u>Explain in detail the contributions the project will make to the local community. (i.e. utilizing local resources and employing local hires).</u>	
<u>Is there additional relevant information necessary for SDG&E to evaluate the merits of the proposal.</u>	

Renewable Products Offer Form



Electrical Interconnection

Interconnection Type:	
Interconnection Status	

If Yes ->

Phase II or Deliverability Study Completed?	
If the project has a completed deliverability study, please provide the estimated date for completion of the deliverability upgrades.	

Under what tariff did you submit an interconnection Request? (CAISO, WDAT, Rule 21, etc.)	
Date Application Filed	
Queue Position Number (if assigned), and Cluster Number	

Interconnection Point	
City of Interconnection Point	
Interconnection COD Date	
Interconnection Voltage Level	

If the value is different than listed in the Study, please explain why?

Non-Reimbursable Interconnection Costs Listed in the Study (in \$). Also list document and page number where this number is taken from		
Reimbursable Interconnection Costs Listed in the Study (in \$). Also list document and page number where this number is taken from.		
How much in non-reimbursable interconnection cost is assumed in your bid price?		

Renewable Products Offer Form



Eligibility Criteria

Please include a brief sentence supporting your Eligibility or Explaining why you think you

Criteria

Yes/No? are exempt

Resource	Will the Project receive CEC-certification by the Project Completion Date?		
	Will the Project generate electricity using only resources that are an Eligible Renewable Energy Resource as defined in PUC Section 399.12		
	Will the Project utilize commercially proven technology?		
	Will the Project sell entire its output to SDG&E (full buy/sell) or all output in excess of onsite load to SDG&E (excess sales).		
	Is the facility new?		
	Has you submitted a fuel availability (solar radiation index, biomass and etc...) study?		
	If you are bidding a solar plant, have you submitted the full PVSyst Model and does the output of that match the inputs to the Delivery Profile?		

Project Capacity	Have you met the Project minimum and maximum project capacity requirments of this RFO?		
	Will the project sell partial output from a system sized above 20 MWs?		
	Is the Project part of an installation larger than 20 MW in the same general location that has been or is being developed by the respondent or the respondent's Affiliates, or is it sharing facilities with one or more projects?		

Location/Site Control	Is the Project located within the service territory of SDG&E or located in the Imperial Valley and dynamically transferred into CAISO		
	Does the Respondent have site control for the duration of the power purchase agreement?		
	Has the Respondent attached submitted a form showing this ownership? (Direct ownership, lease, or lease option)		
	Did the Respondent insert site location map(s) clearly showing the location, size, and orientation of the site; the location of the expected interconnections for transmission, fuel, and water; and the location of residential communities, schools, hospitals, airports, churches, cemeteries, or other expected sensitive neighbors within five miles of the site.		

Required Maps	Did the Respondent submit site location map(s) clearly showing the location, size, and orientation of the site?		
	Did the Respondent submit site location map(s) clearly showing the location of the expected interconnections for transmission, fuel, and water		
	Did the Respondent submit site location map(s) clearly showing the location of residential communities, schools, hospitals, airports, churches, cemeteries, or other expected sensitive neighbors within five miles of the site.		
	Did the Respondent Insert facility drawings and diagrams including general equipment arrangement of the project, electric interconnect one line diagram showing the scope of supply, delivery point and metering for the electric interconnection including any transmission line and switchyard.		

Interconnection	A) If your project is interconnected in SDG&E territory, have you completed a Phase II interconnection study or distribution level equivalent; or do you have a completed Interconnection Agreement? B) If your project is in IV does your project have a dynamic transfer arrangements, and Phase II interconnection study; or Completed Interconnection Agreement?		
	Have you submitted a copy of the most recent completed Phase II study or interconnection agreement with in the offer? Note: if shortlisted, Respondent's interconnection documents must be: 1) in the name of the same entity that will execute the PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.		
	Have you submitted a Project one-line diagram.		
	Will the Interconnection COD occur before Projection Completion?		

Developer Experience	Will the Respondent and/or members of the project development team completed, or begun construction, of a project using a technology similar to the offered technology, that is at least 500 kW nameplate capacity?		
	Will the Respondent maintain contractual control of the facilities and be responsible for development, land acquisition, permitting, financing and construction of the facilities?		

Project Start Date	Is the anticipated delivery start date within 36 months after the expected CPUC Approval date.		
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Incentives	Has your project ever applied for CSI funds?		
	Are you planning to apply for CSI funds for this project?		
	Has this project ever participated in NEM?		
	Does this project plan to participate in NEM in the future?		

GTSR - Both EcoShare and EcoChoice	Will the Project comply with the CARB's VRE Program?		
	Will the project must meet Green-e® Energy eligibility criteria throughout the Delivery Term of the EcoShare PPA?		

EcoShare Only	Will the Respondent SDG&E approval of marketing materials prior to bid solicitation?		
	Has the Respondent provided an attestation to SDG&E that it has received and read Attachment 1 of the Community Choice Aggregation (CCA) Code of Conduct Decision (D.12-12-036) that it will not circumvent it?		
	Has the Respondent reviewed the Community Interest Requirements in the GTSR Decisions and SDG&E's website (http://www.sdge.com/share-sun-for-solar-developers) and plans to adhere to those requirements?		
	Has the Respondent provided the legal opinion outlined in the RFO and GTSR decisions?		

Environmental Justice Projects Only	Have you submitted additional relevant information necessary for SDG&E to evaluate project eligibility as an Environmental Justice project?		
	Is the Projected located in one of the census tracts listed on SDG&E's website		

DERPs	If you have a DERP, did you contact SDG&E by the question deadline and have a call about your interconnection status?		
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Overview	Please include a brief sentence summarizing your conclusion on why you are, or are not, eligible?		
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Renewable Products Offer Form



PPA Summary

Will this project sell 100% of its output to SDG&E and purchase any energy needed to serve onsite load from SDG&E or other utility (full buy/sell) or will it serve onsite load and sell excess to SDG&E (excess sales)?		
Who will be Scheduling Coordinator for the Project?		
Delivery Term (years)	1	
CPUC Approval Security	\$ 100,000.00	PPA Section 8.3 Performance Assurance
Development Period Security	\$ -	PPA Section 8.3 Performance Assurance
Construction Period Security	\$ -	PPA Section 8.3 Performance Assurance
Delivery Period Security	\$ -	PPA Section 8.3 Performance Assurance
TODF Type	Energy Only	
PPA Type		

Renewable Products Offer Form



Permitting/Agreements

List All Project Permits Needed for full legal operation of the facility throughout the term of the PPA.

Permit/AGreement Type/Name	Issuing Agency	Expected Completion Date
CEC Pre-Certification		
CEC Certification		
RPS Certification		
Environmental Impact Study/Report		
Generator Interconnect Agreement		
Exempt Wholesale Generator certification from FERC		
Building & Grading Permits		
Encroachment Permits		
Conditional Use Permit		
Project Labor Agreement		
Right of Way		
Record Decision		
Dust Control		

<p>Discuss plan and status to obtain the permits listed above. Discuss required rights necessary to be obtained and status to obtain such rights. Describe scope of assistance from any third party (if applicable).</p>	
--	--

Renewable Products Offer Form



Schedule

Milestone	Insert dates for all milestones below:
Obtain control of all lands and rights-of-way comprising the Site.	
File a CEC Pre-Certification and Verification application.	
Receive a completed Phase II Interconnection Study Report	
Complete a comprehensive resource assessment.	
File permitting application with appropriate agency(ies).	
Execute interconnection agreement and/or transmission agreement.	
Receive permitting approval(s)	
Execute a supply contract.	
Execute an Engineering, Procurement and Construction ("EPC") contract.	
Complete financing.	
Deliver full NTP under EPC contract and begin construction of the Project.	
Execute Meter Service Agreement and Participating Generator Agreement. In addition, for projects dynamically transferred via pseudo-tie and scheduled into the CAISO only, Pseudo Tie Agreements	
Achieve initial operation.	
Receive all Governmental Approvals necessary to achieve Commercial Operation.	
Receive CEC Certification and Verification.	
Expected LNTP Date	
Expected FNTF Date	
Project Completion Date	
Expected Delivery Start Date under SDG&E PPA	

Discuss overall project development and construction schedule.	
--	--

Your Levelized TOD adjusted price* (\$/MWh)

\$	-
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FOR FCDS BIDS: The Levelized TOD adjusted price shown here assumes that FCDS is achieved as of COD. Bids that cannot provide FCDS at COD will have their PPA TOD prices reduced to the Energy Only price until FCDS is achieved, which will produce a lower TOD Adjusted price in the PPA than what is shown here.

*Note: This is an approximate value. That can change per year based on holidays, Daylight Savings Time, Weather Conditions, etc.

Renewable Products Offer Form



Confidentiality

Identify parts, sections and elements of the offer (including information in this and all other forms) which Respondent considers to be Confidential and Proprietary in accordance with Confidentiality Provisions as described in the RFO Protocols. Put all confidential information in RED font.

Renewable Products Offer Form



For DERP resources only

Discuss your DERP resource, its characteristics, operating characteristics, location, individual project specifics, etc. Submit separate documentation as necessary.



APPENDIX 12

2017 ENHANCED COMMUNITY RENEWABLES (“ECR”) RAM RFO



SAN DIEGO GAS AND ELECTRIC COMPANY
ELECTRIC AND FUEL PROCUREMENT DEPARTMENT
8315 CENTURY PARK COURT, CP21D
SAN DIEGO, CA 92123

**SDG&E'S []
REQUEST FOR OFFERS []
SEEKING
ECOSHARE (ENHANCED COMMUNITY
RENEWABLES) PROJECTS**

ISSUED

[]

OFFERS DUE

[]

RFO WEBSITE

[]

EMAIL QUESTIONS/COMMENTS TO

[\[\]](#)

INDEPENDENT EVALUATOR (IE)

[]



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1.0 BACKGROUND

In accordance with Decision (D.)16-05-006, D.15-01-051, and Resolution 4734 (together the GTSR Decisions) issued by the California Public Utilities Commission (CPUC or Commission), San Diego Gas & Electric Company (SDG&E) is issuing this Enhanced Community Renewables (“EcoShare”) Request for Offers (RFO or the solicitation) seeking contracts with facilities that produce Renewable Portfolio Standard (RPS)-eligible energy for the purpose of implementing its EcoShare program.

The GTSR Decisions require SDG&E to implement two programs: (1) a Green Tariff (GT) program (“EcoChoice”), allowing customers to choose a higher percentage of renewable generation than they already get from SDG&E; and (2) an Enhanced Community Renewables (“EcoShare”), allowing customers to participate in community-based projects. These programs are intended to: 1) make clean, renewable energy available to bundled utility customers, whether they own a home and/or can afford a significant capital investment; (2) increase the overall volume of renewable energy in the San Diego area; and (3) increase options for institutional, commercial and residential customers to meet their renewable energy goals.

Overall, SDG&E’s GTSR program is designed to ensure sufficient eligible capacity is available to meet customer demand of up to 59 MW, with 10 MW of the total program capacity being set aside for projects located in designated Environmental Justice areas. SDG&E held one EcoShare auction in 2017 and will hold two EcoShare auctions in 2017 and 2018, or until all available GTSR capacity is reserved subject to customer participation in these programs. To meet its EcoShare targets, SDG&E will seek offers for up to 20 MW of capacity in its EcoShare II solicitation.

This solicitation is not requesting bids for feed-in-tariff projects (e.g. Re-MAT, Bio-MAT), BioRAM, EcoChoice, or other RPS procurement activities that currently exist or are being contemplated.

Distributed Energy Resource Providers (DERP)¹ can aggregate resources to meet the CAISO 0.5 MW minimum size requirement to bid into the market. Offers consisting of DERP resources are eligible to bid into this solicitation provided they meet the other requirements outlined in this solicitation document.

Participation from Diverse Business Enterprises:

SDG&E encourages Diverse Business Enterprises (DBEs), as defined in G.O. 156, to participate in this RFO. Additional information on SDG&E’s DBE program can be found at:

<http://www.sempra.com/about/supplier-diversity/> and
<http://www.cpuc.ca.gov/puc/supplierdiversity/>

¹ <https://www.caiso.com/participate/Pages/DistributedEnergyResourceProvider/Default.aspx>



SDG&E’s DBE Program representatives will provide a presentation during the bidder’s conference and DBEs can request additional information by contacting SDG&E at vendorrelations@semprautilities.com.

Products and Procurement Targets for SDG&E’s EcoShare II RFO:

Overall, SDG&E’s GTSR program is designed to ensure sufficient eligible capacity is available to meet customer demand of up to 59 MW, with 10 MW of the total program capacity being set aside for projects located in designated Environmental Justice areas. SDG&E is soliciting EcoShare projects that are classified as eligible renewable resources². Projects must be located within SDG&E’s service territory or in the Imperial Valley. Projects located in the Imperial Valley must be either directly connected or dynamically transferred via pseudo-tie into SDG&E’s service territory at the Imperial Valley substation by the California Independent System Operator (CAISO).

The procurement target for this RFO is listed in Table 2. As required by the GTSR Decisions, SDG&E will reserve 10 MW of its program target to projects sized between 500kW and 1 MW located in areas previously identified by the California Environmental Protection Agency as the most impacted and disadvantaged communities (Environmental Justice or EJ Reservation).³

Table 1. Summary of RFO Products

Product	Description
Renewable Portfolio Standard-eligible renewable resource of any technology	“Eligible renewable resource” is defined by the California Energy Commission (CEC). Eligibility criteria are set forth by the CEC in its Renewable Portfolio Standard Eligibility Guidebook.

Table 2. RFO Procurement Targets

Product	Target Capacity (MW)
EcoShare	<input type="checkbox"/>
Environmental Justice (EJ)	<input type="checkbox"/>

All Respondents must incorporate all estimated non-reimbursable interconnection costs that are allocated to the project in their offer pricing.

Deliverability – General:

² D.16-05-006 approves procurement any RPS-eligible renewable generation.

³ D.16-05-006 at 12

Respondents may provide bids for projects that will achieve Full Capacity Deliverability Status (FCDS), as defined by the CAISO Tariff and determined by the CAISO; or, for projects that will not achieve FCDS, provide bids for Energy Only. Respondents may also choose to provide both FCDS and Energy Only bids for the same project. Note, however, projects located in the Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO must submit Energy Only bids (see below for more detail). SDG&E intends to count FCDS projects towards SDG&E's Resource Adequacy (RA) obligations when possible. To achieve FCDS, a project must apply for a deliverability study to be conducted by the CAISO. Respondents with winning bids for FCDS projects must demonstrate that: (1) the project has been assessed for deliverability; or (2) the Respondent will request a deliverability assessment through the next available CAISO cluster window. This condition must be met for winning bids that will interconnect at either the distribution or transmission level. FCDS project bids that result in an executed and approved PPA must, during the project development process, obtain final interconnection studies (i.e., for transmission level projects, a final Phase II interconnection study report, or for distribution level projects, a final interconnection facilities study report (or Phase II study equivalent)).

Deliverability – Imperial Valley Dynamic Transfer Projects Only:

Projects located in the Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO must submit Energy Only bids. The Maximum Import Capability (MIC) for SDG&E from the Imperial Valley Substation is variable, and the ability of SDG&E to utilize this MIC is largely dependent upon SDG&E's current resource pool. An increase in MIC allocations from current temporary adjustment levels out of the Imperial Valley Substation is dependent on yet to be built projects and transmission upgrades in the Imperial Valley and CAISO areas.

Interconnection Site Map:

To help potential Respondents assess the feasibility of project sites, SDG&E has established an interactive website. The website contains SDG&E's transmission system (69 kV and above), distribution system, circuit and substation area maps that Respondents may use to research approximate locations for project interconnection sites. SDG&E does not guarantee that projects can interconnect at any illustrated map location. The map is only one tool to help respondents identify potential project interconnection sites. There are numerous factors that must be considered regarding interconnection, including project rated size, specific circuit and substation load, percent of generation on the circuit and substation, voltage, reactive power (VAR) and power factor considerations. Actual interconnection requirements and costs will be determined after detailed studies are performed for the specific location and project size. To view the interactive map, parties complete the registration form that can be accessed at: <http://sdge.com/builderservices/dgmap/>.

PPA/CPUC Approval:

Selected bidders will have 60 days from the date of notification of contract award to demonstrate fulfillment of the community interest requirements or the awarded capacity may be



assigned to the next highest ranking eligible and conforming EcoShare project in the solicitation. SDG&E highly recommends bidders begin fulfilling their community interest requirements prior to bid submission to ensure community interest requirements are met should they be selected by SDG&E.

Once the community interest requirement is deemed complete by SDG&E, selected bidders and SDG&E will execute the PPA, which is non-modifiable, and subject to CPUC approval. SDG&E reserves the right to seek CPUC approval for contracts individually or to file multiple contracts in one advice letter.

2.0 PROCUREMENT PROCESS

Respondents to this solicitation shall comply with the requirements described in this RFO document. By responding, Respondents are bound by the terms of this RFO. All conforming offers will be evaluated in accordance with the Evaluation Criteria listed in the RFO.

SDG&E plans to select up to MW of capacity in this RFO. SDG&E may decline to award contracts to projects whose bid price exceeds the price cap set by the CPUC.⁴

If the volume of bid capacity exceeds the capacity offered by SDG&E in the solicitation, capacity will be awarded first to the highest LCBF ranked Enhanced Community Renewables-Environmental Justice projects, within the price cap, up to the 10 MW EJ reservation amount⁵, and then all remaining projects which will be evaluated against one another on an LCBF basis up to the price cap. SDG&E reserves the right to not offer an PPA to Respondents if capacity targets have been met, regardless of whether those projects are within the CPUC price caps.⁶

SDG&E recognizes the impact of interconnection costs on successful project development. Distribution level interconnection costs and/or any transmission level interconnection costs allocated to the project and to be paid by the Respondent (i.e. non-reimbursable costs) should be incorporated in the offer price based on the estimates provided in the most recent completed interconnection agreement, interconnection study, or equivalent estimates provided pursuant to the Fast Track process if applicable.

Reimbursable network upgrade costs are ultimately borne by ratepayers and therefore should not be included in a Respondent's offer price. As described in the evaluation section, SDG&E will add the estimated reimbursable network upgrade costs (except for area deliverability network upgrades) resulting from the most recent completed interconnection agreement or interconnection study to the respondent's bid price when ranking bids.

SDG&E recognizes the importance of distinguishing between projects that provide FCDS value and those that do not. Respondents may provide bids for FCDS projects or Energy Only projects. Respondents may also choose to provide both FCDS and Energy Only pricing options for the same project. As noted above, Projects located in the Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by CAISO must submit Energy-Only bids.

⁴ The ECR-EJ project price cap is set at 200 percent of the maximum executed peaking contract price from SDG&E's most recent round of procurement for either the Renewable Auction Mechanism or Green Tariff Program. For ECR projects, 120 percent of the maximum executed peaking contract price from SDG&E's most recent round of procurement for either the Renewable Auction Mechanism or Green Tariff Program.

⁵ SDG&E's EJ reservation amount was set in D.15-01-051

⁶ D.16-05-006 at Ordering Paragraph 3.

For FCDS bids, Respondents must have obtained or plan to obtain a deliverability study from the CAISO to determine what, if any, upgrades are required for the project to achieve FCDS. SDG&E will incorporate the value of FCDS in its evaluation process.

If a bid that includes FCDS value is selected, the Respondent must demonstrate that: (1) the project has been assessed for deliverability; or (2) the Respondent will request a deliverability assessment through the next available CAISO cluster window. For winning FCDS project bids that result in an executed and approved PPA, during the project development process, the project is at a minimum required to obtain final interconnection studies (i.e. for transmission level projects, a final Phase II interconnection study report, or for distribution level projects, a final interconnection facilities study report (or equivalent)). Costs to facilitate such studies will be borne by the Respondent at no additional cost to SDG&E.

The PPA for FCDS projects will provide for one price to be paid before the product achieves FCDS (the PPA price less the Deliverability Value, i.e., the Energy Only Price) and a second (higher) price to be paid after the project achieves FCDS (FCDS Price). The PPA will also require that the project must achieve FCDS by January 1, 2027. Respondents that are not confident of their ability to achieve FCDS by January 1, 2027 should bid as Energy Only.

For bids that will not include FCDS value, Respondents do not need to obtain a deliverability study, and instead can proceed through the interconnection process as an Energy Only project. SDG&E will not include deliverability value in its evaluation of Energy Only bids, as described in Section 5 below. If selected, SDG&E would pay an Energy Only price for this product.

Bids that are selected will receive from SDG&E a form unexecuted PPA and Rider (available on SDG&E's RFO Website) redlined to reflect the relevant provisions that are applicable to the proposed project as indicated by Respondent in their Project Description Form. The executed PPAs will be filed for Approval with the CPUC via a Tier 2 advice letter.

Selected bidders will have 60 days from the date of notification of contract award to demonstrate fulfillment of the community interest requirements or the awarded capacity may be assigned to the next highest ranking project in the solicitation. SDG&E highly recommends bidders begin fulfilling their community interest requirements prior to bid submission to ensure community interest requirements are met should a bid be selected by SDG&E. Once the community interest requirement is deemed complete by SDG&E, (community interest forms, requirements and information can be found here: <http://www.sdge.com/environment/ecoshare-for-developers>) selected bidders and SDG&E will execute the PPA.

3.0 REQUIREMENTS

Respondents to this solicitation shall comply with the requirements herein. SDG&E, at its sole discretion, may change the terms, requirements and schedule of the solicitation. Respondents shall visit the RFO Website for announcements regarding any changes.

A. PARTICIPATION/ELIGIBILITY CRITERIA

Terms of participation are listed below. Respondents not meeting all minimum participation criteria shall be deemed ineligible and their offers will not be considered.

Resource:

1. Resources must be new facilities;
2. Resources must be an Eligible Renewable Energy Resource as defined in PUC Section 399.12.
3. Resources must be CEC-certifiable as an eligible renewable resource by the commercial operation date;
4. Resources must utilize a commercially proven technology;
5. Resources must sell its entire output and all plant attributes to SDG&E (full buy/sell) or sell all output and all plant attributes in excess of onsite load to SDG&E (excess sales);
6. The maximum project capacity for this solicitation is 20 MWs; the full output from the facility must be sold to SDG&E. That is, in this solicitation, SDG&E will not consider purchasing a portion of a project larger than 20 MW.
7. All renewable energy resources procured on behalf of EcoShare Customers from an EcoShare Project shall comply with the California Air Resources Board's (CARB) Voluntary Renewable Electricity Program. California-eligible greenhouse gas allowances associated with purchases from an EcoShare Project shall be retired on behalf of EcoShare Customers as part of the VRE Program.
8. Each EcoShare Project must meet Green-e[®] Energy eligibility criteria throughout the Delivery Term of the EcoShare PPA. An EcoShare respondent must provide to SDG&E an attestation stating that the EcoShare Project meets the marketing, reporting and other requirements of the Green-e[®] Energy Program to be able to produce Green-e[®] Energy eligible product in accordance with the Green-e[®] Energy National Standard in effect at the time of EcoShare PPA execution. The EcoShare respondent must agree to adhere to the Green-e[®] Energy program's marketing, disclosure and additional requirements as specified in the Green-e[®] Energy program website, the EcoShare PPA and/or SDG&E's website, which includes being subject to audits to ensure compliance with the Green-e[®] Energy Program. The EcoShare respondent must agree in the EcoShare PPA that it will complete, sign and return, on an annual basis or whenever required by SDG&E or the Center for Resource Solutions, the Green-e[®] Energy Attestation Form Generator Participating in a Tracking System form, or its successor form, to SDG&E. The EcoShare respondent will, throughout the Delivery Term of the EcoShare PPA, be responsible for all costs incurred to obtain and maintain Green-e[®] Energy certification and compliance.

9. To qualify as an Environmental Justice project, the generating facility must be located in one of the census tracts listed on SDG&E's website (<http://www.sdge.com/documents/list-eligible-census-tracts-environmental-justice-projects>) and meet the project capacity requirements below.

Project Capacity:

1. Project contract minimum size is 0.5 MWac nameplate capacity; and
2. Project contract maximum size is 20 MWac nameplate capacity.
3. EJ Project contract minimum size is 0.5 MWac nameplate capacity;
4. EJ Project contract maximum size is 1 MWac nameplate capacity.
5. SDG&E may, at its sole discretion, determine that the Project appears to be part of an installation larger than 20 MW in the same general location that has been or is being developed by the respondent or the respondent's Affiliates, or appears to be sharing facilities with one or more projects.

Location/Site Control:

1. Projects must be located within the service territory of SDG&E or located in the Imperial Valley and either directly connected or dynamically transferred via pseudo-tie into SDG&E's service territory at the Imperial Valley substation by the CAISO; and
2. The Respondent must have, at time of bidding, site control for the duration of the 10, 15 or 20-year power purchase agreement being bid. A copy of one of the following forms of site control must be provided:
 - a. direct ownership
 - b. a lease; or
 - c. an option to lease or purchase upon PPA approval. The option must be an exclusive option to the Bidder that will last until the completion of the RFO cycle.

Note: If notified of contract award, Respondent's site control documents must be: 1) in the name of the same entity that will execute the PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.

Interconnection:

Respondents must have completed a Phase II interconnection study (or distribution level equivalent) or executed an interconnection agreement or have passed the Wholesale Distribution Access Tariff (WDAT) or California Independent System Operator (CAISO) Fast Track screens and provide:

1. A copy of the most recent completed interconnection agreement or Phase II interconnection study with their offer, or Evidence of having passed the WDAT or CAISO Fast Track screen
2. Transmission level projects that that have a Phase II interconnection study but do not yet have a completed interconnection agreement are required to apply for interconnection through the CAISO process to obtain an interconnection agreement.

3. Distribution level projects that do not yet have a completed interconnection agreement will be required to apply through SDG&E's WDAT process.
4. For projects located in the Imperial Valley and dynamically transferred via pseudo-tie into the CAISO at the Imperial Valley substation, Respondents must have completed a Phase II interconnection study and provide documentation certifying the existence of dynamic transfer arrangements. Such documentation must have a sufficient level of detail for SDG&E to determine conformance with Category 1 content specifications, RFO requirements, and to ensure that the dynamic transfer arrangement conforms with all other California state laws and decisions issued by the California Public Utilities Commission, the California Energy Commission, and any other regulatory authorities with jurisdiction over utility procurement in California.

Note: If shortlisted, Respondent's interconnection documents must be: 1) in the name of the same entity that will execute the PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.

If you have a DERP resource, you must contact SDG&E via the RFO e-mail address before the question deadline to schedule a meeting about your interconnection status.

Respondent Experience:

1. The Respondent and/or members of the project development team must provide evidence of having completed, or begun construction, of a project using a technology similar to the offered technology, that is at least 500 kW nameplate capacity; and
2. The Respondent must maintain contractual control of the facilities and be responsible for development, land acquisition, permitting, financing and construction for the facilities. Respondents must provide a description of how operational control will be maintained.

Respondent Requirements:

1. The Respondent must provide an attestation to SDG&E that it has received and read Attachment 1 of the Community Choice Aggregation (CCA) Code of Conduct Decision (D.12-12-036), and will not circumvent it.
2. The Respondent must receive SDG&E approval of all marketing materials prior to submitting a bid into the solicitation.

Project Start Date:

1. Respondents must provide an anticipated delivery start date that is within 36 months after the expected CPUC Approval date (as indicated in the RFO schedule).

Other Incentives Not Permitted:

1. Respondents shall not have sought California Solar Initiative (CSI) incentives for the projects being offered and shall not plan to seek CSI incentives for the entire term of the PPA;
2. Respondents shall not have participated in the Net Energy Metering (NEM) Program for the projects being offered and shall not participate in the NEM Program for the entire term of the PPA; and
3. Respondents shall not have sought or received any other benefits from the small generator incentive programs, such as the Self-Generation Incentive Program, offered by the State of California or California utilities.

Community Interest:

1. Respondent must demonstrate fulfillment of its community interest requirements within 60 days of notification of contract award.
2. Respondent must comply with all community interest requirements as set forth in the GTSR Decisions. Community interest forms, requirements and additional information can be found here: <http://www.sdge.com/environment/ecoshare-for-developers>.
3. All of Respondent's Customers must meet the eligibility requirements as provided in Schedule EcoShare: http://regarchive.sdge.com/tm2/pdf/ELEC_ELEC-SCHEDS_EcoShare.pdf.

Securities Opinion:

1. Prior to or concurrent with PPA execution, the Respondent must provide an original legal opinion, in form and substance acceptable to SDG&E, and addressed to SDG&E, issued by a law firm listed in The American Lawyer annual "AmLaw 100" list for the then-current year stating that the transactions between the Respondent's Customers and the Respondent: (a) comply with securities law, and that SDG&E and its ratepayers are not at risk for securities claims associated with the Project, and (b) comply with one of the following (i) do not involve the offer or sale of "securities" under California or federal law, (ii) involve the offer or sale of securities that are registered under federal securities law and are qualified under California securities law, or (iii) involve the offer or sale of securities exempt from registration under federal securities law and qualification under California securities law, as applicable. The legal opinion may not contain any exceptions or qualifications unacceptable to SDG&E in its reasonable discretion. The Respondent must submit to SDG&E an attestation from an officer that the fact certificate provided by an officer to the law firm issuing the legal opinion is true and complete and that the Respondent's business model with its Customers is, and throughout the Delivery Term will be, as described in the legal opinion. SDG&E has no obligation to execute a PPA with the Respondent if the Respondent either fails to provide the required legal opinion or provides an opinion that does not meet the requirements described above.



B. POWER PURCHASE AGREEMENT CRITERIA

The PPA and Rider are non-negotiable, no changes will be accepted, other than for designated project specific options. Respondents must use the PPA as is and will accept all terms within.

C. CREDIT TERMS AND CONDITIONS

SDG&E has the unilateral right to evaluate and determine the credit-worthiness of the Respondent relative to this RFO. SDG&E's anticipated credit requirements are provided below. CPUC Approval Security is due **before or on** the signing date of the PPA. **If selected for the shortlist, Respondents must be prepared to post the CPUC Approval Security by the date the PPA is signed.** Credit support may be in the form of a Letter of Credit or cash. A pro forma Letter of Credit is contained within the PPA.

Collateral to Support PPAs	From	To	Security Amount
CPUC Approval Security	Contract Execution	CPUC Approval Date	The greater of \$100,000 or \$2.50/MWh multiplied by 2 times expected annual generation
Development Period Security	CPUC Approval Date	Date on which all Conditions Precedent are satisfied or waived	\$5.00/MWh multiplied by 2 times expected annual generation
Construction Period Security	Date on which all Conditions Precedent are satisfied or waived	COD	\$10.00/MWh multiplied by 2 times expected annual generation
Delivery Term Security	COD	End of Term	\$20.00/MWh multiplied by 2 times expected annual generation

4.0 RFO RESPONSE INSTRUCTIONS

Respondents must submit the offer electronically via PowerAdvocate®, and attach all required forms and bid materials to the offer. Offerors intending to submit an Offer but who do not yet have an existing account must first register to create a username/password to receive access to the event. See below for instructions to log in/register:

Logging In

You access the PowerAdvocate platform via a web browser.

To log in

1. Open a web browser and go to www.poweradvocate.com.
PowerAdvocate functions in most web browsers; however, using browsers other than Internet Explorer (IE) version 6 or higher may cause certain functionality to work unexpectedly. Should you encounter problems, PowerAdvocate support may be unable to provide assistance until the issue has been replicated in a supported version of Internet Explorer.
2. Click **Login**.
The Login page appears; you may wish to bookmark it for quick access.
3. Enter your account **User Name** and **Password**.
Both are case-sensitive.
If you do not have an account, go to poweradvocate.com and click the **Registration** link at the top of the page. If you have an account but do not remember your user information, click **Forgot User Name** or **Forgot Password** and they will be emailed to you.
4. Click **Login**.

First-time users must register as a Supplier using the instructions above and the referral information below to access the RFO event:

Referral Information

Are you registering for a specific Event: * Yes No, I would simply like to register.

Who referred you to this Event: *

Name of that individual's company: *

Name or description of the Event: *

Users with an existing account may request access to the event using the link below:



Required Forms and Bid Materials:

If the Respondent is submitting offers for more than one project, each project must be submitted in a separate compressed ZIP archive with its required forms. Forms and compressed ZIP archives must be clearly labeled to identify the project name and the submitted forms. All forms are located on the RFO website.

1. **Offer Form** – There is no limit on the number of Forms that can be submitted. Therefore, respondents are encouraged, but not required, to submit additional offers for our consideration with shorter tenors or with escalators.
2. **Interconnection Agreement or Phase II Interconnection Study (or distribution level equivalent) and / or Fast Track Documentation** – Submit a copy of the most recent completed interconnection agreement, Phase II interconnection study or equivalent Fast Track documentation. For Projects located in Imperial Valley and dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO, submit copies of a completed Phase II interconnection study and provide documentation certifying the existence of the dynamic transfer arrangements.
3. **Site Control Documentation** – Submit copies of site control documents demonstrating: a) direct ownership; b) a lease; or c) an option to lease or purchase upon PPA approval (must be an exclusive option to the Bidder that will last until the completion of the RFO cycle).
4. **Site Maps** – Submit copies of all project maps showing location, facilities, layout, Interconnection, etc. and the Project single line diagram.
5. **Resource Report** - please submit a verifiable fuel resource plan
6. **Full PVSyst Model (Solar Only)** – the full PVSyst file must be submitted by exporting the entire project that contains the prj, met, inv, pan, etc. files.

The Offer Form must be in Excel format (not in PDF) and must not be modified from the original version, unless entering information into an optional field. The interconnection, maps, and site control documentation must be submitted in PDF format.

All offer materials submitted shall be subject to the confidentiality provisions of this RFO.

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of any forms. During all stages of the RFO process, SDG&E reserves the right to request additional information from individual Respondents or to request any Respondent to submit supplemental materials in fulfillment of the content requirements of this RFO or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFO.

Respondents offering the same projects to multiple solicitations or other contracting opportunities are hereby advised that if SDG&E notifies Respondent that their offer is selected as a winning bid, the Respondent must decide bidder's acceptance date list in the RFO, whether to accept its standing as a winning bidder and immediately withdraw their offer from all other solicitations/contracting opportunities or risk being disqualified from continuing participation in the program. Respondents shall confirm such withdrawal by submitting to SDG&E a copy of the



written correspondence sent to all other solicitations/opportunities pertaining to such withdrawal while granting SDG&E permission to contact the other solicitors to confirm the withdrawal. ALL OFFERS SHALL BE VALID AND BINDING UPON THE RESPONDENT AFTER BEING SELECTED AS A WINNING BIDDER UNTIL CONTRACT EXECUTION.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFO PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E IN ITS SOLE DISCRETION.

5.0 EVALUATION CRITERIA

SDG&E will utilize all required forms and narratives, as provided pursuant to Section 4, to evaluate all offers. Respondents are responsible for the accuracy of all discussions, figures and calculations they submit. Errors discovered during evaluation may impact a Respondent's standing on the short-list.

Respondents must conform to minimum participation criteria and minimum resource criteria to be considered. Each Respondent will submit an offer for the Product, described in Table 1. Every offer submitted in response to this RFO will go through a conformance check to ensure that the requirements are met. Conforming offers will then go through a Least-Cost / Best-Fit (LCBF) / Net Market Value ("NMV") analysis.

SDG&E will periodically brief the members of the PRG and / or CAM PRG during the various stages of evaluation. Upon completion of SDG&E's evaluation process, SDG&E will brief the PRG and/or CAM PRG members regarding SDG&E's recommendations for its short-list. Based upon the comments and recommendations received from the PRG, SDG&E may modify the preliminary short-list as necessary.

A bid may be rejected due to nonconformance of requirements. SDG&E may require clarifying information for certain projects in addition to those specified above; failure to provide such clarifying information timely, or providing information which conflicts with original bid documents, may also result in a bid being rejected due to nonconformance.

QUANTITATIVE EVALUATION

SDG&E evaluates and ranks offers based on Least-Cost/Best-Fit ("LCBF") principles. The LCBF analysis evaluates both quantitative and qualitative aspects of each offer to estimate its value to SDG&E's customers and its relative value in comparison to other offers. The valuation of an offer considers both benefits and costs. The primary quantitative metric used in SDG&E's LCBF process is a Net Market Value ("NMV") calculation. The NMV calculation is a quantification of the value of an offer when compared to a set of price benchmarks for capacity, electrical energy, ancillary services, natural gas, renewable attributes and Green House Gas ("GHG") compliance, as applicable. Additionally, SDG&E may consider portfolio effects (costs or benefits) associated with the offer on the portfolio. These benefit and cost components are netted and discounted to yield a NMV for each offer. The NMV of an offer is compared to the NMV of other offers to determine whether that offer is one of the highest ranked.

SDG&E evaluates the quantifiable attributes of each offer individually. These individual attributes will include: capacity benefits, energy benefits, renewable attribute benefits, ancillary service benefits, contract payments, GHG emissions and costs, congestion costs, and transmission losses and costs. Each of these attributes is described below.

A. NET CAPACITY BENEFITS

Capacity benefits are calculated by comparing the capacity costs in the offer to the capacity value to SDG&E.

B. NET ENERGY AND ANCILLARY SERVICES BENEFITS

The energy benefit valuation is an optimized energy dispatch profile multiplied by the corresponding energy forward price curves. The benefits provided by resources with greater flexibility will be reflected here as they can be dispatched to capture the most beneficial price increments. These benefits are netted against the variable costs associated with generating the energy such as fuel costs and variable O&M to produce the Net Energy Benefit.

C. TRANSMISSION/DISTRIBUTION SYSTEM IMPACTS

Non-reimbursable interconnection costs must be incorporated in the offer pricing, and reimbursable network upgrade costs (Network Upgrade Costs) that benefit the grid broadly and are ultimately borne by ratepayers will be considered in the economic evaluation of the offer. SDG&E requires at least Phase II study (or distribution level equivalent) results as the basis for including appropriate interconnection cost estimates in its evaluation.

D. CONTRACT COSTS

The contract costs are determined by multiplying the TOD-adjusted Offer Price by the expected delivered energy profile for each year.

E. RICA

D.14-11-042 requires the use of a Renewable Integration Cost Adder as part of SDG&E's LCBF for RPS procurement. Currently, the Interim RICA, set forth in the Decision is being used. The RICA currently applies only to Solar and Wind resources. This "cost" component of the NMV represents the expected increase in SDG&E's Flex RA procurement that would be required by adding the resource to SDG&E's portfolio.

QUALITATIVE EVALUATION

Qualitative factors and benefits will be used to determine the projects that are the "Best Fit" for SDG&E's portfolio. Such considerations as resource and/or project viability and developer experience will be considered, among other criteria or factors. SDG&E may use these factors to determine advancement onto the short list or evaluate tie-breakers, if any. Based on these factor, SDG&E reserves the right to select a bid out of rank order.⁷

BID SELECTION PROCESS

⁷ SDG&E's Least-Cost Best-Fit Analysis "...is intended to optimize SDG&E's procurement decisions by minimizing costs and maximizing value." SDG&E's Final 2015 RPS Plan, p. 19. *See also* Appendix 9 Least-Cost Best-Fit, p. 7 of SDG&E's 2015 RPS Plan which allows SDG&E to differentiate between offers by reviewing their rate impacts and portfolio fit.

SDG&E plans to select up to [] MW of capacity. SDG&E may decline to award contracts to projects whose bid price exceeds the price cap set by the CPUC.⁸ SDG&E will award contracts to all projects whose bid price is at or below the price cap up to the amount of capacity that has been offered in the solicitation; provided that in the event that the volume of bid capacity exceeds the capacity offered by SDG&E in the solicitation, capacity Offers will be awarded first to the most highly ranked (LCBF) Enhanced Community Renewables-Environmental Justice projects, within the price cap, up to the 10 MW EJ reservation amount⁹, and then all remaining projects which will be evaluated against one another on an LCBF basis using the LCBF methodology as described above. SDG&E reserves the right to not offer a PPA if capacity targets have been met, regardless of whether those projects are within the caps.

BID CONFORMANCE EVALUATION

In addition to the quantitative elements described above, SDG&E may also reject an offer if:

1. SDG&E uncovers evidence of market manipulation in the auction process;
2. SDG&E cannot confirm the projected deliveries;
3. The Respondent does not provide adequate evidence it meets minimum participation criteria, or it appears that Respondent subdivided a larger project to circumvent the 20 MW project size limit. SDG&E will not enter into PPAs with multiple projects that utilize the same interconnection queue number. In other words, SDG&E will not execute more than one PPA if any of the other capacity utilizing the same interconnection study or queue position is already under contract through RAM or another program;
4. There is a question as to whether the projects meet minimum resource criteria;
5. Acceptance of the offer would cause excessive reliance upon a single provider in the solicitation, or in SDG&E's overall renewable energy portfolio (SDG&E shall provide any details of such seller concentration limit in the Tier 2 advice letter containing the executed contracts);
6. The Respondent cannot fulfill the terms and conditions of the PPA and; and/or,
7. The Respondent is unable to comply with RFO timing and other solicitation requirements.

⁸ The ECR-EJ project price cap is set at 200 percent of the maximum executed peaking contract price from SDG&E's most recent round of procurement for either the Renewable Auction Mechanism or Green Tariff Program, and for ECR projects, 120 percent of the maximum executed peaking contract price from SDG&E's most recent round of procurement for either the Renewable Auction Mechanism or Green Tariff Program.

⁹ SDG&E's EJ reservation amount was set in D.15-01-051



6.0 ECOSHARE RFO SCHEDULE

The following schedule and deadlines apply to this RFO and are provided for guidance purposes only. **SDG&E reserves the right to revise this schedule at any time and in SDG&E's sole discretion.** Respondents are responsible for monitoring the RFO Website that will have the latest updated schedules and possible amendments to the RFO or the solicitation process.

NO.	ITEM	DATE
1.	RFO Issued	<input type="checkbox"/>
2.	Bidder's Conference; 1:00 PM to 4:00 PM, PPT	<input type="checkbox"/>
3.	DEADLINE TO SUBMIT QUESTIONS	<input type="checkbox"/>
4.	Answers to all questions will be posted on SDG&E's website	<input type="checkbox"/>
5.	DEADLINE TO SUBMIT OFFERS/CLOSING DATE Offers must be uploaded to PowerAdvocate® by no later than 12 P.M. (i.e. NOON) Pacific Standard Time	<input type="checkbox"/>
6.	NOTIFICATION TO WINNING and CONTINGENT BIDDERS	<input type="checkbox"/>
7.	BIDDERS ACCEPTANCE/WITHDRAWAL LETTER due from Winning Bidders indicating: a) Withdrawal from SDG&E's solicitation; OR b) Acceptance of standing as a winning bid; withdrawal from participating in any other solicitation and evidence of withdrawal notice to all other solicitors	<input type="checkbox"/>
8.	Deadline for winning and contingent bidders to demonstrate fulfillment of customer participation requirements (60 days from Bidder's acceptance)	<input type="checkbox"/>
9.	SDG&E issues appreciation notices to unsuccessful Respondents	<input type="checkbox"/>
10.	Execute PPAs	<input type="checkbox"/>
11.	SDG&E submits Tier 2 Advice Letter with PPAs to CPUC for approval	<input type="checkbox"/>
12.	Anticipated CPUC approval (prior to any appeal and/or suspension)	<input type="checkbox"/>

CONTINGENT BIDDERS

At the time of notification to winning bidders, SDG&E may also notify certain contingent bidders of their contingent status. Such contingent bidders may be offered PPAs if selected winning bidders decline their winning position with SDG&E or fail to meet the customer participation requirements. Should a contingent bidder be selected and offered a PPA, the contingent bidder will have the same amount of time for each of the following steps as if it was notified originally. For example, contingent bidders must also meet customer participation requirements within 60 days of being notified as to their contingent bidder status to be eligible to execute an PPA.

BIDDER'S CONFERENCE

SDG&E will host one bidder's conference as listed on the RFO schedule and RFP website via web conference (e.g. WebEx). Participation is NOT mandatory to submit an offer. Please monitor the RFO Website periodically for updates and participation instructions.

7.0 RFO WEBSITE AND COMMUNICATION

The RFO and all subsequent revisions and documents are available for download from the RFO Website. Potential Offerors are responsible for monitoring the RFO Website for subsequent updates, notices and postings.

All questions or other communications regarding this RFO must be submitted via email to email address listed below and MUST CC the IE. SDG&E will not accept questions or comments in any other form. SDG&E will not accept questions or comments in any other form, except at the bidder's Conference. Question submitted after the deadline as specified in RFO Schedule will only be answered at the sole discretion of SDG&E or the IE. All questions and their answers will be posted publicly on this website anonymously soon after receipt. We cannot respond directly to or confidentially to any questions.

8.0 REJECTION OF OFFERS

SDG&E SHALL REVIEW EACH OFFER ON A NON-DISCRIMINATORY BASIS AND SHALL EVALUATE ALL OFFERS IN GOOD FAITH. SDG&E MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFO EVEN AFTER ONE OR MORE OFFERS HAVE BEEN SELECTED AS A WINNING BID. SDG&E RESERVES THE RIGHT AT ANY TIME, AT ITS SOLE DISCRETION, TO ABANDON THIS RFO PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF OFFERS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT ANY OFFER OR TO ENTER INTO ANY DEFINITIVE AGREEMENT, TO EVALUATE THE QUALIFICATIONS OF ANY RESPONDENT OR THE TERMS AND CONDITIONS OF ANY OFFER, OR TO REJECT ANY OR ALL OFFERS, ALL WITHOUT NOTICE AND WITHOUT ASSIGNING ANY REASONS AND WITHOUT LIABILITY OF SEMBRA ENERGY, SDG&E, OR ANY OF THEIR SUBSIDIARIES, AFFILIATES, OR REPRESENTATIVES TO ANY RESPONDENT. SDG&E SHALL HAVE NO OBLIGATION TO CONSIDER ANY OFFER.

9.0 CONFIDENTIALITY

EXCEPT WITH THE PRIOR WRITTEN CONSENT OF SDG&E, RESPONDENTS MAY NOT DISCLOSE (OTHER THAN BY ATTENDANCE ALONE AT ANY MEETING TO WHICH MORE THAN ONE RESPONDENT IS INVITED BY SDG&E) TO ANY OTHER RESPONDENT OR POTENTIAL RESPONDENT THEIR PARTICIPATION IN THIS RFO, AND RESPONDENTS MAY NOT DISCLOSE, COLLABORATE ON, OR DISCUSS WITH ANY OTHER RESPONDENT, OFFER STRATEGIES OR THE SUBSTANCE OF OFFERS, INCLUDING WITHOUT LIMITATION THE PRICE OR ANY OTHER TERMS OR CONDITIONS OF ANY INDICATIVE OR FINAL OFFER.

SDG&E WILL USE THE HIGHER OF THE SAME STANDARD OF CARE IT USES WITH RESPECT TO ITS OWN PROPRIETARY OR CONFIDENTIAL INFORMATION OR A REASONABLE STANDARD OF CARE TO PREVENT DISCLOSURE OR UNAUTHORIZED USE OF RESPONDENT'S CONFIDENTIAL AND PROPRIETARY INFORMATION THAT IS LABELED AS "PROPRIETARY AND CONFIDENTIAL" ON THE OFFER PAGE ON WHICH THE PROPRIETARY INFORMATION APPEARS ("CONFIDENTIAL INFORMATION"). RESPONDENT SHALL SUMMARIZE ELEMENTS OF THE OFFER(S) IT DEEMS CONFIDENTIAL. CONFIDENTIAL INFORMATION MAY BE MADE AVAILABLE ON A "NEED TO KNOW" BASIS TO SDG&E'S DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS, CONSULTANTS, THE INDEPENDENT EVALUATOR, AGENTS AND ADVISORS ("REPRESENTATIVES") FOR THE PURPOSE OF EVALUATING RESPONDENT'S OFFER, BUT SUCH REPRESENTATIVES SHALL BE REQUIRED TO OBSERVE THE SAME CARE WITH RESPECT TO DISCLOSURE AS SDG&E.

NOTWITHSTANDING THE FOREGOING, EACH RESPONDENT ACKNOWLEDGES AND EXPRESSLY AUTHORIZES SDG&E TO PUBLICLY DISCLOSE THE FOLLOWING INFORMATION IN THE ADVICE LETTER SEEKING APPROVAL OF EcoShare PPAs, AS REQUIRED BY THE CPUC: (1) NAMES OF THE COMPANIES THAT SUBMITTED OFFERS INTO SDG&E'S EcoShare RFO; (2) NUMBER OF OFFERS RECEIVED BY EACH COMPANY; (3) NUMBER OF OFFERS RECEIVED AND SELECTED AS WINNING BIDS BY SDG&E; (4) PROJECT SIZE; (5) PARTICIPATING TECHNOLOGIES; (6) THE NUMBER OF PROJECTS THAT PASSED THE PROJECT VIABILITY SCREEN; (7) LOCATION OF BIDS BY COUNTY LEVEL SHOWN IN A MAP FORMAT; AND (8) THE PROGRESSION OF EACH EXECUTED CONTRACT'S PROJECT DEVELOPMENT MILESTONES. SDG&E MAY DISCLOSE ANY OF THE CONFIDENTIAL INFORMATION TO COMPLY WITH ANY LAW, RULE, OR REGULATION OR ANY ORDER, DECREE, SUBPOENA, REQUEST OR RULING OR OTHER SIMILAR PROCESS OF ANY COURT, SECURITIES EXCHANGE, CONTROL AREA OPERATOR, GOVERNMENTAL AGENCY OR GOVERNMENTAL OR REGULATORY AUTHORITY AT ANY TIME EVEN IN THE ABSENCE OF A PROTECTIVE ORDER, CONFIDENTIALITY AGREEMENT OR NON-DISCLOSURE AGREEMENT, AS THE CASE MAY BE, WITHOUT NOTIFICATION TO THE

RESPONDENT AND WITHOUT LIABILITY OR ANY RESPONSIBILITY OF SDG&E TO THE RESPONDENT.

IT IS EXPRESSLY CONTEMPLATED THAT MATERIALS SUBMITTED BY A RESPONDENT IN CONNECTION WITH THIS RFO WILL BE PROVIDED TO THE CPUC, THE CEC, AND/OR SDG&E'S PROCUREMENT REVIEW GROUP (PRG). SDG&E WILL REQUEST CONFIDENTIAL TREATMENT PURSUANT TO APPLICABLE LAW, OF ANY CONFIDENTIAL INFORMATION PROVIDED TO SDG&E BY RESPONDENT IN CONNECTION WITH THE RFO AND SUBMITTED BY SDG&E TO THE CPUC AND/OR CEC FOR THE PURPOSES OF OBTAINING REGULATORY APPROVAL. SDG&E WILL PROVIDE SUCH INFORMATION TO ITS PRG SUBJECT TO THE TERMS OF ITS NON-DISCLOSURE AGREEMENT WITH ITS PRG. SDG&E CANNOT, HOWEVER, ENSURE THAT THE CPUC OR CEC WILL AFFORD CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT MEMBERS OF ITS PRG WILL COMPLY WITH THE TERMS OF THE APPLICABLE NON-DISCLOSURE AGREEMENT.

SDG&E, ITS REPRESENTATIVES, SEMBRA ENERGY, AND ANY OF THEIR SUBSIDIARIES DISCLAIM ANY AND ALL LIABILITY TO A RESPONDENT FOR DAMAGES OF ANY KIND RESULTING FROM DISCLOSURE OF ANY OF RESPONDENT'S CONFIDENTIAL INFORMATION.

10.0 RPS PROGRAM PARAMETERS

CALIFORNIA RPS PROGRAM

California's Renewable Portfolio Standard (RPS) Program was originally adopted in 2002 and is codified at Public Utility Code sec 399.11, *et seq.*¹⁰ In adopting the RPS legislation, the Legislature specifically found and declared that increasing California's reliance on renewable energy resources promotes the purpose of and may accomplish each of the following: This program supplements the RPS Program goals to:

- Increase the diversity, reliability, public health and environmental benefits of the energy mix
- Promote stable electricity prices
- Protect public health and improve environmental quality
- Stimulate sustainable economic development and create new employment opportunities
- Reduce reliance on imported fuels
- Ameliorate air quality problems
- Improve public health by reducing the burning of fossil fuels

Current law requires Investor Owned Utilities (IOUs) to serve 33% of its retail sales load with RPS-eligible renewable energy by 2020. SDG&E will comply with all CPUC decisions governing RPS procurement. These decisions are publicly available on the CPUC's website at <http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>.

This RFO is being conducted in compliance with the D.14-11-042 and all relevant statutory and regulatory directives, including D.15-01-051 and D.16-06-006 (the GTSR Decisions). Requirements set forth within the law and all directives shall be incorporated herein by reference. A full text of the law and relevant CPUC decisions can be downloaded from the CPUC website. Respondents are encouraged to review all RPS, RAM, and GTSR-related CPUC issued directives available on the same Internet website, and are responsible for understanding and abiding by all RPS, RAM, and GTSR provisions.

RPS ELIGIBILITY CRITERIA

Respondents successfully signing agreements with SDG&E must warrant that the resources being offered in response to this solicitation are certifiable as an "eligible renewable resource" by the California Energy Commission (CEC). Eligibility criteria are set forth by the CEC in its Renewable Portfolio Standard Eligibility Guidebook. The CEC guidebook can be downloaded from the following internet website: <http://www.energy.ca.gov/renewables/documents/index.html>. Respondents are encouraged to review all RPS-related, CEC issued directives available on the same Internet website and are responsible for understanding and abiding by all RPS provisions. All requirements set forth within the CEC's guidebooks and all RPS-related documents shall be incorporated herein by reference.

¹⁰ See, Senate Bill (SB) 1078 (Stats. 2002 Ch. 516), as amended by SB 107, (Stats. 2006, Ch. 464).

Respondents are encouraged, although not required, to apply for pre-certification from the CEC in advance of submitting an offer. Pre-certification forms are available from the above-entitled guidebook. An excerpt of the eligibility requirements is provided at the end of this section.

PROCUREMENT REVIEW GROUP

The Procurement Review Group (PRG), a CPUC-endorsed entity, is composed of non-market bidders such as ratepayers' advocacy groups, state energy and water commissions, power authorities, utility-related labor unions and other non-commercial, energy-related special interest groups. Each IOU has its own PRG. The PRG is charged with overseeing the IOU's procurement process, reviewing procedural fairness, examining overall procurement prudence and providing feedback during all stages. From RFO language development to Offer evaluation to contract negotiation, each IOU briefs its PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing confidential Offer information to the PRG is required during PRG briefings in accordance with Section 9 ("Confidentiality"). Each Respondent must clearly identify, as part of its Offer, what type of information it considers to be confidential.

INDEPENDENT EVALUATOR

The CPUC requires each IOU to use an Independent Evaluator ("IE") to evaluate and report on the IOU's entire solicitation, evaluation, and selection process. The IE will review SDG&E's implementation of the RFO process and final selections. The IE also makes periodic presentations regarding its findings to the IOU and the IOU's PRG, including the CPUC Energy Division staff. The intent of these IE presentations is to preserve the independence of the IE by ensuring free and unfettered communication between the IE and the CPUC, as well as an open, fair, and transparent process that the IE can affirm.

SDG&E is committed to ensuring an open and transparent solicitation, and to providing a fair, reasonable and competitive process. All correspondences regarding this RFO MUST cc the IE.

The IE will review and validate methods of processing the Offer information and evaluating Offers to ensure that the evaluation is done fairly with no preferential treatment to any Offeror, monitoring IOU solicitation and discussion processes, valuation methodologies, selection processes, reviewing Offers to assure competitive process and no market collusion or market manipulation by some Offerors, and reporting to the Commission on the auction process. The IE is privy to viewing all Offers, invited to participate in all discussions, reviews all Offers, reviews Offer scoring and selection, and must be copied on all correspondence between each IOU and their Offerors.

Affiliate Offers will be closely examined to ensure the Offer is evaluated in the same manner as the other Offers. If an Affiliate Offer were to make the short-list, then all communications and negotiations will be closely monitored and assessed by the IE to ensure no preferential terms and conditions are included in the Offer. An Affiliate Offer is one where the Offeror is an affiliate or if the Scheduling Coordinator of the Offeror is an affiliate.

11.0 SDG&E BACKGROUND

[SDG&E](#) is a regulated public utility that provides safe and reliable energy service to 3.4 million consumers through 1.4 million electric meters and 868,000 natural gas meters in San Diego and southern Orange counties. The utility's area spans 4,100 square miles. SDG&E is committed to creating ways to help customers save energy and money every day. SDG&E is a subsidiary of [Sempra Energy](#) (NYSE: SRE), a Fortune 500 energy services holding company based in San Diego. Connect with SDG&E's Customer Contact Center at 800-411-7343, on [Twitter](#) (@SDGE) and [Facebook](#).





APPENDIX 12.A

2017 ECR RAM PPA RIDER

**ENHANCED COMMUNITY RENEWABLES PROGRAM
RIDER AND AMENDMENT TO THE RENEWABLE AUCTION MECHANISM
POWER PURCHASE AGREEMENT**

between

SAN DIEGO GAS & ELECTRIC COMPANY

and

[NAME OF SELLER]

This Enhanced Community Renewables (ECR) Rider and Amendment (“ECR Rider and Amendment”) to the ECR RAM PPA (as that term is defined below) is entered into between San Diego Gas & Electric Company, a California corporation (“Buyer”), and **[Name of Seller]**, a **[Legal Status of Seller]** (“Seller”), dated as of _____, 2016 (“Effective Date”). Buyer and Seller are hereinafter sometimes referred to individually as a “Party” and jointly as the “Parties”. Capitalized terms used herein and not otherwise defined in this Rider shall have the meanings ascribed to such terms in the ECR RAM PPA (as that term is defined below).

RECITALS

The Parties enter into the ECR Rider and Amendment with reference to the following facts:

- A. Concurrently herewith, Buyer and Seller enter into that certain Green Tariff Renewable Auction Mechanism Power Purchase Agreement (as amended from time to time, the “ECR RAM PPA”), under which, among other things, Seller will sell to Buyer, and Buyer will purchase from Seller, Product upon commencement of the Delivery Term.
- B. The Parties seek to modify the ECR RAM PPA with this ECR Rider and Amendment (together, the “Agreement”) in order to incorporate provisions related to the Enhanced Community Renewables program ***[If DERP applies, add:*** and to permit Distributed Energy Resource Providers as defined by the CAISO Tariff (“DERP”)].
- C. ***[If DERP applies, add:*** The CPUC in D. 16-05-006, O.P. 5, ordered that at such time as the California Independent System Operator expanded market eligibility to sub-500 kilowatt projects, the Enhanced Community Renewables projects procurement should include eligibility for to such projects. The Federal Energy Regulatory Commission ordered on June 2, 2016, that the California Independent System Operator allow for market participation by providers of aggregations of distributed sub-500 kilowatt energy resources.]

AGREEMENT

In consideration of the promises, mutual covenants and agreements hereinafter set forth, and for other good and valuable consideration, as set forth herein, the Parties agree to amend the ECR RAM PPA as follows:

[If DERP applies, add: This ECR Rider and Amendment permits Seller to aggregate Distributed Energy Resources (DER), as such term is defined by the CAISO Tariff, to form one “Project” with one CAISO Resource ID (as such term is defined in the CAISO Tariff) under this Agreement. All references to “Project” shall refer to the resources in the aggregate. Except for the generation resource specific terms

contained in this ECR Rider and Amendment, all provisions of the Agreement pertaining to a Project, including but not limited to scheduling, Delivery Point, excess deliveries from Article 4 of the ECR RAM PPA, Guaranteed Energy Production, CAISO charges, and Non-Availability Charges shall apply to the Project in the aggregate. Seller shall provide Buyer with all information necessary to implement this Agreement for each DERP resource, including:

- (a) [INSERT name of substation or method of identifying the location of interconnection to Transmission Provider's electric system. First point of interconnection must be within Buyer's service territory.] All resources composing the Project must have and maintain a valid interconnection agreement applicable to DERPs.
- (b) [INSERT Information for identifying [Distributed Energy Resource Aggregation] location on CAISO-Controlled Grid for DERP resources.]. Seller shall not modify or change the location of any resource composing the Project without Buyer's prior written consent.
- (c) [INSERT capacity and all other production information for each resource composing the Project.]
- (d) Execute and maintain all CAISO and CPUC agreements, and all interconnection related agreements, including [INSERT], related to the Project, DERP providers and each resource composing the Project under this Agreement.

a. All exhibits shall include resource specific detail./

1. The following changes are made to Section 1.1:

a. Delete the definition of Commercial Operation Date and replace with the following:

“Commercial Operation Date” means the first calendar day of the month following the date on which Seller achieves Commercial Operation for the Project. ***[For existing Project in operation for which CPUC Approval is all that is needed for effectiveness of the Agreement, delete and insert:*** “Commercial Operation Date” means the later of (a) the first calendar day of the month following the date that is thirty (30) days after the date of satisfaction or waiver of the Condition Precedent in Section 2.3(a) or (b) [insert date].”]

b. ***[If DERP applies, add:*** Delete the definition of Project and replace with the following:

“Project” means the [total aggregation of each and every] [insert technology] resource, the Site(s) at which the [resource is or resources are] located, the utility interconnection facilities up to the point of change in ownership to the applicable utility's facilities, and the other assets, tangible and intangible, that compose the resources as more particularly described on Exhibit A./

c. The following defined terms are added, in alphabetical order, to Section 1.1:

“Customer” means a bundled utility customer in Buyer's service territory who meets the eligibility requirements and /or (i) receives service pursuant to Schedule ECR and (ii) enters into a CSA with Seller.

“Customer-Seller Agreement” or “CSA” means that agreement to be executed between Customer and Seller in order for Customer to Subscribe to Seller's Facility, which shall be subject to those requirements set forth within Section 13 of this Agreement. Buyer shall not be a party to, and is prohibited from requesting pricing information contained in, the CSA.

“Default Load Aggregation Point” or “DLAP” has the meaning set forth in the CAISO Tariff.

“Default Load Aggregation Point Price” or “DLAP Price,” as determined by the CAISO, means the hourly Integrated Forward Market DLAP Locational Marginal Price for the applicable Transmission Access Charge Area, as defined in the CAISO Tariff.

“Disclosure Documents” means those disclosure documents required by Green-e[®] Energy to be provided by Seller to Customers and potential Customers, as they may be amended, supplemented or replaced from time to time, as set forth on the Green-e[®] Energy website at http://green-e.org/verif_docs.html or any successor webpage.

“ECR Tariff” means Buyer’s Schedule ECR Enhanced Community Renewables Tariff, as may be amended from time to time, as posted on Buyer’s website at <http://www.sdge.com>.

“FTC” means the Federal Trade Commission.

“FTC Green Guides” means those guiding documents published on the FTC website intended to provide guidance on 1) general principles applicable to environmental marketing claims, 2) how consumers are likely to interpret particular claims and how marketers can substantiate these claims, and (3) how marketers can qualify their claims to avoid deceiving customers.

“Green-e[®] Energy” means the national certification program for renewable energy administered by the Center for Resource Solutions, as such program may be amended, supplemented or otherwise changed from time to time, and about which information can be found at <http://www.green-e.org/> or any successor webpage.

“Minimum Subscription Requirement” has the meaning set forth in Section 3.1(f)(iii).

“Renewable Energy Credit Market Price” means \$10/MWh, pursuant to D.16-05-006 as may be amended from time to time.

“Subscribed Capacity” has the meaning set forth in Section 3.1(f)(i).

“Subscribed Delivered Energy” means the quotient of Subscribed Capacity divided by Contract Capacity, multiplied by Delivered Energy in all hours for the TOD Period being calculated, measured in MWh.

“Subscription”, “Subscribe”, “Subscribed” and other grammatical variations thereof means:

a) In the case of a capacity-based subscription business model employed in the CSA, the subscription that a Customer has signed up for, expressed in kW.

b) In the case of an energy-based subscription business model employed in the CSA, the subscription that a Customer has signed up for (expressed in kWh), multiplied by the Contract Capacity (expressed in kW), divided by the Contract Quantity (expressed in kWh/year), multiplied by 12 months/year, the product of which shall be equal to the Subscription of the Customer, expressed in kW.

Example: Subscription = Load x Contract Capacity / Contract Quantity x 12 months

“Subscription Information and Bill Credit Instructions” mean the information required to be provided by Seller to Buyer in accordance with Section 3.1(m) as set forth in the form provided in Appendix J.

“Unsubscribed Capacity” has the meaning set forth in Section 3.1(f)(ii).

“Unsubscribed Delivered Energy” means the quotient of Unsubscribed Capacity divided by Contract Capacity, multiplied by Delivered Energy in all hours for the TOD Period being calculated, measured in MWh.

“Unsubscribed Energy Price” means the DLAP Price plus the Renewable Energy Credit Market Price.

d. ***If DERP applies:*** The following definitions are modified as follows:

- i. In the definition of Delivered Energy, replace reference to “CAISO revenue meter” with “CAISO approved DERP meter”.
- ii. In the definition of Electrical Losses, replace reference to “CAISO revenue meter” with “CAISO approved DERP meter”./

2. ***If DERP applies, add:*** Insert the phrase “the aggregated resources composing the Project” immediately after the phrase “a refundable cost for” in Section 2.3(b)(ii)./

3. Insert the following subsections after Section 3.1(f):

- “(i) Subscribed Capacity. The aggregate Subscription level of all Customers with Subscriptions to the Project for each month represents the portion of the Contract Capacity that is Subscribed for the Project (“Subscribed Capacity”).
- “(ii) Unsubscribed Capacity. The Contract Capacity less the Subscribed Capacity for each billing month represents the portion of the Contract Capacity that is Unsubscribed for the Project (“Unsubscribed Capacity”).
- “(iii) Seller’s Minimum Subscription Requirement. The minimum Subscribed level required for each month of a Contract Year for the Project shall be as follows (“Minimum Subscription Requirement”):

Year of Operation	Minimum Subscription Requirement
First Contract Year	50%
Second Contract Year	75%
Third Contract Year	95%
Remaining Delivery Term	95%

Provided, that if the Project is below the Minimum Subscription Requirement, a five percent (5%) margin is reasonable to account for Subscription changes in the normal course of business.”

4. Insert the following new Section 3.1(m) after Section 3.1(l):

“(m) ECR Program Subscription Requirements.

Seller shall provide Buyer with Subscription Information and Bill Credit Instructions in the format set forth in Appendix J (as such Appendix J may be

modified by the Buyer in its reasonable discretion to reflect updates to its business practices) setting forth, with respect to each of Seller's Customers for the Project, the information required in Appendix J, such Subscription Information and Bill Credit Instructions to be delivered no later than sixty (60) days prior to the Commercial Operation Date and, thereafter, ten (10) Business Days after the first day of each calendar month, with respect to the prior calendar month.

Buyer shall confirm in writing that it has verified Customer's Subscription requirements, with respect to each Subscribed Customer listed in Seller's Subscription Information and Bill Credit Instructions delivered pursuant to Section 3.1(m)(i) above.

Customer's subscription must be sized to meet at least 50% of the customer's energy demand, and may meet up to 100% of demand (not to exceed one hundred twenty percent (120%) of such Customer's forecasted annual consumption, as such consumption is reasonably determined by Buyer based on historical usage data), subject to the following limits:

(A) Customer's Minimum Subscription: the Subscription amount for each Customer is projected to be in an amount of energy per year equal to or greater than: (x) one hundred (100) kWh per month on average, calculated on an annual basis, or (y) twenty-five percent (25%) of such Customer's forecasted annual consumption ("Minimum Subscription"); and

(B) Customer's Maximum Subscription: each Customer cannot subscribe to more than two (2) MW of nameplate generating capacity for a calendar year; except, that this limitation does not apply to federal, state, or local governments, schools or school districts, county offices of education, the California Community Colleges, the California State University, or the University of California, in which case such entities may exceed the two (2) MW cap provided that no single entity, its affiliates or subsidiaries Subscribes to more than twenty percent (20%) of any single calendar year's total cumulative rated generating capacity ("Maximum Subscription").

Customer Service Agreement. Seller shall enter into a CSA with each Customer with the following required provisions:

(C) An outline detailing the program structure of the ECR Tariff, including the bill credit mechanism and a statement that Buyer is not a party to, or third party beneficiary of, the CSA or the transactions between Seller and Customer, other than as a conduit for bill credits pursuant to Seller's Subscription Information and Bill Credit Instructions;

(D) The benefits and risks to Customer of subscribing to the Facility, including any termination of the PPA or termination fees that may be assessed by Seller or Buyer, and that Customer should not expect to receive bill credits in excess of the amount of consideration it provides to Seller under the CSA;

(E) Customer acknowledgment of the risks associated with participating in wholesale energy markets;

(F) Customer acknowledgment that it should not have any expectation of profits in deciding to enter into the CSA;

(G) Customer acknowledgment that it will only receive bill credits to the extent the Project actually generates Energy and Seller provides the correct Subscription Information and Bill Credit Instructions to Buyer as specified in Section 3.7;

(H) The CSA will automatically terminate upon termination or expiration of this Agreement;

(I) Customer acknowledgment that Buyer is not an issuer or underwriter under California or federal securities laws with respect to the Project, and that Buyer is not making an offer to sell or selling any securities whatsoever;

(J) All disputes (including those related to bill credits) will be handled between the Seller and Customer pursuant to the dispute resolution provisions in the CSA;

(K) Customers must enroll with Buyer's ECR Tariff as a condition to being eligible to receive bill credits;

(L) Customers must un-enroll from Buyer's ECR Tariff if Customer no longer wishes to subscribe to the Project; Customers cannot transfer their Subscriptions to other parties;

(M) Customers may not subscribe for more than 120% of their forecasted annual load, as reasonably determined by Buyer based on historical usage data;

(N) Customer Subscription payments to Seller, if any, are refundable until the Commercial Operation Date has been achieved, and Customer subscriptions are portable within Buyer's territory upon the Execution Date;

(O) Seller shall notify Customer in the event of Seller's imminent bankruptcy or insolvency, or if foreclosure proceedings are initiated on the Project;

(P) Disclosure that the Customer Subscription may be considered a "security" issued by Seller under federal or state law;

(Q) Customer is not guaranteed any energy production from the Project;

(R) Information describing Green-e[®] Energy and what requirements Seller is subject to in order to provide Customers with Green-e[®] Energy product;

(S) A description of Customer access rights to the Site and the Facility, if any;

(T) Seller and Buyer shall share Customer information amongst themselves for purposes of billing and credits, program eligibility and verifying participation and that Buyer and Seller shall maintain the confidentiality of Customer information;

(U) Seller's customer service department must respond to Customer inquiries within two (2) Business Days after a Customer request;

(V) Seller shall indemnify Customers for claims arising from or related to Seller's construction, operation or financing of the Project, including liens of any type, mortgages, stop notices, and claims for bodily injury, death or property damage or destruction;

(W) Seller will provide Buyer with Subscription Information and Bill Credit Instructions related to the Subscribed Capacity, and Seller shall indemnify Buyer for all related claims and billing disputes between Customer and Seller. All bill credits to Customer shall be subject to set-off and counterclaim by Buyer under Seller's power purchase agreement with Buyer;

(X) A Seller transfer or sale of the Project to another entity will be subject to Buyer's consent and the transferee must (i) accept all of Seller's obligations under the power purchase agreement between Buyer and Seller, including all duties, liabilities and indemnities, and (ii) either enter into new CSAs containing same terms and conditions as the original CSAs with existing Customers, or accept assignment of the existing CSAs with existing Customers. In addition, Seller shall provide Customers with notice of any such transfer or sale of the Project;

(Y) Seller shall notify Customers of any proposed modifications to the Project and provide Customers adequate time to withdraw their Subscription to the Project, subject to any applicable termination provisions in the ECR Tariff, due to any such proposed modifications;

(Z) A Customer's minimum Subscription must be projected to be an amount of energy per year equal to or greater than: (x) 100 kWh per month on average, calculated on an annual basis or (y) twenty five percent (25%) of such Customer's load;

(AA) Within sixty (60) days after the Commercial Operation Date, Seller must provide completed Disclosure Documents and a statement that Seller is required by Green-e[®] Energy to provide updated Disclosure Documents to Customer on an annual basis;

(BB) Seller will not make any statements or representations in the CSA or its marketing materials implying that renewable energy is being used or delivered to anyone unless Seller knows that Renewable Energy Credit ownership supports such statements;

(CC) Seller representation that any electricity, stripped of Renewable Energy Credits is null power and no longer renewable and that, due to change

of law provisions in the power purchase agreement between Buyer and Seller, power delivered may cease to be renewable;

(DD) Seller covenants not to claim the Renewable Energy Credits associated with any Delivered Energy;

(EE) Seller obligation regarding transfer and chain of custody of Renewable Energy Credits;

(FF) Seller shall provide Customer notice of any direct change of control of Seller (whether voluntary or by operation of Law); and

(GG) Seller shall disclose to Customers whether or not Seller will pursue Full Capacity Deliverability Status for the Project and the effects of achieving or not achieving Full Capacity Deliverability Status on the amount Customers will receive in bill credits.

Prior to or upon the Execution Date, Seller shall deliver to Buyer an original legal opinion, in form and substance acceptable to Buyer, and addressed to Buyer. The legal opinion shall state that the transactions between the Customers and Seller: either (x) do not involve the offer or sale of “securities” under California or federal law, or, (y) to the extent that such transactions involve the offer or sale of securities under California or federal law, the transactions (i) involve the offer or sale of securities that are registered under federal securities law and exempt from qualification under California securities law, (ii) involve the offer or sale of securities that are registered under federal securities law and are qualified under California securities law, (iii) involve the offer or sale of securities that are exempt from registration under federal securities law and are qualified under California securities law, or (iv) involve the offer or sale of securities exempt from registration under federal securities law and exempt from qualification under California securities law, as applicable. The legal opinion may not contain any exceptions or qualifications unacceptable to Buyer in its reasonable discretion. The Seller must submit to Buyer an attestation from an officer of Seller that the fact certificate provided by an officer of the Seller to the law firm issuing the legal opinion is true and complete and that Seller’s business model with Customers is, and throughout the Delivery Term will be, as described in the legal opinion.”

5. ***[If DERP applies, add:*** Replace all references to “CAISO revenue meter” with “CAISO approved DERP meter” in Section 3.6.]

5. Insert the following new Section 3.11 after Section 3.10:

“3.11 Green-e[®] Energy Certification. Throughout the Term, Seller must comply with Green-e[®] Energy eligibility criteria and requirements in its marketing materials and the CSA, throughout the Term and surviving the expiration of the Agreement, Seller must disclose requested information to the Buyer and/or Green-e[®] Energy for Green-e[®] Energy certification, including but not limited to:

(a) Agreeing to provide Green-e[®] Energy certified resources to all Customers;

Monthly Energy Payment to Seller assigned to Customers for Subscribed Delivered Energy = $\sum (\text{Energy Price} \times \text{TOD Factor} \times (\text{Bundled Green Energy} + \text{Deemed Bundled Green Energy}) \times (\text{Subscribed Capacity}/\text{Contract Capacity}))$

Monthly Energy Payment to Seller from Buyer for Unsubscribed Delivered Energy for months that Seller has obtained FCDS = $\sum (\text{Energy Price} [- \text{Deliverability Value, only if Seller has not achieved FCDS}] \times \text{TOD Factor} \times (\text{Bundled Green Energy} + \text{Deemed Bundled Green Energy}) \times (\text{Unsubscribed Capacity}/\text{Contract Capacity}))$

(ii) Monthly Payment for Projects that do not Achieve the Minimum Subscription Requirement. During each month of the Delivery Term, if the quotient of the average billing month Subscribed Capacity divided by the Contract Capacity is less than the applicable Minimum Subscription Requirement, then the payment for Unsubscribed Delivered Energy for each month shall be an amount equal to the sum for each hour in the month of the product of the lesser of (i) the Unsubscribed Energy Price, and (ii) the Energy Price, less the Deliverability Value if the Project has not achieved FCDS, multiplied by the applicable TOD Factor for the TOD Period at the time of delivery, times the sum of Bundled Green Energy plus Deemed Bundled Green Energy (together, the “Monthly Energy Payment”).

Monthly Energy Payment to Seller assigned to Customers for Subscribed Delivered Energy = $\sum (\text{Energy Price} \times \text{TOD Factor} \times (\text{Bundled Green Energy} + \text{Deemed Bundled Green Energy}) \times (\text{Subscribed Capacity}/\text{Contract Capacity}))$

Monthly Energy Payment to Seller from Buyer for Unsubscribed Delivered Energy for months that Seller has obtained FCDS = $\sum (\text{the lesser of (i) the Unsubscribed Energy Price and (ii) the Energy Price} [- \text{Deliverability Value, only if Seller has not achieved FCDS}] \times \text{TOD Factor for the TOD Period}) \times (\text{Bundled Green Energy} + \text{Deemed Bundled Green Energy}) \times (\text{Unsubscribed Capacity}/\text{Contract Capacity}))$

(iii) Seller shall assign payment for Subscribed Delivered Energy from Subscribed Capacity to its Customers in the CSA, and payment for the Subscribed Delivered Energy shall be applied as a bill credit to Seller’s Customers. Payment for the Unsubscribed Delivered Energy from Unsubscribed Capacity, net amounts owed to Buyer from Seller, shall be paid to Seller from Buyer. For avoidance of doubt, if in any month Seller does not provide Subscription Information and Bill Credit Instructions pursuant to Section 3.1(m), Buyer shall not apply Customers’ bill credit or pay Seller’s Monthly Energy Payment until such time as Seller provides its Customer Subscription Information and Bill Credit Instructions for that month./

[For Energy Only bids and ECR Projects located in Imperial Valley: Monthly Energy Payment.

(i) Monthly Payment for Projects that Achieve the Minimum Subscription Requirement. During each month of the Delivery Term, if the quotient of the billing month Subscribed Capacity divided by the Contract Capacity is greater than the Minimum Subscription Requirement for the corresponding billing month, if the quotient of the billing month Subscribed Capacity divided by the Contract Capacity is greater than the Minimum Subscription Requirement for the corresponding billing month, then the payment

applicable for Unsubscribed Delivered Energy from the Project shall be an amount equal to the sum for each hour in the month of the product of the Energy Price times the TOD Factor for the applicable TOD Period times the sum of Bundled Green Energy plus Deemed Bundled Green Energy in each hour (“Monthly Energy Payment”).

Monthly Energy Payment to Seller assigned to Customers for Subscribed Delivered Energy = \sum (Energy Price x TOD Factor x (Bundled Green Energy + Deemed Bundled Green Energy) x (Subscribed Capacity/Contract Capacity))

Monthly Energy Payment to Seller from Buyer for Unsubscribed Delivered Energy = \sum (Energy Price x TOD Factor x (Bundled Green Energy + Deemed Bundled Green Energy) x (Unsubscribed Capacity/Contract Capacity))

(ii) Monthly Payment for Projects that do not Achieve the Minimum Subscription Requirement. During each month of the Delivery Term, if the quotient of the average billing month Subscribed Capacity divided by the Contract Capacity is less than the applicable Minimum Subscription Requirement, then the payment for Unsubscribed Delivered Energy shall be an amount equal to the sum for each hour in the month of the product of the lesser of (i) the Unsubscribed Energy Price, and (ii) the Energy Price multiplied by the applicable TOD Factor for the TOD Period at the time of delivery, times the sum of Bundled Green Energy plus Deemed Bundled Green Energy (together, the “Monthly Energy Payment”).

Monthly Energy Payment to Seller assigned to Customers for Subscribed Delivered Energy = \sum (Energy Price x TOD Factor x (Bundled Green Energy + Deemed Bundled Green Energy) x (Subscribed Capacity/Contract Capacity))

Monthly Energy Payment to Seller from Buyer for Unsubscribed Delivered Energy = \sum (the lesser of (i) the Unsubscribed Energy Price and (ii) the Energy Price multiplied by the applicable TOD Factor for the TOD Period) x (Bundled Green Energy + Deemed Bundled Green Energy) x (Unsubscribed Capacity/Contract Capacity))

(iii) Seller shall assign payment for Subscribed Delivered Energy from Subscribed Capacity to its Customers in the CSA, and payment for the Subscribed Delivered Energy shall be applied as a bill credit to Seller’s Customers. Payment for the Unsubscribed Delivered Energy from Unsubscribed Capacity, net amounts owed to Buyer from Seller, shall be paid to Seller from Buyer. For avoidance of doubt, if in any month Seller does not provide Subscription Information and Bill Credit Instructions pursuant to Section 3.1(m), Buyer shall not apply Customers’ bill credit or pay Seller’s Monthly Energy Payment until such time as Seller provides its Customer Subscription Information and Bill Credit Instructions for that month./”

8. Delete Section 6.1 in its entirety and replace with the following:

“6.1. Billing and Payment. On or about the tenth (10th) day of each month beginning with the second month of the first Contract Year and every month thereafter, and continuing through and including the first month following the end of the Delivery Term, *[Where Seller is the SC:* Seller shall provide to Buyer (a) records of metered data, including CAISO metering and transaction data sufficient to document and verify the generation of Product by the Project for any

CAISO settlement time interval during the preceding months, (b) access to any records, including invoices or settlement data from CAISO, necessary to verify the invoice; and (c) an invoice, in a format reasonably specified by Buyer indicating the payments associated with the Unsubscribed Delivered Energy./ **[Where Buyer is the SC:** Buyer shall provide to Seller an invoice indicating the payments associated with the Unsubscribed Delivered Energy and/ covering the services provided in the preceding month determined in accordance with Article 4 (which may include preceding months), with all component charges and unit prices identified and all calculations used to arrive at invoiced amounts described in reasonable detail. Buyer shall pay the undisputed amount of such invoices on or before thirty (30) days after receipt of the invoice; except, that payments to Seller under this Agreement of each undisputed invoice related to the Subscribed Delivered Energy shall be made by Buyer in the form of bill credits to Customers in accordance with the Seller's Subscription Information and Bill Credit Instructions, and Seller hereby assigns any right to receive all such payments in respect of Subscribed Delivered Energy to such Customers. If either the invoice date or payment date is not a Business Day, then such invoice or payment shall be provided on the next following Business Day. Each Party will make payments by electronic funds transfer, or by other mutually agreeable method(s), to the account designated by the other Party. Any undisputed amounts not paid by the due date will be deemed delinquent and will accrue interest at the Default Rate, such interest to be calculated from and including the due date to but excluding the date the delinquent amount is paid in full. Invoices may be sent by facsimile or e-mail. Each invoice will be adjusted by any amounts owed by or to Seller under this Agreement, on or before the last Business Day of the second month from which Buyer receives an invoice from Seller; provided, that Buyer shall have the right, but is not obligated, to apply any amounts due to Buyer from Seller for any charges incurred under this Agreement, for past due bills for electric service or for Buyer services, towards any amount owed to Seller under this Agreement. In the event Buyer applies any amounts due to Buyer from Seller towards an invoice issued by Seller, Buyer shall provide an explanation of the amounts Buyer has applied towards Seller's invoice. Buyer shall make payment of each undisputed invoice related to the Unsubscribed Capacity directly to Seller. Buyer and Seller acknowledge that payment to Seller under this Agreement of each undisputed invoice related to the Subscribed Delivered Energy shall be made by Buyer in the form of bill credits to Customers in accordance with the Seller's Subscription Information and Bill Credit Instructions, and Seller hereby assigns any right to receive all such payments in respect of Subscribed Delivered Energy to such Customers. Notwithstanding any other provision in this Agreement, Buyer is not obligated to provide a bill credit to any Customer that does not meet the requirements of this Agreement and the ECR Tariff or if Buyer determines, in its reasonable discretion, that the information contained in the Subscription Information and Bill Credit Instructions is incorrect. Retroactive changes to Subscription Information and Bill Credit Instructions will not be permitted."

9. Delete Section 6.3 in its entirety and replace with the following:

"6.3 Netting of Payments. Any amounts owed by Seller under this Agreement shall not be included in Seller's Subscription Information and Bill Credit Instructions, but shall be included in amounts payable directly to or from Seller. Each invoice will be adjusted by any amounts owed by or to Seller under this Agreement, on or before the later of the last Business Day of the second month from which Buyer receives an invoice from Seller; provided, that Buyer shall have the right, but is not obligated, to apply any amounts due to Buyer from Seller for any charges incurred under this Agreement, for past due bills for electric service or for Buyer services, towards any amount owed to Seller under this Agreement. In the event Buyer applies any amounts due to Buyer from Seller towards an invoice issued by Seller, Buyer shall provide an explanation of the amounts Buyer has applied towards Seller's invoice. Buyer shall make payment of each undisputed invoice related to the Unsubscribed Capacity directly to Seller."

10. Delete Section 10.2(c) entirely and replace with the following:

“(c) Seller, and, if applicable, its successors, represents, warrants and covenants that throughout the Delivery Term: (i) the Delivered Energy qualifies and is Green-e[®] Energy eligible; (ii) Seller shall comply with the Green-e[®] Energy requirements and best practices as updated from time to time by Green-e[®] Energy; (iii) Seller shall provide all forms, disclosures and other documentation required by Buyer and its auditors in connection with the annual Green-e[®] Energy verification and audit; (iv) Seller shall provide to Buyer a copy of all annual Disclosure Documents that it provides to Customers; and (v) Seller shall provide Buyer with a completed “Green-e[®] Energy Attestation From Generator Participating In A Tracking System” (or successor form available on Green-e[®]’s website) promptly when required by Buyer, and (vi) Seller shall provide Buyer with Green-e[®] Energy Host attestations as they are requested.”

11. Insert new Sections 10.2(d) – 10.2(m) as follows:

(d) Seller, and, if applicable, its successors, represents, warrants and covenants that throughout the Delivery Term, Seller has not entered and will not enter into any other agreement with any party for the sale of Product produced by the Project, other than Customers in accordance with the CSA and with ECR Tariff.

(e) Seller, and, if applicable, its successors, represents, warrants and covenants that throughout the Delivery Term, that prior to the Execution Date and during the Term, (a) Seller has not and will not enter into CSAs for Subscribed Capacity exceeding, in the aggregate, one hundred percent (100%) of the Contract Capacity; and (b) Seller has not and will not enter into a CSA with any individual Customer for a Subscription exceeding 2 MW (except in the case of federal, state or local governments, schools or school districts, county offices of education, any of the California Community Colleges, the California State University or the University of California).

(f) Seller, and, if applicable, its successors, represents, warrants and covenants that throughout the Delivery Term, the Subscription Information and Bill Credit Instructions required under Section 3.1(m) shall be accurate and complete. If Seller becomes aware of incorrect information contained in any current or previously submitted Subscription Information and Bill Credit Instructions, Seller shall provide Buyer with updated Subscription Information and Bill Credit Instructions. Buyer shall not be liable for any action it takes or fails to take based on incorrect information contained in inaccurate or incomplete Subscription Information and Bill Credit Instructions.

(g) Seller, and, if applicable, its successors, represents, warrants and covenants that prior to the Execution Date and throughout the Term: (i) Seller has complied with and shall continue to comply with the marketing plan requirements of the ECR Tariff and Green-e[®] Energy, (ii) all marketing by Seller shall be accurate and in compliance with the Federal Trade Commission Green Guides, (iii) any changes to the marketing plan shall be submitted to Buyer for review prior to Seller’s use of such materials, (iv) Seller shall maintain an internet website dedicated to the Project containing disclosures about the Project required by Green-e[®] Energy, including a link to Buyer’s ECR Tariff webpage, a link to the Green-e[®] Energy website, and customer service contact information; and (v) Seller has received from Buyer and has read Attachment 1 of the CPUC’s CCA Code of Conduct decision (D.12-12-036) and has not and will not circumvent it.

(h) Seller, and, if applicable, its successors, represents, warrants and covenants that throughout the Delivery Term, Seller has and shall continue to incorporate in each CSA it enters

into with Customers the provisions required to be included in the CSA as identified in Section 3.1(m)(iv).

(i) Seller, and, if applicable, its successors, represents, warrants and covenants that throughout the Delivery Term, Seller shall not use Buyer's corporate name, trademark, trade name, logo, identity or any affiliation for any reason, without Buyer's prior written consent.

(j) Seller acknowledges that the Subscriptions it sells may be considered securities under federal or California law and, accordingly, has retained its own legal counsel to provide advice on securities law matters.

(k) Seller, and, if applicable, its successors, represents, warrants and covenants that throughout the Delivery Term that the Project shall comply with the requirements of the California Air Resources Board's Voluntary Renewable Electricity Program, and Seller shall provide Buyer with all documents necessary to enable Buyer to retire greenhouse gas allowances on behalf of Customers in compliance with the Voluntary Renewable Electricity Program.

(l) ***[If DERP applies, add: [Include additional DERP-related representations.]]***

(m) With respect to the legal opinion delivered pursuant to Section 3.1(m), Seller hereby represents and covenants that:

- (i) The lawyer primarily responsible for the issuance of the opinion has, within the last eight (8) years, practiced federal and California securities law as a significant portion of their practice (meaning at least five (5) full-time years), and such experience included registering or qualifying offerings or sales of securities, effecting private placements of securities, and/or advising issuers or sellers of securities with respect to exemptions from qualification and registration requirements;
- (ii) The lawyer primarily responsible for issuance of the opinion is licensed to practice law in California and the lawyer's license is active and not under suspension; and
- (iii) The law firm issuing the opinion carries a minimum of \$10 million in professional liability insurance coverage that includes coverage for securities practice.

12. ***[If DERP applies, add: Insert Section 10.3(b)(vi) after Section 10.3(b)(v) as follows:***

“(e) [Include other appropriate DERP-related covenants.]”

13. Insert the following at the end of Section 11.2(a):

“, or in connection with Seller's Subscription Information and Bill Credit Instructions, subscriptions, bill credits, disputes, violations of Law, misrepresentations made by Seller or Seller's contractors, agents, or representatives, claims relating to securities laws, or Green-e[®] Energy certification, or loss thereof”

14. Insert a new Section 13.15 after Section 3.14:

“13.15 No Partnership or Joint Venture. Nothing contained in this Agreement shall be construed as creating any relationship whatsoever between Buyer and Seller, including that of partners, co-employment, or joint venture parties.”

15. A new Appendix J (attached hereto) is added after Appendix I.

MISCELLANEOUS

- (a) Reservation of Rights. Each of the Parties expressly reserves all of its respective rights and remedies under this Agreement and the ECR RAM PPA .
- (b) Legal Effect. Except as expressly modified as set forth herein, the ECR RAM PPA remains unchanged and, as so modified, the ECR RAM PPA remains in full force and effect. Each of the Parties hereby represents and warrants that the representations contained in the ECR RAM PPA are true on and as of the date hereof as if made by the Party on and as of said date.
- (c) Governing Law. THIS AGREEMENT AND THE ECR RAM PPA AND THE RIGHTS AND DUTIES OF THE PARTIES HEREUNDER ARE GOVERNED BY AND CONSTRUED, ENFORCED AND PERFORMED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW. TO THE EXTENT ENFORCEABLE AT SUCH TIME, EACH PARTY WAIVES ITS RESPECTIVE RIGHT TO ANY JURY TRIAL WITH RESPECT TO ANY LITIGATION ARISING UNDER OR IN CONNECTION WITH THIS ECR RIDER AND AMENDMENT.
- (d) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns.
- (e) Authorized Signatures; Notices. Each Party represents and warrants that the person who signs below on behalf of such Party has authority to execute this Agreement on behalf of such Party and to bind such Party to this Agreement. Any written notice required to be given under the terms of this Agreement shall be given in accordance with the terms of the Agreement.
- (f) Effective Date. This Agreement shall be deemed effective as of the Execution Date.
- (g) Further Agreements. This Agreement shall not be amended, changed, modified, abrogated or superseded by a subsequent agreement unless such subsequent agreement is in the form of a written instrument signed by the Parties.
- (h) Counterparts; Electronic Signatures. This Agreement may be executed in one or more counterparts, each of which will be deemed to be an original of this Agreement and all of which, when taken together, will be deemed to constitute one and the same agreement. The exchange of copies of this Agreement and of signature pages by facsimile transmission, Portable Document Format (i.e., PDF), or by other electronic means shall constitute effective execution and delivery of this Agreement as to the Parties and may be used in lieu of the original Agreement for all purposes.

[Remainder of Page Left Intentionally Blank.]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed as of the Effective Date.

[SELLER], a [State and form of incorporation] .
By: _____
[Name] [Title]

SAN DIEGO GAS & ELECTRIC COMPANY, a California corporation.
By: _____
Emily Shults Vice President – Energy Supply

APPENDIX J
Subscribed Customer Reporting Form

Customer Subscription details are to be provided sixty (60) days prior to the Commercial Operation Date, and afterwards, on a monthly basis to Buyer in the form attached below. Note that Seller should only fill out either (i) the “Capacity Subscribed (kW)” or (ii) the “Load Subscribed (kWh)” column, the appropriate column shall be dictated by the business model being employed by Seller pursuant to the CSA.

Name	Service Address	SDG&E Service Account Number	SDG&E Meter Number	Capacity Subscribed (%)	Load Subscribed (kWh)	Load Served (kW)

*** End of Appendix J ***



APPENDIX 12.B

2017 ECR RAM OFFER FORM

Renewable Products Offer Form



General Instructions

Form Field Key:

Free Form Field
Pull Down Menu
Calculated Field
Comment Field

Instructions:

- Follow instructions as they appear in each fields' comments or pop-up messages
- Complete all fields. Enter N/A if the question is not applicable
- Fill out all fields in the units requested
- Do not add, change, or move any cells, rows, columns or worksheets in the workbook
- **Confidential Information should be entered in Red Font**
- Limit and focus the discussions of the free form fields
- Submit One Offer Form per submission
- There are no limits on the number of submissions and they can vary by pricing structure, PPA structure, term, etc.

Renewable Products Offer Form



Company Information

Company Name Submitting Offer:	
Company Name on Potential Contract:	
Company Address:	
Company City:	
Company State:	
Company Zip:	
Company is Women/Minority/Disabled Veteran owned Business Enterprise as per CPUC General Order 156?	
How did the company hear of the RFO? (SDG&E website, SDG&E email, Colleague, Other (please elaborate))	

Company Representative

	Primary Contact	Secondary Contact
Contact Name:		
Contact Title:		
Office Number:		
Cell Number:		
Email:		
Is the Bidder or Contact listed above an affiliate of SDG&E?		
Does the Bidder or Contact listed above has one or more contracts with SDG&E?		

Corporate Profile and Experience

Describe your corporate background and organizational structure for the project.	
Describe project team's background and experience developing projects of a similar nature and technology. How many MW total are currently under construction?	
List and describe other projects of a similar nature and technology developed by Respondent currently in operation. What are the total MW of projects installed.	

Renewable Products Offer Form



Project Information

	Project Name:	
	Site Name	
	Project Latitude	
	Project Longitude	
	Project Parcel Number	
	Project Address	
	Project City	
	Project State	
	Project Zip	
	Which Solicitation Product is this for?	

Quantitative Description

	Technology :	
	Expected Number of Solar Panels or Wind Turbines:	
	Turbine/Panel Manufacturer and rating	
	Total Solar Panel Nameplate Capacity (MWdc), Total Maximum Wind Turbine Power Curve Output (MWac), Total Maximum Generator Output (MWac):	
	Total Inverter Nameplate AC Capacity (MWac) or Nameplate Turbine Output (MWac):	
	Contract Capacity at the point of interconnect net of all plant losses (MWac):	
	Capacity Factor:	
	Solar Tracking system Manufacturer and Model Number (Solar Only):	
	Total Project Area (acres):	
	Operation Type	
	IOU Service Area Project is interconnected to:	
	Resource Origin:	

Qualitative Description	
Describe merits of proposed site/location.	
<u>Discuss status of site control, including required easements. Site control documentation should be in the name of the entity that will sign the PPA. If not, please provide explanation. <i>Note: if shortlisted, Respondent's site control documents must be: 1) in the name of the same entity that will execute the PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.</i></u>	
<u>State and explain the percentage of site control that has been achieved.</u>	
<u>Discuss the viability of proposed technology and credibility of the manufacturer:</u>	
<u>Discuss operational reliability of proposed technology and manufacturer:</u>	
<u>How many projects and MWs with proposed technology have been installed worldwide?</u>	
<u>Discuss year(s) of installation, project locations, project size at each location and operational success.</u>	
<u>Discuss and provide published reports demonstrating that the proposed technology is commercially proven.</u>	
<u>Described the warranty of major components, including panels and inverters.</u>	
<u>Explain how the Respondent has operational control of the project. <i>Either through contractual operational control of the project, or if the Respondent is the project operator.</i></u>	
<u>Discuss the project's financing plan and status, including on-going debt/equity ratio to be carried by the project during construction (if a new facility) and during operation, sources of debt and equity, equity percentage by sponsor, financing organizations (including rates and terms), level of commitment by investors and lenders. If anticipating the need for subsidies, grants, Production Tax Credits, Investment Tax Credits or any other third party monetary awards, detail finances associated with monetary awards and discuss how the lack of funding shall impact the offer and deadlines for obtaining such awards.</u>	
<u>Discuss operational characteristics including required maintenance, delivery profile (peak and off-peak, hourly, daily, seasonal, annual), curtailability and dispatchability.</u>	
<u>For excess sales bids: include details on onsite load estimates and meter configuration (if CAISO meter reflects subtraction of customer onsite load from Project output).</u>	
<u>Explain in detail the contributions the project will make to the local community. (i.e. utilizing local resources and employing local hires).</u>	
<u>Is there additional relevant information necessary for SDG&E to evaluate the merits of the proposal.</u>	

Renewable Products Offer Form



Electrical Interconnection

Interconnection Type:	
Interconnection Status	

If Yes ->

Phase II or Deliverability Study Completed?	
If the project has a completed deliverability study, please provide the estimated date for completion of the deliverability upgrades.	

Under what tariff did you submit an interconnection Request? (CAISO, WDAT, Rule 21, etc.)	
Date Application Filed	
Queue Position Number (if assigned), and Cluster Number	

Interconnection Point	
City of Interconnection Point	
Interconnection COD Date	
Interconnection Voltage Level	

If the value is different than listed in the Study, please explain why?

Non-Reimbursable Interconnection Costs Listed in the Study (in \$). Also list document and page number where this number is taken from		
Reimbursable Interconnection Costs Listed in the Study (in \$). Also list document and page number where this number is taken from.		
How much in non-reimbursable interconnection cost is assumed in your bid price?		

Renewable Products Offer Form



Eligibility Criteria

Please include a brief sentence supporting your Eligibility or Explaining why you think you

Criteria

Yes/No? are exempt

Resource	Will the Project receive CEC-certification by the Project Completion Date?		
	Will the Project generate electricity using only resources that are an Eligible Renewable Energy Resource as defined in PUC Section 399.12		
	Will the Project utilize commercially proven technology?		
	Will the Project sell entire its output to SDG&E (full buy/sell) or all output in excess of onsite load to SDG&E (excess sales).		
	Is the facility new?		
	Has you submitted a fuel availability (solar radiation index, biomass and etc...) study?		
	If you are bidding a solar plant, have you submitted the full PVSyst Model and does the output of that match the inputs to the Delivery Profile?		

Project Capacity	Have you met the Project minimum and maximum project capacity requirements of this RFO?		
	Will the project sell partial output from a system sized above 20 MWs?		
	Is the Project part of an installation larger than 20 MW in the same general location that has been or is being developed by the respondent or the respondent's Affiliates, or is it sharing facilities with one or more projects?		

Location/Site Control	Is the Project located within the service territory of SDG&E or located in the Imperial Valley and dynamically transferred into CAISO		
	Does the Respondent have site control for the duration of the power purchase agreement?		
	Has the Respondent attached submitted a form showing this ownership? (Direct ownership, lease, or lease option)		
	Did the Respondent insert site location map(s) clearly showing the location, size, and orientation of the site; the location of the expected interconnections for transmission, fuel, and water; and the location of residential communities, schools, hospitals, airports, churches, cemeteries, or other expected sensitive neighbors within five miles of the site.		

Required Maps	Did the Respondent submit site location map(s) clearly showing the location, size, and orientation of the site?		
	Did the Respondent submit site location map(s) clearly showing the location of the expected interconnections for transmission, fuel, and water		
	Did the Respondent submit site location map(s) clearly showing the location of residential communities, schools, hospitals, airports, churches, cemeteries, or other expected sensitive neighbors within five miles of the site.		
	Did the Respondent Insert facility drawings and diagrams including general equipment arrangement of the project, electric interconnect one line diagram showing the scope of supply, delivery point and metering for the electric interconnection including any transmission line and switchyard.		

Interconnection	A) If your project is interconnected in SDG&E territory, have you completed a Phase II interconnection study or distribution level equivalent; or do you have a completed Interconnection Agreement? B) If your project is in IV does your project have a dynamic transfer arrangements, and Phase II interconnection study; or Completed Interconnection Agreement?		
	Have you submitted a copy of the most recent completed Phase II study or interconnection agreement with in the offer? Note: if shortlisted, Respondent's interconnection documents must be: 1) in the name of the same entity that will execute the PPA, or 2) shall have been assigned to such entity by the time Respondent accepts its position on the shortlist.		
	Have you submitted a Project one-line diagram.		
	Will the Interconnection COD occur before Projection Completion?		

Developer Experience	Will the Respondent and/or members of the project development team completed, or begun construction, of a project using a technology similar to the offered technology, that is at least 500 kW nameplate capacity?		
	Will the Respondent maintain contractual control of the facilities and be responsible for development, land acquisition, permitting, financing and construction of the facilities?		

Project Start Date	Is the anticipated delivery start date within 36 months after the expected CPUC Approval date.		
--------------------	--	--	--

Incentives	Has your project ever applied for CSI funds?		
	Are you planning to apply for CSI funds for this project?		
	Has this project ever participated in NEM?		
	Does this project plan to participate in NEM in the future?		

GTSR - Both EcoShare and EcoChoice	Will the Project comply with the CARB's VRE Program?		
	Will the project must meet Green-e® Energy eligibility criteria throughout the Delivery Term of the EcoShare PPA?		

EcoShare Only	Will the Respondent SDG&E approval of marketing materials prior to bid solicitation?		
	Has the Respondent provided an attestation to SDG&E that it has received and read Attachment 1 of the Community Choice Aggregation (CCA) Code of Conduct Decision (D.12-12-036) that it will not circumvent it?		
	Has the Respondent reviewed the Community Interest Requirements in the GTSR Decisions and SDG&E's website (http://www.sdge.com/share-sun-for-solar-developers) and plans to adhere to those requirements?		
	Has the Respondent provided the legal opinion outlined in the RFO and GTSR decisions?		

Environmental Justice Projects Only	Have you submitted additional relevant information necessary for SDG&E to evaluate project eligibility as an Environmental Justice project?		
	Is the Projected located in one of the census tracts listed on SDG&E's website		

DERPs	If you have a DERP, did you contact SDG&E by the question deadline and have a call about your interconnection status?		
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Overview	Please include a brief sentence summarizing your conclusion on why you are, or are not, eligible?		
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Renewable Products Offer Form



PPA Summary

Will this project sell 100% of its output to SDG&E and purchase any energy needed to serve onsite load from SDG&E or other utility (full buy/sell) or will it serve onsite load and sell excess to SDG&E (excess sales)?		
Who will be Scheduling Coordinator for the Project?		
Delivery Term (years)	1	
CPUC Approval Security	\$ 100,000.00	PPA Section 8.3 Performance Assurance
Development Period Security	\$ -	PPA Section 8.3 Performance Assurance
Construction Period Security	\$ -	PPA Section 8.3 Performance Assurance
Delivery Period Security	\$ -	PPA Section 8.3 Performance Assurance
TODF Type	Energy Only	
PPA Type		

Renewable Products Offer Form



Permitting/Agreements

List All Project Permits Needed for full legal operation of the facility throughout the term of the PPA.

Permit/AGreement Type/Name	Issuing Agency	Expected Completion Date
CEC Pre-Certification		
CEC Certification		
RPS Certification		
Environmental Impact Study/Report		
Generator Interconnect Agreement		
Exempt Wholesale Generator certification from FERC		
Building & Grading Permits		
Encroachment Permits		
Conditional Use Permit		
Project Labor Agreement		
Right of Way		
Record Decision		
Dust Control		

<p>Discuss plan and status to obtain the permits listed above. Discuss required rights necessary to be obtained and status to obtain such rights. Describe scope of assistance from any third party (if applicable).</p>	
--	--

Renewable Products Offer Form



Schedule

Milestone	Insert dates for all milestones below:
Obtain control of all lands and rights-of-way comprising the Site.	
File a CEC Pre-Certification and Verification application.	
Receive a completed Phase II Interconnection Study Report	
Complete a comprehensive resource assessment.	
File permitting application with appropriate agency(ies).	
Execute interconnection agreement and/or transmission agreement.	
Receive permitting approval(s)	
Execute a supply contract.	
Execute an Engineering, Procurement and Construction ("EPC") contract.	
Complete financing.	
Deliver full NTP under EPC contract and begin construction of the Project.	
Execute Meter Service Agreement and Participating Generator Agreement. In addition, for projects dynamically transferred via pseudo-tie and scheduled into the CAISO only, Pseudo Tie Agreements	
Achieve initial operation.	
Receive all Governmental Approvals necessary to achieve Commercial Operation.	
Receive CEC Certification and Verification.	
Expected LNTP Date	
Expected FNTF Date	
Project Completion Date	
Expected Delivery Start Date under SDG&E PPA	

Discuss overall project development and construction schedule.	
--	--

Your Levelized TOD adjusted price* (\$/MWh)

\$	-
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FOR FCDS BIDS: The Levelized TOD adjusted price shown here assumes that FCDS is achieved as of COD. Bids that cannot provide FCDS at COD will have their PPA TOD prices reduced to the Energy Only price until FCDS is achieved, which will produce a lower TOD Adjusted price in the PPA than what is shown here.

*Note: This is an approximate value. That can change per year based on holidays, Daylight Savings Time, Weather Conditions, etc.

Renewable Products Offer Form



Confidentiality

<i>Identify parts, sections and elements of the offer (including information in this and all other forms) which Respondent considers to be Confidential and Proprietary in accordance with Confidentiality Provisions as described in the RFO Protocols. Put all confidential information in RED font.</i>	
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Renewable Products Offer Form



For DERP resources only

<i>Discuss your DERP resource, its characteristics, operating characteristics, location, individual project specifics, etc. Submit separate documentation as necessary.</i>	
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APPENDIX 13

REDLINE OF FINAL 2017 RPS SOLICITATION DOCUMENTS AGAINST DRAFT 2017 RPS SOLICITATION DOCUMENTS



APPENDIX 9

2017 LEAST-COST BEST-FIT (“LCBF”)

SDG&E's RPS RFO Evaluation Methodology

Below is the assessment methodology and process to be taken by SDG&E and the Independent Evaluator (“IE”) to ensure that the bid selection process is transparent and does not favor any technology or counterparty, and is aligned with SDG&E’s compliance requirements. Although SDG&E has worked diligently with its IE to develop this methodology, this document may require adjustment before issuing of the RFO in order to account for potential market, regulatory, and/or business context changes.

1. Receive all bids prior to the closing date at Noon Pacific Standard Time:
 - a. Bids will be uploaded to the PowerAdvocate® website for any RPS RFO event, to which the IE will have access.
 - b. By Noon on the day after closing, SDG&E will accept bids that, because of technical difficulties, could not be uploaded to the PowerAdvocate® website. The IE makes the call of “no more bids.”
2. After the day after closing, organize bid data:
 - a. The IE and SDG&E will compare folder structures and file sizes to ensure the bid population of the IE is identical to the bid population to be analyzed by the SDG&E RFO team. To the extent the folders do not match, a reconciliation effort begins until folders match.
 - b. The relevant data of all bids is exported into a data table for analysis.
3. Initial Bid Assessment & Completeness Check:
 - a. A snapshot of the key statistics of the bids is produced for presentation to the PRG. These statistics will not include prices; at this stage of the process, bids have not been

checked for conformance vis-à-vis the RFO requirements. Bids are reviewed for completeness and certain eligibility requirements.

4. Bid Evaluation:

- a. **Determine Congestion Cost.** SDG&E will conduct a marginal analysis to determine the difference in locational pricing between the project's point of delivery and SDG&E's default load aggregation point ("DLAP"). SDG&E and the IE will add the relevant Congestion Charges to the Bids once derived or obtained from SDG&E Transmission.
 - i. In the event that a congestion study is required, SDG&E and the IE will jointly prepare the relevant data needed for the SDG&E Transmission Planning team to calculate Congestion Costs. This process will group together, on a no-name basis, the relevant data of bids (mainly anticipated generation and energy delivery profile) by interconnection points. The IE will then forward this information to SDG&E's Transmission Planning team.
 - ii. Transmission Planning will run studies to determine hourly congestion costs associated with each of the proposed offer groups and provide results to SDG&E's evaluation team and the IE.
- b. **Determine Transmission Cost.** For offers for new projects or projects proposing to increase the size of existing facilities, SDG&E performs an initial analysis of costs for transmission network upgrades or additions that are to be directly reimbursed to the bidder using the relevant transmission network upgrade cost studies submitted with the bids. Offers without transmission upgrade cost studies will be rejected as non-

conforming (unless the offer includes acceptable proof of an existing interconnection arrangement).

- i. The total reimbursable transmission upgrade cost specified in the project's transmission studies will be divided by the number of years in which the utility will reimburse the network transmission costs to the bidder to produce an annual transmission upgrade cost.
 - ii. The present value of the annual transmission upgrade costs will be divided by the present value of the estimated energy deliveries during the contract period to produce the Transmission Cost Charge.
 - iii. SDG&E and the IE will add the relevant Transmission Cost Charges to the Bids once they are determined from the transmission cost studies submitted with the Bids and confirmed by both SDG&E and the IE after mutual agreement.
- c. **Calculate the Levelized Post-TOD Contract Price.** Convert the Pre-TOD price to Post-TOD contract price by utilizing the appropriate TOD price factors (See Appendix 1).
- d. **Calculate the Energy Benefit.** The Energy Benefit is calculated based on forecasted SP-15 electricity prices for each contract year, adjusted by SDG&E's hourly energy weighting factors.
- e. **Calculate the Ancillary Services Benefit.** The Ancillary Services ("A/S") Benefit is calculated based on a 2-year historical ratio of A/S prices to energy prices. This ratio is applied to the forecasted SP-15 electricity price for each A/S type: Spin, Non-Spin, Regulation Up and Regulation Down, for each month to determine the forecasted A/S

prices. The forecasted A/S prices are multiplied by the product of the available A/S capacity for each of the A/S types and the expected commitment percentage to determine the A/S Benefit. The expected commitment percentage is a 2-year historical ratio of A/S capacity offered versus A/S awarded in the CAISO Day-Ahead Market for each of the A/S types.

- f. **Calculate the Capacity Benefit.** Capacity Benefit will be calculated as a percentage of Capacity Value as described below. Capacity Value is based on the estimated Net Qualifying Capacity (“NQC”) ratio for each technology multiplied by SDG&E’s forecasted capacity price. NQC will be calculated using both the existing exceedance methodology and the effective load carrying capacity methodology (“ELCC”).

For projects located in SDG&E’s service territory connecting to transmission or distribution facilities at a point that is electrically west of the ECO or Suncrest substations (“Local Area Projects”) bidding as fully deliverable:¹

$$\text{Capacity Benefit} = 100 \% \text{ of Capacity Value}$$

For projects that are in the greater Imperial Valley (“IV”) area as defined by the CAISO,² meaning those projects connecting to transmission or distribution facilities at a point that is at, or electrically east of, the ECO or Suncrest substations bidding as fully deliverable³ and for projects other than Local Area Projects or IV Area Projects that still qualify for Resource Adequacy pursuant to the CAISO Tariff (“System Area Projects”) bidding as fully deliverable:

¹ Projects connecting at the ECO or Boulevard Substation are considered to be IV Area Projects for these purposes.

² Please refer to the CAISO’s 2014 Local Capacity Technical Analysis, Final Report and Study Results, April 30, 2013.

³ Projects connected to the Imperial Valley, Drew, Ocotillo, ECO or Boulevard Substations are considered to be IV Area Projects for these purposes.

$$\text{Capacity Benefit} = \text{Capacity Value} \times 33.59\%$$

For all energy-only projects, or projects interconnected to non-California Balancing Authorities unable to provide resource adequacy benefits to SDG&E that are specific to the project being bid to SDG&E:

$$\text{Capacity Benefit} = 0$$

Resource adequacy substitutions will not be granted any non-zero Capacity Benefit projects under SDG&E's RPS bid process.

Calculate the Renewable Integration Cost Adder.⁴ The integration cost adder will be calculated using the adopted interim valuation methodology. This methodology calculates two components for the cost of integration:

1. Variable integration cost - \$4/MWh for wind, \$3/MWh for solar.
2. Fixed integration cost – the cost to SDG&E of procuring additional flexible and non-flexible RA over the contract period. This is a product of (a) and (b) below:
 - a. The monthly increase (or decrease) in flexible capacity requirement due to the increment of wind or solar being considered for the solicitation. Calculated based on the overall system flexible capacity requirement and then applies the percentage contribution from wind and solar.
 - b. The forecasted monthly flexible RA price.

⁴ SDG&E's valuation process does not lead to double-counting of the Integration Cost adder. The creation of SDG&E's price forecasts does not use the Integration Cost adder as an input. The Integration Cost adder is applied in the LCBF process during the NMV calculation, as a separate component that differentiates variable renewable energy resources from each other and other resource types. The calculated energy benefit attributed to renewable resources in the NMV calculation is the same with or without an Integration Cost adder, which is added later in the valuation process.

g. **Calculate Net Market Value.** For bundled product purchase offers, convert post-TOD adjusted Bid prices into the Net Market Value (NMV) prices as follows:

For bundled products $NMV = (\text{Energy Benefit} + \text{Ancillary Services Benefits} + \text{Capacity Benefits}) - (\text{Levelized Contract Cost} + \text{Transmission Cost} + \text{Congestion Cost}) - (\text{Integration Cost Adder})$

For unbundled RECs: the negative unbundled REC price measured in \$/MWh

5. Develop Short-List: SDG&E determines its RPS Compliance Period 3 and 4 Renewable Net Short (“RNS”) as described in its 2016 RPS Plan and ranks all the Bids by LCBF price until SDG&E has met its need. The Short-List ranking enables SDG&E to determine which offers are most attractive based on an NMV price.

Offers with deliveries outside the acceptable RPS delivery windows will be considered non-conforming, unless SDG&E’s need assessment has changed materially between the time of issuance of this 2016 RPS Plan and the determination of the shortlist.

6. Final Short-Lists:

- a. The highest ranking bids are subjected to a detailed conformance screen before being added to the shortlist.⁵ To the extent offers are not conforming, SDG&E will likely discard (given the high number of anticipated offers) the bid or attempt to make it conforming via discussions with the counterparty provided that the non-conformance is minor.

⁵ Conformance check will start earlier if possible.

b. Qualitative Factors: SDG&E may review the qualitative factors of offers of similar cost,⁶ including: (in no particular order)

- Project Viability⁷
- Local reliability
- Benefits to Disadvantaged Communities: Disadvantaged communities are those identified as Environmental Justice (EJ) communities through California’s Environmental Protection Agency’s CalEnviroScreen 2.0. Offer documents must include any environmental or economic benefits that the proposed project would provide to EJ communities with high poverty or unemployment rates, and/or high emission levels of toxic air contaminants.
- Resource diversity
- Environmental stewardship
- Rate Impacts
- Workforce Development Assessment: Offer documents must include projected California employment growth during construction and operation, including: number of hires; duration of hire; and indication of whether the bidder has entered into Project Labor Agreements or Maintenance Labor Agreements in California for the proposed project.

⁶ The term “similar cost” is used to indicate expected indifference by the PRG and CPUC as to the cost of one offer or another. The PRG will have access to SDG&E’s evaluation and the quantitative and qualitative components of those offers prior to SDG&E’s recommendation filing to the CPUC.

⁷ SDG&E considers project viability as a qualitative factor and relies on the Energy Division’s Project Viability Calculator. For projects that SDG&E rejects due to low viability scores, SDG&E rescues the projects to affirm the bidder did not unfairly score itself too low. For projects that SDG&E shortlists, SDG&E rescues the project to affirm that the bidder did not unfairly score itself too high. Projects below a certain viability threshold will not be considered for the shortlist.

- c. SDG&E and the IE will then develop the preliminary Final Short-Lists that includes congestion costs and transmission cost study results. Qualitative factors may impact the Final Shortlist.
- d. The preliminary Final Shortlist is prepared and shared with the PRG during next viable meeting.
- e. After discussion with the PRG and the Energy Division, SDG&E will determine the final shortlist.

Appendix 1 – LOCAL FCDS TOD Factors and Periods⁸
SDG&E will utilize the following FCDS TOD Payment Factors for Local projects that have received full deliverability status.

TOD Period	Period Days and Hours	FCDS Time-of-day Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.638
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.541
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.823
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.943
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.819
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.963

⁸ SDG&E utilizes forward market conditions to calculate TOD factors used for LCBF analysis and determination of contract payments. As the forward market evolves, SDG&E will continue to assess and update the TOD factors and TOD periods as needed.

Appendix 1 – System and IV FCDS TOD Factors and Periods⁹
SDG&E will utilize the following FCDS TOD Payment Factors for System projects that have received full deliverability status.

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.639
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.550
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.841
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.841
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.792
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.967

⁹ SDG&E utilizes forward market conditions to calculate TOD factors used for LCBF analysis and determination of contract payments. As the forward market evolves, SDG&E will continue to assess and update the TOD factors and TOD periods as needed.

Appendix 1 – Energy Only TOD Factors and Periods¹⁰

TOD Period	Period Days and Hours	TOD Factor
Winter On-Peak	Nov 1 - Jun 30 Weekdays 5 pm to 9 pm PPT (HE 18 to HE 21)	2.641
Winter Semi-Peak	Nov 1 - Jun 30 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Winter On-Peak Hours	0.562
Winter Off-Peak	Nov 1 - Jun 30 All Weekend Hours NERC Holiday Hours and Weekday Hours not already considered Winter On-Peak or Winter Semi-Peak	0.864
Summer On-Peak	Jul 1 - Oct 31 Weekdays 2 pm to 9 pm PPT (HE 15 to HE 21)	1.714
Summer Semi-Peak	Jul 1 - Oct 31 Weekdays 6 am to 10 pm PPT (HE 7 to HE 22) excluding Summer On-Peak Hours	0.758
Summer Off-Peak	Jul 1 - Oct 31 All Weekend Hours, NERC Holiday Hours and Weekday Hours not already considered Summer On-Peak or Summer Semi-Peak	0.971

¹⁰ SDG&E utilizes forward market conditions to calculate TOD factors used for LCBF analysis and determination of contract payments. As the forward market evolves, SDG&E will continue to assess and update the TOD factors and TOD periods as needed.



APPENDIX 10

2017 RPS SALES REQUEST FOR PROPOSALS (“RFP”)



SAN DIEGO GAS AND ELECTRIC COMPANY
ELECTRIC AND GAS PROCUREMENT DEPARTMENT
8315 CENTURY PARK COURT, CP21D
SAN DIEGO, CA 92123

2017

**REQUEST FOR PROPOSAL
FOR THE SALE OF
RENEWABLE ENERGY
PRODUCTS**

ISSUED



OFFERS DUE



RFP WEBSITE



EMAIL QUESTIONS/COMMENTS TO
renewablerfo@semprautilities.com

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1.0 SCOPE OF REQUEST

As ~~required~~ authorized by D.~~XX XX XXX~~17-12-007, San Diego Gas & Electric Company (“SDG&E”) is issuing this Request for Proposal (“RFP”) seeking proposals from third parties (“Respondents”) who are interested in purchasing energy products from eligible renewable resources under contract with SDG&E (“Resources”). By responding, Respondents are bound by the terms and conditions of this RFP. Energy products are derived from Resources that meet the California Renewables Portfolio Standard (“RPS”) eligibility criteria set forth by the California Energy Commission (“CEC”) (See Section 5.0 for additional information on RPS Program Parameters). This RFP solicits bids from financial institutions, energy service providers, utilities, municipal utilities, industrial end users, wholesale power marketers, and any other entity that would have a need to purchase bundled energy or REC’s.

Table 1 – Acceptable Product Types

Product Types:	RPS Categories: Bundled (Category 1) and REC (Category 3)
Minimum Term:	1 month
Maximum Term:	10 years (120 months)
Delivery Window:	Start no earlier than X, End no later than X+120 months ¹
Point of Delivery:	SP-15 EZ Gen Hub (Category 1) or WREGIS Account (Category 3)
Min Volume:	50 GWh

A. Definition of Products

SDG&E is required to serve its customers in the following manner: (a) with an average of 20% of retail sales from renewable resources between January 1, 2011 and December 31, 2013, inclusive² (“Compliance Period 1”); (b) with 25% of retail sales from renewable resources by December 31, 2016, with reasonable progress made in 2014 and 2016³ (“Compliance Period 2”); (c) with 33% of retail sales from renewable resources by December 31, 2020, with reasonable progress made in 2017, 2018 and 2019⁴ (“Compliance Period 3”); and (d) with 33% of retail sales from renewable resources in each year beyond 2020⁵ (“Post 2020 Compliance Period”).

SDG&E must meet these goals by procuring renewable resources that meet the requirements of the products outlined in Public Utilities Code 399.16(b). A summary of each product type is provided below:

¹ Respondent to propose dates for purchase.

² Compliance towards Compliance Period 1 goals shall be measured as required by D.11-12-020, Ordering Paragraph (“OP”) 1.

³ Compliance towards Compliance Period 2 goals shall be measured as required by D.11-12-020, OP 2.

⁴ Compliance towards Compliance Period 3 goals shall be measured as required by D.11-12-020, OP 3.

⁵ Compliance towards Post 2020 Compliance Period goals shall be measured as required by D.11-12-020, OP 4.

Category 1 (Public Utilities Code 399.16(b)(1)(A-B)): Bundled Products

- Must have first point of interconnection (“POI”) with a California Balancing Authority (“CBA”); **or**
- Must have first POI with distribution facilities used to serve end users within a CBA; **or**
- Must be scheduled from the eligible renewable resource (“ERR”) into a CBA without substituting electricity from another source⁶; **or**
- Have an agreement to dynamically transfer electricity to a CBA.

Category 3 (Public Utilities Code 399.16(b)(3): Unbundled Renewable Energy Credits (“RECs”)

- ERR products, or any fraction of the electricity generated, **including unbundled RECs**, that do not qualify under 399.16(b)(1-2).

The table below provides a high level overview of product categories being offered in this RFP. A more detailed discussion of RFP eligibility requirements is provided in Section 7.0 “Products & Eligibility Requirements.” SDG&E will also consider annual bids for less than the full compliance period (i.e. 2017 only, etc.), and bids for projects beyond Compliance Period 3.

Table 2 – Product Types by Compliance Period

	Compliance Period 2: January 1, 2014- December 31, 2016	Compliance Period 3: January 1, 2017- December 31, 2020	Compliance Period 4: January 1, 2021 Forward
Category 1	Volume As Bid N/A	Volume As Bid	Volume As Bid
Category 3	Volume As Bid	Volume As Bid	Volume As Bid

SDG&E is not selling Resource Adequacy (“RA”) with any of these ~~Category 1 or Category 2~~ transactions. The final portfolio sale will be shaped as specified by the seller in the bid form. Offered resources may be:

- 1) Re-powered or existing facilities;
- 2) New facilities;
- 3) New facilities that are scheduled to come online during the years specified in this RFP; and/or
- 4) Other facilities.

⁶ If using another source to provide real-time ancillary services required to maintain an hourly or sub-hourly import schedule into a CBA is permitted, but only the fraction generated by the ERR will count as Category 1.

B. Transaction Documents

a) Category 1

Respondents bidding on bundled energy (“Category 1”) products must sign an Edison Electric Institute (“EEI”) Confirmation. Any resulting agreement shall be subject to CPUC approval. Additional respondent criteria are described in Section 7.0 “Products & Eligibility Requirements.”

b) Unbundled REC Agreements

Respondents bidding on unbundled RECs (“Category 3”) products must sign SDG&E’s Model REC Agreement (See Section 4.0 RFP Response Instructions) to be provided to bidder upon shortlisting. Any resulting agreement shall be subject to CPUC approval. Additional eligibility requirements are described in Section 7.0 “Products & Eligibility Requirements.”

2.0 RFP WEBSITE AND COMMUNICATIONS

The RFP and all subsequent revisions and documents are available for download from the RFP Website []. Potential Respondents are responsible for monitoring the RFP Website for subsequent updates, notices and postings.

The RFP website contains RFP forms and documents, RFP Schedule, and a Question and Answer forum.

All questions or other communications regarding this RFP must be submitted via email to renewablerfo@semprautilities.com by the DEADLINE TO SUBMIT QUESTIONS as specified in Section 3.0 RFP Schedule. SDG&E will not accept questions or comments in any other form.

3.0 RFP SCHEDULE

The following schedule and deadlines apply to this RFP. SDG&E reserves the right to revise this schedule at any time and in SDG&E's sole discretion. Respondents are responsible for accessing the RFP Website for updated schedules and possible amendments to the RFP or the solicitation process.

N O.	ITEM	APPROX. DATE
1.	RFP Issued	[]
2.	Pre-Bid Conference (Webinar)	[]
3.	DEADLINE TO SUBMIT QUESTIONS Question submittal cut-off date. Answers to all questions will be posted on the website no later than 3 business days following question submittal cutoff date	[]
4.	CLOSING DATE: Offers must be emailed to and received by the RFP email inbox no later than NOON (Pacific Standard Time).	[]
5.	SDG&E notifies the CPUC (Executive Director) that the RFP has closed.	[]
6.	SDG&E notifies winning Bidder(s).	[]
7.	Letter due from winning Bidders indicating: a. Withdrawal from SDG&E's solicitation; OR b. Acceptance of the winning position and binding price confirmation.	[]
8.	SDG&E submits FINAL list of winning Bidders to Commission and PRG.	[]
9.	SDG&E issues appreciation notices to unsuccessful Bidders.	[]
10.	SDG&E commences with Transaction Document negotiations.	[]
11.	SDG&E submits Tier <u>1 or Tier 3</u> Advice Letters <u>Letter(s)</u> with agreements for Commission approval.	[]

PRE-BID CONFERENCES

SDG&E will host one pre-bid webinar conference on []. While encouraged, participation in the pre-bid conference is NOT mandatory in order to submit an offer. Please monitor the RFP Website periodically. The venue and time will be posted as soon as arrangements are finalized.

Any party interested in attending this pre-bid conference and/or webinar should email the following information to renewablerfo@semprautilities.com. Please limit your participation to two representatives per organization.

- Company name
- Attendees' names, titles and contact information

4.0 RFP RESPONSE INSTRUCTIONS

Respondents may submit up to 10 bids into this solicitation by submitting the forms listed below. Forms are available on the RFP Website. The failure to provide the listed information may result in the bids being deemed non-conforming and may disqualify the proposal from further consideration.

Required Forms for Category 1 Offers:

- 1) **Participation Summary**
- 2) **Bid Form**
- 3) **Credit Application**
- 4) **Transaction Document** – Respondents shall populate and redline the Transaction Agreement.

Required Forms for Category 3 Offers:

- 1) **Participation Summary**
- 2) **REC Bid Form**
- 3) **Credit Application**
- 4) **Model REC Agreement** – To be provided to bidder by SDG&E at time of shortlisting.

The Participation Summary and redlines to the Transaction Document must be in Word or Word-compatible format (not in PDF). The Pricing Form must be in Excel or Excel-compatible format (not in PDF). The Credit Application must be submitted in Word or Word-Compatible format (or in PDF).

Submissions containing unsolicited materials, submissions in ZIP archives or other compressed formats, or submissions of individual bid documents in file formats other than the formats of the original bid forms, will be rejected. This RFP is an electronic only Solicitation; Respondents need not submit paper documents, or e-binders.

Any party interested in submitting an offer must submit the offer via electronic mail (email) to renewablerfo@semprautilities.com, which is the RPS RFP inbox, and attach all required forms and bid materials to the email. All offers must be emailed no later than 12:00 p.m. (i.e. Noon), Pacific Standard Time, on the CLOSING DATE (see RFP Schedule). The Subject line of the email should be as follows: Bid Submission for SDG&E's 2017 Request for Proposal for sale Eligible Renewable Resources. A reply email from the RPS RFO inbox will be sent to the email address submitting the offer to confirm receipt of the offer.

If Respondents encounter technical difficulties with emailing, they should provide evidence of such difficulties (e.g. a screen shot of the error message) and email the bid again to the RPS RFP inbox by 1:00 p.m., Pacific Standard Time, on the Closing Date. If the Respondent encounters further technical

difficulties with the RPS RFO inbox, they should provide evidence of such difficulties (e.g. a screen shot of the error message or a sent email notice with a time stamp before 1:00 p.m. on the Closing Date) and submit a hard copy and a CD of the bid package to SDG&E and the Independent Evaluator at the addresses below by close of business on the day following the Closing Date.

San Diego Gas & Electric Company
Electric and Fuel Procurement Department
Attn: 2017 Request For Proposal for
Renewable Energy Products
8315 Century Park Court, CP21D
San Diego, CA 92123-1593

Independent Evaluator (IE)
To Be Determined

All offer materials submitted in accordance with the above Response Instructions shall be subject to the confidentiality provisions of Section 11 “Confidentiality” of this RFP.

SDG&E will review and may utilize all information, if any, submitted by a Respondent that is not specifically requested as a part of any forms. During all stages of the RFP process, SDG&E reserves the right to request additional information from individual Respondents or to request any Respondent to submit supplemental materials in fulfillment of the content requirements of this RFP or to meet additional information needs. SDG&E also reserves the unilateral right to waive any technical or format requirements contained in the RFP.

ALL BIDS SHOULD BE VALID AND BINDING UPON THE RESPONDENTS ACCEPTANCE OF THE WINNING POSITION. BIDS SHALL REMAIN VALID AND BINDING UNTIL CONTRACT EXECUTION.

SDG&E WILL NOT REIMBURSE RESPONDENTS FOR THEIR EXPENSES UNDER ANY CIRCUMSTANCES, REGARDLESS OF WHETHER THE RFP PROCESS PROCEEDS TO A SUCCESSFUL CONCLUSION OR IS ABANDONED BY SDG&E IN ITS SOLE DISCRETION.

5.0 RPS PROGRAM PARAMETERS

CALIFORNIA RPS PROGRAM

California's Renewable Portfolio Standard ("RPS") Program was adopted in 2002 and is codified at Public Utility Code sec 399.11, *et seq.*⁷ In adopting the RPS legislation, the Legislature specifically found and declared that increasing California's reliance on renewable energy resources promotes the purpose of and may accomplish each of the following:

- Increase the diversity, reliability, public health and environmental benefits of the energy mix
- Promote stable electricity prices
- Protect public health and improve environmental quality
- Stimulate sustainable economic development and create new employment opportunities
- Reduce reliance on imported fuels
- Ameliorate air quality problems
- Improve public health by reducing the burning of fossil fuels

Current law requires all California load-serving entities ("LSEs") to procure renewable energy in the amount of 33% of retail sales by 2020⁸. Unlike the prior annual RPS program, the 33% regime sets increasing targets for three multi-year Compliance Periods ("CPs"). The targets are set at 20% by the end of CP1 (2011-2013), 25% at the end of CP2 (2014-2016), and 33% by the end of CP3 (2017-2020). The CPUC issued its first decision implementing the RPS Program, D.03-06-071 on June 19, 2003. This decision established certain basic RPS Program parameters. The CPUC has subsequently issued several additional RPS-related decisions in rulemaking proceeding R.04-04-026, and successor proceedings R.06-02-012, R.06-05-027, R.08-08-009 ~~and~~, R.11-05-005, and R.15-02-020. SDG&E will comply with all CPUC decisions governing RPS procurement. These decisions are publicly available on the CPUC's website at <http://www.cpuc.ca.gov/PUC/energy/Renewables/decisions.htm>.

This RFP is being conducted in compliance with relevant statutory and regulatory directives. Requirements set forth within the law and all directives shall be incorporated herein by reference. A full text of the law and the above-mentioned CPUC decisions can be downloaded from the CPUC website. Respondents are encouraged to review all RPS-related, CPUC issued directives available on the same Internet websites and are responsible for understanding and abiding by all RPS provisions.

RPS ELIGIBILITY CRITERIA

Resources being offered in this solicitation are certifiable as an "eligible renewable resource" by the CEC. Eligibility criteria are set forth by the CEC in its Renewable Portfolio Standard Eligibility Guidebook. ~~The most recent revision to the CEC guidebook was adopted in April 30, 2013. It, which~~

⁷ See, Senate Bill (SB) 1078 (Stats. 2002 Ch. 516), as amended by SB 107, (Stats. 2006, Ch. 464).

⁸ See, Senate Bill (SB) 2 (1x) (Simitian), stats. 2011, ch. 1

can be downloaded from the CEC's website at <http://www.energy.ca.gov/renewables/documents/index.html#rps>. Respondents are encouraged to review all RPS-related, CEC issued directives available on the same Internet website and are responsible for understanding and abiding by all RPS provisions. All requirements set forth within the CEC's guidebooks and all RPS-related documents shall be incorporated herein by reference.

PROCUREMENT REVIEW GROUP

The Procurement Review Group ("PRG"), a CPUC-endorsed entity, is composed of non-market participants such as ratepayers' advocacy groups, state energy and water commissions, power authorities, utility-related labor unions and other non-commercial, energy-related special interest groups. CPUC Decision D.03-06-071 established the role of the PRG. The PRG is charged with overseeing the IOU's procurement process, reviewing procedural fairness, examining overall procurement prudence and providing feedback during all stages. From RFP language development to offer evaluation to contract negotiation, IOUs brief the PRG on a periodic basis during the entire process.

Respondents are hereby notified that revealing confidential offer information to the PRG is required during PRG briefings in accordance with Section 11 ("Confidentiality"). Each Respondent must clearly identify, as part of its offer, what type of information it considers to be confidential.

INDEPENDENT EVALUATOR

The CPUC requires each IOU to use an Independent Evaluator to separately evaluate and report on the IOU's entire solicitation, evaluation, and selection process for this solicitation. This will serve as an independent review of SDG&E's implementation of the RFP process and final selections. The Independent Evaluator shall make periodic presentations regarding its findings to the IOU, and the IOU's PRG including the CPUC Energy Division staff. The intent is to preserve the independence of the Independent Evaluator by ensuring free and unfettered communication between the Independent Evaluator and the CPUC as well as an open, fair, and transparent process that the Independent Evaluator can affirm.

SDG&E is committed to ensuring an open and transparent solicitation, and to providing a fair, reasonable and competitive process.

6.0 SDG&E BACKGROUND

SDG&E provides electricity to 3.4 million consumers. It delivers the electricity through 1.4 million meters in San Diego County and an adjacent portion of southern Orange County. SDG&E also delivers natural gas through 855,000 meters in San Diego County and transports electricity and natural gas for others. The electric customer base comprises 89% residential and 11% commercial and industrial customers.

SDG&E's electric transmission network is comprised of 130 substations with 884 miles of 69-kV, 265 miles of 138-kV, 349 miles of 230-kV, and 215 miles of 500-kV transmission lines. Local ("on system") generating resources include the Encina plant (connected into SDG&E's grid at 138 kV and 230 kV), the Palomar Energy Center (connected at 230kV) and a number of combustion turbine facilities located around the service area (connected at 69 kV). Imported resources are received via the Miguel Substation as the delivery point for power flow on the Southwest Power Link, which is SDG&E's 500-kV transmission line that runs from Arizona to San Diego along the U.S./Mexico border, and via the San Onofre Nuclear Generating Station 230-kV switchyard.

The figure below shows a simplified diagram of existing SDG&E's service area, which encompasses an area of 4,100 square-miles and spans 2 counties and 25 communities.



For a map California IOU service territories please visit:

http://www.energy.ca.gov/maps/serviceareas/electric_service_areas.html

7.0 PRODUCTS & ELIGIBILITY REQUIREMENTS

A. Compliance Periods.

In this RFP, SDG&E intends to offer short and medium term Category 1 and 3 for the periods defined in Table 2 of the this document. Such products are defined below.

I. Category 1 Products

- a. Term: 10 years or less
- b. Pricing: SP-15 EZ Gen Hub day ahead index price plus premium expressed in \$/MWh
- c. Volume: To be bid in

II. Category 3 Products

- a. Term: 10 years or less
- b. Pricing: Bid REC price expressed in \$/MWh
- c. Volume: To be bid in

Eligibility Requirements

1. WRIGIS Account; and
2. Credit Capability (See Section 12.0 “Credit Terms and Conditions”).

8.0 EVALUATION CRITERIA AND SHORTLISTING

All incoming Bids will be assessed for conformance. Respondents shall conform to the minimum eligibility criteria in order to be considered, please see RFP Response Instructions.

SDG&E will utilize all the information provided in the required forms and narratives to evaluate all Bids. Respondents are responsible for the accuracy of all information provided in response to this RFP.

SDG&E will periodically brief the members of the PRG during the various stages of evaluation. Upon completion of SDG&E's evaluation process, SDG&E will brief the PRG members regarding SDG&E's recommendations for its short-list. Based upon the comments and recommendations received from the PRG, SDG&E may modify the preliminary list of winning bids.

QUANTITATIVE EVALUATION

SDG&E evaluates and ranks bids based on the pricing, volume and term information provided by the Bidders. SDG&E's analysis evaluates both quantitative and qualitative aspects of each bid to estimate its value to SDG&E's customers and its relative value in comparison to other Offers. SDG&E considers the value of selling surplus Renewable Energy as compared to the potential value of using surplus Renewable Energy to defer future RPS purchases to meet RPS compliance targets through banking. The quantitative valuation of an Offer takes into account SDG&E's RPS position and any opportunity costs associated with each transaction. A bid that minimizes overall cost to SDG&E's customers and satisfies all volumetric and timing constraints will be selected. The Offer will be accepted if it fulfills the quantitative and qualitative criteria and SDG&E decides to move forward to close a transaction.

QUALITATIVE EVALUATION

Qualitative factors and benefits may be used to determine advancement onto the short list or evaluate tie-breakers, if any.

ADHERENCE TO TERMS AND CONDITIONS

Respondents may not make material modification to the supplied Transaction Documents. SDG&E will review modifications of any terms and conditions proposed in the Offer and consider the materiality of these changes. Material changes will result in disqualification.

BID CONFORMANCE EVALUATION

In addition to the elements described above, SDG&E may also reject a Bid if:

1. SDG&E uncovers evidence of market manipulation in the bid preparation and Offer process;
2. The Respondent does not provide adequate evidence it meets minimum participation criteria;

3. If there is a question as to whether or not the bids meet minimum eligibility criteria;
4. If the Respondent cannot fulfill the terms and conditions of the supplied Transaction Documents;
5. If the Respondent is unable to comply with RFP timing and other solicitation requirements; and/or
6. Respondent in SDG&E's sole judgment may not be able to provide or maintain the level of security of the transaction.

9.0 REJECTION OF OFFERS

SDG&E SHALL TREAT ALL RESPONDENTS FAIRLY AND EQUALLY AND SHALL EVALUATE ALL BIDS IN GOOD FAITH. WHILE SDG&E IS MINDFUL OF THE BENEFITS OF THIS RFP, IT MAKES NO GUARANTEE THAT A CONTRACT AWARD SHALL RESULT FROM THIS RFP EVEN AFTER A BID HAS BEEN SHORTLISTED. IN ADDITION, SDG&E NOTES THAT SHORTLISTING A BID DOES NOT CONSTITUTE SDG&E ACCEPTANCE OF ALL REDLINED CHANGES TO THE REQUIRED TRANSACTION AGREEMENT. SDG&E RESERVES THE RIGHT AT ANY TIME, AT ITS SOLE DISCRETION, TO ABANDON THIS RFP PROCESS, TO CHANGE THE BASIS FOR EVALUATION OF BIDS, TO TERMINATE FURTHER PARTICIPATION IN THIS PROCESS BY ANY PARTY, TO ACCEPT ANY BID OR TO ENTER INTO ANY DEFINITIVE AGREEMENT, TO EVALUATE THE QUALIFICATIONS OF ANY RESPONDENT OR THE TERMS AND CONDITIONS OF ANY BID, OR TO REJECT ANY OR ALL BIDS, ALL WITHOUT NOTICE AND WITHOUT ASSIGNING ANY REASONS AND WITHOUT LIABILITY OF SEMpra ENERGY, SDG&E, OR ANY OF THEIR SUBSIDIARIES, AFFILIATES, OR REPRESENTATIVES TO ANY RESPONDENT. SDG&E SHALL HAVE NO OBLIGATION TO CONSIDER ANY BID.

10.0 CONFIDENTIALITY

EXCEPT AS STATED BELOW OR WITH THE PRIOR WRITTEN CONSENT OF SDG&E, RESPONDENTS MAY NOT DISCLOSE (OTHER THAN BY ATTENDANCE ALONE AT ANY MEETING TO WHICH MORE THAN ONE RESPONDENT IS INVITED BY SDG&E) TO ANY OTHER RESPONDENT OR POTENTIAL RESPONDENT THEIR PARTICIPATION IN THIS RFP, AND RESPONDENTS MAY NOT DISCLOSE, COLLABORATE ON, OR DISCUSS WITH ANY OTHER RESPONDENT, OFFER STRATEGIES OR THE SUBSTANCE OF OFFERS, INCLUDING WITHOUT LIMITATION THE PRICE OR ANY OTHER TERMS OR CONDITIONS OF ANY INDICATIVE OR FINAL OFFER. RESPONDENT MAY DISCLOSE THEIR PARTICIPATION IN THIS RFP, THEIR OFFER INFORMATION, AND THE NEGOTIATION PROCESS, TO THE CPUC, ITS STAFF, THE PRG AND THE IE UNDER APPROPRIATE CONFIDENTIALITY PROTECTIONS.

SDG&E WILL USE THE HIGHER OF THE SAME STANDARD OF CARE IT USES WITH RESPECT TO ITS OWN PROPRIETARY OR CONFIDENTIAL INFORMATION OR A REASONABLE STANDARD OF CARE TO PREVENT DISCLOSURE OR UNAUTHORIZED USE OF RESPONDENT'S CONFIDENTIAL AND PROPRIETARY INFORMATION THAT IS LABELED AS "PROPRIETARY AND CONFIDENTIAL" ON THE OFFER PAGE ON WHICH THE PROPRIETARY INFORMATION APPEARS ("CONFIDENTIAL INFORMATION"). RESPONDENT SHALL SUMMARIZE ELEMENTS OF THE OFFER(S) IT DEEMS CONFIDENTIAL. THE SUMMARY MUST CLEARLY IDENTIFY WHETHER OR NOT PRICE, PROJECT NAME, LOCATION, SIZE, TERM OF DELIVERY AND TECHNOLOGY TYPE (EITHER COLLECTIVELY OR INDIVIDUALLY) ARE TO BE CONSIDERED CONFIDENTIAL INFORMATION. CONFIDENTIAL INFORMATION MAY BE MADE AVAILABLE ON A "NEED TO KNOW" BASIS TO SDG&E'S DIRECTORS, OFFICERS, EMPLOYEES, CONTRACTORS, CONSULTANTS, THE INDEPENDENT EVALUATOR, AGENTS AND ADVISORS ("REPRESENTATIVES") FOR THE PURPOSE OF EVALUATING RESPONDENT'S OFFER, BUT SUCH REPRESENTATIVES SHALL BE REQUIRED TO OBSERVE THE SAME CARE WITH RESPECT TO DISCLOSURE AS SDG&E.

NOTWITHSTANDING THE FOREGOING, SDG&E MAY DISCLOSE ANY OF THE CONFIDENTIAL INFORMATION TO COMPLY WITH ANY LAW, RULE, OR REGULATION OR ANY ORDER, DECREE, SUBPOENA OR RULING OR OTHER SIMILAR PROCESS OF ANY COURT, SECURITIES EXCHANGE, CONTROL AREA OPERATOR, GOVERNMENTAL AGENCY OR GOVERNMENTAL OR REGULATORY AUTHORITY AT ANY TIME EVEN IN THE ABSENCE OF A PROTECTIVE ORDER, CONFIDENTIALITY AGREEMENT OR NON-DISCLOSURE AGREEMENT, AS THE CASE MAY BE, WITHOUT NOTIFICATION TO THE RESPONDENT AND WITHOUT LIABILITY OR ANY RESPONSIBILITY OF SDG&E TO THE RESPONDENT.

IT IS EXPRESSLY CONTEMPLATED THAT MATERIALS SUBMITTED BY A RESPONDENT IN CONNECTION WITH THIS RFP WILL BE PROVIDED TO THE CPUC, ITS STAFF, THE CEC, ITS STAFF, AND THE PRG. SDG&E WILL SEEK CONFIDENTIAL TREATMENT PURSUANT TO CPUC DECISION NUMBER 06-06-066, PUBLIC UTILITIES CODE SECTION 583 AND GENERAL ORDER 66-~~ED~~ OF THE CPUC, WITH RESPECT TO ANY RESPONDENT CONFIDENTIAL INFORMATION SUBMITTED BY SDG&E TO THE CPUC FOR THE PURPOSES OF OBTAINING REGULATORY APPROVAL. SDG&E WILL ALSO SEEK CONFIDENTIALITY PROTECTION FROM THE CEC FOR RESPONDENT'S CONFIDENTIAL INFORMATION AND WILL SEEK CONFIDENTIALITY AND/OR NON-DISCLOSURE AGREEMENTS WITH THE PRG. SDG&E CANNOT, HOWEVER, ENSURE THAT THE CPUC OR CEC WILL AFFORD CONFIDENTIAL TREATMENT TO A RESPONDENT'S CONFIDENTIAL INFORMATION OR THAT CONFIDENTIALITY AGREEMENTS OR ORDERS WILL BE OBTAINED FROM AND/OR HONORED BY THE PRG, CEC, OR CPUC.

SDG&E, ITS REPRESENTATIVES, SEMBRA ENERGY, AND ANY OF THEIR SUBSIDIARIES DISCLAIM ANY AND ALL LIABILITY TO A RESPONDENT FOR DAMAGES OF ANY KIND RESULTING FROM DISCLOSURE OF ANY OF RESPONDENT'S INFORMATION.

11.0 CREDIT TERMS AND CONDITIONS

SDG&E has the unilateral right to evaluate and determine the credit-worthiness of the Respondent relative to this RFP. The Respondent is required to complete, execute and submit the RFP credit application as part of its offer. The application requests financial and other relevant information needed to demonstrate creditworthiness. Respondents may download the application from the RFP Website.

All credit support arrangements (e.g., parent guaranty, deed of trust, letter of credit) must be negotiated prior to an offer being accepted as a winning offer. The form of the security (e.g. parent guaranty, deed of trust, letter of credit) will be at SDG&E's sole discretion and will depend on various factors including Respondent's credit worthiness, product type, the volume and the term of the agreement. A model guaranty and a model letter of credit may be downloaded from the RFP Website as separate attachment to the Transaction Document.

12.0 CPUC APPROVAL

SDG&E shall submit all signed agreements to the CPUC for approval. CPUC approval that is final and non-appealable will be required as a condition precedent to the effectiveness of any contract resulting from this RFP, however, the winning bidder, in its sole discretion, may choose to take deliveries prior to such approval.



APPENDIX 14

**REDLINE OF FINAL 2017 RPS PLAN (EXCEPT SOLICITATION DOCUMENTS)
AGAINST DRAFT 2017 RPS PLAN (EXCEPT SOLICITATION DOCUMENTS)**



ATTACHMENT A

**SAN DIEGO GAS & ELECTRIC COMPANY
2017 RPS PROCUREMENT PLAN**

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I. EXECUTIVE SUMMARY

San Diego Gas & Electric Company's ("SDG&E's") 2017 Renewable Portfolio Standard ("RPS") Procurement Plan (the "RPS Plan") describes the processes used by SDG&E to determine its RPS procurement need, as well as the methods it will use to manage its RPS portfolio to meet RPS program compliance targets in a cost-effective manner.¹ The RPS Plan establishes guidelines for SDG&E's procurement of Least-Cost Best-Fit ("LCBF") RPS-eligible resources that have enabled and, in the future, will enable SDG&E to achieve the following levels of renewable deliveries during each Compliance Period ("CP"): (a) an average of 20% of retail sales between January 1, 2011 and December 31, 2013, inclusive ("CP1"); (b) 25% of retail sales by December 31, 2016, with reasonable progress made in 2014 and 2015 ("CP2"); (c) 33% of retail sales by December 31, 2020, with reasonable progress made in 2017, 2018 and 2019 ("CP3"); (d) 40% of retail sales by December 31, 2024, with reasonable progress made in 2021, 2022 and 2023 ("CP4"); (e) 45% of retail sales by December 31, 2027, with reasonable progress made in 2025 and 2026 ("CP5"); (f) 50% of retail sales by December 31, 2030, with reasonable progress made in 2028 and 2029 ("CP6"); and (g) 50% of retail sales for all compliance periods beginning in 2031.² The RPS Plan also accounts for the new requirement that beginning in 2021, 65% of the procurement a retail seller counts towards its RPS compliance must be from long-term contracts ("65% long-term contracting requirement").³

To date, SDG&E has led the State in RPS procurement, achieving 35% renewable energy in 2015 (thereby exceeding the 2020 target of 33% five years early), 100% of which was from long-term contracts (also exceeding the 65% long-term contracting requirement). SDG&E achieved 43% renewable energy in 2016, 100% of which was also from long-term contracts; see

¹ SDG&E reserves the right to update its 2017 RPS Plan, including all Appendices attached hereto, as necessary.

² Compliance towards CP's 1, 2, and 3 shall be measured in accordance with Decision ("D.") 11-12-020, Ordering Paragraphs ("OP") 1-3. Senate Bill ("SB") 350 added CP's 4, 5, 6, and three-year compliance periods beginning in 2031. On December 15, 2016, the California Public Utilities Commission ("Commission") issued D.16-12-040 implementing the new compliance periods and procurement quantity requirements per SB 350.

³ SB 350 added a new long-term contracting requirement under 399.13(b), which was formalized in D.17-06-026, issued on July 5, 2017. To count towards this requirement, RPS-eligible procurement must be from: (i) facilities owned by the retail seller; (ii) facilities in which the retail seller has an ownership agreement for a duration of 10 years or more; and (iii) contracts with a duration of 10 years or more. Grandfathered contracts, which are those meeting the requirements of 399.16(d), also count in full towards the long-term contracting requirement per D.17-06-026. All statutory references herein are to the Public Utilities Code unless otherwise noted.

Appendix 2 for further detail. SDG&E is forecasted to reach 49% renewable energy in 2021, 98% of which will be from long-term contracts.

To determine the quantity of renewable generation that must be procured to meet SDG&E's RPS procurement need in each CP, SDG&E will follow the Need Determination Methodology described below. To determine its optimal portfolio mix, SDG&E manages its portfolio to conform to the portfolio content, balance, and 65% long-term contracting requirements established through the RPS program. SDG&E will implement a work plan to fulfill its need, if any, including potentially soliciting additional multi-product and multi-term contracts through RPS solicitations, considering bilateral proposals, utilizing banked procurement, selling surplus RPS generation when appropriate, and pursuing utility investment opportunities and/or utility ownership when economic and prudent. SDG&E will use all tools available to seek to manage its existing RPS-portfolio and the investment in SDG&E's banked procurement in the best interest of its ratepayers. As explained in more detail below, based on SDG&E's current portfolio and forecasted position, the most reasonable course of action for SDG&E is to not hold an RPS RFO during the 2017 procurement cycle.

Edits throughout the RPS Plan reflect the direction provided by the *Assigned Commissioner and Assigned Administrative Law Judge's Ruling Identifying Issues and Schedule of Review for 2017 Renewables Portfolio Standard Procurement Plans and Inviting Comments on Renewable Auction Mechanism Proposal* ("the ACR"), issued on May 26, 2017, and the Decision Accepting Draft 2017 Renewables Portfolio Standard Procurement Plans, issued on December 18, 2017.⁴ as well as edits reflecting updates necessary due to the passage of time⁵ and to explain SDG&E's proposed changes.

Additionally, on July 5, 2017, the Commission issued Decision D.17-06-026, the *Decision Revising Compliance Requirements for the California Renewables Portfolio Standard in Accordance with Senate Bill 350*. The Decision addresses modifications made to the RPS program banking rules by SB 350, and provides direction regarding Section 399.13(a)(4)(B)(iii),⁶

⁴ Decision ("D.") 17-12-007.

⁵ The use of "passage of time" in this document denotes basic updates (e.g., decision issuance since prior plan version).

⁶ New 399.13(a)(4)(B)(iii) allows a retail seller who elects to utilize the new banking rules to notify the Commission of such intention as well as its intention to comply with the new long-term contracting requirement (399.13(b)).

which allows a retail seller to utilize these new banking rules in CP3 if it also notifies the Commission that it will comply with the new 65% long-term contracting requirement beginning in CP3 (instead of CP4). The Decision requires the following: (i) a retail seller must provide notice to the Commission of its intention to utilize the new banking rules in a letter to the Director of Energy Division, served on the service list and filed with the Docket Office, within 60 days of the effective date of the final decision; and (ii) reflection of the early application of the new banking rules in the retail seller's RPS procurement plans filed in CP3, including an express statement that the retail seller has elected early compliance, the date of the letter to the Director of Energy Division indicating the election, and any specific consequences. SDG&E has elected early compliance with the 65% long-term contracting requirement, and submitted its letter to the Director of Energy Division on July 17, 2017. SB 350's adoption of the 65% long-term contracting requirement reaffirms the Legislature's longstanding view that long-term contracts and new-build projects are critical to the success of the RPS Program. As mentioned above, 100% of the renewable energy that SDG&E delivered to its customers in 2016 came from long-term contracts, therefore SDG&E is well positioned for early compliance with SB 350 goals. The 65% long-term contracting requirement and the new banking rules have been incorporated into SDG&E's Renewable Net Short ("RNS") table under Appendix 2.

While SDG&E cannot predict the results of SB 350 implementation at this time, it is important to note that SB 350 includes a wide-sweeping planning process, the Integrated Resource Planning ("IRP") process, which SDG&E anticipates will optimize RPS planning and procurement, within a larger framework that looks at meeting State policies at the lowest possible cost as is discussed in more detail below under Section II.C. In short, the current siloed approach to procurement, in which resource procurement mandates are imposed on a program-by-program basis without reference to other potential forms of supply- and/or demand-side procurement, runs directly counter to both the goal of optimization and the new statutory mandates. Procurement should be done in a manner that maximizes ratepayer benefits while minimizing bill impacts. The holistic process contemplated by the IRP must evaluate the costs and benefits of all available resources when developing portfolios that comply with the requirements set by SB 350 and will be able to better guide RPS planning and procurement, thereby maximizing the value of ratepayer dollars and minimizing ratepayer exposure to excessive costs. SDG&E remains focused on effective cost and risk management, as described

in more detail below under Section II.B, and it looks forward to assisting the Commission in its implementation of the new IRP regime.

II. ASSESSMENT OF RPS PORTFOLIO SUPPLIES AND DEMAND

A. *Need Determination Methodology*

SDG&E makes procurement decisions based on how its risk-adjusted RPS position forecast (referred to herein as its “RPS position”) compares to its RPS program compliance requirements, the result of which is its probability-weighted procurement need or RNS. In order to calculate its RPS Position, SDG&E assigns a probability of success, following a qualitative and quantitative assessment, to the expected deliveries for each project that is not yet online in its portfolio⁷ and then adds the risk-adjusted expected deliveries across all projects in its entire RPS portfolio. Probabilities are used because renewable projects and their deliveries are exposed to multiple risks, and the flexible compliance mechanisms that allowed for borrowing from future procurement were eliminated by SB 2 (1X).⁸ These risks include approval risks (*e.g.*, Commission approval and the timing of such), development risks (*e.g.*, permitting, financing, or transmission interconnection), delivery risks (*e.g.*, generation fluctuations given the variant-intermittent nature of some renewable resources, or operational challenges), and/or other risks (*e.g.*, under-development of transmission infrastructure common to a group of projects).

In general, if SDG&E’s RPS Position is less than its RPS requirements, SDG&E will plan to procure additional RPS resources on a schedule that will allow for the procurement and development of resources in time to provide deliveries to meet anticipated shortfalls. If, on the other hand, its RPS Position is greater than its RPS requirements, SDG&E will consider opportunities to bank or sell bundled and/or unbundled renewable energy credits (“RECs”). In addition, to optimize the relative value of renewable energy across compliance periods, SDG&E also considers short-term contracts when, for example, it is short⁹ in the most immediate CP but

⁷ For purposes of determining its RPS Position, SDG&E considers its portfolio to include all executed contracts until contract expiration (*e.g.*, it does not assume expiring contracts will be renewed and excludes contracts under-negotiation unless indicated otherwise) and investment and UOG projects where relevant progress has been made.

⁸ Stats. 2011, Ch. 1.

⁹ The term “short” is used herein to refer to an RPS Position that is lower than the relevant RPS program requirements. The term “long” is used to refer to an RPS Position that is higher than relevant RPS program requirements.

long in the subsequent CP. SDG&E will also consider procurement strategies that are in the best interest of ratepayers across compliance periods in order to secure greater value from approved RPS expenditures. For example, SDG&E strives to have a well-diversified RPS portfolio so that its RPS compliance, particularly in the most immediate compliance period, is not unduly exposed to any given risk (*e.g.*, a particular technology, region, counterparty, etc.). SDG&E's RPS portfolio management strategy involves identifying needs and risks and managing them in a cost-effective manner in the best interest of its ratepayers.

The following sections explain SDG&E's methodology for determining its RNS. First, the process used to compute the RPS Position is explained. Then, procurement needs by compliance periods are inferred by comparing RPS requirements to RPS Positions.

i. Assessment of Probability of Success for Various Project Types as a Key Component of Calculating the Probability-Weighted RPS Position Forecast

SDG&E must assess the probability of success and/or expected generation of the following main types of projects: (a) delivering; (b) approved but not yet delivering; and (c) not yet approved.¹⁰ SDG&E evaluates the probability of success for each project in its portfolio on a monthly basis in order to calculate its RNS, which is the basis for its procurement need. To do this, SDG&E conducts a monthly review with an interdisciplinary team and uses the most up-to-date qualitative and quantitative information to assign a probability of success and/or determine the expected generation of each individual project. SDG&E's most up-to-date assessment as of June 2017 is set forth in Appendix 2. SDG&E applies the following methodology to analyze each project type:

a. Assessment of Performance of Delivering Projects

Projects that have already achieved commercial operation and have begun delivering energy provide the most stable source of RPS deliveries when forecasting RPS procurement need. These projects have overcome development hurdles and are supported by steady revenues under executed Power Purchase Agreements ("PPAs"). However, it is crucial to consider the potential fluctuations in deliveries that these projects can experience and the impact that such fluctuations could have on SDG&E's need to procure additional resources to meet its RPS goals. As discussed further in Section V, deliveries from these projects can be impacted by resource

¹⁰ See the Renewable Net Short Calculation set forth in Appendix 2.

availability, regulatory changes, economic environment, evolving technologies, and third party systems. These types of fluctuations can be significant. In order to ensure RPS compliance, SDG&E must account for potential fluctuations (while recognizing that swings in production could be positive). The monitoring of performance of delivering contracts and the assessment of probabilities focuses on (a) understanding the historical generation profile of each project and how it has differed year-over-year and relative to forecasts; and (b) the operational track record of any given project. SDG&E has found that a weighting of 100% is typically appropriate for delivering contracts. The forecast of future deliveries for delivering contracts is based on historical deliveries (up to the most recent three years, if available; if not available historical deliveries are used), which SDG&E will revise as appropriate. Adjusting forecasts when necessary is a crucial component of SDG&E's need assessment methodology.

b. Assessment of the Development Progress of Approved Projects that Have Not Yet Begun Delivering

Another important aspect of SDG&E's need assessment methodology is evaluating the development status of projects approved by the Commission, but not yet delivering energy. These projects are typically much riskier than projects that have begun delivering due to the challenges that can arise during the development process that might prevent a project from completing construction and achieving commercial operation. Permitting, interconnection, financing and other development issues are discussed further in Section IV. SDG&E must account for development risks when determining its procurement need and the monitoring of development status is the most critical aspect of SDG&E's need assessment methodology. As with delivering contracts, SDG&E meets internally on a monthly basis to assign a probability of success to each of its developing projects. This factor is then applied to the expected deliveries stated in the contracts. SDG&E's current assessment as of June 2017 is provided in the RNS Calculation in Appendix 2.

c. Assessment of the Approval Queue for Projects that Have Been Submitted to the Commission, But Are Not Yet Approved

SDG&E typically meets monthly with its Procurement Review Group ("PRG"), which includes Energy Division staff, to discuss the likely approval timetable of projects that SDG&E has submitted to the Commission for approval. The discussion covers expected timing of Commission action and any potential constraints that might necessitate expedited Commission action or require additional information. SDG&E works collaboratively with the Commission to

develop a work plan that results in timely approval. It is possible, however, that the shortage of Energy Division staff or other procedural challenges can result in approval delays that can impact a project's ability to achieve milestones. SDG&E must monitor this process closely to determine what impact, if any, delays may have on the timing of expected deliveries or sales.

ii. Assessment of Other Portfolio Impacts

Once SDG&E has determined the probability of success for each of the contracts in its portfolio, SDG&E must also consider a broader range of risk factors that can impact multiple projects or its entire portfolio. SDG&E evaluates the impact of these factors on a monthly basis and describes its methodology for analyzing these risk factors below.

a. Impact of Retail Sales Fluctuations

Because RPS compliance is based on an energy target, as opposed to a capacity target that is calculated using a percentage of retail sales, it is important to monitor fluctuations in forecasted retail sales. In accordance with Commission guidance, SDG&E uses the latest California Energy Commission ("CEC") forecast consistent with the standardized planning assumptions authorized in D.12-01-033. SDG&E monitors its retail sales forecasts on a monthly basis to identify potential fluctuations and their impact on its RPS requirements.

b. Impact of Solar Panel Degradation

Contracts with solar photovoltaic ("PV") developers incorporate a degradation factor that is used to forecast the project's performance over time as the panels age and become less efficient. SDG&E utilizes the degradation factor provided by the bidder in its LCBF evaluation, and uses the contractual degradation factor when calculating project deliveries for its RPS position calculation (both nominal¹¹ and probability-weighted). To the extent deliveries are different than the provided estimates, SDG&E will adjust its RPS position calculation accordingly.

c. Impact of Key Transmission Upgrades and/or Infrastructure

Transmission availability has long been recognized as a potential barrier to achieving RPS goals, and SDG&E continues to monitor the progress of transmission upgrades on which

¹¹ Nominal RPS position refers to a position estimate assuming that deliveries from contracts will occur as expected 100% of the time.

SDG&E's RPS projects depend in order to assess potential delays and possible impacts. A more detailed discussion of transmission is provided under Section IV.

d. Impact of Contract Renewal

SDG&E began signing RPS contracts in 2003, most of which had terms of 20 years. Some of these contracts are expected to deliver through 2023, and may impact SDG&E's procurement needs post-2020. Some contracts for renewable energy procurement, however, were signed before the institution of the RPS program. Some of these contracts terminated during Compliance Period 2 and some are scheduled to terminate in Compliance Period 3. As part of its RPS position calculation, and in accordance with Commission direction,¹² SDG&E does not assume that these contracts will be renewed. Owners of these projects will be asked to bid such projects into future requests for offers ("RFO") to compete with other options available to SDG&E at that time, and these bids will be required to conform with the need identified in the then-current RFO.¹³ SDG&E believes that ratepayers will benefit from this additional supply being submitted into solicitations as this would make these solicitations more competitive and provide these facilities with the opportunity to extend their contracts past the original termination dates into later years when SDG&E has a need for additional resources. Additionally, as explained under Section B below, SDG&E may seek to extend the term of an existing contract when economically prudent.

e. Impact of Contract Termination

As part of its contract administration process, SDG&E actively monitors contractual requirements including conditions precedent that must be met (or waived) in order for the contract to be viable. When a condition precedent may not be met or has not been met, or when parties can mutually agree to a termination, SDG&E may consider terminating the contract if it is in the best interest of ratepayers.

f. Impact of Banking Rules

¹² Administrative Law Judge's Ruling on Renewable Net Short, issued May 21, 2014.

¹³ Qualifying Facilities with expiring RPS contracts may be able to sign a Standard Contract for Qualifying Facilities with a Power Rating that is Less than or Equal to 20 MW, which was approved by the Commission on November 23, 2011 as part of the Qualifying Facilities and Combined Heat and Power Program Settlement (the "QF Settlement").

Current RPS program rules allow SDG&E to bank excess procurement from one compliance period for use in another, with exceptions for short term contracts and products that meet the requirements of § 399.16(b)(3) (“Category 3”).¹⁴ SB 350 adopted a new set of banking rules, formalized in D.17-06-026. There are several key differences between the current and new SB 350 banking rules. Under the new SB 350 banking rules: (i) short-term Category 1 products can be banked;¹⁵ (ii) Category 2 products cannot be banked;¹⁶ and (iii) Category 2 and 3 products of any duration cannot be deducted from the bank.¹⁷ In accordance with Commission direction,¹⁸ SDG&E assumes for purposes of calculating its RNS that eligible excess procurement¹⁹ will be utilized in future compliance periods,²⁰ and it has updated its RNS table under Appendix 2 to comport with the new SB 350 banking rules, consistent with SDG&E’s election to utilize the new SB 350 banking rules beginning in CP3.

g. Impact of the Resale Market

SDG&E will closely monitor opportunities to sell excess procurement. SDG&E will assess the market when opportunities arise to determine whether it is more advantageous for SDG&E’s ratepayers to bank such excess procurement for use in a future compliance period or sell the excess procurement. If SDG&E believes that the current market price is favorable and expects that it will be able to fulfill any future needs with more economic options, it may choose to sell excess procurement instead of banking it²¹ if such a transaction is viewed to be in the best interests of its ratepayers. More detail is provided under Section B below and Appendix 10.B, attached hereto.

¹⁴ 399.13(a)(4)(B)(ii).

¹⁵ 399.13(a)(4)(B)(i).

¹⁶ 399.13(a)(4)(B)(ii).

¹⁷ The current banking rules, established by D.12-06-038 (see p. 66), require that bankable excess procurement be calculated by deducting all short-term RECs of any category from the total volume of bankable excess procurement. SB 350 expressly changes this by allowing the banking of short-term Category 1 products (399.13(a)(4)(B)(i)), and prohibiting the deduction of any Category 2 and 3 products when determining bankable excess procurement (399.13(a)(4)(B)(ii)).

¹⁸ *Administrative Law Judge’s Ruling on Renewable Net Short*, issued May 21, 2014.

¹⁹ Rules regarding excess procurement are set forth in D.12-06-038, and D.17-06-026.

²⁰ Note that SDG&E may manage excess procurement by selling such products when doing so would benefit ratepayers, or by utilizing a retired REC for RPS compliance in future compliance periods.

²¹ Note that banking a REC may either mean that the REC is held in SDG&E’s active WREGIS sub-account to be used later in its 36-month active lifespan, or it can mean that the REC is retired before its 36-month active lifespan ends and is then held in SDG&E’s retirement account for use in future compliance periods.

h. Impact of Rim Rock Settlement

In 2011, the Commission approved a settlement agreement between SDG&E, NaturEner Rim Rock Wind Energy, LLC, the Division of Ratepayer Advocates (“DRA”) (now known as the Office of Ratepayer Advocates (“ORA”)) and The Utility Reform Network (“TURN”) (together, the “Settling Parties”) regarding the Rim Rock wind project located in Montana.²² As part of the settlement agreement, SDG&E has agreed not to procure any incremental RECs from projects that are neither directly connected nor dynamically scheduled to a California-based Balancing Area Authority (“CBA”) if such purchase would cause SDG&E to meet more than 25% of its RPS requirements with such RECs through December 31, 2017. SDG&E currently includes generation from Rim Rock in its RNS calculation.

i. Impact of Mandated Procurement Programs

The Legislature has passed, and the Commission has been working to implement several renewable procurement programs mandated by State legislature: SB 43 (“Green Tariff Shared Renewables” or “GTSR”), SB 1122 (“Bioenergy Market Adjusting Tariff” or “BioMAT”), and the Renewable Market Adjusting Tariff (“Re-MAT”). The Commission implemented its own mandated renewable procurement program, the Renewable Auction Mechanism (“RAM”) program in 2010, as well as the Bioenergy Renewable Auction Mechanism (“BioRAM”) in 2016 in response to the Governor’s Emergency Proclamation to protect public safety and property from falling dead trees and wildfire (“Emergency Proclamation”).²³ These programs have resulted and will result in additional RPS procurement that SDG&E must include in its RNS calculation;²⁴ this will impact SDG&E’s position and procurement decisions. As explained under Section II.C, SDG&E anticipates that the recently codified IRP process signifies a shift away from separate programs and processes (including those discussed below), towards a holistic planning and procurement process. Further detail regarding the current mandated programs is as follows:

- Green Tariff Shared Renewables: SB 43 is intended to facilitate customer participation in offsite renewable generation facilities and became effective on

²² See D.11-07-002 and D.16-07-006.

²³ ACR, p. 16.

²⁴ SDG&E’s RNS calculation, attached hereto as Appendix 2, only includes programs that have been fully implemented.

January 1, 2014.²⁵ This bill requires participating utilities, including SDG&E, to file an application for a GTSR program, which would allow customers to buy some or all of their energy from local renewable projects. This bill also requires that SDG&E use “commission-approved tools and mechanisms to procure additional eligible renewable energy resources for the green tariff shared renewables program,” and states that “[a]ny renewable energy credits associated with electricity procured by a participating utility for the shared renewable energy self-generation program, but not utilized by a participating customer, shall be counted toward meeting that participating utility’s renewables portfolio standard.” SDG&E’s target for this program is 59 MW,²⁶ and this program is discussed in more detail below under Section XVII.

- BioMAT: SB 1122 became effective on January 1, 2013,²⁷ and requires that the Commission create a new feed-in-tariff (“FiT”) for bioenergy projects commencing operations after June 1, 2013, that are no larger than 3 MW in size. The goals of this new FiT program are to: (i) establish a rate based on quantifiable avoided cost, (ii) contain costs, (iii) ensure maximum value to the ratepayer and utility, and (iv) stimulate the development of in-state biogas. The Commission issued D.14-12-081 on December 26, 2014, setting forth the tariff and contract requirements. These documents were submitted to the Commission on February 9, 2015, and subsequently approved with certain modifications in D.15-09-004. SDG&E submitted the modified BioMAT documents as directed on October 19, 2015, began accepting applications for its BioMAT program on December 1, 2015, and the first program period was February-March of 2016. SDG&E’s target for this program is 24.68 MW.²⁸
- Re-MAT: The Re-MAT program began on October 1, 2013, and was offered to projects that are no larger than 3 MW in size on a first-come first-serve basis. The goals of this FiT program were similar to those of the BioMAT, ReMAT was intended to: (i) establish a rate based on quantifiable avoided cost, (ii) contain costs,

²⁵ Section 2831 *et seq.*

²⁶ D.15-01-051, p. 32.

²⁷ Stats. 2012, Ch. 612.

²⁸ D.14-12-081, p. 36.

(iii) ensure maximum value to the ratepayer and utility, and (iv) utilize locations close to load and the distribution system. In order to participate, a project was required to apply, and if SDG&E determined that a project was eligible, it would assign this project a Re-MAT Queue Number for the project's relevant Product Type (Baseload, Peaking As-Available, and Non-Peaking As-Available), and the project would then be able to indicate acceptance of the price for its Product Type. Capacity was offered incrementally on a bi-monthly basis in 3 MW increments to each Product Type Queue to the extent possible. SDG&E's target was 48.8 MW, less the amount contracted under SDG&E's prior FiT Programs (the Customer Renewable Energy ("CRE") FiT and the Water Agency Tariff for Eligible Renewables ("WATER") FiT.²⁹ Per Section F.3. of SDG&E's Commission-approved Schedule Re-MAT Tariff, it's Re-MAT program ends for all Product Types 24 months after the first Product Type is fully subscribed or reaches a de minimis amount of capacity. SDG&E's Peaking As-Available Product Type was fully subscribed in Period 4, therefore SDG&E's Re-MAT program ended 24 months after the close of Period 4, on June 30, 2016. SDG&E posted notice regarding this future closure date in July of 2014 on both SDG&E's Company and Accion Re-MAT websites, and on July 1, 2016, updated these websites and informed all parties registered on SDG&E's Accion site that the Re-MAT program had closed effective June 30, 2016. On December 15, 2016, SDG&E filed Advice Letter ("AL") 3018-E to provide notice to the Commission of the closure of SDG&E's Schedule Re-MAT Tariff, effective June 30, 2016. ~~Energy Division initially suspended Advice Letter 3018-E until May 15, 2017, and then further suspended the Advice Letter until November 13, 2017. This AL is pending before the Commission. Additionally, on December 15, 2017, the Commission directed the IOUs to not sign any new Re-MAT contracts pending next steps, as a result of the U.S. District Court for the Northern District of California's finding that the program does not comply with the Public Utility Regulatory Policies Act ("PURPA").~~

- Renewable Auction Mechanism: The Commission adopted the RAM program in December 2010 with the intent of creating a standardized method for procuring

²⁹ D.13-01-041, pp. 79-80.

projects up to 20 MW in size in order to contribute to RPS goals in the near-term, and reduce transaction costs for all parties. ~~D.10-12-048 directed the investor-owned utilities (“IOUs”) to hold four auctions over a two-year period and to submit bidding protocols and standard contracts through a Tier 3 advice letter (“AL”). SDG&E’s program target is 165 MW,³⁰ of which approximately 107 MW remain unprocured as of May 2017 despite SDG&E’s full efforts to subscribe competitively priced RAM contracts. SDG&E held four auctions between 2011 and 2013, and Resolution E-4582 issued on May 13, 2013 authorized a fifth solicitation.³¹ SDG&E issued its fifth solicitation on June 2, 2014 to solicit bids for its remaining capacity under the RAM program. Per D.14-11-042, SDG&E issued a sixth RAM auction for approximately 92 MW,³² including GTSR procurement, which closed on August 21, 2015.³³ On July 20, 2016, the Commission issued Resolution E-4783 directing SDG&E to procure the balance of its RAM target (107 MW) from the bids it received in its sixth RAM solicitation, or alternatively, hold a seventh RAM solicitation which shall close by June 30, 2017.³⁴ SDG&E has filed a Petition to Modify (“PFM”) D.10-12-048, D.12-02-002, and D.14-10-042 and an Application for Modification of Resolution E-4783. SDG&E was SDG&E’s program target is 165 MW,³⁵ and SDG&E held seven RAM solicitations between 2011 and 2017. SDG&E’s most recent AL 3151-E, detailing its RAM VII solicitation results, was approved by the Commission on December 21. The Investor Owned Utilities (“IOUs”) were authorized in D.14-11-042 to utilize the RAM program for GTSR procurement,³⁶ and as a streamlined procurement mechanism going forward.³⁷ The RAM mechanism is discussed in more detail under Sections II.B and XVI.~~

³⁰ ~~SDG&E’s previous target was 155 MW; however, D.14-11-042 (pp. 102-103) added 10 MW to this target.~~

³¹ ~~E-4582, Ordering Paragraph 2, p. 12.~~

³² ~~D.14-11-042, *mimeo*, p. 103.~~

³³ ~~SDG&E filed AL 2717-E on March 19, 2015 seeking approval of its RAM VI solicitation documentation (including solicitation schedule). This AL became effective on June 11, 2015 per Energy Division’s disposition letter dated June 17, 2015.~~

³⁴ ~~Resolution E-4783, ordering paragraph 2.~~

³⁵ ~~SDG&E’s previous target was 155 MW; however, D.14-11-042 (pp. 102-103) added 10 MW to this target.~~

³⁶ D.15-01-051, p. 23.

³⁷ D.14-11-042, p. 92.

- BioRAM: In response to Governor Brown’s Emergency Proclamation to protect public safety and property from falling dead trees and wildfire the Commission issued Resolution E-4770 on March 17, 2016, requiring SDG&E to hold a solicitation targeting 10 MW of capacity from facilities that utilize biofuel from high hazard zones using the RAM procurement mechanism and standard contract. SDG&E issued its solicitation on June 28, 2016. This program is discussed in more detail under Section II.B.

j. Impact of Local Capacity Resource Needs

In D.14-03-004, the Commission authorized SDG&E to procure 500-800 MW of local capacity resources to be on-line by 2022 of which up to 600 MW could be from any source, and the remaining 200 MW from preferred resources or energy storage (including a required minimum of 25 MW of energy storage).³⁸ In D.15-05-051 (the Carlsbad Energy Center conditional approval decision), the Commission approved a power purchase tolling agreement (“PPTA”) for the 500 MW Carlsbad Energy Center, which was 100 MW smaller than the 600 MW PPTA requested in SDG&E’s application. The reduced contract capacity is “subject to the same per-unit price and other terms and conditions of the power purchase toll agreement (‘PPTA’) submitted with the application.”³⁹ Additionally, D.15-05-051 mandated that “[a]ll of the 100 megawatts in residual procurement authority resulting from the reduction of the purchase power tolling agreement must consist of preferred resources and energy storage.”⁴⁰ D.14-03-004 also required that SDG&E submit a procurement plan within 90 days of the issuance of that decision. SDG&E complied with that requirement by submitting a conventional resource procurement plan and a preferred resources procurement plan to the Energy Division that were approved by the Director of the Energy Division on July 17 and July 22, 2014 respectively.

In accordance with these approved procurement plans, SDG&E has issued two solicitations. The most recent of which was SDG&E’s 2016 Preferred Resources local capacity requirement (“LCR”) solicitation, issued on February 26, 2016, seeking up to 140 MW of preferred resources from demand response, energy efficiency, energy storage, renewables or distributed generation. On April 19, 2017 SDG&E filed A.17-04-017 requesting approval of 88

³⁸ D.14-03-004, OP 2, p. 143.

³⁹ Carlsbad Decision at p. 36, OP 1.

⁴⁰ Carlsbad Decision at p. 37, OP 2.

MW of in-basin capacity (83.5 MW from energy storage, and 4.5 MW from Demand Response). SDG&E may issue another solicitation for preferred resources to fill any remaining 2022 LCR need (which can include renewable energy), in the future and to allow for sufficient time for approval.

k. Impact of Distributed Generation Policy Goals

The Governor’s commitment to renewable distributed generation (“DG”) continues to influence proceedings, programs, and legislation. This commitment will ultimately shape the State’s renewable mix, and as load-serving entities (“LSEs”) reach compliance, they may be required to shift procurement from utility-scale projects to small-scale DG projects. Two programs related to the Governor’s policy position are the BioMAT and GTSR programs, discussed in more detail above, as well as in Sections II.B and XVII below. SDG&E is monitoring the legislative and policy activities related to this goal, and any potential impacts to its portfolio. Again, as explained under Section II.C, SDG&E anticipates that the recently codified IRP process signifies a shift away from separate programs and processes (including DG-specific programs), towards a holistic planning and procurement process.

l. Impact of Energy Storage Procurement

The Commission issued D.13-10-040⁴¹ on October 1, 2013, requiring SDG&E to procure 165 MW of energy storage by 2020.⁴² As required by D.13-10-040, SDG&E filed A.14-02-006 on February 28, 2014 detailing its Energy Storage Procurement Framework and Program for the 2014 Biennial Procurement Period (“Energy Storage Procurement Framework”), which was approved by the Commission on October 16, 2014 via D.14-10-045. On March 1, 2016, SDG&E filed A.16-03-003, as required by D.13-10-040, detailing its energy storage procurement framework for the 2016 energy storage procurement cycle. Energy storage itself is not explicitly RPS-eligible, as explained in the 9th Edition of the CEC’s RPS Renewables Portfolio Standard Eligibility Commission Guidebook (“RPS Guidebook”).⁴³ However, to the extent SDG&E procures energy storage that, in the future the CEC determines is RPS-eligible, it will count this capacity towards its RPS targets.

⁴¹ This decision established the policies and mechanisms for procurement of electric energy storage pursuant to Assembly Bill 2514.

⁴² D.13-10-040, *mimeo*, OP 3, p. 77.

⁴³ RPS Guidebook, p. 40.

m. Impact of California Energy Commission Requirements

The CEC revises its RPS Guidebook with relative frequency, which sometimes results in changes to eligibility requirements for various renewable energy resources. SDG&E monitors this process and works with CEC staff to determine the effects, if any, on its portfolio as a result of these periodic Guidebook revisions. The CEC is also tasked with verifying RPS procurement. SDG&E submits its procurement data from the prior year to the CEC annually by July 1 and is prepared to work with the CEC in its review process.

n. Impact of New Generator Interconnection and Deliverability Allocation Procedure

Under the California Independent System Operator's ("CAISO's") Generator Interconnection and Deliverability Allocation Procedure ("GIDAP") procedure, the CAISO will: (i) identify the needed transmission upgrades in its annual Transmission Planning Process ("TPP"); (ii) calculate the amount of transmission capacity ("TP Deliverability") available; and (iii) allocate this TP Deliverability to eligible projects based on project viability. As a part of this process, projects seeking either Full or Partial Capacity Deliverability Status will be required to select Option A (indicating the need for ratepayer-funded deliverability upgrades), or Option B (indicating the willingness and ability to self-fund the necessary upgrades). The outcome of this TP Deliverability allocation process can affect projects in several ways if they select Option A. While projects choosing Option A will receive cash reimbursement for upgrades in accordance with their assigned cost responsibility, they may have to downsize, keep their project size and accept "Partial Capacity Deliverability Status," convert to "Energy-Only Deliverability Status," or withdraw from the interconnection queue if they do not receive a sufficient TP Deliverability allocation. A project's TP Deliverability allocation and the consequences associated with it could make it difficult for the project to secure financing, and it may also impact the project's ability to meet its contractual obligations, such as the project online date. SDG&E will closely monitor this process, and any effects it may have on its portfolio.

o. Impact of Departing Load

The State has recognized the potential for departing load from utility bundled service to alternative providers such as Electric Service Providers ("ESPs"), and Community Choice Aggregators ("CCAs"). The Commission held an En Banc regarding CCAs on February 1, 2017, and the Commission and the CEC held a joint En Banc on May 19, 2017, to discuss

consumer retail choice in California. Additionally, the City of Solana Beach voted to begin the process to adopt a CCA program on May 24, 2017, the first city within SDG&E’s service territory to do so.⁴⁴ Various other cities within SDG&E’s service territory are actively exploring adoption of a CCA program as well, including the City of San Diego, which represents 43% of SDG&E’s load.⁴⁵ If any cities form a CCA within SDG&E’s territory, this will reduce its volume of retail sales, thereby impacting its RPS position. However, the overall impact to SDG&E is not isolated to the RPS program, but is in fact much broader as the current methodology for allocating costs to departing load, the Power Charge Indifference Amount (“PCIA”), is ineffective at maintaining bundled customer indifference as required by law.

With this larger impact in mind, the three IOUs together filed a joint Application⁴⁶ requesting approval of the Portfolio Allocation Methodology (“PAM”) for all customers. The PAM is a new methodology by which the costs and benefits of an IOU’s procurement portfolio are fairly allocated among its departing load customers and remaining bundled customers. It is intended to replace the PCIA, which utilizes projected market costs and administratively-determined benchmarks without true-up mechanisms. The PCIA not only fails to ensure bundled customer indifference in the event of departing load, but it is also not scalable – the larger the volume of departing load, the larger the impact to remaining bundled customers. On the other hand, PAM is based on actual market results and true-up mechanisms and scales seamlessly from low to high levels of departing load, including instances where departing load returns to bundled service. The IOUs proposed that PAM will take effect no sooner than one year from Commission approval through the next utility-specific Energy Resource Recovery Account (“ERRA”) Forecast proceeding (e.g., if approved in December 2017, PAM would be implemented in the Joint Utilities’ 2019 ERRA Forecast proceedings filed in 2018, with PAM rates in effect as of January 1, 2019), and requested Commission approval of the PAM Application by December 2017.

⁴⁴ <http://www.sandiegouniontribune.com/communities/north-county/sd-no-solana-beach-energy-20170525-story.html>.

⁴⁵ The City of San Diego published its CCA Feasibility Study in July 2017: https://www.sandiego.gov/sites/default/files/san_diego_cca_feasibility_study_final_draft_main_report_7-11-17.pdf.

⁴⁶ A.17-04-018.

On June 29, 2017, the Commission adopted an Order Instituting Rulemaking (“OIR”) seeking to review the PCIA, the scope of which will include stakeholder work on the PCIA to date as well as language within SB 350 regarding customer indifference requirements under a departing load scenario. The OIR concludes that the Joint IOU PAM Application is premature, and dismisses it without prejudice, which means that the Joint IOUs are not precluded from proposing the PAM proposal as part of the OIR process. SDG&E looks forward to the expeditious resolution of the OIR and the Joint IOU PAM proposal, and will modify its future RPS Plans as appropriate to reflect the outcome of this work.

iii. Determination of the Compliance Needs for Each Compliance Period

After probabilities are assigned to each project, SDG&E’s RNS is calculated by multiplying the expected contractual deliveries (including degradation) by each contract’s probability weighting and then adding the resulting expected deliveries across the portfolio.⁴⁷ The discussion below describes SDG&E’s current forecasted RNS for each compliance period based on its assessment as of June 2017.

D.14-03-004 authorizes SDG&E to procure resources to meet LCR needs by 2022. D.14-03-004 also directs that at least 25 MW of SDG&E’s authorization come from energy storage and at least 200 MW come from preferred resources or energy storage to be on-line by 2022. This authorization may result in new renewables contracts that can provide local capacity although no renewable contracts were signed as a result of the 2014 All Source solicitation or the 2016 Preferred Resources LCR RFO that followed from D.14-03-004. As explained above, SDG&E exceeded the 2020 goal of 33% renewable energy five years early (achieving 35% RPS in 2015), and SDG&E is currently forecasting 49% renewable energy by 2021, 98% of which will be from long-term contracts – therefore it is SDG&E’s expectation that it will be able to meet its CP2 and CP3 goals with RPS eligible procurement already under contract (as also explained below). Consistent with its assessment of supply (SDG&E’s delivering and developing contracts) and demand (SDG&E’s RPS targets in each CP),⁴⁸ the most reasonable

⁴⁷ As explained above, SDG&E’s practice is to exclude contracts under-negotiation and estimates of deliveries from programs that are not yet fully implemented, and not to assume renewal for expiring contracts.

⁴⁸ See Appendix 2 for SDG&E’s RNS as well as its list of probability weighted deliveries from contracts presently delivering and developing.

course of action at this time is to refrain from soliciting new renewable resources via an RPS-specific solicitation in the 2017 procurement cycle. As also explained below, it is likely that SDG&E will not seek to hold an RPS RFO for the next several years given its current forecasted position. SDG&E notes that it continues to procure renewable energy projects under mandated procurement programs, such as the BioMAT and GTSR programs. SDG&E will seek permission from the Commission to procure any amounts, other than amounts separately mandated by the Commission, during the 2017 solicitation cycle.

Additionally, SDG&E continues to seek optimization opportunities, which may include the sale of RPS products via bilateral sales agreements and/or a request for proposals (“RFP”). These opportunities are market-driven. To the extent SDG&E determines that an RFP is necessary, it will issue the RFP attached hereto as Appendix 10. SDG&E will determine if a need for either a buy RFO or sales RFP exists at the time it files its final 2017 RPS Plan based upon updated information available at that time. More detail on SDG&E’s need in each compliance period is provided in Appendix 2.

a. Compliance Period 1 Procurement Needs

The compliance reporting process for CP1 is not yet complete. SDG&E reported all RECs used for CP1 compliance to the CEC on June 25, 2014, and to the Commission on August 1, 2014. As explained under Section IV, the Commission has also requested additional documentation to substantiate all retail sellers’ contract content categorizations. SDG&E will know the results of its CP1 RPS compliance efforts and any impact to its procurement needs once the CEC and Commission have completed their respective review processes.

b. Compliance Period 2 Procurement Needs

Based on current projections, SDG&E expects that it will meet its CP2 RPS goals with generation from contracts that have been executed, together with the deliveries from utility-owned generation (“UOG”) initiatives where relevant progress has been made.⁴⁹ SDG&E intends to manage potential over-procurement by banking it for future compliance needs, terminating contracts when appropriate or where mutual agreement is reached, and/or selling such excess procurement.

c. Compliance Period 3 Procurement Needs

⁴⁹ This analysis includes SDG&E’s Solar Energy Project.

Based on SDG&E’s current probability-weighted RPS position forecast, SDG&E will likely not require additional procurement in CP3. It is important to note, however, that this outlook is based on current data, and procurement needs are difficult to forecast for periods beyond several years into the future. The level of any new purchases required for CP3 will be a function of portfolio performance and will be subject to the level of banking, if any, related to potential excess procurement in CP2 into CP3. SDG&E intends to fill any remaining RPS need with viable low-cost opportunities from future solicitations, bilateral transactions, and potential investments, and will continue to procure from mandated programs to the extent required. SDG&E intends to manage potential over-procurement by banking it for future compliance needs, terminating contracts where conditions precedent are not met or where mutual agreement is reached, and/or selling such excess procurement.

d. Post-2020 Compliance Period Needs

Based on SDG&E’s current forecast, SDG&E anticipates meeting its RPS requirements for each CP through 2030 with procurement already under contract. As with CP3 above, however, it is important to note that this expectation is based on data available to date. SDG&E may undertake additional procurement at some point in the future to ensure compliance, with the understanding that any resulting excess can be either banked or sold bilaterally or through an RFP. Additional discussion regarding the analysis of selling versus banking can be found in Section B below.

iv. Utility Tax Equity Investment and Utility Ownership Opportunities

SDG&E’s participation as a tax equity investor or utility owner in renewable generation and/or associated transmission projects may enhance project viability (through securing of financing) and may decrease costs for ratepayers (given SDG&E’s cost of capital relative to the renewable financing market). SDG&E may consider additional investment opportunities where: (a) its involvement might enhance the viability or cost competitiveness of a project; and/or (b) where a project may have a positive socioeconomic impact, potentially involving a Diverse Business Enterprise (“DBE”).

Additionally, SDG&E has also undertaken the construction of renewable energy facilities, for example under the Solar Energy Project program. SDG&E will complete this program with the commercial operation of the 4.95 MW(dc) Ramona Solar Project.⁵⁰

v. System Requirements

A wide variety of procurement programs exist both within the RPS program, as well as in addition to the RPS program that will contribute to SDG&E's overall portfolio diversity. An overview of mandated RPS procurement programs is provided above, as is a discussion of SDG&E's recent preferred resources solicitation, and Section X below includes information on SDG&E's flexible capacity and storage procurement efforts. Together, these sections clearly address how SDG&E will increase the diversity of its portfolio and how such increase will contribute to ratepayer value.

Another factor that will influence SDG&E's portfolio diversity as well as help to appropriately address integration and overgeneration is the LCBF calculation that SDG&E will use to select shortlisted projects. The LCBF document is attached hereto as Appendix 9. The methodology outlined in this document includes the interim integration adder, the application of which will ensure that integration is factored into bid evaluation, with the objective of selecting a diverse portfolio in consideration of system needs. The LCBF document also contains qualitative evaluation metrics described in Appendix 9, which play a part in selecting a diverse portfolio.

Additionally, SDG&E's 2017 Plan includes a section dedicated to economic curtailment, Section X, which outlines how SDG&E proposes to address the integration of renewables and the issue of overgeneration, both of which can contribute significantly to the incidence of economic curtailment. This section includes a discussion of SDG&E's analysis and activities, as well as information regarding contract modifications SDG&E has made over time to address curtailment. SDG&E notes that the ACR expresses an interest in how SDG&E is addressing the "under-utilization" of renewable energy. This term implies that renewable energy is not being used to the extent possible when generated, which is not the case. As explained further under

⁵⁰ Approved by D.08-07-017. SDG&E was authorized to build up to 26 MWs of distributed utility-owned solar PV at a cost cap of \$3.50/W(dc). SDG&E held an RFP in the fall of 2011 and executed a contract for up to a total of 17 MW at eight sites owned by SDG&E. To stay under the cost cap, the number of projects were subsequently reduced due to permitting, site, and contractor issues. SDG&E held another RFP in the spring of 2015, and no contracts were executed as a result of the RFP.

Section X, renewable generation is not load-following, and as such can result in overgeneration. One way to address overgeneration is through the use of energy storage. Section X includes an update on the status of SDG&E's energy storage portfolio, as well as more detail regarding the potential of this technology to address overgeneration, which is responsive to the ACR's interest.

The various procurement activities and continued refinement of both the project valuation methodology and contract are undertaken on behalf of SDG&E's ratepayers to ensure that they receive a reliable and cost-effective portfolio of generation.

B. Portfolio Optimization Strategy

SDG&E's optimization strategy is designed to allow SDG&E to meet and maintain its RPS compliance, while minimizing ratepayer costs, maximizing portfolio value and managing risk. SDG&E approaches this task from a variety of angles as described below. SDG&E's optimization strategy is aimed at ensuring an optimal cost-effective portfolio mix based on technology, location, and contract length. SDG&E continually assesses opportunities to increase the value of its existing portfolio of contracts, and the investment in SDG&E's RPS bank in order to continually mitigate potential compliance, financial, and cost-allocation risks.

i. RNS Optimization

The first step in SDG&E's portfolio optimization strategy is to determine its RPS need. As outlined above, the probability of success and/or the expected generation of each of the projects in SDG&E's portfolio is revised monthly in an interdepartmental meeting using the most current information. The result of this comprehensive review is a calculation of SDG&E's forecasted RPS position, which is then compared with SDG&E's RPS compliance requirements to determine its RNS. SDG&E uses this RNS to determine the appropriate level of procurement, including the necessary margin of over-procurement, going forward. Generally, if SDG&E were to foresee a shortfall it will then procure additional resources; if it foresees an excess then it may sell a portion or all of this excess pending the results of a detailed cost and benefit analysis of banking versus selling. Once SDG&E has determined its need, it proceeds to manage its procurement by continually reviewing its portfolio to minimize costs, maximize value and manage risk.

The *Administrative Law Judge's Ruling on Renewable Net Short*, issued May 21, 2014, included specific questions regarding the RNS calculation and assumptions. Responses to these questions are set forth below:

- a. *How do current and historical performance of online resources in your RPS portfolio impact future projections of RPS deliveries and your subsequent RNS?*

An explanation of SDG&E's methodology for forecasting project deliveries can be found in Section II(A)(i).

- b. *Do you anticipate any future changes to the current bundled retail sales forecast? If so, describe how the anticipated changes impact the RNS.*

An explanation of SDG&E's methodology for forecasting bundled retail sales can be found in Section II(A)(ii)(a).

- c. *Do you expect curtailment of RPS projects to impact your projected RPS deliveries and subsequent RNS?*

Curtailment is discussed in Section X.

- d. *Are there any significant changes to the success rate of individual RPS projects that impact the RNS?*

The average success rate of SDG&E's contracts currently in effect is discussed in Section II(A)(i), and the success rates of individual projects are shown in Appendix 2.

- e. *As projects in development move towards their COD, are there any changes to the expected RPS deliveries? If so, how do these changes impact the RNS?*

The average success rate of SDG&E's contracts currently in effect is discussed in Section II(A)(i), and the success rates of individual projects are shown in Appendix 2.

- f. *What is the appropriate amount of RECs above the PQR ("Procurement Quantity Requirement") to maintain? Please provide a quantitative justification and elaborate on the need for maintaining banked RECs above the PQR.*

SDG&E's current level of RECs above its PQR is discussed in Section VII, and is shown in Appendix 2.

- g. *What are your strategies for short-term management (10 years forward) and long-term management (10-20 years forward) of RECs above the PQR? Please discuss any plans to use RECs above the PQR for future RPS compliance and/or to sell RECs above the PQR.*

An explanation of SDG&E's methodology for managing RECs above the PQR can be found in Sections II(B)(ii)(d) and II(B)(ii)(e).

- h. Provide a voluntary margin of over-procurement (“VMOP”) on both a short-term (10 years forward) and long-term (10-20 years forward) basis. This should include a discussion of all risk factors and a quantitative justification for the amount of VMOP.*

A discussion of risk factors affecting RPS procurement can be found in Sections IV and V, and SDG&E’s current level of RECs above its PQR is discussed in Section VII and is shown in Appendix 2 (see row Ga).

- i. Please address the cost-effectiveness of different methods for meeting any projected VMOP procurement need, including application of forecast RECs above the PQR.*

An explanation of SDG&E’s methodology for managing RECs above the PQR can be found in Sections II(B)(ii)(d) and II(B)(ii)(e).

- j. Are there cost-effective opportunities to use banked RECs above the PQR for future RPS compliance in lieu of additional RPS procurement to meet the RNS?*

An explanation of SDG&E’s methodology for managing RECs above the PQR can be found in Sections II(B)(ii)(d) and II(B)(ii)(e).

- k. How does your current RNS fit within the regulatory limitations for PCCs? Are there opportunities to optimize your portfolio by procuring RECs across different PCCs?*

An explanation of the content categorization of SDG&E’s portfolio can be found in Section II(A)(iii)(a), and an explanation of SDG&E’s methodology for optimizing procurement across content categories can be found in Section II(B)(iv)(a) and (d).

ii. Cost Optimization

Cost optimization begins before a contract is executed, with contract analysis methodology development and adoption. Once this analysis methodology is utilized and a contract is executed, if an opportunity to optimize this contract becomes apparent, SDG&E will investigate it to determine the best course of action for ratepayers.

- a. Least-Cost Best-Fit Analysis*

SDG&E carefully analyzes bids and bilateral proposals according to its LCBF methodology. This methodology is intended to optimize SDG&E’s procurement decisions by minimizing cost and maximizing value. It includes analysis of the PPA price, which inherently includes the counterparty’s interest, carrying, and transaction costs. The analysis also takes into account the energy and capacity value provided by each of the projects, congestion costs, and

transmission costs. The LCBF process results in the quantification and subsequent ranking of the cost and benefits of each bid based on these metrics. The formula deducts the PPA Price (“Levelized Contract Cost”), Transmission Cost, Renewable Integration Cost Adder (“RICA”), and Congestion Cost from the sum of the Energy Benefit and Capacity Benefits to determine a project’s Net Market Value (“NMV”). These NMVs can then be compared and used to create a quantitative ranking. SDG&E then evaluates any identifiable qualitative aspects, such as DBE status, project viability, developer experience, and portfolio fit to determine the shortlist. The projects that are placed on the shortlist will have the lowest combined net cost and best portfolio fit when compared with other bids from the particular solicitation. D.14-11-042 directed several changes to the LCBF methodology, and these changes have been included in the LCBF methodology attached hereto as Appendix 9.⁵¹ SDG&E revises its LCBF methodology as necessary to incorporate new information, such as through the outcome of the LCBF review process currently underway at the Commission, as discussed in Section IV.

b. Revision of Time of Day Factors and Periods, and Capacity Values

Integral to the LCBF calculation are the Time-of Day (“TOD”) factors and periods, and Capacity values. SDG&E utilizes forward market conditions to calculate the TOD factors and periods as well as the Capacity values. These data points assist in providing a comparison between bids that is based on the best information available at the time of bid evaluation. As the forward market evolves, SDG&E will continue to assess the TOD factors and periods, and Capacity values, and prior to the issuance of any RPS solicitation, may update those factors, time periods, and values so that they are consistent with the latest forecasts.

c. Contract Management

SDG&E continually monitors its existing contracts and seeks to improve their performance for the benefit of customers. SDG&E may attempt to negotiate a modification to a contract to meet its current portfolio needs, for example, by allowing an alternate termination date⁵² or a change in contract volumes.⁵³ SDG&E may also have the opportunity to secure increased value from an RPS resource by adjusting terms of an existing contract, such as by extending the contract term of a relatively inexpensive contract or by moving the project site to a

⁵¹ D.14-11-042, pp. 16, 19, 49, 61-63.

⁵² For example, in Resolution E-4587, the Commission approved a contract amendment that established an earlier termination date for an existing RPS contract.

⁵³ SDG&E will seek approval of any contract modifications pursuant to Commission direction.

location that provides greater capacity benefits. SDG&E is also active in modifying contract terms to incorporate economic curtailment rights. SDG&E's PPA also allows for the right to review and accept or reject proposed material changes to a generating facility at its sole discretion.⁵⁴ SDG&E is also willing to consider arrangements involving existing contracts that would improve counterparty financing options, thereby increasing the probability of project success. If opportunities such as these present themselves, SDG&E will perform a detailed analysis of the costs and benefits associated with making such a change, and if it determines that the proposed changes would result in more value for ratepayers it will pursue these options. Finally, SDG&E has made efforts to streamline its mid-office process with respect to tracking the progress of contracts under construction by revising the RPS PPA Milestone Schedule (Exhibit B) to remove unnecessary checkpoints. These optimization methods provide SDG&E with flexibility in managing its portfolio and therefore portfolio costs.

d. Banking vs. Sales Analysis

Another optimization tool related to contract management is the analysis of the option to bank or sell excess procurement.⁵⁵ When SDG&E has excess RPS procurement in its portfolio, it will perform an analysis of both the short-term and long-term quantitative and qualitative costs and benefits associated with either banking this excess, or selling it. The quantitative portion of the valuation includes consideration of SDG&E's RPS position, the time value of revenues from the potential REC sale, and the potential replacement cost. The qualitative portion includes consideration of the impact on market liquidity and SDG&E's RPS position. If SDG&E determines that banking would provide the most value to SDG&E's ratepayers, then this optimization method will be used. If it finds that a sale would provide customers with more value, then this optimization method will be chosen. SDG&E will reflect current industry best practices in its sales contracts.⁵⁶ For more information regarding SDG&E's Sales Framework, please see Appendix 10.B.

⁵⁴ D.14-11-042, *mimeo*, p. 29.

⁵⁵ SDG&E's excess procurement is SDG&E's VMOP (discussed in more detail under Section VII).

⁵⁶ In Resolution E-4572, the Commission approved SCE's request to enter into a 19.5-month renewable energy sales contract with Energy America LLC. Contractual deliveries began on May 15, 2012, and the contract was filed with the Commission on July 6, 2012. The Commission also approved, in Resolution E-4639, PG&E's request to enter into two overlapping renewable energy sales agreements for a period of approximately 1 month and 9 days with Tenaska Power Services Company. Contractual deliveries began November 22, 2013, and the contract was filed with the Commission on December 19, 2013. In order to

e. Retirement Analysis

There is a significant link between SDG&E's banking versus sales analysis and its retirement analysis where SDG&E evaluates its compliance position and strategy to ensure that RECs are handled in the most cost-effective way in both the short-term and long-term for SDG&E's ratepayers. SDG&E's retirement decisions include consideration of its RPS position and the 36-month shelf-life of the RECs. SDG&E also considers the time value of the impact of potential revenues or additional RPS procurement on rates for bundled customers when making the decision to buy, sell, bank, or retire RECs.

iii. Value Optimization

In addition to its contract analysis and management strategies, SDG&E also seeks to add value to the RPS procurement process by actively participating in the discussion of current and proposed procurement programs, and by evaluating unique procurement opportunities.

a. RAM Program

SDG&E has actively participated in discussions regarding the future of this program, and has provided recommendations regarding the continued availability of a streamlined procurement process for small to mid-sized RPS projects on an as-needed basis. The Commission ultimately addressed the future of RAM in D.14-11-042, where it determined that "the original objectives of RAM have been met... [however, as] suggested by SDG&E and [the Office of Ratepayer Advocates]... RAM may provide the IOUs with a procurement tool to facilitate more streamlined procurement for RPS needs... [therefore] starting with the 2015 annual RPS procurement plans filings, the utilities shall include, at the discretion of the utility, RAM as a streamlined procurement tool."⁵⁷ SDG&E intends to utilize the RAM tool on an as-needed basis to efficiently procure low cost RPS resources, as discussed in Section XVI below, and believes that the flexibility provided by the Commission in allowing the IOUs to utilize RAM as a need-based procurement tool provides a benefit not found in mandated procurement – proper alignment with actual procurement need. As explained under Section II.C, SDG&E anticipates that the recently codified IRP process signifies a shift away from separate programs and

provide maximum flexibility and value to customers, SDG&E will also consider opportunities where deliveries begin before the contract is submitted and approval is granted retroactively.

⁵⁷ D.14-11-042, *mimeo*, pp. 91-92.

processes (including a stand-alone RAM program), towards a holistic planning and procurement process.

b. BioMAT Program

SDG&E has actively participated in the development of the BioMAT program by providing program design recommendations intended to contain costs and protect ratepayers. As explained above, the first auction was the period of February-March of 2016. Additionally, as explained under Section II.C, SDG&E anticipates that the recently codified IRP process signifies a shift away from separate programs and processes (including stand-alone Feed-in Tariffs), towards a holistic planning and procurement process.

c. BioRAM Program

On October 30, 2015, Governor Brown issued an Emergency Proclamation (the “Proclamation”) to protect public safety and property from falling dead trees and wildfire. In response, the Commission issued Resolution E-4770 (the “BioRAM Resolution”) which directs the IOUs to procure 50 MW of biomass from high hazard fire zones through an expedited solicitation using the RAM mechanism. The BioRAM Resolution allocated SDG&E a capacity target of 10 MW.⁵⁸ As explained in the BioRAM Resolution, the Governor’s goal is to see contracts executed with bioenergy facilities using high-hazard feedstock in 2016. Pursuant to this expectation, the Commission directed the IOUs to launch one targeted RAM solicitation (“BioRAM I”) by July 1, 2016 (which SDG&E did on June 28, 2016), and also lifted SDG&E’s bilateral contract prohibition during the 2015 RPS solicitation cycle (which is the year 2016) for the narrow purpose of fulfilling the Proclamation’s objectives.⁵⁹

Subsequent to the BioRAM Resolution, the California Legislature passed Senate Bill (“SB”) 859, and Governor Brown, signed SB 859 into law on September 14, 2016.⁶⁰ SB 859 developed a new, similar requirement for electrical corporations to procure their respective shares of 125 MW from existing biomass facilities using similar prescribed amounts of dead and dying trees in high hazard fire zones as feedstock. SB 859 also allows capacity procured in excess of the BioRAM I solicitation requirement to apply toward the SB 859 requirement. In addition, SB 859, at Public Utilities Code §399.20.3(f), requires that the procurement costs to

⁵⁸ This allocation is at issue in an application for rehearing (“AFR”) filed by SDG&E on April 18, 2016.

⁵⁹ BioRAM Resolution, pp. 5, 7.

⁶⁰ http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB859

satisfy this requirement be recovered from all customers on a non-bypassable basis. On October 21, 2016, the Commission issued Resolution E-4805 to implement the requirements of SB 859. Resolution E-4805 allocated 9 MW of additional capacity to SDG&E, with the option to fulfill this procurement mandate through excess capacity signed in the BioRAM I solicitation, bilateral contracting, or a second BioRAM solicitation. On November 14, 2016, the IOUs filed A.16-11-005 to create a new Tree Mortality Non-Bypassable Charge (“Tree Mortality NBC” or “TM NBC”) to track the procurement costs incurred by the IOUs as directed by Resolutions E-4770 and E-4805. A prehearing conference on this matter was held on June 23, 2017.

The BioRAM program is for a specified purpose in 2016 only and for this reason SDG&E has not included BioRAM solicitation documentation in its 2017 RPS Plan as it does not plan to hold subsequent BioRAM solicitations. From its BioRAM I solicitation, SDG&E submitted AL 3002-E seeking approval of a 24 MW BioRAM PPA which meets both its Resolution E-4770 and E-4805 capacity targets. The advice letter was approved via disposition letter and effective December 16, 2016.

SDG&E has actively participated in the development of the BioRAM program by providing program design recommendations intended to contain costs, protect ratepayers, and ensure that bundled ratepayers are not left to shoulder the entire cost of this program. The BioRAM is intended to address a public safety issue and benefits the entire state of California, accordingly, the cost of this program is most appropriately allocated through a non-bypassable charge to be included in the Public Purpose Program (“PPP”) surcharge rate to guarantee that all beneficiaries pay their fair share. On April 18, 2016, SDG&E filed a PFM of D.10-12-048 (the “RAM Decision”) to enable all contract-related costs incurred by SDG&E as part of the BioRAM program to be allocated to all benefitting customers through a new non-bypassable charge (a “BioRAM NBC”) to be included in the PPP surcharge rate and billed based on delivered energy. On December 1, 2016, the CPUC, via consent agenda, approved Administrative Law Judge Simon’s proposed decision which denied SDG&E’s April 2016 PFM of the RAM Decision and required applications (A.16-11-005) to be filed to allocate costs for procurement pursuant to the BioRAM through a tree mortality nonbypassable charge.

Lastly, on April 18, 2016, SDG&E filed two separate AFRs of the BioRAM Resolution alleging: (i) the CPUC erred by allocating 10 MW of the 50 MW BioRAM program capacity to SDG&E instead of the roughly 10% allocation that SDG&E has been allocated in RAM and

other renewables programs (based on proportion of statewide load); and (ii) the CPUC erred by not implementing a Cost Allocation Mechanism (“CAM”) or other nonbypassable charge when clearly all customers benefit from increased electric reliability due to the procurement of BioRAM resources that are meant to mitigate fire risks. On August 18, 2016, the CPUC Commissioners denied SDG&E’s AFR’s on BioRAM cost allocation and capacity allocation.

d. Tax Equity

As explained above, SDG&E evaluates tax equity opportunities as a procurement option and assesses the value of its involvement. SDG&E may participate in this type of project if its participation would either augment the probability of project success or cost competitiveness of a project, and/or lead to a positive socioeconomic impact, for example potentially involving a DBE.

e. Utility Ownership

SDG&E evaluates utility ownership opportunities as a procurement option and assesses the value of its involvement. SDG&E may participate in this type of project if its participation would either augment the probability of project success or cost-effectiveness of a project, and/or lead to a positive socioeconomic impact, for example potentially involving a DBE.

f. Bilateral Transactions

SDG&E will enter into bilateral purchase or sales agreements to the extent that these transactions benefit ratepayers. Not all products are well-suited for the RFO process due to, for example, deal timing and/or complexity. The ability to contract bilaterally is a valuable tool in maximizing value to ratepayers – it is useful in addressing an unforeseen need in a timely manner and also allows an IOU to take advantage of opportunities that are too complex to solicit through an RFO, such as tax equity, utility ownership, or buy/sell transactions. In addition, the ability to engage in bilateral deals is necessary from a practical perspective; bilateral deals assist market development by offering an additional sales option, making project development less dependent on RPS solicitation cycles.

iv. Risk Optimization

SDG&E addresses risk optimization through several long-term and short-term strategies to mitigate this risk, and also seeks to add value by actively participating in discussions regarding compliance and enforcement rules.

a. Category 1 Procurement

While SDG&E faces some degree of risk related to a procurement deficit – and therefore, as explained herein, regularly reviews its RNS so that it has the best information available with which to manage its portfolio towards compliance – the most significant non-compliance risk faced by SDG&E relates to contract categorization under § 399.16(b)⁶¹ – *i.e.*, the risk that SDG&E’s categorization of the contracts in its portfolio will not be accepted by the Commission. SDG&E has expressed this concern verbally and in comments to the Commission filed in R.11-05-005. This concern will be alleviated somewhat after CP1 compliance has been determined, as many of the CP1 contracts span several compliance periods. Thus, any change in categorization of these contracts can be reflected going forward, and any discrepancies will have been explained and can be used to inform categorization determinations in the future. In the meantime, however, this uncertainty constrains SDG&E’s procurement activities and as a conservative measure, SDG&E’s long-term strategy is to continue to emphasize the procurement of products it considers to be Category 1.

b. Voluntary Margin of Over-procurement

A second long-term procurement strategy utilized by SDG&E is the adoption of a “buffer” or Voluntary Margin of Over-procurement (“VMOP”)⁶² to ensure to the extent possible that SDG&E is able to reach its RPS goals, as explained in more detail below under Section VII which describes SDG&E’s VMOP formula. Project development can present challenges which must be accounted for when determining need, and in combination with the constant fluctuation of RPS targets (based on retail sales), as well as continual changes in RPS deliveries, it is essentially impossible to meet the RPS targets exactly. SDG&E undertakes conservative VMOP procurement as a prudent measure to guard against any unforeseen events that may impact its portfolio and jeopardize compliance.

c. Short-term Contracts

⁶¹ For reference, the categories are as follows: (i) Category 1 is a bundled (energy + REC) product, (ii) Category 2 is a firm-and-shaped product, and (iii) Category 3 is an unbundled product (REC only).

⁶² 399.13(a)(4)(D):

(4) The commission shall adopt, by rulemaking, all of the following...

(D) An appropriate minimum margin of procurement above the minimum procurement level necessary to comply with the renewables portfolio standard to mitigate the risk that renewable projects planned or under contract are delayed or canceled. This paragraph does not preclude an electrical corporation from voluntarily proposing a margin of procurement above the appropriate minimum margin established by the commission.

Due to unforeseen events, a situation may occur in which SDG&E needs to procure a small amount of renewable energy in the near-term. In this scenario, short-term contracting is a viable strategy as it allows SDG&E to respond quickly to a sudden change in portfolio status and manage a short-term need without entering into an unnecessary long-term commitment.

d. Category 3 Procurement

SDG&E may consider Category 3 procurement to the extent that such products are shown to be cost-effective and a need for additional procurement becomes evident. However, SDG&E also intends to maintain enough room below its Category 3 procurement limits to ensure that Category 3 procurement is a potential strategy in the short-term should SDG&E need to procure to fill any unforeseen immediate need.

C. Lessons Learned & Trends

The following sections discuss how trends and lessons learned over the past several years impact RPS procurement, and illustrate how SDG&E accounts for these factors in its RPS plan and procurement activities.

i. Lessons Learned

a. Overbuilding

As described in SDG&E's 2013, 2014, 2015, and 2016 RPS Plans, SDG&E is concerned that developers have provided profiles in prior solicitations that ultimately do not match the profiles of the facilities that are built,⁶³ in other words, developers have "overbuilt" facilities (i.e., installed capacity above the amount bid and/or shaped the production profile to take advantage of higher-priced TOD periods). The resulting overgeneration has increased costs to customers through increased contract costs, and increased generation overall which increases the incidence of and payments for negative real-time energy pricing. In response to this observation, SDG&E modified its PPA to include a maximum limit on generation during each TOD period, which the Commission approved as a part of SDG&E's 2013 RPS Plan. SDG&E also made several changes to its PPA in its 2015 RPS Plan⁶⁴ in an effort to address overbuilding through

⁶³SDG&E 2013 RPS Plan, p. 37. SDG&E 2014 RPS Plan, p. 25. SDG&E 2015 RPS Plan, p. 25. SDG&E 2016 RPS Plan, p. 28.

⁶⁴ SDG&E 2015 RPS Plan, pp. 25-28.

stronger generation caps.⁶⁵ SDG&E acknowledges that the grid landscape is changing and will continue to reevaluate its contract provisions in subsequent versions of the plan, as new information becomes available, to determine if and how its contracts should be updated.

b. Peak Shifting

As a result of the success of the RPS program, a significant amount of solar and wind energy has been added to the grid, and much more appears likely to come online before 2020. These renewable resources are very low variable cost resources that (at high penetration levels) will cause significant reductions in marginal prices in periods when they operate. Substantial amounts of rooftop solar are also being added by customers behind the meter. A large amount of variable resource penetration during any single time during the day may result in significant decreases in marginal energy prices and even significant ramping events. As a result of increased renewable generation in Southern California, the peak load net of variable energy resources has shifted and will continue to shift as the California resource portfolio evolves. As market conditions develop, it is important that SDG&E's TOD factors and time periods, which will be used for analysis purposes, reflect the most up-to-date information to provide ratepayers with the greatest value. SDG&E updated its TOD periods in the 2013 RPS Plan, as well as the TOD factors based on the market conditions, to reflect the shift in timing and magnitude of energy and capacity and will continue to do so as market conditions change. SDG&E's LCBF document, attached hereto as Appendix 9, includes the most recent TOD factors which were calculated as of June 2017.

c. Capacity Value

SDG&E's method for calculating energy and capacity values uses a benchmark where energy values are shaped hourly based on a forecast of SP15 energy prices and the results of production cost modeling that yields a year 2022 hourly energy shape. The capacity value is shaped hourly using a year 2022 Loss-of-Load Probability ("LOLP") study. The process assigns

⁶⁵ SDG&E also proposed to change its TOD factors to 1 in all contracts going forward in 2014 to reduce the incentive to overbuild (SDG&E Draft 2014 RPS Plan, pp. 25-26), and in 2015 explained that although stronger generation caps may be more effective at addressing overbuilding, TODs of 1 in the contract would provide price transparency and avoid sending the wrong price signals over time (SDG&E Draft 2015 RPS Plan, pp. 28-29). The Commission rejected SDG&E's recommendations in both instances and deferred this issue to LCBF Reform (D.14-11-042, p. 26; D.15-12-025, p. 93).

higher capacity value to hours of greater capacity need, which more accurately reflects the impact of variable energy resources upon capacity needs.

The annual capacity values are based on the following:

- For Local Area Projects: the Marginal Generation Capacity Cost of \$120/kW-year,⁶⁶ which is intended to provide a proxy for the net cost of new entry, as discussed in Section 3 of the Revised Prepared Direct Testimony of David T. Barker, Chapter 5, On Behalf of SDG&E in connection with Application 11-10-002 (Application of SDG&E For Authority To Update Marginal Costs, Cost Allocation, And Electric Rate Design).
- For IV Area Projects and System Area Projects: the CPUC penalty of \$40/kW-year⁶⁷ associated with failure to meet system RA requirements.

These annual values are then taken through a process which creates monthly capacity values using the LOLP mentioned above, then down to an hourly level using the monthly values.

These benchmark values are reasonable because, when evaluating a contract on a standalone basis, it should be measured against the avoided costs the utility might face had this contract not been part of the portfolio. For example, if SDG&E had a resource in its portfolio, and that resource was crucial to meeting local resource adequacy requirements, the marginal value of that resource is the amount that SDG&E must pay to replace that resource if it becomes unavailable plus the cost to replace the energy that resource would have generated in order to serve hourly retail load. SDG&E will update its calculations as the assumption sources are updated.

d. Distributed Generation Deliverability

The CAISO conducts an annual assessment methodology for determining and allocating RA deliverability to DG resources at locations that do not require any yet-to-be-approved network transmission upgrades. The assessment is coordinated with the CAISO's

⁶⁶ Note that this value will need to be updated from time to time in correlation with market trends. The current value of \$120/kW-year is in 2012 dollars and a 2.5% annual escalation rate is applied to calculate the value beyond 2012.

⁶⁷ CPUC 2014 Filing Guide for System, Local and Flexible Resource Adequacy (RA) Compliance Filings, p. 27.

interconnection procedures and the CAISO's transmission planning process. The initiative is in support of California's goal of 12,000 MWs of DG by 2020.⁶⁸

The CAISO performed the 2016-2017 Distributed Generation Deliverability ("DGD") assessment to determine MW quantities of Potential DGD at specific nodes of the CAISO Controlled Grid for assigning deliverability status to DG Facilities.⁶⁹ The 2016-2017 DG deliverability assessment results indicate that a total of 1,950.46 MWs of Potential DGD is available at locations on the CAISO grid for assignment of deliverability status to DG resources connected or requesting interconnection below those locations.

There were 27 locations studied for Potential DGD in the SDG&E service territory. A total of 28.48 MW of Potential DGD is available at the studied nodes including the Potential DGD that was identified but not assigned in the previous DGD cycle. DG resources interconnected, or seeking interconnection, to the Distribution System of an IOU Participating Transmission Owner may apply to the applicable IOU Participating Transmission Owner to be eligible to receive a Deliverability Status assignment in the current DG Deliverability Assessment cycle.

The study model used by the CAISO for the DGD assessment incorporates the most recent CAISO generation interconnection deliverability assessment base case and is a snapshot in time. SDG&E plans continued monitoring of this annual assessment and will make existing and potential distribution-level resources aware of the need to apply for a potential assignment of deliverability.

e. Delay of COD Declaration

SDG&E is concerned that a facility could reach commercial operation prior to the contractual commercial operation date ("COD"), but delay declaring COD until the COD date in the contract. As a result, the facility would be paid for this energy at the contract price, thereby extending the term of its contract, resulting in an additional cost to ratepayers. To mitigate this issue, SDG&E adjusted its PPAs in its 2015 RPS Plan to change the price paid for energy delivered prior to COD to a fixed REC value plus CAISO revenues net of CAISO costs. This

⁶⁸ See

<http://www.caiso.com/informed/Pages/StakeholderProcesses/DeliverabilityforDistributedGeneration.aspx>

⁶⁹ <http://www.caiso.com/Documents/2017DeliverabilityforDistributedGenerationStudyResultsReport.pdf>

will incentivize developers to declare COD once it is reached, rather than delaying COD to earn extra revenue.

ii. Trends

a. Steady Project Success Rates

As the market for renewable energy has matured, SDG&E has observed a positive trend in the success rate of achieving commercial operations of the projects in its current RPS portfolio. As explained above, SDG&E reviews project success rates on a monthly basis to incorporate the most recent information and will continue this practice.

b. Expansion of RA Products

The RA program is currently the subject of Commission rulemaking (“R.”) proceeding R.14-10-010. The Effective Load Carrying Capability (“ELCC”) methodology for Net Qualifying Capacity (“NQC”) values of wind and solar resources starting in the 2018 compliance year was adopted in D.17-06-027, issued on July 7, 2017. The current methodology calculates the NQC values based on seventy percent (70%) exceedance of historical actual output during a specified set of hours each month. The ELCC methodology measures the resource’s contribution towards reliability throughout all hours of the year rather than a set of hours of the exceedance methodology. Solar resources are expected have a lower NQC value while wind resources will have a higher value when compared to their current NQC values. This is consistent with the fuel source of each resource type throughout the day. The impact of ELCC on the State’s total supply of RA capacity is expected to decrease as there is more installed solar capacity than wind capacity. However, the effect on the bilateral market is unknown at this time.

The Commission also adopted the continuation of the interim flexible capacity product under D.17-06-027 as the durable flexible capacity framework is not yet ready for adoption. The CAISO continues to refine its needs of the physical attributes as more renewable resources are integrated into the energy markets. SDG&E is monitoring the active Commission RA proceeding to determine the impact any applicable decisions will have on SDG&E’s procurement practices.

c. Multiple RPS Contract Versions Across Programs

SDG&E has noted that as the volume of mandated programs has increased, so have the number of contract versions that must be managed. At this time, there are six distinct PPAs for

RPS products, all with separate approval processes: the Long-Term and Short-Term RPS PPAs (attached hereto as Appendices 6 and 7), the Green Tariff (“GT”) RAM PPA (attached hereto as Appendix 11.A), the Enhanced Community Renewables (“ECR”) RAM PPA Rider (attached hereto as Appendix 12.A), the BioMAT PPA, and the BioRAM PPA. As the Commission has acknowledged, it is logical that the TOD factors used in each PPA be consistent, to the extent possible.⁷⁰ Going forward, in accordance with D.14-11-042, SDG&E intends to use the TOD factors approved in each RPS Plan in all PPAs for RPS products executed in that plan year, with updates where appropriate. Additionally, any Tier 1 AL filed by SDG&E requesting Commission approval of conforming TOD factors across its RPS Procurement Programs will be served on the R.15-02-020 service list, or then current RPS proceeding, and any entities in SDG&E’s RPS procurement queue.⁷¹

d. Integrated Resource Planning

SB 350 recently added a provision to the Public Utilities Code directing the Commission to implement a holistic integrated resource planning process. IRP is a wide-ranging effort at the Commission, undertaken along with staff from the CEC and the California Air Resources Board (“CARB”), that will/should combine the numerous planning processes currently undertaken in separate resource-specific cases into a single look to ensure that IOU and non-IOU load-serving entities will achieve the targets to be established by CARB related to GHG emission reductions.⁷² As explained in the IRP OIR, prior planning has not addressed the comprehensive resource optimization challenge presented by IRP.⁷³ IRP incorporates at least 19 different procurement-related proceedings, including the RPS proceeding,⁷⁴ and is bound by the following constraints which are addressed in or related to the various incorporated proceedings: (i) GHG emissions; (ii) reliability; (iii) cost; (iv) the 50% by 2030 RPS goal; (v) the goal of doubling cost-effective energy efficiency savings; and (vi) the Commission’s continuing responsibility to ensure safe and reliable service at just and reasonable rates.⁷⁵

⁷⁰ D.14-11-042, *mimeo*, p. 24.

⁷¹ D.15-12-025, OP 7, p. 123.

⁷² Senate Bill 350 (Stats. 2015, Ch. 547). at 14.

⁷³ R.16-02-007, p. 13.

⁷⁴ R.16-02-007, p. 11.

⁷⁵ R.16-02-007, p. 13.

RPS procurement is currently a composite of several different procurement programs and targets that are the results of separate mandates to address the needs of a particular technology, market segment, or policy goal. As described above, these programs do not necessarily address an identified resource need, cost-effectiveness or grid implications in the broader context – these elements are necessary to ensure that ratepayers receive the least-cost best-fit resources.

SDG&E views the IRP process and associated constraints as a marked transition away from procurement made via numerous one-off programs and separate processes towards a comprehensive, optimized and cost-effective process that evaluates a portfolio of resources on a comparative basis. IRP should enable procurement in consideration of multiple data points, not just what is required by a particular policy-driven program, thereby providing cost and grid optimization opportunities to the benefit of SDG&E ratepayers as well as ratepayers statewide. Of particular interest in the RPS context are several items discussed in the OIR: (i) cost containment of renewable resource procurement; (ii) consistent valuation methodologies across resource types; and (iii) the integration of renewable resources onto the grid.⁷⁶ These items are all under development in the RPS proceeding, as explained above. SDG&E looks forward to participating in the resolution of these items and the development of the IRP process, with the end goal of enhancing the cost-effectiveness of RPS and other procurement mandates. SDG&E believes that it is prudent to pause any incremental RPS-procurement, including the adoption of new procurement mandates, while IRP is being implemented, especially given SDG&E's RPS performance to date.

e. Meeting Demand for Higher Levels of Renewables

In addition to the State's goals (the most recent development of which was SB 350), many customers and communities within SDG&E's service territory are interested in electricity service with even higher levels of renewables than required by law. Related to SDG&E's RPS planning efforts, SDG&E will consider ways in which SDG&E can potentially provide offerings that are made available to customers throughout the SDG&E service territory to help meet these goals.

⁷⁶ R.16-02-007, pp. 15-16.

III. PROJECT DEVELOPMENT STATUS UPDATE

As described further in Section II, SDG&E regularly evaluates project development status to assess each project's ability to begin deliveries pursuant to contract terms and conditions. SDG&E's portfolio of renewable energy resources currently under contract but not yet delivering (either pre-construction or in construction) are in various stages of development. Projects under development generally require numerous permitting approvals, generator interconnection, financing, and completion of construction before they can achieve commercial operation. Each of the above issues adds significant risk to the development of a project and can directly impact the success or failure of a project. SDG&E's experience is that achieving all of these milestones represents a significant challenge for developers.

SDG&E has or is developing contracts for three renewable projects that are in the pre-construction or construction phase (of which one is UOG), and 62 projects that are in commercial operation (none of which are UOG). Generally, projects in the pre-construction phase are most at risk of failure. However, projects under construction may also encounter issues that could affect their ability to achieve commercial operation, such as successful litigation against the project. In general, projects that have achieved commercial operation have a high probability of meeting their contractual obligations; however, project failure or resource fluctuations (*i.e.*, a bad wind year) can create challenges. Although a developer's experience may improve the likelihood of a project achieving commercial operation, it does not ensure that a project will be successful. Sections IV and V of this plan discuss the various delays and risks that could impact projects in various stages of development, and Appendix 1 provides the most recent information on SDG&E's developing projects from SDG&E's June 2017 PRG meeting.

Renewable project developers continue to face a challenging environment. SDG&E observed an increase in the difficulty experienced by developers in securing financing after 2008 when the U.S. economy entered a deep recession. In addition, as more projects were proposed, especially in desert regions, permitting approvals took longer than developers expected due to increased scrutiny of environmental issues and permitting agency coordination efforts. Today, many smaller projects are experiencing local agency permitting delays as individuals and community groups challenge projects. These challenges can result in increased costs to the developer and significant project delays that can jeopardize project viability and potentially lead

to project failure. Finally, studying and constructing generator interconnection upgrades continues to take years to complete and can significantly influence project costs.

A transition from large-scale to smaller distributed renewable resource development is occurring as the IOUs reach RPS compliance. As explained above under Section II, California enacted legislation to encourage the development of distributed renewable generation, which is taking place under the BioRAM, BioMAT and GTSR programs. Renewable procurement efforts will be focused on fulfilling these goals in the near-term and through the sunset dates of each of these respective programs, subject to the ultimately adopted Procurement Expenditure Limitation (“PEL”) methodology, which is described in more detail below in Section IV.

A. Impact of Project Development Status

As a practical matter, until a project actually begins commercial operation, it bears significant development risk. SDG&E currently expects that a majority of the projects in its portfolio will meet their commercial operation dates either on schedule or within the prescribed cure period. SDG&E bases its forecasting, and therefore its RNS calculation, on its individual project assessments, as is described in more detail in Section II. It also relies on the lessons it has learned and trends it has observed as a result of the RPS procurement process, as discussed in more detail in Section II. The above factors contribute to SDG&E’s monthly project assessments of the likelihood of each project’s success. For example, a project that has been experiencing permitting issues would receive a probability weighting reduction to account for this risk until the issue is resolved. The result of these cumulative assessments is reflected in the RNS, which SDG&E will use to inform its procurement activities over the next two compliance periods and past 2020. The RNS as of June 2017 is provided in Appendix 2. [For additional information on RPS products, please visit the Commission’s RPS Database at http://cpuc.ca.gov/RPS_Reports_Data.](http://cpuc.ca.gov/RPS_Reports_Data)

IV. POTENTIAL COMPLIANCE DELAYS

The market for renewable energy is dynamic; multiple factors can impact project development and SDG&E’s attainment of its RPS program goals. The following discussion covers the major issues affecting both renewable project developers and SDG&E. It begins with the transmission, permitting, and financing hurdles faced during project development, and continues through some of the challenges experienced as a project matures – e.g., viability, debt equivalence, accounting issues, and regulatory uncertainty.

A. Transmission and Permitting

i. Interconnection Facility Delays

The timely approval, permitting, and completion of interconnection facilities are crucial to the successful implementation of SDG&E’s renewable portfolio. The completion of the East County (“ECO”) Substation and the Drew Switchyard, as well as the interconnection of five renewable projects to the Imperial Valley (“IV”) Substation, have all been positive developments. However, SDG&E notes that recent events impacting the development of certain transmission facilities may impede the development of future renewable resources in the IV region. Two collector switchyards north of the IV Substation were planned as part of an effort to increase the transfer capability between the Imperial Irrigation District (“IID”) and CAISO balancing authorities and to facilitate the development of additional renewable resources northwest of IV Substation.

The first collector switchyard was a “Public Policy” project approved by the CAISO where IID was selected to construct and own the facilities. However, the CAISO received notice from IID on November 24, 2015 that IID was exercising its right to terminate the Approved Project Sponsor Agreement (“APSA”) between IID and the CAISO.⁷⁷ IID’s decision not to move forward with this collector switchyard could have adverse ramifications for the development of new renewable resources northwest of IV Substation.

IID also cancelled the second collector switchyard on February 16, 2016,⁷⁸ which was initially proposed to interconnect the existing CSolar West generating project and ultimately create a new 230 kV line between IID’s proposed Dixieland Substation and IV Substation. The CSolar West project is currently operational and connected to IV Substation via a radial gen-tie line. Accordingly, even with IID not moving forward with the second collector switchyard, the CSolar West project can continue to operate. Nevertheless, as with IID’s decision to terminate the APSA, a decision not to move forward with the second collector switchyard could have adverse ramifications for the development of new renewable resources northwest of IV Substation. While the failure to move forward with these two switchyards does not affect the

⁷⁷ IID Notice of Termination, p. 1-2 & 51
<http://www.caiso.com/Documents/Dec112015NoticeofTerminationofApprovedProjectSponsorAgreementImperialIrrigationDistrictER16-508.pdf>

⁷⁸ IID Board of Directors meeting, February 16, 2016, agenda item 17
http://imperialid.granicus.com/MediaPlayer.php?view_id=3&clip_id=150

development of any renewable resources contemplated by SDG&E's existing PPAs, future renewable resource options may be reduced as a result.

Transfer capability between the IV Substation and the San Diego load center has been greatly expanded with the construction of the Sunrise Powerlink project. Even with construction of the Sunrise Powerlink, ongoing requests to interconnect generation – principally new renewable generation – in the San Diego and Imperial Valley areas,⁷⁹ the anticipated retirement of coastal gas-fired power plants using ocean water for cooling, and the permanent retirement of the San Onofre Nuclear Generating Station (“SONGS”), have lead the CAISO to approve a new 230 kV Sycamore Canyon-Penasquitos transmission line. This new line will support the ability of renewable resources to obtain Full Capacity Deliverability Status (“FCDS”); thereby enhancing the likelihood that new renewable resources can be counted towards LSEs’ RA requirements. The CAISO Board-approved 2016-2017 transmission plan lists the 230 kV Sycamore Canyon-Penasquitos line with a June 2018 in-service date.⁸⁰

The CAISO conducted a competitive solicitation for developers to offer proposals to construct, own, and maintain this new line. SDG&E submitted a proposal to this solicitation and was selected by the CAISO. Subsequent to its selection, SDG&E submitted an application to the Commission for a Certificate of Public Convenience and Necessity (“CPCN”) to build the new line. SDG&E obtained the CPCN on October 14, 2016. However, the project is behind the original in-service date of June 2017 due to the delay in receiving the CPCN.

The existing series capacitors on the Southwest Powerlink (“SWPL”) and Sunrise Powerlink 500 kV lines were bypassed to increase generation deliverability in the Imperial zone and mitigate the various overload concerns as set out in the 2014-2015 CAISO transmission plan.⁸¹ Any further delays may cause uncertainty for renewable developers whose project economics rely on the deliverability that the 230 kV Sycamore Canyon-Penasquitos project supports.

Timely approval and construction of interconnection facilities will support the schedules of renewable facilities under development, both within and external to California. Accordingly, SDG&E submitted an interregional transmission project to both CAISO and WestConnect in

⁷⁹ 2012-2013 ISO Transmission Plan, p 34.

⁸⁰ 2016-2017 ISO Transmission Plan, p 377.

⁸¹ 2016-2017 ISO Transmission Plan, p. 140.

March 2016 through their respective interregional transmission processes. SDG&E also submitted this interregional transmission project into the CAISO's economic study request window in March 2017 as part of the CAISO's 2017-2018 Transmission Planning Process.

The SDG&E alternating current to direct current ("AC-to-DC") conversion project proposes to convert a portion of the 500 kV SWPL to a multi-terminal, multi-polar high-voltage DC ("HVDC") system with terminals at North Gila, IV, and Miguel Substations. The conversion of a portion of SWPL to a HVDC system will provide significant regional and interregional benefits including but not limited to solving loop flow issues, optimizing transfer capabilities, aiding the integration of new transmission and generation projects, and increasing the ability to deliver renewable resources into the Southern California load centers. The project will also increase import capability into the San Diego and Greater Imperial Valley transmission-constrained load pockets during critical contingency conditions. The increased import capability will reduce LCRs and the attendant requirement of LSEs serving load in the San Diego area to contract for comparatively scarce, and therefore costly, dependable generating capacity within those LCR areas RA generating capacity.

The CAISO is currently conducting an Interregional Transmission Project Evaluation and 50% out-of-state Assessment ("Assessment") which includes the AC-to-DC conversion project. CAISO expects the assessment to be completed as a continuation of the 2016-2017 planning cycle and is intended to be for informational purposes.⁸²

Analysis conducted by the CAISO for the CAISO's 2014-2015 transmission plan found that:

The early retirement of the San Onofre Nuclear Generating Station had materially changed flow patterns in the area, resulting in a significant decline in forecast deliverability from the Imperial area as set out in the 2013-2014 Transmission Plan. These new measures, in combination with previously approved transmission projects are projected to provide over 1,700 to 1,800 MW of incremental transmission deliverability for the Imperial area. As approximately 1,050 to 1,200 MW of new renewable generation interconnecting to either the ISO or IID in the Imperial area is already moving forward, there is sufficient transmission deliverability projected to support an additional 500 to 750 MW of renewable resources, depending on the precise resource locations within the Imperial area.⁸³

⁸² Interregional Transmission Project Evaluation and 50% RPS Out-of-state Portfolio Assessment Study Plan, p. 1.

⁸³ *Id.* at p. 2.

Moreover, the CAISO found that “[t]o make the entire 2,600 MW of the portfolio deliverable would require a transmission project such as a new Midway-Devers 500 kV line or the STEP project.”⁸⁴ On the other hand:

ISO considers that emphasis needs to be placed on how solutions addressing future reliability concerns in the LA Basin/San Diego area integrate with potential solutions for increasing generation deliverability benefits for resource development in the Imperial area given the high degree of interaction between the two areas. In addition, other considerations that should be taken into account include:

- Timing and emergency of need for additional mitigation for both needs (i.e., reliability and generation deliverability);
- Feasibility of various developments, which can be drawn from the Imperial area consultation efforts at the ISO, as well as the CEC/Aspen high-level environmental assessment analysis;
- Potential benefits of a more staged approach, such as some transmission solutions that work well together but have standalone benefits as well. Examples of such options include the Midway – Devers 500 kV AC (or DC line) and the Valley – Talega 500kV line, where the former primarily supports exports of renewables from the Imperial area, and the latter primarily supports the LA Basin and San Diego areas;
- Future analysis that will be required as needs evolve, including consideration of a larger picture that benefits both California and Mexico clean energy objectives, such as the CFE – ISO Bulk 500kV AC or HVDC transmission option.”⁸⁵

The analysis conducted for the CAISO’s 2014-2015 transmission plan focused on the year 2024. The extent to which the retirement of SONGS will affect the deliverability of Imperial Valley renewable generation between now and year 2024 will depend upon: (i) how quickly the CAISO Board-approved mitigation solutions can be permitted and built; and (ii) the results of the CAISO’s ongoing analysis of other potential transmission upgrades (such as the proposed 500 kV Midway-Devers transmission line). Delays in implementing these transmission solutions could limit the deliverability of existing and planned renewable resources in the Imperial Valley and thereby compromise the economic viability of those resources.

⁸⁴ *Id.* at p. 219.

⁸⁵ *Id.* at p. 100-101.

ii. Interconnection Study Process

The CAISO's process for determining required upgrades for renewable projects can cause delay and expense. SDG&E protects ratepayers by establishing transmission upgrade cost limits and including conditions precedent in the PPA whereby if the upgrade costs are higher than the thresholds established in the PPA, the contract can be terminated. In the past, developers have been required to wait years for study results and in some cases have been faced with extremely high upgrade costs that render their projects unviable.

Changes in the CAISO's approach for identifying network upgrades that provide interconnecting renewable generators with FCDS were implemented several years ago and appear to be reducing transmission funding hurdles for new generators that are in interconnection cluster 5 and later clusters. The CAISO's transmission planning process now identifies ratepayer-funded transmission upgrades that support a specific RPS portfolio. For generators that are not part of the specific RPS portfolio, the CAISO's interconnection studies will identify Delivery Network Upgrades that are needed to support the generator's request for FCDS. However, generators now have the option to choose not to fund construction of these upgrades and instead rely on deliverability that may be available because other generators fail to develop as expected. Nevertheless, renewable generators that sought interconnection prior to cluster 5 are still subject to financing hurdles tied to the requirement to advance construction funds for Delivery Network Upgrades.

iii. Jurisdictional Agency Permitting Delays

Uncertainty surrounding the timely issuance of key permits associated with lead agency review continues to create risks for projects under development. The permitting timeline can vary greatly based on a multitude of factors including project location, environmental issues, lead/other agency resources, and public participation. First, this uncertainty may lead to scheduling challenges and corresponding problems with project elements such as site control, financing, permitting, engineering, procurement including supplier and engineering, procurement, and construction ("EPC") contracts. Second, costs to mitigate environmental issues or respond to public concerns can lead to higher than expected costs for developers to complete a project.

B. Project Finance, Tax Equity Financing and Government Incentives

Obtaining financing is key to the successful development of renewable projects. Two

areas of financing are of primary importance: (i) project financing relied upon to construct the project; and (ii) tax equity financing relied upon to monetize tax benefits such as the Production Tax Credits (“PTC”) or Investment Tax Credits (“ITC”). Financial institutions traditionally provide project financing, the cost and availability of which is a function of the overall health of the financial system. Tax equity financing is also traditionally provided by banks or large corporations. In order to secure financing, renewable projects generally must: (i) complete permitting; (ii) have a long-term fixed price PPA from a credit-worthy off-taker; and (iii) have a bankable (or proven) technology. The financial markets have proven unstable, thus non-traditional investors are also key to the success of the renewable energy industry. Non-traditional investors include institutional investors reached by projects issuing a security, and utilities and other corporations with tax appetite as tax equity investors.

The American Recovery and Reinvestment Act of 2009 was successful in increasing the economic viability of projects through enabling the PTC and ITC, with both the PTC and ITC being extended by former President Obama’s signing of the Omnibus Appropriations Act. The PTC (which expired at the end of 2013 and was reinstated for 2015 through the end of 2019) and ITC (currently set to expire at the end of 2022, with a 10% credit remaining in perpetuity) represent about 33% of the economic value of renewable projects and without them, the relative competitiveness of renewable energy relative to fossil fuels, will be severely impacted. The recent reinstatement of the PTC through 2019 (and potentially longer where a project can demonstrate that it is “under construction”) and the extension of the ITC will support the project development and financing landscape for future projects.

C. Debt Equivalence and Accounting

Two additional issues may challenge SDG&E’s ability to achieve its RPS goals. The first involves debt equivalence. The cumulative debt equivalence of executed PPAs could affect SDG&E’s credit profile and, consequently, its financial standing. Rating agencies may include long-term fixed financial obligations, such as PPAs, in their credit risk analysis. These obligations could be treated as additional debt during their financial ratio assessment. Standard and Poor’s (“S&P”) views three ratios, Funds From Operations (“FFO”) to Debt, FFO to Interest Expense, and Debt to Capitalization, as the critical components of a utility’s credit profile. Debt equivalence could negatively impact all three ratios. Unless this risk is mitigated, a PPA would negatively impact SDG&E’s credit profile by degrading credit ratios.

The second issue relates to Accounting Standards Codification (“ASC”) 810 Consolidation, which includes the subject of Consolidation of Variable Interest Entities (“VIEs”). Application of ASC 810 as it pertains to Consolidation of VIEs could also impact SDG&E’s ability to sign new contracts. As part of SDG&E’s overall internal review and approval process for new PPAs, SDG&E conducts a review of whether each PPA will be subject to consolidation under ASC 810. Under ASC 810, no renewable PPA has been deemed subject to such consolidation, however, ASC 810 requires SDG&E to perform an evergreen assessment for those contracts which are considered VIEs. For this reason, SDG&E believes that it is required to assess quarterly each contract or category of contracts to ensure continued compliance with ASC 810, to determine whether or not SDG&E must consolidate a seller’s financial information with SDG&E’s own quarterly financial reports to the Securities and Exchange Commission. The accounting rules associated with ASC 810 can change, thus wind, solar, geothermal and bio-gas renewable sellers could be impacted.

Application of ASC 810 could hinder SDG&E’s ability to achieve its RPS goals, and add further costs and risk to execution of new renewable contracts. If SDG&E determines that consolidation is required, a seller must open its books to SDG&E and submit financial information, on a quarterly and monthly basis, as specified in SDG&E’s contract language for the duration of the relevant agreement.

All PPAs are affected by either debt equivalence or ASC 810 requirements. The Commission is well aware of the negative impact of debt equivalence on SDG&E’s credit profile. AB 57 requires that the Commission adopt procurement plans that, among other objectives, enhance the creditworthiness of the utility. ASC 810 will affect SDG&E’s reported financial data and may have a negative impact on SDG&E’s balance sheet and/or credit profile. ASC 810 could impact SDG&E’s capital structure on a consolidated basis and cause it to be misaligned with its authorized capital structure. To the extent SDG&E must seek to mitigate the impacts of debt equivalence and ASC 810, it will do so through a separate cost of capital filing.

D. Regulatory Factors Affecting Procurement

The Commission is in the process of implementing changes to the RPS program required by SB 2 (1X) as well as SB 350. As a result, full program details are not yet final, which creates regulatory uncertainty. However, it is important to note that SDG&E currently expects to meet and exceed its near-term RPS program goals, as well as those established by SB 350, with

procurement already under contract, as explained in Sections I and II above, and as such the RPS procurement initiatives pending before the Commission will likely have a greater impact on RPS procurement undertaken to meet future need. On February 5, 2016, the Commission issued an *Amended Scoping Memo of Assigned Commissioner* to identify the issues for consideration under R.15-02-020. A plethora of RPS procurement issues were listed in the amended scoping memo, several of which are particularly important to note here: the RPS PEL, verified compliance reports for CP1, LCBF methodology revisions including updating the variable integration cost adder, and SB 350 implementation.

Beginning with the PEL, SDG&E has urged the Commission to implement a cap on expenditures by IOUs to meet RPS goals. Greater detail regarding the actual limitation for SDG&E, how it will relate to the procurement dollars spent and contracts signed as of the date of the final decision, and how the expenditure cap will interact with the other requirements of the RPS program will assist SDG&E in planning its future procurement activities, especially as the State moves towards a 50% RPS goal. Given the shift away from separate programs and processes towards a holistic planning and procurement process under the IRP (discussed in more detail under Section II.C), SDG&E has taken a renewed look at cost containment and believes that any PEL developed by the Commission should be informed by the IRP proceeding. The IRP not only incorporates all procurement types, but also contemplates an evaluation metric that ties procurement to the State's Cap-and-Trade program to reduce greenhouse gas ("GHG") across all sectors in the most cost-effective manner by using a marginal GHG abatement cost (or "GHG Planning Price").⁸⁶ In order to procure the best possible resources to meet both RPS and GHG goals, this metric should be applied to RPS procurement.

With respect to compliance, the results of the CEC and Commission review and verification of SDG&E's CP1 procurement and associated documentation will provide greater certainty regarding the PCCs of contracts in SDG&E's portfolio and will thereby inform SDG&E's procurement activities going forward.

The pending nature of LCBF reform also creates uncertainty. *The Scoping Memo and Ruling of Assigned Commissioner* for R.15-02-020 (the "2015 RPS OIR Ruling"), filed May 22, 2015, lists LCBF reform as one of the Commission's top five priorities.⁸⁷ On June 22, 2016, the

⁸⁶ Energy Division Staff Proposal for Implementing Integrated Resource Planning at the CPUC, p. 30-31

⁸⁷ 2015 RPS OIR Ruling, p. 4.

Commission issued a ruling requesting comment on the LCBF staff paper and requesting that the IOUs jointly submit a proposal for developing a standardized methodology and set of inputs and assumptions for estimating future capacity prices. Clarity surrounding the ultimate alterations to this calculation and the factors used in bid evaluation as a result of this LCBF revision initiative will help SDG&E understand and plan for any impacts. In addition to this initiative, there are also several other items under consideration at this time, or slated to be considered in the near future, that will impact the LCBF calculation. First, the Commission issued a ruling on May 12, 2016 requesting input on a report and next steps for development of a renewable integration cost adder (“RICA”). The results of this initiative will inform the development of the variable component of the interim integration cost adder for use in the LCBF evaluation. Second, the Commission’s new probabilistic reliability model may significantly alter the expected qualifying capacity of new and existing wind and solar resources and thereby impact the Net Qualifying Capacity (“NQC”) of a resource for RA compliance purposes. This in turn may materially alter the NQC value assigned to renewable projects as a part of the LCBF evaluation. And third, R.15-02-020 introduces “integrating goals and metrics for reducing the emission of [greenhouse gases] GHG into RPS procurement processes and evaluation”⁸⁸ as a new initiative and one of the top five priorities for the RPS proceeding. It is unclear at this time how this will impact RPS project valuation, and as such the outcome of this work cannot be predicted currently, but SDG&E looks forward to participating in the development of these goals and metrics. SDG&E continues to monitor these processes and will incorporate any new data points or methodologies into its LCBF evaluation when final.

And finally, Governor Brown signed SB 350 into law on October 7, 2015. This law increases the RPS target to 50% by 2030. The Commission issued a ruling on April 15, 2016 seeking comments on implementation of various portions of SB 350, and has issued two decisions regarding SB 350 parameters;⁸⁹ SDG&E looks forward to participating actively in the stakeholder process that this change in law will initiate.

E. Unanticipated Curtailment

As explained in more detail below under Section X, the incidence of curtailment has

⁸⁸ 2015 RPS OIR Ruling, p. 5.

⁸⁹ D.16-12-040 extending the current straight-line method for calculating RPS targets which can be seen in SDG&E’s RNS table under Appendix 2, and D.17-06-026 which sets forth the new banking rules, also incorporated into SDG&E’s RNS table.

increased and will continue to do so as more and more intermittent renewable generation is brought online. SDG&E's current strategy inherently addresses curtailment as it seeks to mitigate the need to curtail by procuring a diverse portfolio of resources that account for system needs as described above in Section II, and by refining its RPS PPA to ensure that the projects that are ultimately built reflect the project as bid, also described under Section II. Additionally, SDG&E has taken steps in its RPS PPA to provide for economic curtailment rights, and these past RPS PPA modifications are referenced in Section X below.

F. Insufficient Supply of Renewable Resources

As described above under Section II, it is SDG&E's expectation that it will be able to meet its CP goals through 2030 with RPS eligible procurement already under contract, and as such, it is likely that SDG&E will not seek to hold an RPS RFO for the next several years given its current forecasted position. The majority of the facilities with which SDG&E has contracted are operating, as can be seen in the probability weighted tables in Appendix 2. It is unlikely that an event or series of events will undermine SDG&E's ability to procure energy from these resources. However, as mentioned in Sections II and VII, SDG&E procures a VMOP to guard against unforeseen circumstances.

G. Unanticipated Increases in Retail Sales

SDG&E's retail sales forecast methodology, which is intended to capture both increases and decreases, is explained above under Section II. It is unlikely that an event or series of events will increase SDG&E's retail sales to a level that would prevent RPS compliance. However, as mentioned above and in Sections II and VII, SDG&E procures a VMOP to guard against unforeseen circumstances.

H. Impact of Potential Delays

SDG&E bases its forecasting, and therefore its RNS calculation, on its individual project assessments, as described in more detail in Section II. It also considers lessons learned and trends it has observed as a result of the RPS procurement process, as discussed in more detail in Section II. The factors discussed in this section contribute to SDG&E's monthly assessment of the likelihood of each project's success. For example, a project that has been experiencing difficulty in obtaining a key permit would receive a probability weighting reduction to account for this risk until the issue is resolved. While the impacts of the regulatory proceedings mentioned above cannot be known until the final decisions are issued, SDG&E is monitoring

these issues and will reflect their outcomes accordingly, when appropriate. The results of these cumulative assessments are reflected in the RNS, which helps SDG&E to identify any potential project delays that may impact compliance and to then plan its procurement activities over the next two compliance periods and past 2020. The RNS as of June 2017 is provided in Appendix 2.

V. RISK ASSESSMENT

SDG&E periodically evaluates the risk that delivering projects will underperform. In SDG&E's experience, developers are inherently motivated to achieve the COD for their facilities and maintain successful operations due to several factors: (i) the significant investment required to achieve COD; (ii) the timely payments made for energy delivered once COD is reached; and (iii) the penalties incurred if the project does not meet contractual requirements to supply at least the minimum amount of energy contemplated. As explained above under Section II, SDG&E anticipates meeting its CP3 targets with procurement already under contract. However, risks are still present, and over the past decade, SDG&E has observed some dynamic factors that may affect power production from delivering projects:

- Resource Availability and Variable Generation: Renewable resources depend on natural sources of energy which are variable, and can be impacted by various factors. For example, a bad wind year can greatly impact a wind facility's performance and cause lower than expected generation, impacting SDG&E's ability to meet its RPS goals. Another factor that could also impact generation, and therefore SDG&E's ability to meet its RPS goals, is the occurrence of unexpected mechanical failures. This could cause the facility to be partially or fully unavailable until the issue can be resolved.
- Regulatory Changes: The expiration of subsidies or additional requirements resulting from changes in regulations could lower the revenue stream and increase costs for RPS developers and could lead to reduced production if the project has difficulty in supporting this lower revenue stream.
- Economic Environment: The interest rates and flexibility of financing arrangements entered into by developers can impact a project's success. Long-term project financing arrangements with unfavorable terms can lead to project failure or reduced production if the project has difficulty in supporting the financing cost requirements.

Additionally, a change in the economic environment could negatively impact a generator's supply chain, potentially causing difficulty in complying with contract terms.

- Evolving Technology: Facilities with older generation technology that is no longer supported by the manufacturer can experience project failure or reduced production. This problem is arising now for older RPS projects, and could repeat itself over the next 20 years as the projects being contracted for today begin to age.
- Issues with Third Party Mandatory Systems: CAISO and WREGIS systems have experienced technical issues in the past, and potential technical problems with these systems going forward could complicate the compliance process.

SDG&E's current assessment is that, as an overall matter, projects in its portfolio are at a low risk of non-performance, but notes that this assessment is based on the above risk factors remaining relatively stable. As noted herein, SDG&E bases its forecasting, and therefore its RNS calculation, on its individual project assessments, lessons learned and trends it has observed as a result of the RPS procurement process. The above factors contribute to SDG&E's monthly project assessments of the likelihood of each project's success. For example, the probability weighting for a project that has begun experiencing technical difficulties due to an aging system and has been unable to receive assistance from a manufacturer that no longer exists, would receive a probability weighting reduction to account for its reduced generation until the issue is resolved. The result of these cumulative assessments is reflected in the RNS, which SDG&E will then use to inform its procurement activities over the next two compliance periods and beyond 2020. The RNS as of June 2017 is provided in Appendix 2.

VI. QUANTITATIVE INFORMATION

The analysis attached hereto in Appendix 2 shows the Commissions' prescribed RNS calculation with supporting probability weighting calculations by project as of June 2017. SDG&E intends to monitor the vintage and remaining life of RECs in order to maximize their value to the portfolio by retiring them at the most opportune time, this is discussed in more detail in Section II.

VII. MINIMUM MARGIN OF OVER-PROCUREMENT

SDG&E's RPS Risk Adjusted⁹⁰ RNS Calculation, as shown in Appendix 2, provides a VMOP.⁹¹ SDG&E's VMOP is composed of a "Minimum Margin of Procurement" that is intended to account for foreseeable project failures or delays, as well as an additional volume of procurement which is undertaken to ensure that SDG&E achieves its RPS requirements despite unforeseeable risks. Due to constant fluctuations in RPS targets (as a result of changes in retail sales) and RPS deliveries, it is nearly impossible to meet RPS targets with the exact number of MWhs required. SDG&E's VMOP is designed to ensure that it achieves its RPS goals with a "buffer" to and considers foreseeable and unforeseeable risks such as those discussed in Sections IV and V. Because it is difficult to predict retail sales and project performance, particularly for periods farther into the future, SDG&E's VMOP may be higher in later years. SDG&E's portfolio (RPS resources necessary to reach compliance and provide a VMOP) is the result of the forecasts (including need, retail sales, and project success rates), the assessment of potential risks, and the project valuations made at the time of each individual contract execution and approval. SDG&E's RNS calculation, including its VMOP, for each year is based on the following formula:

$$\text{RPS Risk-adjusted Net Short} = (\text{Bundled Retail Sales Forecast} \times \text{RPS Procurement Quantity Requirement} + \text{Voluntary Minimum Margin of Procurement}) - (\text{Online Generation} + \text{Risk-adjusted Forecast Generation} + \text{Pre-approved Generic Generation})^{92}$$

Where:

- a. Bundled Retail Sales Forecast = the forecast developed in accordance with Section II(A)(ii)(a) of SDG&E's 2017 RPS Plan
- b. RPS Procurement Quantity Requirement = the target for the relevant CP or year

⁹⁰ Probability weightings are used to adjust estimated deliveries based on the likelihood that each developing project will reach COD, as well as the likelihood that each delivering projects will continue to deliver as estimated. The probability weighting process identifies the volume of generation under contract that SDG&E is likely to receive and be able to apply towards its RPS compliance. Based on this analysis, SDG&E can determine what additional procurement is necessary to (i) reach its RPS targets, and (ii) provide a buffer against foreseen and unforeseen events (the VMOP).

⁹¹ See Row D of the RNS Table.

⁹² All generation data listed in any of SDG&E's RPS Plans, as well as any of its RPS Plan Appendices, are from contracts that have been approved or pre-approved by the Commission.

- c. Voluntary Minimum Margin of Procurement = up to the current anticipated net long position for the relevant CP or year
- d. Online Generation = the generation that SDG&E expects will be delivered by its portfolio of RPS projects that have achieved commercial operation, as discussed in Section II(A)(i)(a) of SDG&E's 2017 RPS Plan
- e. Risk-adjusted Forecast Generation = the generation that SDG&E expects will be delivered by its portfolio of RPS projects that have not yet achieved commercial operation, as discussed in Section II(A)(i)(b) of SDG&E's 2017 RPS Plan
- f. Pre-approved Generic Generation = unsubscribed volumes that SDG&E is required to procure under fully implemented CPUC mandated procurement programs (RAM and Re-MAT)

VIII. BID SOLICITATION PROTOCOL, INCLUDING LEAST-COST, BEST-FIT

Attached hereto in Appendices 6-12.B are SDG&E's proposed RPS Long- and Short-Term Model PPAs, RPS REC Agreement, LCBF, RPS Sale RFP, RPS Sales Model PPA, documentation for a GT RAM solicitation, and documentation for an ECR RAM solicitation. Note that the RPS Sales Model PPA currently contemplates the sale of a Category 1 product; SDG&E will modify this agreement as necessary to accommodate the sale of Category 3 products. Although SDG&E does not intend to issue a solicitation for RPS purchases in 2017, it has attached RPS Long- and Short-Term Model PPAs,⁹³ an RPS REC Agreement, and an LCBF document. Submitting these updated documents is important so that they do not become stale. As required by D.14-11-042, SDG&E has included GT RAM and ECR RAM solicitation documents. Per D.14-11-042, SDG&E will request Commission approval via a Tier 1 AL if it determines that changes to these documents are necessary.⁹⁴

- Appendix 6 – 2017 RPS Long-Term Model PPA
- Appendix 7 – 2017 RPS Short-Term Model PPA
- Appendix 8 – 2017 RPS REC Agreement
- Appendix 9 – 2017 LCBF
- Appendix 10 – 2017 RPS Sales RFP

⁹³ D.14-11-042, p. 78.

⁹⁴ D.14-11-042, *mimeo*, p. 22.

- Appendix 10.A – 2017 RPS Sales Model PPA
- Appendix 10.B – 2017 Framework for Assessing Potential RPS Sales
- Appendix 11 – 2017 GT RAM RFO
- Appendix 11.A – 2017 GT RAM PPA
- Appendix 11.B – 2017 GT RAM Offer Form
- Appendix 12 – 2017 ECR RAM RFO
- Appendix 12.A – 2017 ECR RAM PPA Rider
- Appendix 12.B – 2017 ECR RAM Offer Form

A. Workforce Development Assessment Proposal

A Workforce Development Assessment has been added as a qualitative factor within SDG&E’s LCBF. The information used in this Assessment will be gathered as part of the required bid information for any solicitations which include renewable resources. The Assessment results will be qualitatively compared among all renewable resource bids within the solicitation which will inform the final bid ranking, similar to all other qualitative factors.

B. Assessment of Benefits to Disadvantaged Communities

In D.04-07-029, the Commission directed the use of “benefits to low income or minority communities” as a qualitative factor in the LCBF analysis. Consistent with this direction, SDG&E has applied this factor on a qualitative basis along with several other qualitative factors (see Appendix 9 for a full list). Benefits to the community are either described by the developer in the project description form, or can be requested by SDG&E if not provided. The results of SDG&E’s LCBF analysis (quantitative as well as any additional qualitative) are shared with the PRG and also described in the AL seeking approval for SDG&E’s shortlist.

IX. CONSIDERATION OF PRICE ADJUSTMENT MECHANISMS

SDG&E acknowledges that contracts with online dates occurring more than 24 months after the contract execution date can pose additional risk to ratepayers. SDG&E has incorporated price adjustment mechanisms into some of its current contracts that are intended to alleviate some of these risks, including the following:

- Price adjustment for delay in Guaranteed Commercial Operation Date (“GCOD”): A lower price for a late GCOD provides additional incentive for developers to come online pursuant to the contract. However, this structure can create financing challenges if

financing parties are not comfortable with the potentially lower price. It is also difficult to quantify an appropriate price adjustment amount and can lead to drawn out negotiations.

- Capped transmission upgrade costs: Placing a cap on the amount of transmission upgrade costs, which are ultimately borne by ratepayers, that a project can incur is an effective way to limit ratepayer exposure to such costs. This type of cap is especially important for projects with CODs more than 24 months after the contract execution date because it is more likely that transmission upgrade cost estimates could change for these projects. The cap is set as a condition precedent to SDG&E's obligations under the PPA. If estimated costs exceed the cap, SDG&E has the right not to move forward with the PPA.
- Price adjustment for higher than expected transmission upgrade costs: Another mechanism that SDG&E has successfully incorporated into past contracts is a mechanism whereby the seller agrees to a price reduction to offset higher than anticipated transmission upgrade costs. Under this mechanism, the contract price would be reduced on a dollars per megawatt-hour basis commensurate with the cost of transmission upgrades above an agreed upon cap. The price adjustment mechanism would include an upper limit on transmission upgrade costs, above which SDG&E can terminate the contract. This mechanism is similar to the cap described immediately above except, rather than giving SDG&E the right not to move forward with the PPA, it gives the developer the choice of whether to go forward at a reduced price equal to the amount of transmission costs above the cap, or the developer may choose not to go forward with the PPA.
- Price adjustment for failure to achieve full capacity deliverability status: If a project is not deemed fully deliverable by CAISO at the time of COD, then the PPA price is reduced by either a negotiated price reduction specific to the project, or the application of energy only TOD factors in place of FCDS factors until such time as the project is deemed fully deliverable.

X. ECONOMIC CURTAILMENT FREQUENCY, COSTS, & FORECASTING

The sections below discuss observations, analysis, activities, and how the RPS Plan contents address these items.

A. Market & Operational Observations

The issue of curtailment is a result of the operational characteristics of the facilities within the renewable market (both those procured pursuant to the RPS program, as well as customer-side facilities that are incremental to the RPS program under existing rules, specifically net energy metered installations). These resources are as-available (that is, they generate only when the wind is blowing or the when sunlight strikes the panel, and they are negatively affected by atmospheric conditions which interfere with this energy production, such as cloud cover) and intermittent, which results in generation profiles that do not necessarily follow load. SDG&E's net load profile now shows a pronounced shift toward an evening peak as increased solar generation has begun to offset load during SDG&E's historical peak load hours (mid-day). The shift of SDG&E's net peak into the evening hours becomes more pronounced as more renewable generation (particularly solar) is brought online, as it has over the past several years and will continue to do so as RPS penetration increases.⁹⁵ This difference leads to integration issues, specifically overgeneration, which in turn leads to an increase in economic curtailment orders and negative pricing. The CAISO, the Participating Transmission Owner or distribution operator, or the Buyer (SDG&E) can instruct a generator to curtail (take its power off of the grid) in order to manage excess generation, minimize the effect of negative pricing, and maintain grid reliability. When negative pricing occurs, and generators are not economically curtailed, SDG&E must pay the CAISO to take this power if it is the Scheduling Coordinator for the project. It is important to address and work to mitigate these issues through the valuation process and the contracting process. It should also be noted that each year brings with it more information and additional opportunity for refinement of the procurement process.

With respect to the valuation component, the Commission adopted an interim renewable integration cost adder in D.14-11-042⁹⁶ which has been incorporated into SDG&E's LCBF calculation attached hereto as Appendix 9. SDG&E has also initiated work, discussed under

⁹⁵ See the CAISO "duck chart" at:

https://www.caiso.com/Documents/FlexibleResourcesHelpRenewables_FastFacts.pdf.

⁹⁶ D.14-11-042, p. 63.

Section IV above, to address revision of this process by authorizing integration studies that will ultimately be used to inform the development of the final integration cost adder. This final adder will be incorporated into the LCBF calculation with the objective of enhancing its effectiveness in identifying projects with the lowest cost in consideration of the cost of integration, and ideally reducing the incidence of curtailment and/or negative pricing. SDG&E looks forward to participating in this process and in the revision of the LCBF calculation as a whole, as discussed in Section IV.

Regarding the contracting component, SDG&E has and will continue to address this process as it gains more and more experience with the issue of curtailment. SDG&E has made contract modifications related to curtailment, which are discussed in more detail below under Subsections C and D. These revisions are an important step in addressing the issue of curtailment, the cost of which has increased significantly over the past several years.⁹⁷

B. Analysis, Initiatives, & Strategy

SDG&E has been tracking its curtailment actions and results since Q3 2014, and based on the data available to date, its curtailment activities have resulted in significant cost savings for SDG&E ratepayers. SDG&E will continue to track this data and report on it as appropriate.

C. Activities

SDG&E has undertaken activities to manage its existing contracts, as well as strengthen the language regarding economic curtailment in its pro forma PPA to be used in future contracting.

Beginning with its existing contracts, SDG&E has seen multiple instances of negative pricing since the CAISO implemented its new tariff revisions on May 1, 2014, and has acted to minimize ratepayer exposure to negative pricing by economically curtailing facilities with which it has this contractual right. These instances have generally followed the same sequence of

⁹⁷ The Federal Energy Regulatory Commission (“FERC”) issued Order No. 764 (“FERC 764”) on June 22, 2012, in an effort to “adopt reforms that would remove barriers to the integration of variable energy resources and provide for related just and reasonable rates” (see CAISO Docket No. ER13-2452-000 Tariff Revisions to Comply with Order No. 764, p. 2). In response to FERC 764, the CAISO updated its open access transmission tariff, which was conditionally approved by the FERC on December 19, 2013, and implemented on May 1, 2014. As part of this tariff update, the floor on negative bids was decreased from -\$30 to -\$150, which may be modified in future years. As a result, the magnitude of potential negative prices has increased. SDG&E’s ratepayers are exposed to negative CAISO prices plus the hourly price of the contract. The likelihood of incurring these charges is greatly increased with respect to renewable facilities which, as mentioned above, typically do not follow load.

events: (a) as facility Scheduling Coordinator SDG&E economically bids energy from a facility into the market; (b) a negative pricing event occurs; (c) the CAISO instructs the facility that was economically bid by SDG&E to dispatch down (curtail); and (d) the facility responds to the extent possible. These actions protected ratepayers by reducing the negative pricing payments made to the CAISO, but SDG&E's ability to curtail its current portfolio is limited by several factors: (a) the majority of SDG&E's existing RPS contracts do not contain economic curtailment rights (however, as mentioned below, SDG&E has initiated contract renegotiations minimizing adverse impacts on ratepayers); (b) many facilities have operating restrictions which impact their ability to respond immediately to an economic curtailment order; and (c) (where the contract contains economic curtailment rights) SDG&E's ability to economically curtail is limited in many cases to 5% of a facility's annual deliveries.

With respect to SDG&E's RPS PPA, the Commission approved the proposed revisions filed with SDG&E's 2014 RPS Plan, which allow for uncapped economic curtailment rights, and included a requirement that the generator install the automated dispatch system ("ADS"), which is the software that receives the dispatch notice/curtailment order, and the application programming interface ("API"), which is the software necessary to respond to and implement the dispatch notice/curtailment order.⁹⁸ Requiring this software will ensure that responses to economic curtailment orders are immediate, which will bolster grid management efforts and forecasting. D.14-11-042 also provided for the incorporation of several provisions allowing payment to the generator for the economically curtailed generation (i.e., what could have been generated but for the economic curtailment), and requiring the generator to be responsible for CAISO imbalance energy costs or charges incurred during periods of economic curtailment. The benefits of these changes to ratepayers and reliability are threefold. First, requiring that facilities are both required and equipped to respond to a curtailment order will assist the CAISO in complying with the North American Electric Reliability Corporation ("NERC") reliability standards. Second, this increased ability to manage excess generation could help reduce the incidence of negative pricing events on the CAISO system as a whole, which provides a general benefit to all ratepayers in the State. Third, by allowing uncapped curtailment, SDG&E will better be able to manage the incidence of negative pricing payments made to the CAISO, which is beneficial to SDG&E's ratepayers.

⁹⁸ D.14-11-042, p. 38.

SDG&E has continued renegotiation of dispatch down, scheduling and curtailment provisions of existing contracts. To the extent feasible, SDG&E plans to address all contracts that require updates due to CAISO's implementation of FERC Order 764. SDG&E's PPAs generally contain language⁹⁹ which contemplates the need for the buyer and seller to update the PPA when there are major market changes (such as CAISO's implementation of FERC Order 764).

D. 2017 RPS Plan

SDG&E's 2017 RPS Plan contains a comprehensive overview of SDG&E's procurement strategy, including ways to address the economic curtailment observations and activities discussed in this section. As explained above, on the evaluation side of procurement, work to revise the LCBF and incorporate a final integration adder is underway at the Commission, and until this adder is finalized SDG&E will utilize the interim integration adder adopted in D.14-11-042. With respect to the contract side of procurement, SDG&E incorporated provisions into its PPA in the 2014 version of its RPS Plan related to curtailment and is working on the renegotiation of dispatch down and scheduling and curtailment provisions in existing contracts. SDG&E also made additional modifications to its RPS PPAs (attached hereto as Appendices 6, 7, and 11.A) to ensure clarity with respect to FERC 764 changes in its 2016 RPS Plan, and as explained above under Section II, has made contract adjustments intended to remove the incentive to overbuild (additional and unplanned generation can contribute to negative pricing incidences and lead to economic curtailment).

Initiatives undertaken outside of the RPS proceeding also have the potential to assist in the management of intermittent generation and the resulting curtailment – specifically, the addition of flexible capacity and energy storage resources to the grid. On May 21, 2015, the Commission approved SDG&E's 20-year term contract with the Carlsbad Energy Center in D.15-05-051, finding that “[t]he Carlsbad PPTA would provide additional benefits including reliability benefits by being able to meet SDG&E's LCR need by 2018, renewable resources integration benefits due to its flexible dispatchability, and locational benefits by virtue of being

⁹⁹ See RAM PPA Section 3.3.a: “In the event that the PIRP or the CAISO Tariff and/or any protocols relating thereto are changed, amended, modified replaced or terminated, Seller and Buyer agree to comply with such revisions and, to the extent practical, to implement such revisions in a manner that maintains the relative economic positions of the Parties as of the date of this Agreement.”

highly compatible with the existing transmission system and on previously disturbed land.”¹⁰⁰ The Commission’s decisions on storage (D.13-01-040, D.14-10-045 and D.16-01-032) list a myriad of grid management issues that can be addressed via storage, for example, transmission and distribution reliability.¹⁰¹ Storage also has the ability to respond to periods of overgeneration, potentially mitigating the frequency of negative pricing. SDG&E is well on its way to meeting the energy storage procurement requirements included in D.13-01-040 including the procurement of at least 165 MW¹⁰² of energy storage through a series of biannual solicitations. To date, SDG&E has completed the 2014 and 2016 energy storage procurement cycles and has at least two more (in 2018 and 2020). Additionally, D.14-03-004 required that SDG&E procure a minimum of 25 MW¹⁰³ of energy storage, and in A.17-04-017, filed by SDG&E on April 29, 2017, SDG&E made a showing that this requirement has been fulfilled.

In February of 2017, SDG&E brought 37.5 MW of battery energy storage on-line in Escondido (30 MW) and El Cajon (7.5 MW). As mentioned, energy storage resources could potentially mitigate the effects of surplus energy. They have the capability to absorb excess energy during times of high renewable generation, and discharge it at times when generation is more valuable. However, the total volume of energy storage available in the CAISO is not enough to have a significant impact on the utilization of renewable generation. As energy storage capacity increases, the ability of this resource to absorb excess energy may increase, which may decrease the need for economic curtailments.

XI. EXPIRING CONTRACTS

The table attached hereto in Appendix 4 lists the contracts in SDG&E’s portfolio, as of June 2017, that will be expiring in the next 10 years.

XII. COST QUANTIFICATION

The tables attached hereto in Appendix 3 provide an annual summary of both actual and forecasted RPS procurement costs and generation, by technology type, as of June 2017.

¹⁰⁰ D.15-05-051, p. 34.

¹⁰¹ D.13-10-040, p. 15.

¹⁰² D.13-10-040, p. 15.

¹⁰³ D.14-03-004, p. 2.

XIII. IMPERIAL VALLEY

SDG&E did not hold a 2016 RPS RFO, however, the RPS portfolio currently contains 11 contracts in the IV/IID territory, that when completed will provide an estimated 3,100 GWh per year. As of June 2017, 10 of these projects have reached commercial operation, and the generation from these projects is anticipated to be approximately 3,000 GWh per year. Additionally, projects located within IV and either directly connected or dynamically transferred via pseudo-tie into SDG&E's service territory by the CAISO are eligible to participate in SDG&E's GTSR program.¹⁰⁴ SDG&E proposed in AL 2717-E, which addresses initial procurement for the GT component via RAM, that projects from the IV be allowed to submit bids,¹⁰⁵ this AL was approved without modification and became effective on June 11, 2015. SDG&E made this same recommendation for the ECR component, and the GTSR Phase IV decision allows ECR facilities that contract with SDG&E to site in the IV.¹⁰⁶

XIV. IMPORTANT CHANGES TO ~~2016~~DRAFT 2017 RPS PLAN

Important changes made to SDG&E's ~~2016~~Draft 2017 RPS Plan are detailed in Appendix 5.

XV. SAFETY CONSIDERATIONS

SDG&E is committed to providing safe, reliable and environmentally sound electric service for its customers. As discussed herein, SDG&E's RPS Plan contemplates procurement of RPS-eligible generation through both PPAs and UOG. SDG&E's emphasis on safety is reflected in: (i) the terms and conditions contained in the pro forma PPAs used in its various procurement programs, and (ii) the safety procedures that all contractors working on UOG facilities are required by SDG&E to follow.

A. RPS Power Purchase Agreements

SDG&E's current procurement programs and the safety-related contractual provisions included in the contract for each program are detailed below. Although the precise wording varies slightly among PPAs related to different programs, each PPA follows the same logic by

¹⁰⁴ D.15-01-051, p. 35.

¹⁰⁵ SDG&E AL 2717-E, p. 5.

¹⁰⁶ D.16-05-006, p. 17.

first defining prudent business practices as those which, given the information available at the time the decision was made, could reasonably be expected to accomplish the desired result consistent with good business practices, reliability and safety. This definition is then referenced throughout the contract. By executing any of the following referenced PPAs, a counterparty agrees to incorporate safety considerations into its decision-making process and operate accordingly.

- i. **PPA Provisions - Utility Scale RFOs (Long-Term and Short-Term¹⁰⁷ Contracts) and GT RAM¹⁰⁸**
 - Section 1.1: “Good Industry Practice” means those practices, methods and acts that would be implemented and followed by prudent operators of electric transmission facilities (with respect to Buyer) or prudent operators of electric generation facilities similar to the Project (with respect to Seller) in the Western United States during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety, and shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers’ warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and applicable Law. Good Industry Practice is not intended to be the optimum practice, method or act to the exclusion of all others, but rather is intended to be any of the practices, methods and/or actions generally accepted in the region.
 - Section 3.1(f)(ii): [For Baseload, Peaking, Dispatchable Product: Annual Capacity Testing. Thereafter, at least once per Contract Year within the first

¹⁰⁷ SDG&E’s Short-Term PPA is for projects that have already been constructed because it is not likely that a new project would be interested in a term of 5 years or less, as such it does not contain a Milestone Schedule, a Commercial Operations Certificate, or a Form of Quarterly Progress Report.

¹⁰⁸ D.14-11-042 requires that SDG&E file a short-term RPS PPA and RAM PPA, and D.16-05-006 requires that SDG&E utilize a RAM Rider for its ECR program. These documents are attached here to as Appendices 7, 11.A and 12.A, respectively. All of these documents are based on SDG&E’s RPS PPA, attached hereto as Appendix 6, as such the safety provisions and associated references are the same.

quarter of each Contract Year, upon no less than 14 days prior Notice to Buyer, Seller shall schedule and complete a Capacity Test. In addition, Buyer shall have the right to require a retest of the Capacity Test at any time upon five (5) days prior written Notice to Seller if Buyer reasonably believes that the actual Contract Capacity has varied materially from the results of the most recent tests. Seller shall have the right to run a retest of the Capacity Test at any time upon two (2) days prior written Notice to Buyer (or any shorter period reasonably acceptable to Buyer consistent with Good Industry Practices).]

- Section 3.5(a): General Operation. Seller shall comply with all applicable requirements of Law, the CAISO, NERC and WECC relating to the Project (including those related to safety, construction, ownership and/or operation of the Project).
- Section 3.5(b): CAISO and WECC Standards. Each Party shall perform all generation, scheduling and transmission services in compliance with all applicable (i) operating policies, criteria, rules, guidelines, tariffs and protocols of the CAISO, (ii) WECC scheduling practices and (iii) Good Industry Practices.
- Section 3.5(c): Reliability Standards. Seller agrees to abide by all (i) NERC, WECC and CAISO reliability requirements, including all such reliability requirements for generator owners and generator operators, and, if applicable, CPUC General Order No.167, “Enforcement of Maintenance and Operation Standards for Electrical Generating Facilities,” and (ii) all applicable requirements regarding interconnection of the Project, including the requirements of the interconnected Transmission Provider.
- Section 3.6(a)(i): Testing and Calibration. Seller shall perform or cause to be performed, at its expense, annual testing and calibration of the electric meters in accordance with Good Industry Practice and the CAISO Tariff. Seller shall give Buyer reasonable advance notice of any inspection, testing or calibration of the electric meters. Buyer shall have the right to have a representative or designee present at such inspection, test or calibration of the electric meters.

Buyer shall have the right to require, at Buyer's expense, except as required below, a test of any of the electric meters not more often than two (2) times every twelve (12) months.

- Section 3.7(a): Planned Outages. Seller shall schedule Planned Outages for the Project in accordance with Good Industry Practices and with the prior written consent of Buyer, which consent may not be unreasonably withheld or conditioned. The Parties acknowledge that in all circumstances, Good Industry Practices shall dictate when Planned Outages should occur. Seller shall notify Buyer of its proposed Planned Outage schedule for the Project for the following calendar year by submitting a written Planned Outage schedule no later than October 1st of each year during the Delivery Term. The Planned Outage schedule is subject to Buyer's approval, which approval may not be unreasonably withheld or conditioned. Buyer shall promptly respond with its approval or with reasonable modifications to the Planned Outage schedule and Seller shall use its best efforts in accordance with Good Industry Practices to accommodate Buyer's requested modifications. Notwithstanding the submission of the Planned Outage schedule described above, Seller shall also submit a completed Outage Notification Form to Buyer no later than fourteen (14) days prior to each Planned Outage and all appropriate outage information or requests to the CAISO in accordance with the CAISO Tariff. Seller shall contact Buyer with any requested changes to the Planned Outage schedule if Seller believes the Project must be shut down to conduct maintenance that cannot be delayed until the next scheduled Planned Outage consistent with Good Industry Practices. Seller shall not change its Planned Outage schedule without Buyer's approval, not to be unreasonably withheld or conditioned. Seller shall use its best efforts in accordance with Good Industry Practices not to schedule Planned Outages during the months of July, August, September and October. At Buyer's request, Seller shall use commercially reasonable efforts to reschedule Planned Outage so that it may deliver Product during CAISO declared or threatened emergency periods. Seller shall not substitute

Energy from any other source for the output of the Project during a Planned Outage.

- Exhibit F, Form of Quarterly Progress Report, Section 9.0: Safety and Health Reports
 - 9.1 Please list all accidents from the previous calendar quarter.
 - 9.2 Any work stoppage from the previous calendar quarter.
 - 9.3 Work stoppage impact on construction of the Project.
- ii. **PPA Provisions – CRE and WATER FiT Programs¹⁰⁹**
 - Section 5.4: The Generating Facility shall be operated with all of Producer's Protective Functions in service and in accordance with Prudent Electrical Practices whenever the Generating Facility is operated in parallel with SDG&E's Distribution System. Any deviation from these requirements may occur only when the Parties have agreed to such deviations in writing.
 - Appendix F, Item 32: "Operate," "Operating" or "Operation" means to provide (or the provision of) all the operation, engineering, purchasing, repair, supervision, training, inspection, testing, protection, use, management, improvement, replacement, refurbishment, retirement, and maintenance activities associated with operating the Generating Facility in accordance with Prudent Electrical Practices.
 - Appendix F, Item 41: "Prudent Electrical Practices" means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy generating facilities in the Western United States, similar to the Generating Facility, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety.
 - Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods and acts described in the

¹⁰⁹ SDG&E's CRE FiT and WATER FiT programs terminated July 24, 2013.

preceding sentence that comply with manufacturers' warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the ISO and applicable laws.

- Prudent Electrical Practices shall also include taking reasonable steps to ensure that:
 - Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Generating Facility's needs;
 - Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Generating Facility properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Generating Facility and emergencies whether caused by events on or off the Site;
 - Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Generating Facility, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
 - Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;
 - Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or SDG&E's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
 - Equipment and components designed and manufactured to meet or exceed the standard of durability that is generally used

for electric energy generating facilities operating in the Western United States and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

iii. PPA Provisions – Re-MAT FiT Program, and BioRAM¹¹⁰

- Section 6.4: Standard of Care. Seller shall: (a) maintain and operate the Facility and Interconnection Facilities, except facilities installed by Buyer, in conformance with all Laws and in accordance with Prudent Electrical Practices; (b) obtain any governmental authorizations and permits required for the construction and operation thereof; and (c) generate, schedule and perform transmission services in compliance with all applicable operating policies, criteria, rules, guidelines and tariffs and Prudent Electrical Practices. Seller shall reimburse Buyer for any and all losses, damages, claims, penalties, or liability Buyer incurs as a result of Seller’s failure to obtain or maintain any governmental authorizations and permits required for construction and operation of the Facility throughout the Term of this Agreement.
- Section 6.5.2: Access Rights. Buyer, its authorized agents, employees and inspectors may, on reasonable advance notice under the circumstances, visit the Project during normal business hours for purposes reasonably connected with this Agreement or the exercise of any and all rights secured to Buyer by Law, its tariff schedules, and rules on file with the CPUC. Buyer, its authorized agents, employees and inspectors must (a) at all times adhere to all safety and security procedures as may be required by Seller; and (b) not interfere with the operation of the Project. Buyer shall make reasonable efforts to coordinate its emergency activities with the Safety and Security Departments, if any, of the Project operator. Seller shall keep Buyer advised of current procedures for contacting the Project operator’s Safety and Security Departments.

¹¹⁰ SDG&E’s Re-MAT FiT Program ended June 30, 2016. Note that SDG&E’s BioRAM contract is also based on SDG&E’s ReMAT PPA.

- Appendix A: “Demonstrated Contract Capacity” means the Facility’s total rated electric alternating current energy generating capacity which will equal the [lesser of (a) the sum of the Inverter Block Unit Capacity of all Inverter Block Units in the Facility and (b) the continuous output power rating at the expected operating power factor of the step-up transformer that connects the Facility to the Transmission/Distribution Owner’s system[for solar photovoltaic technology]] [the total of the manufacturer’s nameplate ratings of all installed Wind Turbines, consistent with Prudent Electrical Practices and accepted industry standards, as indicated on the nameplates physically attached to the individual Wind Turbine generators[for wind technology]] [sum of the Metered Amounts for the Demonstration Hour[all other technologies]], as determined in accordance with Appendix M.
- Appendix A: “Inverter Block Unit Capacity” means, with respect to each Inverter Block Unit, the total rated electric alternating current energy generating capacity of such Inverter Block Unit, determined as the lesser of: (a) The manufacturer’s output rating of the Current Inverter included in such Inverter Block Unit, consistent with Prudent Electrical Practices and accepted industry standards, as indicated on the nameplate physically attached to such Current Inverter; (b) The sum of the manufacturer’s nameplate ratings of all Photovoltaic Modules included in such Inverter Block Unit, consistent with Prudent Electrical Practices and accepted industry standards, as indicated on the nameplates physically attached to such individual Photovoltaic Modules;
- Appendix A: “Prudent Electrical Practices” means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy generating facilities in the Western United States, similar to the Facility, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety. Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods

and acts described in the preceding sentence that comply with manufacturers' warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and Laws. Prudent Electrical Practices also includes taking reasonable steps to ensure that:

- (a) Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Facility's needs;
- (b) Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Facility properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Facility and Emergencies whether caused by events on or off the Site;
- (c) Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Facility, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;
- (d) Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;
- (e) Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or the Transmission/Distribution Owner's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
- (f) Equipment and components are designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy generating facilities operating in the Western United States and will function properly over the full range of ambient temperature and

weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

iv. PPA Provisions – BioMAT FiT Program¹¹¹

- Section 5.4: Standard of Care. Seller shall: (a) maintain and operate the Facility and Interconnection Facilities, except facilities installed by Buyer, in conformance with all Laws and in accordance with Prudent Electrical Practices; (b) obtain any governmental authorizations and permits required for the construction and operation thereof; and (c) generate, schedule and perform transmission services in compliance with all applicable operating policies, criteria, rules, guidelines and tariffs and Prudent Electrical Practices. Seller shall reimburse Buyer for any and all losses, damages, claims, penalties, or liability Buyer incurs as a result of Seller’s failure to obtain or maintain any governmental authorizations and permits required for construction and operation of the Facility throughout the Term of this Agreement.
- Section 5.5.2: Access Rights. Buyer, its authorized agents, employees and inspectors may, on reasonable advance notice under the circumstances, visit the Project during normal business hours for purposes reasonably connected with this Agreement or the exercise of any and all rights secured to Buyer by Law, its tariff schedules, and rules on file with the CPUC. Buyer, its authorized agents, employees and inspectors must (a) at all times adhere to all safety and security procedures as may be required by Seller; and (b) not interfere with the operation of the Project. Buyer shall make reasonable efforts to coordinate its emergency activities with the Safety and Security Departments, if any, of the Project operator. Seller shall keep Buyer advised of current procedures for contacting the Project operator’s Safety and Security Departments.
- Section 5.17: Safety Plan. Seller shall provide to Buyer, prior to commencement of any construction activities on the Site, a report from an independent engineer (acceptable to both Buyer and Seller) certifying that

¹¹¹ SDG&E’s BioMAT FiT Program began February 1, 2016.

Seller has a written plan for the safe construction and operation of the Facility in accordance with Prudent Electrical Practices.

- Appendix A: “Demonstrated Contract Capacity” means the Facility’s total rated electric alternating current energy generating capacity which will equal the sum of the metered amounts for the Demonstration Hour, as determined in accordance with Appendix J.
- Appendix A: “Prudent Electrical Practices” means those practices, methods and acts that would be implemented and followed by prudent operators of electric energy generating facilities in the Western United States, similar to the Facility, during the relevant time period, which practices, methods and acts, in the exercise of prudent and responsible professional judgment in the light of the facts known at the time the decision was made, could reasonably have been expected to accomplish the desired result consistent with good business practices, reliability and safety. Prudent Electrical Practices shall include, at a minimum, those professionally responsible practices, methods and acts described in the preceding sentence that comply with manufacturers’ warranties, restrictions in this Agreement, and the requirements of Governmental Authorities, WECC standards, the CAISO and Laws. Prudent Electrical Practices also includes taking reasonable steps to ensure that:
 - (a) Equipment, materials, resources, and supplies, including spare parts inventories, are available to meet the Facility’s needs;
 - (b) Sufficient operating personnel are available at all times and are adequately experienced and trained and licensed as necessary to operate the Facility properly and efficiently, and are capable of responding to reasonably foreseeable emergency conditions at the Facility and Emergencies whether caused by events on or off the Site;
 - (c) Preventive, routine, and non-routine maintenance and repairs are performed on a basis that ensures reliable, long term and safe operation of the Facility, and are performed by knowledgeable, trained, and experienced personnel utilizing proper equipment and tools;

- (d) Appropriate monitoring and testing are performed to ensure equipment is functioning as designed;
- (e) Equipment is not operated in a reckless manner, in violation of manufacturer's guidelines or in a manner unsafe to workers, the general public, or the Transmission/Distribution Owner's electric system or contrary to environmental laws, permits or regulations or without regard to defined limitations such as, flood conditions, safety inspection requirements, operating voltage, current, volt ampere reactive (VAR) loading, frequency, rotational speed, polarity, synchronization, and control system limits; and
- (f) Equipment and components are designed and manufactured to meet or exceed the standard of durability that is generally used for electric energy generating facilities operating in the Western United States and will function properly over the full range of ambient temperature and weather conditions reasonably expected to occur at the Site and under both normal and emergency conditions.

B. Renewable Utility-Owned Generation Projects

SDG&E requires all contractors working on the construction of new UOG facilities to observe the following safety-related procedures:

i. Safety Requirements

- The Contractor must comply with all applicable federal, state, regional, municipal, and local laws, ordinances, rules, codes, regulations, and executive orders, including all laws, ordinances, rules, codes, regulations, and executive orders applicable to health and safety, SDG&E's Class 1 Contractor Safety Manual, and all contract terms as set forth in the contract entered into with the Company, and must ensure that all employees and subcontractors working on Contractor's behalf meet or exceed these same requirements. If there is a conflict between SDG&E's Class 1 Contractor Safety Manual, the contract entered into with the Company, or applicable H&S Laws, the more specific standard applies.

- The Contractor must enroll in and maintain compliance with SDG&E's Contractor safety program.
- The Contractor must establish, implement, and maintain a complete site-specific safety program. The Contractor must submit electronic and written copies of this program to SDG&E for review.
- The safety program must include a full-time, on-site Safety Manager at the start of the project and sufficient, qualified support staff for the duration of on-site work. This safety program must follow the applicable laws, ordinances, regulations, and standards for such programs and must include: code of safe practices, fire protection plan, spill prevention plan, worker environmental awareness training, emergency situations response plan and procedures, and hazardous material control and training. The plan must be coordinated with SDG&E's and local authorities as required.
- The safety program must include sections addressing site environmental protection and a personal protective equipment.
- Safety and Health Orientation:
 - Each new employee (including subcontractors and vendors) must receive a thorough safety and health orientation from the Contractor that gives the employee the basic information about the Contractor's safety program, Federal or State OSHA (the most stringent in any case), and other applicable safety rules and regulations. The Contractor must provide additional safety instructions during the scope of the normal daily activities for the performance of hazardous or unfamiliar tasks.
- Supervisor's Safety Orientation
 - The Contractor must familiarize all supervisory personnel with the Contractor's safety and health responsibilities by conducting a safety and health orientation with each supervisor. Supervisors must be trained in CPR and First Aid.
- Weekly Toolbox and Daily Safety Meetings

- The Contractor must conduct weekly toolbox meetings, open to SDG&E's representatives, to provide all on-site employees with up-to-date safety and health information. Daily task safety analysis for each planned activity must be performed to help the employees prepare for the hazards associated with each assigned task.
- General Safety Requirements:
 - Barricades: The Contractor must erect and maintain all barricades used to protect personnel from hazardous work operations as required by Federal or State OSHA, whichever is applicable.
 - Safety Signs: The Contractor must post any signs or posters that may be needed to advise employees of unsafe areas or conditions as required by Federal or State OSHA, whichever is applicable.
 - Scaffolds: The Contractor must erect all scaffolds in conformance with applicable Federal or State OSHA standards and maintain a method of communication that daily scaffolding erection inspection has been performed and that the scaffolding is ready for use.
 - Floor and Roof Openings: The Contractor must barricade or cover all floor and roof openings to protect employees from falls as required by Federal or State OSHA.
 - Lock Out and Tag Out: The Contractor must provide an approved procedure for lock out and tag out, including all lock tags, of all applicable equipment.
 - The Contractor must identify in writing a qualified safety representative to administer the Contractor's safety program. All vendor-supplied service organizations must each be required to implement a safety program appropriate for the Work being performed and in compliance with the Contractor's safety program. The Contractor is responsible for all subcontractor compliance with the its safety program.
- Loss Prevention Requirements:
 - Implementation of an approved safety program

- Provision of a safe workplace for all employees
- Implementation of a fire prevention program in accordance with NFPA 241: Standard for Safeguarding Construction, Alteration, and Demolition Operations
- Prevention of equipment operation unless the equipment is safe to operate, all protective equipment is in place, and the operators are properly trained and licensed or certified for the particular equipment being operated
- Identified hazards are addressed/mitigated
- Implementation of regular safety meetings and training
- Adherence to all applicable Federal or State OSHA, DOT, and other applicable safety requirements
- Occupational Health
 - The Contractor must take all reasonable steps and precautions to protect the health of their employees and other site personnel. The Contractor must conduct occupational health monitoring and sampling as required by Federal or State OSHA, whichever is applicable, to determine the levels of exposure of its employees to hazardous or toxic substances or environmental conditions. Copies of employee sampling results must be provided to SDG&E upon request.
- Fire Protection and Prevention
 - The Contractor must provide fire extinguishers that are adequate for potential fire hazards present during construction, and must provide instruction regarding the proper use of such equipment to all employees. Only carbon dioxide (CO₂) fire extinguishers may be used within proximity of the inverters, transformers, switchgear, and communications enclosures to avoid damage to this equipment.
 - The Contractor must ensure the material it proposes to use at the site conforms to appropriate standards for flame-resistance or fireproof characteristics or is adequately protected from fire danger. Specific materials in this category include coatings, plastic-covering materials,

construction lumber, scaffold plans, paper, boxes, and crating materials. Flammables, such as fuels and solvents, must be stored in appropriate containers. Fire blankets must be used to protect personnel and permanent project equipment/installations when necessary.

- Crane Safety and Material Handling
 - The Contractor must comply with all rules, regulations, and standards associated with crane safety and material handling. No equipment or machinery intended for material or personnel handling is allowed on site without having written proof of a current inspection, insurance, and crane operator certification. All equipment inspection reports must be renewed prior to expiration. All crane equipment must have an inspection checklist signed off by the operator at the beginning of each shift to ensure that any crane used is in safe operating condition. Equipment must have functioning horns of sufficient volume to provide warnings when required. When applicable, crane lift plan(s) will be submitted in advance for SDG&E's review.

ii. Safety Inspections and Reporting

- Inspections
 - The Contractor must conduct weekly safety inspections of all work areas and operations in accordance with the Contractor's safety program. The Contractor must cooperate with any general safety inspections conducted by SDG&E.
 - The Contractor must maintain an inspection program for review of safety compliance for the Contractor's equipment, including power tools, electrical cords, rigging equipment, safety equipment, etc.
- Accident and Incident Reporting
 - The Contractor must immediately notify SDG&E's Project Manager of all project-related incidents, as required by SDG&E's Class 1 Contractor Safety Manual.
 - The Contractor must analyze any accident or incident (including "near misses") and provide an independent report of the cause and results of

the accident or incident to SDG&E, as required by SDG&E's Class 1 Contractor Safety Manual. The Contractor safety program must identify and implement all necessary corrective action to prevent future occurrence of a similar incident.

- Contractor must immediately notify Owner of any governmental agency (OSHA, Fire Dept., Health Dept., etc.) complaint and inspection of the project.
- Recordkeeping
 - The Contractor must maintain all records required by federal and state agencies that pertain to work-related injuries or illness.
- Security
 - The Contractor is responsible for providing site security as necessary during construction.

XVI. RENEWABLE AUCTION MECHANISM

A. Procurement Need

As outlined above under Section II, SDG&E anticipates meeting its CP3 need with projects it already has under contract. Consequently, SDG&E may use the RAM solicitation documentation, attached hereto as Appendices 11-12.B, on an as-needed basis to procure for its GTSR program,¹¹² as authorized by D.15-01-051¹¹³ and D.16-05-006.¹¹⁴ The attached RAM documentation is intended for procurement of resources for the GT¹¹⁵ component of SDG&E's GTSR program, as well as for the ECR¹¹⁶ component of SDG&E's GTSR program.

B. Documents & Updated Parameters

SDG&E has attached GT RAM solicitation form documentation hereto as Appendices 11-11.B. These documents are summarized below:

¹¹² SDG&E will use the capacity procured via the RAM mechanism to satisfy its LCR requirement if the resources contracted with are eligible.

¹¹³ D.15-01-051, OP 5, p. 180.

¹¹⁴ D.16-05-006, OP 1, p. 41.

¹¹⁵ EcoChoice, formally known as SunRate.

¹¹⁶ EcoShare, formally known as Share the Sun.

- Appendix 11, GT RAM RFO: This document incorporates the eligibility criteria required by D.14-11-041, D.15-01-051, and D.16-05-006: allows for all RPS-eligible projects to participate in the program, allows for projects to be sized 0.5 MW to 20 MW, allows projects to be located in, or dynamically transferred into, SDG&E’s territory (which is within the CAISO), requires at a minimum a Phase II Interconnection Study for projects interconnecting at the transmission level (and equivalent requirements for projects interconnecting at the distribution level), requires a 36 month construction timeline with a 6 month extension for interconnection, force majeure and/or regulatory delays, and requires the submittal of a Geographic Information System (“GIS”) file of the project boundaries and associated gen-tie. SDG&E will use its RPS LCBF methodology, attached hereto as Appendix 9, to evaluate projects that bid into future RAM auctions.¹¹⁷
- Appendix 11.A, GT RAM PPA: SDG&E’s GT RAM PPA is a modified version of the RAM PPA and includes the additional eligibility criteria required by D.15-01-051 and D.16-05-006. Because this PPA is non-modifiable, SDG&E has also included a due date for FCDS.
- Appendix 11.B, GT RAM Offer Form: SDG&E’s GT RAM Offer form, attached hereto as Appendix 11.B, is compatible with its LCBF methodology, attached hereto as Appendix 9. The GT Projection Description form has been consolidated into the GT RAM Offer form.

SDG&E has attached ECR RAM solicitation form documentation hereto as Appendices 12-12.B. These documents are summarized below:

- Appendix 12, ECR RAM RFO: This document incorporates the following eligibility criteria required by D.14-11-042, D.15-01-051¹¹⁸ and D.16-05-006:¹¹⁹ allows for projects to be sized 0.5 MW to 20 MW, allows for distributed energy resource providers (“DERPs”) to aggregate, allows projects to be located in, or dynamically transferred into, SDG&E’s territory (which is within the CAISO), requires at a minimum a Phase II Interconnection Study for projects interconnecting at the transmission level (and equivalent requirements for projects interconnecting at the distribution level), requires a

¹¹⁷ D.14-11-042, pp. 23, 66, 94-101.

¹¹⁸ D.15-01-051, OP 5, p. 180.

¹¹⁹ D.16-05-006, OP 1, p. 41.

36 month construction timeline with a 6 month extension for interconnection, force majeure and/or regulatory delays, and requires the submittal of a GIS file of the project boundaries and associated gen-tie. SDG&E will use its RPS LCBF methodology, attached hereto as Appendix 9, to evaluate projects that bid into future RAM auctions.

- Appendix 12.A, ECR RAM Rider: SDG&E's ECR RAM Rider was designed to modify the GT RAM PPA pursuant to D.16-05-006 to procure RPS-eligible capacity for the purpose of implementing the ECR program. Pursuant to D.16-05-006, SDG&E is authorized to use the RAM to procure RPS-eligible capacity for the purposes of implementing the ECR program.
- Appendix 12.B, ECR RAM Offer Form: SDG&E's ECR RAM Offer form, attached hereto as Appendix 12.B, is compatible with its LCBF methodology, attached hereto as Appendix 9. The ECR Projection Description form has been consolidated into the ECR RAM Offer form.

C. Approval Process

D.14-11-042 allows the IOUs to propose an approval method for contracts resulting from the RAM process. At this time, SDG&E proposes no change to the current Tier 2 AL process, but may propose alternate methods in subsequent versions of its RPS Plan.

XVII. GREEN TARIFF SHARED RENEWABLES PROGRAM

A. Program History and Status

As explained above under Section II, SB 43, which requires participating utilities to file an application for a GTSR program allowing customers to buy some or all of their energy from local renewable projects (via a GT or an ECR) option, became effective on January 1, 2014. Prior to the effective date of this law, SDG&E filed an application requesting approval of its "connected.....to the sun" program in January of 2012 (A.12-01-008). This application included both a GT and an ECR program, and SDG&E subsequently modified this application to comport with the GTSR program requirements of SB 43. The Commission issued D.15-01-051 on February 2, 2015, requiring the IOUs to submit a series of ALs regarding advanced procurement, marketing, implementation, and customer-side considerations for both GTSR components. Pursuant to D.15-01-051, SDG&E filed a Tier 1 AL describing its advanced procurement plan on February 23, 2015, which became effective on February 25, 2015. This AL explained that

SDG&E will procure only for GT at this time, stating “SDG&E will seek to procure its authorized initial advanced procurement capacity of between 10.5 MW and 25 MW for SDG&E’s GT program as part of SDG&E’s RAM VI solicitation.”¹²⁰ SDG&E also filed a Joint Procurement Implementation AL¹²¹ (“JPIAL”) in partnership with SCE and PG&E, as well as SDG&E-specific Marketing Implementation¹²² (“MIAL”) and Customer Side Implementation¹²³ (“CSIAL”) ALs on May 13, 2015. The Commission issued D.16-05-006 on May 12, 2016, addressing participation of ECR projects in the RAM and other refinements to the GTSR program. Pursuant to that decision, SDG&E filed a Tier 2 AL on June 15, 2016 submitting a revised ECR rider and solicitation documents to allow for procurement of ECR projects using the RAM, and issued its first ECR solicitation on August 31, 2016.

SDG&E issued a combined GTSR solicitation for GT and ECR projects on March 22, 2017.¹²⁴ The discussion below summarizes the information that SDG&E anticipates providing in subsequent versions of this RPS Plan, following complete implementation of all components of the GTSR program.

B. Progress Towards Target and Reservations

SDG&E has a target of 59 MW total capacity between its GT and ECR programs, and within this target are two reservations of 10 MW each for residential customers and EJ projects.¹²⁵ The Commission approved SDG&E’s AL 3074-E, via disposition letter, effective June 5, 2017, approving a 20 MW project for SDG&E’s GT program leaving 39 MW of available capacity in SDG&E’s GTSR program. At the time of this filing, the results of SDG&E’s Q1 2017 GTSR solicitation are undetermined, and any procurement resulting from this solicitation would impact SDG&E’s remaining 39 MW program capacity. Subsequent procurement for the GT program through RAM, as described above under Section XVI, will be based on assessment of “incremental customer enrollments and the amount of dedicated Green Tariff procurement... [already] under contract.”¹²⁶ While an ECR project remains to be

¹²⁰ SDG&E AL 2708-E, p. 2.

¹²¹ SDG&E AL 2743-E.

¹²² SDG&E AL 2744-E.

¹²³ SDG&E AL 2745-E.

¹²⁴ SDG&E AL 3043-E, submitted February 10, 2017.

¹²⁵ D.15-01-051, p. 5.

¹²⁶ AL 3218, p. 8.

developed in SDG&E’s service territory, SDG&E has solicited for ECR projects based upon D.16-05-006 and will hold two solicitations a year through 2018.¹²⁷ SDG&E’s first ECR solicitation of 2017 was launched March 22, 2017.

C. Reporting

D.15-01-051 allows an IOU to supply initial GT program demand from an interim pool of existing RPS resources under contract with that IOU.¹²⁸ The decision also requires reporting regarding this pool, specifically that the IOU’s RPS Plan include “all information related to the transfer of megawatts from the existing RPS program to GTSR. This information includes the impact on residual net short and the need to bridge for any shortfall, accounting of RECs, list of contracts with price, and other relevant details.”¹²⁹ SDG&E received Commission approval of its interim project pool Alternative B (list below).¹³⁰ Enrollment in SDG&E’s GT program began in Q4 2016, and SDG&E’s reporting on the interim project pool Alternative B as of June 2017 is as follows: in 2016 8 RECs were transferred between the interim project pool Alternative B and the GTSR program; between January 1, 2017 and June 30, 2017, 477 RECs were transferred between the interim project pool Alternative B and the GTSR program; and the price of contracts within interim project pool Alternative B is \$93.68/MWh.¹³¹ Per SB 43,¹³² the generation used to serve the customers enrolled in SDG&E’s GT program as well as the bundled retail load served via SDG&E’s GT program have not been included in SDG&E’s RNS table, attached hereto as Appendix 2.

SDG&E GTSR Interim Pool Contracts				
Facility Name	Technology	MW	Location	GTSR Pool %
Desert Green Solar Farm	Solar PV	6.3	Borrego Springs, CA	8%
Sol Orchard 20 - Ramona 1	Solar PV	2.0	San Diego County, CA	2%
Sol Orchard 22 - Valley Center 1	Solar PV	2.5	San Diego County, CA	3%

¹²⁷ D.16-05-006, p. 10.

¹²⁸ D.15-01-051, p. 39.

¹²⁹ D.15-01-051, p. 41.

¹³⁰ SDG&E AL 2745-E, pp. 3-4.

¹³¹ Energy Resource Recovery Account (“ERRA”) Prepared Direct Testimony of Cynthia Fang on Behalf of SDG&E, April 14, 2017, p. CF 16.

¹³² 2833(t).

Sol Orchard 21 - Ramona 2	Solar PV	5.0	San Diego County, CA	5%
Sol Orchard 23 - Valley Center 2	Solar PV	5.0	San Diego County, CA	5%
Cascade Solar	Solar PV	18.4	Sun Fair, CA	20%
Calipatria, LLC	Solar PV	20.0	Calipatria, CA	18%
TallBear Seville	Solar PV	20.0	El Centro, CA	22%
Maricopa West	Solar PV	20.0	Maricopa, CA	16%

XVIII. OTHER RPS PLANNING CONSIDERATIONS AND ISSUES

In accordance with D.17-01-006,¹³³ SDG&E is including the below information on its base time of use (“TOU”) periods. SDG&E’s base TOU periods are established as part of the rate design proceeding commonly referred to as the General Rate Case Phase 2 (“GRC Phase 2”).

A. SDG&E’s Current Standard Base TOU Periods

Current TOU Periods [EFFECTIVE THROUGH 11/30/17]		
TOU Period	Summer (May 1 – October 31)	Winter (November 1 – April 30)
On-peak	11:00 a.m.-6:00 p.m. Weekdays	5:00 p.m.-8:00 p.m. Weekdays
Semi-peak	6:00 a.m.-11:00 a.m. Weekdays; 6:00 p.m.-10:00 p.m. Weekdays	6:00 a.m.-5:00 p.m. Weekdays; 8:00 p.m.-10:00 p.m. Weekdays
Off-peak	10:00 p.m.-6:00 a.m. Weekdays Plus Weekends & Holidays	10:00 p.m.-6:00 a.m. Weekdays Plus Weekends & Holidays

B. SDG&E’s Adopted Base TOU Periods

SDG&E’s current base TOU periods were updated in D.17-08-030.¹³⁴ These adopted base TOU periods are scheduled to take effect on December 1, 2017.

Adopted TOU Periods (Weekdays) [EFFECTIVE BEGINNING 12/1/17]		
TOU Period	Summer (June 1 – October 31)	Winter (November 1 – May 31)
On-peak	4:00 p.m.-9:00 p.m.	4:00 p.m.-9:00 p.m.
Off-peak	6:00 a.m.-4:00 p.m.; 9:00 p.m.-midnight	6:00 a.m.-4:00 p.m. excluding 10:00 a.m.-2:00 p.m. in March and April; 9:00 p.m.-midnight

¹³³ D.17-01-006, OP2, p. 78.

¹³⁴ D.17-08-030 was approved by the Commission on August 24, 2017.

Super-off-peak	Midnight- 6:00 a.m.	Midnight-6:00 a.m.; 10:00 a.m.-2:00 p.m. in March and April
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Adopted TOU Periods (Weekends and Holidays) [EFFECTIVE BEGINNING 12/1/17]		
TOU Period	Summer (June 1 – October 31)	Winter (November 1 – May 31)
On-peak	4:00 p.m.-9:00 p.m.	4:00 p.m.-9:00 p.m.
Off-peak	2:00 p.m.-4:00 p.m.; 9:00 p.m.-midnight	2:00 p.m.-4:00 p.m.; 9:00 p.m.-midnight
Super-off-peak	Midnight- 2:00 p.m.	Midnight- 2:00 p.m.

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue
Implementation and Administration, and
Consider Further Development, of California
Renewables Portfolio Standard Program.

Rulemaking 15-02-020
(Filed February 26, 2015)

**SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E)
NOTICE OF AVAILABILITY OF FINAL 2017 RENEWABLES PORTFOLIO
STANDARD PROCUREMENT PLAN**

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SAN DIEGO GAS & ELECTRIC COMPANY

January 17, 2018

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking to Continue
Implementation and Administration, and
Consider Further Development, of California
Renewables Portfolio Standard Program.

Rulemaking 15-02-020
(Filed February 26, 2015)

**SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E)
NOTICE OF AVAILABILITY OF FINAL PLAN 2017 RENEWABLES PORTFOLIO
STANDARD PROCUREMENT PLAN**

Pursuant to Rule 1.9(d) of the Rules of Practice and Procedure of the California Public Utilities Commission (the “Commission”), San Diego Gas & Electric Company (“SDG&E”) hereby provides notice that it has electronically filed with the Commission’s docket office its **SAN DIEGO GAS & ELECTRIC COMPANY (U 902 E) FINAL 2017 RENEWABLES PORTFOLIO STANDARD PROCUREMENT PLAN.**

The public version of the Final 2017 Plan filing is available on SDG&E’s website at the following link: <https://www.sdge.com/regulatory-filing/3520/long-term-procurement-plan-proceeding>.

The Final 2017 Plan filing may also be obtained by contacting:

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DATED at San Diego, California, this 17th day of January 2018.

Respectfully submitted,

By: /s/ Paul A. Szymanski

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