Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2020 Cost of Capital
Application: A.19-04-XXX
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SAN DIEGO GAS & ELECTRIC COMPANY

PREPARED DIRECT TESTIMONY OF BRUCE A. FOLKMANN

POLICY OVERVIEW

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

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PREPARED DIRECT TESTIMONY
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OVERVIEW

4 **I. INTRODUCTION**

5 My testimony presents a summary of the proposals of San Diego Gas & Electric
6 Company ("SDG&E" or the "Company") regarding the adoption of a new authorized cost of
7 capital ("COC") in support of the Company's California Public Utilities Commission
8 ("Commission" or "CPUC") regulated operations in test year 2020. These operations are
9 principally SDG&E's electric distribution, gas distribution, and gas transmission businesses,
10 together with the electric generation and the electric and natural gas procurement functions.[1] I
11 am an officer and sponsoring witness for both SDG&E and Southern California Gas Company
12 ("SoCalGas" or "SCG"). This testimony focuses on SDG&E's proposals.

13 Those proposals can be placed into four main categories: (1) authorized return on equity
14 ("ROE"); (2) authorized capital structure; (3) cost of debt; and (4) cost of capital mechanism
15 ("CCM"). The first three categories will determine SDG&E's authorized rate of return ("ROR")
16 for 2020 and beyond, until the next COC application is filed and adopted or until operation of the
17 CCM. My testimony presents an overview of SDG&E's supporting testimony exhibits, reiterates
18 the importance of a strong, investment grade credit rating, and presents the Company's
19 recommendations.

20 **II. OVERVIEW OF PROPOSALS**

21 For 2020, SDG&E proposes the following cost of capital structure.

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[1] For purposes of this proceeding, the return on electric transmission is not included since its governing regulatory agency is the Federal Energy Regulatory Commission.

1 **TABLE 1 – PROPOSED 2020 AUTHORIZED COST OF CAPITAL STRUCTURE**

Component	Capital Ratio	Cost	Weighted Cost
Long-Term Debt	44%	4.59%	2.02%
Preferred Stock	0%	0%	0%
Common Equity	56%	14.30%	8.01%
ROR	100%	N/A	10.03%

2 The Company's currently authorized cost of capital structure is shown below.

3 **TABLE 2 – CURRENTLY AUTHORIZED COST OF CAPITAL STRUCTURE**

Component	Capital Ratio	Cost	Weighted Cost
Long-Term Debt	45.25%	4.59%	2.08%
Preferred Stock	2.75%	6.22%	0.17%
Common Equity	52.00%	10.2%	5.30%
ROR	100%	N/A	7.55%

4
5 If adopted, this cost of capital structure will increase the Company's currently authorized
6 rate of return by 2.48%, which will result in an estimated $195 million ($168 million electric and
7 $27 million gas) revenue requirement increase for ratepayers.

8 SDG&E proposes continuing a CCM. This mechanism automatically adjusts the
9 authorized ROR up or down between COC applications if there are significant changes in the
10 specified benchmark. The Company proposes relatively modest modifications to the current
11 CCM based upon the current credit rating environment.

12 SDG&E's comprehensive COC proposals provide the Commission with the necessary
13 data, sound financial modeling, and other qualitative and quantitative analyses from company
14 and independent sources. As Moody's Investor Services ("Moody's") recently stated, a

1 sufficient rate of return for SDG&E and other California utilities is critical to account for the
2 unprecedented threats facing California utilities; primarily from the increased risk of catastrophic
3 wildfire, the accompanying legal regime that can result in unrecoverable wildfire costs for the
4 Company, and the resulting credit rating downgrades because of that regime.[2] SDG&E's
5 proposed capital structure, ROE, and overall ROR will enable the Company to raise the
6 significant amount of investment required to help meet the State's ambitious climate change and
7 other environmental goals, maintain safe, reliable, and affordable service to customers, and
8 moderate the cost of capital overall.

9 **III. THE NECESSITY OF A REASONABLE RATE OF RETURN**

10 Although SDG&E is owned and operated by private investors, it is considered a public
11 utility because its assets are employed in the public interest to provide consumers with electricity
12 and natural gas.[3] As a public utility, SDG&E is subject to what is referred to as the "regulatory
13 compact." Because of the high costs of transmission and distribution and barriers to duplicating
14 networks, SDG&E is granted the right to be the exclusive provider of electric and gas
15 distribution within its service territory.

16 In exchange, SDG&E is subject to public utility regulation as a substitute for market
17 competition. SDG&E is under a duty to provide adequate, efficient, and reasonable services to
18 all customers regardless of risk or ability to pay. The Company is subject to after-the-fact
19 reasonableness reviews. And the Commission controls the prices that SDG&E can charge by
20 setting the Company's rates.[4]

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[2] Moody's Investors Service, California Utilities Struggle with Inverse Condemnation Exposure (Apr. 15, 2019) at 3.

[3] Cal. State Const. Art. 12, section ("§") 5.

[4] Cal. Pub. Utils. Code § 216(b).

1 In permitting the setting of utility rates, the Supreme Court has long recognized in *Hope*,
2 *Bluefield*, and *Duquesne* that the unique status of private-owned, public utilities necessitates a
3 balancing of consumer and investors' constitutional interests; encompassed by the concept of a
4 "reasonable rate of return."[5] SDG&E, like other investor owned utilities in the State of
5 California, does not earn a profit on electricity or natural gas as a commodity, consistent with the
6 practice of "decoupling." But to provide electricity and natural gas to customers, the Company
7 needs to invest in infrastructure such as substations, transformers, meters, power lines and
8 pipelines. These assets are known as the Company's rate base. SDG&E must attract private
9 investors to fund these projects that benefit the public.
10 To obtain and support that private investment, as the Commission has repeatedly
11 recognized, the Supreme Court has long held that utilities, like SDG&E, are entitled to a
12 reasonable rate of return on those rate base capital investments.[6] A rate of return is set by
13 applying a utility's embedded cost of debt, embedded cost of preferred stock (if applicable), and
14 determined ROE to its weighted capital structure. The resulting rate of return cannot be so low
15 that it is an unconstitutional confiscatory taking of investors' capital.[7]

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[5] *Duquesne Light Co. v. Barasch*, 488 U.S. 299, 307 (1989); *Fed. Power Comm'n v. Hope Nat'l Gas Co.*, 320 U.S. 591, 603 (1944); *Bluefield Water Works & Improvement Co. v. Pub. Serv. Comm'n of W. Va.*, 262 U.S. 679 (1923).

[6] Decision ("D.") 18-03-035 at 6 (citing *Hope*, 320 U.S. 591; *Bluefield*, 262 U.S. 679; *Duquesne*, 488 U.S. 299). *See also SFPP, L.P. v. Pub. Utils. Comm'n*, 217 Cal. App. 4th 784, 790 (4th App. Dist. 2013) ("'The basic principle [of ratemaking] is to establish a rate which will permit the utility to recover its cost and expenses *plus* a reasonable return on the value of property devoted to public use.'" (quoting *So. Cal. Gas Co. v. Pub. Utils. Comm'n*, 23 Cal.3d 470, 476, 153 Cal Rptr. 10, 591 (1979)).

[7] *See Duquesne*, 488 U.S. 299, 307 ("The guiding principle has been that the Constitution protects utilities from being limited to a charge for their property serving the public which is so 'unjust' as to be confiscatory.") (citing *Covington & Lexington Turnpike Road Co. v. Sandford*, 164 U.S. 578, 597 (1896)); *accord* D.18-03-035 at 6 ("In *Duquesne*, the Court concludes that rates must not be so low as to be confiscatory.").

Instead, the Supreme Court has held that a rate of return must be set at a level that is comparable to the return for other businesses with corresponding risks.[8] Although the Company is deemed the primary service provider for transmission and distribution, SDG&E and other public utilities must compete for capital in a competitive investment market.

In short, the rate must maintain the Company's financial integrity, attract necessary capital, and fairly compensate investors for their risks.[9] The "adopted equity return should be sufficient to provide a margin of safety to pay interest, pay reasonable common dividends, and allow for some money to be kept in the business as retained earnings."[10] As the Commission has stated, its goal is to "provide reasonable confidence in the utilities' financial soundness, to maintain and support investment-grade credit ratings, and provide utilities the ability to raise money necessary for the proper discharge of their public duty."[11]

For SDG&E to finance its investments to provide electricity and natural gas at a lower overall cost of capital, investors need to perceive SDG&E as a safe entity to invest with a return that is competitive with similar investment options. This ensures a financially sound Company, encouraging private investors to put up money for projects that benefit the public through cleaner and lower-cost energy solutions.

IV. THE IMPORTANCE OF SDG&E'S CREDIT RATING

As the Commission has recognized, a strong investment grade credit rating – which is based on the soundness of the Company as an investment – benefits both the utility and

[8] D.18-03-035 at 6 (citing *Bluefield*, 262 U.S. 679).

[9] *Id.* (citing *Hope*, 320 U.S. 591); *see generally Permian Basin Rate Cases*, 390 U.S. 747 (1967).

[10] D.18-03-035 at 7 (citing 78 CPUC at 723 (1975)).

[11] D.12-12-034 at 29.

1 ratepayers. An investment-grade credit rating allows the Company to access public debt and
2 equity markets at reasonable costs – a prerequisite to the provision of reliable service at just and
3 reasonable rates – as well as maintain financial strength for the long-term management of capital
4 investments.[12] The riskier that SDGE is considered as an investment, the more expensive it is for
5 the Company to raise capital – because it has to compensate bond and stock holders for that
6 increased risk — though higher interest rates, a higher return on equity or, most likely, both.[13] A
7 "company that is non-investment grade must generally post collateral to engage in purchase
8 transactions."[14] Ratepayers ultimately bear these costs.[15]
9 As Dr. Morin describes, a single A bond rating minimizes the cost of capital to
10 ratepayers.[16] The difference in costs between being a single A-rated and BBB-rated company is
11 50 basis points.[17] That means, for every $100 million of bonds issued by a utility, the cost to
12 ratepayers of being BBB instead of A-rated is $10 million.[18] The Commission has thus found
13 that it is "obligated in setting just and reasonable rates to authorize a sufficient return on equity

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[12] *See id.* at 7.

[13] *See* D.03-12-035 at 42 ("the cost of investment grade debt is considerably less . . . the lower cost of a utility's debt translates into lower rates, all else being equal.").

[14] *Id.*

[15] *See* D.12-12-034 at 9 (as credit ratings are downgraded, it increases "financial risks for common equity holders, thereby requiring greater returns on common equity.").

[16] Prepared Direct Testimony of Roger A. Morin, Ph.D., Return on Equity (April 2019) ("Ex. SDG&E-04 (Morin)") at 64.

[17] *Id.*

[18] *Id.*

for the utility to maintain its creditworthiness,"[19] holding that maintaining investment-grade creditworthiness is an "important component[] of the *Hope* and *Bluefield* decisions."[20]

SDG&E currently faces substantial risks operating as a utility in California compared to its peers nationwide. The most immediate threat is from the increased risk of catastrophic wildfires, and the accompanying legal and regulatory framework – where the Company is strictly liable for wildfire ignitions under the doctrine known as inverse condemnation, but the Commission does not consider that strict liability in its cost-recovery review. This leaves the Company at risk of not recovering significant costs for a catastrophic wildfire, effectively forcing SDG&E to act as the wildfire insurer of last resort for its territory. Even if it does eventually recover wildfire-related costs, the Company may bear those costs on its books for years until the Commission makes a determination regarding cost recovery.

SDG&E is considered to have one of the most sophisticated wildfire mitigation systems in the world.[21] The Company has taken extensive steps to reduce the risk of wildfires, including:

- harden infrastructure to further reduce the threat of wildfire ignitions involving utility electric systems and improve grid resiliency;
- improve situational awareness; and
- enhance operational measures (*e.g.*, enhanced overhead inspections, vegetation management, emergency response protocols).

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[19] D.03-12-035 at 60.

[20] D.12-12-034 at 37 (alteration in original).

[21] *See* Standard & Poor's ("S&P") Global Ratings, Credit FAQ: Will California Still Have an Investment-Grade Investor-Owned Electric Utility? (February 19, 2019), *available at* https://www.capitaliq.com/CIQDotNet/CreditResearch/RenderArticle.aspx?articleId=2168627&SctArtId=467165&from=CM&nsl_code=LIME&sourceObjectId=10866063&sourceRevId=14&fee_ind=N&exp_date=20290218-21:25:39.

Yet SDG&E cannot eliminate the wildfire risk.[22] As a result, SDG&E's investment grade credit rating is currently threatened. Even though SDG&E has not been associated with a wildfire ignition resulting in significant property damage for 12 years, California's overall increased risk of wildfires and corresponding legal framework has resulted in recent credit rating downgrades for the Company. Since September 2018, SDG&E's bond rating has been downgraded from A2 to Baa1 by Moody's and A to BBB+ by S&P (two 'notches' in both cases) with both agencies putting the Company on negative watch.

Dr. Morin notes that ROE directly impacts a utility's credit rating. It is therefore critical for the Commission to set a sufficient ROE.[23] It is similarly important that the Commission set SDG&E's authorized capital structure to reflect the Company's actual capital ratio – both to improve credit metrics and support a stronger investment grade rating. If SDG&E does not have the same access to low-cost debt and equity that it has long had, ratepayers will feel the impact for years from higher borrowing costs and less ability to invest in public capital projects. Utilities play a key role in helping the State meet its ambitious climate change and other environmental goals, while providing safe, reliable, and affordable service to customers. California's ability to meet targets in areas like renewable energy and electric transportation are likely either diminished or out of reach without its public utilities being financially healthy to attract the private capital necessary to invest in needed public infrastructure.

As Moody's recently stated, California's wildfire liability regime turns the state's investor-owned electric utilities into an insurance backstop, but without the certainty of cost

[22] *Id.*

[23] Ex. SDG&E-04 (Morin) at 63-64.

1 recovery or authorized capitalization and rate of return to account for the higher risk.[24] Given
2 that danger, the proposals in this Application establish a framework that is equitable to all
3 stakeholders by proposing a sufficient ROE and capital structure to entice and assuage private
4 investors, given the significantly increased risks those investors face. This will enable SDG&E
5 to achieve the underlying objective of these extensive capital investments – meeting customer
6 demands for electricity and gas at reasonable rates and deploying a technologically advanced and
7 efficient system that accomplish the State's laudable environmental requirements.[25]

8 **V. KEY RECOMMENDATIONS IN SUPPORTING TESTIMONY**

9 The Company's testimony supports its COC proposals. While my testimony highlights
10 the findings of the Company's witnesses, each witness sponsors the recommendations in their
11 areas of responsibility. I provide SDG&E's ROE recommendation and the bases for that
12 proposal.

13 Mr. Don Widjaja explains the business, financial, and regulatory risks for SDG&E. The
14 testimony of Ms. Maritza Mekitarian provides details of the Company's proposed capital
15 structure as well as the embedded cost of debt. Dr. Roger Morin submits a ROE
16 recommendation that meets the criteria mentioned above that was set out by the Supreme Court
17 in the *Hope*, *Bluefield*, and *Duquesne* cases,[26] and is based on a traditional current peer-company
18 observations models. Messrs. John Reed, Jim Coyne, and Todd Shipman from Concentric

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[24] Moody's Investors Service, Potential remedies to reduce California fire risk face competing interests (April 3, 2019) at 1.

[25] *See* D.12-12-034 at 18 ("We attempt to set the ROE at a level of return commensurate with market returns on investments having corresponding risks, and adequate to enable a utility to attract investors to finance the replacement and expansion of a utility's facilities to fulfill its public utility service obligation.").

[26] *Duquesne*, 488 U.S. 299, *Hope,* 320 U.S. 591; *Bluefield*, 262 U.S. 679.

1 Energy Advisors ("Concentric") recommend a ROE risk premium based on the unique threats
2 that California's legal and regulatory environment for wildfire liability places on California
3 utilities that cannot fully be captured by traditional ROE methods. Mr. Bruce MacNeil describes
4 SDG&E's proposal to maintain the CCM with four modifications based on the changing credit
5 rating environment for California utilities.

6 **A. Company Risks**

7 Mr. Widjaja describes SDG&E's business, financial, operational, and regulatory risks as
8 an electric and gas utility operating in California, which must compete for a finite set of
9 investment capital and loans available in the market (*see* Exhibit SDG&E-03).

10 Mr. Widjaja's testimony focuses extensively on the increased risk to the Company from
11 the increased frequency and severity of catastrophic wildfires associated with climate change,
12 drought, and extreme wind events – and the accompanying regulatory and legal framework that
13 leaves California utilities potentially liable for billions of dollars in unrecoverable costs even
14 when the utility acted prudently.

15 As Mr. Widjaja describes, utility equipment in California has been implicated in several
16 catastrophic wildfire ignitions. Fifty-seven (57) percent of SDG&E's service territory is
17 classified as High Fire Threat by the Commission. California state law makes utilities strictly
18 liable for such ignitions under the doctrine of inverse condemnation, even in the absence of
19 fault.[27] California courts apply inverse condemnation on the rationale that the public entity or
20 utility can spread the costs through rates. Yet the Commission has applied its separate "prudent

[27] *See Barham v. S. Cal. Edison Co.*, 74 Cal. App. 4th 744, 752 (1999) ("The fundamental policy underlying the concept of inverse condemnation is to spread among the benefiting community any burden disproportionately borne by a member of that community, to establish a public undertaking for the benefit of all.").

manager" standard to a utility's role in catastrophic wildfires without regard to the strict liability imposed by inverse condemnation or the cost-spreading rationale underlying that doctrine. This means that a utility can be liable for a wildfire under inverse condemnation through no fault of its own without any means of recovery or cost sharing. Even if a utility does eventually recover costs, it may have to bear those expenses for years as the lengthy recovery proceedings unfold.

The 2017 and 2018 catastrophic wildfires in Pacific Gas and Electric Company's ("PG&E") and Southern California Edison Company's ("Edison") service territories demonstrate the company-threatening risk posed by catastrophic wildfires for California utilities, eventually resulting in PG&E's bankruptcy filing. Because of these liability risks, insurers may require a higher premium than in other states with similar exposure. Or they may refuse to provide coverage.

As Mr. Widjaja describes, SDG&E has been engaged in numerous wildfire risk mitigation efforts, including the development of the largest utility-owned weather network, fire mapping activities, development of a fire potential index and Santa Ana Wildfire Threat Index, infrastructure hardening, aggressive vegetation management, revised operational protocols, contracting for firefighting resources, and using one of the world's largest water dropping helitankers. Nevertheless, the Company has experienced multiple ratings agency downgrades due to the California wildfire regulatory environment.

For instance, while Moody's recognizes SDG&E's effective wildfire mitigation and prevention programs, the ratings agency nonetheless recently downgraded SDG&E's credit rating because of the Company's exposure to sizeable potential liabilities in connection with California wildfires, which results in higher business and financial risks compared to utilities

1 operating outside of California.[28] S&P and Moody's currently have negative outlooks on the
2 Company and have indicated there could be further downgrades, with S&P going so far as to
3 suggest that all California electric utilities could be below investment grade before the start of
4 the 2019 wildfire season.[29]

5 These ratings downgrades increase risks to the Company. As S&P states, a utility's
6 credit rating is critical because utilities generally operate with "negative discretionary cash flow,
7 reflecting the high capital spending necessary to maintain and improve their electrical
8 systems."[30] As such, these lowered credit ratings because of the California electric utility
9 wildfire regulatory environment result in higher borrowing costs and increase risks to equity
10 investors, requiring higher returns to compensate for the increased risks.

11 Mr. Widjaja also identifies additional threats that make operating a utility in California
12 riskier than industry peers even if there are further reforms to wildfire liability. A more
13 decentralized, less utility-centric model – as customers adopt technologies such as rooftop solar –
14 presents numerous risks, given the Company's current volumetric based rate structure, and puts
15 rate pressure on the Company's remaining customers.

16 Indeed, as Mr. Widjaja describes, significant wildfire risks will remain for SDG&E even
17 with wildfire liability legislative or regulatory reform. The Company will continue to have to

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[28] Moody's Investors Service, Rating Action: Moody's downgrades San Diego Gas & Electric Company to Baa1 from A2; outlook negative (Mar. 5, 2019) at 1.

[29] *See* S&P Global Ratings, Credit FAQ: Will California Still Have An Investment-Grade Investor-Owned Electric Utility? (Feb. 19, 2019), *available at* https://www.capitaliq.com/CIQDotNet/CreditResearch/RenderArticle.aspx?articleId=2168627&SctArtId=467165&from=CM&nslut_code=LIME&sourceObjectId=10866063&sourceRevId=14&fee_ind=N&exp_date=20290218-21:25:39.

[30] *Id.*

1 mitigate the increase threat of wildfire. Any wildfire cost-recovery response could compound
2 rate pressures.[31] And SDG&E shareholders may remain responsible for continued wildfire
3 liability or insurance contributions beyond what they would be at a non-California utility.

4 **B. Authorized Capital Structure**

5 The Company's witness for authorized capital structure is Maritza Mekitarian (*see*
6 Exhibit SDG&E-02). SDG&E requests that its authorized capital structure be altered to reflect
7 its actual capital structure and consist of 56% common equity, 44% long-term debt, and 0%
8 preferred stock – a change from its currently authorized structure of 52% common stock, 45.25%
9 debt, and 2.75% preferred stock.

	Current Authorized	2020 Proposed
Long-Term Debt	45.25%	44.00%
Preferred Stock	2.75%	0.00%
Common Equity	52.00%	56.00%

10
11 SDG&E also requests that the Commission approve the Company's embedded cost of
12 debt as 4.59%, as discussed in Ms. Mekitarian's testimony.

13 As Ms. Mekitarian explains, capital structure consists of common equity, long-term debt,
14 and preferred stock. An optimal capital structure is one that supports a strong credit rating,
15 lowering borrowing costs for the utility and ratepayers. This generally involves a blend of debt
16 and equity. A higher debt ratio increases financial risks. A company that is highly leveraged
17 with fixed costs requires a higher return on both debt and equity for investors – as the earnings
18 available to shareholders become more volatile and secondary to debt payments. As the

[31] Moody's Investors Service, Potential remedies to reduce California fire risk face competing interests (April 3, 2019) at 5-7.

Commission has stated, "[b]ecause the level of financial risk that the utilities face is determined in part by the proportion of their debt to permanent capital, or leverage, we must ensure that the utilities' adopted equity ratios are sufficient to maintain reasonable credit ratings and to attract capital."[32]

As noted, SDG&E proposes to moderately alter its authorized capital structure to reflect the Company's actual recorded structure. Ms. Mekitarian presents evidence of SDG&E's actual capital structure levels for the last five years. On a rounded basis, SDG&E has been operating at or above a 56% equity percentage since 2015. As SDG&E has faced increased business risks, these higher than authorized equity levels have improved credit metrics by reducing debt throughout this period with capital provided by shareholders, directly benefitting customers and shareholders.

The Commission has previously found that authorized capital structures should align with actual ratios. The Commission approved SDG&E's currently authorized capital structure for Test Year 2013 principally because it reflected the Company's actual capital structure at that time.[33] The Commission likewise recently adopted common equity ratios for regulated water utilities that were informed by those utilities' actual ratios.[34] SDG&E requests that the Commission modify the Company's authorized capital structure to again reflect its current actual capital structure.

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[32] D.12-12-034 at 5.

[33] *Id.* at 11 (approving the Company's proposed capital structure after finding that "SDG&E seeks a common equity ratio for its revenue requirement which is the same as its actual common equity ratio.").

[34] *See* D.18-03-035 at 22.

1 Such a change is necessary to manage risks going forward. As discussed, SDG&E's
2 credit rating has been repeatedly downgraded and faces further downgrades for factors that are
3 largely outside of the Company's control. A moderately higher equity ratio will help SDG&E
4 manage those risks, to the extent possible, supporting an improvement in credit metrics and
5 credit ratings.

6 Dr. Morin endorses SDG&E's proposed capital structure for that reason, noting that it
7 will help lower the overall cost of capital for ratepayers.[35] Dr. Morin supports that A-rated
8 utilities have the optimal cost of capital. He notes that, for "a single A bond rating, which I
9 consider optimal and cost efficient for ratepayers, the debt ratio range is 35%-45%, implying a
10 common equity ratio range of 55%-65%."[36] The "Company's proposed common equity ratio is
11 almost at the bottom of this range, notwithstanding the fact that its business risk far exceeds that
12 of its peers."[37]

13 **C. Authorized Return on Equity**

14 **1. Dr. Morin's ROE Recommendation**

15 Dr. Morin provides the Company's traditional ROE recommendation (see Exhibit
16 SDG&E-04). Based on the "results of all [his] analyses, the application of [his] professional

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[35] Ex. SDG&E-04 (Morin) at 63 ("It is clear from these multiple perspectives that SDG&E's 56% common equity ratio is barely adequate given its very high business risks.").

[36] *Id.* at 64-65.

[37] *Id.* at 62; *accord id.* at 63 ("SDG&E's capital structure should be more conservative than that of its peers in order to partially compensate for its higher business risks.").

judgment, and the extraordinary risk circumstances of SDG&E,"[38] Dr. Morin sponsors an authorized ROE for SDG&E of 10.9%.[39]

Dr. Morin's testimony provides market-based assessments of the risks associated with the Company's equity and determines the investor-required return commensurate with those risks. Dr. Morin reaches his conclusion by applying standard proxy-based cost of capital methodologies. Specifically, he applies statistical methods to estimate required equity returns – generally referred to as the discounted cash flow ("DCF"), risk premium, and capital-asset pricing models ("CAPM") – to a group of investment-grade dividend-paying combination gas and electric utilities to establish an ROE range for SDG&E's utility peer group.

Dr. Morin concludes that a fair, reasonable base ROE for SDG&E is 10.9%, based on the adoption of the Company's proposed 56% common equity ratio. To derive that percentage, Dr. Morin determined SDG&E's ROE based on adjusting his recommendation upwards from the midpoint of his proxy statistical range to account for the Company's higher degree of risk compared to the average peer utility. Dr. Morin found that SDG&E's "very high level of business, regulatory, and financial risks compared to the proxy group of companies"[40] was evidenced by the Company having, among other factors:

- a significantly higher beta (market) risk measure among utilities for equity investors;[41]
- a higher than average DCF cost of equity risk result; and

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[38] *Id.* at 61.

[39] D.12-12-034 at 28 ("In the final analysis, it is the application of informed judgment, not the precision of financial models, which is the key to selecting a specific ROE estimate.").

[40] Ex. SDG&E-04 (Morin) at 57.

[41] *See* D.12-12-034 at 25 (noting that electric utilities generally have low betas).

- a higher degree of regulatory and legislative uncertainty and risk.

2. Concentric Wildfire Risk Premium

Concentric concludes that "typical cost of capital models and approaches" like standard proxy-based models, are, when standing alone, "ill-suited" for the "extraordinary circumstances" facing California utilities from the potential for significant wildfire-related liability (*See* Ex. SDG&E-05, Chapters 1-2).[42] Accordingly, Concentric proposes an ROE-adder "designed to measure greater shareholder risk generally, and the specific wildfire risks of SDG&E, and the impacts of these risks on SDG&E's cost of equity."[43] Their proposal is based on three approaches:

- An "Estimated Loss Approach," estimating the earnings necessary to make up for the risk of shareholder wildfire loss;
- A wildfire "Insurance Approach," measuring how much it costs for SDG&E shareholders to bear the risk of wildfire liability as measured by the premiums that the Company pays to insurance companies;
- And a "catastrophe ("CAT") Bond Approach," that measures CAT bond spreads for California utilities.[44]

These approaches are built around the interaction between SDG&E's wildfire insurance coverage and the Company's probabilistic wildfire risk modeling that uses a methodology that was approved by the Commission in D.18-12-014 for use in future Risk Assessment Mitigation Phase ("RAMP") and General Rate Case ("GRC") filings. SDG&E has approximately $1.5 billion in wildfire insurance coverage, including several conventional insurance policies and a

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[42] *See* Prepared Direct Testimony of John J. Reed and James M. Coyne, Wildfire Risk Premium (April 2019) ("Ex. SDG&E-05, Ch. 1 (Reed/Coyne)") at 47 (noting that the California utilities are primarily distinguished from the average utility industry risk profile nationwide to the risk of catastrophic wildfire liability.).

[43] *Id.* at 7.

[44] *Id.* at 50-53.

1 CAT bond. The modeling attempts to quantify the potential frequency of wildfire events as they
2 exist today, based on the Company's experience, data, and wildfire-related mitigation activities
3 in place, coupled with the potential consequence should a wildfire occur.

4 Concentric's Estimated Loss Approach takes the Company's modeled risk of expected
5 wildfire financial loss and determines "the earnings required to offset" the projected average
6 wildfire loss above the Company's insurance. Concentric's Insurance Approach translates what
7 insurance companies are requiring to insure SDG&E's wildfire liability into a risk premium for
8 what shareholders need to carry the additional risk of a projected average wildfire event above
9 the Company's insurance coverage. With the CAT Bond Approach, Concentric measures the
10 premium that CAT bond investors are requiring to bear the risk of wildfire liability relative to a
11 three-year U.S. Treasury note.

12 Concentric analyzed the data related to these approaches, which yielded the following
13 ROE adjustments ranging from 1.87% to 3.87%:

Approach to Measuring Wildfire Liability Risk	**ROE Adjustment**
Estimated Loss Approach	1.87%
Insurance Approach	3.68%
CAT Bond Approach	3.87%

14
15 The midpoint of the mean and median from Concentric's three approaches is 3.4%,
16 which they recommend as a wildfire risk premium representing a conservative measure of the
17 risk differential.[45] Concentric explains how such a premium will help support the Company's
18 credit ratings.

45 *Id.* at 53.

3. Overall ROE Proposal

Dr. Morin's traditional, proxy-based, ROE proposal of 10.9%, in addition to Concentric's wildfire risk premium of 3.4%, results in an overall ROE recommendation of 14.3%.

Source	ROE Proposal
Dr. Morin Traditional ROE Proposal	10.9%
Concentric Wildfire Premium	3.4%
Overall ROE Proposal	14.3%

Dr. Morin acknowledges that he "consider[s] [his] recommended ROE as barebones given the unresolved risks due to wildfires regulation in California."[46] As Dr. Morin continues, his ROE recommendation is built on numerous risk factors outside of wildfire liability. So, as Dr. Morin acknowledges, his traditional proxy estimate is insufficient to fully account for SDG&E's unique risks for wildfire liability. He therefore concurs that Concentric's wildfire risk premium is warranted above his traditional ROE recommendation.[47]

Concentric similarly contends that traditional equity market-based models do not fully capture SDG&E's wildfire-liability risk because those markets are discounting that risk due to the expectation of legislative and/or regulatory reform.[48] Concentric likewise notes that California utilities carry a risk premium, even absent the threat from unrecoverable wildfire liability.[49] As such, they too believe that a wildfire-specific risk premium is necessary. SDG&E agrees and believes that a wildfire-adder – one that considers the Company's own internal

[46] Ex. SDG&E-04 (Morin) at 6.

[47] *Id.* at 61.

[48] *See* Ex. SDG&E-05, Ch. 1 (Reed/Coyne) at 7.

[49] *See id.* at 48.

modeling of wildfire loss and how the insurance industry and bond markets are pricing that wildfire risk – is a reasonable addition to Dr. Morin's traditional, equity-market based, peer group review approach.

D. Capital Adjustment Mechanism

Mr. Bruce MacNeil recommends maintaining the CCM with four modifications (*See* Ex. SDG&E-06). The CCM allows for the filing of COC applications every three years, through a formula that automatically adjusts SDG&E's ROE and ROR between COC proceedings, based on broad movements in the bond markets. The mechanism relies on two basic components: (1) a benchmark; and (2) a tolerance band. The benchmark forms the basis of determining market volatility most in line with the Company's market profile. The tolerance band is a range of the chosen benchmark that determines when and how often a cost of capital mechanism triggers, either automatically increasing or automatically decreasing the authorized cost of capital structure.

This essentially means that the mechanism, if triggered, will bring the authorized cost of capital in general alignment with the financial markets during times of market volatility, so that the Company does not have to seek Commission review and approval of its authorized cost of capital between cases. SDG&E has had some type of authorized adjustment mechanism for nearly 20 years, with the current CCM in place for all California electric and gas utilities since 2008.

As the Commission has found, the CCM has benefitted all stakeholders. Under the CCM, changes to SDG&E's return between COC proceedings is produced by an objective outcome based on historical rates. This eliminates the need for interest rate projections and mitigates potential forecasting risk. The mechanism has been responsive to longer-term trends, rather than short-term volatility. The CCM effectively balances the interests of shareholders and

ratepayers while simplifying and reducing COC proceedings, workload requirements, and regulatory costs.[50] Credit agencies and investment banks – who regularly evaluate the financial condition of the utilities – likewise indicate their preference for this automatic rate-setting mechanism, since it provides greater clarity and transparency.

But, as Mr. MacNeil details, SDG&E is proposing modest changes to the CCM, based upon the deteriorating credit rating environment for SDG&E and other California utilities. As Mr. MacNeil reiterates, it is critical that the Company maintain an investment grade credit rating. Yet despite SDG&E's longstanding history of strong credit ratings, Moody's, S&P, and Fitch Ratings have all recently downgraded SDG&E and other California utilities – based upon the ratings agencies increased focused on the risks to California utilities from catastrophic wildfires and potentially unrecoverable liability.

While SDG&E's credit ratings are currently investment grade, there is no guarantee that SDG&E's current credit ratings will remain the same, as credit rating agencies have left the Company on negative outlook. To help mitigate this deleterious credit environment, SDG&E proposes to continue utilizing the currently authorized CCM (as previously described), with four modest modifications:

- Change the dead band trigger to 50 from 100 basis points;
- clarify the selection of an CCM index when the utility has split ratings;
- clarify how to approach a rating agency split during CCM years; and
- provide guidance for utilities with non-investment grade ratings.

Adopting the above-mentioned changes would make the CCM more sensitive by accurately reflecting market conditions, while continuing to balance the frequency of triggering.

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[50] D.13-03-015 at 7.

This can benefit ratepayers should the Company's credit ratings improve, as the CCM adjusts in both directions. The Company also recommends that the Commission establish actions should a utility's credit rating move below investment grade, including the suspension of the CCM and annual true up of the costs of long-term debt and preferred stock.

VI. CONCLUSION

SDG&E respectfully asks the Commission to adopt its proposed authorized cost of capital structure and cost of capital mechanism. The Company's proposals are supported by data and the reasoned analyses of witnesses qualified to speak to their respective areas of expertise. Facing unparalleled risk from the threat of a catastrophic wildfire, the potential inability to recover costs from acting as the insurer of last resort, and credit rating downgrades because of this legal and regulatory environment, SDG&E must continue to attract capital investments to provide safe, reliable, cleaner, and more cost-effective electricity and natural gas to customers while helping achieve the state's regulatory and environmental goals. Therefore, the Company's authorized capital structure, return on equity, and cost of capital mechanism must be competitive and on par with the other California regulated utilities facing similar threats.

This concludes my prepared direct testimony.

VII. WITNESS QUALIFICATIONS

My name is Bruce A. Folkmann. I am Vice President, Chief Financial Offer, Controller, Chief Accounting Officer, and Treasurer for SDG&E and SoCalGas, Sempra Energy's California regulated utility businesses. My business address is 8330 Century Park Court, San Diego, California 92123.

In my current position, I am responsible for overseeing the financial planning and budgeting, energy risk management, financial reporting, treasury management, and affiliate compliance for SDG&E and SoCalGas.

I graduated summa cum laude from the University of Houston Honors College, receiving degrees in Accounting and Finance. I am a Certified Public Accountant. I began my career with Arthur Andersen and a large multinational company. In 2005, I joined Sempra Energy and have held positions of increasing responsibility in Sempra Energy businesses since that time.

I have previously testified before the Commission.