Company: San Diego Gas & Electric Company (U 902 M)

Proceeding: 2019 General Rate Case

Application: A.17-10-Exhibit: SDG&E-19

SDG&E

DIRECT TESTIMONY OF LISA C. DAVIDSON

(CUSTOMER SERVICE INFORMATION AND TECHNOLOGIES)

October 6, 2017

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA



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SUMMARY
TY 2019 Summary of Total O&M Costs

CS - INFORMATION & TECHNOLOGIES (In 2016 \$)			
	2016 Adjusted- Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
Total Non-Shared Services	21,744	26,058	4,314
Total Shared Services (Incurred)	343	343	0
Total O&M	22,087	26,401	4,314

TY 2019 Summary of Total Capital IT Costs

INFORMATION TECHNOLOGY (In 2016 \$)			
Categories of Management	Estimated 2017 (000s)	Estimated 2018 (000s)	Estimated TY 2019 (000s)
CS – Information & Technologies	20,583	21,109	1,818

Summary of Requests

San Diego Gas & Electric Company's (SDG&E) Customer Service Information and Technologies is requesting \$26.401 million for Test Year (TY) 2019, which represents a 20% increase from 2016 adjusted recorded costs. The requested funding supports SDG&E's goal of providing safe, reliable and efficient gas and electric service, and serving as a trusted energy advisor to customers by offering relevant information about their energy consumption, pricing plans, programs and tools to manage and control their use. This request will allow us to provide customers with residential customer services, business services, marketing and communications, research and analytics, customer programs, and customer pricing, among other services.

SDG&E's request reflects the effects of the following:

- System upgrades, research and rate education to prepare customers for new and changing pricing plans and program options related to residential rate reform and rate education plans that have been requested and/or previously approved by the Commission;
- Support for the wide array of business customers' energy needs;

- Expansion of research and communication to engage customers in diverse and disadvantaged communities;
- Customer privacy and data access initiatives to comply with new regulations and make it easier for customers to securely share their energy usage data with third parties;
- Increased support for rate design strategy, rate changes and impacts;
- Expansion of clean transportation programs in support of ambitious state greenhouse gas reduction goals;
- Risk Assessment Mitigation Phase (RAMP) Natural Gas Appliance
 Testing (NGAT) and seasonal safety communications; and
- Operational efficiency projects.

I chose a base year forecast method for Customer Service Information and Technologies. For reasons described in my testimony, a base year forecast represents the appropriate starting point to calculate TY 2019 operation and maintenance (O&M) expenses for the activities listed above.

SDG&E DIRECT TESTIMONY OF LISA C. DAVIDSON (CUSTOMER SERVICE INFORMATION AND TECHNOLOGIES)

I. INTRODUCTION

A. Summary of Customer Service Information and Technologies Costs and Activities

My testimony supports the TY 2019 forecasts for O&M costs for both non-shared and shared services, and capital costs for the forecast years 2017, 2018, and 2019, associated with the Customer Service Information and Technologies (CSIN) area for SDG&E. Table LD-1 summarizes my sponsored O&M costs and Table LD-2 summarizes IT capital project costs for which I sponsor the business justification.

TABLE LD-1
TY 2019 Summary of Total O&M Costs

CS - INFORMATION & TECHNOLOGIES (In 2016 \$)			
	2016 Adjusted- Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
Total Non-Shared Services	21,744	26,058	4,314
Total Shared Services (Incurred)	343	343	0
Total O&M	22,087	26,401	4,314

TABLE LD-2 TY 2019 Summary of Total Capital IT Costs

INFORMATION TECHNOLOGY (In 2016 \$)			
Categories of Management	Estimated 2017 (000s)	Estimated 2018 (000s)	Estimated TY 2019 (000s)
CS – Information & Technologies	20,583	21,109	1,818

CSIN provides efficient, effective, and reliable customer service to SDG&E's 3.6 million consumers. By employing a customer centric approach, SDG&E listens, understands, and responds to customers' requests, concerns, and feedback to help them make informed energy choices that best suit their energy goals. To this end, SDG&E has won several awards for outstanding customer service and best practices, including the 2016 Utility Customer Champions by Market Strategies International, as reflected in their Cogent Utility Trusted Brand &

Customer Engagement Benchmark Residential survey.¹ SDG&E was among 46 champions nationally in 2016 (of 130 utilities included in the study) and one of the two winning California utilities. In 2016, SDG&E received Chartwell's Silver Award for Best Practices in Billing and Payment Programs² for our enhanced Bill Ready Notification email, which provides My Account customers with a snapshot of key billing and usage information through charts and infographics, as well as customized energy-management solutions via messages and videos based on customers' past interactions. In 2014, SDG&E was ranked third out of 35 participating utilities in an Esource survey for our Account Management services for business customers.³ We are proud of these recognitions and strive every day to deliver positive value-added service and experiences for our customers.

Advancements in technology have increased customer expectations. Today's customer is connected in a twenty-four hour, data-driven, social media culture. Customers have come to expect fast, personalized service. They expect to be able to interact over the channel or device of their choice, at any time, day or night, and receive an expeditious response. As energy-related issues, regulations, and options increase in complexity, customers expect SDG&E to be a trusted energy advisor, providing them with services and an experience that is personalized and relevant to them. To meet these expectations, SDG&E is delivering solutions that are integrated and customized, while providing simplified processes that make it seamless for a customer to transact with us and tools and services that meet each customers' individual needs.

SDG&E strives to provide the right message to the right customer at the right time using the right channel. We do this by providing information on programs, products, and pricing options in various languages, at various times, and through multiple channels. Our outreach efforts are active year-round and we partner with community and trade organizations that help us reach underserved communities and customer segments.

¹ Report by Market Strategies International, per their Cogent Utility Trusted Brand & Customer Engagement Benchmark Residential survey http://landing.marketstrategies.com/2016-utility-brand-trust-customer-engagement-residential-study-ecr-scores.

² Chartwell's Best Practices Awards recognize excellence among electric and gas utilities with respect to projects, programs and initiatives. The awards program is open to all utilities – large, small, investor owned utilities (IOU), cooperatives, and municipals – across North America.

³ https://www.esource.com/ES-PR-AMA-2014-07/Press-Release/AMA.

SDG&E also provides account management services to commercial and industrial customers. Account Executives are assigned to market segments, which creates in-depth knowledge and familiarity with the complexity of energy use and service needs of each industry. This has produced strong relationships with our business customers that are built on knowledge and trust.

SDG&E is implementing a portfolio of Clean Transportation programs that provide solutions for reducing the carbon footprint in San Diego. Our Clean Transportation team provides customers with electric transportation information on metering, rates, charging equipment and installation, safety, reliability, and the benefits of off-peak charging.

SDG&E's customers encompass a wide range of market segments with varying levels of sophistication, energy knowledge and know-how. As such, SDG&E offers customers numerous options for receiving information and interacting with us. As an example, these options include the use of social media for the tech savvy customer who prefers a more immediate response and is likely to self-serve, compared to our customers at the other end of the spectrum who prefer a more individualized personal interaction with the Customer Contact Center (CCC). Whatever the preferred experience, SDG&E continuously works to meet or exceed customers' expectations.

As the energy environment changes, and customer needs and expectations evolve, SDG&E is committed to developing a deeper understanding and insights into its diverse customer segments. This is done through research and analytics and the continuous monitoring of our customer service efforts, utilizing customer surveys. We leverage our Customer Connection Survey to measure customers' experience when they transact with SDG&E. Some of these transactions include in-person payments, the Call Center, Field Technician service orders, and Interactive Voice Response (IVR) transactions. This survey provides actionable feedback that translates into enhancements to our customer service efforts. The final year-end score for 2016 showed 80% of customers who transacted with us scored the experience as excellent or very good.

SDG&E is also dedicated to providing customers with choices and information on their energy pricing plans and program options that will allow them to select the best rate that meets their lifestyle or business needs. SDG&E's business customers are enrolled in time varying pricing plans, and we are focused on preparing residential customers for future phases of rate

reform and the transition to default time-of-use (TOU) pricing plans. Our goal is to increase residential customers' awareness, understanding, and engagement with rate options and the energy management tools and behaviors that can help better manage electricity use and thereby increase adoption and retention of customers on TOU.

In addition to sponsoring my own organization's costs, my testimony also supports business justification for the following areas:

- Information Technologies (IT) capital costs that support CSIN are sponsored by SDG&E witness Christopher Olmsted (Exhibit SDG&E-24). However, I will cover in my testimony the business rationale for these costs.
- Memorandum account proposals are sponsored by SDG&E witness Norma Jasso (Exhibit SDG&E-41). However, I sponsor the reasonableness of costs recorded to the Alternative Fuel Vehicle Memorandum Account (AFVMA), Energy Data Request Memorandum Account (EDRMA), Assembly Bill (AB) 802 Memorandum Account, and Rate Reform Memorandum Account (RRMA).
- Facilities capital costs for SDG&E are sponsored by witness Dale Tattersall (Exhibit SDG&E-22). However, I will cover in my testimony the business justification for proposed Energy Innovation Center capital improvements.

B. Summary of Safety and Risk-Related Costs

Some of the costs supported in my testimony are driven by activities described in Southern California Gas Company (SoCalGas) and SDG&E's November 30, 2016 RAMP Report.⁴ The RAMP Report presented an assessment of the key safety risks of SoCalGas and SDG&E and proposed plans for mitigating those risks. As discussed in the Risk Management testimony chapters of Diana Day and Jamie York (Exhibit SCG-02/SDG&E-02, Chapters 1 and 3, respectively), the costs of risk-mitigation projects and programs were translated from that RAMP Report into the individual witness areas.

⁴ I.16-10-015/I.16-10-016 Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company, November 30, 2016. Please also refer to Exhibit SCG-02/SDG&E-02, Chapter 1 (Diana Day) for more details regarding the utilities' RAMP Report.

 In the course of preparing my General Rate Case (GRC) forecasts, I continued to evaluate the scope, schedule, resource requirements, and synergies of RAMP-related projects and programs. Therefore, the final representation of RAMP costs may differ from the ranges shown in the original RAMP Report.

Table LD-3 provides a summary of the RAMP-related costs supported by my testimony by RAMP risk:

TABLE LD-3 Summary of RAMP Overlay

CS - INFORMATION & TECHNOLOGIES (In 2016 \$) RAMP Risk Chapter	2016 Embedded Base Costs (000s)	TY 2019 Estimated Incremental (000s)	Total (000s)
SDG&E-3 Employee, Contractor and Public Safety	693	241	934
Total O&M	693	241	934

C. Summary of Costs Related to Fueling our Future (FOF)

As described in the joint testimony of Hal Snyder and Randall Clark (Exhibit SCG-03/SDG&E-03), the utilities kicked off the FOF initiative in May 2016 to identify and implement efficient operations improvements. Various workgroups in CSIN benefit from the FOF initiative; the details of the FOF improvements and the savings to be realized as a result of implementing them relate to both labor and non-labor costs, and are included in each of the impacted workgroups in this testimony. FOF savings reflected in TY 2019 are approximately \$922,000 as shown in Table LD-4 below.

TABLE LD-4
Summary of FOF Costs

CS - INFORMATION & TECHNOLOGIES (In 2016 \$)			
FOF O&M	Estimated 2017 (000s)	Estimated 2018 (000s)	Estimated 2019 (000s)
FOF-Ongoing/ <benefits></benefits>	-443	-913	-922
Total O&M	-443	-913	-922

D. Organization of Testimony

My testimony is organized into five main categories: RAMP and Safety Culture (Section II), Non-Shared Services Costs (Section III), Shared Services Costs (Section IV), IT Capital Projects (Section V), and Energy Innovation Center (Section VI).

I will address the non-shared services for all the areas within CSIN such as Residential Customer Services (RCS), Business Customer Services, Marketing, Research and Analytics, and Customer Programs, Pricing and Other Office. In each of the non-shared sections, I will present the primary activities of the workgroup, the reason for using the base year (BY) forecast methodology, and support for the request for each of the cost drivers. I will then present shared service areas of Business Strategy and Development as well as the Low Emission Vehicle Program. Like the non-shared services section, I will present the primary activities of the workgroup, the reason for using the base year forecast methodology, and support for the request for each of the cost drivers.

Following that, I will provide the business justification for the IT capital costs for technology that supports CSIN and are sponsored by SDG&E witness Mr. Olmsted (Exhibit SDG&E-24) and for the proposed Energy Innovation Center capital improvements.

II. RISK ASSESSMENT MITIGATION PHASE AND SAFETY CULTURE RAMP

As illustrated in Table LD-5, part of my request is linked to mitigating safety risks that have been identified in the RAMP Report. These risks are further described in the table below:

TABLE LD-5 RAMP Risk and Description

RAMP Risk	Description
Employee, Contractor and Public Safety	The risk of non-adherence to safety programs, policies and procedures, which may result in severe harm to employees, contractors and the general public.

In developing my request, priority was given to this key safety risk to determine which currently established risk control measures were important to continue and what incremental efforts were needed to further mitigate this risk. Identifying projects and programs that help to mitigate these risks manifest themselves in my testimony as adjustments to my forecasted costs. This adjustment process was used to identify both RAMP mitigation costs embedded as part of

traditional and historic activities, as well as forecasted RAMP-incremental costs, that are also associated with mitigation strategies and corresponding to historic or new activities. These can be found in my workpapers as described below. The general treatment of RAMP forecasting is described in the testimony of RAMP to GRC Integration witness Jamie York (Exhibit SCG-02/SDG&E-02, Chapter 3).

For this risk, an embedded BY 2016 cost-to-mitigate and any incremental costs expected by the TY 2019 are shown in Table LD-6 below. The table also provides the location in my workpapers where the specific adjustments representing those incremental costs can be found. Furthermore, the details for the individual mitigation efforts are described in impacted testimony areas below.

TABLE LD-6
RAMP Summary of Costs

CS - INFORMATION & TECHNOLOGIES (In 2016 \$) SDG&E-3 Employee, Contractor and Public Safety	2016 Embedded Base Costs (000s)	TY 2019 Estimated Incremental (000s)	Total (000s)
1IN001.000, Residential Customer	11	0	11
Services			
1IN002.000, Business Services	80	0	80
1IN003.000, Marketing, Research, &	455	100	555
Analytics			
1IN004.000, Customer Programs,	147	141	288
Pricing, and Other Office			
Total	693	241	934

As the table demonstrates, the RAMP risk mitigation efforts are associated with specific programs or projects contained within several workgroups. For each of these mitigation efforts an evaluation was made to determine the portion that was already being performed in our historical activities. My incremental request includes risk mitigation efforts such as customer communications and customer initiated orders relative to public safety. These efforts may further reduce our employee, contractor, and public safety risk by expanding Summer and Winter Preparedness Communication as well as NGAT, which is a safety measure included in the RAMP filing to help mitigate exposure to carbon monoxide (CO). As described in section

III. D.3.d, NGAT is a CPUC mandated program and SDG&E has not separately explored any alternative to that program.

Safety Culture

SDG&E is committed to providing safe and reliable service to its customers. Our safety-first culture focuses on our employees, customers, and public safety, and is embedded in every aspect of our work. This effort includes developing a trained workforce, operating and maintaining the electric infrastructure, and providing safe and reliable gas and electric service. SDG&E's strong safety culture and commitment to further developing processes and programs is designed to manage safety risks and promote system reliability. CSIN at SDG&E promotes and supports the company's safety culture by providing customers with information on preparing for emergencies, the safe use of gas and electricity, and fire prevention. Customer feedback is gathered and used to continuously improve services and communication related to safety. Departments in CSIN also communicate safety messages to employees and hold safety meetings and stand-downs intended to reduce or eliminate safety incidents.

III. NON-SHARED COSTS

Non-Shared O&M costs represent the costs of labor and non-labor activities required to deliver services exclusively benefitting SDG&E and its customers and do not need to be allocated out to other business units. Table LD-7 below summarizes the total non-shared O&M forecasts for the listed cost categories.

TABLE LD-7
Non-Shared O&M Summary of Costs

CS - INFORMATION & TECHNOLOGIES (In 2016 \$)			
A. Customer Service Information	2016 Adjusted- Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
1. Residential Customer Services	5,262	6,267	1,005
2. Business Services	5,037	4,812	-225
3. Marketing, Research, & Analytics	6,219	8,574	2,355
4. Customer Programs, Pricing, and Other Office	5,226	6,405	1,179
Total	21,744	26,058	4,314

Α. **Residential Customer Services**

Table LD-8 below summarizes SDG&E's requested TY 2019 expenses for RCS.

TABLE LD-8 **Forecast for Residential Customer Services**

CS - INFORMATION & TECHNOLOGIES (In 2016 \$) A. Customer Service Information	2016 Adjusted- Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
1. Residential Customer Services	5,262	6,267	1,005
Total	5,262	6,267	1,005

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1. **Description of Costs and Underlying Activities**

The RCS department is responsible for services and activities focused on delivering and enhancing the overall customer experience of 3.6 million consumers. The overall mission of RCS is to provide consistent, timely, efficient, and responsive service to customers and anticipate their needs to proactively and effectively assist them with energy decisions. The key subgroups within the RCS department are Residential Outreach, Office of Customer Experience, Office of Customer Privacy, Clean Transportation, CCC, and Branch Offices. The expenses for the CCC and Branch Offices are included in the Customer Service Office Operations testimony of Jerry Stewart (Exhibit SDG&E-18). Additional descriptions of each RCS sub-group are provided below.

The Residential Outreach group is responsible for developing and executing the outreach

plans and strategies around promotion of residential programs and services. This group

stakeholders, educating and informing them about SDG&E products, services, and solutions.

Furthermore, this group engages employees and trains them to be the company ambassadors for

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19 essentially provides the "feet on the street" and communicates directly to customers and external

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Residential Outreach

SDG&E's numerous products, services, and solution offerings.

Office of Customer Experience The Office of Customer Experience is responsible for coordinating and leading crossdepartmental activities and fostering a customer-centric culture to improve the overall customer experience. Serving in an advisory capacity to various SDG&E departments, this group assists in the development of customer journey maps, identification of customer "pain points," root

cause analysis of customer complaints, recommendations on how to address and improve the customer experience, and measure effectiveness of changes that are implemented.

• Office of Customer Privacy (OCP)

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The OCP is responsible for safeguarding and advocating for customer privacy while ensuring SDG&E meets its mandatory privacy requirements. A primary objective of the OCP is to streamline operations by focusing on the automation of key privacy tasks. To ensure SDG&E complies with privacy laws and California Public Utilities Commission (CPUC) rules, the OCP works across the Company with departments that process and manage customer information to reinforce customer privacy goals and objectives and analyze and minimize customer privacy risks.

The Office of Customer Privacy consists of a formal customer privacy program, which includes:

- A privacy framework and controls that meet the Company's Federal and State privacy obligations, as well as industry-accepted best practices via the Generally Accepted Privacy Principles (GAPP), while simultaneously incorporating Privacy by Design (PbD) principles.
- A Privacy Impact Assessment process and tools to help employees describe the risk their projects, programs, and processes have on customer privacy and provide controls and options to help mitigate that risk.
- Privacy GreenLight is SDG&E's enterprise process for sharing customer data with authorized third parties when customer consent will not be obtained. This process includes: analysis of the request to determine the level of sensitivity of the data and identification of opportunities to minimize the amount of data shared; thorough review of the third party's privacy and security practices to minimize breaches or unintended disclosures of information; assessments to evaluate risk when sharing the information with the third party; drafting of non-disclosure agreements where applicable; and secure transmission of data to the third party once all reviews and approvals are met.
- The ongoing and periodic delivery of privacy training to all active employees and contractors with access to customer information.
- The analysis of draft legislative and regulatory controls that may impact customer privacy or the business processes that support privacy.
- Coordination with SDG&E's Information Security department on the Company's response to privacy breaches.
- Collaboration with external privacy regulators and key stakeholders to share best practices and advocate for the importance of protecting our customer's energy privacy.

SDG&E is working to develop a reputation for being a strong privacy advocate to further our relationship with customers and maintain their trust. One example is a proof-of-concept Differential Privacy project SDG&E is doing with Microsoft. Differential Privacy is a set of tools governed by a mathematical algorithm that performs statistical analysis on a data set in such a way that one can query the data without revealing any one individual whose data is in the data set. The project is expected to be completed in 2017. When completed, SDG&E will evaluate the effectiveness of the technology to provide self-service access to aggregated customer data versus its current practice through individual requests.

• <u>Clean Transportation</u>

The Clean Transportation group is responsible for education and outreach to all customers with electric transportation information on metering, rates, demand response programs, charging equipment, installation, safety, reliability, and the benefits of off-peak charging. This group is also responsible for the management and implementation of the ongoing requirements of the Assigned Commissioner's Ruling regarding the filing of the Transportation Electrification Applications pursuant to Senate Bill 350 issued in Rulemaking (R.) 13-11-007. This includes all aspects and activities of transportation electrification, such as determining its value and potential, developing enabling policies, regulations and business processes around transportation electrification, and supporting enabling technology development.

2. Forecast Method

I chose a base year forecast method for Residential Customer Services because the last recorded year accurately reflects the expense level associated with current and forecasted departmental activity. Both labor and non-labor have exhibited an overall upward trend during the 2012 - 2016 time-period, primarily due to the increased focus on rate education and outreach, customer privacy, the transition of ongoing Dynamic Pricing support staff to O&M in BY 2016 referenced in the SDG&E test year 2016 GRC Application A.14-11-003 Ex. 101 (SDG&E-14), and the expansion of the Clean Transportation group. Therefore, the base year provides a reasonable starting point for future expenditures.

3. Cost Drivers

The Table LD-9 below summarizes the changes in the RCS estimated expenses for TY 2019.

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TABLE LD-9 **Changes in Residential Customer Services TY 2019 Estimated Expenses**

	TY 20	TY 2019 - 2016 Change (000s)				
Residential Customer Services	Labor	Non- Labor	Total	FTEs		
a. Employee Retirement	-103		-103	-0.9		
b. Capital Project Impacts: Customer Authorization Project		179	179			
c. Customer Information Advisor	102	3	105	1.0		
d. Privacy Training		33	33			
e. Cool Zones		43	43			
f. Expansion of Clean Transportation	498		498	4.7		
g. Electric Vehicle Education & Outreach		250	250			
Total TY 2019 Impact	497	508	1,005	4.8		

Employee Retirement – Voluntary Retirement Enhancement a. Program (VREP)

The Residential Customer Services TY 2019 forecast reflects a (\$103,000) reduction in labor for a Customer Experience Project Manager position that was vacated due to an employee retirement. This position and the job duties will be absorbed within the organization. As discussed in our RAMP filing on Workforce Planning and in the testimony of Tashonda Taylor (Exhibit SDG&E-30), SDG&E has used programs, like our recent VREP, to achieve an orderly transition of knowledge and skills between select retirement-eligible employees and those employees ready to move into leadership or other senior positions. The VREP offered a voluntary separation package to a select group of retirement eligible employees in areas believed to have skill surpluses to enable SDG&E to achieve balance and appropriate staffing for projected workforce requirements. SDG&E has periodically offered similar VREP programs in the past.

b. **Capital Project Impacts – Customer Authorization Project**

I am requesting \$179,000 in non-labor above the BY 2016 for the maintenance of the new enterprise-wide Customer Authorization functionality as a result of Capital Project #T16036.5 This functionality will automate SDG&E's current manual processes for managing Letters of Authorization (LOA), also known as the Customer Information Service Request

⁵ See Section V.2.b.

(CISR) form, that customers use to provide consent to SDG&E to share their information with third parties. Known as "Consent to ShareTM" this new functionality will support customers' and third parties' ability to create, manage and revoke LOAs electronically. It will support mandated programs, including Electric Rule 32 (Rule 32 is the tariff that governs the utility's role in supporting direct participation of third parties in the California Independent System Operator's (CAISO) markets) and California AB 802 (AB802 – Commercial Benchmarking) as well as a variety of other reasons customers share data with third parties. Consent to Share will provide a new online way for customers to provide authorization and will make it easier for customers to provide, and for third parties to receive, consent for the purposes of sharing energy usage data and other customer data.

c. Customer Information Advisor

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I am requesting \$102,000 in labor and \$3,000 in associated non-labor costs above the BY 2016 for a Customer Information Management (CIM) Advisor. Smart Grid Privacy Decision (D.)11-07-056, attachment D, section 6, established privacy control requirements for access to customer information. Increasing demand by third parties and regulators for access to customer information necessitates this additional resource to assure responsiveness and compliance with the regulatory directives. The Office of Customer Privacy will continue to centralize and automate the business processes for sharing customer data including the management of customer consent, planning for self-service, and automated delivery of data to authorized third parties. The CIM Advisor is responsible for managing the enterprise technologies that are developed for this purpose. These technologies support the intake and validation of new requests for customer information, business review support, aggregation and validation of data per mandated requirements, secure delivery of data to authorized third parties, and assurance of secure disposal when the data is no longer required for its intended purpose. The CIM Advisor is also responsible for ensuring that relevant regulatory requirements for new mandated programs with customer data sharing components are integrated into the Consent to Share platform described above.

d. Privacy Training

I am requesting \$33,000 in non-labor for privacy training. This amount represents the normalized cost (one third of the total) of this privacy training, which spans over three years.⁶ The training will enable SDG&E to more efficiently comply with Ordering Paragraph 1 and Section 9(c) of Attachment D of CPUC D.11-07-056, which states "Covered entities shall provide reasonable training to all employees and contractors who use, store or process covered information." Additionally, this training aligns SDG&E with other California utilities' privacy training practices. SDG&E will contract with a third party to build, deploy and manage privacy training for employees and contractors who use, store, or process covered information⁷.

e. Cool Zones

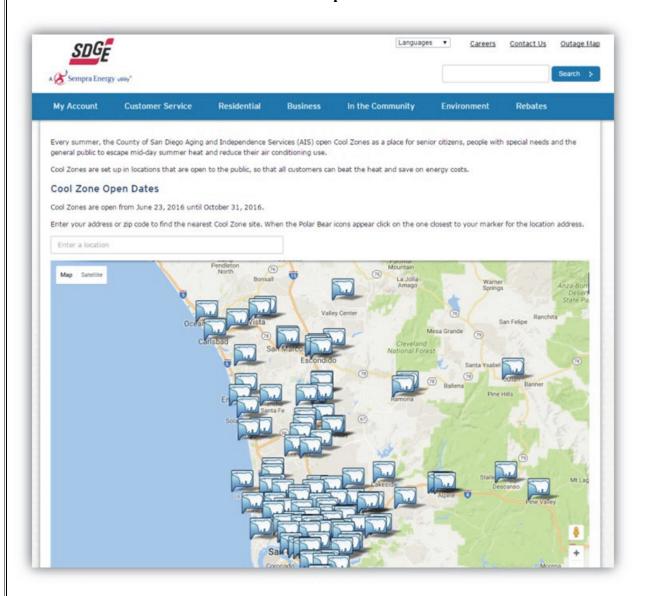
I am requesting \$43,000 in non-labor to support the operation of Cool Zones per D.16-11-022, Ordering Paragraph 116, that directs California electric Investor-Owned Utilities to include cooling center costs in their General Rate Case proceedings going forward. Operational since 2001, the Cool Zone program was created out of concern for seniors and disabled persons with health problems that might escalate during periods of extreme heat. SDG&E has partnered with the County of San Diego and its Aging and Independence Services Department (AIS) for the past 15 years to support this initiative, which helps thousands of vulnerable senior, special needs, and disabled constituents locate an air-conditioned place to spend time during hot summer days. SDG&E customers who visit these Cool Zone locations have an added benefit to save on their utility bills by running their home air conditioning less or not at all. AIS administers and oversees the Cool Zone program with annual program support provided in part by SDG&E.

An interactive map as seen in Figure LD-1 below is available to customers on SDG&E's website, sdge.com/cool-zones, which shows locations of Cool Zone sites by zip code, and provides the days and hours of operation for each location. This website has zoom functionality for customers who are visually impaired, allowing them to increase the page view up to 400%.

⁶ If the four year GRC cycle is adopted, as proposed in the testimony of Kenneth Deremer (Exhibit SDG&E-43), then this calculation will need to be revised to reflect that.

⁷ Covered information is usage information obtained through the capabilities of Advanced Metering Infrastructure (interval usage data) when associated with any information that can reasonably be used to identify an individual, family, household, residence, or non-residential customer. D.11-07-056 at 150-151, Conclusions of Law 9 and Attachment D at 1.

FIGURE LD-1 Interactive Cool Zone Map at SDG&E's Website



f. Expansion of Clean Transportation

I am requesting \$498,000 in labor above the BY 2016 for the expansion of Clean Transportation programs in support of state policy goals to reduce greenhouse gas emissions. This increase is for the addition of 4.7 Full Time Equivalents (FTEs) who support the areas of Business Development, Financial Analysis, and Customer Engagement. Three of these positions consist of a Regulatory & Policy Manager, a Marketing, Research & Analytics Analyst, and a Project Manager. The Regulatory & Policy Manager understands the regulatory structure of the gas and electric industries and the business interests of SDG&E's Clean Transportation efforts

and applies that knowledge to oversee the preparation of position papers, analytical studies, direct testimony, rebuttal arguments, and discovery response review to be used in transportation electrification regulatory proceedings. Also, this resource is a primary liaison with external agencies including the CPUC, California Energy Commission (CEC), California Air Resources Board (CARB), and other regulatory agencies for Clean Transportation business matters. The Marketing, Research & Analytics Analyst develops, analyzes, and interprets a wide range of technical and specialized data using economic or statistical methods for Clean Transportation initiatives. The Project Manager is responsible for developing regulatory and legislative policy positions, strategies and mechanisms that support Clean Transportation's business plans and objectives. Collectively, these positions will be responsible for managing and implementing future regulatory filings, market analysis, and public policy as it pertains to future transportation electrification filings pursuant to Senate Bill 350.

The remaining FTEs consist of a Business Analyst supporting the calculation of revenue requirements, rate impact analysis and cost studies, and a Customer Outreach Manager supporting future customer engagement, all pertaining to future transportation electrification filings pursuant to Senate Bill 350.

g. Electric Vehicle Education & Outreach

I am requesting \$250,000 in non-labor above the BY 2016 for targeted education and outreach costs to support the growing number of customers in SDG&E's service territory expected to purchase electric vehicles (EVs). Based on D.11-07-029 at 68, the CPUC established principles and requirements to guide utility education and outreach for EVs, and ordered SDG&E to provide customers with information on the choices available for rates, charging equipment and installation, and off-peak charging. It also required EV education and outreach to utility customers about the environmental benefits of driving electric as related to the reduction of greenhouse gas emissions (GHG) set forth by AB 32 – requiring reduction of the state's GHG emissions to 1990 levels by 2020. On January 1, 2017, Senate Bill 32 accelerated these goals to reduce GHG emissions to 40% below the 1990 level by 2030. With the transportation sector accounting for nearly 40% of the state's GHG emissions,⁸ and

⁸ California California's Greenhouse Gas Emission Inventory – 2017 Edition. The California Air Resources Board (CARB) is responsible for maintaining and updating the State's GHG Inventory per Cal Health & Safety Code §39607.4.

approximately 50% of GHG emissions in SDG&E's service territory, ⁹ education and outreach efforts on the benefits of transportation electrification must be significantly increased.

To meet Governor Jerry Brown's goal to have 1.5 million electric cars on California roads by 2025, ¹⁰ the San Diego region will need to see a much stronger adoption rate of EVs than it has seen to date. SDG&E will seek to increase EV adoption, while reducing GHG emissions, by leveraging the work already being done in this region and increasing efforts where additional education and outreach will receive its best return on investment. For example, SDG&E successfully leveraged the education and outreach aspects of its new Electric Vehicle Climate Credit program launch into the highest amount of EV TOU rate sign ups that it had seen in any prior month. SDG&E's program not only provided EV drivers with a bill credit for driving electric, but they were also able to sign up for a rate that encourages EV charging at times beneficial to the grid.

To further advance EV adoption/purchase, SDG&E's Power Your Drive EV charging station program is installing 3,500 charging stations at 350 apartments, condos and businesses. While the program has its own education and outreach effort directed to properties to install the charging stations and to teach EV drivers how to use them, this effort can be significantly leveraged by hosting EV ride-and-drives at each of the workplace and multifamily locations to grow EV adoption where drivers know they can find a charge.

The statewide EV education campaign, Veloz,¹¹ will launch in 2017, with the goal to advance the electric car movement. SDG&E can effectively leverage Veloz messaging and campaign successes to help move EV adoption to the mainstream. Together with this year's launch of the Chevy Bolt and Tesla Model 3, potential EV drivers will see decreases in EV prices while battery ranges increase. This means reduced EV purchase barriers for customers living in disadvantaged or underserved communities, and education and outreach efforts can keep the momentum going by providing information on how easy it is to sign up for a TOU rate

⁹ 3 EPIC San Diego County Updated GHG Emissions Inventory (2013), p. 3, http://catcher.sandiego.edu/items/usdlaw/EPIC-GHG-2013.pdf.

¹⁰ Executive Order B-16-2012.

¹¹ Veloz is a California-based nonprofit organization with the mission to advance the electric car movement.

to provide drivers with the lowest price for their fuel, and to install any necessary charging facilities.

According to CARB's April 12, 2017 report, ¹² one of the top four ways to overcome barriers to access clean transportation is by expanding education and outreach and providing permanent funding to do so in low-income and disadvantaged communities to increase awareness. The report's examples include: expanding educational curricula for kindergarten through 12th grade students; increasing knowledge of ridesharing and demand response options such as Lyft, many of which use electric vehicles; and developing a network of car dealerships that low-income residents can rely on for the purchase or lease of clean technology used and new vehicles.

SDG&E's commercial customers are increasingly requesting information on the total cost of ownership and best practices of transportation electrification for medium- and heavy-duty fleet vehicles. Education and outreach to these groups in the form of workshops, webinars and demonstrations is expected to increase and will help grow electric adoption for this segment.

Combining these additional efforts with our current efforts will create a robust education and outreach campaign to help increase EV adoption in the San Diego region and support the state's GHG reduction goals.

4. Memorandum Accounts

a. Memorandum Account – AFVMA

The AFVMA was established pursuant to Ordering Paragraph 7 of D.13-11-002. The costs recorded in the AFVMA are incurred for expenses related to implementation of the submetering pilots, that are above what could reasonably be recovered through the Electric Program Investment Charge (EPIC).¹³ Costs recorded in this memorandum account cannot exceed \$2 million per utility in the case of co-funding from EPIC and cannot exceed \$5 million per utility in the case that the EPIC program is not authorized. Since SDG&E did not have an electric

¹² California Air Resources Board Draft Guidance Document, Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents, p. 53, https://www.arb.ca.gov/msprog/transoptions/draft_sb350_clean_transportation_access_guidance_docume nt.pdf.

¹³ EPIC is the customer funded research, development and deployment program authorized by the CPUC. Twenty percent of the funds are administrated by all three electric IOUs and 80% of the funds are administrated by the CEC.

vehicle EPIC project proposal at the time of this Decision, all sub-metering pilot costs were charged to the AFVMA. Specifically, the function and activity costs included in the AFVMA were for establishing subtractive billing capabilities for the pilot, including the receipt and management of third party EV charging data, to support up to 500 eligible sub-metering participant customers for 12 billing months for each pilot phase, dis-enrolling participants after the end of each pilot phase, paying incentives to third party Electric Vehicle Service Providers for their enrollment and meter data management and exchange services, and paying 1/3 of the cost of a third party evaluator contracted by Pacific Gas and Electric (PG&E). The phase 1 pilot ran between September 1, 2014 and August 31, 2016; the phase 2 pilot runs between January 16, 2017 through April 30, 2018. Based on D.13-11-002, Ordering Paragraph 7, SDG&E is to seek cost recovery in an appropriate ratemaking proceeding, therefore SDG&E respectfully requests AFVMA recovery in this GRC. Based on the foregoing, the costs recorded by SDG&E are in compliance with D.13-11-002, are reasonable, and should be approved by the Commission. Upon approval, this account will be closed. Additional information regarding regulatory accounts is provided in the direct testimony of SDG&E Regulatory Account witness Norma Jasso (Exhibit SDG&E-41). Table LD-10 below shows the activity in this memorandum account.

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TABLE LD-10 Alternative Fuel Vehicle Memo Account

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Year	Expenses	Interest	Account Balance
2014	315,257	204	\$ 315,461
2015	1,388	460	\$ 317,309
2016	505,250	2,282	\$ 824,841
Jan-Jun 2017	219,883	3,957	\$ 1,048,681

b. Memorandum Account - EDRMA

The EDRMA was established pursuant to Ordering Paragraph 13 of D.14-05-016. The costs associated with the EDRMA were incurred for developing processes and technologies and providing labor to support functions and activities related to managing Energy Data Access Rules. More specifically, the functions and activities include the development and production of the Energy Data Access website and back-end workflow automation, tracking and metrics required to support the requirements of the Energy Data Access Decision, including needed software, licensing and labor to enable and manage the service, as well as labor to manage

energy data access requests, administer and troubleshoot the application, and provide training to employees and contractors regarding third party data sharing. Based on the foregoing, the costs recorded by SDG&E are in compliance with D.14-05-016, are reasonable, and should be approved by the Commission. Upon approval, this account will be closed. Additional information regarding regulatory accounts is provided in the direct testimony of SDG&E Regulatory Account witness Norma Jasso (Exhibit SDG&E-41). Table LD-11 below shows the activity in this memorandum account.

TABLE LD-11
Energy Data Request Memo Account – Electric

Year	Expenses	Interest	Account Balance
2014	176,814	49	\$ 176,863
2015	62,065	290	\$ 239,218
2016	70,552	1,370	\$ 311,140
Jan-Jun 2017	33,251	1,380	\$ 345,771

Energy Data Request Memo Account - Gas

Year	Expenses	Interest	Account Balance
2014	31,202	8	\$ 31,210
2015	9,843	51	\$ 41,104
2016	10,345	229	\$ 51,678
Jan-Jun 2017	4,806	227	\$ 56,711

B. Business Services

 Table LD-12 below summarizes SDG&E's requested TY 2019 expenses for Business Services (referred to as "Commercial and Industrial Services" in prior GRCs).

TABLE LD-12 Forecast for Business Services

CS - INFORMATION & TECHNOLOGIES (In 2016 \$) A. Customer Service Information	2016 Adjusted- Recorded	TY 2019 Estimated	Change (000s)
	(000s)	(000s)	
2. Business Services	5,037	4,812	-225
Total	5,037	4,812	-225

1. Description of Costs and Underlying Activities

SDG&E understands and values the significant contribution provided by business customers and the military to the regional economy and to our state, and is committed to

providing these customers with the level of customer service needed for them to thrive.

Providing relevant, timely, and responsive customer support requires strong and collaborative relationships with business customers and an understanding of their energy needs.

Within SDG&E's service territory in BY 2016, business customers represented approximately 160,000 electric meters with sales totaling \$1.9 billion or 58% of all SDG&E electric sales and 33,000 gas meters, representing sales of \$133 million or 30% of all SDG&E gas sales. Business Services (BuS) provides customer-focused education, expertise and analysis surrounding energy rates, tariff services, energy efficiency, demand response, safety, and regulatory information through various channels. BuS uses research studies and a collaborative process working with other SDG&E departments, customers and the business community to identify and provide value to its customers and seeks to continuously improve the quality and content of its support activities. To effectively meet the wide and growing array of business customers' complex energy needs, SDG&E delivers customer service through a team of highly trained and specialized personnel. BuS activities are broken down into two functional areas: Business Account Management and Customer Services Staff Support.

• Business Account Management

This workgroup takes a customer-centric approach to serving all business customers, large, medium, and small.

In BY 2016, large business customers represented energy usage totaling roughly 45% of all energy sales for business customers and combined utility bills of over \$795 million. Account management services are provided to large commercial, industrial, and governmental customers through an Account Executive (AE) team who are supported by management, staff and administrative personnel. Each AE manages an average of 800 electric and natural gas accounts (40-50 customers) and is assigned to a unique market segment to cultivate more in-depth market knowledge and provide tailored customized service. The interactions between an AE and the customer are critical to ensure that customers are well informed about rate and service options, have someone that is familiar with their large and more complex service needs, and who can resolve their unique service issues quickly, safely and reliably.

The AE provides the single point of contact with SDG&E for large business customers and assists them with billing questions, rate analysis, credit issues, inquiries regarding service or facility infrastructure changes, energy management questions, regulatory decisions, tariff

changes, other programs and services such as direct access or distributed generation, power quality, or general energy industry information.

In BY 2016, small and medium business customers represented approximately 180,000 electric and gas meters. The small and medium business customers look to SDG&E to provide them with information regarding energy issues that will directly impact their business, keep them apprised of regulatory matters and rate changes, present solutions on how to save money on their energy bill, and for safety-related messages. Unlike the large business customer who may employ skilled engineering staff to help them manage their energy usage, the small and medium business owners frequently fill multiple roles and may lack the expertise, background, or even the time to understand complex energy messages and offers. Because of the limited time and resources they can dedicate to energy issues, these customers rely on SDG&E to personalize the myriad of energy rate options and solutions for ease of use and understanding. These business owners may have language or cultural differences to overcome; therefore, communications must be clear and relevant to a diverse group of customers. These unique characteristics make this segment one of the most difficult to engage, such that targeted outreach campaigns and customized tailored treatments are the best approach to serve this customer base.

• Customer Services Staff Support

Customer Services Staff Support provides specialized assistance and expertise in many different areas including infrastructure project coordination, billing assistance services, reliability information, rate analysis, technical assistance on end use equipment, development of outreach tools and materials, and employee and customer education materials and training.

<u>Customer Energy Specialists</u> directly help small business and residential customers with more complex problems than the Customer Contact Center is able to resolve and that typically require a site visit for resolution. They work with the customer over the phone to explain rate options and billing issues and make site visits to further research and satisfy customer issues (billing, meter service, high bills), provide tips on how to reduce bills, and address any safety issues found.

The Planned Outage Coordination Team coordinates all planned outages for SDG&E. In BY 2016, the Planned Outage Coordination Team processed a total of 7,119 planned outages, impacting 25,465 commercial customers and 220,414 residential customers. Once a planned outage date has been established, all customers are notified via telephone, email (if available),

and direct mail a minimum of six days in advance of the upcoming outage. In addition, the Planned Outage Coordinator will contact directly, via phone, all life support and medical baseline customers who will be impacted by a planned outage. If the Planned Outage Coordinator is unable to reach a life support customer by phone or via message, they must attempt to make physical contact with the customer. Depending on the customer types impacted and nature of the planned outage, additional planning, coordination and communication beyond the standard messaging may be required.

Account, Billing and Rate Management Services are provided to business customers who have multiple or even hundreds of accounts. This function helps customers reconcile their bills and understand their rate options, credit requirements and service change requests.

<u>Infrastructure Coordination</u> works with the customer and SDG&E's Project Management group on construction projects, relocations, customer-requested maintenance outages, service upgrades, pulse meters to integrate meter data with customer energy management systems, and meter change outs. They develop the project scope, represent the customer's needs, explain utility requirements, and help the customer complete necessary documentation required for infrastructure projects.

<u>Safety and Critical Event Support</u> coordinates the safety education and outreach efforts to support all business customers. As a result of the wildfires in 2007, the winter storms in 2010, and regional earthquake activity, SDG&E identified a growing need to help its customers be better informed and prepared to respond to emergency situations regarding their energy service. Some of these activities are included in the RAMP 2016 embedded base costs shown in Table LD-6.

<u>Tariff Development and Review</u> monitors and participates in proceedings that impact large commercial and industrial and government customers, including but not limited to the Triennial Cost Allocation Proceeding (TCAP), Rate Design Window (RDW), Demand Response (DR) programs, and Net Energy Metering (NEM). The staff also prepares rate analyses for customers and provides internal and external rate training.

<u>Customer Choice team</u> is responsible for implementing and managing SDG&E's Customer Choice Programs, which include Electric Direct Access (DA), Community Choice Aggregation (CCA), the Noncore Gas Transportation Program for large customers, and the Core Aggregation Transportation (CAT) Program. This group performs a wide variety of functions to

support and educate customers seeking these alternate energy services. The Customer Support staff interfaces with Electric and Gas Energy Service Providers (ESP) daily, providing internal and external education, and proactive communication regarding the applicability and operations of the programs. In addition, this staff is responsible for customer and ESP contract management administration, compliance with Sarbanes Oxley (SOX), and conducting a biennial gas pipeline capacity open season.

Gas Transportation Administration provides gas aggregation and transportation services for SDG&E's core and noncore self-procurement customers. This activity involves working with customers and their third-party providers and managing the pipeline capacity open season. Every contract goes through a rigorous SOX compliance review and is approved by SDG&E management. SDG&E staff provides monthly balancing reports to customers and their gas providers and a monthly core storage report that highlights firm withdrawal rights or injections.

Special Contracts and Services supports development of special contracts to meet the needs of customer projects that don't conform to existing rules and yet provide value to, and do not harm, our customers. These special contracts require analysis to ensure that these customers' interests are not being cross-subsidized. Each year there are unique proposals that SDG&E needs to assess and, if needed, file with the CPUC.

Business Services Outreach disseminates energy education materials, including regulatory proceedings and mandated communications, emergency event and safety communications, quarterly customer newsletters, rate updates, and other information important to customers. In addition, as more energy-related legislation and regulation is enacted, customers look to SDG&E to help them understand new requirements, steps they must take to be compliant, and how this will impact their day-to-day business operations, energy consumption and costs. SDG&E is continually developing new educational materials, seminars and workshops to address the growing demand for information that will support business customers in their efforts to become more sustainable, and to understand the impact of changes to regulations and legislation.

2. Forecast Method

I chose a base year forecast method for TY 2019 GRC because the business has changed significantly due to Small and Medium Business (SMB) TOU Default. Starting in 2015, a special task force was created to assist SMB Customers with making decisions in regards to their

pricing plan. Additional self-service tools were added to aid in customer understanding of their pricing options while reducing reliance on support staff. Furthermore, BY 2016 labor and non-labor costs are more reflective of the costs needed to support increasing customer interactions. Therefore, the base year provides a reasonable starting point for future expenditures.

3. Cost Drivers

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Table LD-13 below summarizes the changes in Business Services estimated expenses for TY 2019.

TABLE LD-13
Changes in Business Services TY 2019 Estimated Expenses

	TY 2019 - 2016 Change (000s)				
Business Services	Labor	Non- Labor	Total	FTEs	
AB802 (Commercial Benchmarking)	100	80	180	1.0	
Business Optimization (FOF)	-405		-405	-5.0	
Total TY 2019 Impact	-305	80	-225	-4.0	

a. AB802 – Commercial Benchmarking Support

I am requesting \$100,000 in labor for a Benchmarking Administrator and \$80,000 in non-labor above the BY 2016 to support the ongoing expenses related to California AB802. This Administrator will work with building owners, their agents and customers to process AB802 requests in compliance with AB802 and CEC Benchmarking Regulations. AB802 was signed into law in October 2015 to provide building owners with the ability to request and obtain energy usage data so they can benchmark their buildings. To comply with the provisions of the statute and with the subsequent Benchmarking Regulations being developed and promulgated by the CEC, SDG&E is building new systems to automate and process the requests from building owners. The \$80,000 in non-labor will cover license fees, monthly maintenance and hosting costs, and necessary enhancements to the systems.

b. Business Optimization - FOF

The BuS TY 2019 forecast reflects a (\$405,000) reduction in labor for the various process improvements across this business unit. In BY 2016 BuS identified processes within the

¹⁴ Benchmarking is the process of measuring a building's energy consumption and comparing it against past performance and to other similar buildings. The Environmental Protection Agency (EPA) uses ENERGY STAR® Portfolio Manager to benchmark and rank a building's energy performance on a scale of 1 to 100 (a score of 75 means a building performs better than 75% of similar buildings nationwide).

organization that needed detailed analysis and redefinition. Once implemented, these process improvements are anticipated to result in organizational efficiencies and labor savings.

4. Memorandum Account – AB802 Commercial Benchmarking

The AB802 Commercial Benchmarking memorandum account was established through Advice Letter 2870-E/2463-G to comply with the AB802 Statute discussed above and the subsequent benchmarking regulations being developed by the CEC. Section 5 of AB802 adds Cal. Pub Res Code §25402.10(g), which states, "The reasonable costs of an electrical or gas corporation in delivering electrical or gas usage data pursuant to this section or other information as required under state or federal law or by an order of the commission shall be recoverable in rates evaluated and approved by the Public Utilities Commission." The Memorandum Account covers the costs associated with the AB802 project work, IT system costs, and business change management activities. IT system costs include the design, development, implementation and testing of a new application to process AB802 benchmarking requests, integration with EPA Portfolio Manager, and modifications and integrations to SDG&E internal systems. Business change management activities include, but are not limited to, the development and implementation of new business processes, changes to the SDG&E website, development of communication and training materials, and the delivery of training. Based on the foregoing, the costs recorded by SDG&E are in compliance with AB802, are reasonable, and should be approved by the Commission. Upon approval, this account will be closed. Additional information regarding regulatory accounts is provided in the direct testimony of SDG&E Regulatory Account witness Norma Jasso (Exhibit SDG&E-41). The Table LD-14 below shows the activity in this memorandum account.

TABLE LD-14 AB 802 Memo Account – Electric

Year	Expenses	Interest	Ac	count Balance
2016	89,871	120	\$	89,991
Jan-Jun 2017	56,518	504	\$	147,013

AB 802 Memo Account - Gas

Year	Expenses	Interest	Acc	count Balance
2016	42,293	57	\$	42,350
Jan-Jun 2017	26,596	238	\$	69,184

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C. Marketing, Research & Analytics

Table LD-15 below summarizes SDG&E's requested TY 2019 expenses for Marketing, Research & Analytics (MRA).

> TABLE LD-15 Forecast for Marketing, Research and Analytics

CS - INFORMATION & TECHNOLOGIES (In 2016 \$)			
A. Customer Service Information	2016 Adjusted- Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
3. Marketing, Research, & Analytics	6,219	8,574	2,355
Total	6,219	8,574	2,355

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1. **Description of Costs and Underlying Activities**

The MRA department is responsible for a wide variety of activities, which include developing strategic marketing plans, execution of communication tactics across various channels (such as mass, direct, social and digital), oversight and management of SDG&E's websites, conducting qualitative and quantitative customer research and analytics, supporting statewide collaboration regarding various marketing initiatives, and providing key services through mobile application development and management.

The primary functional areas managed by the MRA department include:

Mass Communication

SDG&E proactively communicates to customers and stakeholders via mass and targeted channels to increase customers' awareness, understanding, and engagement with SDG&E services and solutions. This includes marketing of rates and numerous programs, as well as communication and education about safety and emergency preparedness. For example, SDG&E communicates annually via targeted messaging to customers in the high fire risk areas of San Diego to promote safety and outage preparedness. In addition, an annual campaign is launched to inform customers about seasonal energy use issues, such as the impact of air conditioner use and changes to baseline allowances, as well as energy safety. Some of these activities are included in the RAMP 2016 embedded base costs shown in Table LD-6.

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Digital

MRA provides oversight and management of sdge.com, the company's mobile app, and the customer facing aspects (graphics and content) for the My Account website, including

- addressing accessibility standards for customers with disabilities. Examples of website management activities include:
 - daily updates of information on customer service changes and refinements;
 - development and posting of new information;
 - daily section content updates; and
 - development of new sections as informational needs arise.

Website visits have seen steady increases from the beginning of 2014 to the end of BY 2016. From 2014 to BY 2016, page views have increased 44% from 13.2 million to 19.1 million. At the same time the number of users has increased from 3.1 million to 4.1 million, a 29.8% increase. Over the same period, the viewer time visiting the site has increased from 2:36 minutes to over 3 minutes. Figures LD-2 and LD-3 show the highlights from Google Analytics for sdge.com for the years 2014 and 2016.

FIGURE LD-2 2014 Web Site Visits Overview

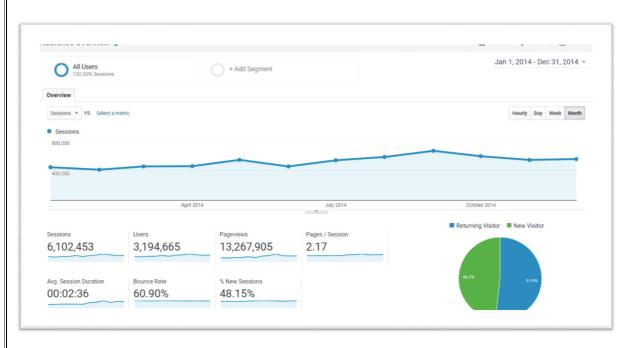
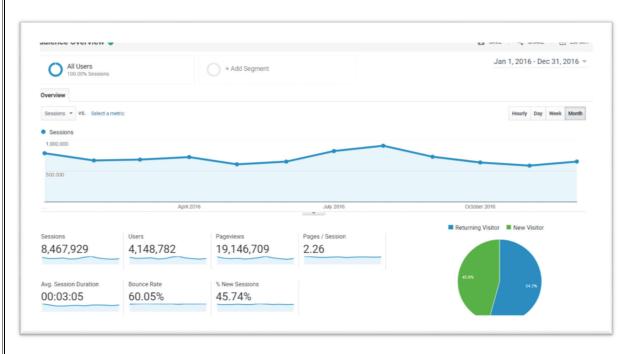


FIGURE LD-3 2016 Web Site Visits Overview



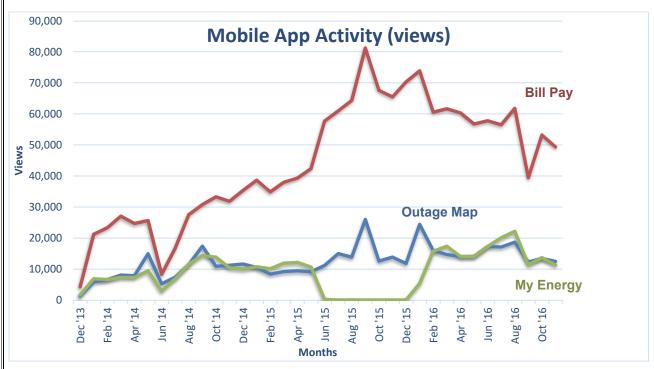
Mobile Applications (APP)

MRA is responsible for the App development and management across iOS and Android platforms, which provides key services for customers. Functionality includes Bill Pay, My Energy, Outage Map, Energy Cost Calculator, and Report an Outage.

Additional support of the growth of digital engagement can be seen by the level of activity on the SDG&E App. The figure LD-4 below shows activity data (views) for three of the most popular functions available in the App:

- Bill Pay: this functionality displays the account balance and due date as well as various options to make a payment.
- Outage Map: enables users to view outage activity in the sdge.com service territory via the mobile app and filter outages by "Unplanned, Planned Active and Planned Future."
- Energy use charts (My Energy): this online tool provides customers with a customized overview of how much and when their home uses energy and lists additional resources, such as personalized energy-saving recommendations, pricing plan options and alerts and subscriptions.

FIGURE LD-4 Mobile App Activity Comparisons



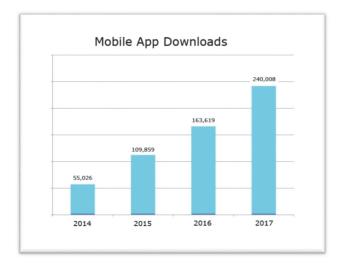
An additional piece of information related to digital engagement shows the upward trend of people registered for SDG&E's My Account tool and the number of mobile app downloads since 2013, as shown in Figures LD-5 and LD-6 below.



FIGURE LD-5







 January

 2014
 2015
 2016
 2017

 My Account Registered Users
 730,131
 795,152
 858,315
 913,113

 Mobile App Downloads
 55,026
 109.859
 163,619
 240,008

As shown by these figures, there is a steady increase in the customer interactions on SDG&E's digital channels and this trend is expected to continue. SDG&E's objective is to provide an excellent digital customer experience and ensure that it is easy for customers to transact with us.

• Collateral Design and Production

MRA leads and manages the creation of printed and electronic outreach materials (developed internally or by an external agency) that meet marketing and communication objectives and align with the overall SDG&E brand identity. These materials can be printed, delivered digitally through SDG&E's website or via email, or both.

• Research & Analytics

MRA is responsible for analyzing customer insights stemming from primary customer research, secondary sources, and analytics to assist decision-making throughout the organization in support of SDG&E's business strategies and goals. This includes both qualitative and quantitative research to measure and evaluate customer perceptions, preferences, feedback on quality of service delivered, anticipation of future needs and preferences, as well as conducting analysis utilizing internal customer data and third-party data. Research and analytics enrich our understanding of customer expectations, needs and behaviors, and enable not only service

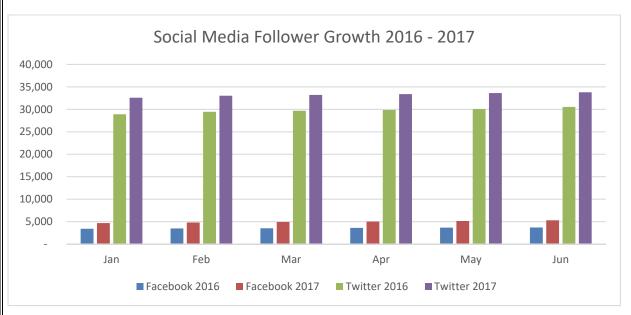
improvement but also the execution of targeted marketing, education and outreach efforts with tailored messages for a wide variety of audiences.

• Social Media Engagement

 MRA engages customers through social media channels, such as Facebook and Twitter, to communicate service offerings, outage updates, emergency and safety messages. Social media is a growing consideration in all our communications efforts, with planning and strategies included in the initial development stages of marketing plans.

In addition to a significant increase of visits to the website, sdge.com, figure LD-7 below shows the steady growth in engagement with our social media channels. Data for the first six months of 2017 (January through June) is compared to the same time frame in 2016 to illustrate this growth trend. Figure LD-8 and LD-9 shows SDG&E's Twitter and Facebook homepages respectively.

FIGURE LD-7 Social Media Follower Growth from 2016 to 2017



	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Facebook 2016	3,413	3,492	3,517	3,616	3,665	3,710	3,795	3,845	4,068	4,105	4,161	4,350
Facebook 2017	4,683	4,799	4,935	5,019	5,153	5,297						

Twitter 2016	28,891	29,444	29,678	29,842	30,055	30,526	30,785	31,193	31,442	31,767	32,039	32,285
Twitter 2017	32,571	33,013	33,196	33,373	33,605	33,778						

LCD-32

FIGURE LD-8 SDG&E's Twitter Homepage

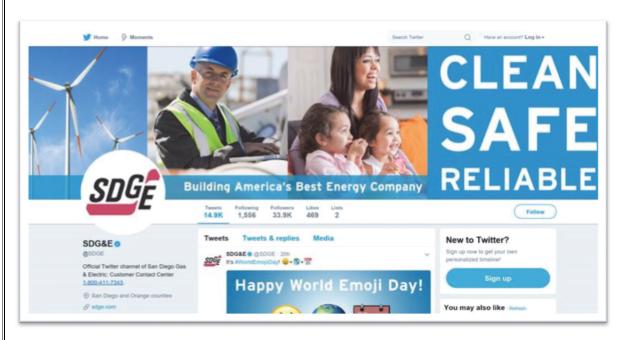


FIGURE LD-9 SDG&E's Facebook Homepage



2. **Forecast Method**

I chose a base year forecast method for TY 2019 because the last recorded year accurately reflects the expense level associated with current and forecasted departmental activity.

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Non-labor has exhibited an overall downward trend during the 2012 - 2016 time-period, although the communication related to rates and energy pricing will continue to increase as residential rate reform progresses. Therefore, the base year provides a reasonable starting point for future expenditures.

3. Cost Drivers

Table LD-16 summarizes the changes in the MRA estimated expenses for TY 2019.

TABLE LD-16 Changes in Marketing, Research, and Analytics TY 2019 Estimated Expenses

	TY 2	019 - 2016 Change (000s)			
Marketing, Research, and Analytics	Labor	Non- Labor	Total	FTEs	
Rate Education & Outreach		1,700	1,700		
Marketing Automation		70	70		
Outage Communication		72	72		
Customer Insight - Surveys		185	185		
Multicultural Campaign		450	450		
Contact Information Campaign		250	250		
RAMP-Summer and Winter Prep Communication		100	100		
Business Optimization: FOF		-472	-472		
Total TY 2019 Impact		2,355	2,355	•	

a. Rate Education and Outreach

I am requesting \$1,700,000 in non-labor above the BY 2016 to educate customers about the changing landscape of energy pricing and new rate options. In SDG&E's TY 2016 GRC, 2015-2018 was described as a time of tremendous change for customers as rate reform is being implemented. Rate reform will bring new pricing options to customers and require them to have an increased level of involvement with the management of their energy use. To assist customers with this process, SDG&E proposed to increase communications using a wide range of available channels to offer information to help inform and educate them about the changes occurring and options available. Funding to support new rate options and programs was approved in the TY 2016 GRC case D.16-06-054. However, due to various reasons, rate reform has progressed at a slower pace than anticipated and not all of the outlined planned activities were implemented in BY 2016 due to the change in timing.

It is now expected that most marketing, education and outreach for the implementation of a new High Usage Charge (HUC) and transition to default TOU pricing plans will occur from

2017 to 2020. Building awareness and preparing customers for new rates and rate changes is as critical now as before. The above request will enable us to educate SDG&E's customers on upcoming changes related to activities such as the HUC, the concept of "When You Use Energy Matters," TOU period changes, and the distribution of bill comparisons. This funding request also includes research studies to measure the effectiveness of the deployed communications activities. In addition, SDG&E will apply marketing automation techniques that enable streamlining of digital processes and faster reporting on results.

The communication channels to be used may consist of mass media (*e.g.*, television, print, radio), targeted tactics (*e.g.*, direct mail, email, bill inserts, and collateral), as well as outreach activities such as events and workshops.

Customer research will be used to measure effectiveness and refine messaging specific to the rate reform communications and education efforts. Based on the complexity and evolving nature of the messaging that will be needed to create a positive experience for customers, and behavior changes that may be needed for them to understand that it matters what time of the day they use energy to be successful on a TOU rate, I believe the amount of base GRC funding requested is necessary and appropriate.

Messages during this time will evolve and progress from preparing people for the coming changes and explaining the details of these changes, to explaining the reasons and benefits to customers of time variant rates, and ultimately when to expect the changes to affect their bills.

The audience for these messages includes all residential customers, which covers a broad spectrum of demographics and segments of customers. This includes multicultural, non-English speaking, low income, high energy users, as well as hard to reach customers.

The strategy is to build on previous communications efforts SDG&E undertook in the 2015 and BY 2016 timeframe and to leverage the Rate Reform Marketing, Education and Outreach (ME&O) plan that was filed November 1, 2016 in Advice Letter (AL) 2992-E. This plan is designed to achieve goals to increase customers' awareness, understanding, and engagement with rate options, and energy management tools and behaviors that help manage energy use, and increase adoption and retention of customers on TOU. Rate Reform ME&O

expenses in excess of the amount of TY 2019 GRC funding requested here will be recorded to the RRMA.¹⁵

b. Marketing Automation

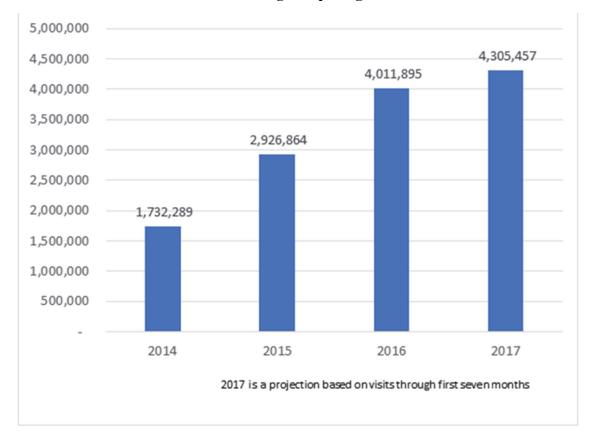
I am requesting \$70,000 in non-labor above the BY 2016 for marketing automation software and licensing costs. The marketing automation software/licensing costs pertain to the use of online customer behavior tracking tools for gathering information related to digital activity specific to the website, digital ads, and emails. This tracking allows for customizing a user's digital experience to offer up the most relevant content based on behavior, therefore increasing efficiency and effectiveness of communications via the digital platform.

c. Outage Communication

I am requesting \$72,000 in non-labor above the BY 2016 for an online map enterprise license used extensively for outage reporting and monitoring. The online map uses Google Maps, which requires an enterprise license to host SDG&E's Outage Map due to the volume of daily traffic to the site exceeding the threshold for free page views per day. The growth in overall traffic to the Outage Map is shown in the trend graph below. The Outage Map enables customers to get information about planned and unplanned power outages.

¹⁵ This memorandum account was established pursuant to Ordering Paragraph 12 of D.15-07-001.

FIGURE LD-10 SDG&E Outage Maps Page Views



d. Customer Insight - Surveys

I am requesting \$185,000 in non-labor above the BY 2016 for customer research activities. To meet changing customer needs and expectations, it has become even more important to identify specific needs and challenges for various subgroups of customers who may be underserved, hard-to-reach, residing in disadvantaged communities, or vulnerable in some way. This research would allow us to better understand their needs and apply those learnings to better serve them by providing more tailored communications and solutions that resonate with their unique differences and circumstances. To that end, SDG&E is requesting funding to conduct a Multicultural and Language Survey for \$115,000 and a Disability Needs Assessment for \$70,000. See below for details and timing for those studies:

• Multicultural and Language Survey

SDG&E is planning to gather insights from segments of customers who have not traditionally been spotlighted in SDG&E consumer research, to support increased understanding

of customers, their perceptions, behaviors, and channel preferences in order to effectively provide relevant information and solutions to them. The data collected will help inform a new multicultural campaign scheduled to launch in 2019, with the study conducted prior to the campaign launch. Several target audiences are of interest, such as Chinese, Filipino, Vietnamese and African Americans, as well as residents of disadvantaged communities.

• <u>Disability Needs Assessment Survey</u>

SDG&E seeks to enhance our understanding of the communication and engagement needs and preferences of hearing and vision challenged customers. This is an area that has traditionally not been a focus of past customer research. With our diverse population, and ever changing needs of customers with vision and hearing challenges, it is critical that SDG&E has a mechanism in place to assess, understand, and address their needs, preferences and any potential communication gaps with this audience.

e. Multicultural Campaign

I am requesting \$450,000 in non-labor above the BY 2016 for a multicultural campaign. This campaign leverages the Multicultural and Language Survey as described in the previous section. Various communication channels such as newspaper ads, emails and digital ads will be used to promote available customer services such as bill payment assistance, appliance safety checks, and Level Pay, among others, to create awareness of these services for hard-to-reach customers. Costs are based on historical figures for prior use of these channels and an anticipated campaign to last between nine to ten months per year, plus creation of materials. This effort would target the leading Asian languages in the area (Vietnamese, Chinese, Tagalog) plus residents of disadvantaged and low-income communities.

f. Contact Information Campaign

I am requesting \$250,000 in non-labor above the BY 2016 for a contact information campaign. This effort would use various offers to encourage customers to provide updated contact information to allow for more effective, fast and efficient communications, via email, mobile phone, and text, on critical topics such as outage information, safety messaging (e.g., appliance checks), and offering relevant and timely solutions. Updated contact information will ensure that important communications reach the right customers at the right time.

g. RAMP – Summer and Winter Prep Communication

I am requesting \$100,000 in non-labor above the BY 2016 for an expansion of existing summer and winter season messaging described in Chapter 3¹⁶ of the RAMP Report (Employee, Contractor and Public Safety), pertaining to the importance of safe energy use and changes that occur during the seasons. Mediums include bill inserts, print ads, radio spots, the web, and social media. Messaging examples include CO safety, fumigation information, and safe furnace use. These additional funds will provide for a greater level of radio media exposure and additional emails being sent to selected target audiences.

h. Business Optimization - FOF

The MRA TY 2019 forecast reflects a (\$472,000) reduction in costs related to mass media purchases as well as procurement strategy optimization. Based on the business optimization efforts, the purchasing of mass media with a negotiated rate would be done at the beginning of the year for planned advertisement placements. Rates would be negotiated for the entire year for this spending rather than on a project by project basis and will have a benefit of (\$25,000). Furthermore, as discussed in the testimony of Witness Denita Willoughby (Exhibit SDG&E-20), Supply Management focuses on optimizing procurement strategies for business units across the companies. Supply Management benefits for the Customer Service Information and Technology areas are (\$447,000).

4. Memorandum Account - RRMA

I am providing the business justification for the costs incurred for rate reform activities from January 1, 2016 through June 30, 2017, that have been posted to the RRMA.¹⁷ This memorandum account was established pursuant to Ordering Paragraph 12 of D.15-07-001. The RRMA is used to track verifiable incremental costs in the following categories: (i) TOU pilots, (ii) TOU studies, including hiring of a consultant or consultants to assist in developing study parameters, (iii) ME&O costs associated with the rate changes approved in that Decision, and

¹⁶ I.16-10-015/I.16-10-016 Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company (Nov. 30, 2016).

¹⁷ SDG&E filed a Tier 1 Advice Letter 2769-E on July 31, 2015, to establish the Rate Reform Memorandum Account (RRMA), which was approved September 22, 2015 by letter from the Director of Energy Division and effective July 31, 2015.

(iv) other reasonable expenditures as required to implement that Decision. The Table LD-17 below shows the activity in this memorandum account.

TABLE LD-17
Rate Reform Memo Account

			Account
Year	Expenses	Interest	Balance
2016	3,739,910	8,838	\$3,748,748
Jan-Jun 2017	2,089,506	19,985	\$5,858,239

Additionally, in a Ruling¹⁸ issued on March 14, 2016, the Administrative Law Judge (ALJ) directed the Investor Owned Utilities (IOUs) to provide additional information on costs incurred to implement Residential Rate Reform (RRR) changes.

Specifically, the Ruling states "The utilities must provide the information necessary for the Commission and parties to understand the marketing and other expenditures made to date to implement the rate changes. As stated above, the [Progress of Residential Rate Reform] (PRRR) report must reference any marketing or other expenditures that the utility has indicated to the Commission will not be included in the RRMA. In order to make review of cost recovery applications more transparent, this list of excluded amounts should also be footnoted in any future cost recovery application. Furthermore, any such expenditures excluded from the RRMA must be itemized and labeled consistently in the PRRR report and may not be included, embedded, or recovered in any other memorandum or balancing account in any future cost recovery proceeding." SDG&E's PRRR reports can be found on the CPUC's website at http://www.cpuc.ca.gov/General.aspx?id=12154.²⁰

TOU pilot expenses are for activities pertaining to the Opt-in and Default pilots, and include pilot planning and design (including expenses for consultants to develop studies), ME&O, pilot measurement and evaluation, customer insights and support, and technology treatments and customer recruitment for the Opt-in TOU Pilot. These estimated budgets were vetted and approved via AL–2835-E-A and Resolution E-4769 (Opt-in TOU Pilot) and SDG&E

¹⁸ E-Mail Ruling Setting Forth Requirements for Future Advice Letter Filings and Notifying Parties of Next Progress on Residential Rate Reform Workshop and Other Procedural Matters.

¹⁹ *Id*. at 6.

²⁰ Rate Reform costs excluded from the RRMA from August 1, 2015 through June 30, 2017 total \$5.081 million, per page 18 of SDG&E's Eighth Quarterly PRRR Report submitted August 1, 2017.

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AL 3020-E, 3020-E-A and 3020-E-B and Resolution E-4848 (Default TOU Pilot). The TOU pilots had extensive support and input from the TOU working group, and were conceived after SDG&E's TY 2016 GRC was filed, and as such these expenses are incremental and reasonable.

SDG&E enrolled approximately 16,000 customers onto its Opt-in TOU pilots, which began in June 2016. Customers were enrolled onto one of three TOU rates (treatment customers) or remained on the tiered rate (control customers). These pilots compared the load and bills between treatment and control customers, as well as their responses to an extensive survey. Figure LD-11 below shows the pilot participation across all three Opt-in TOU Pilot rates.

FIGURE LD-11

Pilot Participation- As of June 23, 2017



Pilot	Pilot Group	# of Customers	Drop O	# of Active		
Group #	Filot Group	Enrolled	Rate 1	Rate 2	Rate 2 Control Group	
1	Hot	432		60/15		357
2	Cool, Non CARE	4008	196/23	331/36	199/2	3221
3	Cool, CARE	3808	204/15	357/23	227/3	2979
4	Moderate, Non CARE	3946	169/40	338/62	186/1	3150
5	Moderate, CARE	3610	210/29	359/35	188/4	2785
	Totals	15,804	779/107	1445/171	800/10	12,492

Note- 2,664 of the overall Ineligibility count is due to Finaled Accounts.

Opt In Rate Options

Experimental Rate E1

- 3,268 customers assigned to E1
- June 2016 Dec 20173 TOU Periods- On Peak, Off
- Peak, Super Off Peak
- 4-9pm On-Peak

Experimental Rate E2

- 5,885 customers assigned to E2
- June 2016 Dec 20172 TOU Periods- On Peak, Off
- Peak
 4-9pm On-Peak

Control Group

- 3,339 customers assigned to Control Group
- June 2016 Dec 2017
 Remain on Residential DR or DR-LI rate

Experimental Rate E3

- 61 enrolled participants
- Hourly dynamic rate, includes:
 - Monthly service fee (\$10)
 - Prices that vary hourly
 - Dynamic rate components

 Net surplus energy credits

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SDG&E plans to transition 100,000 to 125,000 customers to default TOU pricing in March 2018 based on their billing cycle. To account for customers who opt out, close their account, or transfer service, SDG&E will send out default notifications to approximately 125,000 to 150,000 randomly selected, eligible residential customers. An initial awareness communication will be distributed in October 2017, six months in advance of the customer defaulting. The primary default notification including rate comparisons and other information will occur in January 2018, 60 days prior to transitioning customers in March 2018. A reminder communication will be sent 15 to 30 days prior to the customer transitioning. Default pilot

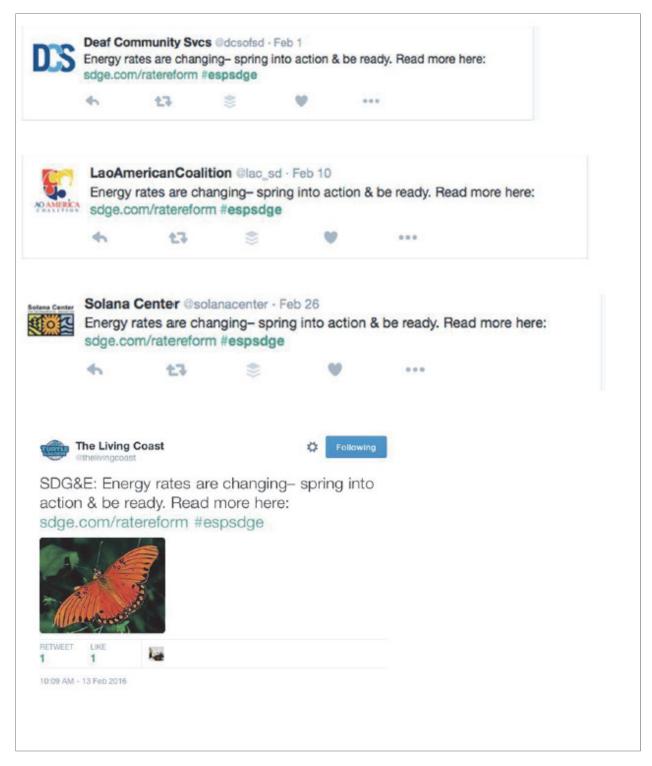
customers will receive ongoing communications, including summer and winter pricing information and end of bill protection notification. SDG&E will test two default tariffs, which are structurally the same as the E1 and E2 TOU rates tested in SDG&E's Opt-in TOU Pilot. SDG&E's default pilot plan will help to ensure SDG&E's business processes and operational systems are functional and its ME&O efforts are fine-tuned in preparation for the full roll-out of TOU default pricing to eligible residential customers in 2019.

As previously stated, SDG&E filed its Rate Reform ME&O plan in November 2016 in AL 2992-E. The plan is designed to achieve goals to increase customers' awareness, understanding, and engagement with rate options and energy management tools and behaviors that help manage energy use, and increase adoption and retention of customers on TOU. In that plan, SDG&E states that ME&O activities contained in the plan and related incremental costs that exceed the [TY 2016] GRC Phase 1 authorized marketing budget will be tracked and recorded in the RRMA.

ME&O expenses recorded in the RRMA to date are for activities such as outreach efforts to vulnerable customer segments and the SDG&E partner network, which was specifically directed in the Rate Reform Decision, Greenberg Inc. consultant fees, which was directed by an Assigned Commissioner and ALJ Ruling issued in December 2015,²¹ and marketing automation for a website pixel tracking tool. Figure LD-12 below shows examples of SDG&E's Partner Network delivering Rate Reform messaging via social media.

²¹ December 17, 2015 Assigned Commissioner and ALJ's Ruling Requiring Utilities to Prepare Comprehensive Marketing, Education and Outreach, Metrics, Goals and Strategies for RRR.

FIGURE LD-12 SDG&E's Rate Reform Messaging via Partner Network



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Based on the foregoing, the costs recorded by SDG&E are in compliance with D.15-07-

001, are reasonable, and should be approved by the Commission. Additional information

1 regarding regulatory accounts is provided in the direct testimony of SDG&E Regulatory Account 2

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witness Norma Jasso (Exhibit SDG&E-41).

D. Customer Programs, Pricing, and Other Office (CP&P)

Table LD-18 below summarizes SDG&E's requested TY 2019 expenses for CP&P.

TABLE LD-18 Forecast for Customer Programs, Pricing, and Other Office

CS - INFORMATION & TECHNOLOGIES (In 2016 \$)			
A. Customer Service Information	2016 Adjusted- Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
4. Customer Programs, Pricing, and Other Office	5,226	6,405	1,179
Total	5,226	6,405	1,179

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1. **Description of Costs and Underlying Activities**

CP&P consists of the Vice President of Customer Services and three key groups: Customer Assistance Programs (CAP), Customer Solutions and Customer Pricing. These groups are collectively responsible for analytical, technical and policy support for development of valueadded customer solutions as well as rate design, strategy, electric load analysis, and demand forecasting.

The primary activities and functions covered under CP&P are provided below.

Customer Assistance

SDG&E's Customer Assistance group delivers programs and services to income qualified and special needs customers. The State mandated California Alternate Rate for Energy (CARE) and Energy Savings Assistance (ESA) programs are managed by Customer Assistance, but these program costs are funded through the Public Purpose Surcharge and not through base rates. Specific non-refundable Customer Assistance activities are described below.

NGAT or CO testing, is a safety-related program for Customer Assistance's ESA Program participants. As described in Chapter 3²² of the RAMP filing (Employee, Contractor and Public Safety), SDG&E conducts CO testing on homes weatherized through the ESA Program in accordance with the Statewide Energy Savings Assistance Program Installation

²² I.16-10-015/I.16-10-016 Risk Assessment and Mitigation Phase Report of San Diego Gas & Electric Company and Southern California Gas Company (Nov. 30, 2016).

Standards and the Statewide Energy Savings Assistance Program Policy and Procedures Manual. CPUC directives order SDG&E to charge the costs for the NGAT program to base rates rather than to the Public Purpose program funds.²³

Medical Baseline Program provides additional baseline allowance to customers that have certain medical conditions that require life support equipment or have increased heating or air conditioning needs due to their medical condition. Costs for managing this program include program administration, collateral materials, applicant enrollment, and education and outreach efforts.

Neighbor to Neighbor Program provides bill payment assistance of up to \$200 per year to customers experiencing financial hardship. This program is not income based, and is open to customers who are experiencing a temporary financial hardship and do not qualify for state or federal assistance. O&M expenses are related to program management, including outreach and the cost of collateral materials.

Low Income Home Energy Assistance Program (LIHEAP) is a federally funded assistance program administered by the state that provides bill payment assistance and home weatherization services to income qualified customers. SDG&E works with contracted LIHEAP agencies to ensure that payments are received and applied correctly to customers' bills. Although the LIHEAP program is funded externally, SDG&E's costs support customer outreach and administration of this program.

Customer Solutions

The Customer Solutions group is responsible for investigation, selection and development of value-added customer solutions within the Customer Programs department. This includes identifying customer needs, creating plans to bring customer solutions to market, and working with internal and external organizations to define and implement identified solutions. The Customer Solutions group develops and manages services that help customers save time and money through both energy and non-energy-related services that complement SDG&E's core business.

²³ D.08-11-031 Ordering Paragraph 65; D.05-04-052 Finding of Fact 10; D.00-07-020 Finding of Fact 44.

• Customer Pricing

Customer Pricing transferred to the Customer Services division from Regulatory Affairs in 2014, and includes the following groups and functions.

<u>Electric Rates</u>, which develops the electric rates to ensure accurate recovery of authorized revenue requirements.

<u>Rate Design and Strategy</u>, which develops cost-of-service studies, revenue allocation and electric rate design, analyzes ratemaking policies and options, and supports these issues in various regulatory filings.

Electric Load Analysis, which analyzes and studies customer data and load information.

<u>Electric Demand Forecasting</u>, which provides near-term and long-term forecasts of energy usage at the system and class level.

• Vice President of Customer Services

The Vice President of Customer Services is responsible for oversight of the entire Customer Services organization that is being represented in the TY 2019 GRC by three different witnesses: Customer Services Field is being represented by Gwen Marelli (Exhibit SDG&E-17), Customer Services Office Operations is being represented by Jerry Stewart (Exhibit SDG&E-18), as well as the areas represented in this exhibit.

2. Forecasting Methodology

I chose a base year forecast method for TY 2019 for CP&P because the last recorded year accurately reflects the expense level associated with current and forecasted departmental activity. The Customer pricing group continues to expand to meet the demands created by numerous rate related activities resulting from increasing legislative and regulatory requirements, rate analysis, and development of rate options. Therefore, the base year provides a reasonable starting point for future expenditures.

3. Cost Drivers

Table LD-19 summarizes the changes in the Customer Programs, Pricing, and other Offices estimated expenses for TY 2019.

TABLE LD-19
Changes in Customer Programs, Pricing, and Other Office TY 2019 Estimated Expenses

	TY 2019 - 2016 Change (000s)					
Customer Programs, Pricing, and Other Office	Labor	Non- Labor	Total	FTEs		
Customer Pricing – full year labor & non-labor						
impact	156	469	625	2.0		
Customer Pricing Regulatory Compliance	332	9	341	3.0		
Medical Baseline (MBL) System Upgrades		97	97			
Neighbor to Neighbor (NTN) System						
Enhancements		20	20			
RAMP – Natural Gas Appliance Testing (NGAT)		141	141			
Business Optimization (FOF)	-45		-45	-0.5		
Total TY 2019 Impact	443	736	1,179	4.5		

a. Customer Pricing – Full Year Labor and Non-Labor Impact

I am requesting \$156,000 in labor above the BY 2016 to create a full year impact for Customer Pricing Rate Support staff who were hired during 2016. Additionally, I am requesting \$469,000 in non-labor incremental to the 2016 base year for the Dynamic Pricing load impact studies. D.08-04-050 requires that SDG&E perform annual studies of all DR activities using the adopted load impact protocols. That Decision also requires SDG&E to file reports consistent with the protocols annually on April 1 of each year. The Decision defined the phrase "DR Activities" to include event based pricing rates, TOU rates and real-time pricing rates. In addition, section 7.3, page 19 of D.12-12-004, which adopts critical peak pricing and TOU rates for residential and small non-commercial customers, requires SDG&E to separately report the load reduction achieved through these rates annually for TOU, commercial critical peak pricing and residential critical peak pricing rates. Ordering Paragraph 15 on page 73 of D.12-12-004 states that SDG&E can request cost recovery in a future GRC for ongoing costs related to dynamic pricing.

The TOU load impact studies follow the demand response summer event season that concluded on October 31, 2016. The consultants typically issue their data requests to begin the load impact evaluations shortly thereafter. Hence, the invoice costs for the months of October and November are lower than the subsequent months as the evaluation activities ramp up, and the December invoices are typically received in the middle of January. Therefore, most of the costs associated with load impact studies for the DR program year 2016 are captured in the first

four months of 2017. Based on the Decision summarized above, these load studies reports are due on April 1 annually, with workshops and other databases provided after that date. The full amount will be spent annually going forward, so an adjustment is needed to create a normalized year of costs for load impact studies.

b. Customer Pricing Regulatory Compliance

I am requesting \$332,000 in labor and \$9,000 in associated non-labor above the BY 2016 for Customer Pricing. This increase is the result of increasing legislative and regulatory requirements regarding the analysis and development of rate options, which include growing requirements for data provided, such as population of bill impacts and segmentation. In addition, changes in customer energy usage and the utility grid result in the need for more analysis to better understand customer needs and the impacts to utility cost of service as well as continued granularity in forecasting methodologies.

c. Medical Baseline (MBL) Recertification Process and Related System Enhancements

I am requesting \$97,000 in non-labor above the BY 2016 to support the MBL program's growth in customer enrollments, letter recertification process, and related system enhancements. The recertification letter process for MBL is moving to a new fulfillment house. The new fulfillment house employs more stringent protection for customer privacy through greater quality control protocols, which results in associated higher cost for services (printing, stamping, postage) and mailing of letters.

Furthermore, the MBL system will require system enhancements and program website updates. The current MBL recertification website hosted by a third-party vendor is utilizing obsolete technology and needs enhancements to keep pace with technology standards and customer expectations. For example, the current MBL recertification website does not have mobile versioning capabilities, which is important because many customers depend solely on their mobile phones for access to the internet. Furthermore, the MBL website needs to be enhanced to allow for the uploading of applications and documents directly into the system for customer convenience and faster processing.

d. RAMP – CO Testing/NGAT

I am requesting \$141,000 in non-labor above the BY 2016 to support an expected increase in NGAT, CO testing. NGAT, or CO testing, is a safety-related program for Customer Assistance's ESA Program participants as outlined in the RAMP Filing for Employee,

Contractor and Public Safety (Chapter SDG&E-3).²⁴ The purpose of this program is to test inhome appliances for CO hazards for homes that are weatherized through the ESA Program. SDG&E expects the percentage of NGAT treated homes to increase due to program rule changes adopted in D.16-11-022 to reduce barriers to participation, including offering measures that attract landlord agreement to participate and elimination of the ten-year go-back rule. CPUC directives require SDG&E to charge the costs for the NGAT program to base rates rather than to the public purpose funds.²⁵

e. System Enhancements for Neighbor to Neighbor Data Base Move to Energy Efficiency Collaboration Platform (EECP)

I am requesting \$20,000²⁶ in non-labor above the BY 2016 to support a system enhancement related to the Neighbor to Neighbor Program (NTN). NTN information is manually tracked in spreadsheets making analysis and reporting of this data inefficient and cumbersome. To automate the NTN program process and eliminate the use of spreadsheets, a system enhancement to SDG&E's existing EECP is required. Once this program is automated, analyzing and responding to information requests will become more efficient and data integrity will improve.

f. Business Optimization - FOF

The CP&P TY 2019 forecast reflects a (\$45,000) reduction in labor for business optimization efforts around reporting. In 2016, internal reporting within CP&P was reviewed and various automation processes were identified that will reduce overall reporting workload when implemented.

IV. SHARED COSTS

This section presents SDG&E's estimated TY 2019 expenses for shared services that are required for both SoCalGas and SDG&E. I am sponsoring the forecasts on a total incurred basis, as well as the shared services allocation percentages related to those labor and non-labor costs. Those percentages are presented in the shared services section of my workpapers (Ex. SDG&E-19-WP), along with a description explaining the activities being allocated. The dollar amounts

²⁴ November 30, 2016 RAMP Report, Chapter 3.

²⁵ D.08-11-031 Ordering Paragraph 65; D.05-04-052 Finding of Fact 10; D.00-07-020 Finding of Fact 44.

²⁶ If the four year GRC cycle is adopted, as proposed in the testimony of Mr. Deremer (Exhibit SDG&E-43), then this calculation will need to be revised to reflect that.

allocated to affiliates are presented in our Shared Services Policy and Procedures testimony sponsored by James Vanderhye (Exhibit SDG&E-32).

A. Customer Service Technologies

Table LD-20 below summarizes SDG&E's requested TY 2019 expenses for Customer Service Technologies.

TABLE LD-20 Shared O&M Summary of Costs

CS - INFORMATION & TECHNOLOGIES (In 2016 \$) (In 2016 \$) Incurred Costs (100% Level) A. Customer Service Technologies	2016 Adjusted- Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
1. Business Strategy and Development	239	239	0
2. Low Emissions Vehicle Program	104	104	0
	343	343	•

B. Business Strategy & Development

Table LD-21 below summarizes SDG&E's requested TY 2019 expenses for the Business Strategy and Development shared service group.

TABLE LD-21 Forecast for Business Strategy and Development

CS - INFORMATION & TECHNOLOGIES (In 2016 \$)			
(In 2016 \$) Incurred Costs (100%			
Level)			
A. Customer Service Technologies	2016 Adjusted-	TY 2019	Change (000s)
	Recorded	Estimated	
	(000s)	(000s)	
1. Business Strategy and Development	239	239	0
Incurred Costs Total	239	239	0

1. Description of Costs and Underlying Activities

The Business Strategy and Development shared service cost center is comprised of various external information services used across the company. These subscription services are utilized to conduct research on market and industry trends, and business model and technology innovations in the power and utility sectors, peer benchmarking, analysts' reports, forecasts of

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2. **Forecast Method**

I chose a base year forecast method because 2016 represents the current activity level that is not expected to change. Therefore, the base year provides a reasonable starting point for future expenditures.

energy supply, demand, and pricing, among other items. Data gathered from the external

information services are utilized to support the company's business strategies and initiatives.

3. **Cost Drivers**

I am not requesting any additional dollars above the BY 2016 for Business Strategy and Development.

C. **Low Emission Vehicle Program**

Table LD-22 below summarizes SDG&E's requested TY 2019 expenses for the Low Emissions Vehicle Program.

> **TABLE LD-22** Forecast for Low Emission Vehicle Program

CS - INFORMATION & TECHNOLOGIES (In 2016 \$) (In 2016 \$) Incurred Costs (100%			
A. Customer Service Technologies	2016 Adjusted- Recorded (000s)	TY 2019 Estimated (000s)	Change (000s)
2. Low Emissions Vehicle Program	104	104	0
Incurred Costs Total	104	104	0

The Low Emissions Vehicle Program shared service cost center supports the SDG&E and

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1. **Description of Costs and Underlying Activities**

SoCalGas Low Emissions Vehicle Programs; providing Natural Gas Vehicle (NGV) utility

account management, customer information, education, and training services to the general

public, operators of NGVs, operators of NGV refueling stations, government agencies, and

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2. **Forecast Method**

others throughout the service territories of both SoCalGas and SDG&E.

I chose a base year forecast method because 2016 represents the current activity level and is not expected to change. Furthermore, this workgroup has one FTE whose work is not cyclical in nature and should remain constant for 2017 through TY 2019. Therefore, the base year provides a reasonable starting point for future expenditures.

3. Cost Drivers

I am not requesting any additional dollars above the BY 2016 for the Low Emissions Vehicle Program.

V. CAPITAL

I am sponsoring the business rationale for each of the following IT capital projects. The estimated capital expense requests are included in the testimony of Mr. Olmsted (Exhibit SDG&E-24). Table LD-23 summarizes the total capital forecasts for 2017, 2018, and TY 2019.

TABLE LD-23
Capital Expenditures Summary of Costs

INFO TECH/TELECOM CAPITAL			
Shown in Thousands of 2016 Dollars			
CS – Information & Technologies	Estimated	Estimated	Estimated
	2017	2018	TY 2019
A. Business Optimization	517	612	643
B. Improving Customer Experience	1,826	1,387	310
C. Mandated	18,240	19,110	865
Total	20,583	21,109	1,818

The detailed capital projects by category are summarized in Table LD-24 below.

TABLE LD-24 Capital Expenditures Summarized by Category

GRID WP#	Capital Project #	Capital Project Name	2017 Total (\$000)	2018 Total (\$000)	TY 2019 Total (\$000)
831H	T15831	Demand Response Management System Phase 1 (DRMS 1)	517	0	0
831A	T19003	Demand Response Management System Phase 3 (DRMS 3)	0	612	643
		Sub-Total Business Optimization	517	612	643
		My Account Reliability and System			_
811I	T16027	Investigation Request (SIR) Bundled Work	626	171	0
811L	T16036	Customer Authorization Project	1,200	0	0
831B	T19004	Gas Customer Choice Automation (GCCA)	0	1,216	310
		Sub-Total Improving Customer Experience	1,826	1387	310
811B	T19006	Residential TOU Default Pilot Program	8,482	15,548	865
811J	T15076	Residential Rate Reform (RROIR/RDW)	832	0	0
811M	T16037	Residential Rate Reform TOU	661	0	0
811D	T19007	GRC Phase II	5,833	3,562	0
811N	T16038	AB802 Benchmarking Project	919	0	0
		Enterprise Hourly Time of Use			
811H	T16033	Metering/Billing	1,513	0	0
		Sub-Total Mandated	18,240	19,110	865
			20,583	21,109	1,818

Business Optimization

Table LD-25 below shows a summary of the requested capital expenditures related to business optimization.

TABLE LD-25 Business Optimization Capital Summary

GRID WP#	Capital Project #	Capital Project Name	2017 Total (\$000)	2018 Total (\$000)	TY 2019 Total (\$000)
831H	T15831	Demand Response Management System Phase 1 (DRMS 1)	517	0	0
831A	T19003	Demand Response Management System Phase 3 (DRMS 3)	0	612	643
		Sub-Total Business Optimization	517	612	643

a. Demand Response Management System Phase 1 (DRMS) (Project # T15831) and DRMS Phase 3 (Project # T19003)

The DRMS Projects will enable the management of SDG&E's demand response portfolio with the following integrated capabilities: program management, enrollment, eligibility, device management, event management, forecasting, settlement, analytics/reporting and workflow. This first phase implemented functionality necessary to support SDG&E's Capacity Bidding Program and also provided customers with the ability to connect home area network devices to their meters and receive price information on their devices. Phase 3 will provide additional functionality to deliver additional DR programs in a single integrated architecture. The forecast for the DRMS projects for 2017, 2018, and 2019 are \$517,000, \$612,000, and \$643,000.

2. Improving Customer Experience

Table LD-26 below shows a summary of the requested capital expenditures related to improving customer experience.

TABLE LD-26
Improving Customer Experience Capital Summary

GRID WP#	Capital Project #	Capital Project Name	2017 Total (\$000)	2018 Total (\$000)	TY 2019 Total (\$000)
		My Account Reliability and SIR Bundled			
811I	T16027	Work	626	171	0
811L	T16036	Customer Authorization Project	1,200	0	0
831B	T19004	Gas Customer Choice Automation (GCCA)	0	1,216	310
		Sub-Total Improving Customer Experience	1,826	1387	310

a. My Account Reliability & System Investigation Request (SIR) Bundled Work (Project # T16027)

The purpose of the My Account Reliability & SIR Bundled Work project is to minimize My Account site outages and maximize the ability to monitor and communicate system operations. Additionally, there are a number of enhancements that will improve the customer's online experience such as strengthening the authentication process, enhancing customer self-service capabilities, and adhering to online regulatory compliance rules. As shown in Figure LD-5, there are over 900,000 My Account registered users, so these improvements will benefit a significant number of customers. The forecast for the My Account Reliability & SIR project for 2017, 2018, and 2019 are \$626,000, \$171,000, and \$0.

b. CAP (Project # T16036)

The CAP project seeks to streamline the existing disparate process for handling LOAs and associated requests for customer data. LOAs are paper and electronic documents used by a customer of record to authorize SDG&E to share their data with a third party. These letters are currently received by several departments around the company from third parties requesting customer data. Hence, there is no central location for storing, tracking, and validating LOAs. Furthermore, LOAs are only available in paper form, which makes submission and tracking very difficult for customers. This project would improve efficiency within SDG&E while enhancing the customer experience. The forecast for the CAP project for 2017, 2018, and 2019 are \$1,200,000, \$0, and \$0.

c. Gas Customer Choice Automation (GCCA) (Project # T19004)

The GCCA project would automate the Gas Imbalance reporting and curtailment processes to reduce compliance and process risk and deliver efficiencies. The scope includes creating a central repository and reporting for GCCA capabilities, and managing gas core and non-core imbalance reporting, customer communications, and contract maintenance.

Additionally, it will improve efficient execution of gas curtailment processes including analysis of available load, event monitoring, and violations reporting. The forecast for the GCCA project for 2017, 2018, and 2019 are \$0, \$1,216,000, and \$310,000.

3. Mandated

Table LD-27 below shows a summary of the requested capital expenditures related to mandated projects.

TABLE LD-27 Mandated Capital Project Summary

GRID WP#	Capital Project #	Capital Project Name	2017 Total (\$000)	2018 Total (\$000)	TY 2019 Total (\$000)
811B	T19006	Residential TOU Default Pilot Program	8,482	15,548	865
811J	T15076	Residential Rate Reform (RROIR/RDW)	832	0	0
811M	T16037	Residential Rate Reform TOU	661	0	0
811D	T19007	GRC Phase II	5,833	3,562	0
811N	T16038	AB802 Benchmarking Project	919	0	0
		Enterprise Hourly Time of Use			
811H	T16033	Metering/Billing	1,513	0	0
		Sub-Total Mandated	18,240	19,110	865

a. Residential TOU Default Pilot Program (Project # T19006)

The residential TOU Default Pilot project is to support CPUC D.15-07-001, which directs SDG&E to conduct certain "pilot" programs and studies of residential TOU electric rate designs. The purpose of this project is to study aspects of TOU, fine-tune customer education, and test system operability prior to the full rollout of default TOU in TY 2019. The solution will support the two default tariffs and the transition of over 100,000 customers to TOU pricing in March 2018 based on the customer's bill cycle. The solution will enable personalized communication efforts to these customers. This includes pre-awareness notices, the default notices, and ongoing post-default communications. This will also allow for the implementation of tools and applications that will track and monitor transactions, system defects, and impacts on day-to-day business processes. The forecast for the Residential TOU default pilot project for 2017, 2018, and 2019 are \$8,482,000, \$15,548,000, and \$865,000.

b. Residential Rate Reform RROIR/RDW (Project # T15076) and Residential Rate Reform TOU (Project # T16037)

SDG&E's Residential Rates Order Instituting Rulemaking (RROIR)/RDW project is to support continued implementation of rate reform pursuant to D.15-07-001. System changes are needed to support residential rate tier collapse, CARE line item discounts, Family Electric Rate Assistance (FERA) line item discounts, baseline allowance updates, and other changes. Particularly in 2017, the project was highly focused on implementing the new HUC, also known as the Super User Surcharge. The Rate Reform decision mandated that we implement a new charge when customers' consumption exceeds 400% of their allocated baseline, resulting in a new consumption charge for the customer. Additionally, the Decision also requires SDG&E to

proactively alert customers at the time that they have exceeded this threshold to create awareness of the increased consumption levels via different communication channels. The project requires making changes to multiple SDG&E systems. The forecast for the RROIR/RDW projects for 2017, 2018, and 2019 are \$1,493,000, \$0, and \$0.

c. **GRC Phase 2 (Project # T19007)**

The GRC Phase 2 rate design project is being implemented in compliance with General Rate Case application A.15-04-012. The project includes making changes to SDG&E's Customer Information System to enable billing of the proposed electric rates, including changes to SDG&E's current TOU periods to align with grid needs. Changes also need to be made to SDG&E's online Energy Management Tool, which provides customers with bill-to-date, bill history, and other electric energy pricing information. The rate changes become effective for customers in 2018. The forecast for the GRC Phase 2 project for 2017, 2018, and 2019 are \$5,833,000, \$3,562,000, and \$0.

d. AB802 Benchmarking Project (Project # T16038)

AB802 requires utilities to maintain records of the energy usage data of all buildings to which they provide service for at least the most recent 12 complete months. Furthermore, this legislation requires that by January 1, 2017, each utility, upon the request and the written authorization or secure electronic authorization of the owner, owner's agent, or operator of a covered building, deliver or provide aggregated energy usage data for a covered building to the owner, owner's agent, operator, or to the owner's account in the ENERGY STAR Portfolio Manager. AL 2870-E/2463-G provided for establishment of a memo account to track costs, the business explanation for which can be found in Section III.B in this testimony. The forecast for the AB802 Benchmarking project for 2017, 2018, and 2019 are \$919,000, \$0, and \$0.

e. Enterprise Hourly TOU Metering/Billing (Project # T16033)

The Enterprise Hourly TOU Metering/Billing project includes IT system changes to develop functionality that will enable SDG&E to support third party meter read accuracy and hourly TOU pricing and bill calculations. This functionality will be leveraged for the Power Your Drive pilot approved in D.16-01-045. This pilot oversees multiple charging stations constructed for driver convenience at Multi-Unit Dwellings and work places. The forecast for the Enterprise Hourly TOU Metering/Billing project for 2017, 2018, and 2019 are \$1,513,000, \$0, and \$0.

VI. ENERGY INNOVATION CENTER

I am sponsoring the business rationale for GRC-related future capital improvement costs associated with the Energy Innovation Center (EIC). If approved, SDG&E proposes to fund these improvements from blanket facilities capital budgets included in the testimony of Witness Dale Tattersall (Exhibit SDG&E-22). SDG&E is requesting funding of \$1,850,000 for costs associated with the EIC in 2017-2019. The costs are related to building and equipment upkeep, upgrades and improvements, including HVAC, refrigeration equipment, furniture (classroom tables, chairs), audio/visual equipment, and security improvements.

SDG&E's EIC opened its doors in January 2012, offering the San Diego community a place to learn about energy efficiency, sustainability and innovation in building performance. While the primary offering of the center is education and training for San Diego's workforce, it also provides visitors the opportunity to learn about advances in energy efficiency, clean transportation, and renewable energy production so that they can make informed choices about energy use and technology. The EIC has become a resource for the local community. SDG&E customers use the center as a venue for hundreds of meetings and events per year. Since 2012, over 139,000 people have visited the EIC. The funding requested will allow SDG&E to perform necessary improvements and upkeep for the EIC to remain a community asset.

VII. CONCLUSION

My SDG&E Customer Services Information & Technologies O&M and Capital project justifications were carefully developed and reviewed, and represent a projection of the level of funding necessary to support SDG&E's organizational focus for the GRC term. SDG&E is focused on partnering with our customers as a trusted energy advisor by ensuring customers have choice, convenience, and control of how they interact with us and manage their pricing plans and energy use, and on maintaining safe, efficient, effective, and reliable customer service.

This concludes my prepared direct testimony.

VIII. WITNESS QUALIFICATIONS

My name is Lisa Davidson. I am employed by SDG&E as the Director of Customer
Programs. My business address is 8335 Century Park Court, San Diego, California, 92123. My
current responsibilities include overseeing SDG&E's energy efficiency, customer assistance and
demand response programs, customer solutions and outreach teams. I assumed my current
position in May 2014. I have been employed by SDG&E and Sempra Energy since 2001, and
have held positions of increasing responsibility in the Regulatory Affairs, Finance, External
Affairs and Customer Services departments. I received a Bachelor of Arts degree in Economics
from Northwestern University Lhave previously testified before this Commission

GLOSSARY OF TERMS

AB: Assembly Bill
AE: Account Executive

AFVMA: Alternative Fuel Vehicle Memorandum Account AIS: Aging and Independence Services Department

AL: Advice Letter

ALJ: Administrative Law Judge App: Mobile Application BuS: Business Services

BY: Base Year

CAISO: California Independent System Operator

CAP: Customer Authorization Project
CARB: California Air Resources Board
CARE: California Alternate Rates for Energy
CAT: Core Aggregation Transportation
CCA: Community Choice Aggregation

CCC: Customer Contact Center

CEC: California Energy Commission
CIM: Customer Information Management
CISR: Customer Information Service Request

CO: Carbon Monoxide

CP&P: Customer Programs, Pricing, and other Office

CPUC: California Public Utilities Commission

CSIN: Customer Service Information and Technology

D: Decision
DA: Direct Access
DR: Demand Response

DRMS: Demand Response Management System
EECP: Energy Efficiency Collaboration Platform
EDRMA: Energy Data Request Memorandum Account

EIC: Energy Innovation Center

EPA: Environmental Protection Agency
EPIC: Electric Program Investment Charge

ESA: Energy Savings Assistance ESP: Energy Service Provider

EV: Electric Vehicle

FERA: Family Electric Rate Assistance

FOF: Fueling our Future FTE: Full-Time Equivalent

GAPP: Generally Accepted Privacy Principles GCCA: Gas Customer Choice Automation

GHG: Greenhouse Gas Emissions

GRC: General Rate Case HUC: High Usage Charge

HVAC Heating, Ventilation and Air Conditioning

IOU: Investor Owned Utilities

IT: Information TechnologyIVR: Interactive Voice ResponseLOA: Letters of Authorization

LIHEAP: Low Income Home Energy Assistance Program

MBL: Medical Baseline

ME&O: Marketing, Education, and Outreach MRA: Marketing, Research, and Analytics NGAT: Natural Gas Appliance Testing

NEM: Net Energy Metering NGV: Natural Gas Vehicle

NTN: Neighbor to Neighbor Program
O&M: Operations and Maintenance
OCP: Office of Customer Privacy
PG&E Pacific Gas and Electric

PbD: Privacy by Design

PRRR: Progress of Residential Rate Reform

R.: Rulemaking

RAMP: Risk Assessment Mitigation Phase RCS: Residential Customer Services

RDW: Rate Design Window

RROIR: Residential Rates Order Instituting Rulemaking

RRMA: Rate Reform Memorandum Account

RRR: Residential Rate Reform

SDG&E: San Diego Gas & Electric Company

SIR Software Inspection Report SMB: Small and Medium Business

SOCALGAS: Southern California Gas Company

SOX: Sarbanes Oxley

TCAP: Triennial Cost Allocation Proceeding

TOU: Time of Use TY: Test Year

VREP: Voluntary Retirement Enhancement Program