SB 695 Report
To California Public Utility Commission (CPUC) *Energy Division*
San Diego Gas and Electric Company
2020

Part II: Section 748(b) Utility Study and Report

San Diego Gas & Electric Company (SDG&E) appreciates the opportunity to provide input to the California Public Utilities Commission (CPUC or Commission) in response to Senate Bill (SB) 695-enacted changes to Public Utilities Code (PUC) Section 748. This report addresses PUC Section 748(b). SDG&E's response addressing PUC Section 748(a), which provided data related to both gas and electric revenue requirements, was submitted separately.

SDG&E's objective in this response is to provide information that the CPUC may find useful as it prepares its annual report for the Governor and Legislature. Accordingly, SDG&E's report provides data related to both gas and electric revenue requirements and rates. With respect to overall presentation, SDG&E's report is structured as per the Energy Division's (ED) request under the following headings:

- Overall Rate Policy
- Management Control of Rate Components
- Utility Policies and Recommendations for Limiting Costs and Rate Increases While Meeting State's Energy and Environment Goals for Reducing Greenhouse Gases (GHG).

1. Recommendations to the CPUC and Legislature

A. Opening Comments

California's Energy Landscape is Changing Rapidly.

The rapidly changing energy environment in California is driving the need for a comprehensive and holistic renewed focus on the fundamentals surrounding the ratemaking process. The guiding principles needed to meet the state's climate goals require balancing customer choice and economically efficient decisions at all levels, which are critical to providing affordable rates that benefit the grid and all customers. While the energy

landscape has rapidly changed and evolved in recent years, the ratemaking principles we apply to that environment have not. Only through the combination of equity, transparency, and comprehensive customer education can SDG&E be an effective platform for ensuring all ratepayers have full access to affordable, competitive customer choices in a sustainable energy market and a safe, reliable electric grid.

California is the most populous state in the nation and the 5th largest economy[1] in the world and continues to be a leader in shaping national energy policy with its adoption of a set of comprehensive policies and initiatives aimed at significantly reducing GHG. A recent report by the California Legislative Analyst's Office (LAO) recognizes that the electricity sector has been the primary driver of GHG reductions over the last decade, with annual emissions declining by approximately 40% statewide.[2] California's ambitious and important climate change goals will require significant changes in the electric sector to accommodate the electrification of the transportation and other sectors. The state should take advantage of the most economically efficient means to reach these goals, which will ensure affordability and a safe and reliable electric grid for all customers.

State Programs and Policies Have Contributed to Upward Rate Pressure.

The achievement of these goals to date has not been blind to the potential rate and cost shift implications that these programs create for electric utility customers. State mandates like the Renewable Portfolio Standards (RPS) and other programs like the California Solar Initiative (CSI) and Net Energy Metering (NEM) have accumulated to contribute to increasing electric rates. While the state's policies and programs to date have made significant progress toward meeting the state's emissions reduction goals, the current mix of policies is not the most cost-effective way to meet the future ambitious targets. The policies that promote adoption of distributed generation and other technologies, while extremely successful, have placed upward pressure on rates while also contributing to decreasing utility sales, which shifts cost responsibility to customers who do not participate in these programs. While certain programs are beneficial for all customers and the grid, the benefits of other policies, such as NEM are passed to a subset of customers at the expense

[1] Gross Domestic Product by State, Third Quarter 2019. Bureau of Economic Analysis. https://www.bea.gov/data/gdp/gdp-state. Accessed 17 January 2020.
[2] Petek, Gabriel. California Legislative Analyst's Office. Assessing California's Climate Policies – Electricity Generation. January 2020.

of those who do not participate in the program. As more and more customers adopt distributed generation and NEM, fewer and fewer customers are left to pay for grid upkeep and investment. This upward rate pressure could be a barrier to customer adoption of cleaner technologies.

The Current Volumetric Rate Structure Could be a Barrier to Decarbonization and Affordability.

One of the state's visions for long-term GHG reduction is electrification – customers moving from more carbon-intensive fuels to low-carbon or carbon-neutral electricity to power electric vehicles, homes, and businesses. Rate structures that punish customers for increased usage do not encourage conversion to electrification. While the electric sector has made progress towards GHG reduction, the transportation sector still produces significant emissions in California. In order for this to change, customers and businesses will need to convert combustion engine vehicles (CEV) to electric vehicles (EV) and significant investments in the grid will need to be made to accommodate them. A rate structure that adds potentially hundreds of dollars to a customer's monthly bill does not encourage adoption of EVs. Additionally, the volumetric rate structure allows customers who adopt technology to reduce their bills and avoid paying for infrastructure and program costs that other customers must foot the bill for. As more and more customers adopt technology avoid and paying for the grid, non-adopters feel an increasing burden through upward rate pressure. Maintaining a largely volumetric rate structure will contribute to increasing affordability concerns.

Given the future challenges and opportunities faced by California IOUs, some of which are described herein, the importance of establishing the "right" rate design now cannot be overstated. There will be more change within the electric industry in the next ten years than in the past 100 years – California must anticipate and prepare for this change to implement a well-conceived rate design that furthers, rather than impedes, advancement. It is crucial that as the State moves forward into the next decade, its rate design policies be carefully crafted to maintain the current momentum toward realization of a sustainable energy future that incorporates increasing amounts of DERs, including solar, energy storage, and EVs, through reliance on an advanced electric grid, while minimizing cost impacts on utility customers. Additionally, rate design based on cost-causation principles is

critical to ensure that energy usage occurs in a manner consistent with electric grid conditions and provides customers with price signals to incent behavior which minimizes incremental system and local capacity needs.

SDG&E Continues to Support State and Commission Goals.

SDG&E continues to advance California's goals, as a leader in clean energy, supporting the adoption of electric vehicles and developing and operating a low-carbon energy infrastructure while providing safe and reliable service. SDG&E is committed to delivering safe, clean, and reliable energy services to its customers with accomplishments including:

- Around forty-five percent of SDG&E's delivered electricity comes from renewable resources;
- As of the end of December 2019, SDG&E had approximately 1,233 megawatts ("MW") of customer-sited solar and wind generation from over 179,000 customers;
- As of the end of December 2019, SDG&E has built and energized about 3,000 electric vehicle (EV) chargers to date at workplaces, apartments and condominiums.
- Receiving the "Best in the West" award for electric reliability for 14 straight years.

To ensure the continued pursuit of the State's clean energy goals in a sustainable manner and reach the 100 percent zero carbon electricity goals of State Bill (SB) 100 by 2045, it is critical that the state review the basic principles of the ratemaking process through the lens of innovation, evolving technology, and economic efficiency, and reassess whether certain principles should be given more or less weight. The challenge for utilities and regulators is to address these needs and harness opportunities on the urgent timeline required to meet greenhouse gas abatement targets, while not abandoning long-standing requirements for affordable, universal energy supply and grid reliability."[3] Therefore, an evolving utility requires increased flexibility in rate structures.

SDG&E has fully embraced the State's vision of increased DER integration. For example, as of the end of 2019, SDG&E had over 1,233 megawatts (MW) of customer-sited solar and wind generation from over 179,000 customers, an increase of approximately 210 MW and nearly 31,000 customers, from 2018. On January 26, 2018, the Governor issued an executive order formalizing a target of 5 million EVs on California's roads by 2030.[4] As

[3] Rocky Mountain Institute ("RMI"), Reimagining the Utility: Evolving the Functions and Business Model of Utilities to Achieve a Low-Carbon Grid. January 2018.
[4] California Executive Order B-48-18

of December 1, 2019, SDG&E customers have adopted approximately 52,000 EVs within its service territory. However, to meet Governor Brown's goal of 5 million zero emission vehicles (ZEV) in California by 2030, SDG&E will need to plan for mass adoption of ZEVs, which includes designing and installing charging infrastructure, offering rates that encourage grid-friendly charging behavior, and undertaking marketing, education and outreach efforts to ensure that the vehicles purchased by customers help support SDG&E's goals of grid sustainability and reliability.

There is consensus that the utility power grid "is evolving from a one-way centralized power delivery system to a more open, flexible, multipoint digitized network (or platform) with a collection of technologies and assets, some controlled by the utility and some not."[5] This concept of the grid as a "plug-and-play platform" for integration of new services and technologies is relatively recent, but it is undeniably the shape of things to come. As technology continues to advance, more innovative approaches to rate design may be needed to balance the interests of all ratepayers in order to minimize the cost shift to non-participating customers (i.e., customers who cannot or do not utilize distributed energy resources or other energy technologies) and ensure that all customers are treated fairly.

The transforming role of the consumer – from passive recipient of service to an active participant in an interconnected grid – brings a new dimension to the electric utility business environment that the utilities need to be responsive to. It is likely that significant investment in upgrading the grid will be necessary to successfully manage the evolution of the electric grid to a "grid of things" that seamlessly integrates new energy resources and technologies.

To support California's GHG reduction and transportation electrification (TE) goals, SDG&E has proposed and gained approval of several charging infrastructure programs. In 2016, SDG&E received approval to deploy 3,000 charging stations at workplaces, apartments, and condos. This program, called the Power Your Drive Pilot, was completed in 2019, and offers an innovative hourly rate to drivers as well as billing on driver's home electric accounts.

[5] The Edison Foundation Institute for Electric Innovation, Innovations Across the Grid, Vol.2, December 2014, p. 3.
Available at: http://www.edisonfoundation.net/iei/Documents/IEI_InnovationsGrid_volII_final_LowRes.pdf

In January 2017, SDG&E filed its Application for Authority to Implement Priority Review and Standard Review Proposals to Accelerate Widespread Transportation Electrification that will help meet the goals of SB 350.[6] In January 2018, the Commission approved SDG&E's priority review projects, which involve electrifying airport ground support equipment, installing charging stations at park and ride sites, installing charging equipment at the port of San Diego, installing infrastructure and charging equipment for fleet delivery services and shuttle vehicles, and providing incentives for dealerships and salespeople in support of EV sales. These projects will benefit all ratepayers through associated GHG emission reductions and local air pollution reductions.

In January 2018, SDG&E filed an application with the CPUC seeking approval to implement a medium-duty and heavy-duty (MD/HD) EV charging infrastructure program and a vehicle-to-grid (VGI) electric school bus pilot. The program and pilot were approved in August 2019. The MD/HD charging infrastructure program will support charging for a minimum of 3,000 EVs. In addition, SDG&E filed an application in July 2018 at the CPUC seeking approval to implement a light-duty EV charging infrastructure program at state parks and beaches, and city and county parks. The School pilot seeks to install 196 charging units (184 Level 2 [L2] and 12 Direct Current Fast Chargers [DCFC]) at 30 school facilities and educational institutions. The Parks and Beaches portion of the filing supports the installation of a total of 140 charging stations (120 L2 and 20 DCFC). The schools, parks and beaches pilots were approved in November 2019.

SDG&E filed two incremental applications in 2019 to support additional TE. The first is a proposal to create a new electric rate to support MD/HD EVs and fast charging stations. The second is an extension program to add 2,000 more charging ports to expand SDG&E's success Power Your Drive program that has to date deployed over 3,000 charging ports at workplaces, apartments, condos.

California is at a crucial turning point, and updating rate design priorities is critical to meeting long-term GHG reduction goals. The state should take this opportunity to carefully re-examine historic rate design principles through the lens of California's future goals and consider which principles may need updating to reach the needed levels of GHG abatement.

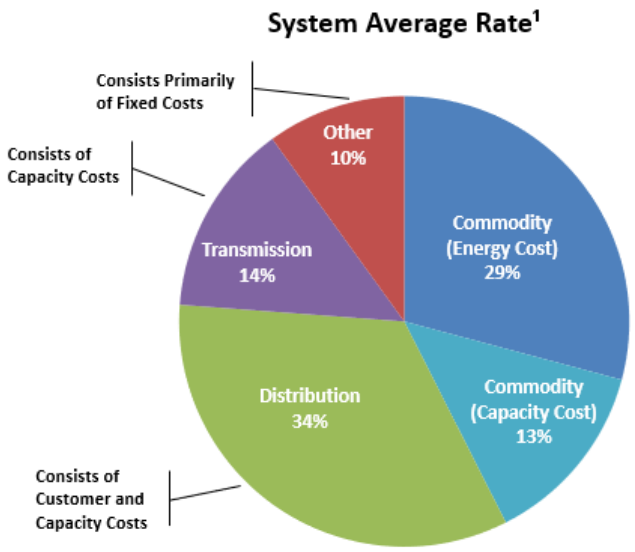
[6] A. 17-01-020

B. Overall Rate Policy

California continues to be a leader in shaping national energy policy, in particular with its adoption of a set of comprehensive policies and initiatives aimed at significantly reducing GHG. As we evolve from a world where all customers receive "full service" from the utility, to one in which there is an abundance of choices available to customers for the various elements of service previously solely provided by the utility (i.e., rooftop solar for a portion of their energy needs, batteries for "banking", commodity services from Community Choice Aggregators ("CCA")), the need for accurate price signals that truly reflect the cost of the variety of services provided is critical. Additionally, as the State moves towards Zero Net Energy (ZNE) structures, the Commission will need to consider what cost recovery mechanisms are appropriate. A fully volumetric rate will allow for maximum bypass of costs, which are then shifted to other customers. The California Energy Commission's energy forecast for SDG&E continues to predict overall sales declines in the near term, as energy efficiency increases and levels of renewable distributed generation remain high. This fact alone will cause upward rate pressure on all customer classes. Allowing bypass and non-transparent subsidies to perpetuate will shift costs to an even smaller pool of customers.

Utility rates recover the costs of services related to commodity resources, distribution resources, transmission resources, and the costs of public policy programs and mandates. Under SDG&E's current effective electric rates, commodity services represent 42% of total costs recovered, distribution represents 34%, transmission covers 14% and the remaining 10% represents the costs of State and Commission mandated programs.

Chart 1: Breakout of System Average Rate



[1]Based on rates effective January 1, 2020.

When reviewing the breakdown of the cost of utility services, only Commodity Energy Costs, which represent a fraction (less than one-third) of the services recovered in electric utility rates, are driven by the kilowatt-hour (kWh) energy usage of customers. Most of the costs to serve customers are fixed. These costs are incurred independent of customer usage (kWh) and are driven either by (1) the number of customers or (2) the capacity needs of customers, on both the system and individual circuits, which result from their maximum load or demand of the customers. Commodity energy costs vary with the volume of electricity consumed and are appropriately recovered through consumption charges. However, the remaining costs incurred by SDG&E, including distribution customer and grid-related costs, generation capacity costs, transmission, and portions of state-mandated Public Purpose Programs (PPP) do not vary with the volume of electricity consumed by customers, and therefore are fixed costs for the utility. SDG&E, as the provider of last resort, must incur these generation, transmission, and distribution costs on a scale that supports at least the minimum needs of its entire customer base, regardless of a customer's energy consumption. Recognizing the changes in technology and customer behavior to date and those that will occur in the future will allow for rethinking of rate priorities and the weight we give to certain rate design principles.

In October 2013, AB 327 was signed into law. AB 327 provided among other things (1) removal of constraints to rate design previously legislated by AB 1X and SB 695 to

allow changes to residential rate structures, and (2) legislative requirements for the NEM successor tariff. In the Residential Rates Order Instituting Rulemaking (RROIR), R.12-06-013, the Commission adopted the following ten Rate Design Principles (RDP) for rate design. While the RROIR was limited to residential rate design, SDG&E believes these principles should guide the rate design for all customer classes. Table 1 below presents the RDPs in the four categories consistent with D.15-07-001: cost of service, affordable electricity, conservation and customer acceptance.

Table 1: Rate Design Principles

Cost of Service RDP	Affordable Electricity RDP	Conservation RDP	Customer Acceptance RDP
(2) Rates should be based on marginal cost; (3) Rates should be based on cost-causation principles; (7) Rates should generally avoid cross-subsidies, unless the cross-subsidies appropriately support explicit state policy goals; (8) Incentives should be explicit and transparent; (9) Rates should encourage economically efficient decision-making.	(1) Low-income and medical baseline customers should have access to enough electricity to ensure basic needs (such as health and comfort) are met at an affordable cost.	(4) Rates should encourage conservation and energy efficiency; (5) Rates should encourage reduction of both coincident and non-coincident peak demand.	(6) Rates should be stable and understandable and provide customer choice; (10) Transitions to new rate structures should emphasize customer education and outreach that enhances customer understanding and acceptance of new rates, and minimizes and appropriately considers the bill impacts associated with such transitions.

Given today's energy landscape and increased competition for limited economic resources, it is time to weigh the value of each rate design principle both individually and collectively, and ask what else is needed to ensure California realizes its climate goals. Rates should continue to be based on cost-causation principles and encourage economically efficient decision-making, be affordable for all customers, emphasize customer understanding and stability, and incentives should be explicit and transparent. Rates should also continue to encourage energy efficiency, conservation and reduction of peak demands. However, in order for customers to electrify their homes and businesses, they must see a value proposition in converting CEVs to EVs. Electrification requires customers to increase their consumption from current levels. The current rate structure gives significant weight to Conservation RDP #4, and is extremely punitive for customers with higher usage.

Although most of the utility's costs are fixed, today's rates are largely volumetric. Residential customers have a rate structure that is nearly entirely volumetric. Historically, this volumetric structure deviates from the principle that rates be based on cost-causation principles and on marginal costs in order to emphasize conservation and energy efficiency RDPs. This is the structure that allows for bypass of all costs for NEM customers. NEM customers are still, if not more reliant on the grid, as they use the utility as a battery to store their excess production during the day, require capabilities for a two-way flow of energy, and pull energy from the grid at night when the sun is not shining. Because NEM policy allows for netting of nearly volumetric rate components,[7] adopters are able to reduce their bills to nearly nothing, although the grid provides free storage and SDG&E is able to provide them energy on days when the sun isn't shining. Additionally, these customers avoid paying for state policy mandates and programs that other, nonadopting customers end up paying for.

The state is at a critical point where it must reconsider which RDPs are most essential to reach its long-term GHG reduction goals. Although conservation and energy efficiency are still important, they should not be prioritized over other principles when the result overburdens customers who have not adopted technology and will likely be a barrier for customers to electrify their vehicles, homes and businesses. At the very least, RDPs should not discourage increased usage where switching to electric would be zero-emission or carbon neutral. Rates that recover more fixed costs through a fixed manner would better reflect the actual cost to serve customers, and would allow for the utility to charge customers a volumetric $/kWh price that is much closer to the true marginal cost. Lowering the volumetric price that customers see will encourage electrification and will more closely reflect the true cost of energy. Adjusting the RDP priorities to recover more fixed costs in fixed charges would also ensure that NEM customers, who are still very much reliant on the grid, pay for the cost of upkeep, new investment to accommodate advanced technology, state policy mandates and programs, and do not pass those costs on to nonadopters.

The IOUs are also limited in the absolute amount of fixed costs they can potentially recover from residential customers through a monthly customer charge. AB 327 currently

[7] The original NEM tariff allows for netting of all rate components. The NEM Successor Tariff (NEM 2.0) requires customers to pay nonbypassable charges on all delivered energy. Nonbypassable charges make up approximately $0.0216/kWh of the average residential rate, which is $0.272/kWh as of January 1, 2020.

limits the maximum monthly fixed charge for residential customers to $10 per month.[8] SDG&E has requested the maximum fixed charge in Phase 3 its 2018 Residential Rate Design Window (RDW). SDG&E believes that recovering this modest amount in a monthly customer charge will better reflect the cost of service for residential customers and would be offset by a decreasing volumetric rate. However, a $10 per month charge will not go far enough to lower the volumetric rate to greatly incentivize electrification and adoption of EVs. If a fixed charge of any amount is approved, that charge may be increased by the Consumer Price Index (CPI) annually, which is typically only a few percentage points or less. Even if a $10 fixed charge was approved for SDG&E's customers, increasing this charge by 2% annually will barely reach $11 per month by 2025 and $12 per month by 2030. For SDG&E to be able to offer lower volumetric rates, the state must adjust the $10 residential fixed charge cap and allow for collection of more costs through residential fixed charges. Fixed charges create some equity concerns, as they impact low-income customers more than non-low-income customers. However, there are potential solutions, including discounted fixed charges for customers who participate in income-assistance programs, similar to the current rate structure for this subset of customers.

SDG&E has already made progress toward state goals by beginning the statewide transition of its bundled residential customers to time-of-use (TOU) rates. The first of the three California IOUs to begin Residential Default TOU, SDG&E began its Residential Mass TOU Default in March 2019 and through 2019 defaulted approximately 290,000 customers. SDG&E's Residential Mass Default TOU transition is planned to be completed by April 2020, and SDG&E anticipates 600,000 residential customers will have been transitioned by this time. Under a TOU rate, cost-based TOU differentials result from the average commodity price for marginal energy in the period and the occurrence of generation capacity need in the period with the on-peak period defining the system's high-cost hours for commodity services. A properly-defined on-peak period appropriately captures the system's high-cost hours and delivers accurate price signals to customers. Improperly defined on-peak periods result in cost shifts between customers, wrong incentives as when to consume electricity, exacerbation of ramping needs and overall higher system costs, which lead to higher rates for all customers. The State's Residential

[8] California Alternate Rates for Energy (CARE) customers and Medical Baseline customers are limited to $5 per month.

Mass TOU Default migration aims to shift customer usage outside of expensive on-peak TOU period hours with the goal of reducing GHG emissions. Additionally, while implementation of the new TOU periods approved in SDG&E's 2016 GRC Phase 2[9] is a step in the right direction, grandfathered TOU customers continue to receive the wrong price signals, which will further delay California's clean energy future.

There are additional concerns regarding TOU period definitions. Currently, CCAs in California are not required to offer TOU rates to their customers, and there is no regulatory process established to define TOU periods, as the large IOUs are required to do in their respective GRC Phase 2 proceedings. While the only CCA in SDG&E's service territory offers commodity rates that mirror the standard SDG&E TOU periods, the CCA is not required to offer these rates, and could define different TOU periods without a regulatory process. The state must ask whether allowing CCAs to operate without CPUC oversite will ensure its clean energy future. TOU periods are defined to incentivize customers to shift their usage outside the high-cost hours, with the goal of reducing long-term system costs. If CCAs define different TOU periods, or none at all, customers will not be incentivized to shift their consumption to lower-cost hours as the state has intended.

C. Management Control of Rate Components (Utility Management's Policy to Control Costs and Control Rate Increases for Customers)

SDG&E's rate components can be broken down into the following broad categories of services that they provide:

- *Generation service* – provision of energy service, including reliability and ancillary services. The costs associated with generation services are, in addition to the costs of providing energy services to meet provider-of-last-resort customer load, heavily compliance driven - both legislative compliance (i.e., RPS) and regulatory compliance from various regulatory agencies (i.e., GHG under ARB).
- *Transmission service* – provision of system delivery and reliability. These costs are addressed at the Federal Energy Regulatory Commission (FERC).
- *Distribution services* – provision of local delivery and reliability and

[9] Implemented December 1, 2017.

customer services.

- *Public Policy Programs*.

Additionally, power quality requires the coordination of distribution, transmission and generation resources. All changes to SDG&E's revenues recovered through rates or the recovery structure through which revenues are collected are subject to the authority of the CPUC or the Federal Energy Regulatory Commission (FERC) as a regulated entity.

Utility's Policies and Recommendations for Limiting Costs and Rate Increases While Meeting State's Energy and Environment Goals for Reducing Greenhouse Gases

While the implementation is not perfect, SDG&E believes that the principle of bundled customer indifference also provides a correct approach when considering policies around departing load customers and the pursuit of forward-looking policy goals. As California continues to ensure customer choice for energy services, it is important to continue to recognize the unique role the utilities will continue to play as the provider of last resort for customers. This means that the utility is required to ensure the ability to provide service to every customer in its service territory (basically, access to SDG&E's electric grid), even if that customer is not SDG&E's customer. A fair and equitable rate design would require that all customers pay a reasonable share of the utility infrastructure costs needed to serve them.

Today's traditional customer, however, is not indifferent to the "departing load" that occurs because of the adoption of rooftop solar or other DERs. Customers today are observably changing their behavior. The cost shift associated with the adoption of such technologies in SDG&E's territory is acutely felt by all non-adopters as the utility cost of service for adopters is disproportionately transferred to non-adopters.

Within California, NEM policy has been wildly successful in incentivizing customers to adopt distributed generation. SDG&E estimates that nearly one-quarter of single-family homes in its service territory have adopted rooftop solar, The NEM 2.0 Decision led to minimal change in the way rooftop solar is treated by the utility. As of the end of 2019, the estimated Annual Residential Cost Shift increased by $71 million over the previous year to $428 million.[10]

[10] Cost shift estimates based on 6/1/2019 effective rates and the NEM MW installed in each respective year.

While certain portions of the NEM 2.0 Decision speaks to "significantly reducing the cost-shift while also pushing rooftop solar to provide significantly more benefit to the grid,"[11] under the resulting decision SDG&E's customers have yet to see this net benefit reflected in their rates, as upward rate pressure continues. Within SDG&E's territory, the annual cost shift has increased 272% to $475 million from year-end 2014 to year-end 2019, with $220 million occurring under NEM 2.0 since SDG&E hit the NEM cap in June of 2016. This cost shift is anticipated to increase over time without significant revisions to NEM policy.

A more rigorous examination of the future of NEM policies before the Commission is expected to begin in 2020. The Commission anticipates being able to make a more informed decision on the benefits of distributed solar NEM policy. As the Commission prepares to re-examine NEM policies, it is imperative that the correct principles are in place to ensure future sustainability which balance the need to further incent clean energy adoption in a manner that minimizes cost shift to non-participating customers. The Commission should also weigh what future rate structure will ensure that all customers are treated equitably, not unfairly burdened, and will allow the state to reach its GHG reduction goals.

1. List the Policies the Utility is Advocating

SDG&E recommends the following policies for limiting costs and rate increases while meeting the State's energy and environment goals for reducing GHG:

1. **Accurate price signals**: Providing customers with accurate price signals means that utilities charge for the services they provide and rates are designed to recover costs on the same basis by which they are incurred. By sending customers clear price signals regarding the cost of electricity and the cost of using the electric grid for the services they receive, SDG&E aims to give customers the best possible opportunity to make wise decisions about their energy use and to mitigate cost shifts between customers. This includes charging a more accurate $/kWh price for volumetric consumption that will allow for electrification and conversion from traditional more carbon-intensive fuels to low-carbon electric alternatives.
2. **Transparent incentives**: Incentives or subsidies that have been deemed necessary to further public policy objectives are separately and transparently identified. Cost-shifting is exacerbated with incentives that are buried in rates and not transparently identified. Building upon the foundation of accurate price signals, subsidies that advance state policy goals should be transparently identified in utility bills, separate

[11] R.14-07-002, Concurrence of President Michael Picker on Item 24, D.16-01-044.

from the charges for services provided to or from the customer. SDG&E believes that the departing load indifference principle should be a best practice when moving forward with future proceedings to continue moving toward fair and equitable rates that reflect the real utility cost of service.

3. **Customer options**: SDG&E believes that a critical aspect of SDG&E's policy framework is to balance the needs of customers while still providing a cost-based rate structure. SDG&E recognizes the importance of continuing to offer customers new cost-based rate options that best meet their needs, and that providing the opportunity for customers to adopt rates that allow more customer choice and control should be balanced with complexity of rates.
4. **Transition paths to minimize impacts and inform customers**: SDG&E is committed to proactively providing customers with clear and timely information to help customers prepare for any rate change. SDG&E believes that implementing rate design changes in transitional phases: (i) helping to minimize customer impacts and (ii) providing the best opportunity for customers to progressively gain more control, and become more engaged and informed about the choices that are available to them.

SDG&E's four policy objectives are summarized in the diagram below:

2. Provide recommendations for the CPUC and Legislature to help minimize rate increases in the future

In 2020, SDG&E makes the following recommendations for minimizing rate increases into the future:

1. Reconsideration of Rate Design Principles that Penalize Increased Consumption Resulting from Electrification and Decarbonization

2. Implementation of a Residential Fixed Charge one year after Mass TOU Default
3. Reconsideration of the AB 327 Cap on Residential Fixed Charges and Composite Tier Methodology
4. Adopt a Successor Tariff to NEM that Reduces the Cost Shift Burden to Nonparticipating Customers
5. Cost-Based Rates to Reduce Cross Subsidies
6. Increase Transparency of Subsidies

Under AB 327, the Legislature has made significant strides in providing a framework that provides the guidance and direction for a rate design structure for the future that meets the state's energy and environmental goals while minimizing rate increases in the future addressing, among other things, residential rate structures, NEM reform, and introducing distribution level resource planning. SDG&E recommends that the Commission take this opportunity to continue the effort already taken by the Legislature to continue to move forward with a cost-based rate structure and transparent incentives that allows for customers to accurately assess alternative energy services on a competitive basis. In addition, only with cost-based rate structure and transparent incentives can a clean energy future be supported without artificially inflating customer rates resulting from subsidies buried in rate design.

AB 327 permitted the reform of residential rate structures to reduce tier differentials and allow for the consideration of residential fixed charges, and under the direction of the Commission progress is under way. SDG&E implemented the last tier consolidation step in its Glidepath on January 1, 2020, bringing the Tier 1 to Tier 2 differential to 1:1.25. However, SDG&E continues to have concerns about future upward rate pressures. SDG&E recommends that the Commission allow for the implementation of a residential fixed charge, given that the majority of SDG&E's costs to provide service are fixed.

Adopting a residential fixed charge is an important first step, but more change is needed in order to provide customers with high rate relief. SDG&E recommends that the CPUC comprehensively look at the adopted RDPs through the lens of today's and future technology advances, and give appropriate weight to those principles which will allow the

state to fully achieve its climate goals. SDG&E fully supports the State's pursuit for a clean energy future. SDG&E simply cautions the Legislature and the Commission to ensure that the pursuit of this clean energy future is done in a thoughtful manner that always takes into consideration the rate and bill implications to utility customers before adopted.

SDG&E has a multitude of goals and objectives, such as RPS standard, EE and DR goals, and Energy Storage targets in line with the State's clean energy goals. The greater flexibility the Commission provides the IOUs in the manner in which these tools are used to reach the State's objectives and meet the unique characteristics of each service territory, the greater the ability the IOUs will have to meet these goals in a least cost manner. SDG&E recommends that the Legislature and the Commission ensure that the costs of programs and technologies that help achieve its clean energy goals are paid for equitably by all customers and limit the ability for customers to bypass paying for their fair share of these programs. Additionally, SDG&E recommends that the Commission consider the true cost and benefits of certain programs, including NEM, that require the adopting customer to be compensated at the retail rate, when the same clean energy could be procured for significantly less. Looking to future affordability of electricity, the Commission and state have a responsibility to choose policies that are more cost-effective among those available to meet GHG targets. SDG&E will be required to continue to invest in infrastructure to provide clean, safe, and reliable service to all its customers, regardless of where they choose to purchase their commodity service. More grid investment and upgrades will be needed to accommodate as technology advances and is adopted broadly. SDG&E has a key role to play in the state's clean energy future, and ensuring the right rate principles are in place will allow California to reach its future climate goals.

CPUC ENERGY DIVISION
GENERAL REQUEST OF DATA
SDG&E RESPONSE
DATE RECEIVED: APRIL 6, 2020
SDG&E RESPONSE: APRIL 17, 2020

Annual SB 695 Report – Management Control of Rate Components

1. We request that you provide the following data as a supplement to the response your utility originally provided in response to Part II of the data request issued January 3, 2020 to provide data to fulfill the requirements of Public Utilities Code Sec. 913.1(b) ("Utility Study and Report"). Specifically, the response should supplement your response to the following:

   Management Control of Rate Components
   Describe and discuss your utility management's policies and practices for controlling costs and rate increases for customers in general, and for different customer classes.

   Energy Division is requesting that your utility identify and quantify specific cost savings estimated to be realized over the period corresponding to General Rate Case (GRC) application A.17-10-008/007. We suggest that you organize your response based on the Fueling Our Future initiative referenced in A.17-10-008/007 and refer you to Table HS/RC-1 (SCG) and Table HS/RC-2 (SDG&E) in SCG-03-R/SDG&E-03-R of that application. The table(s) in your response should show by functional area how cost savings could flow to customers for each year 2019 – 2021 for either Operating and Maintenance (O&M) or Capital cost savings (or both). These cost savings could be a continuation of cost savings initiatives existing prior to the filing of A. 17-10-008/007 or new cost savings initiatives associated with SCG's 2019 GRC and SDG&E's 2019 GRC Phase I.

   We request that the table(s) in your response include at least five line items by operational area, and further request that you present the percent of total cost savings to total cost for each functional area over the 2019 – 2021 period (e.g. one total for the three year period per functional area). In selecting these line items by functional area, please strive to show a minimum overall cost savings of 5% averaged for the functional areas selected. Please also provide narrative discussing the table(s). Please fill out the requested data in the attached Spreadsheet:

SDG&E Response:

Quantification of cost savings over the General Rate Case (GRC) period is achieved through reductions that are already incorporated or reflected in the authorized revenue requirement, therefore specific quantification of cost savings over the 2019-2021 period is not applicable beyond the tables/information already presented in testimony. To further clarify, the Fueling our Future (FOF) enterprise wide initiative generated savings that were passed back to ratepayers in the form of a lower overall revenue requirement authorized in the 2019 GRC Decision (D.)19-09-051. As referenced in Table HS/RC-1 (SCG) and Table HS/RC-2 (SDG&E) in SCG-03-R/SDG&E-03-R and discussed on page 32 of the final decision, the Commission adopted savings of $42.760 million for SoCalGas and $26.231 million for SDG&E. These savings were

immediately realized upon implementation of the TY 2019 GRC rates and will continue to benefit ratepayers until the TY 2024 GRC decision is implemented.

Any new companywide cost savings initiatives implemented by SoCalGas or SDG&E will be reflected as a proposal in the TY 2024 GRC or as reductions to the historical data used to build the cost forecasts for that rate case.