

Application of San Diego Gas & Electric
Company (U 902 E) for Authority to Update
Marginal Costs, Cost Allocation, and Electric
Rate Design.

Application: 23-01-008

Exhibit No.: _____

CHAPTER 1

REVISED PREPARED DIRECT TESTIMONY OF

SAMANTHA PATE

ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

September 29, 2023



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1 **REVISED PREPARED DIRECT TESTIMONY OF**
2 **SAMANTHA PATE**
3 **(CHAPTER 1)**

4 **I. INTRODUCTION**

5 This General Rate Case (GRC) Phase 2 Application presents San Diego Gas & Electric
6 Company's (SDG&E) electric revenue allocation and rate design proposals associated with the
7 implementation of SDG&E's test year (TY) 2024 GRC Phase 1 electric revenue requirement.
8 The testimony supporting the Application presents SDG&E's marginal cost studies, revenue
9 allocation, and rate design.

10 This testimony adopts the prepared direct testimony of Adam Pierce supporting
11 SDG&E's 2024 GRC Phase 2 Application. The purpose of my revised prepared direct testimony
12 is to discuss the overarching policy framework that guides SDG&E's proposals for revenue
13 allocation and rate design. This Application covers the years 2024-2027.

14 My testimony is organized as follows:

- 15 • Section II – Overview of SDG&E's TY 2024 GRC Phase 2 Application
- 16 • Section III – SDG&E's Policy Objectives and Rate Design Proposals Seek to
17 Balance the California Public Utilities Commission's (Commission's or CPUC)
18 Rate Design Policy Objectives
- 19 • Section IV – Revenue Allocations
- 20 • Section V – Updated Standard Base Time-of-Use (TOU) Periods, Customer
21 Transition, and Customer Education
- 22 • Section VI – Current TOU Differentials Should Be Maintained
- 23 • Section VII – Medium Commercial Customer Class Proposal and Applicability
- 24 • Section VIII – Proposal to Update Seasonality Component, Schedule EV-TOU-
25 5, and Medical Baseline Discount Methodology for Residential Customers
- 26 • Section IX – Proposal to Assess Critical Peak Pricing (CPP) Periods Less
27 Frequently

- 1 • Section X – Additional Compliance Requirements
- 2 • Section XI – Implementation Timing
- 3 • Section XII – Witness Qualifications

4 **II. OVERVIEW OF SDG&E’S TY 2024 GRC PHASE 2 APPLICATION**

5 This Application includes the traditional elements of a GRC Phase 2 – cost allocation and
6 rate design – as well as specific requirements identified within various Commission decisions
7 and directives, including but not limited to Decision (D.) 21-07-010 (2019 GRC Phase 2
8 Decision) and D.17-01-006, (TOU Policy Decision). SDG&E is proposing the following:

- 9 •
- 10 • Update base TOU periods to extend weekday super-off-peak hours of 10 AM – 2
11 PM year-round (currently offered in March and April only) for all customer
12 classes;
- 13 • Maintain SDG&E’s current TOU differentials given the lack of observable market
14 data supporting a drastic change and continue alignment with current Commission
15 policy, except as needed to accommodate SDG&E’s proposal for residential
16 tiered rate seasonality;
- 17 • Split the current Medium/Large Commercial & Industrial (M/L C&I) customer
18 class into two customer classes: Medium Commercial and Large C&I;
- 19 • Use the System Average Percent Change (SAPC) revenue allocation methodology
20 to develop rates for certain rate components;
- 21 • Maintain current revenue allocation methodologies for the Public Purpose
22 Programs (PPP) rate components, except updated allocations based on more
23 recent data for the Energy Efficiency component;
- 24 • Evaluate CPP periods less frequently, as changes require significant customer
25 education and outreach;
- 26 • Move the rate mechanism for moderating seasonal bill volatility from the delivery
27 rate to the commodity rate for tiered residential rates, adjust the super off-peak
28 volumetric distribution rate for Residential Schedule EV-TOU-5, and update the
29 Medical Baseline discount to a line-item discount for both tiered and non-tiered
30 rates; and

- Miscellaneous updates to rate design and tariffs that will provide greater clarification to SDG&E customers.

Because significant changes to residential rate design are being concurrently addressed in the Rulemaking to Advance Demand Flexibility Through Electric Rates (R.22-07-005) (Demand Flexibility Rulemaking), SDG&E proposed limited changes to residential rate design in the original testimony served in this proceeding on January 17, 2023.¹ Since that time, the scope of the Demand Flexibility Rulemaking has been clarified and issues that SDG&E believed would be addressed in the Demand Flexibility Rulemaking have been deemed out of scope.

Accordingly, in addition to updating its testimony to reflect the 2023 sales forecast, SDG&E has further updated its testimony to include two additional residential rate design proposals, as described in the Supplemental Testimony of SDG&E witness Utama. First, SDG&E is proposing to move the adjustment mechanism that moderates seasonal bill volatility in residential tiered rates from the delivery rate (i.e., UDC rate) to the commodity rate (i.e., EECC rate), which will achieve consistency in seasonality rate design between tiered and untiered residential rates. Second, SDG&E is proposing to adjust the super off-peak period volumetric distribution rate for Schedule EV-TOU-5, in order to reflect marginal cost-based rates.

Additionally, SDG&E is proposing to maintain the TOU differentials in its current effective commodity rates for all customer classes, except as needed to accommodate SDG&E's proposal for residential tiered rate seasonality. SDG&E's marginal commodity cost study, as shown in the revised prepared direct testimony of SDG&E witness Jeff DeTuri (Chapter 5), forecasts that the TOU differentials from a purely forecasted, cost-based perspective, for 2024 and 2027, will be significantly lower than the current TOU differentials, particularly in the summer months. However, as discussed below, SDG&E believes that it is premature to

¹ A.23-01-008.

1 significantly decrease TOU differentials (*e.g.*, the difference between the on-peak period and
2 super off-peak period price) based solely on forecasts at this time.

3 Pursuant to D.17-08-030, SDG&E is required to file an annual Tier 2 Advice Letter (AL)
4 that updates the critical event period based on a loss of load analysis.² However, in the interest
5 of customer understanding, education, and the significance of a change in the CPP period,
6 SDG&E is proposing to eliminate this compliance requirement and evaluate its CPP event period
7 in every GRC Phase 2 starting with the subsequent GRC cycle.

8 The Application is further supported by the following testimony:

- 9 • Chapter 2 (Ray C. Utama): Presents SDG&E's updated electric revenue
10 allocation and proposals for changes to revenue allocations, as well as revenue
11 allocation compliance requirements.
- 12 • Chapter 3 (Ray C. Utama, Erica Wissman, Hannah Campi, and Evelyn Luna):
13 Presents SDG&E's proposals to update rates to reflect proposed TOU periods,
14 revenue allocations, electric rate design, and illustrative bill impacts to support
15 those proposals, including:
 - 16 ○ Update to the current Residential Medical Baseline methodology and
17 expansion of a Medical Baseline Program Discount to non-tiered
18 residential rates;
 - 19 ○ Movement toward more cost-based rates for non-residential customers,
20 including increases to existing monthly service fees; and
 - 21 ○ Division of the current M/L C&I customer class into a Medium
22 Commercial customer class and a Large C&I customer class and
23 illustrative rates.
- 24 • Chapter 4 (William G. Saxe): Presents SDG&E's proposed distribution marginal
25 costs (both customer costs and demand costs) and the cost basis for distribution
26 revenue allocation.
- 27 • Chapter 5 (Jeff DeTuri): Presents SDG&E's commodity marginal cost, including
28 both energy costs and generation capacity costs, the cost-based commodity and
29 Competition Transition Charge (CTC) revenue allocations, and data to support

² D.17-08-030, Ordering Paragraph (OP) 32 at 92.

1 SDG&E’s current TOU periods, as well as the deadband tolerance analysis
2 required in each GRC Phase 2 Application.³

- 3 • Chapter 6 (William G. Saxe): Presents SDG&E’s Street Lighting cost studies and
4 associated rate design proposals.
- 5 • Chapter 7 (Jeff Nightingale): Describes the process for converting Schedule OL-
6 1 lamps to Light Emitting Diode (LED) technology, including the costs for
7 completing these conversions.
- 8 • Chapter 8 (Evelyn Luna): Proposes miscellaneous tariff and rate design changes.
- 9 • Chapter 9 (Rachelle Baez): Presents Affordability Metrics as required by D.22-
10 08-023.
- 11 • Supplemental Testimony (Ray Utama): Presents residential rate design proposals
12 for seasonality and Schedule EV-TOU-5.

13 **III. SDG&E’S POLICY OBJECTIVES AND RATE DESIGN PROPOSALS SEEK TO**
14 **BALANCE THE COMMISSION’S RATE DESIGN POLICY OBJECTIVES**

15 SDG&E continues to be a leader in providing clean energy and advancing technology, all
16 while providing safe and reliable service. SDG&E’s accomplishments include:

- 17 • Recognized leader for its wildfire safety and mitigation efforts;
- 18 • Procuring approximately fifty-nine percent of its power from renewable
19 resources;⁴
- 20 • Integrating over 2,000 megawatts (MW) of customer-sited solar from over
21 277,000 customers;⁵
- 22 • Serving ~121,000 plug-in electric vehicles within its service territory, making
23 clean driving more accessible with several programs available to customers
24 including the Power-Your-Drive program, and expanding access to electric
25 vehicle charging at businesses, multi-family communities, and disadvantaged
26 neighborhoods; and

³ SDG&E’s proposed deadband tolerance methodology was approved with modifications in Resolution E-4948 on November 29, 2018. SDG&E subsequently filed Advice Letter AL 3064-E-A on January 1, 2019, which was approved and became effective as of January 2, 2019.

⁴ R.18-07-003, SDG&E’s Draft 2023 Renewable Portfolio Standard Procurement Plan – Public Version (July 17, 2023) at 3 (SDG&E’s procured 59% of its power from renewable resources in 2022).

⁵ 2023 estimates from California Distributed Generation Statistics, available at <https://www.californiadgstats.ca.gov/charts/>.

- Receiving the 2021 National Reliability Award, the 2022 Outstanding Grid Reliability Award, as well as receiving the “Best in the West” award for electric reliability for 17 straight years.⁶

Despite significant progress in these areas, rate design has not evolved alongside a rapidly changing energy marketplace, and this disconnect represents a potential barrier for customer technology adoption and customer choice. SDG&E commends the Commission for addressing demand flexibility and revisions to residential rate design, as well as adopting updated rate design principles (RDPs) and considering demand flexibility rates more broadly in the Demand Flexibility Rulemaking.⁷ To help ensure the continued pursuit of the state’s clean energy goals in a sustainable manner, it is critical to move toward rates that reflect accurate prices to help incentivize customer behavior, and, if necessary for policy reasons, provide incentives or subsidies that are direct and transparent.

Importantly, SDG&E supports the updated RDPs adopted by the Commission in Order Instituting Rulemaking 22-07-005, which are presented below in Table SP-1.⁸ SDG&E’s proposals in this application balance these updated rate design principles.

Figure SP-1: Rate Design Principles

D.23-04-040 RDPs
(1) All residential customers (including low-income customers and those who receive a medical baseline or discount) should have access to enough electricity to ensure that their essential needs are met at an affordable cost.
(2) Rates should be based on marginal cost.
(3) Rates should be based on cost-causation.
(4) Rates should encourage economically efficient (i) use of energy, (ii) reduction of greenhouse gas emissions, and (iii) electrification.
(5) Rates should encourage customer behaviors that improve electric system reliability in an economically efficient manner.
(6) Rates should encourage customer behaviors that optimize the use of existing grid infrastructure to reduce long-term electric system costs.

⁶ PA Consulting ReliabilityOne™ Awards.

⁷ See generally R.22-07-005.

⁸ See D.23-04-040.

- (7) Customers should be able to understand their rates and rate incentives and should have options to manage their bills.
- (8) Rates should avoid cross-subsidies that do not transparently and appropriately support explicit state policy goals.
- (9) Rates design should not be technology-specific and should avoid creating unintended cost-shifts.
- (10) Transitions to new rate structures should (i) include customer education and outreach that enhances customer understanding and acceptance of new rates, and (ii) minimize or appropriately consider the bill impacts associated with such transitions.

1 SDG&E continues to advocate for movement towards more cost-based rates as outlined
2 by the RDPs in Figure SP-1 above. In addition, SDG&E recognizes the importance of ensuring
3 balance of all the Commission’s RDPs. SDG&E in this Application is seeking to continue to
4 move forward with more cost-based rates with the rate design proposal, discussed in the revised
5 prepared direct testimony of SDG&E witnesses Ray C. Utama, Erica Wissman, Hannah Campi,
6 and Evelyn Luna (Chapter 3) to increase certain existing Monthly Service Fees (MSF) of the
7 Small Commercial, proposed Medium Commercial, Large C&I, and Agricultural customer
8 classes for the years 2024-2027. SDG&E’s proposals to increase current MSFs result in
9 offsetting decreases to other rate components, helping reduce bill volatility for customers, and
10 providing rates more closely based on marginal cost (RDP 2) and cost-causation (RDP 3). In
11 addition, SDG&E’s proposal to continue use of the revenue allocation SAPC methodology for
12 certain rate components is intended to provide customers with greater rate stability. Further,
13 SDG&E’s proposal to divide the current M/L C&I class into a Medium Commercial customer
14 class and Large C&I customer class will provide “Medium” and “Large” commercial customers
15 with rates more closely based on their cost of service (RDP 3). SDG&E’s proposals in
16 Supplemental Testimony (witness Utama) will improve customer understanding by providing
17 consistent summer and winter delivery rates (RDP 7) and reduce technology-specific non-
18 transparent cost shifts (RDPs 8 and 9). Finally, SDG&E’s proposal to extend the super off-peak
19 TOU period from 10am to 2pm year-round will also improve customer understanding by

1 providing consistent TOU periods year-round (RDP 7), and will encourage economically
2 efficient consumption during low-cost daytime hours, when renewable resources are more
3 available and greenhouse gas (GHG) emissions are lower (RDP 4).

4 **A. Lower Volumetric Rates are Needed to Incentivize Electrification**

5 California is moving toward electrification of homes and buildings, a necessary step to
6 reduce harmful greenhouse gases (GHGs) and other emissions to help meet the state’s collective
7 climate goals. However, the current residential rate design structure is misaligned with the
8 state’s goals, as nearly all costs are recovered in volumetric energy rates. In order to incentivize
9 broad electrification from all customers, including non-residential customers, it is important to
10 reduce volumetric rates. For its residential customers, SDG&E is proposing to reduce
11 volumetric rates by recovering more costs in a monthly fixed rate component. The Commission
12 will decide the issue of income-based fixed charges for default, and potentially all, residential
13 rate schedules in accordance with Assembly Bill 205 in the ongoing Demand Flexibility
14 Rulemaking.⁹ SDG&E is hopeful that the Commission will establish an income-based fixed
15 charge for all residential rates that meaningfully lowers volumetric rates and prevents certain
16 customers from rate arbitrage.

17 SDG&E’s revised testimony herein reflects developments that have occurred in the
18 Demand Flexibility Rulemaking. Since SDG&E filed this application on January 17, 2023, the
19 Commission has more clearly defined the scope of Track A of the Demand Flexibility
20 Rulemaking, which is considering income-graduated fixed charges for residential rates.

⁹ See R.22-07-005.

1 Specifically, the Commission determined that TOU rate design was beyond the scope of Track
2 A.¹⁰

3 Accordingly, in light of the narrowed scope in the Demand Flexibility Rulemaking, Track
4 A, SDG&E is proposing changes to Residential customer class rate design in its supplemental
5 testimony in the instant application. In order to avoid conflicting proposals and workstreams,
6 SDG&E limits its proposed residential rate design changes in supplemental testimony to those
7 issues that are out of scope or are unlikely to be addressed in a decision resulting from R.22-07-
8 005, Track A. Thus, in this Application, SDG&E is proposing an update to TOU periods for all
9 customer classes, including residential, to move the rate adjustment mechanism that moderates
10 residential bill seasonality from the delivery rate to the commodity rate for its tiered residential
11 rates, to adjust the super-off peak rate for Schedule EV-TOU-5 to recover marginal costs, and an
12 update to the Medical Baseline Program discount methodology and an expansion of the Medical
13 Baseline Program Discount to non-tiered rates.

14 **B. Commission Policy & Recent Events Point to a Need for Strong Load-**
15 **Shifting Incentives**

16 SDG&E believes it is important for customers to receive price signals that incentivize
17 changes in behavior that will benefit the electric grid and its customers. As discussed in Section
18 VI, SDG&E is proposing to maintain its current TOU price differentials despite its commodity
19 cost study, as presented in the revised prepared direct testimony of SDG&E witness Jeff DeTuri
20 (Chapter 5), showing a significant decrease in the cost-based price differentials, particularly for
21 summer months, for its TOU periods. Moderating the price differentials that customers see
22 could result in a lower incentive for customers to shift usage outside the on-peak period. Making

¹⁰ See, R.22-07-005, Phase 1 Track A: Income Graduated Fixed Charge Guidance Memo (January 17, 2023) at 4-5.

1 a drastic change based purely on current forecasts is of concern to SDG&E, especially given that
2 the state has experienced heat events in recent years that have strained its power grid and its
3 energy supply. It is in the interest of all involved parties – SDG&E, customers, the state, the
4 Commission, and others – to avoid these types of events.

5 Strong price signals are one tool to incentivize customers to regularly shift their usage
6 outside the peak period and support state policy objectives of reducing GHGs and increasing grid
7 reliability. The Commission recently affirmed this policy in D.22-12-056, stating “[h]ighly
8 differentiated time-of-use rates are closer to the energy prices required to run the grid” and
9 “[h]ighly differentiated time-of-use rates encourage electrification and help California reach its
10 greenhouse gas emissions reduction goals.”¹¹ Accordingly, SDG&E is proposing to maintain the
11 current TOU differentials, as approved in its last GRC Phase 2, rather than update them based on
12 the marginal commodity cost study presented in the revised prepared direct testimony of
13 SDG&E witness Jeff DeTuri (Chapter 5).

14 **IV. REVENUE ALLOCATIONS**

15 Consistent with current practice adopted in D.21-07-010, SDG&E is proposing to
16 maintain use of the SAPC methodology when implementing new sales forecasts, as discussed in
17 detail in the revised prepared direct testimony of SDG&E witness Ray C. Utama (Chapter 2). In
18 line with providing greater rate and bill stability, SDG&E believes continuing to use the SAPC
19 methodology will help smooth out volatility in class average rate changes due to changes in sales
20 caused by economic factors, technology adoption, and load departure.

21 Additionally, SDG&E is proposing to maintain the current revenue allocation
22 methodologies for the PPP subcomponents, as adopted in D.21-07-010, with modification to

¹¹ D.22-12-056, Findings of Fact 112 and 114 at 217-218.

1 accommodate division of the current M/L C&I customer class into the Medium Commercial
2 class and Large C&I class. Most PPP subcomponents are dependent on Commission-adopted
3 sales forecasts, which are updated annually via SDG&E's Energy Resource Recovery Account
4 (ERRA) Forecast Applications. SDG&E is proposing to continue the current methodology to
5 update its PPP rates annually via implementation advice letter. Updating PPP subcomponents
6 annually based on the most recently adopted sales forecast and latest PPP revenue requirements
7 reflects the most up-to-date conditions and is the most equitable way to minimize potential cost
8 shifts between customer classes.

9 The only exception to SDG&E's proposal to maintain current treatment for PPP
10 components is SDG&E's proposal to update the revenue allocation factors for the Energy
11 Efficiency (EE) PPP subcomponent. EE allocations are based on forecasted EE spending by
12 customer class, as approved in D.05-09-043, with the current allocations based on the 2019
13 forecasted program budget.¹² SDG&E is proposing to update EE revenue allocation factors with
14 the forecasted EE program budget year 2022. Revenue allocation proposals are discussed in
15 more detail in the revised prepared direct testimony of SDG&E witness Ray C. Utama (Chapter
16 2).

17 **V. UPDATED STANDARD BASE TIME-OF-USE (TOU) PERIODS, CUSTOMER**
18 **TRANSITION, AND EDUCATION**

19 SDG&E is required to analyze its Base TOU Periods with every GRC Phase 2 application
20 and propose new TOU periods if warranted.¹³ As described in the revised prepared direct
21 testimony of SDG&E witness Jeff DeTuri (Chapter 5), SDG&E evaluated its current TOU
22 periods using two methodologies: 1) a Loss of Load Expectation (LOLE) analysis; and 2) a

¹² D.21-07-010 at 22.

¹³ D.17-01-006, Appendix 1, Policy Guideline #6 at 2.

1 Deadband Tolerance analysis.¹⁴ The LOLE determines the probability of SDG&E not meeting
2 load in a given hour. The results, which are described in more detail in the revised prepared
3 direct testimony of SDG&E witness Jeff DeTuri (Chapter 5), highlight a greater likelihood of
4 loss of load during SDG&E’s current and proposed on-peak TOU period when using the same
5 assumptions as the Integrated Resource Plan (IRP). Additionally, SDG&E’s Deadband
6 Tolerance analysis compares the top 100 hours with existing TOU periods to determine if a
7 certain percentage of hours fall outside the current On-Peak Period, and whether a percentage of
8 the bottom 100 hours fall outside the Super Off-Peak Period. All top 100 hours fall into
9 SDG&E’s current and proposed On-Peak Period, and all bottom 100 hours occur during
10 SDG&E’s proposed Super Off-Peak Period.

11 **A. Updated Standard Base TOU Periods**

12 The Commission has adopted general principles in respect to developing and
13 implementing changes in Base TOU periods.¹⁵ For instance, Policy Guideline #5 of D.17-01-
14 006, Appendix 1 states that “Base TOU periods should continue for a minimum of five years
15 (unless [there are] material changes ... [that warrant a change], and each IOU should propose
16 new Base TOU periods, if warranted, at least every two general rate case cycles.”¹⁶ Base TOU
17 Periods should be developed using forward-looking data, with the forecast year set at least three
18 years after the year the Base TOU Period will go into effect. Using TY 2024, SDG&E conducted
19 its LOLE analysis on both 2024 and 2027 data to determine whether to update its Base TOU
20 Periods.

¹⁴ The Deadband Tolerance methodology was approved in AL 3064-E/A. *See e.g.*, n.4, *supra*.

¹⁵ *See* D.17-01-006, Appendix 1, Policy Guideline #5 at 1.

¹⁶ *Id.*

Based on this analysis, SDG&E is proposing to update its existing standard TOU periods to include additional super-off-peak period hours. SDG&E is proposing to update its standard base TOU periods to: 1) better reflect cost-causation as shown in the marginal commodity cost study in the revised prepared direct testimony of SDG&E witness Jeff DeTuri (Chapter 5); 2) encourage customers to shift energy consumption to daytime hours when significant renewable generation is available, thereby helping reduce GHG emissions; and 3) provide more opportunities for customers to shift load into the Super Off-Peak period and manage their bills. Figure SP-2 below displays SDG&E’s proposed Base TOU periods.

Figure SP-2: SDG&E Proposed Base TOU Periods

TOU Period	Weekday		Weekend	
	Summer	Winter	Summer	Winter
On-Peak	4 – 9 PM	4 – 9 PM	4 – 9 PM	4 – 9 PM
Off-Peak	All other hours	All other hours	All other hours	All other hours
Super Off-Peak	Midnight – 6 AM; 10 AM – 2 PM	Midnight – 6 AM; 10 AM – 2 PM	Midnight – 2 PM	Midnight – 2 PM

SDG&E believes the extension of these four super off-peak period weekday hours during the middle of the day year-round will provide more opportunities for residential customers to shift their consumption to daytime hours when excess clean energy is typically available. Many businesses are still operating on a work-from-home or hybrid basis, meaning that individuals are home more often during the day and able to take advantage of these hours as compared to pre-pandemic. Encouraging customers to shift their consumption to the daytime, non-peak hours, will help benefit the system, customer bills, and encourage GHG emissions reduction.

Based on the LOLE analysis presented in the revised prepared direct testimony of SDG&E witness Jeff DeTuri (Chapter 5), a change to SDG&E’s peak period is not warranted. The current on-peak period is 4 PM – 9 PM, year-round, weekdays and weekends/holidays. As

1 shown in the revised prepared direct testimony of SDG&E witness Jeff DeTuri (Chapter 5), the
2 forecasted data does not support a change to the on-peak period. Additionally, SDG&E believes
3 that customers (especially residential customers) are still becoming familiar with and accustomed
4 to TOU rates and the 4 PM – 9 PM on-peak period. Mass Residential Default TOU concluded in
5 2020 and included a massive statewide and service territory marketing and education campaign.
6 Changing the on-peak period prematurely when the data does not support a change would incur
7 unnecessary costs, confuse customers, and provide little benefit to the system.

8 **B. Customers Should Transition Immediately to New Standard TOU Periods**

9 SDG&E believes that this proposed change to its Standard Base TOU Periods, which
10 makes the current March/April TOU periods the year-round standard, is more easily understood
11 than potential other changes to TOU periods, such as changes to the on-peak period. The
12 inclusion of additional super off-peak hours during the day, when residential customers may be
13 at home, or many non-residential customers have business hours, is likely a benefit to those
14 customers. Customers, especially residential customers working from home, will be able to shift
15 their electricity consumption to mid-day when solar generation is plentiful, thereby helping to
16 reduce emissions.

17 SDG&E is proposing no legacy period for customers on current standard TOU periods.¹⁷
18 While the Commission granted legacy periods for certain BTM solar customers on SDG&E's
19 previous base TOU periods (pre-2017 TOU periods), the change experienced by those customers
20 was significantly more drastic (the on-peak period moved from 11 AM – 6 PM to 4 PM – 9 PM).

¹⁷ Non-residential solar customers with legacy TOU periods are able to stay on their legacy TOU periods 10 years after interconnection (through December 31, 2027). *See* D.17-01-006, as modified by D.17-10-018, and D.17-08-030.

1 ¹⁸ Here, the proposed change to TOU periods does not include a change in the on-peak period,
2 only the addition of four super off-peak period hours on weekdays from May – February.
3 Requiring a legacy TOU grace period for SDG&E’s currently effective TOU periods, which
4 could benefit current BTM solar customer by allowing them to stay on today’s current effective
5 TOU periods for a period of time after implementing the new TOU periods, would require
6 SDG&E to have two versions of legacy TOU periods implemented for customers and bill
7 customers on three different sets of TOU periods, which would serve to increase customer
8 confusion, ME&O, and billing costs.

9 Additionally, for policy reasons, SDG&E does not believe that BTM solar customers
10 should receive special treatment and be allowed to stay on the current effective TOU periods
11 longer than non-solar customers. New residential NEM 2.0 customers in SDG&E’s service
12 territory who completed an interconnection application before April 14, 2023, enjoy simple
13 paybacks of approximately three years,¹⁹ and receive NEM treatment for 20 years.²⁰ The newly
14 adopted Net Billing Tariff (NBT) is estimated to provide SDG&E solar customers simple
15 paybacks in less than six years, well below the targeted nine-year payback of the decision.²¹
16 Additionally, because the NBT decision payback was calculated using a simple payback, it does

¹⁸ See D.17-01-006 at 56-65 (describing legacy TOU periods for solar customers but specifying on pages 56-57 that customers investing in solar and other on-site distributed energy resources should be aware that going forward the plan is to regularly review and update TOU periods and this information should be taken into account when making investment decisions).

¹⁹ Simple payback refers to the number of years required to recover initial investment. *And see* E3 study comparing NEM successor proposals as submitted by the parties in CPUC Rulemaking 20-08-020 to replace the existing NEM tariff, NEM 2.0. Study Title: *Cost Effectiveness of NEM Successor Rate Proposals Under Rulemaking 20-08-020* (June 15, 2021) at 34 (, available at: <https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/net-energy-metering/nem-revisit/net-billing-tariff> (under Party Proposals)).

²⁰ D.22-12-056 at 191 (stating that D.16-01-044 “established a legacy period of 20 years from the customer’s interconnection as a reasonable period over which the customer should be eligible to continue taking service under NEM 2.0 tariff.”).

²¹ D.22-12-056 at 79.

1 not take into account any rate increases that will occur in the future, which will increase NBT
2 customer bill savings.

3 In addition, SDG&E has significant excess solar generation during the middle of the day.
4 Today, nearly 23% of SDG&E’s residential customers are rooftop solar (NEM or NBT)
5 customers.^{22,23} NEM and NBT customers should be encouraged to consume or store their
6 daytime generation onsite, not export it to the grid where it contributes to curtailment of cheaper,
7 utility-scale solar resources.²⁴ A lower super off-peak price during the day should incentivize
8 NEM and NBT customers with paired batteries to store their self-generation and consume it later
9 in the evening. Therefore, it does not make sense to provide a new legacy period to NEM or
10 NBT customers on current standard TOU periods.

11 **C. Customer Marketing, Education & Outreach for Standard TOU Period**
12 **Change**

13 If SDG&E’s request is approved, SDG&E will develop and deploy a robust marketing,
14 education, and outreach (ME&O) plan to inform its bundled business and residential customers
15 of the new opportunity to save on their energy bill and make better use of renewable energy
16 sources when they are more available to the power grid. Because additional super off-peak hours
17 during weekdays are not a new concept to customers, SDG&E believes that marketing activities
18 can be efficiently and effectively integrated into existing rate education activities that focus on
19 when a customer uses energy and customer choice when it comes to pricing plan options.

²² ~272,000 residential NEM solar PV projects per 2023 estimates from California Distributed Generation Statistics, available at <https://www.californiadgstats.ca.gov/charts/>. SDG&E has approximately 296,000 residential NEM customers as of August 31, 2023, and a total of approximately 1.3 million residential customers.

²³ Interconnected NBT customers are temporarily being billed on NEM 2.0 until SDG&E can implement the NBT in its billing system.

²⁴ California ISO, Managing Oversupply, available at <http://www.caiso.com/informed/Pages/ManagingOversupply.aspx>; see e.g., California ISO, Fast Facts, Impacts of renewable energy on grid operations, available at <http://www.caiso.com/Documents/CurtailmentFastFacts.pdf>.

1 ME&O activities would include, but are not limited to, leveraging a multi-channel
2 strategy, including digital marketing, targeted email and/or direct mail, on-bill messaging,
3 community partner content packets, talking points and collateral for customer-facing employees
4 including Account Executives and Customer Care Center, social media, sdge.com and earned
5 media when possible. SDG&E believes there is an opportunity to promote these lower-priced
6 energy hours to customers who are not on a TOU plan or are on a TOU plan with only two
7 pricing periods as another pricing plan option for their consideration. Communications will
8 consider the needs of specific customer segments, including low-income and in-language needs.
9 SDG&E would exclude marketing to customers who take service with a Community Choice
10 Aggregator in adherence with the applicable Code of Conduct.

11 **VI. CURRENT TOU DIFFERENTIALS SHOULD BE MAINTAINED**

12 SDG&E is proposing to maintain its current TOU differentials for all customer classes.
13 As stated previously, Figure SP-3 below shows the current TOU differentials for SDG&E's
14 default residential rate compared to the TOU differentials shown in SDG&E's 2024 commodity
15 cost study. As shown below, using SDG&E's 2024 GRC Phase 2 Commodity Cost Study results
16 in significantly more muted TOU differentials.

1 **Figure SP-3: SDG&E’s January 1, 2023, Effective Base Commodity Rates vs. Base**
 2 **Commodity Rates Using the 2024 Commodity Cost Study**

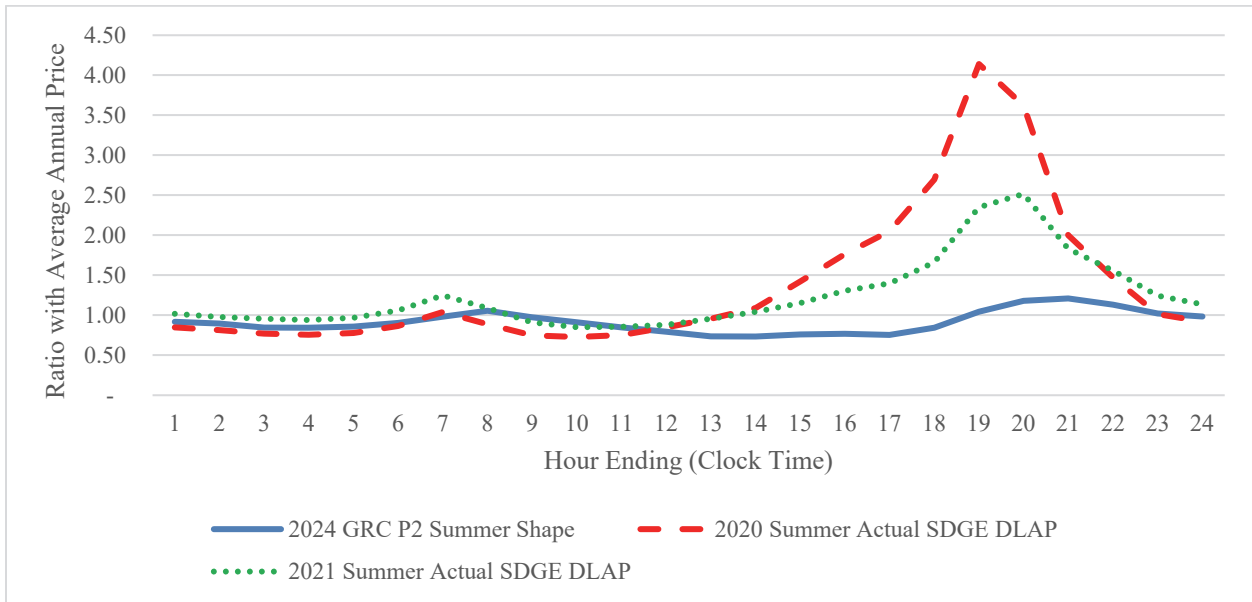
TOU-DR1	January 1, 2023	2024 Commodity Cost Study
Base Commodity Rates	(¢/kWh)	(¢/kWh)
Summer		
On-Peak	57.0	26.7
Off-Peak	25.6	12.1
Super Off-Peak	9.2	9.9
Winter		
On-Peak	19.2	16.5
Off-Peak	10.8	12.4
Super Off-Peak	8.3	10.5
Summer Differentials:		
On: Super Off-Peak	6.2	2.7
On: Off-Peak	2.2	2.2
Winter Differentials:		
On: Super Off-Peak	2.3	1.6
On: Off-Peak	1.8	1.3

3
 4 Because it is forecasted that there will be additional capacity resources added to
 5 SDG&E’s service territory by 2024, in accordance with the reliability procurement orders and
 6 concerns,²⁵ theoretically, SDG&E would have enough capacity in its service territory and would
 7 need less of a response from customers to shift load outside the on-peak period. This forecast is
 8 consistent with the Integrated Resources Plan (IRP). Many of the resources forecasted to come
 9 online are battery storage, meaning that they could provide capacity during the peak period,
 10 when costs are highest. Using these forecasted assumptions results in significantly lower “cost-
 11 based” TOU differentials. However, this is a drastic change from current price differentials
 12 observed in the market. In 2020 and 2021, SDG&E observed extreme market price spikes in the
 13 peak hours relative to the off and super-off-peak hours. Figures SP-4 and SP-5 below show the
 14 average 2020 and 2021 summer and winter Default Load Aggregation Point (DLAP) prices for
 15 SDG&E compared to the forecasted 2024 summer and winter shapes.

²⁵ See, D.19-11-016, D.21-06-035, D.21-12-015, and D.22-02-004.

1

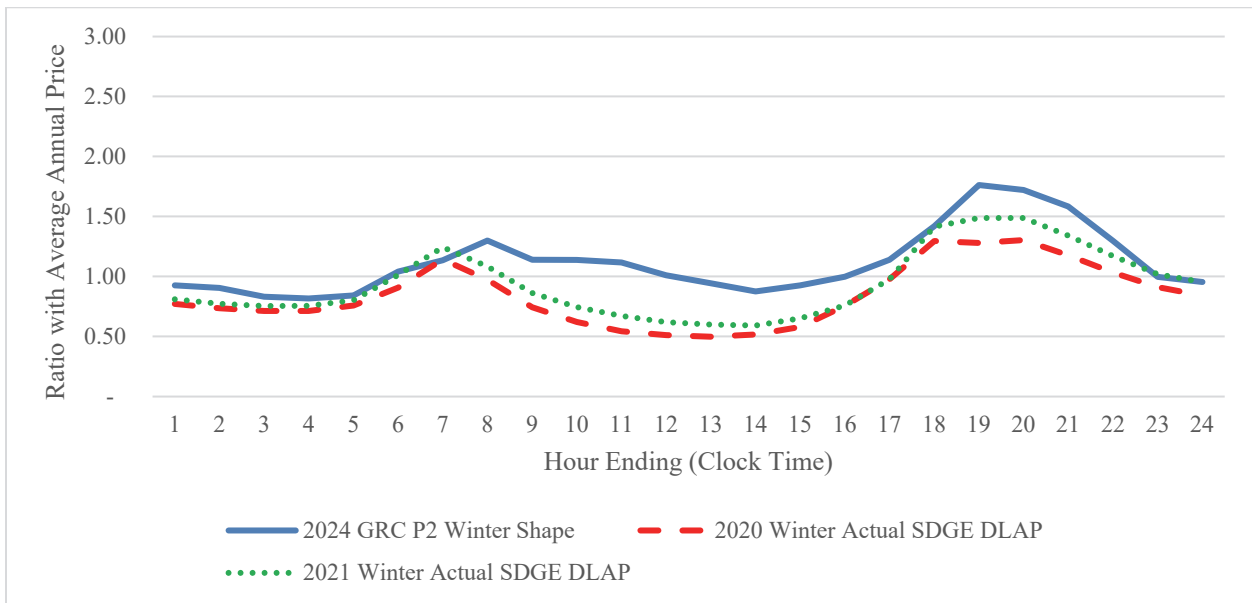
Figure SP-4: Summer Weekday Average Hourly Shape



2

3

Figure SP-5: Winter Weekday Average Hourly Shape



4

5

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8

This market price differential was again observed in the summer months of 2022. While the IRP forecasts an increase in additional resources coming online in 2024 that could limit future summer market price spikes, it is premature to make this change based on forecasts and without observable market data supporting this hypothesis. Flattening TOU differentials,

1 especially in summer months, could have the unintended consequence of muting a necessary
2 price signal and discourage needed customer demand response during critical times of the day.
3 Given all of this information, SDG&E believes the best course of action is to continue using the
4 cost-based differentials that are currently in effect, rather than implement the more muted
5 differentials shown in SDG&E’s 2024 commodity cost study.

6 **VII. MEDIUM COMMERCIAL CUSTOMER CLASS PROPOSAL AND**
7 **APPLICABILITY**

8 **A. Proposal to Split Current M/L C&I Customer Class**

9 SDG&E is proposing to split the current M/L C&I customer class to create a new
10 customer class for “medium” commercial customers and a class for “large” commercial and
11 industrial customers. Currently, SDG&E has two commercial customer classes: the Small
12 Commercial customer class is generally for customers with maximum demands up to 20
13 kilowatts (kW), and the M/L C&I customer class is generally for customers with maximum
14 demands over 20 kW.²⁶

15 Pursuant to D.21-07-010, and as detailed in the revised prepared direct testimony
16 SDG&E witnesses Ray C. Utama, Erica Wissman, Hannah Campi, and Evelyn Luna (Chapter 3),
17 SDG&E was required to consider creating one or more new customer classes for medium
18 commercial customers. SDG&E studied whether it would be appropriate to split its M/L C&I
19 customer class and is proposing herein to split its current M/L C&I class into two classes: one
20 customer class for “medium” commercial customers with maximum demands up to 200 kW, and
21 one customer class for “large” commercial and industrial customers with maximum demands
22 exceeding 200 kW. Based on SDG&E’s analysis, the differences in cost to serve customers with
23 demands under 200 kW and demands over 200 kW is sufficiently different to justify dividing the

²⁶ Specific eligibility requirements are detailed in SDG&E’s tariffs.

1 customer class. Additionally, splitting the class at the 200 kW level leaves a sufficient number
2 of customers in each class. The revised prepared direct testimony of SDG&E witness Ray C.
3 Utama (Chapter 2) and witness Hannah Campi (Chapter 3) discuss in more detail the revenue
4 allocation and rate design of the proposed Medium Commercial customer class.

5 SDG&E anticipates once this proposal is approved it will develop an ME&O plan to
6 communicate and educate customers impacted by this change. SDG&E's implementation timing
7 is discussed in section XI.

8 **VIII. PROPOSAL TO UPDATE MEDICAL BASELINE DISCOUNT METHODOLOGY**

9 SDG&E offers a Medical Baseline program in compliance with statute and Commission
10 direction that provides eligible medical customers with a higher baseline allocation to cover the
11 additional energy needs required by their medical equipment.²⁷ Baseline allowance is a feature
12 of tiered residential rates, where a certain quantity of consumption each month is provided at a
13 lower price (*i.e.*, Tier 1 pricing), and all consumption beyond that quantity is provided at a higher
14 price (*i.e.*, Tier 2 pricing). Eligible medical baseline customers also receive an embedded rate
15 discount on their tiered prices.²⁸ However, SDG&E also offers non-tiered residential rates,
16 where all volumetric energy rates are priced the same, regardless of quantity of consumption.
17 Because these rates are non-tiered, there is no option to provide an additional amount of energy
18 at a lower price to medical baseline customers who would otherwise receive lower rates if they
19 chose a tiered rate.

20 For this reason, SDG&E proposes to update the medical baseline to a line-item discount
21 for eligible medical customers on residential tiered *and* non-tiered rate schedules to provide both
22 sets of customers the same type of discount. In addition, SDG&E is proposing to update the

²⁷ Per California Public Utilities Code §739(c) and D.15-07-001.

²⁸ D.15-07-001 at 247-250.

1 medical baseline discount percentage to better align with the discounts provided by the other
2 California Investor-Owned Utilities (IOUs). The revised prepared direct testimony of SDG&E
3 witnesses Ray C. Utama, Erica Wissman, Hannah Campi, and Evelyn Luna (Chapter 3)
4 discusses SDG&E’s proposal to update the Medical Baseline discount methodology in more
5 detail.

6 **IX. PROPOSAL TO ASSESS CRITICAL PEAK PRICING (CPP) PERIODS LESS**
7 **FREQUENTLY**

8 Currently, SDG&E is required to file an annual Tier 2 AL that updates the CPP event
9 period based on a loss of load analysis.²⁹ SDG&E has filed this Tier 2 AL in compliance with
10 D.17-08-030 since 2018, and changed its CPP period once to align with its current on-peak
11 period.³⁰ Changing the CPP event period is a significant task: it requires development and
12 conducting of a marketing, education and outreach campaign to all customers. Additionally, it is
13 logical to align the CPP event period with the on-peak period. A CPP that differs from the on-
14 peak period is likely to send confusing and conflicting price signals to customers. Each change
15 would need to have a significant ME&O campaign. Therefore, SDG&E does not believe it will
16 change CPP periods outside of a base TOU period change. It makes sense for CPP periods to be
17 aligned with the currently effective on-peak period and for adjustments to CPP periods to
18 coincide with adjustments to TOU periods. Therefore, in the interest of customer understanding,
19 education, and the significance of a change in the CPP period, SDG&E is proposing to eliminate
20 this annual compliance requirement and evaluate its CPP event period every GRC Phase 2
21 starting with the current GRC cycle.

²⁹ D.17-08-030, OP 32 at 92.

³⁰ AL 3667-E, approved and effective December 13, 2021, changed the 2 PM – 6PM CPP period adopted in D.17-08-030 to 4 PM – 9 PM per D.21-03-056, to align with SDG&E’s current on-peak period and the hours of greatest capacity need.

1 **X. ADDITIONAL COMPLIANCE REQUIREMENTS**

2 SDG&E is required to provide other information as a part of this Application, including:

3 A) a Deadband Tolerance Assessment;³¹ and B) NEM vs. Non-NEM Marginal Costs.³²

4 **A. Deadband Tolerance Assessment**

5 D.17-01-006 required SDG&E to conduct a deadband tolerance test for determining
6 when a change would trigger TOU period revisions more frequently than five-year intervals, and
7 provide Base TOU period analysis. As directed, SDG&E filed AL 3064-E on April 3, 2017,
8 proposing a two-part methodological test for the deadband tolerance rate. The CPUC issued
9 Resolution E-4948 on November 29, 2018, approving SDG&E’s proposal in part, and SDG&E
10 filed supplemental AL 3064-E-A on December 17, 2018, to comply with the resolution.

11 SDG&E has included the results of the deadband tolerance assessment in this Application, as
12 discussed in the revised prepared direct testimony of SDG&E witness Jeff DeTuri (Chapter 5).

13 The results of the assessment support the current base on-peak and off-peak TOU periods, but as
14 discussed in Section V.A., indicate that prices are low during the mid-day hours. Therefore,
15 SDG&E is proposing to extend the current March/April weekday Super Off-Peak period of 10
16 AM – 2 PM throughout all months of the year.

³¹ D.17-01-006, OP 1 at 77-78, and Resolution E-4951 (September 13, 2018).

³² D.21-07-010, OPs 1 and 2 at 88, adopted the 2019 GRC Phase 2 settlement agreement.

1 **B. NEM and Non-NEM Marginal Costs**

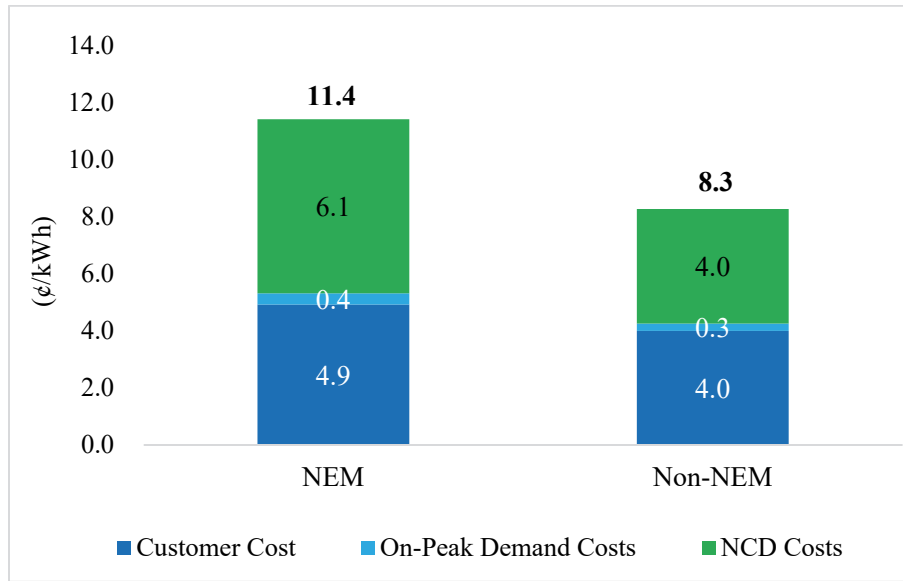
2 Pursuant to the SDG&E’s TY 2019 GRC Phase 2 Settlement Agreement, SDG&E was
3 required to evaluate distribution and commodity NEM and non-NEM marginal costs in this
4 application.³³ These marginal costs are presented in the revised prepared direct testimony of
5 SDG&E witness William G. Saxe (Chapter 4) and witness Jeff DeTuri (Chapter 5). It is
6 important to examine the differences between NEM and non-NEM customers to determine if
7 there are significant differences in the cost to serve these customers. If the cost to serve certain
8 customer groups is higher, it may serve as justification to require those customers to pay higher
9 rates. Additionally, this analysis serves to inform the Commission whether there are cross-
10 subsidies embedded within the current rate construct. The analysis is limited to distribution and
11 commodity costs, and therefore, limited to those rate components.

12 As shown in the revised prepared direct testimony of SDG&E witness William G. Saxe
13 (Chapter 6), the distribution cost to serve NEM customers is generally higher than non-NEM
14 customers. Figure SP-6 below shows the illustrative residential marginal distribution cost rates
15 to serve NEM and non-NEM customers.

³³ D.21-07-010, Appendix B, Section 2.2.6 at 13.

1

Figure SP-6: Residential Non-NEM vs. NEM Distribution Cost Comparison (¢/kWh)

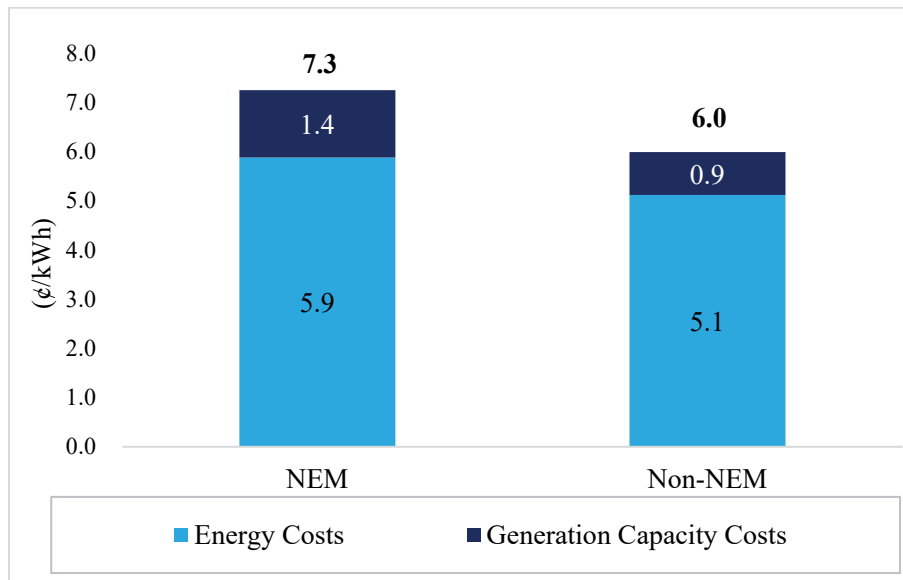


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3 Commodity costs for NEM customers are also shown to be generally higher by customer
 4 class in the commodity cost analysis as shown in the revised prepared direct testimony of
 5 SDG&E witness Jeff DeTuri (Chapter 5). Figure SP-7 below shows the illustrative residential
 6 marginal commodity cost to serve NEM and non-NEM customers.

7

Figure SP-7: Residential NEM vs. Non-NEM Commodity Cost Comparison (¢/kWh)



8

1 **XI. IMPLEMENTATION TIMING**

2 Primarily due to the significant work needed to design, build, test, and deploy SDG&E's
3 proposal to split the current M/L C&I class into two distinct Medium Commercial and Large
4 C&I customer classes, as well as the implementation of new TOU periods, including the
5 necessary marketing related to the proposed TOU period change and new customer class,
6 SDG&E anticipates that it will be able to implement the changes proposed in its Application 180
7 days after the adoption of a final decision.

8 This concludes my prepared direct testimony.

1 **XII. WITNESS QUALIFICATIONS**

2 My name is Samantha Pate, and my business address is 8330 Century Park Court, San
3 Diego, California 92123. I am the Director of Customer Pricing at SDG&E. My primary
4 responsibilities include managing: the development of rate design in various regulatory filings,
5 rate strategy, determination of revenue allocation, and load forecasting and analysis.

6 I received a Bachelor of Science degree in Accountancy from University of San Diego in
7 2007. I joined SDG&E in 2006 and have held various positions of increasing responsibility at the
8 Sempra family of companies including: Sempra Energy's Investor Relations Manager, SDG&E's
9 Senior Regulatory Policy Manager and SDG&E's Director of Strategic Planning.

10 I have not previously testified before the California Public Utilities Commission.