

Docket No.: A.26-02-001

Exhibit No.: _____

Date: September 11, 2026

Witness: Various

**PREPARED DIRECT TESTIMONY
ON BEHALF OF
SAN DIEGO COMMUNITY POWER AND CLEAN ENERGY ALLIANCE
IN SAN DIEGO GAS AND ELECTRIC COMPANY'S
APPLICATION FOR APPROVAL OF DEMAND FLEXIBILITY RATES**

Sept. 11, 2026

TABLE OF CONTENTS

I.	Chapter 1: Overview and Purpose of Testimony	1
A.	Introduction	1
B.	Key Defects in SDG&E’s DF Rates Application	7
C.	SD CCAs’ Perspective on Demand Flexibility and Dynamic Rates	13
D.	Summary of Recommended Conditions for Commission Approval of Application.....	15
E.	Chapter Overview & Testimony Roadmap	19
II.	Chapter 2: Background on Intervenors & Perspective on Application.....	20
A.	Description of the SD CCAs	20
B.	SDCP Demand Flexibility Strategy, Programs and Pilots	22
C.	CEA’s Demand Flexibility Strategy, Programs and Pilots	24
III.	Chapter 3: The Importance of Timely and Actionable Customer Electricity Usage Data to Dynamic Rates Success	27
A.	Overview	27
B.	Why Timely Interval Meter Data Access is Necessary for Successful Dynamic Rate Implementation	32
C.	Current Lack of Timely and Actionable Meter Data Access for SD CCAs and SDG&E Distribution Customers	46
D.	Recommended Conditions for Application Approval: Energy Usage Data Access Parity and Near Real-Time Data Access.....	67
IV.	Chapter 4: The Application’s Proposed Cost Recovery Mechanisms Unjustly Shift Costs to Nonparticipating Ratepayers.....	77
A.	Introduction	77
B.	Risks of Cost-Shifting to Unbundled Customers and Nonparticipating Ratepayers in SDG&E’s Application.....	79
C.	Principles for Adequate Cost Recovery	90
V.	Chapter 5: Need for SDG&E Coordination and Collaboration with SD CCAs on DF Rate Design and Implementation.....	95
A.	Introduction	96
B.	SDG&E’s Lack of Coordination and Collaboration with the SD CCAs on Dynamic Rates to Date	98
C.	Impacts of the Lack of SDG&E Coordination with SD CCAs	103
D.	Goals for Effective Coordination Among SDG&E and the SD CCAs	108
VI.	Chapter 6: Necessary Modifications to Application & Recommended Conditions for Commission Approval	123
A.	Summary	123

B.	Timely Interval Meter Data Access.....	125
C.	Cost Recovery Aligned With California Law and the Commission’s Rate Design Principles.....	127
D.	DF Rate Design in Alignment with Principles of Cost Causation and Ratepayer Indifference	128
E.	CCA Collaboration and Coordination	130
F.	Conclusion.....	131

EXHIBITS

Exhibit A	Witness Resumes
Exhibit B	Declaration of Michael Murray on Behalf of San Diego Community Power and Clean Energy Alliance
Exhibit C	SDG&E Responses to SD CCAs’ Discovery in A.26-02-001
Exhibit D	Select Discovery Responses from SDG&E AMI 2.0 Proceeding
Exhibit E	Evidence of Latency of Interval Meter Data Provided by SDG&E to SD CCAs
Exhibit F	Mission:data Map of Current Access to Real-time Energy Usage Data

I. Chapter 1: Overview and Purpose of Testimony

A. Introduction	1
B. Key Defects in SDG&E’s DF Rates Application	7
1. Lack of Timely Interval Meter Data Access for Customers and LSEs	7
2. Illegal Cost Shifts Resulting from Cost Recovery Through the Public Purpose Program Charge.....	10
3. Cost Shifts to Non-Participating Ratepayers Resulting from the Proposed DF Rate Design.....	11
4. Inadequate Coordination with the SD CCAs	12
C. SD CCAs’ Perspective on Demand Flexibility and Dynamic Rates	13
D. Summary of Recommended Conditions for Commission Approval of Application.....	15
1. Timely and actionable energy usage data access.....	16
2. Cost recovery aligned with principles of ratepayer indifference and cost causation ..	17
3. Rate design aligned with principles of ratepayer indifference and cost causation.....	18
4. Structured process for CCA collaboration on rate design and implementation	18
E. Chapter Overview & Testimony Roadmap	19

A. Introduction

Q: Please state your names, positions, and business addresses.

A: My name is Lucas Utouh. I have been employed as Senior Director of Data Analytics & Customer Operations at San Diego Community Power (“SDCP”) since April 2021. I have over 15 years of experience working with Community Choice Aggregation (“CCA”) programs spearheading the expansion of operational, data, analytics and customer service systems, processes and protocols that have led to increased customers’ participation in renewable energy throughout the San Diego region. At SDCP, my primary responsibilities include oversight, management and analysis of customer “back office” data and operations, rate design as well as managing relationships with SDCP’s largest and key customers. “Back office” data management includes understanding, development, and application of

1 various rate structures including development of real time pricing options, customer energy
2 usage, billing and management of customer rate applications. This also includes a deeper
3 analysis of customer energy usage and behaviors in order to contribute towards SDCP
4 programs and customer outreach development. Key accounts include non-residential
5 customers and involve introducing those customers to SDCP's program and rate offerings,
6 general benefits of our community choice program, and understanding of their usage
7 patterns, rate and overall bill impacts. Before my time at SDCP, I worked for Calpine
8 Energy Solutions from 2012 to 2021. While at Calpine, I conducted research, analysis, and
9 operational functions pertaining to Investor-Owned Utility ("IOU") rate tariffs, advice
10 letters and applications across all three IOUs in the state, Commission decisions, and
11 billing mechanics for clientele of the CCA programs across the multiple IOU territories. I
12 received a Bachelor of Science degree in Accounting and Finance from Minnesota State
13 University, Mankato in 2010, and a Master of Business Administration ("MBA") from
14 California State University, San Bernardino in 2016. My resume is attached hereto in
15 **Exhibit A.**

16 My name is Aaron (Yichen) Lu. I have been employed as the Rates and Strategy
17 Manager at SDCP since October 2023. I have over 10 years of experience working in the
18 California energy industry, including electric rate design and implementation, demand-side
19 programs, energy origination and procurement, and CCA operations and strategy. At
20 SDCP, my primary responsibilities include oversight and management of rate
21 development, implementation, and rate-related strategic initiatives. Before my time at
22 SDCP, I worked for San Diego Gas and Electric Company ("SDG&E") on its load
23 forecasting and energy origination and procurement teams from 2019 to 2023. From 2016

1 to 2019, I worked for the City of San Diego and supported its efforts to establish a CCA
2 program in the region. Prior to 2016, I worked as a senior analyst at the California Public
3 Utilities Commission (“CPUC” or “Commission”) on revenue allocation and rate design
4 advocacy on behalf of ratepayer advocates. I received Bachelor of Science degrees in
5 Environmental Systems and in Neuroscience and Physiology from University of
6 California, San Diego in 2009, and a Master of Environmental Management from Duke
7 University, North Carolina in 2013. My resume is attached hereto in **Exhibit A**.

8 My name is Peter Polonsky. I have been employed as Senior Rates Analyst at SDCP
9 since July 2025. I have over 5 years of experience working in the energy industry in
10 California and Hawaii on rate design and program development. At SDCP, my primary
11 responsibilities include rate development and rate-related strategic initiatives. This
12 includes designing SDCP rates and service options, reviewing detailed customer data to
13 inform rate design, collaborating with other departments on program design, and engaging
14 with customers on rate-related initiatives. Before my time at SDCP, I completed a research
15 project in 2024-2025 on how electricity consumption and climate change are connected
16 and how electricity rates in California can evolve in the context of climate change. From
17 2020 to 2024, I worked as a utility analyst for the Hawaii Public Utilities Commission,
18 focusing on distributed energy resource programs, grid planning, resource procurement,
19 innovative rate design, and energy equity. I received a Bachelor of Arts degree in Public
20 Policy Studies from Duke University in 2020 and a Master of Advanced Studies in Climate
21 Science and Policy from University of California, San Diego in 2025. My resume is
22 attached hereto in **Exhibit A**.

1 **Q: On whose behalf are you testifying?**

2 A: We are testifying on behalf of SDCP and Clean Energy Alliance (“CEA” and, collectively
3 with SDCP, “the SD CCAs”).

4 **Q: Please provide an overview of the SD CCAs’ position with respect to San Diego Gas
5 & Electric’s (“SDG&E”) Application in this proceeding.**

6 A: The SD CCAs support the development of dynamic rates as a potential tool to enhance
7 customer choice, improve grid reliability, reduce greenhouse gas (“GHG”) emissions, and
8 lower customer bills. As SDG&E has acknowledged, its application for approval of its
9 proposal for opt-in demand flexibility rates pursuant to Decision (“D.”) 25-08-049¹
10 (“Proposed DF Rates”) filed on February 2, 2026 (“Application”) is neither just nor
11 reasonable because it fails to account for the central role that CCAs play in serving
12 customers throughout SDG&E’s service territory. CCAs serve approximately 80 percent
13 of the load within SDG&E’s distribution territory, yet the Application does not provide a
14 meaningful pathway for CCA customers’ participation. As a result, most SDG&E
15 distribution customers may be unable to access or fully benefit from the proposed rates.
16 Without significant modifications to address data access, program coordination, and CCA
17 participation, the Proposed DF Rates face a substantial risk of underperformance or failure,
18 resulting in reduced customer participation, diminished program benefits, and inefficient
19 use of ratepayer funds.

¹ D.25-08-049, *Decision Adopting Guidelines for Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company on Demand Flexibility Rate Design Proposals* (Aug. 29, 2025) (“D.25-08-049”).

1 **Q: In addition to these implementation concerns, do the SD CCAs have concerns**
2 **regarding SDG&E’s cost recovery proposals?**

3 A: Yes. SDG&E’s Application also creates the potential for unlawful cost shifts to unbundled
4 customers that would be required to fund SDG&E’s Proposed DF Rates implementation,
5 despite having limited or no opportunity to participate in the program. These concerns are
6 particularly important given the magnitude of the costs SDG&E seeks to recover from
7 ratepayers. SDG&E requests authorization to recover approximately \$11.3 million in
8 implementation costs associated with developing and deploying the Proposed DF Rates.
9 At the same time, SDG&E expressly acknowledges in the first paragraph of its Application
10 that it “does not believe this proposal represents the most cost-effective or prudent use of
11 Commission or SDG&E resources given the current affordability challenges facing electric
12 ratepayers in our service area and across the State.” Similarly, in its Application for
13 Rehearing of D.25-08-049, SDG&E reasoned that “the Commission cannot truly assess
14 the costs of this rate and its cost-effectiveness, without ensuring that the issues of data
15 access, and the systems and processes to allow such access, are addressed concurrently
16 with the rate design and that significant CCA generation providers participate.”² SDG&E’s
17 own statements raise serious questions regarding the reasonableness of approving
18 substantial implementation expenditures for a rate that the utility itself characterizes as
19 imprudent and cost ineffective.

² Rulemaking (“R.”) 22-07-005, *Application for Rehearing of D.25-08-049 by San Diego Gas & Electric Co.* (U 902 E) (Sept. 29, 2025) (“SDG&E AFR of D.25-08-049”) at 18.

1 **Q: Can the SD CCAs’ concerns be resolved by programmatic changes to SDG&E’s**
2 **proposals?**

3 A: No. Our testimony demonstrates that the deficiencies in the Application are not merely
4 implementation details to be tweaked but fundamental flaws that undermine the proposal’s
5 ability to achieve the Commission’s demand flexibility objectives of affordability,
6 reliability, GHG emissions reduction and to “enable participation in demand flexibility by
7 both bundled and unbundled customers.”³ Moreover, the Application fails to comply with
8 the directives of D.25-08-049 for DF Rates. Specifically, the Application fails to provide
9 adequate data access necessary for CCA participation, proposes cost recovery mechanisms
10 that may unfairly shift costs to unbundled customers that cannot benefit from the program,
11 does not adequately address the risk of cost shifts to non-participating customers more
12 generally, and reflects insufficient coordination with the CCAs that serve most customers
13 in SDG&E’s territory. As a result of these failures, SDG&E has not demonstrated that its
14 Proposed DF Rates are just, reasonable, cost-effective, or in the public interest.

15 As SDG&E itself argued in its Application for Rehearing of D.25-08-049:

16 The systems and processes for data sharing and transmission are essential
17 to the Commission’s consideration of the costs and efficacy of the proposed
18 DF rates and should be considered as part of all parties’ DF rate proposal
19 applications. This approach will allow all parties equal opportunity to
20 analyze and assess, via sworn testimony, the proposed rate design—
21 including, importantly, the full costs associated with that rate design and its
22 successful implementation. **Anything less will lead to a half-baked rate**
23 **with half-baked costs that will result in the potential for either a very**
24 **expensive rate with low customer adoption, or a rate that is**
25 **implemented without approval of costs necessary to make it successful.**
26 **Both of those outcomes are unacceptable and neither can be found to**
27 **be “just and reasonable” as required by statute.**⁴

³ D.23-04-040, *Decision Adopting Electric Rate Design Principles and Demand Flexibility Design Principles* (May 3, 2023) (“D.23-04-040”) at 4.

⁴ SDG&E AFR of D.25-08-049 at 27 (emphasis added).

1 The SD CCAs agree.

2 Absent meaningful modification to address these issues, the Commission should
3 deny SDG&E's Application. The SD CCAs herein present solutions to these shortcomings
4 intended to carry out California's goals for demand flexibility, in alignment with California
5 law and Commission orders. The Commission should condition any approval of the
6 Proposed DF Rates on these recommended modifications summarized in Section D of this
7 Chapter and presented in greater detail in Chapter VI. The SD CCAs thank Assigned
8 Commissioner Reynolds for including these important considerations within the scope of
9 this docket and for the opportunity to present intervenor testimony.

10 **B. Key Defects in SDG&E's DF Rates Application**

11 **Q: Can you please summarize the key defects in the Application with references to the**
12 **associated scoping issues set forth in the Assigned Commissioner's Scoping Memo**
13 **and Ruling dated April 30, 2026 ("Scoping Memo")?**

14 A: Yes. The key defects of the Application are: 1) a lack of timely customer energy usage data
15 access for customers and LSEs, 2) illegal cost recovery for implementation costs, 3) cost
16 shifts to non-participating ratepayers, and 4) inadequate coordination with the SD CCAs.
17 We will address each issue in turn.

18 **1. Lack of Timely Interval Meter Data Access for Customers and LSEs**

19 **Q: Is the issue of meter data access within the scope of this proceeding?**

20 A: Yes. Scoping Issue 8 asks "When, and how frequently, should SDG&E share data with
21 Load Serving Entities ("LSE") such as Direct Access providers and Community Choice
22 Aggregators, to broaden the knowledge of how all customers could participate in, and / or

benefit from, SDG&E’s proposed Demand Flexibility rates?”⁵ A fundamental defect in SDG&E’s Application is its failure to rectify the lack of timely access to energy usage data from meters for both CCAs and customers, an issue that has been raised by the SD CCAs repeatedly in numerous dockets over many years. Chapter III of this testimony directly addresses Scoping Issue 8, with recommendations for substantially improved data access that should be a condition to Commission approval of the Application.

Q: Please explain the SD CCAs’ current level of access to customer’s meter data.

A: SDG&E does not currently provide SD CCAs with timely access to meter data, which hinders CCAs from developing and offering their own dynamic rates. SD CCAs receive customer energy usage interval meter data (or “interval data,” which is stored and recorded by the customer’s meter at standard intervals of time)⁶ 48 to 72 hours (or 2 to 3 days) after the point in time in which electricity has been used by the customer as measured by the customer’s meter (“power flow”).⁷ By contrast, SDG&E initially receives such data zero to 33 hours from power flow, and begins to make use of such data 9 to 33 hours from power flow. Without access to customer usage data within a timeframe that is actionable, CCAs cannot effectively support customer participation in dynamic rates, forecast load or adjust dynamic prices in a manner that can carry out the policy goals of dynamic rates. As a result, most customers served by CCAs are effectively excluded from meaningful participation in the Proposed DF Rates. This limitation significantly undermines the viability and scalability of the proposal because CCAs serve approximately 80 percent of the load within SDG&E’s service territory.

⁵ Scoping Memo at 3.

⁶ See *Declaration of Michael Murray on Behalf of San Diego Community Power and Clean Energy Alliance* (Sept. 11, 2026) attached hereto as **Exhibit B** (“A.26-02-001 Murray Declaration”) at ¶ 6(f).

⁷ *Id.* at ¶ 6(h).

1 **Q: Please explain how SDG&E’s customers lack timely energy usage data, and how this**
2 **impacts their participation in dynamic rates.**

3 A: The lack of timely data access also affects all SDG&E customers, bundled and unbundled
4 alike. SDG&E customers do not have access to near real-time meter data (which the SD
5 CCAs define herein as capable of being received within a few seconds of power flow) –
6 which SDG&E’s existing Smart Meters 1.0 are fully capable of providing.⁸ This barrier
7 severely limits customers’ ability to respond to dynamic price signals and optimize energy
8 consumption in response to changing system conditions. As discussed in Chapter III below,
9 demand flexibility programs are most effective when customers, authorized third parties
10 such as automation service providers, demand response (“DR”) providers, energy
11 management service providers and LSEs can readily access and act upon timely usage
12 information. The status quo data-sharing framework proposed by SDG&E⁹ fails to address
13 a critical prerequisite for successful dynamic rate implementation.

14 By failing to provide customers and non-IOU LSEs with the data necessary to
15 support informed decision-making, SDG&E’s proposal severely limits the potential
16 benefits of dynamic rates and impedes achievement of the Commission’s policy objectives
17 for such rates related to load shifting, grid reliability, and energy savings. These concerns

⁸ *Id.* at ¶¶ 8, 9, 12, 13. As discussed in Chapter III below, SDG&E has discontinued providing such near real-time data access for its customers. A.22-05-002, et al., *Petition for Modification of Decision 22-12-009 of Clean Energy Alliance, San Diego Community Power and Mission:data Coalition, Inc* (Feb. 19, 2025) (“PFM of D.22-12-009”) at 8-11, Exhibit C, *Declaration of Michael Murray in Support of Petition for Modification* (“A.22-05-002 Murray Declaration”) at ¶¶ 13-19.

⁹ See Application, Exh. SDGE-05-2R, *Second Revised Prepared Direct Testimony of Chelsea Haro on behalf of SDG&E, Ch. 5 – Implementation* (Feb. 2, 2026) at 5:17 to 6:1 (“SDG&E will continue to provide DF rate participants with access to their hourly usage data through SDG&E’s secure online account portal.”). SDG&E’s My Energy Center portal is only available beginning at approximately 9:00 AM the day after power flow. Moreover, SDG&E proposes to provide customers with only *hourly* usage data, whereas Smart Meters are capable of transmitting usage data in increments of seconds.

are directly relevant to Scoping Issues 1 (whether the Application is just and reasonable), Scoping Issue 6 (“Should the Commission authorize SDG&E’s proposed options for customer outreach, marketing, and education regarding SDG&E’s proposed Demand Flexibility rates”), and Scoping Issue 8 (as quoted above regarding SDG&E provision of data access for other LSEs).¹⁰

2. Illegal Cost Shifts Resulting from Cost Recovery Through the Public Purpose Program Charge

Q: What are the SD CCAs’ concerns regarding how SDG&E proposes to recover the costs of implementing its Proposed DF Rates?

A: SDG&E seeks approval to recover approximately \$11.3 million in costs to implement its Proposed DF Rates through the Public Purpose Program (“PPP”) rate component for all customer classes.¹¹ Recovering these costs from all customers would impose an unlawful cost shift on unbundled customers, including CCA customers, who are unable to meaningfully participate in or benefit from the Proposed DF Rates under the current design. Cost-causation principles require that costs be allocated to those customers that cause or benefit from the expenditure. Under SDG&E’s proposal, approximately 80 percent of SDG&E’s distribution customers would be required to fund the Proposed DF Rates implementation, despite lacking the practical ability to participate in such rates or receive benefits from such rates.

This concern is particularly acute because the Application does not provide a viable pathway for CCA participation in violation of D.23-04-040. As long as CCAs lack

¹⁰ Scoping Memo at 2-3.

¹¹ Exh. SDGE-05-2R at 9:14-16.

adequate and timely access to energy usage data and the operational capability necessary to offer complementary dynamic rates, CCA customers will bear implementation costs while receiving limited or no program benefits. Consequently, SDG&E's proposed cost recovery mechanism is neither just nor reasonable and raises significant concerns under Scoping Issues 4, 5, and 9.

3. Cost Shifts to Non-Participating Ratepayers Resulting from the Proposed DF Rate Design

Q: Please explain the potential for cost shifts to non-participating customers stemming from SDG&E's Proposed DF Rate design.

A: The Application also fails to demonstrate that the Proposed DF Rate design will avoid cost shifts between participating and non-participating customers. Dynamic rates provide opportunities for participating customers to reduce bills by shifting consumption to lower-cost periods. Unless carefully designed, however, such rates can shift costs to customers that do not enroll in the rate or that lack the ability to modify their energy usage in response to dynamic pricing signals.

SDG&E's Application does not adequately demonstrate that its Proposed DF Rates will prevent adverse bill impacts to non-participating customers. Nor has it provided sufficient evidence that customers who are unable to participate, including many CCA customers under the current proposal, will be protected from indirect cost shifts resulting from program design and implementation costs. Given the potential for differential bill impacts and inequitable outcomes, the Commission should closely scrutinize whether the proposed rate structure appropriately protects non-participants and complies with the

Commission’s affordability and ESJ objectives. These issues fall squarely within Scoping Issues 1, 9, and 10.

4. Inadequate Coordination with the SD CCAs

Q: Did SDG&E conduct adequate coordination with the SD CCAs in developing its Proposed DF Rates?

A: No. SDG&E’s limited coordination, collaboration, and data sharing with CCAs has contributed to many of the Application’s deficiencies identified in this testimony. Effective implementation of a DF Rate requires close coordination among the utility and all LSEs responsible for serving customers within SDG&E’s service territory. In fact, D.25-08-049 expressly required IOU collaboration with CCAs in their distribution territory’s demand flexibility rates (“DF Rates”)¹² development and implementation.¹³ Yet SDG&E has not established a collaborative framework that adequately incorporates CCA input into rate design, program implementation, marketing, education and outreach (“ME&O”), data-sharing protocols, or evaluation, measurement, and verification (“EM&V”) activities. Therefore, SDG&E’s Application fails to comply with the Commission’s directive.

Because CCAs serve approximately 80 percent of load within SDG&E’s distribution service territory, meaningful engagement is essential to achieving broad customer participation and ensuring program success. Insufficient coordination increases the risk that program design decisions will fail to account for the operational realities of CCA service, resulting in lower participation rates, reduced customer benefits, and inefficient use of ratepayer funds. While collaboration alone cannot resolve the

¹² This testimony defines “DF Rates” as IOU demand flexibility rates required pursuant to D.25-08-049.

¹³ D.25-08-049 at 136-37, Conclusion of Law (“COL”) 34.

Application's fundamental defects, greater coordination and data sharing with CCAs are a necessary component of any effective solution. For this reason, the Commission should require SDG&E to establish more robust collaborative processes and data-sharing mechanisms as part of any approved DF Rate implementation framework. These concerns are directly relevant to Scoping Issues 1, 2, 3, 6, and 8.

C. SD CCAs' Perspective on Demand Flexibility and Dynamic Rates

Q: At a high level, do the SD CCAs support the development of dynamic rates and demand flexibility programs?

A: Yes. CCAs were established to provide customers with greater choice in electric service and to advance innovative programs that deliver customer benefits. As discussed in more detail in Chapter II, CCAs are innovators in load modification and demand flexibility programming. The SD CCAs support the development of DF Rates and dynamic rates more generally, and seek to work collaboratively with SDG&E to design and implement rate structures that can reduce customer bills, lower GHG emissions, and improve electric system reliability. Successful demand flexibility programs require broad customer participation and coordination among all entities serving customers within SDG&E's distribution service territory.

Q: Why haven't the SD CCAs been able to offer their own dynamic rates?

A: To date, the SD CCAs have not offered their own dynamic generation rates to their customers because the necessary foundational elements for effective implementation are currently not in place. In particular, SDG&E has not implemented a dynamic import rate pilot in its territory, in contrast with the other large IOUs, nor does it provide the level of meter data access and operational collaboration needed to support effective CCA

1 participation. Given the lack of timely energy usage data, the SD CCAs will be hindered
2 from meaningfully being able to evaluate customer performance and engage with their
3 customers to enable timely load shifting. And, as further discussed below, lack of timely
4 meter data impairs the SD CCAs' ability to forecast load, with the result that procurement
5 decisions and potential dynamic pricing cannot be ideally aligned with actual energy and
6 capacity needs. This hindrance reduces the efficacy of dynamic pricing in advancing
7 reliability, energy savings, affordability and environmental goals.

8 For these reasons, CCAs have consistently advocated for improved customer data
9 access and data parity between CCAs and IOUs across multiple Commission
10 proceedings.¹⁴ Timely and equitable access to customer usage data is critical in enabling
11 CCAs to implement innovative rate offerings, educate customers, and support California's
12 demand flexibility and grid modernization objectives. Absent such access, CCAs and their
13 customers will be hindered from meaningfully participating in SDG&E's Proposed DF
14 Rates or in offering their dynamic rates.

¹⁴ See, e.g., A.21-12-006 et al., *Opening Brief of San Diego Community Power and Clean Energy Alliance* (Jun. 9, 2023); D.23-11-006, *Decision Adopting Dynamic Export Rate Pilot and Dismissing Application for a Real Time Pricing Rate Pilot* (Nov. 2, 2023) ("D.23-11-006") at 7, 9, Finding of Fact ("FOF") 4; PFM of D.22-12-009 at 20-21, passim; A.22-05-002 et al., *Clean Energy Alliance, San Diego Community Power and Mission:Data Coalition, Inc Application For Rehearing of Decision 25-10-004* (Nov. 12, 2025) ("AFR of D.25-10-004"); A.25-12-012, *Protest of San Diego Community Power and Clean Energy Alliance to San Diego Gas & Electric Company's Application for Approval of Smart Meter 2.0* (Jan. 21, 2026) at 10-13; R.22-07-005, *California Community Choice Association's Comments on the Proposed Decision* (Aug. 14, 2025) ("CalCCA Comments on D.25-08-049") at 1-2, 6-8, 12; *CalCCA's Comments on Order Instituting Rulemaking to Advance Demand Flexibility Through Electric Rates* (Aug. 15, 2022) ("CalCCA Comments on Advanced Rate Design OIR") at 2; see also A.26-02-001, *Response of the Utility Consumers' Action Network to Application of San Diego Gas & Electric Company (U 902-E) for Approval of Demand Flexibility Rates in Compliance with D.25-08-049* (Mar. 5, 2026) at 5-8.

Q: Is coordination between IOUs and CCAs important to the success and effectiveness of dynamic rates?

A: Yes. Any effort to implement DF Rates without substantial CCA involvement risks limiting customer participation and reducing overall program effectiveness. Given the significant share of customers served by CCAs, coordination on rate design, data sharing, customer outreach, ME&O, implementation, and EM&V is essential to ensure that DF Rates are cost-effective and capable of achieving their intended reliability, affordability, and environmental objectives. Without such collaboration, there is a substantial risk that implementation costs will be incurred without achieving the level of customer participation and benefits necessary to justify those expenditures.

D. Summary of Recommended Conditions for Commission Approval of Application

Q: Do the SD CCAs recommend certain conditions be imposed on any approval of SDG&E's Proposed DF Rates?

A: Yes. The deficiencies in SDG&E's Application summarized above and discussed in greater detail in the chapters to follow can be addressed through several targeted modifications to SDG&E's proposal that would improve customer access, promote equitable treatment among customers, and increase the likelihood that DF Rates achieve their intended objectives.

As conditions to the approval of the Application, the Commission should:

1. Require SDG&E to provide customer meter data access parity to the SD CCAs, meaning that the SD CCAs receive the same customer energy usage data from customer meters that SDG&E receives at as close to equivalent timing, frequency, latency, granularity and completeness as is technically feasible (at a minimum by 9:00 AM the morning after power flow);

2. Require SDG&E to provide the SD CCAs and their customers with near real-time meter data access (defined as a latency of just a few seconds from power flow) through existing technology in its Smart Meters 1.0 and in its proposed new Smart Meters 2.0;
3. Align cost recovery for this Application to cost causation principles so non-participating customers do not bear the implementation costs of programs from which they cannot benefit;
4. Require SDG&E to align its Proposed DF Rate design to principles of cost causation and ratepayer indifference to minimize cost shift risks and deliver efficient price signals; and
5. Establish a formal collaboration process for SDG&E and the SD CCAs across all elements of SDG&E's Proposed DF Rate; including design, data sharing, implementation, education & outreach, and evaluation.

1. Timely and actionable energy usage data access

Q: Why should timely customer meter data access be a condition to the Commission's approval of the Application?

A: The Commission should require timely energy usage data access for both LSEs and customers in SDG&E's distribution territory. Specifically, the Commission should require parity in meter data access among all LSEs, including CCAs, so that they have access to the same customer usage information, at the same latency. Without data parity, CCAs cannot implement and administer effective dynamic offerings or provide comparable dynamic rates to their customers. In addition, the Commission should restore SDG&E customer and third-party access to near real-time meter data with latency of just a few seconds. One of the California Energy Commission's ("CEC") key goals in establishing its Load Management Standards ("LMS") was to "to provide real-time load flexibility on the electric grid."¹⁵ Access to near real-time usage information is a foundational requirement

¹⁵ CEC, *Final Staff Report Analysis of Potential Amendments to the Load Management Standards* (Dec. 22, 2021) ("CEC LMS Staff Report") at iii, 1, 2, available at: <https://www.energy.ca.gov/publications/2021/analysis-potential-amendments-load-management-standards>.

1 for any dynamic pricing program because it enables customers to effectively respond to
2 price signals, have visibility into and thereby manage consumption in near real-time, and
3 thereby realize the potential benefits of dynamic rates in accomplishing real-time load
4 shifting. The shift from time of use pricing to dynamic pricing is just as significant, if not
5 more so with respect to necessary customer education and support, as has been California's
6 shift from volumetric pricing to time-of-use pricing, which occurred over several years in
7 a very coordinated effort. A successful transition requires enhanced capabilities for the
8 customer and authorized third parties to monitor their near real-time energy usage and for
9 the customer's LSE to have such data access as well to provide support and offer
10 opportunities for load shifting as near to real-time as possible.

11 **2. Cost recovery aligned with principles of ratepayer indifference and cost**
12 **causation**

13 **Q: By what standards should the Commission review SDG&E's proposed cost recovery**
14 **for the Application?**

15 A: Any cost recovery framework approved by the Commission in this Application should be
16 consistent with the principles of ratepayer indifference and cost causation. Customers that
17 cannot meaningfully participate in or benefit from the Proposed DF Rates should not be
18 required to bear implementation costs. Cost recovery should therefore be structured to
19 ensure that costs are allocated to the customers that cause those costs or receive the benefits
20 associated with the rate offering. Adhering to these principles will help protect customers
21 from unfair cost shifts and ensure that implementation expenditures are justified by
22 corresponding customer and system benefits.

1 **3. Rate design aligned with principles of ratepayer indifference and cost**
2 **causation**

3 **Q: Should SDG&E's design for the Proposed DF Rates adhere to cost causation**
4 **principles?**

5 A: Yes. The Commission should require that the design of SDG&E's DF Rates be guided by
6 the same principles of ratepayer indifference and cost causation. SDG&E should
7 demonstrate that participating customers are responsible for the costs associated with the
8 benefits they receive and that non-participating customers are protected from unintended
9 bill impacts. A properly designed rate structure should produce efficient price signals while
10 minimizing the risk of cost shifts between participating and non-participating customers
11 and ensuring that program benefits are achieved in a fair and equitable manner.

12 **4. Structured process for CCA collaboration on rate design and**
13 **implementation**

14 **Q: How should the Commission ensure that SDG&E collaborates with the SD CCAs in**
15 **implementing the Proposed DF Rates?**

16 A: The Commission should establish a formal and structured process for SDG&E to
17 collaborate with the SD CCAs on Proposed DF Rate design and implementation. Because
18 CCAs serve approximately 80 percent of load within SDG&E's service territory,
19 meaningful participation by CCAs is essential to the success of any DF Rate offering. A
20 collaborative process should include regular engagement on rate design, data-sharing
21 requirements, ME&O, implementation planning, and EM&V activities. Such a framework
22 would improve transparency, leverage the expertise of all LSEs, and increase the likelihood
23 that the Proposed DF Rates will be cost-effective, broadly accessible, and capable of

1 achieving the State's demand flexibility goals. This type of requirement would also align
2 with the Commission's direction in D.25-08-049, which recognized the value of
3 coordination between CCAs and IOUs by ordering the Large IOUs DF Rate Proposals to
4 include a detailed description regarding how they will collaborate with CCAs on various
5 features of DF Rates and related programs.

6 **E. Chapter Overview & Testimony Roadmap**

7 **Q: How is the remainder of your testimony organized?**

8 A: In Chapter II below, this testimony provides background on the SD CCAs, their service
9 areas and demand flexibility programming, and the basis for their position on the
10 Application. In Chapter III, the SD CCAs explain why timely customer energy usage data
11 access is needed for dynamic rate implementation, the current lack of data access parity
12 and its impact on CCA customers in SDG&E's territory, and why data access parity should
13 be a condition to the Commission's approval of the Application. Chapter IV discusses the
14 risks of cost-shifting posed by the Application from SDG&E's proposed implementation
15 cost recovery and its Proposed DF Rate design and sets forth principles of cost recovery
16 that the Commission should apply to this Application. In Chapter V, the SD CCAs explain
17 why collaboration between SDG&E and the SD CCAs is necessary for the success of the
18 Proposed DF Rate design and implementation, and why a structured process for such
19 collaboration should be required as a condition to the Commission's approval of the
20 Application. Finally, the SD CCAs' testimony assembles a set of recommended conditions
21 for the Commission's approval of the Application in Chapter VI.

II. Chapter 2: Background on Intervenor & Perspective on Application

A. Description of the SD CCAs	20
B. SDCP Demand Flexibility Strategy, Programs and Pilots	22
C. CEA's Demand Flexibility Strategy, Programs and Pilots	24

A. Description of the SD CCAs

Q: Please describe the SD CCAs.

A: The SD CCAs were established pursuant to California law to provide local communities with greater choice regarding electric generation service.¹⁶ As LSEs, SDCP and CEA procure electricity on behalf of their customers while SDG&E continues to provide transmission, distribution, billing, and other utility services. Together, SDCP and CEA serve approximately 80 percent of retail customer load within SDG&E's distribution service territory and therefore have a direct interest in the design, implementation, and administration of SDG&E's Proposed DF Rates.

Q: Please describe SDCP.

A: SDCP is a joint powers authority serving the unincorporated County of San Diego and the Cities of San Diego, Chula Vista, Encinitas, Imperial Beach, La Mesa, and National City. Through its locally governed structure, SDCP provides electric generation service to customers within its member jurisdictions while advancing local energy policies and customer-focused programs. SDCP serves approximately 960,000 customer accounts, representing approximately 65 percent of the electric load within SDG&E's service

¹⁶ *Amended and Restated Joint Powers Agreement of San Diego Community Power* (Dec. 16, 2021) ("SDCP JPA") at 3; *Clean Energy Alliance Joint Powers Agreement* (Dec. 17, 2021) ("CEA JPA") at 2 ("The purposes for the Founding Members... entering into this Agreement include ... fostering consumer choice and local economic benefits such as job creation, local energy programs and local power development.").

territory. As the largest CCA in the San Diego region, SDCP has a significant interest in ensuring that customers have equitable access to innovative rate offerings and demand-side programs and an equal opportunity to shift load to achieve energy savings, increase reliability and reduce procurement costs.

Q: Please describe CEA.

A: CEA is a joint powers authority serving the Cities of Carlsbad, Del Mar, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. CEA was established to provide local control over energy procurement decisions and to advance affordability, reliability, and sustainability objectives on behalf of its member communities.¹⁷ CEA currently serves approximately 250,000 customer accounts, representing approximately 15 percent of the annual electric load within SDG&E's distribution service territory.

Q: Why is it essential that SDG&E's Proposed DF Rates enable participation by customers of the SD CCAs?

A: Collectively, SDCP and CEA serve well over one million customer accounts and represent most of the electric load within SDG&E's service area, serving approximately 80 percent of customers and load within SDG&E's service territory. As a result, the success of any DF Rate depends on meaningful participation by CCAs and other LSEs. Any rate design, implementation framework, or cost recovery proposal that fails to account for the realities of a service territory in which most customers are served by non-utility providers risks limiting customer participation, reducing program effectiveness, and undermining the Commission's objectives. Given the extensive customer base represented by SDCP and CEA, effective coordination among CCAs, SDG&E, and the Commission is essential to

¹⁷ CEA JPA at 2-3.

1 ensure that DF Rates are designed and implemented in a manner that is equitable, cost-
2 effective, and accessible to all customers regardless of their electricity provider.

3 **B. SDCP Demand Flexibility Strategy, Programs and Pilots**

4 **Q: How is demand flexibility incorporated into the formation documents and purpose of**
5 **SDCP?**

6 A: SDCP was formed to empower its member communities to choose the generation resources
7 that reflect their individual values and needs. SDCP was established to procure and develop
8 electrical energy for customers in participating jurisdictions, address climate change by
9 reducing energy-related greenhouse gas emissions, promote electrical rate price stability
10 and affordability, and foster local economic benefits such as job creation, local energy
11 programs, and local power development¹⁸ while prioritizing equity.¹⁹ SDCP is actively
12 pursuing pathways to reduce system peak, stress on the grids, GHG emissions, and
13 customer costs through programs and pilots.²⁰ Thus, SDCP firmly supports and aligns with
14 the intent and goals of the state’s demand flexibility goals through its active load flexibility
15 programs.

16 **Q: Please describe SDCP’s overall demand flexibility strategy.**

17 A: SDCP has adopted a comprehensive demand flexibility strategy that seeks to empower
18 customers to manage energy usage in ways that reduce costs, support grid reliability, and

¹⁸ SDCP JPA at 2. *See also San Diego Community Power, Community Power Plan* (May 2023) at 31 (listing “Maintaining financial stability,” “Managing load flexibility,” and “Making investments in Communities of Concern and keeping energy affordable” as organizational priorities).

¹⁹ SDCP JPA at 4 (The founding parties sought to “[p]ursue purposeful and focused investment in communities of concern, prioritization of local renewable power, workforce development, and policies and programs centered on economic, environmental, and social equity.”).

²⁰ *Id.* at 5 (SDCP is authorized to “implement sustainable energy initiatives that reduce energy demand, increase energy efficiency, and advance the use of clean, efficient, and renewable resources in the region.”).

1 accelerate the transition to a cleaner electric system.²¹ Rather than relying on a single
2 program or technology, SDCP's approach focuses on developing a portfolio of demand-
3 side solutions that leverage distributed energy resources, electrification technologies,
4 customer incentives, and behavioral programs to encourage load shifting and load
5 shedding. This strategy recognizes that customers have diverse needs and that multiple
6 pathways are necessary to achieve broad participation in demand flexibility initiatives.²²

7 **Q: Please provide some specific examples of load flexibility programs that SDCP has**
8 **implemented.**

9 A: One example of SDCP's commitment to load flexibility is its Solar Battery Savings
10 program.²³ The program is currently available to residential customers and incentivizes the
11 installation and operation of paired solar and battery systems to support customer bill
12 savings and grid reliability objectives. Through managed battery operation and customer
13 engagement, the program encourages customers to reduce demand during high-cost and
14 high-stress grid conditions while maximizing the value of distributed energy resources.
15 SDCP is also working to expand these opportunities to the non-residential sector, further
16 increasing the potential for flexible load management across its customer base.

17 SDCP has also developed Electric Vehicle ("EV") Flex Connect, a program
18 designed to support managed EV charging and encourage customers to shift charging
19 activity to periods that better align with grid needs and lower system costs.²⁴ As

²¹ *Id.* at 3 (The founding parties sought to "[p]romote an energy portfolio that incorporates energy efficiency and demand response programs and pursues ambitious energy consumption reduction goals.").

²² *Id.* (The founding parties sought to "[p]rovide a range of energy product and program options, available to all Parties and customers, that best serve their needs, their local communities, and support regional sustainability efforts."). *See also San Diego Community Power, Board of Directors Agenda Packet* (Nov. 21, 2024) at 55 ("Flexible load programs are needed to meet California's ambitious clean energy goals.").

²³ Solar Battery Savings, <https://sdcommunitypower.org/solar-battery-savings/>.

²⁴ EV Flex Connect, <https://sdcommunitypower.org/ev-flex-connect/>.

1 transportation electrification continues to increase electricity demand, programs such as
2 EV Flex Connect provide an important mechanism for capturing load flexibility benefits
3 while helping customers manage charging costs.

4 In addition, SDCP offers the Smart Home Flex program (now known as the Smart
5 Energy Rewards program) which encourages customers to reduce or shift energy
6 consumption during periods of high system demand.²⁵ This program leverages connected
7 devices, customer notifications, and performance-based incentives to support voluntary
8 demand response and customer participation in load flexibility efforts. Through these and
9 other initiatives, SDCP has demonstrated both its commitment to DF and its ability to
10 engage customers in programs designed to deliver reliability, affordability, and
11 environmental benefits.

12 C. CEA's Demand Flexibility Strategy, Programs and Pilots

13 **Q: How is demand flexibility incorporated into CEA's formation documents and**
14 **purpose?**

15 A: CEA similarly recognizes demand flexibility as a critical component of California's
16 evolving electricity system and has incorporated load flexibility principles into its founding
17 documents and broader customer program strategy.²⁶ CEA's approach emphasizes the
18 development of programs and offerings that support customer choice, affordability, clean

²⁵ Smart Energy Rewards, <https://sdcommunitypower.org/smart-energy-rewards/>.

²⁶ CEA JPA at 3 (By establishing CEA, the founding parties seek to “[p]romote an energy portfolio that incorporates energy efficiency and demand response programs and pursues ambitious energy consumption reduction goals.”); *see also Clean Energy Alliance, Addendum No. 2 to the Community Choice Aggregation Implementation Plan and Statement of Intent* (Oct. 20, 2022) at 13 (“Integrated resource planning efforts of the Alliance will make use of demand side energy efficiency, distributed generation and demand response programs as well as traditional supply options.”).

energy integration, and grid reliability.²⁷ By encouraging customers to adopt technologies and behaviors that align electricity consumption with system conditions, CEA seeks to create long-term value for both customers and the electric grid.

Q: Please provide some specific examples of load flexibility programs that CEA has implemented.

A: One example of these efforts is CEA’s Solar Plus program, offered in collaboration with Participate.Energy and certified partners.²⁸ This program offers solar panel and battery storage systems with no upfront costs and no credit check required, making clean energy more accessible and affordable. Solar Plus systems transform homes into microgrids that power personal residences and support community-wide resiliency. Participate.Energy finances and owns the systems while customers pay a predictable rate for the electricity they use from the system directly on their SDG&E bill. This program is available for residential customers and a commercial version of the offering is offered in partnership with Luminia.

Another example is CEA’s PeakSmart Savers demand flexibility program, which helps residential customers lower their electricity bills by offering reduced energy rates throughout most of the year.²⁹ In return, customers shift or reduce their energy use during

²⁷ CEA JPA at 2 (Purposes of CEA include “addressing climate change by reducing energy-related greenhouse gas emissions, promoting electrical rate price stability and cost savings, and fostering consumer choice.”). *See also Clean Energy Alliance, Board of Directors Agenda Packet* (Mar. 27, 2025) at 51 (“[Load Management Standards] are designed to encourage shifting electricity use from times of day when it is expensive and polluting to times when it is cheaper and cleaner. Load management, or demand flexibility, can save building owners money on their energy bills, reduce greenhouse gas emissions, and help strengthen the resiliency of the electricity grid.”); *See also Clean Energy Alliance, Meeting Minutes for Board Meeting* at 1 (Mar. 27, 2025) (approving Load Management Standards item unanimously by consent calendar).

²⁸ Solar Plus, <https://thecleanenergyalliance.org/solar-plus/>.

²⁹ PeakSmart Savers, <https://thecleanenergyalliance.org/peaksmart/>.

1 called PeakSmart Days when CEA charges a premium for energy during on-peak hours.
2 CEA may call PeakSmart Days when energy use and demand on the grid are forecasted to
3 be high (excluding weekends and holidays), encouraging customer participation in load
4 flexibility.

5 CEA's Energy Programs Plan anticipates a future commercial expansion of the
6 PeakSmart Savers program and the development of a Distributed Energy Resources
7 Management System ("DERMS") platform to incentivize customers to shift energy use
8 away from peak periods. The DERMS platform will serve as a foundational capability for
9 CEA to further transition from passive energy procurement toward active system
10 optimization and distributed resource participation. By leveraging advanced forecasting,
11 real-time visibility, and automated control capabilities, the DERMS will enable CEA to
12 enhance grid reliability, reduce costs, and support California's broader clean energy and
13 decarbonization goals. The dispatch of this system and connected devices will be reliant
14 on real-time data access to call events based on accurate and up to date load data.

15 **Q: Why is it significant that the SD CCAs have implemented these demand flexibility**
16 **programs?**

17 **A:** The demand flexibility efforts undertaken by the SD CCAs demonstrate that CCAs are not
18 passive stakeholders in this proceeding. Rather, they are active participants in developing
19 and implementing customer-focused solutions that advance California's demand flexibility
20 management goals.

III. Chapter 3: The Importance of Timely and Actionable Customer Electricity Usage Data to Dynamic Rates Success

A.	Overview	27
B.	Why Timely Interval Meter Data Access is Necessary for Successful Dynamic Rate Implementation	32
1.	SDCP Case Example: Multiple Days of High Electricity Prices and More Timely Usage Data Access	33
2.	Near Real-Time Energy Usage Data Access & Customized Customer Outreach.....	36
3.	The Role of Timely Data Access in Load Forecasting and Dynamic Rate Pricing.....	41
4.	Timely Interval Meter Data Access for DR and DERMS	43
C.	Current Lack of Timely and Actionable Meter Data Access for SD CCAs and SDG&E Distribution Customers	46
1.	SDG&E Receives Customer Interval Meter Data Significantly Earlier Than Do the SD CCAs	46
2.	SDG&E No Longer Supports Near Real-Time Energy Usage Data Access for Its Distribution Customers.....	54
3.	The Lack of Timely and Actionable Energy Usage Data Prevents Effective Implementation of Dynamic Rates.....	57
4.	The Lack of Improved Data Parity Creates an Unfair Competitive Advantage for SDG&E	62
D.	Recommended Conditions to Application Approval: Energy Usage Data Access Parity and Near Real-Time Data Access.....	67
1.	Interval Meter Data Access Parity as Between SDG&E and SD CCAs	68
a.	SDG&E Headend System Direct to SD CCAs	69
b.	SDG&E MDMS Direct to SD CCAs	71
2.	Near Real-Time Interval Meter Data Access for Customers and Third Parties, Including LSEs	74

A. Overview

Q: Which Scoping Issue will you address in this chapter of your testimony?

A: Scoping Issue 8 asks “When, and how frequently, should SDG&E share data with LSEs such as DA providers and CCAs, to broaden the knowledge of how all customers could

participate in, and/or benefit from, SDG&E’s proposed DF rates?”³⁰ This chapter addresses why access to timely customer meter data is crucial to successful implementation of dynamic rates, how the absence of such data access for CCAs and their customers presents a fundamental barrier to DF Rate access for SD CCA customers and achievement of California’s demand flexibility goals in SDG&E territory, and provides specific recommended conditions to the approval of SDG&E’s Application to address these data access challenges.

Q: Do the SD CCAs currently rely on customer meter data to provide service to their customers?

A: Yes, the SD CCAs rely on customer electric meter usage data (interval data that is stored by SDG&E’s smart meters and transmitted to SDG&E) to perform numerous core functions, including load forecasting, procurement planning, billing validation, customer service, regulatory reporting, rate development, and program evaluation. Access to such data on a more timely basis on parity with SDG&E and also in near real time (i.e. within a few seconds of power flow) would provide far more granular, specific, and timely insight into how customers respond to changing conditions throughout the day in a manner that is *actionable* in terms of real-time demand flexibility potential.

Q: Do load flexibility programs rely on customer energy usage data?

A: Yes. Modern load flexibility programs increasingly depend on timely consumption information for portfolio management, demand response event settlement, load forecasting, and procurement activities. For example, a managed EV charging program in Connecticut, operated by AmpUp, utilized real-time locational charging and usage data to

³⁰ Scoping Memo at 3.

1 “strategically pause charging sessions during peak grid hours” and shift load to off-peak
2 hours, which reduced grid strain at lower cost (and emissions) than the average peaker
3 plant.³¹ This pilot program also provided the utility with a real-time dashboard that
4 included hourly visibility into location-level performance. These are examples of advanced
5 energy monitoring data that is crucial for the operation of a smart demand flexibility
6 program that is event-oriented.

7 **Q: How is energy usage data important for dynamic rate offerings?**

8 A: For dynamic rates in particular, access to meter data in a timely manner is critical to
9 administering DF Rate offerings and helping customers respond effectively to changing
10 price signals. One of the CEC key goals in establishing its LMS was to “to provide real-
11 time load flexibility on the electric grid.”³² Dynamic rates are designed to expose
12 customers to dynamic price signals that more closely reflect the time-based costs incurred
13 to serve load.³³ Dynamic rates that change on a daily and hourly basis are inherently more
14 complex than traditional fixed and pre-established time-of-use rates. To achieve the load-
15 shifting goals of dynamic rates, customers must understand not only when prices change,
16 but also how their energy usage decisions affect their bills and how they can rapidly
17 respond to those price signals. When rates are dependent on hourly market conditions,
18 customer usage data must be available with a level of timeliness sufficient to support
19 actionable and real-time customer decision-making to achieve load shift.

³¹ See <https://www.prnewswire.com/news-releases/ampups-adapt-program-delivers-grid-relief-3x-more-efficiently-than-peaker-plants-302563740.html>.

³² CEC LMS Staff Report at iii, 1, 2.

³³ D.21-12-015, *Phase 2 Decision Directing Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company to Take Actions to Prepare for Potential Extreme Weather in the Summers of 2022 and 2023* (Dec. 2, 2021) (“D.21-12-015”) at 84-85; D.25-08-049 at 3-4; CEC LMS Staff Report at 38-39.

1 Achieving these outcomes requires timely meter data access for the customer's
2 LSE to support participating customers in shifting their energy usage behavior and to
3 evaluate the effectiveness of those changes within an actionable timeframe. In the absence
4 of timely customer usage information, the SD CCAs are unable to effectively assist
5 customers in managing usage during periods of elevated prices.

6 **Q: Why does the SD CCAs' current lack of timely access to customer meter data impact**
7 **their ability to offer their own dynamic rates?**

8 A: These information gaps create operational blind spots that may limit opportunities to
9 provide proactive customer outreach during critical system conditions, load shifting
10 potential, and thereby opportunities to support reliability and state environmental goals. In
11 addition, data latency reduces CCAs' load forecasting accuracy and increases procurement
12 costs, exacerbating the state's energy affordability crisis.

13 The absence of timely data access for SD CCAs also causes inequities between
14 bundled and unbundled customers. A ratepayer's ability to benefit from a DF Rate should
15 not depend on whether their generation provider has timely access to the information
16 necessary to support them. Such inequities violate California law and Commission
17 requirements regarding LSE competition and customer choice.³⁴

³⁴ D.23-04-040 at 4 (key Commission objective in advancing demand flexibility rates is to "enable participation in demand flexibility by both bundled and unbundled customers."), 31 ("The systems and processes for calculating dynamic price signals should be able to include bundled and unbundled rate components so that any load serving entity can elect to participate."); *see also* D.12-12-036, *Decision Adopting a Code of Conduct and Enforcement Mechanisms Related to Utility Interactions with Community Choice Aggregators, Pursuant to Senate Bill 790* (Dec. 20, 2012), Attachment 1 at A7 ("An electrical corporation shall not, through a tariff provision or otherwise, discriminate between its own customers and those of a CCA in matters relating to any product or service that is subject to a tariff on file with the Commission.").

1 **Q: Has the Commission recognized the importance of access to meter data for the SD**
2 **CCAs in implementing dynamic rates?**

3 A: Yes. The SD CCAs and other CCAs throughout the state have consistently emphasized that
4 improved meter data access is a prerequisite for full CCA customer participation in DF
5 Rate programs and for maintaining meaningful customer choice.³⁵ Further, the
6 Commission has recognized that participation in dynamic rates by unbundled customers
7 requires systems and processes that provide CCAs with access to necessary customer data
8 and billing functionality.³⁶ In D.23-11-006, the Commission declined to approve SDG&E's
9 proposed dynamic rate pilot in part because unresolved data sharing limitations stood in
10 the way of CCA participation in dynamic rates.³⁷ In its Application for Rehearing of D.25-
11 08-049, SDG&E expressly argued that CCA data access and data-sharing processes remain
12 unresolved challenges that must be addressed before broad deployment of dynamic rates
13 can succeed.³⁸ Yet, despite this recognition, SDG&E's Application does not propose a
14 solution to this longstanding data gap consistently raised by the SD CCAs, and by CCAs
15 throughout the state.

16 While dynamic rates are an exciting and innovative opportunity for California to
17 support grid reliability, GHG emissions reduction, and affordability goals, without
18 corresponding improvements in meter data access, customers and CCAs will be unable to

³⁵ See *supra* note 14.

³⁶ D.23-11-006 at FOF 4 (“SDCP and CEA will not offer a dynamic rate to its customers until the Commission addresses the issue of data access for offering dynamic rates to CCA customers in a decision.”).

³⁷ *Id.* at 9-10 (“SDCP/CEA and SDG&E agreed that SDG&E did not provide a solution for CCAs to access data needed to implement a dynamic import rate for their customers in this proceeding.... we also agree with the broad range of parties that support dismissal of the Import Rate Pilot application without prejudice for the reasons above.”).

³⁸ SDG&E AFR of D.25-08-049 at 18, 27.

1 fully realize the intended affordability, reliability, and load-shifting benefits of such rates.
2 The SD CCAs therefore recommend that any approval of SDG&E's Application be
3 conditioned on the provision of near real-time meter data access for CCAs and their
4 customers and, at a minimum, meter data access parity between the SD CCAs and SDG&E.

5 **B. Why Timely Interval Meter Data Access is Necessary for Successful Dynamic**
6 **Rate Implementation**

7 **Q: Please explain at a high level why access to customer energy usage data is needed to**
8 **successfully implement dynamic rates.**

9 A: Dynamic rates are intended to more closely align rates that customers pay with the costs
10 incurred to serve those customers on a temporal basis that is far more granular and dynamic
11 than current fixed time of use periods.³⁹ SDG&E's proposed day-ahead hourly dynamic
12 rate would expose participating customers to volatile energy prices, to which, in theory,
13 such customers can respond by shifting load away from time periods with high energy
14 prices. To respond to these price signals as intended, however, customers and their LSEs
15 require more timely data access to understand customer usage in high-cost periods and to
16 shift usage to low-cost periods.

³⁹ D.21-12-015 at 85-86; CEC LMS Staff Report at iii, 11.

1 **1. SDCP Case Example: Multiple Days of High Electricity Prices and**
2 **More Timely Usage Data Access**

3 **Q: Can you please provide a hypothetical to illustrate why it is important for customers**
4 **and LSEs to have access to meter data in order to effectively manage dynamic rates?**

5 A: Yes. Consider a particularly hot summer week, or a particularly hot week in a non-summer
6 month, as is becoming more common with current climate trends.⁴⁰ During a week when
7 the California Independent System Operator (“CAISO”) day-ahead rate reaches the price
8 cap during the evening on-peak period several days in a row, the Marginal Generation
9 Capacity Cost (“MGCC”) adder would be applied to these hours due to forecasted load
10 being above the 150-hour threshold, as high-load periods tend to concentrate in week-long
11 periods associated with weather conditions.⁴¹ SDG&E’s Proposed DF Rate for residential
12 customers during those high-cost hours in which the MGCC adder is applied would have
13 averaged \$1.81/kWh and peaked at \$3.54/kWh in 2024, according to SDG&E’s mock bill
14 impact analysis for 2024,⁴² approximately three times higher and nearly six times higher,
15 respectively, than the total on-peak summer rates for TOU-DR-1 SDG&E bundled

⁴⁰ According to the National Oceanic and Atmospheric Administration, California recorded its warmest March on record in 2026, alongside warmer-than-average temperatures for both April and May as well. *See* <https://www.ncei.noaa.gov/news/national-climate-202603>.

San Diego County has recorded warmer-than-average temperatures for the first seven months of 2026 and the warmest ever November-to-May period from November 2025 through May 2026, which aligns with the “Winter” seasonal schedule for both bundled and unbundled SDG&E customers. *See* <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/county/time-series/CA-073/tavg/7/5/1895-2026>.

⁴¹ In SDG&E “RTPIImport_BillCalc_Workpaper_Proposed_Revised,” referenced in A.26-02-001, SDG&E Response to SD CCAs DR 2.19(a), response attached hereto as **Exhibit C** and workpaper is available at <https://eq-research.sharefile.com/public/share/web-s2fe7a3ceaeaa447aa823115334239a52>, tab “TOU-DR-1,” cells D1:E8785 and A11:AI8785, SDG&E’s mock bill analysis indicates that the MGCC adder would have been applied to 156 hours in 2024 for residential customers, generally concentrated across five weeks in the summer. This includes 13 hours between July 24th and 26th, 18 hours between August 2nd and 6th, 18 hours between August 12th and 15th, 20 hours between August 19th and 22nd, and 81 hours between September 3rd and 10th.

⁴² *See id*, cells AK1:AK8785.

1 customers in 2024 of about \$0.60/kWh.⁴³ Over the most expensive seven-day period,
2 September 4th through September 10th, the average Proposed DF Rate would have been
3 \$1.09/kWh, nearly triple that of comparative TOU-DR-1 summer rates, and the average
4 rate between 4 PM and 9 PM during this week would have been \$2.02/kWh, more than
5 triple that of the comparative TOU-DR-1 summer on-peak total rate.⁴⁴ These types of
6 sustained periods with multiple consecutive days of high prices are significant drivers of
7 resource adequacy needs, reliability concerns, and customer bill impacts.

8 **Q: Why would a customer or LSE need access to meter data to manage these types of**
9 **sustained periods of high-priced days?**

10 A: During these sustained expensive rates, a customer can only effectively manage their
11 hourly consumption if they or a third party, such as their CCA, can monitor their usage in
12 near real time (i.e., within a few seconds after power flow), as further described below.
13 Furthermore, during these extremely high-price hours, commodity components account for
14 over three-quarters of the total (commodity plus delivery) Proposed DF rate.⁴⁵ It is crucial
15 that customers' commodity service providers can support and encourage customer load-

⁴³ See SDG&E Schedule TOU-DR1, Residential Time-of-Use, effective Jan. 1, 2024, available at <https://tariffsprd.sdge.com/view/historical/?utilId=SDGE&bookId=ELEC&tarfKey=898&tarfYear=2024>.

⁴⁴ See SDG&E "RTPImport_BillCalc_Workpaper_Proposed_Revised," referenced in A.26-02-001, SDG&E Response to SD CCAs DR 2.19(a), response attached hereto as **Exhibit C** and workpaper is available at <https://eq-research.sharefile.com/public/share/web-s2fe7a3ceaea447aa823115334239a52>, Tab "TOU-DR-1," cells AK5930:AK6097, for average Proposed DF rates; see SDG&E Schedule TOU-DR1 (Residential TOU), Sheet 2, available at <https://tariffsprd.sdge.com/view/historical/?utilId=SDGE&bookId=ELEC&tarfKey=898&tarfYear=2024> for total TOU-DR-1 bundled rates, in which the average rate during the summer was \$0.40415/kWh (calculated by averaging the Summer On-Peak Rate of 0.70206, the Summer Off-Peak rate of 0.47262, and the Summer Super Off-Peak rate of 0.35211, then subtracting the baseline adjustment credit of 0.10478). The Summer On-Peak rate is calculated by subtracting the baseline adjustment credit of 0.10478 from the total On-Peak rate of 0.70206, resulting in a rate of \$0.59728/kWh.

⁴⁵ See SDG&E "RTPImport_BillCalc_Workpaper_Proposed_Revised," referenced in A.26-02-001, SDG&E Response to SD CCAs DR 2.19(a), response attached hereto as **Exhibit C** and workpaper is available at <https://eq-research.sharefile.com/public/share/web-s2fe7a3ceaea447aa823115334239a52>, Tab "TOU-DR-1," cells AH5930:AI6097 and AK5930:AK6097.

1 shifting behavior through the use of near real-time usage data for customers to respond
2 effectively to dynamic rates. At the very least, during periods of multiple consecutive days
3 of high prices, providing CCAs with access to customer data by 9 AM the morning after
4 power flow will substantially improve CCAs' and customers' ability to respond to high
5 prices informed by their performance on the prior day.

6 **Q: Do sustained periods of high prices only occur in the summer?**

7 A: No. There are also periods outside of the summer in which high prices can unexpectedly
8 persist over a several-day period. In SDG&E's residential bill impact analysis, a four-day
9 period over January 13th through January 16th, 2024, experienced an average Proposed DF
10 rate of \$0.83/kWh, more than double the comparable TOU-DR-1 average winter rate of
11 \$0.40/kWh.⁴⁶ And while the example above pertains to the Proposed DF residential rate,
12 these trends are consistent across all modeled customer classes as the CAISO day-ahead
13 rate does not vary by customer class and the MGCC adder is applied during the same hours
14 for each customer class.⁴⁷ A water-pumping or manufacturing customer enrolled on a DF
15 rate which fails to account for such extremely high prices for the week used in the above
16 example would be subject to a substantially higher energy bill, which could be abated if
17 the CCA and customer had access to near real-time energy monitoring data and can take
18 preventative real-time action to reduce and/or shift usage. Because these high-price hours
19 align with strained grid conditions, enabling a customer to more effectively respond to

⁴⁶ See *id*, Tab "TOU-DR-1," cells AK290:AK385; see SDG&E Schedule TOU-DR1 (Residential TOU), Sheet 2, available at <https://tariffsprd.sdge.com/view/historical/?utilId=SDGE&bookId=ELEC&tarfKey=898&tarfYear=2024>.

⁴⁷ See *id*, Tab "TOU-A," "AL-TOU-M," "AL-TOU," and "TOU-PA," cells AF1:AF8785 and AI1:AI8785 (for each such tab).

high-price hours with near real-time usage data also enhances the effectiveness of the DF rate to reduce system costs.

Q: Is access to meter data only important for periods in which there are multiple consecutive days of high prices?

A: As the above examples illustrate, high-priced days are likely to occur as part of multi-day periods of high-priced days. As noted above, during a period of multiple consecutive high-priced days, having access to customer data by 9 AM the morning after power flow would provide valuable, timely feedback to help customers and their LSEs assess load shifting performance on the prior day and plan effectively for the upcoming day. However, real-time access to meter data for both customers and LSEs is needed to manage high prices regardless of whether they occur on one-off days or during periods with multiple consecutive days of high prices. On any given high-priced day, access to real-time usage data would allow customers and their LSEs to manage customer loads around price spikes as they are occurring.

2. Near Real-Time Energy Usage Data Access & Customized Customer Outreach

Q: How do the SD CCAs define “near real-time” for purposes of energy usage data access?

A: The SD CCAs define “near real-time” smart meter data access latency as within just a few seconds from the point in time in which electricity has been used by the customer as measured by the customer’s meter (“power flow”). This is the latency at which SDG&E’s current fleet of existing Smart Meters 1.0 are capable of transmitting such data.⁴⁸ The SD

⁴⁸ A.26-02-001 Murray Declaration at 2.

1 CCAs' position is supported by Commission orders going back over 15 years and was
2 articulated in their Petition for Modification ("PFM") of D.22-12-009 and their
3 Application for Rehearing of D.25-10-004.⁴⁹

4 **Q: How does SDG&E define "near real-time" for purposes of customer energy usage**
5 **data access?**

6 A: In discovery responses provided to the SD CCAs in SDG&E's Smart Meter 2.0
7 Application (A.25-12-012), SDG&E has stated "For purposes of this testimony, SDG&E
8 does not distinguish between the terms "real-time" and "near real-time." SDG&E uses
9 these terms to refer to the elapsed time—**typically under one minute**—between when an
10 event occurs and when it is reported to the customer, user, or system for attention."⁵⁰

11 In defense of D.22-12-009, the Commission decision which approved SDG&E's
12 request to discontinue servicing ZigBee radio frequency-based meter data transmissions
13 to the HAN device at a customer's premises (which occurs within seconds), by contrast,
14 SDG&E argued that data provided to customers via "Green Button or the customer's own
15 account on SDG&E's website" constitutes "near-real time" data access.⁵¹ Based on
16 discovery received to date, the SD CCAs understand that such access is available to
17 SDG&E's customers sometime between 9:00 AM the morning after power flow to 2:00

⁴⁹ PFM of D.22-12-009 at 11-21 (discussing D.09-12-046, *Decision Adopting Policies and Findings Pursuant to the Smart Grid Policies Established by the Energy Information and Security Act of 2007* (Dec. 17, 2009) at 65, COL 18; D.11-07-056, *Decision Adopting Rules to Protect the Privacy and Security of the Electricity Usage Data of the Customers of Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company* (Jul. 28, 2011) ("D.11-07-056") at Ordering Paragraph ("OP") 11; Resolution E-4527 (Sep. 27, 2012) at 2, FOF 2, OP 1(a), and subsequent orders); AFR of D.25-10-004 at 12-16.

⁵⁰ A.25-12-012, SDG&E Response to SDCP/CEA DR 1.30 (emphasis added), attached hereto as **Exhibit D.**

⁵¹ A.22-05-002 et al., *Reply Comments of San Diego Gas & Electric Company (U 902 E) on the Proposed Decision Denying Petition for Modification of D.22-12-009* (Sept. 15, 2025) at 4.

1 AM the second day after power flow, a range of 9 to 50 hours after such usage.⁵² In the
2 reply same comments on D.25-10-004, SDG&E argued that its provision to the SD CCAs
3 “as soon as it is technically feasible to do so, within 2-3 days of the meter read” should
4 be considered “near real-time.”⁵³ The SD CCAs strongly disagree with SDG&E’s
5 definition of near real-time data access.

6 **Q: Do Commission decisions provide support for the SD CCAs’ definition of “near real-**
7 **time” energy usage data access?**

8 A: Yes.

9 **Q: What types of actions would the SD CCAs take to support their customers on**
10 **dynamic rates if they had near real-time access to customers’ meter data?**

11 A: The SD CCAs have a keen interest in supporting their customers in implementing
12 dynamic rates by preventing unexpectedly high bills and enhancing their customers’
13 opportunities to save on their energy costs, while improving overall grid reliability,
14 reducing procurement costs, improving energy affordability and aligning usage to achieve
15 environmental and public health goals. If the SD CCAs had access to meter data in near
16 real-time, they could communicate with customers promptly, so that customers have the
17 necessary information to enable load reduction during high-price DF Rate periods. The
18 customer communication channels could both be automated and tailored to individual
19 customers. Having access to near real-time energy usage data would enable the use of
20 automation technology, such as a messaging application programming interface (“API”),

⁵² See *infra* notes 76 -78.

⁵³ A.22-05-002 et al., *San Diego Gas & Electric Company’s (U 902 E) Response to Petition for Modification of Decision 22-12-009 of Clean Energy Alliance, San Diego Community Power and Mission:data Coalition, Inc.* (Mar. 21, 2025) (“SDG&E PFM Response”) at 6; A.22-05-002 et al., *Reply Comments of San Diego Gas & Electric Company (U 902 E) on the Proposed Decision Denying Petition for Modification of D.22-12-009* (Sept. 15, 2025) (“SDG&E D.25-10-004 Reply Comments”) at 4-5.

1 to trigger push alerts to enrolled customers based on either grid conditions (*e.g.*, high or
2 low prices, application of MGCC adders) or customer load trends (*e.g.*, abnormally high
3 demand or load periods or atypical load profile during high price periods). These alerts
4 could be supplemented by personalized outreach to key accounts with large loads and
5 potentially large load shift potential, based on the SD CCAs' cultivated relationship with
6 those key accounts.

7 **Q: Why do both customers and their LSEs need access to meter data to respond to**
8 **dynamic rates?**

9 A: Fundamentally, customer access to near real-time electricity usage data is essential for
10 operationalizing load-shifting behaviors and responding effectively to pricing signals, and
11 other utilities are rolling out the ability for customers to have real-time energy monitoring
12 data. Southern California Edison Company ("SCE") and Pacific Gas and Electric
13 Company ("PG&E") currently provide real-time data access to customers, and this
14 functionality is available in a number of other service areas around the country.⁵⁴ In order
15 for the Proposed DF Rate to be effective, both customers and their LSEs, including the
16 SD CCAs, need access to near real-time usage data in order to help customers understand
17 and interpret that data through both regular, routine customer service and through
18 developed marketing and educational materials. Customers that are motivated to shift
19 their loads away from high-price periods need to know in near real-time whether their
20 efforts were successful or not in order to respond effectively in the future. Without near
21 real-time data access, both automated and personalized outreach becomes less actionable
22 as the customer and LSE have less insight into monitoring energy usage patterns. When

⁵⁴ A.26-02-001 Murray Declaration at ¶ 12; attached hereto as **Exhibit B**.

1 customers receive stale feedback on their load shifting efforts several days after the fact,
2 they most likely would have forgotten which strategies they employed on the day in
3 question. Only with prompt feedback can customers learn over time to shift their loads
4 effectively and manage their energy consumption around a dynamic pricing paradigm.

5 **Q: Has SDG&E acknowledged the importance of access to real-time meter data?**

6 A: Yes. SDG&E acknowledged quantifiable benefits of customer access to real-time energy
7 usage data in its Smart Meter 2.0 Application (A.25-12-012) testimony, which claimed an
8 estimated \$226 million in customer and community benefits.⁵⁵ SDG&E explained that
9 providing customers with “more timely and granular visibility into how and when
10 electricity is consumed than is available through legacy interval data.”⁵⁶ SDG&E went on
11 to support this functionality by stating:

12 This increased visibility provides customers with improved insight into
13 when and how electricity is consumed and how those usage patterns may
14 influence their monthly bills, particularly under more time-sensitive rate
15 structures, consistent with the Commission’s emphasis on improving
16 customer access to usage information.⁵⁷

17 **Q: In addition to avoiding high price periods, is access to real-time meter data necessary**
18 **for customers to take advantage of low-price periods?**

19 A: Yes. Near real-time energy access would also enable customers to take better advantage of
20 low-price DF Rate periods and draw power from the grid during times of the day when it
21 is cheaper and more likely to be powered by non-polluting clean energy sources. Similar
22 to the example provided above, the use of either an automated API and/or personalized
23 outreach could prompt customers in advance of low-price hours and reinforce customers’

⁵⁵ A.25-12-012, Exh. SDG&E-07-2E, *Supplemental Testimony of Nicole Richardson, David Thai, and Michael R. Woodruff* (Aug. 26, 2026) at 22:13-15.

⁵⁶ *Id.* at 21:1-3.

⁵⁷ *Id.* at 21:19-22.

load-shifting behaviors to these hours. Improving meter data access effectively would reduce customer bills and greatly improve the customer experience on dynamic rates.

Q: In addition to helping customers save money, will meter data access help achieve the goals of dynamic rates?

A: Yes. Hand-in-hand with helping customers rapidly respond to dynamic rates to save on electricity bills, improved data access would make dynamic rates more effective in furthering one of their central purposes: enhancing the reliability of California's electric system.⁵⁸ The level of customer engagement and outreach enabled by near real-time usage data will supercharge the ability of customers to respond to price signals and align load to reduce grid strain and the need for incremental generation at peak.

3. The Role of Timely Data Access in Load Forecasting and Dynamic Rate Pricing

Q: Would providing access to meter data improve CCAs' load forecasts?

A: Yes. By improving customers' ability to shift load out of more expensive times of day, such data access could also improve load forecasting by the SD CCAs. And, as a consequence of load reductions at peak and more accurate load forecasting, which impact both procurement and programmatic operations, enhanced data access can reduce LSE costs to meet customer demand in the long term and make next-day dynamic prices more accurate and potentially affordable.

More timely meter data access would significantly impact SD CCAs' Day-Ahead aggregated load forecasting processes and procurement initiatives. If SD CCAs had access to near real-time meter data access (i.e. within a few seconds of power flow) and, at a

⁵⁸ See D.23-04-040 at 4.

1 minimum, meter data access parity with that of SDG&E (currently, the receipt of interval
2 data by 9:00 AM the morning after power flow, rather than 2-3 days after power flow), that
3 dataset would be used to update, inform and calibrate the short-term load forecasts which
4 inform day-ahead bidding to serve load. This would include the ability for SD CCAs to
5 provide updates to CAISO schedules with responsive load in real time. Access to near real-
6 time usage data would lead to a lower Mean Absolute Percentage Error (“MAPE”) in day-
7 ahead load forecasting and thus lead to more accurate bids in the day-ahead power market,
8 rather than CCAs relying on outdated data or forecasts that deviate significantly from the
9 meter data to make procurement decisions. Ultimately, this improvement would reduce
10 both over- and under-procurement risks and would bolster both reliability and affordability
11 for the system and for customers.

12 **Q: If the SD CCAs were able to offer their own dynamic rates, would providing access**
13 **to meter data improve the accuracy of their day-ahead dynamic prices?**

14 **A:** Yes. The ability to more accurately forecast load with customer meter data access in near
15 real-time, or at a minimum at the same time such data are received by SDG&E, would also
16 impact the day-ahead dynamic rates that could be offered by the SD CCAs. If the SD CCAs
17 load forecasts and thus procurement activities are more tailored to the reality of their
18 customers’ load, their next-day, day-ahead pricing could also be more tailored in this way.
19 If customers are able to shift load off peak in response to dynamic pricing, this could reduce
20 next-day dynamic rates such that they will more accurately reflect actual, informed
21 procurement costs. This connection was highlighted in the R.22-07-005 Track B Working
22 Group Report, which considered the data access needs of CCAs in implementing dynamic
23 rates:

1 As pricing becomes more time-dependent (i.e., for both time-of-use and
2 dynamic rates), the need for accurate data for load forecasting becomes
3 heightened. Without such data, CCAs will incur additional costs for
4 inaccurate scheduling, potentially resulting in inflated prices and further
5 exacerbating grid reliability issues that both TOU and RTP are designed to
6 improve.⁵⁹

7
8 In fact, even SDG&E has admitted the “necessary” role of consumption data access
9 enabled by Smart Meter technology in supporting dynamic rate calculations.⁶⁰

10 **4. Timely Interval Meter Data Access for Demand Response and**
11 **Distributed Energy Resources Management System**

12 **Q: In addition to responding to dynamic rates, please explain the importance of CCA**
13 **access to customer meter data for implementing effective DR programs and operation**
14 **of CCAs’ DERMS.**

15 A: CCA access to customer meter data is critical to enable CCAs to implement effective DR
16 programs and successfully operate DERMS platforms. For example, on the programmatic
17 side, SDCP has a growing portfolio of daily load shifting and event-based demand
18 flexibility and DR programs whose effectiveness relies on the ability to align device
19 dispatch with forecasted load. SDCP’s DERMS platform includes a load forecasting tool,
20 which is currently fed meter data lagging by three days after power flow. This lag decreases
21 the accuracy of forecast data and reduces the ability to respond to acute and transient, near-
22 term swings in demand. With aggregated interval meter data access at parity with that of

⁵⁹ R.22-07-005 *Track B Working Group Report and Notice of Availability* (Oct. 11, 2023), Attachment A (“Track B Working Group Report”) at 235.

⁶⁰ A.25-12-012, SDG&E Response to SDCP/CEA DR 2.5, attached hereto as **Exhibit D**. (“In connection with dynamic rate programs, SM 1.0 advanced metering technology enabled access to the interval consumption data that is necessary to support dynamic or time-of-use (TOU) rate calculations. The absence of advanced metering infrastructure and a return to manual meter reads would create significant delay in availability of consumption data and would interfere with the availability of the granular data needed for dynamic or TOU rate calculations.”).

SDG&E (i.e. at 9:00 AM the morning after power flow), SDCP could re-run dispatch optimization each morning, or on a more frequent basis, against the prior day's actual load, rather than a three-day-old snapshot. This would keep device dispatch schedules aligned with real conditions instead of a stale forecast. With near real-time data access (i.e. within a few seconds of power flow), SDCP could tighten the trigger windows on our event-based demand flexibility programs, calling events closer to when acute demand materializes, rather than relying on forecasts built on lagged data. SDCP's DERMS platform has been designed to be flexible enough to work under a dynamic rate framework and more timely data access can more accurately optimize scheduling dispatch aligned with load conditions.

Clean Power Alliance, a CCA operating in SCE's distribution territory, made similar observations in a report regarding its Power Response Program, a DR program which aggregates smart thermostats, battery energy storage systems and EV chargers. In summarizing the CCA's lessons learned and recommendations for DER integration and management to address time-based grid events, CPA noted:

Customer meter data access challenges for CCAs: The Power Response Program, as a CCA run program, is at a disadvantage compared to IOU programs due to lack of direct access to its customer's meter data. Timely access to customer meter data is essential to track and report on event performance for a DR program. To overcome this barrier, [CPA's vendor] Olivine had to expand the program's customer enrollment process to include an additional step wherein customers were asked to authorize Olivine to access their meter data. Customers were required to provide the program administrator their utility account number to complete this step, which they sometimes were unable to provide. This additional step is sometimes a burden on customers, complicates the customer experience, and is a key barrier for maximizing enrollments in CCA programs. **This has been a known barrier for CCAs in California since their inception, and**

1 **the implementation of this program has highlighted this issue once**
2 **again.**⁶¹

3 In summary, near real-time and data access parity with that of SDG&E would lead
4 to improved forecasting which would increase the SD CCA's ability to respond to near-
5 term variations in load, reduce peak demand, and more effectively manage secondary
6 peaks related to EV charging. Ultimately, more accurate and effective load management
7 would directly impact the SD CCA's operational expenses and overall affordability, by
8 reducing resource adequacy procurement obligations and associated costs.

9 **Q: Based on this discussion, please briefly summarize why meter data access is**
10 **important to the SD CCAs.**

11 A: From the SD CCAs' perspective, the ability to provide the level of customer service,
12 ME&O and near real-time customer engagement enabled by near real-time meter data
13 access is crucial for the success of DF Rates. Yet, as explained in more detail below, under
14 current SDG&E meter data access protocols and actual data latency conditions, the SD
15 CCAs are hindered from providing these services.

⁶¹ CPA, *Power Response Program (2019-2021) Final Report* (Nov. 2021), available at https://olivineinc.com/wp-content/uploads/2021/12/CPA-Power-Response_Final-Report_122821-Clean.pdf (emphasis added).

1 **C. Current Lack of Timely and Actionable Meter Data Access for SD CCAs and**
2 **SDG&E Distribution Customers**

3 **1. SDG&E Receives Customer Interval Meter Data Significantly Earlier**
4 **Than Do the SD CCAs**

5 **Q: Please explain the disparity between when SDG&E receives customer meter data and**
6 **when the SD CCAs receive that data.**

7 A: SDG&E has access to customer energy usage data at a materially shorter latency than do
8 the LSEs serving approximately 80 percent of the customers in its service territory. Based
9 on SDG&E's discovery responses in this proceeding and in SDG&E's Smart Meter 2.0
10 Application (A.25-12-012), and the experience of SD CCA staff, SDG&E initially receives
11 customer interval meter data from SDG&E's existing Smart Meters 1.0 at its head end
12 system ("HES") between 0 to 33 hours after the consumption occurs, as measured at the
13 time of power flow through the customer's meter, while the SD CCAs receive such data
14 after a significant amount of data processing has occurred within SDG&E, approximately
15 two to three days (48 to 72 hours) after power flow.

16 From data responses received by the SD CCAs, the flow of usage data from the
17 customer's meter appears to follow the steps set forth in **Table 1** below.

Table 1 SDG&E Customer Interval Meter Data Availability Timeline

Data Source	Data Destination	Time after Day of Power Flow	Hours from Power Flow	SDG&E Function	Discovery Source⁶²
SDG&E customer meter	SDG&E Head End System (“HES”)/ SDG&E Smart Meter IT Department	Between 12:00 AM and 9:00 AM	0 to 33	HES “requests,” “retrieves” and “processes” meter data	1.09, 2.09(1)(a), 2.15(a)
HES	SDG&E Meter Data Management System (“MDMS”)	Between 12:00 AM and approximately 9:00 AM	0 to 33	MDMS processes data and performs validations, edits and estimation (“VEE”)	1.09, 2.09(1)(b)
MDMS	SDG&E Customer Information System (“CIS”)	By approximately 9:00 AM	0 to 33	Customers may view data; ⁶³ possible access by SDG&E’s “energy procurement function”; ⁶⁴ CIS performs “Additional processing” “including associating the meter data to both a customer and the CCA, reformatting the data into the CCA data schema, and performing additional estimations for complex metering scenarios.”	1.09; 1.12b; 1.14b, 2.09(1)(a); AMI 2.0 SDG&E Responses 1.25(b); 3.2(b)
MDMS	SDG&E’s Engineering Data Warehouse	By approximately 9:00 AM	9 to 33	“used for electric reliability and grid operations” and “planning that supports electric system reliability”	2.09(1)(b), 2.09(2)(b), 2.09(2)(b)(1), 3.09(2)(b)(1)(i), (ii)
CIS	CIS data lake	2:00 AM <u>second</u> day after power flow	26 to 50	Made available to “multiple organizations” for, “energy efficiency and demand response, distributed energy resource integration, market settlement & regulatory reporting, and grid planning and asset management.”	1.09, 2.09(1)(b), 2.09(4)(a); AMI 2.0 Response 1.25(b)
CIS	CCA data lake	Per SDG&E, 2:00 AM <u>second</u> day after power flow Per SD CCAs’ experience, 2nd or 3 rd day after power flow	Per SDG&E: 26-50 Per SD CCAs’ experience: 48-72	Made available to CCAs through an API	1.09, 2.09(3)(a), 2.15(a)
CIS	Meter Data Processing System	5:00 AM second day after power flow	29 to 53	“used by the energy procurement function”	1.09, 2.09(3)(a), 2.09(3)(b)

1 **Q: When does SDG&E first request and receive customer meter data?**

2 A: As shown in Table 1, SDG&E first begins to receive customer interval meter data at its
3 HES at midnight on the day after power flow.⁶⁵ This process concludes by approximately
4 9:00 AM the morning after power flow.⁶⁶

5 **Q: When does SDG&E begin using customer meter data for its operations?**

6 A: According to discovery responses SD CCAs received from SDG&E, SDG&E first begins
7 to make use of customer interval meter data that arrived at the HES by 9:00 AM the
8 morning after power flow, which is 9 to 33 hours after power flow. Specifically, SDG&E's
9 Engineering Data Warehouse receives interval meter data by approximately 9:00 AM the
10 morning after power flow.⁶⁷ SDG&E has stated in response to the SD CCAs' discovery
11 requests that customer interval meter data received by SDG&E's Engineering Data
12 Warehouse is used by SDG&E for "electric reliability and grid operations"⁶⁸ and "planning
13 that supports electric system reliability."⁶⁹

14 Thus, according to SDG&E's data responses, SDG&E first utilizes customer
15 interval meter data approximately 17 hours prior to the time *SDG&E claims* such data first

⁶² SDG&E response to SD CCAs' data requests in A.26-02-001, attached hereto as **Exhibit C**, unless otherwise indicated. "AMI 2.0 SDG&E Response" indicates a response to the SD CCAs' data requests in A.25-12-012, SDG&E's Smart Meter 2.0 Application, attached hereto as **Exhibit D**.

⁶³ As discussed below, the SD CCAs have received conflicting information regarding whether customers may begin to view data by 9:00 AM the morning after power flow, or by 2:00 AM the following day.

⁶⁴ See A.25-12-012, SDG&E Response to SDCP/CEA DR 1.25(b). As noted below, in other responses, SDG&E has stated that its "energy procurement function" does not receive customer interval meter data until it is in the Meter Data Processing System by 5:00 AM, which appears to be on the second day after power flow. A.26-02-001, SDG&E Response to SD CCAs DRs 1.09, 2.09(3)(a).

⁶⁵ A.26-02-001, SDG&E Response to SD CCAs DRs 1.09, 1.12b, attached hereto as **Exhibit C**. These data are first received by SDG&E's Smart Meter IT department. A.26-02-001, SDG&E Response to SD CCAs DR 1.11, attached hereto as **Exhibit C**.

⁶⁶ A.26-02-001, SDG&E Response to SD CCAs DR 3.09(2)(b)(2)(i), attached hereto as **Exhibit C**.

⁶⁷ A.26-02-001, SDG&E Response to SD CCAs DR 3.09(2)(b)(1)(i), attached hereto as **Exhibit C**.

⁶⁸ A.26-02-001, SDG&E Response to SD CCAs DR 2.09(2)(b)(1), attached hereto as **Exhibit C**.

⁶⁹ A.26-02-001, SDG&E Response to SD CCAs DR 3.09(2)(b)(1)(ii), attached hereto as **Exhibit C**.

1 become available to CCAs, which is via the CCA data lake at 2:00 AM the second day
2 after power flow.⁷⁰ As discussed below, the discrepancy is actually far greater based on
3 when the SD CCAs *actually receive* such data in their practical experience (48 to 72 hours
4 from power flow,⁷¹ or a range of 15 to 63 hours after SDG&E's Engineering Data
5 Warehouse receives such data).

6 In response to the SD CCAs' discovery requests, SDG&E responded that the
7 customer interval meter data received by the Engineering Data Warehouse "is not
8 associated with individual customers" and that SDG&E does not currently utilize such data
9 "to make procurement decisions," to initiate program events for demand management or
10 DR or for customer outreach or communication.⁷² Yet, the SD CCAs have received
11 somewhat conflicting information regarding when SDG&E's procurement function has
12 access to customer interval data. In response to the SD CCAs' discovery in A.25-12-012
13 (SDG&E's Smart Meter 2.0 Application), SDG&E stated that its "energy procurement
14 function" has access to customer interval data after it is sent to SDG&E's CIS.⁷³ The
15 interval data are sent to SDG&E's CIS by 9:00 AM the morning after power flow.⁷⁴ In
16 other responses, it stated that the procurement function does not use the customer-specific
17 data and receives it by approximately 5:00 AM or 2-3 days after power flow.⁷⁵

18 Regardless of how *SDG&E* currently does or does not choose to make use of
19 customer energy usage data to which it has access, such data would be useful to the SD

⁷⁰ A.26-02-001, SDG&E Response to SD CCAs DR 2.09(1)(b), attached hereto as **Exhibit C**.

⁷¹ See also *infra* note 8585.

⁷² A.26-02-001, SDG&E Response to SD CCAs DR 3.09(2)(b)(1)(ii), (iv) and (vi), attached hereto as **Exhibit C**.

⁷³ A.25-12-012, SDG&E Response to SDCP/CEA DR 1.25(b), attached hereto as **Exhibit D**.

⁷⁴ A.26-02-001, SDG&E Response to SD CCAs DR 1.12b, attached hereto as **Exhibit C**.

⁷⁵ A.26-02-001, SDG&E Response to SD CCAs DRs 1.16; 2.09(3)(a), attached hereto as **Exhibit C**.

1 CCAs in implementing dynamic rates, and, as discussed below, to ensure data access parity
2 as between the SD CCAs and SDG&E. The SD CCAs would be interested in making use
3 of such data for high-level customer support, procurement, load forecasting, and program
4 event initiation functions which supplement the goals of the DF Rates. Even aggregated
5 data would enable a customers' LSE to track aggregated usage data, allowing the SD CCAs
6 to provide high-level customer support.

7 **Q: When do SDG&E's customers first have access to their own interval meter data after**
8 **such data are received by SDG&E's HES?**

9 A: According to SDG&E, customer interval data are transferred to SDG&E's CIS sometime
10 between midnight and 9:00 AM on the morning after power flow⁷⁶ (thus in a range of zero
11 to 33 hours from power flow). In SD CCA staff experience utilizing SDG&E "My Energy
12 Center" website function, SDG&E's customers can typically access their interval meter
13 data by 9:00 AM the morning after power flow via SDG&E's My Energy Center web
14 portal.⁷⁷

15 But SDG&E has provided the SD CCAs with conflicting data responses on this
16 point. In other responses to the SD CCAs' discovery, SDG&E stated that such interval
17 meter data are available to customers sometime between 10:00 AM the morning after
18 power flow and 2:00 AM the following day in My Energy Center.⁷⁸

⁷⁶ A.26-02-001, SDG&E Response to SD CCAs DR 3.09(2)(a)(i), attached hereto as **Exhibit C**.

⁷⁷ See myenergycenter.com; see also A.25-12-012, SDG&E Response to SDCP/CEA DR 3.2(b)(i), attached hereto as **Exhibit D** (explaining that customer energy usage data are available to SDG&E's customers after VEE by the MDMS and loading into the CIS "in parallel with the CIS performing its processing" 5 to 34 hours after power flow processing, "depending on where their meter appears in the CIS upload file sequence.").

⁷⁸ A.26-02-001, SDG&E Response to SD CCAs DR 3.09(2)(b)(2)(i), attached hereto as **Exhibit C**.

1 Based on the SD CCAs' practical experience regarding when interval data are
2 actually made available to the CCAs (48 to 72 hours from power flow),⁷⁹ SDG&E
3 customers have access to interval data somewhere in the range of 15 to 63 hours prior to
4 CCA access, and the discrepancy may be even larger for data that are available in the CIS
5 zero to 9 hours sooner.

6 **Q: At what time and for what purposes can SDG&E use customer meter data after it**
7 **enters the CIS data lake?**

8 A: SDG&E stated in discovery provided to the SD CCAs in this case that customer interval
9 meter data are available for use in the CIS data lake by 2:00 AM the second day after power
10 flow.⁸⁰ Per SDG&E, once customer meter data are transmitted to SDG&E's CIS data lake,
11 "multiple organizations can use the data for their own business purposes such as energy
12 efficiency and demand response, distributed energy resource integration, market settlement
13 & regulatory reporting, and grid planning and asset management."⁸¹ Thus, based on the
14 SD CCAs' regarding when interval data are actually made available to the CCAs,⁸²
15 SDG&E has access to customer meter data for load forecasting, customer load flexibility
16 programs and myriad other functions between 22 to 46 hours prior to when it provides the
17 SD CCAs with such access.

⁷⁹ See also *infra* note 8585.

⁸⁰ A.26-02-001, SDG&E Response to SD CCAs DR 2.09(3)(b), attached hereto as **Exhibit C**.

⁸¹ A.26-02-001, SDG&E Response to SD CCAs DR 1.09, attached hereto as **Exhibit C**.

⁸² See also *infra* note 8585.

1 **Q: When does SDG&E say that it makes customer interval meter data available to a**
2 **customers' authorized third party via My Energy Center?**

3 A: SDG&E shares interval meter data with its distribution customers' authorized third parties
4 via an automated process beginning on 8:00 AM the second day after power flow.⁸³ This
5 is 32 to 56 hours from power flow, which means customers' authorized third parties receive
6 their usage data **up to 40 hours** before the SD CCAs, such customers' LSEs, actually
7 receive such data in their actual experience.

8 **Q: When does SDG&E say that it makes customer meter data available to the CCAs?**

9 A: SDG&E takes the position that customer interval meter data are available to the SD CCAs
10 in the CCA data lake at 2:00 AM on the second day after power flow (26 to 50 hours from
11 power flow).⁸⁴

12 **Q: When do the SD CCAs actually begin having access to meter data in their practical**
13 **experience?**

14 A: The practical experience of the SD CCAs suggests that actual data delivery timelines do
15 not align with the timelines described in SDG&E's discovery responses. CCAs have
16 frequently experienced delays, data quality issues, and gaps in interval meter data
17 availability that create an even larger disparity in data latency as between the utility and
18 the LSEs. The actual experience of the SD CCAs is that they generally receive customer
19 usage information approximately two to three days (48 to 72 hours) after power flow,
20 which could range 15 to 72 hours after SDG&E first receives interval data at its HES and
21 39 to 63 hours after SDG&E begins to utilize such data for its operations. When the SD
22 CCAs execute queries to obtain meter data earlier than two to three days (or 48 to 72 hours)

⁸³ A.25-12-012, SDG&E Response to SDCP/CEA DR Response 3.2(b)(ii), attached hereto as **Exhibit D**.

⁸⁴ A.26-02-001, SDG&E Response to SD CCAs DRs 2.09(3)(a), 2.15(a), attached hereto as **Exhibit C**.

1 from power flow, no data are available. This experience is backed up by SDG&E's own
2 description of its CCA data lake data availability in communications with the SD CCAs
3 and the R.22-07-005 Track B Working Group Report.⁸⁵

4 **Q: Please summarize the disparity between when SDG&E can access customer meter**
5 **data and when the SD CCAs can access these data.**

6 A: SDG&E first receives customer energy usage data at its HES *15-72 hours* prior to the SD
7 CCAs, first utilizes such data for “electric reliability and grid operations” between *39 to*
8 *63 hours before CCAs have access to such data*, and makes the data available for business
9 purposes such as “energy efficiency and demand response, distributed energy resource
10 integration, market settlement & regulatory reporting, and grid planning and asset
11 management” *22 to 46 hours* prior to such data being provided to the SD CCAs. This
12 striking inequality, and also the discrepancy between SDG&E's stated data access
13 timelines and actual CCA experience, warrant careful Commission scrutiny because they
14 directly affect the SD CCAs' ability to participate in the Proposed DF Rates, offer their
15 own dynamic rate programs and carry out other load flexibility initiatives.

⁸⁵ R.22-07-005, Track B Working Group Report at 243 (“Interval data will be available for access through the self-service solution two to three days after it has been recorded in the meter.”); excerpt of SDG&E, *SDG&E and San Diego Region CCA Monthly Touchpoint* (May 11, 2023), attached hereto as **Exhibit E** at 16 (“Interval data will be available for access through the self-service solution two to three days after it has been recorded in the meter”); email correspondence from S. Nordin to L. Utouh (Aug. 29, 2023).

1 **2. SDG&E No Longer Supports Near Real-Time Energy Usage Data**
2 **Access for Its Distribution Customers**

3 **Q: Do all SDG&E customers have access to their usage data in near real-time?**

4 A: No. Most do not. Not only do CCAs have delayed access to their customers' meter data,
5 but SDG&E's distribution customers, bundled and unbundled alike, lack timely and
6 actionable access to their own energy usage data.

7 The Commission required such near real-time usage data access for well over a
8 decade under a long line of Commission orders,⁸⁶ but recently permitted SDG&E to
9 discontinue servicing this data pathway in D.22-12-009.

10 **Q: How quickly are SDG&E's existing Smart Meters 1.0 *capable* of providing customers**
11 **and their authorized third parties with near real-time usage data?**

12 A: SDG&E currently deprives customers of access to their electricity usage data which could
13 be made available on a near real-time basis (within just a few seconds of power flow) via
14 a Home Area Network ("HAN") device and the "ZigBee" radio connectivity technology
15 that already exists in SDG&E's existing fleet of Smart Meters.⁸⁷ Using such technology,
16 customers have the ability to authorize third parties to access such data, such as energy
17 service providers or LSEs seeking to assist customers in shifting or shedding load.⁸⁸

18 **Q: Was near real-time usage data access important to the Commission when it approved**
19 **ratepayer funding for Smart Meters 1.0?**

20 A: Very much so. In fact, the Commission later stated that approval of ratepayer funding for
21 the IOUs' initial procurement and rollout of Smart Meters nearly two decades ago was

⁸⁶ PFM of D.22-12-009 at 11-21.

⁸⁷ *Id.* at 8-11, Exhibit C, A.22-05-002 Murray Declaration ¶¶ 8, 13, 15-18.

⁸⁸ A.26-02-001 Murray Declaration at ¶ 9, attached hereto as **Exhibit B**.

1 “*predicated*” on such “near real-time” energy usage data access and the real-time load-
2 shift potential it was expected to unlock.⁸⁹

3 **Q: Do customers in other utility service territories have real-time access to the energy**
4 **usage data?**

5 A: Yes. By contrast, PG&E and SCE customers have such real-time energy usage data
6 access.⁹⁰ See **Exhibit F**, a map that shows service areas around the U.S. where real-time
7 (within a few seconds) electric usage data are made available by utilities, including PG&E
8 and SCE, NV Energy, Ameren Illinois Company and various utilities in Pennsylvania.

9 **Q: Please explain how the Commission could restore real-time energy usage data access**
10 **for customers in SDG&E’s service territory.**

11 A: Because SDG&E’s existing Smart Meters 1.0 currently have such near real-time data
12 access capability, this entirely preventable data access deprivation by SDG&E could be
13 easily restored through a simple Commission order modifying D.22-12-009 and requiring
14 SDG&E to restore ZigBee-based near real-time meter data access for customers until such
15 customers’ meters are replaced by Smart Meters with new technology that provides near
16 real-time (i.e., within a few seconds) data access, expected to be via WiFi.⁹¹ The
17 Commission should also require that any new AMI technology provide equivalent data
18 access.

19 By way of background, the SD CCAs, joined by Mission:data, brought SDG&E’s
20 customer electricity usage data gap to the Commission’s attention by filing a PFM of D.22-
21 12-009, asking the Commission to require SDG&E to reinstate ZigBee data access

⁸⁹ Resolution E-4527 at 5-6 (emphasis added).

⁹⁰ A.26-02-001, Murray Declaration at ¶ 12; PFM of D.22-12-009 at 4, Exhibit C, A.22-05-002 Murray Declaration at ¶ 23.

⁹¹ PFM of D.22-12-009 at 29, Exhibit D (Joint Petitioners’ Proposed Modifications to D.22-12-009).

1 connections and to enable new ZigBee connections until SDG&E provides new Smart
2 Meters 2.0 that provide equivalent near real-time energy usage data access, which is
3 expected to occur via Wi-Fi rather than a radio connection. The Commission, however,
4 denied the PFM in D.25-10-004 on procedural grounds because it was filed more than one
5 year after D.22-12-009.⁹²

6 In D.22-12-009 and D.25-10-004 (as modified by D.26-05-036), the Commission
7 stated that it expected the issue of near real-time energy usage data access in SDG&E's
8 territory to be addressed in short order in SDG&E's AMI 2.0 application.⁹³ But,
9 unfortunately, nearly four years have passed, while SDG&E's distribution customers
10 continue to be deprived of such data access provided to California customers in other IOU
11 distribution territories and which SDG&E customers paid for via the ratebasing of AMI
12 1.0.

13 **Q: At what data latency does SDG&E plan to provide energy usage data to its**
14 **distribution customers in its implementation of its Proposed DF Rates?**

15 **A:** Despite the capability of Smart Meters 1.0 to provide customers and their authorized third
16 parties with usage data within seconds, when asked by the SD CCAs in discovery "how
17 SDG&E intends to enable bundled customers to monitor their energy usage in relation to
18 the price signals in the Proposed DF Rates," SDG&E responded: "Customers can access

⁹² D.25-10-004, *Decision Denying Petition for Modification of Decision 22-12-009* (October 9, 2025) ("D.25-10-004"), FOFs 1, 4, COLs 1, 2; *see also* D.26-05-036, *Order Modifying Decision D.25-10-004 and Denying Rehearing of the Decision, as Modified* (May 14, 2026) ("D.26-05-036").

⁹³ D.22-12-009, *Decision Approving Investor-Owned Utilities' Demand Response Programs, pilots, and Budgets for Bridge Year 2023* (Dec. 1, 2022) ("D.22-12-009") at 28 (citing A.22-05-002 et al., *Prepared Direct Testimony of E Bradford Mantz – Chapter 1A on behalf of San Diego Gas & Electric Company* (May 2, 2022) ("SDGE-1A") at 19:15 – 20:19 (explaining that SDG&E planned to begin replacing existing Smart Meters 1.0 with Smart Meters 2.0 possibly in 2023 and that such new meters use Wi-Fi, rather than ZigBee); D.26-05-036, OP 2.

1 their energy usage via MyAccount.”⁹⁴ Yet, such data are only available to customers
2 beginning at 9:00 AM the morning after power flow, and, according to one response the
3 SD CCAs received in discovery, as late as 2:00 AM on the *second* day after power flow, a
4 range of 9 to 50 hours after such usage has occurred.⁹⁵

5 **3. The Lack of Timely and Actionable Energy Usage Data Prevents**
6 **Effective Implementation of Dynamic Rates**

7 **Q: Please explain the impact of these meter data access issues you have described on the**
8 **CCAs’ ability to offer and customers’ ability to respond to dynamic rates.**

9 A: The current latency in energy usage data access creates a significant barrier to CCA
10 implementation of dynamic rates and meaningful participation in SDG&E’s Proposed DF
11 Rates offering. As described in Section B of this Chapter, dynamic pricing programs
12 depend on the ability of customers and LSEs to react quickly to changing system conditions
13 and price signals. When CCAs receive customer usage information several days after the
14 fact, they cannot effectively support customers participating in rates designed around
15 dynamic, real-time energy costs and dynamic consumption decisions.

16 For customers, delayed data reduces visibility into consumption patterns and limits
17 the effectiveness of tools designed to encourage load shifting. Customers cannot respond
18 efficiently to dynamic price signals if the relevant usage information is unavailable until
19 the morning after the consumption event has occurred. This prevents assessment of actual
20 real-time loads and load-shift potential. As a result, the benefits promised by dynamic rates

⁹⁴ A.26-02-001, SDG&E Response to SD CCAs DR 1.20, attached hereto as **Exhibit C**.

⁹⁵ See *supra* notes –76 - 78.

—including bill savings, emissions reductions, and grid reliability improvements — become more difficult to achieve.

Q: Are there examples of the impacts of the lack of meter data access from actual dynamic rate pilots?

A: Yes. Some of the key challenges reported in PG&E’s Hourly Flex Pilots included “limited visibility into customer status and performance information” and delays in performance reporting.⁹⁶ The mid-term evaluation of those pilots reported that many participants sought “clearer guidance on how to succeed in the pilot. Customers generally know they should shift load in response to hourly pricing signals, yet many are uncertain about what specific actions will maximize benefits.”⁹⁷ The final evaluation report for Valley Clean Energy Alliance’s (“VCE”) “AgFIT” dynamic rates pilot authorized in D.21-12-015 noted VCE’s observation that “barriers to accessing timely, accurate usage data” negatively impacted pilot results and potentially caused customers to rely on the Otherwise Applicable Tariff, rather than dynamic pricing signals.⁹⁸ Similarly, the final evaluation report for SCE’s dynamic rate pilot authorized in D.21-12-015 reported numerous issues with meter data delays and accuracy.⁹⁹ Third-party vendors that worked with customers in implementing

⁹⁶ Escalent, *PG&E Hour Flex Pricing (HFP) Pilot Process and Customer Experience: Summary* (Aug. 2, 2026) (“PG&E HFP Mid-Term Evaluation Customer Experience Attachment”) at 3, available at <https://pgera.azurewebsites.net/Regulation/search> (select “GRC 2023 Phase II” from the dropdown menu, select “PGE” from the Party dropdown menu, enter 08/03/26 on the Date(s) from menu).

⁹⁷ PG&E HFP Mid-Term Evaluation Customer Experience Attachment at 3.

⁹⁸ R.22-07-005, Christensen Associates, *Final Evaluation of Valley Clean Energy’s Agricultural Pumping Dynamic Rate Pilot* (Apr. 17, 2025) (“VCE AgFIT Pilot Final Evaluation”) at 77, available at <https://pgera.azurewebsites.net/Regulation/search> (select “Summer Reliability Proceeding (R.20-11-003)” from the Case dropdown menu; select “PGE” from the Party dropdown menu; enter 04/25/2025 in the dates “from” and “to.”).

⁹⁹ R.22-07-005, Christensen Associates, *Final Evaluation of Southern California Edison’s Dynamic Rate Pilot* (Feb. 28, 2025) (“SCE Final Pilot Evaluation Report”) at 63, 64 (“The challenge lay in the inability to transmit real-time meter data daily across SCE’s service-wide territory for daily circuit forecasts, as this capability was currently unavailable.”), 67, available at <https://www.dret-ca.com/wp-content/uploads/2025/03/PUBLIC-SCE-DRP-Final-Evaluation-Report.pdf>.

1 the pilots “suggested that customer engagement could be improved by providing closer to
2 real-time feedback.”¹⁰⁰

3 **Q: Please explain the impact of the meter data access issues you have described on the**
4 **SD CCAs’ ability to forecast load and establish accurate dynamic prices.**

5 A: In the absence of near real-time data access or even data access parity with that of SDG&E
6 day-ahead load forecasting accuracy is significantly reduced. The SD CCAs’ load
7 flexibility programs are unable to respond to acute and transient, near-term demand
8 fluctuations to reduce peak load. Without timely data, CCA day-ahead load forecasting is
9 less accurate, which results in over- and under-procurement relative to actual grid
10 conditions. The facts of the matter are such that without timely energy usage data, the SD
11 CCAs can still communicate dynamic prices, but more than likely they will end up being
12 incorrect signals to customers because CCAs are required to forecast what their marginal
13 daily costs will be based on their day-ahead load. If such forecasts are in error due to the
14 data latency issues, this would automatically reduce the accuracy of dynamic pricing. If
15 the SD CCAs were to offer dynamic rates in the absence of timely customer meter data,
16 this could result in day-ahead pricing that is far less reflective of actual load conditions.
17 The lack of timely, actionable customer energy usage data will reduce the efficacy of
18 dynamic pricing signals and opportunities to improve reliability, incentivize load shifting,
19 help customers save on energy costs and increase electricity affordability.

¹⁰⁰ SCE Final Pilot Evaluation Report at 8.

1 **Q: Please explain the impact of the meter data access issues on the SD CCAs' ability to**
2 **evaluate customer performance and communicate effectively with customers.**

3 A: Delayed meter data limits the SD CCAs' ability to evaluate customer responsiveness to
4 pricing signals, incorporate flexible resources into operational planning, and accurately
5 forecast customer load. Customized communications to customers cannot flag high-load
6 periods for customers in order to determine rapid response to pricing signals with delayed
7 meter data, and customer load data will no longer be actionable for event-based programs
8 that aim to strategically reduce or shift customer load in response to grid stress. Dynamic
9 rate events and hourly adders based on customer usage cannot be accurately applied in the
10 absence of near real-time access to meter data. As California increasingly relies on flexible
11 demand to support electric system reliability, access to stale data places CCAs at a
12 competitive and operational disadvantage and reduces the effectiveness of demand-side
13 resources.

14 **Q: Has the lack of data access parity between CCAs and IOUs been resolved in other**
15 **Commission proceedings?**

16 A: No. While meter data access barriers to dynamic rates implementation are not new and
17 have been raised at the Commission by CCAs and others for years, they have not been
18 resolved.

19 The Scoping Memo in R.22-07-005 set an intention to address data access and
20 systems to enable LSEs to participate in dynamic rates.¹⁰¹ Most of this work was taken up
21 by the Track B Working Group 2, which addressed systems and processes for responding

¹⁰¹ See R.22-07-005, *Assigned Commissioner's Scoping Memo and Ruling* (Nov. 2, 2022) at 4-5 ("What systems and processes should the Commission authorize to enable load serving entities to offer unbundled customers the option to take service on dynamic electricity prices?").

1 to price signals, including “What systems and processes should the Commission authorize
2 to enable load serving entities to offer unbundled customers the option to take service on
3 dynamic electricity prices.”¹⁰²

4 The R.22-07-005 Track B Working Group Report specifically discussed
5 insufficient meter data access for CCAs, and the role of deficient data access in hampering
6 CCA dynamic rates implementation, load tracking and load forecasting, noting that data
7 delay “[p]revents CCAs from timely tracking of load correlation from [real-time
8 pricing (“RTP”)]” and “[h]ampers load forecasting ([Estimated Settlement Quality
9 Meter Data (“ESQMD”)] and Day ahead load forecast submissions to CAISO) to
10 promote load management/grid reliability”).¹⁰³ In a section on CCA enablement, the
11 report addressed the CCAs’ parity concerns: “the CCAs should have access to sub-hourly
12 data (i.e., 15-minute or other sub-hourly intervals) if the IOUs have access to such data to
13 provide sub-hourly dynamic pricing.”¹⁰⁴

14 In D.25-08-049, the Commission noted that the Joint IOUs and other parties
15 recognized that the lack of CCA access to customer usage data served as a barrier to their
16 participation in variable pricing offerings.¹⁰⁵ Yet, the Commission never brought this issue
17 to conclusion in that decision,¹⁰⁶ despite party comments and even an Application for
18 Rehearing (“AFR”) by SDG&E addressing this barrier and the impacts to unbundled
19 customers from prematurely closing the docket without addressing this scoped issue.¹⁰⁷

¹⁰² Track B Working Group Report at 2.

¹⁰³ *Id.*, Appendix 2 Working Group Information at 630.

¹⁰⁴ *Id.* at note 325.

¹⁰⁵ D.25-08-049 at 133, 135 (citing Track B Working Group Report at 100).

¹⁰⁶ *Id.* at 13.

¹⁰⁷ CalCCA Comments on D.25-08-049 at 1-2, 6-8, 12 (“**The lack of access to real-time usage data is a barrier to CCAs being able to offer the kinds of expanded demand flexibility tools to customers contemplated by this proceeding.** Without addressing this asymmetry in data access, the Commission

1 This issue was also addressed in party comments on the Commission’s new
2 Advanced Electric Rate Design OIR, where CalCCA argued “Improvements to customer
3 data access is critical to enable CCAs to design and implement dynamic rates and related
4 programs.”¹⁰⁸

5 As the barriers to unbundled customer participation in dynamic rates have been
6 raised repeatedly but have yet to be resolved, the SD CCAs are very grateful to Assigned
7 Commissioner Reynolds for scoping CCA data access issues into this docket now¹⁰⁹ and
8 very much hope this proceeding will resolve the issue to enable dynamic rates
9 implementation to proceed in SDG&E’s distribution territory.

10 **4. The Lack of Improved Data Parity Creates an Unfair Competitive**
11 **Advantage for SDG&E**

12 **Q: What details has SDG&E provided regarding the ways in which it uses customer**
13 **meter data it receives before the SD CCAs receive such data?**

14 **A:** In discovery responses received by the SD CCAs, SDG&E admits that it uses customer
15 interval meter data for “electric reliability and grid operations” and “planning that supports
16 electric system reliability” beginning at 9:00 AM the morning after the day of power

would inadvertently prevent the majority of customers from being able to contribute to meeting statewide goals.”) (emphasis added); CalCCA Comments on Advanced Rate Design OIR at 2; SDG&E AFR of D.25-08-049 at 18 (“the Commission cannot truly assess the costs of this rate and its cost-effectiveness, without ensuring that the issues of data access, and the systems and processes to allow such access, are addressed concurrently with the rate design and that significant CCA generation providers participate.”); *see also id.* at 27.

¹⁰⁸ R.26-04-009, *California Community Choice Association’s Comments on the Order Instituting Rulemaking on California Advanced Electric Rate Design* (May 11, 2026) at 7.

¹⁰⁹ Scoping Memo at 3 (Scoping Issue 8).

1 flow.¹¹⁰ This is 39 to 63 hours prior to when the SD CCAs actually begin to receive such
2 data.

3 SDG&E further admits that once customer interval meter data are transmitted to
4 SDG&E's CIS data lake, they are available to be used by "multiple organizations," for
5 "energy efficiency and demand response, distributed energy resource integration, market
6 settlement & regulatory reporting, and grid planning and asset management."¹¹¹ Thus,
7 based on the SD CCAs' practical experience regarding when interval meter are actually
8 made available to the CCAs, SDG&E has access to customer interval data for DR, DER
9 integration, forecasting and energy market transactions and numerous other functions
10 somewhere between 22 to 46 hours prior to CCA access. SDG&E thus enjoys a significant
11 unfair competitive advantage over the other LSEs in its distribution territory in violation
12 of California law.

13 As another example, in A.25-12-012, SDG&E's Smart Meter 2.0 Application, the
14 SD CCAs asked SDG&E in discovery "how the absence of advanced metering
15 infrastructure makes dynamic rate programs less effective and, as a consequence, can lead
16 to customers becoming dissatisfied." SDG&E responded:

17 In connection with dynamic rate programs, SM 1.0 advanced metering
18 technology enabled access to the interval consumption data that is necessary
19 to support dynamic or time-of-use (TOU) rate calculations. The absence of
20 advanced metering infrastructure and a return to manual meter reads would
21 create significant delay in availability of consumption data and would
22 interfere with the availability of the granular data needed for dynamic or
23 TOU rate calculations.¹¹²

¹¹⁰ A.26-02-001, SDG&E Response to SD CCAs DRs 2.09(2)(b)(1), 3.09(2)(b)(1)(i), (ii), attached hereto as **Exhibit C**.

¹¹¹ A.26-02-001, SDG&E Response to SD CCAs DR 1.09, attached hereto as **Exhibit C**.

¹¹² A.25-12-012, SDG&E Response to SDCP/CEA DR 2.5, attached hereto as **Exhibit D** (emphasis added).

1 **Q: Please explain your concerns regarding the ways in which SDG&E uses or may use**
2 **customer meter data in a way that gives it a competitive advantage over other LSEs**
3 **in its distribution territory.**

4 A: Access to timely customer usage data is increasingly valuable in a competitive electricity
5 market. Such data can inform iterative rate design updates, customer engagement
6 strategies, customer bill savings, customer program satisfaction, program development,
7 load forecasting, and procurement decisions. When SDG&E obtains customer usage data
8 significantly earlier than the CCAs serving those same customers, SDG&E enjoys an
9 informational advantage that is unavailable to competing providers. This asymmetry is
10 particularly concerning in a proceeding where SDG&E seeks authorization to implement
11 rates that depend heavily on customer usage information and participation.

12 **Q. Has SDG&E Fully Disclosed How it Uses Customer Interval Meter Data for its**
13 **Operations, and in ways that may be anticompetitive?**

14 A: No. Discovery responses regarding SDG&E's use of customer smart meter data, together
15 with evidence developed in this and related proceedings, demonstrate the need for greater
16 transparency regarding how customer energy usage data are utilized before SDG&E makes
17 such data available to CCAs.

18 For example, when the SD CCAs asked SDG&E which departments or functions
19 within SDG&E have access to customer meter data prior to its availability to the CCAs,
20 SDG&E provided very vague and general answers, stating that its Engineering Data
21 Warehouse has such access and uses it for "electric reliability and grid operations"¹¹³ and

¹¹³ A.26-02-001, SDG&E Response to SD CCAs DR 2.09(1)(b), 2.09(2)(b), 2.09(5)(a), attached hereto as **Exhibit C**. By contrast, SDG&E explains in the same response that customer interval meter data are made available for use by CCAs in the CCA data lake at 2:00 AM the following day. *Id.* at 2.09(1)(b).

1 for “planning that supports electric system reliability.”¹¹⁴ As noted above, in other
2 responses SDG&E stated that its “energy procurement function” has access to interval data
3 after it is sent to SDG&E’s CIS,¹¹⁵ and that, once in the CIS data lake, “multiple
4 organizations can use the data for their own business purposes such as energy efficiency
5 and demand response, distributed energy resource integration, market settlement &
6 regulatory reporting, and grid planning and asset management.”¹¹⁶ These responses are
7 vague, and in some cases contradictory. SDG&E repeatedly objected to the SD CCAs’
8 discovery questions seeking a list of all departments at SDG&E, affiliates of SDG&E or
9 third parties that then have access to the customer interval meter data and the known uses
10 of such data after such data are received by SDG&E’s Smart Meter IT department.¹¹⁷ So,
11 the SD CCAs do not have transparency into the flow of such data from SDG&E’s
12 Engineering Data Warehouse and what other ways SDG&E uses such data prior to CCA
13 access.

14 As another example, when asked by the SD CCAs how SDG&E intends to utilize
15 customer meter data to conduct ME&O with respect to the Proposed DF Rates, SDG&E
16 responded: “The testimony explains that SDG&E plans to consider bill analysis, internal
17 analytics, and customer insights, which may include interval data when and where
18 applicable, to help inform ME&O activities.”¹¹⁸ This vague response does not enable the
19 SD CCAs or the Commission to evaluate whether SDG&E’s data access asymmetry
20 provides it with a competitive advantage with respect to Proposed DF Rate

¹¹⁴ A.26-02-001, SDG&E Response to SD CCAs DR 3.09(2)(b)(1)(ii), attached hereto as **Exhibit C**.

¹¹⁵ A.25-12-012, SDG&E Response to SD CP/CEA DR 1.25(b), attached hereto as **Exhibit D**.

¹¹⁶ A.26-02-001, SDG&E Response to SD CCAs DR 1.09, attached hereto as **Exhibit C**.

¹¹⁷ A.26-02-001, SDG&E Response to SD CCAs DRs 1.13, 2.09(4)(b), 2.11(c), attached hereto as **Exhibit**

C.

¹¹⁸ A.26-02-001, SDG&E Response to SD CCAs DR 1.22, attached hereto as **Exhibit C** (emphasis added).

1 implementation, or whether SDG&E will make the best use of these data to advance its
2 Proposed DF Rates. It is vital that the Commission and all stakeholders understand what
3 is meant by this response, *how* such granular data are used by SDG&E for Proposed DF
4 Rate calculations, and whether such data are being accessed and utilized by SDG&E prior
5 to their availability to the SD CCAs, resulting in an unfair competitive advantage to
6 SDG&E.

7 As quoted above, in discovery in other dockets, SDG&E has stated that AMI data:
8 ...is necessary to support dynamic or time-of-use (TOU) rate calculations.
9 The absence of advanced metering infrastructure and a return to manual
10 meter reads would create significant delay in availability of consumption
11 data and would interfere with the availability of the granular data needed
12 for dynamic or TOU rate calculations.¹¹⁹

13 But SDG&E has not explained how it is using or plans to use customer energy usage data
14 to make dynamic rate calculations in a manner that would allow the SD CCAs or the
15 Commission to evaluate whether SDG&E has an unfair competitive advantage.

16 The Commission, other LSEs in SDG&E's service territory, customers, and other
17 stakeholders have a right to know whether SDG&E may be using these customer data to
18 forecast load, make procurement decisions, set Proposed DF Rates, implement Proposed
19 DF Rates and take any other actions that provide it with a competitive advantage over other
20 LSEs in its service area.

21 **Q: Please summarize the reasons why data access parity between SDG&E and the SD**
22 **CCAs is important.**

23 A: In a service territory where CCAs serve approximately 80 percent of customer load,
24 successful implementation of DF Rates requires that all LSEs have access to the same

¹¹⁹ A.25-12-012, SDG&E Response to SDCP/CEA DR 2.5, attached hereto as **Exhibit D** (emphasis added).

1 fundamental customer usage and operational information. Data access parity is therefore
2 not only a matter of fairness, but also a prerequisite for competition, innovation, customer
3 choice, and successful achievement of the Commission’s demand flexibility objectives.
4 Without timely and equivalent access to customer energy usage data, the SD CCAs cannot
5 effectively offer dynamic rate products, customers cannot realize the full benefits of
6 dynamic rates, and SDG&E’s Application cannot be expected to achieve its intended goals.

7 **D. Recommended Conditions for Application Approval: Energy Usage Data**
8 **Access Parity and Near Real-Time Data Access**

9 **Q: What will you address in this section of this section of your testimony?**

10 A: This Section directly responds to the questions posed in Scoping Issue 8 (“When, and how
11 frequently, should SDG&E share data with Load Serving Entities such as Direct Access
12 providers and Community Choice Aggregators, to broaden the knowledge of how all
13 customers could participate in, and / or benefit from, SDG&E’s proposed Demand
14 Flexibility rates?”¹²⁰) and provides the Commission with specific conditions that should
15 be imposed for approval of the Application so that it is consistent with Demand Flexibility
16 Design Principle 4 adopted in D.23-04-040: “The systems and processes for calculating
17 dynamic price signals should be able to include bundled and unbundled rate components
18 so that any load serving entity can elect to participate.”¹²¹ To address the defects in
19 SDG&E’s Application outlined in Chapter III Section C above and advance California’s
20 objectives in requiring dynamic rates, the SD CCAs recommend that the Commission
21 establish a clear, enforceable meter data access parity standard and require SDG&E to

¹²⁰ Scoping Memo at 3.

¹²¹ D.23-04-040 at 31.

1 provide customers and CCAs with access to customer energy data at a latency available
2 within SDG&E's existing fleet of meters and operational systems.

3 **1. Interval Meter Data Access Parity as Between SDG&E and SD CCAs**

4 **Q: Should the Commission adopt a definition of “data parity” in this proceeding? If so,**
5 **how should this term be defined?**

6 **A:** Yes, the Commission should adopt a clear and comprehensive definition of data parity to
7 avoid ambiguity in implementation and compliance. Data parity should mean that CCAs
8 and other LSEs receive the same customer energy usage data that SDG&E receives at as
9 close to equivalent timing, frequency, latency, granularity, completeness as is technically
10 feasible. Information should be delivered through documented, standards-based interfaces
11 that allow the applicable LSE and authorized third parties to integrate data into customer
12 service platforms, forecasting tools, dynamic pricing operations and demand response and
13 DERMS systems. Anything less than functional equivalence would perpetuate an uneven
14 playing field between bundled and unbundled service providers and undermine
15 California's objectives and requirements for dynamic rates participation by all LSEs.

1 **a. SDG&E Head End System Direct to SD CCAs**

2 **Q: What is the first interval meter data transmission pathway the Commission could**
3 **require SDG&E to take to provide full data parity between SDG&E and the SD**
4 **CCAs?**

5 A: A significant improvement in providing data parity would be for SDG&E to provide
6 interval meter data directly to CCAs as soon as it is first received by SDG&E at SDG&E's
7 HES.

8 **Q: Has SDG&E analyzed its ability to provide customer interval meter data access to**
9 **CCAs at the same time it initially receives such data at its HES?**

10 A: No. SDG&E has *acknowledged* this potential CCA data access pathway in data responses
11 provided to the SD CCAs in the Smart Meter 2.0 Application (A.25-12-012):

12 A different approach would be to receive all meter data through the SDG&E
13 headend, which is the current configuration, and make it directly available
14 to CCAs by bypassing the existing SDG&E back-office systems...for
15 billing purposes.¹²²

16 But, in response to the SD CCAs' discovery, SDG&E stated that it has not analyzed
17 the feasibility of providing customer interval meter data directly to other LSEs in its
18 territory, including the SD CCAs, when it transmits such data to its Meter Data
19 Management System ("MDMS"),¹²³ its CIS or prior to SDG&E's transfer to its CIS.¹²⁴

¹²² A.25-12-012, SDG&E Response to SDCP/CEA DR 2.7, attached hereto as **Exhibit D**.

¹²³ A.26-02-001, SDG&E Response to SD CCAs DR 2.09(1)(d), attached hereto as **Exhibit C**. In response to the SD CCAs' subsequent data request asking whether SDG&E is "willing to perform such an analysis and provide the results to the SD CCAs in discovery" SDG&E objected on various grounds, including that "it is not required to generate analyses that do not already exist and that the request to do so would impose an undue burden on SDG&E." SDG&E also offered to meet and confer regarding such an analysis "and the potential burden, including time, resources, and/or costs associated with the analyses." A.26-02-001, SDG&E Response to SD CCAs DR 3.09(1)(d)(i), attached hereto as **Exhibit C**.

¹²⁴ A.26-02-001, SDG&E Response to SD CCAs DR 2.09(2)(d), attached hereto as **Exhibit C**.

1 **Q: Has SDG&E attempted to explain why it does not provide customer usage data to the**
2 **SD CCAs with a shorter latency?**

3 A: In response to the SD CCAs' discovery questions regarding why customer usage data
4 cannot be provided to the SD CCAs with a shorter latency, SDG&E explained that in order
5 for customer meter data to be provided to the CCAs, it must perform VEE and "additional
6 processing, including associating the meter data to both a customer and the CCA,
7 reformatting the data into the CCA data schema, and performing additional estimations for
8 complex metering scenarios."¹²⁵ SDG&E further provided that "The process of formatting
9 customer interval meter data into the CCA data schema includes appending key field
10 information, such as contract account, energy service provider, contract, rate, and other
11 relevant customer and billing attributes."¹²⁶

12 **Q: Please explain whether it is necessary for SDG&E to perform VEE prior to making**
13 **customer usage data available to the SD CCAs.**

14 A: There is an important distinction between near real-time data access and timely next-day
15 data access for purposes of utilizing very recent usage data to influence customer load
16 shifting, day-ahead load forecasting and potentially dynamic rate pricing, and fully
17 processed, validated and estimated data needed for customer billing and settlement. The
18 SD CCAs need all three sets of data in a timely manner, for three distinct dynamic rates
19 implementation purposes.

20 According to SDG&E, "VEE is designed to ensure that *billed quantities* are
21 accurate, complete, and suitable for *financial settlement*, including detection and correction

¹²⁵ A.26-02-001, SDG&E Response to SD CCAs DR 1.14b attached hereto as **Exhibit C**.

¹²⁶ A.26-02-001, SDG&E Response to SD CCAs DRs 2.09(1)(b), 2.14(b)(a), attached hereto as **Exhibit C**.

1 of missing, anomalous, or erroneous interval data.”¹²⁷ Yet, while billing-quality data are
2 needed for actual month-end customer billing, this process is not necessary for such data
3 to be useful to the SD CCAs for dynamic rates implementation purposes. In response to
4 the SD CCAs’ data request in the A.25-12-012 (SDG&E’s Smart Meter 2.0 Application),
5 SDG&E provided pre-processed billing-quality data which contained relevant information
6 to identify the customer or premise and hourly or fifteen-minute interval data.¹²⁸ SD CCAs
7 could still use pre-processed billing-quality data that is at near real-time or at parity-level
8 with SDG&E access to conduct customized customer outreach in response to grid events
9 and customer usage, improve day-ahead load forecasting and make procurement and
10 dynamic pricing better aligned with grid realities with unvalidated data. Then, VEE and
11 further data processing should be leveraged to produce billing/revenue quality interval data
12 accordingly, as SDG&E acknowledges. The SD CCAs disagree that it is not reasonable or
13 possible for SDG&E to provide the SD CCAs with customer meter data access before such
14 data have been processed.

15 **b. SDG&E MDMS Direct to SD CCAs**

16 **Q: Short of providing interval meter data directly to CCAs as soon as it is first received**
17 **by SDG&E at SDG&E’s HES, is there another option for improving data parity**
18 **between SDG&E and the SD CCAs?**

19 **A:** Yes. At a bare minimum, it is certainly already possible for customer interval data to be
20 provided to CCAs at the same time such data are provided to SDG&E’s Engineering Data
21 Warehouse or to SDG&E’s CIS at 9:00 AM on the morning after power flow. If such data

¹²⁷ A.25-12-012, SDG&E Response to SDCP/CEA DR 3.5(b), attached hereto as **Exhibit D**.

¹²⁸ A.25-12-012, SDG&E Response to SDCP/CEA DR 3.9(c), attached hereto as **Exhibit D**.

1 can be used by SDG&E for “electric reliability and grid operations,”¹²⁹ and can be made
2 available to SDG&E’s customers, they should also be made available to SDG&E’s LSE
3 competitors so that such LSEs can more accurately implement dynamic rates, forecast load
4 and improve upon procurement and, ultimately, dynamic pricing. This would result in
5 greater reliability benefits more generally. The SD CCAs view such access as the bare
6 minimum for parity as between the CCAs and the incumbent utility.

7 While customer interval meter data access with a latency of 9 to 33 hours does not
8 constitute “near real-time data access” (which would be a latency of a few seconds), a
9 reduction in the data delivery timeline to LSEs in the range of 39 to 63 hours would
10 certainly be an improvement, provide parity with respect to the time when SDG&E states
11 that it first begins to make use of such data, and enable CCAs to provide a higher level of
12 customer engagement with enrolled participants, improved load forecasting and
13 procurement and dynamic rate pricing crucial to the success of such a rate.

14 **Q: Has SDG&E analyzed its technical ability to provide customer meter data to the SD**
15 **CCAs at the same time it is provided to MDMS, CIS or the Engineering Data**
16 **Warehouse?**

17 **A:** No. In response to the SD CCAs’ discovery, SDG&E stated that it has not conducted such
18 analysis,¹³⁰ despite years of requests by the CCAs to provide these data in a more timely
19 fashion and despite even a Commission decision finding that without customer usage data

¹²⁹ A.26-02-001, SDG&E Response to SD CCAs DR 2.09(1)(b), attached hereto as **Exhibit C**.

¹³⁰ A.26-02-001, SDG&E Response to SD CCAs DRs 2.09(1)(d), 2.09(2)(d), attached hereto as **Exhibit C**; *see also* A.26-02-001, SDG&E Response to SD CCAs DR 3.09(1)(d)(i), attached hereto as **Exhibit C** (objecting to the SD CCAs’ questions as to whether SDG&E is willing to perform such an analysis and how long SDG&E’s analysis would take, but offering to meet and confer to discuss the analysis and its expense and burden to SDG&E).

1 access, CCAs will not offer dynamic rates.¹³¹ If SDG&E has still failed to analyze options
2 to provide other LSEs with data access parity at the time of a Commission decision or
3 ruling in this case, the Commission should order SDG&E to do so as soon as possible.

4 **Q: But what about SDG&E’s improvements to CCA data access a few years ago?**
5 **Weren’t they sufficient?**

6 A: SDG&E has argued to the Commission that its prior efforts to reduce customer interval
7 meter data latency from historical delivery timelines (up to a month after power flow) to
8 the current latency (approximately 48 to 72 hours from power flow) represents meaningful
9 progress.¹³² SDG&E even argued that data provided at a 2-3 day lag is “near real time.”¹³³
10 While the SD CCAs do appreciate any improvement in meter data accessibility and
11 welcomed such changes, incremental improvement does not equate to parity. The
12 difference in receiving data at 9:00 AM the morning after power flow as compared with
13 two to three days after power flow is significant, as demonstrated in Chapter III(C)(1), and
14 impacts the SD CCAs’ ability to conduct effective customer outreach, load forecasting and,
15 ultimately, this flows to dynamic price setting, with consequences for carrying out dynamic
16 rate policy goals, as discussed in Chapter III(B) and III(C)(3). The relevant comparison is
17 not whether current data delivery is better than it was previously; the relevant comparison
18 is whether the SD CCAs receive the same information on substantially the same timeline
19 as SDG&E. As long as SDG&E retains significantly earlier access to customer meter data
20 than the entities serving most customers in the territory, data access barriers and unjust
21 inequities for SD CCAs and their customers remain.

¹³¹ See D.23-11-006 at 9-10, FOF 4.

¹³² See Track B Working Group Report at 243.

¹³³ SDG&E PFM Response at 6; SDG&E D.25-10-004 Reply Comments at 4-5.

1 **2. Near Real-Time Interval Meter Data Access for Customers and Third**
2 **Parties, Including LSEs**

3 **Q: In addition to establishing data parity between SDG&E and the SD CCAs as you have**
4 **described above, should the Commission also require real-time data access for**
5 **customers, authorized third parties, and LSEs?**

6 A: Yes, the Commission should restore SDG&E customer access to view their energy
7 consumption in near real-time, while those conditions are occurring (i.e., within a few
8 seconds from power flow), not 9-33 hours after the fact, as is currently the latency of
9 SDG&E's My Energy Center (or up to 50 hours after the fact, per some of SDG&E's
10 discovery responses).¹³⁴ Existing Smart Meter 1.0 functionality for third party access to
11 such near real-time data should also be restored, including for LSEs. Finally, the
12 Commission should require ongoing near real-time energy usage data access in SDG&E's
13 Smart Meter 2.0 technology.

14 Specifically, on this record, the Commission should restore near real-time customer
15 data from the meter to both the customer at their premises and to a third party (including
16 the customer's LSE) within just a few seconds, bypassing the utility's head end system.
17 This is currently and easily achievable via SDG&E's Smart Meter 1.0 ZigBee radio
18 transmission to a HAN device at the customer premises.¹³⁵

¹³⁴ See *supra* notes 77, 78.

¹³⁵ A.26-02-001 Murray Declaration at ¶¶ 8, 9, 10, 12, attached hereto as **Exhibit B**.

1 **Q: Will the next generation of SDG&E’s smart meters, “AMI 2.0,” be capable of**
2 **providing real-time data access?**

3 A: Yes, WiFi-based AMI 2.0 technology can also transmit customer meter data from the meter
4 to a third party, bypassing the distribution utility’s head end system.¹³⁶ Xcel is providing
5 real-time meter data via this transmission pathway in Minnesota and Colorado utilizing
6 Itron AMI 2.0 meter technology.¹³⁷ In addition, it may be possible for Smart Meters to
7 provide interval data direct from the meter to more than one head end system (i.e., the
8 distribution provider and the non-utility LSE).¹³⁸

9 All SDG&E customers, both bundled and unbundled, and especially those
10 participating in dynamic rates, should have continuous access to current and historical
11 energy usage information through either SDG&E-provided platforms, pending the cost
12 recovery framework, and/or interoperable third-party solutions. Access should include
13 interval usage information and any relevant pricing information necessary to understand
14 the financial consequences of consumption decisions during dynamic pricing events. Only
15 with prompt feedback on their load shifting strategies can customers, with support from
16 their LSEs, learn to manage dynamic rates effectively.

¹³⁶ *Id.* at ¶ 14, 15.

¹³⁷ A.26-02-001 Murray Declaration at ¶ 14, attached hereto as **Exhibit B**.

¹³⁸ A.25-12-012, SDG&E Response to SDCP/CEA DR 2.7, attached hereto as **Exhibit D**. (“One theoretical method of sending interval data directly from meters to CCAs would be to have the meter or AMI system designed to transmit data from a single electric meter back to two separate headends/networks (*i.e.*, the IOU network and a separate CCA network). This approach is considered at Row 222 by the IT & Analytics function and is classified as a “Net New Capability” since, at this time, SDG&E is not aware of any commercially deployed meter or AMI system designed to transmit data from a single electric meter back through two separate communication networks/headends in parallel (*i.e.*, the IOU network and a separate CCA network).”).

1 **Q: Are there other examples of utilities that provide more timely customer meter data**
2 **access than does SDG&E?**

3 A: Yes. As noted above, it is the SD CCAs' understanding that both PG&E and SCE continue
4 to enable near real-time (within a few seconds) ZigBee-based data access via their existing
5 Smart Meters 1.0. Xcel is providing real-time meter data via this transmission pathway in
6 Minnesota and Colorado utilizing Itron AMI 2.0 meter technology.¹³⁹ The map attached as
7 **Exhibit F** shows service areas around the country that provide near real-time data access
8 via ZigBee or via WiFi. Hydro-Québec is running a pilot project that provides an in-home
9 display to customers on a rate with incentives to participate in load-shifting events during
10 the winter, enabling customers to track their energy usage in real-time, identifying the most
11 energy-intensive appliances and finding information on peak demand events.¹⁴⁰

12 And, at longer latency, but still far shorter than what SDG&E provides its
13 customers currently, National Grid rolled out smart meters that allow customers to access
14 real-time electricity usage data, updated every 15 minutes, through an online portal and
15 app, identifying usage from specific appliances and providing additional automated
16 support such as high-usage email alerts and monthly usage and billing trends.¹⁴¹ Xcel
17 Energy rolled out smart meters that provide a live look at energy usage, updated every 15
18 minutes, and customized cost and savings insights through their app, My Energy
19 Connection.¹⁴²

¹³⁹ A.26-02-001 Murray Declaration at ¶ 14, attached hereto as **Exhibit B**.

¹⁴⁰ See <https://www.hydroquebec.com/collab-space/hydro-lab/projects/in-home-display.html>.

¹⁴¹ See <https://www.nationalgridus.com/MA-Home/Smart-Meters/>.

¹⁴² See <https://co.my.xcelenergy.com/s/billing-payment/energy-insights>.

IV. Chapter 4: The Application’s Proposed Cost Recovery Mechanisms Unjustly Shift Costs to Nonparticipating Ratepayers

A. Introduction	77
B. Risks of Cost-Shifting to Unbundled Customers and Nonparticipating Ratepayers in SDG&E’s Application	79
1. Illegal and Unjust Shifting of Proposed DF Rate Implementation Costs.....	79
2. Risks of Cost-Shifting in SDG&E’s Proposed DF Rate Design	82
a. Potential for Revenue Undercollection	83
b. Potential for Revenue Over-collection	85
c. SDG&E’s Price Floor/Ceiling Has Not Been Adequately Considered	86
d. SDG&E’s Proposed DF Rates are Inconsistent Across Customer Classes.	87
e. Impacts of the Effective Exclusion of CCA Customers from SDG&E’s Proposed DF Rates	89
C. Principles for Adequate Cost Recovery	90
1. SDG&E’s DF Rate Design Must Avoid Cost Shifts to Unbundled and Nonparticipating Customers.....	90
2. Cost Recovery Should Be Tied to the Customers Receiving the Benefit	91
3. Ratepayer Indifference Requires Comparable Cost-Recovery Opportunities for CCAs	93

A. Introduction

Q: Which Scoping Issues will you address in this chapter of your testimony?

A: Several of the issues identified in the Assigned Commissioner’s Scoping Memo relate directly the allocation of costs and benefits associated with SDG&E’s Proposed DF Rates. Scoping Issue 1 asks whether SDG&E’s request to implement its Proposed DF Rates is just and reasonable. Scoping Issues 4 and 5 address whether and how the Commission should authorize SDG&E to recover approximately \$11.3 million in cost to implement the Proposed DF Rates. Scoping Issue 9 specifically asks whether the Proposed DF Rates could cause cost shifts to customers that do not enroll and, if so, how the Commission

1 should mitigate those potential impacts.¹⁴³ These questions are closely interconnected
2 because the reasonableness of SDG&E's proposal depends not only on the anticipated
3 benefits of the Proposed DF Rates, but also on whether the costs of implementing and
4 operating the program are allocated fairly among ratepayers.

5 **Q: Which ratemaking principles should the Commission bear in mind when addressing**
6 **these Scoping Issues?**

7 A: The Commission has long recognized that utility rates and cost recovery mechanisms
8 should be guided by the principles of cost causation and nonparticipating ratepayer
9 indifference.¹⁴⁴ Customers that cause costs or receive benefits from utility programs should
10 bear an appropriate share of those costs, while customers that do not participate in or
11 benefit from a program should be protected from subsidizing others.¹⁴⁵

12 **Q: Please summarize your concerns with SDG&E's proposal with respect to these**
13 **principles.**

14 A: SDG&E's Application would violate the Commission's adopted principles for DF Rate
15 design. First, the proposal effectively excludes many CCA customers from meaningful
16 participation in the Proposed DF Rates because it fails to address the lack of timely meter
17 data access and the resulting absence of critical operational tools necessary for SD CCAs
18 to participate and offer their own dynamic rate options. Second, SDG&E's proposed cost
19 recovery mechanism risks imposing Proposed DF Rate implementation costs on
20 nonparticipating customers without demonstrating a commensurate benefit. Third, the

¹⁴³ Scoping Memo at 3.

¹⁴⁴ See D.23-04-040 at OP 1(c) ("Rates should be based on cost causation") and OP 1(i) ("Rate design ... should avoid creating unintended cost shifts.").

¹⁴⁵ See *id.* at OP 1(h) ("Rates should avoid cross-subsidies that do not transparently and appropriately support explicit state policy goals.")

Proposed DF Rate design itself may result in cost shifts between participating and non-participating customers. Accordingly, this chapter evaluates the risks of unjust cost-shifting posed by the Application and recommends principles that should condition approval of Proposed DF Rate implementation cost recovery and rate design.

B. Risks of Cost-Shifting to Unbundled Customers and Nonparticipating Ratepayers in SDG&E's Application

1. Illegal and Unjust Shifting of Proposed DF Rate Implementation Costs

Q: Please explain your concerns regarding SDG&E's proposal to recover its costs of implementing its Proposed DF Rates.

A: SDG&E proposes to recover approximately \$11.3 million in Proposed DF Rates implementation costs through the PPP charge applicable to all SDG&E distribution customers. Yet, as discussed above, approximately 80 percent of SDG&E's distribution customers that receive generation service from CCAs currently lack meaningful access to the Proposed DF Rates.

This proposal is inequitable, unjust, and unreasonable. Customers that lack the practical ability to access or benefit from the proposed rates should not be required to fund the systems necessary to implement those rates. Requiring all distribution customers to bear implementation costs while only bundled SDG&E customers are positioned to realize meaningful benefits creates a direct cost shift from participating customers to unbundled customers.

1 **Q: Does SDG&E share the SD CCAs' concern regarding cost recovery for its**
2 **Application?**

3 A: Yes. SDG&E itself expressly agreed with the SD CCAs' position in its Application for
4 Rehearing of D.25-08-049:

5 The systems and processes for data sharing and transmission are essential
6 to the Commission's consideration of the costs and efficacy of the proposed
7 DF rates and should be considered as part of all parties' DF rate proposal
8 applications. This approach will allow all parties equal opportunity to
9 analyze and assess, via sworn testimony, the proposed rate design—
10 including, importantly, the full costs associated with that rate design and its
11 successful implementation. **Anything less will lead to a half-baked rate**
12 **with half-baked costs that will result in the potential for either a very**
13 **expensive rate with low customer adoption, or a rate that is**
14 **implemented without approval of costs necessary to make it successful.**
15 **Both of those outcomes are unacceptable and neither can be found to**
16 **be “just and reasonable” as required by statute.**¹⁴⁶

17 Despite SDG&E's recent perspective on the importance of data access for including
18 its unbundled customers in its Proposed DF Rates, its Application does *not* address systems
19 and processes for data sharing with the other LSEs in its territory to improvements to
20 customer data access. Thus, as SDG&E predicted just one year ago, the Application is a
21 “half-baked rate with half-baked costs” that is expensive, unlikely to be effective, and is
22 neither just nor reasonable.

23 **Q: Why do unbundled customers that receive service from the SD CCAs or DA providers**
24 **lack meaningful access to the Proposed DF Rates?**

25 A: As explained in Chapter III, a prerequisite for CCA participation in dynamic retail pricing
26 programs is timely access to customer energy usage data. SDG&E has discontinued
27 providing near real-time energy usage data access to its customers directly from their
28 existing Smart Meters via ZigBee technology. SDG&E currently possesses access to timely

¹⁴⁶ SDG&E AFR of D.25-08-049 at 27 (emphasis added).

1 customer usage information, while non-utility LSEs do not receive equivalent data access.
2 Because SDG&E has failed to rectify this issue elsewhere or in this Application, SD CCA
3 customers are disadvantaged from effectively participating and yielding the intended
4 benefits of the Proposed DF Rates. Importantly, the projected primary customer energy
5 savings from the Proposed DF Rates will be achieved on the commodity portion of the
6 customer's bill.¹⁴⁷ SDG&E's failure to provide the required data access and failure to
7 address this issue in its Application means that the SD CCAs cannot offer their own
8 dynamic commodity rates and unbundled customers will be deprived of most benefits of
9 the Proposed DF Rates, despite being required to contribute to implementation costs
10 through the PPP charge.

11 **Q: Is SDG&E's proposal to recover its implementation costs through the PPP charge**
12 **consistent with other uses of the PPP?**

13 A: No. The proposed funding mechanism is inconsistent with the purpose of PPP cost
14 recovery. The PPP rate component applies to all California large IOU distribution
15 customers, and funds several categories of ratepayer-supported programs, including energy
16 efficiency and conservation programs, public interest research and development, in-state
17 renewable energy, and low-income discounts and weatherization programs (California
18 Alternate Rates for Energy ("CARE"), Family Electric Rate Assistance ("FERA") and
19 Energy Savings Assistance ("ESA")).¹⁴⁸ Recovering the costs of these types of programs
20 through the PPP is justified because they provide broad public benefits or are available to
21 all customers on a reasonably comparable basis.

¹⁴⁷ Application at 2 ("regardless of SDG&E's rate design, the most significant price signal (and resulting rate benefits to the grid and customers) comes from the commodity component of the rate.").

¹⁴⁸ See Cal. Pub. Util. Code §§ 381(a)-(c), 399.8(a), (c)(1), 739.1(a), 739.12, § 2790.

1 Here, SDG&E proposes to socialize implementation costs across all customers via
2 the PPP despite the fact that most customers are effectively excluded from participation
3 due to SDG&E data-access limitations beyond their control. Any CCA customer that does
4 sign up for the Proposed DF Rates would only experience dynamic transmission and
5 distribution charges, significantly limiting their energy savings opportunity. Because the
6 primary energy cost savings opportunity of the Proposed DF Rates lies in the variable
7 commodity charge and the ability to shift load rapidly in response to pricing signals,
8 recovery through the PPP asks unbundled customers to subsidize a savings opportunity
9 that is only available to a subset of bundled customers. Not only would PPP cost recovery
10 be unjust, but it would also mislead SDG&E customers into viewing Proposed DF Rates
11 as accruing to their benefit, when the vast majority of such customers, especially those
12 served by the SD CCAs, are excluded therefrom.

13 Accordingly, SDG&E has not demonstrated that recovery of Proposed DF Rate
14 implementation costs through the PPP mechanism is just, reasonable, or free from undue
15 cost shifting.

16 2. Risks of Cost-Shifting in SDG&E's Proposed DF Rate Design

17 **Q: Does the analysis that SDG&E has presented in the Application demonstrate that the**
18 **potential for cost shifts has been mitigated?**

19 **A:** No. SDG&E's rate design analysis fails to adequately examine whether the Proposed DF
20 Rates could create structural cost shifts among customers and customer classes.

1 **a. Potential for Revenue Under-collection**

2 **Q: Please explain why SDG&E’s Application creates a risk of potential revenue under-**
3 **collection.**

4 A: SDG&E’s price floor and price ceiling analysis does not adequately evaluate the revenue
5 requirement implications associated with customer participation during periods of extreme
6 market prices. Specifically, the analysis does not meaningfully assess the effects of
7 significantly different customer load profiles during negative pricing periods and high-
8 price intervals exceeding \$750 per megawatt-hour (“MWh”). SDG&E’s analysis evaluates
9 the number of hours over the four-year period of 2022 through 2025 in which CAISO day-
10 ahead prices fall below \$0/MWh or exceed one of eight thresholds (including \$100/MWh,
11 \$200/MWh, \$300/MWh, \$500/MWh, \$750/MWh, \$1,000/MWh, \$1,200/MWh, and
12 \$1,300/MWh), paired with the sum of those prices.¹⁴⁹ The analysis determines that the
13 \$750/MWh cap is appropriate because it represents the closest corresponding price cap to
14 offset negative prices. However, the analysis considers only the sum of prices above
15 \$750/MWh to compare to the sum of prices below \$0/MWh, rather than comparing the
16 sum of prices multiplied by hourly load and subtracting out price below the cap of
17 \$750/MWh to analyze revenue “lost” (i.e., above the cap) or revenue “gained” (i.e., below
18 the floor). Instead, SDG&E’s analysis compares the sum of 19 hours of prices above the
19 cap to the sum of 2,043 hours of prices below the cap, determining that these sums
20 approximately offset each other.¹⁵⁰ The actual customer load is not factored into this

¹⁴⁹ See SDG&E “Revised Ch4 Price Cap and Floor” Excel workpaper, A.26-02-001, SDG&E Response to SD CCAs DR 2.18(a), response attached hereto as **Exhibit C** and workpaper is available at <https://eq-research.sharefile.com/public/share/web-s2fe7a3ceacaa447aa823115334239a52>, in tab “Summary” at cells A35073 through C35082.

¹⁵⁰ See *id.*

1 analysis, nor are other thresholds between \$500/MWh and \$750/MWh, which might lead
2 to a closer price offset in SDG&E's own analysis.

3 **Q: Why are these omissions in the analysis concerning?**

4 A: These omissions are particularly concerning because customer bill impacts and utility
5 revenue collection may vary substantially depending on which customers sign up for the
6 Proposed DF Rates are able and willing to shift load during these events. As reflected in
7 the workbook "Revised Ch4_Price Cap and Floor" provided in response to SD CCA Data
8 Request 2.18a, SDG&E has not demonstrated that the proposed price bounds appropriately
9 mitigate these risks. SDG&E's current justification for the price cap and floor is that "the
10 sum of all negative prices almost perfectly offsets (zeroes out) the sum of all prices above
11 \$750/MWh" (i.e., the price cap) for 2022-2025.¹⁵¹ However, revenue from customers is
12 determined by multiplying the hourly price by the hourly load, then summing that amount
13 for each hour, not by simply summing all prices over a period of time. Attaching hourly
14 load into the calculation to determine the appropriate price cap and floor would decrease
15 the chance of revenue over- or under-collection by SDG&E, should there be high
16 enrollment in the Proposed DF Rates and a trend of either more negative prices or more
17 prices higher than the proposed price cap. Revenue under-collection could result in cost
18 shifts among bundled customers that participate in the Proposed DF Rates and potentially
19 impact non-participants as well, depending on how cost recovery is determined.

¹⁵¹ SDGE-04-2R, *Second Revised Prepared Testimony of Jeff DeTuri on behalf of San Diego Gas & Electric Company Chapter 4 – Customer Protection* (June 17, 2026) at 4.

1 **b. Potential for Revenue Over-collection**

2 **Q: Please explain why SDG&E’s Application creates a risk of potential revenue over-**
3 **collection.**

4 A: SDG&E’s Proposed Rate design analysis fails to examine the changing frequency and
5 seasonal distribution of extreme market-price events over the study period. Over time,
6 there has been a trend toward increasing numbers of negative-price hours and decreasing
7 numbers of extremely high-price hours. The CAISO day-ahead prices for SDG&E’S
8 Default Load Aggregation Point (“DLAP”) by threshold for each year from 2022 to 2025
9 are provided below in **Table 2**. There is a clear trend of more frequent negative prices
10 between 2022 and 2023 and 2024 and 2025, with nearly 10% of hours having negative
11 pricing in 2024 and 2025, and less frequent high prices, with only 13 hours exceeding
12 \$100/MWh in 2025, compared to over 3,000 hours exceeding \$100/MWh in 2022.

13 **Table 2 CAISO Day-Ahead Price Count, SDG&E DLAP¹⁵²**

Range (\$/MWh)	Price Count Within Range			
	2022	2023	2024	2025
<0	43	263	989	748
0-100	6,724	7,159	7,619	7,999
100-200	1,394	1,199	120	13
200-300	271	106	43	0
300-500	277	21	5	0
500-750	29	4	3	0
>750	16	3	0	0

¹⁵² See SDG&E “Revised Ch4 Price Cap and Floor” workpaper referenced in A.26-02-001, SDG&E Response to SD CCAs DR 2.18(a), response attached hereto as **Exhibit C** and workpaper is available at <https://eq-research.sharefile.com/public/share/web-s2fe7a3ceaeaa447aa823115334239a52>, in tab “Summary” for the underlying data and in tab “Proposed Cust Prot” for a similar analysis done by SDG&E that identifies the number of hours lower than the price floor (i.e., <\$0/MWh) or higher than the price cap (i.e., >\$750/MWh). This table expands that analysis using the underlying data to look at the number of hours within certain ranges between the price cap and price floor, using Excel functions.

1 These trends could materially affect the revenue neutrality assumptions underlying
2 SDG&E's Proposed DF Rates. Increased prevalence of negative-price periods may
3 increase opportunities for participating customers to receive bill credits while reducing
4 offsetting revenue recovery during high-price periods. Without a rigorous assessment of
5 these dynamics, SDG&E cannot demonstrate that the proposed rate structure avoids over-
6 or under-collection risks that may ultimately be borne by nonparticipating customers.
7 SDG&E evaluates how the thresholds for price cap and floor compare over a four-year
8 period,¹⁵³ rather than evaluating the potential to under- or over-collect within each year
9 during that four-year period and evaluating the need to adjust the price cap given trends in
10 the data from 2022 and 2023 to 2024 and 2025. Regardless of whether this trend may
11 continue or not in future years, SDG&E does not factor the trend into its analysis or discuss
12 the implications of having a higher-than-necessary price cap.

13 **c. SDG&E's Price Floor/Ceiling Has Not Been Adequately**
14 **Considered**

15 **Q: Please explain your concerns regarding the price floor and price ceiling that SDG&E**
16 **used to develop its Proposed DF Rates.**

17 **A:** SDG&E's responses to discovery conducted by the SD CCAs raise questions regarding the
18 robustness of its proposed price floor and ceiling constructs. In response to SD CCAs Data
19 Request 1.01b, SDG&E acknowledged that it did not investigate the price floor and ceiling

¹⁵³ See SDG&E "Revised Ch4 Price Cap and Floor" workpaper referenced in A.26-02-001, SDG&E Response to SD CCAs DR 2.18(a), response attached hereto as **Exhibit C** and workpaper is available at <https://eq-research.sharefile.com/public/share/web-s2fe7a3ceaeaa447aa823115334239a52>, in tab "Summary" at Cells A35073 through C35082.

1 structures adopted in other dynamic pricing pilots.¹⁵⁴ Similarly, in response to Data
2 Request 1.05b, SDG&E stated that it “does not know” why the number of negative-price
3 hours observed in 2024 exceeded those observed in 2022 or 2023.¹⁵⁵ These responses
4 suggest that key elements of the proposed rate design have not been sufficiently studied,
5 and SDG&E may not fully understand the market conditions that drive customer outcomes
6 under the proposed tariff. For example, if negative prices are largely the result of having
7 more daytime-generating resources and/or customer-sited resources exporting to the grid,
8 then it may be reasonable to expect this trend of more negative prices to continue in the
9 future; if extremely high prices are largely the result of weather conditions and available
10 resources on the grid, then the likelihood of high prices in future years is dependent on
11 climate patterns, load growth, and resource adequacy. Understanding these trends and how
12 they relate to the determination of the price cap and floor is crucial to the evaluation of the
13 Proposed DF Rates and their effectiveness at addressing the very issues that may be driving
14 these trends, such as load growth and resource adequacy.

15 **d. SDG&E’s Proposed DF Rates are Inconsistent Across Customer**
16 **Classes.**

17 **Q: Please explain your concerns regarding the consistency or lack of consistency of the**
18 **Proposed DF Rates across customer classes.**

19 A: SDG&E provided an analysis quantifying the relative contribution of commodity,
20 distribution, and transmission components to anticipated monthly bills for each customer
21 class, as well as the difference between present monthly bills and monthly bills for

¹⁵⁴ A.26-02-001, SDG&E Response labelled 1.02b (in response to Question 1.01b on page 2 of SDG&E Response to SDCCA Data Request 01), attached hereto as **Exhibit C**.

¹⁵⁵ A.26-02-001, SDG&E Response to SD CCAs DR 1.05b, attached hereto as **Exhibit C**.

1 customers taking service under the Proposed DF Rates.¹⁵⁶ This analysis makes it clear that
2 the Proposed DF Rate price signal, absent customer behavioral change in response to
3 dynamic pricing, varies significantly by customer class and by rate component. While
4 residential and agricultural customers would experience approximately a 5-6% increase in
5 their annual costs, commercial customers would experience a 2-4% decrease in their
6 annual costs.¹⁵⁷ Each customer group, excluding agricultural customers, would also
7 experience a larger change in their commodity costs than combined transmission and
8 distribution costs, with all commercial customers experiencing a large reduction in
9 commodity costs, offset by a large increase in combined transmission and distribution
10 costs.¹⁵⁸ To provide more consistent price signals to customers, align with grid reliability
11 needs and achieve revenue neutrality, these trends in changes to bills and the distribution
12 amongst total commodity, distribution, and transmission costs should be consistent across
13 customer classes and be properly reflected in SDG&E's proposed rate design. Because the
14 impact across customer classes is uneven, revenue neutrality will largely depend on
15 enrollment in the Proposed DF Rates across customer classes. If one customer class
16 experiences much higher enrollment, such as large commercial—which is projected to
17 realize the most savings per customer—then other customer classes may end up bearing
18 the burden of recovering costs to meet revenue neutrality.

¹⁵⁶ See SDG&E “RTPImport_BillCalc_Workpaper_Proposed_Revised” Excel, A.26-02-001, SDG&E Response to SD CCAs DR 2.19(a), response attached hereto as **Exhibit C** and workpaper is available at <https://eq-research.sharefile.com/public/share/web-s2fe7a3ceaeaa447aa823115334239a52>, in tab “TOU-DR-1” at cells AP17 through BK41, tab “TOU-A” at cells AO17 through BO41, tab “AL-TOU-M” at cells AP24 through BR51, tab “AL-TOU” at cells AQ24 through BS51, and tab “TOU-PA” at cells AO17 through BO41.

¹⁵⁷ See *id.*, in tab “TOU-DR-1” at cell BH31, tab “TOU-A” at cell BG31, tab “AL-TOU-M” at cell BQ39, tab “AL-TOU” at cell BR39, and tab “TOU-PA” at cell BG31.

¹⁵⁸ See *id.*, in tab “TOU-A” at cells BG41 to BI41, tab “AL-TOU-M” at cells BH51 to BJ51, and tab “AL-TOU” at cells BI51 to BK51.

e. **Impacts of the Effective Exclusion of CCA Customers from
SDG&E's Proposed DF Rates**

Q: What are the potential implications for cost recovery of the fact that CCA customers cannot meaningfully participate in SDG&E's Proposed DF Rates?

A: To the extent that commodity-related savings represent the majority of anticipated customer benefits for certain customer classes (*e.g.*, Medium Commercial and Large Commercial & Industrial), SD CCA customers may be effectively precluded from realizing those benefits because the SD CCAs currently lack the meter-data access needed to administer comparable dynamic generation rates. By failing to address prerequisites for CCA participation, SDG&E's Proposed DF Rate offerings will be substantially less attractive to SD CCA customers. Lower participation by unbundled customers could result in costs being unjustly and disproportionately borne by non-participating, unbundled customers.

Q: Please summarize your concerns with respect to potential cost shifts that could occur as a result of the Proposed DF Rate design.

A: For all of the above reasons, there is significant risk that SDG&E's Proposed DF Rates could result in cost-shifting in a manner that may be inconsistent with California law and the Commission orders. Additional analysis is necessary to assess impacts on bundled versus unbundled customers, the distribution of benefits across customer classes, the implications of the selected default-rate comparator, and the treatment of non-bypassable charges and franchise fees. Until these issues are fully evaluated, the Commission cannot and should not conclude that SDG&E's Proposed DF Rates are just, reasonable, or equitable for all customer groups or that they are consistent with established rate design principles.

1 **C. Principles for Adequate Cost Recovery**

2 **Q: How should the Commission evaluate SDG&E's cost recovery proposal in this**
3 **proceeding?**

4 A: The Commission should ensure that SDG&E's Proposed DF Rate cost-recovery
5 framework is grounded in fundamental ratemaking principles, including cost causation,
6 beneficiary-pays principles, and protection against undue cost shifting. Because SDG&E's
7 Proposed DF Rates are structured in a manner that may not be equally accessible to all
8 customer groups and may result in illegal cost-shifts, it is unjust and unreasonable and
9 should not be approved in its current form. Any approval of the Application should include
10 modifications to carefully align cost recovery with the customers that cause and receive
11 the benefits associated with SDG&E's DF Rates, according to the principles outlined
12 below.

13 **1. SDG&E's DF Rate Design Must Avoid Cost Shifts to Unbundled and**
14 **Nonparticipating Customers**

15 **Q: What do you recommend with respect to the potential for cost shifts to unbundled**
16 **and nonparticipating customers?**

17 A: As a threshold matter, the Commission should ensure that SDG&E's Proposed DF Rate
18 implementation and ongoing program costs do not prejudice unbundled customers or result
19 in cost shifts to customers that are unable or unwilling to participate. Section 366.2(a)(4)
20 of the Public Utilities Code requires the Commission to prevent cost shifts between
21 bundled and unbundled customers, and to maintain cost indifference for both bundled and
22 unbundled customers. More specifically, section 365.2 requires the Commission to "ensure

1 that departing load does not experience any cost increases as a result of an allocation of
2 costs that were not incurred on behalf of the departing load.”

3 The Commission’s rate design guidance in the DF rulemaking, R.22-07-005,
4 reinforces that any demand flexibility tariff must avoid shifting costs onto customers that
5 do not participate in—or benefit from—the new rate structure. Specifically, Electric Rate
6 Design Principle 9, adopted in D.23-04-040, directs that “[r]ate design ... should avoid
7 creating unintended cost-shifts.”¹⁵⁹ Similarly, Electric Rate Design Principle 8 states:
8 “Rates should avoid cross-subsidies that do not transparently and appropriately support
9 explicit state policy goals.”¹⁶⁰

10 Due to the lack of timely meter-data access currently available to non-utility LSEs
11 and the absence of a dynamic rate pilot in SDG&E’s distribution territory, most unbundled
12 customers cannot meaningfully participate in generation-based dynamic pricing programs
13 comparable to SDG&E’s Proposed DF Rates. Consequently, any cost-recovery approach
14 that broadly allocates program costs without regard to customer access or participant
15 benefits risks creating inequitable outcomes and violating both traditional cost-causation
16 principles and clear statutory requirements.

17 **2. Cost Recovery Should Be Tied to the Customers Receiving the Benefit**

18 **Q: What principles should guide the Commission’s review of cost recovery from**
19 **distribution customers?**

20 **A:** The Commission should ensure that recovery of SDG&E’s Proposed DF Rate
21 implementation costs is aligned with the underlying utility functions and associated

¹⁵⁹ D.23-04-040 at 21.

¹⁶⁰ *Id.* at 20.

1 beneficiaries. To the extent dynamic rates produce benefits related to the distribution and
2 transmission systems, such as reducing distribution capacity constraints, mitigating local
3 reliability issues, or lowering transmission costs, those costs may be appropriately
4 recovered through distribution rates applicable to all customers that benefit from those grid
5 services. Yet, this is highly unlikely to be the case under the current circumstances, where
6 SDG&E has not made it possible for the SD CCAs to participate in the Proposed DF Rates
7 and unbundled customers are highly unlikely to participate. With so little participation,
8 there will be precious little benefit to all SDG&E distribution customers.

9 **Q: Should SDG&E recover generation-related Proposed DF Rate costs from all**
10 **customers?**

11 A: No. In contrast to distribution and transmission system costs and benefits, the costs and
12 benefits associated with the generation component of a DF Rate should be assigned to the
13 customers that receive those generation-related benefits. Because bundled SDG&E
14 customers receive generation service from SDG&E, generation-related Proposed DF Rate
15 costs should be recovered through generation-related ratemaking mechanisms, such as the
16 Energy Resource Recovery Account (“ERRA”), rather than through charges broadly
17 imposed on both bundled and unbundled customers.

18 **Q: Should SDG&E recover the cost of implementing its Proposed DF Rates from all**
19 **customers?**

20 A: No. Implementation costs should follow the same cost-causation principles. To the extent
21 SDG&E’s implementation investments are necessary to support bundled customer
22 participation in generation-based dynamic rates, recovery of those costs from participating
23 bundled customers is the most direct and equitable approach. Recovery of implementation

costs from all SDG&E distribution customers irrespective of access, participation, or benefit would be inconsistent with beneficiary-pays principles, particularly here where unbundled customers are effectively prevented from participating.

3. Ratepayer Indifference Requires Comparable Cost-Recovery Opportunities for CCAs

Q: What action should the Commission take if it agrees with your analysis with respect to SDG&E's proposal to recover implementation costs?

A: If the Commission agrees with the SD CCAs and concludes that only customers receiving direct benefits from SDG&E's Proposed DF Rates should fund implementation costs, then SDG&E's proposed recovery of all implementation costs through PPP charges should be rejected. Instead, SDG&E's Proposed DF Rate implementation costs should be recovered from the bundled customers that take service under and have the opportunity to benefit from these rates, rather than from all bundled and unbundled customers.

Q: What action should the Commission take if it approves SDG&E's implementation cost recovery proposal?

A: Alternatively, if the Commission approves SDG&E's Application and authorizes broad-based recovery through PPP charges, similar cost recovery principles should apply to non-utility LSEs, such as the SD CCAs. For example, if the SD CCAs obtain access to timely customer energy usage data and determine to offer their own dynamic rates, the SD CCAs will incur many of the same categories of non-energy implementation costs when developing dynamic rate programs, including rate design, billing system modifications, customer education and outreach, enrollment support, measurement and evaluation activities, and ongoing administration. The Commission has awarded ratepayer-funded

1 reimbursement of such implementation costs to CCAs in the past for other types of
2 programs and rate offerings.¹⁶¹ If the Commission determines that SDG&E's Proposed DF
3 Rates *do* provide benefits that extend beyond participating customers and justify socialized
4 cost recovery through PPP or any other charges on the distribution side of the customer
5 bill, there is a strong argument that CCAs should have access to comparable cost-recovery
6 treatment for reasonable implementation costs for their own generation-side dynamic rates
7 offerings, i.e. non-energy expenditures associated with delivering equivalent demand
8 flexibility benefits to customers.

¹⁶¹ D.22-06-005, *Decision Granting In {Part the January 31, 2022 Petition for Modification of Valley Clean Energy, Polaris Energy Services, and Temix Inc.* (Jun. 2, 2022) ("D.22-06-005") at OPs 1, 3, 4; D.24-01-032, *Decision to Expand System Reliability Pilots of Pacific Gas and Electric Company and Southern California Edison Company* (Jan. 25, 2024) ("D.24-01-032") at COL 12(f), (g).

V. Chapter 5: Need for SDG&E Coordination and Collaboration with SD CCAs on DF Rate Design and Implementation

A.	Introduction	96
B.	SDG&E's Lack of Coordination and Collaboration with the SD CCAs on Dynamic Rates to Date	98
1.	Pilot History	98
2.	Data Access Barriers	100
3.	Development of the Current Application and Proposed DF Rates.....	101
C.	Impacts of the Lack of SDG&E Coordination with SD CCAs	103
1.	The SD CCAs Have Been Unable to Offer Dynamic Rates to Their Customers.....	103
2.	The SD CCAs and Their Customers Have Been Unable to Learn from Dynamic Rate Pilots.....	104
3.	SDG&E's Application Exhibits Defects That Earlier CCA Collaboration Could Have Helped Identify and Resolve	106
D.	Goals for Effective Coordination Among SDG&E and the SD CCAs	108
1.	Coordination Goal # 1: Synergize Generation and Delivery Components of DF Rates	110
a.	Ensure generation and delivery rate components sync (i.e., give a consistent price signal and use consistent methodologies)	111
b.	Ensure that price cap and floor are appropriate, based on historic data and forward-looking trends.....	111
c.	Mirror PG&E and SCE and their CCAs collaborative efforts, including option to customize MGCC for CCAs	112
2.	Coordination Goal #2: Coordinated Marketing, Education, & Outreach, Implementation (Including Billing), and Evaluation of the Proposed DF Rates	113
a.	Ensure SDG&E – SD CCAs collaboration efforts include ME&O, implementation, and EM&V to ensure rate success.....	113
b.	Require SDG&E to provide details on how it will work with third party vendors and DF-enabling technologies to support customers in automating their responses to price signals.....	115
i.	Pricing Data Access and User Interface	116
ii.	Load Automation.....	117
c.	Require that any billing updates made for the Proposed DF Rates enable SD CCAs' participation and consistent billing practices	120

1 **A. Introduction**

2 **Q: What will you address in this chapter of your testimony?**

3 A: In this chapter of our testimony, we will address the importance of collaboration between
4 the SD CCAs and SDG&E with respect to DF Rates. Because the SD CCAs serve
5 approximately 80 percent of electric load within SDG&E’s service territory, meaningful
6 collaboration between the SD CCAs and SDG&E is essential to achieving the
7 Commission’s objectives of affordability, reliability, emissions reductions, and enabling
8 participation by both bundled and unbundled customers. A successful DF Rate framework
9 cannot be designed or implemented solely from the perspective of bundled customers.
10 Rather, it must account for the operational realities, customer relationships, and program
11 offerings of all LSEs serving customers in the service territory.

12 **Q: Has the Commission required collaboration between IOUs and CCAs regarding the**
13 **development of dynamic rates?**

14 A: Yes. In D.23-04-040, the Commission established six objectives of dynamic rates,
15 including to “enable participation in demand flexibility by both bundled and unbundled
16 customers.”¹⁶² In D.25-08-049, the Commission explicitly required the IOUs’ DF Rate
17 proposals to include “a detailed description regarding how the Large IOUs will collaborate
18 with CCAs on various features of DF rates and DF rate programs.”¹⁶³ Yet, both the history

¹⁶² See D.23-04-040 at 4 (explaining that the purpose of the rulemaking is “to establish demand flexibility policies and modify electric rates to advance the following objectives: (a) enhance the reliability of California’s electric system; (b) make electric bills more affordable and equitable; (c) reduce the curtailment of renewable energy and greenhouse gas (GHG) emissions associated with meeting the state’s future system load; (d) enable widespread electrification of buildings and transportation to meet the state’s climate goals; (e) reduce long-term system costs through more efficient pricing of electricity; and (f) enable participation in demand flexibility by both bundled and unbundled customers.”).

¹⁶³ D.25-08-049 at 136-37, COL 34.

1 of the development of SDG&E's Proposed DF Rates and the Application demonstrate a
2 failure to provide for the collaboration process needed to comply with these requirements
3 and ensure the success of DF Rates.

4 **Q: Please summarize your recommendation with respect to this issue and identify to**
5 **which specific Scoping Issues it relates.**

6 A: To address these deficiencies, the Commission should require SDG&E to establish a
7 formal and ongoing collaboration process with the SD CCAs throughout the development,
8 implementation, evaluation, and refinement of the Proposed DF Rates and any future
9 dynamic rates. This recommendation is directly relevant to Scoping Issue 1: as SDG&E
10 itself asserts on page 1 of its Application, without participation by the SD CCAs, the
11 allocation of ratepayer expense for the Proposed DF Rates is neither just nor reasonable.
12 The SD CCAs collaboration recommendation directly addresses Scoping Issue 2 – whether
13 SDG&E's Application complies with D.25-08-049, as discussed above. Effective
14 coordination with CCAs is directly relevant to Scoping Issue 6, which addresses whether
15 SDG&E's ME&O proposals should be approved. As discussed throughout this testimony,
16 timely data access for CCAs is critical to broadening customer understanding of dynamic
17 rates and how to respond to pricing signals to shift load, the subject of Scoping Issue 8.
18 Meaningful collaboration with the CCAs will be necessary to educate customers on the
19 potential benefits of the Proposed DF Rates. Finally, the need for a structured collaboration
20 process with CCAs is relevant to Scoping Issues 4 and 9 regarding whether recovery of
21 \$11.3 million in implementation costs is justified and the potential for shifting of costs to
22 nonparticipating customers.¹⁶⁴

¹⁶⁴ See Scoping Memo at 2-3.

1 **B. SDG&E’s Lack of Coordination and Collaboration with the SD CCAs on**
2 **Dynamic Rates to Date**

3 **Q: Has SDG&E sufficiently collaborated with the SD CCAs in the development of its**
4 **Proposed DF Rates?**

5 A: Unfortunately, to date there has been a lack of meaningful coordination between SDG&E
6 and the SD CCAs in the development, testing, and deployment of SDG&E’s Proposed DF
7 Rates, in violation of Commission orders. This lack of collaboration has limited the ability
8 of the SD CCAs and their customers to gain experience with DF Rate implementation via
9 a pilot and contributed to the deficiencies in SDG&E’s current DF Rate proposal. Without
10 remedy, the absence of coordinated design and deployment of dynamic rates will severely
11 limit SDG&E customer access to and participation in the Proposed DF Rates, critically
12 undermining the state’s demand flexibility objectives and the basis for this Application.

13 **1. Pilot History**

14 **Q: Please describe SDG&E’s history with dynamic rate pilots.**

15 A: SDG&E originally proposed a real-time pricing (“RTP”) import pilot that would have
16 exposed participating customers to dynamic energy prices reflecting wholesale market
17 conditions. However, in D.23-11-006, the CPUC dismissed SDG&E’s import-rate pilot
18 application, recognizing the role of customer meter data access latency in inhibiting CCAs
19 and their customers from participating in the proposed pilot.¹⁶⁵

20 The only SDG&E dynamic-rate pilot currently authorized is the Dynamic Export
21 Rate Pilot Program, which was approved by D.23-11-006.¹⁶⁶ SDG&E acknowledges that

¹⁶⁵ D.23-11-006 at 9-10, FOF 4, COL 1.

¹⁶⁶ *Id.* at 9.

1 zero customers have enrolled in the Dynamic Export Rate Pilot Program “despite
2 significant customer outreach.”¹⁶⁷ The primary reason for this failure is that the pilot is
3 only available to *bundled* customers that have an on-site device that can export power and
4 is subject to a Rule 21 interconnection agreement, but do not participate in any solar
5 programs (*e.g.*, Net Energy Metering (“NEM”) and Net Billing Tariff (“NBT”)) or DR
6 programs.¹⁶⁸ By excluding both CCA customers representing approximately 80 percent of
7 customer load in SDG&E’s territory, as well as NEM, NBT and DR customers, SDG&E’s
8 only dynamic rate pilot left a negligible pool of potentially interested customers.

9 **Q: Did SDG&E collaborate with the SD CCAs with respect to these two pilot efforts?**

10 A: No. SDG&E’s dynamic rate pilot efforts were largely developed and administered by
11 SDG&E without meaningful collaboration with the SD CCAs. As a result, the pilots were
12 developed primarily within a bundled-customer framework and have been ineffective in a
13 service territory where most customers receive generation service from a non-utility LSE.
14 Thus, the SD CCAs and their customers have been deprived of meaningful opportunities
15 to gain experience piloting dynamic rates to date. As discussed in Chapter IV(C)(2) below,
16 the SD CCAs’ experience stands in contrast with that of CCAs in PG&E and SCE’s service
17 areas, where CCAs and their customers did have opportunities to gain experience and
18 learnings on dynamic rates via pilots.

¹⁶⁷ Application at 1.

¹⁶⁸ SDG&E, Dynamic Export Rate Pilot, available at:

https://www.sdge.com/sites/default/files/FINAL_S2570004-DynamicExportRatePilot-FS_ONLINE.pdf

(“Pilot participants must receive both electric generation and delivery service from SDG&E on the EVHP, AL-TOU or TOU-A pricing plan and have a completed Rule 21 interconnection agreement with SDG&E. The pilot is not available to solar (NEM or Solar Billing Plan), Community Choice Aggregation (CCA) or Direct Access (DA) customers, as well as customers on legacy rates, conjunctive billing, or who are currently enrolled in any Demand Response programs.”).

2. Data Access Barriers

Q: Please summarize the data access barriers that have prevented the SD CCAs from offering their own dynamic rates.

A: As discussed extensively in Chapter III, a primary reason for the limited participation of the SD CCAs in DF Rate development to date has been the lack of timely access to customer meter data. SDG&E has terminated Smart Meter 1.0 near real-time energy usage data access capabilities for its customers and does not provide such access to CCAs. CCAs do not receive customer meter data access until 2 to 3 days after power flow. These barriers significantly hinder effective DF Rate implementation by CCAs. Without timely energy usage data, the SD CCAs cannot effectively communicate with customers regarding near real-time load shift opportunities in response to dynamic pricing signals. While SDG&E has access to usage information initially within zero to 33 hours and states that it begins to make use of such data 9-33 hours from power flow, non-utility LSEs do not receive equivalent data access. This disparity has created a structural barrier preventing the SD CCAs from implementing comparable and cost-effective dynamic rates. The absence of timely and equivalent meter data access has prevented the SD CCAs from participating on equal footing in dynamic rate development and implementation efforts and has limited SDG&E unbundled customers' ability to benefit from SDG&E's Proposed DF Rates offerings.

1 **3. Development of the Current Application and Proposed DF Rates**

2 **Q: Please describe the Commission’s directives with respect to collaboration between the**
3 **IOUs and CCAs with respect to DF Rates.**

4 A: In establishing guidelines for DF Rates, the Commission required that each Large IOU’s
5 application include “a detailed description regarding how the Large IOUs will *collaborate*
6 *with CCAs* on various features of DF rates and DF rate programs, including but not limited
7 to:

8 a. developing generation and distribution components and customer bill
9 protection and management elements of DF rates, such as subscription
10 design and transactive options;

11 b. creating and launching LSE DF programs with IOU DF programs, to
12 utilize lessons learned from IOU DF pilots and ME&O efforts and foster
13 customer understanding of both bundled and unbundled DF rate offerings;
14 and

15 c. ensuring that LSE DF rates conform with CEC LMS requirements.¹⁶⁹

16 **Q: Did SDG&E collaborate with the SD CCAs in the development of its Proposed DF**
17 **Rates?**

18 A: Largely no. The current Application reflects many of the same shortcomings that have
19 characterized prior SDG&E dynamic rate efforts. Although the Proposed DF Rates would
20 affect both bundled and unbundled customers throughout SDG&E’s service territory, the
21 SD CCAs were not meaningfully involved in the design of the Proposed DF Rate structure,
22 the development of implementation plans, or the evaluation of customer impacts before
23 the Application was filed, contrary to the requirements of D.25-08-049.

¹⁶⁹ D.25-08-049 at COL 34 (emphasis added).

1 The Application references only two meetings held by SDG&E with the SD
2 CCAs.¹⁷⁰ In the initial meeting on October 13, 2025, SDG&E shared and walked through
3 a prepared slide deck containing a high-level summary of their preliminary Proposed DF
4 Rate framework. In the subsequent meeting on January 7, 2026, SDG&E walked through
5 a slide deck containing an updated high-level summary for their Proposed DF Rate
6 framework that would be eventually included in their Application. SD CCAs found that it
7 was helpful for SDG&E to present the narratives of their Proposed DF Rate framework in
8 these meetings, but the two meetings were insufficient for parties to align expectations and
9 formally collaborate on details such as rate design.

10 **Q: Does SDG&E attempt to explain why did it not meaningfully collaborate with the SD**
11 **CCAs on the development of its Proposed DF Rates?**

12 **A:** In testimony, SDG&E implies that because the SD CCAs indicated that they were not
13 currently planning to offer their own DF Rates, SDG&E discontinued its attempts to
14 collaborate with the SD CCAs.¹⁷¹ SDG&E states that it will require the SD CCAs to
15 develop their own DF Rate programs prior to any further collaboration.¹⁷² Yet, SDG&E's
16 reasoning and its condition to collaboration fails to address the fact that the primary reason
17 the SD CCAs have been hindered from offering dynamic rates is due to lack of access to
18 timely usage data from SDG&E, and the connected and related absence of dynamic rate
19 pilots in SDG&E territory.

¹⁷⁰ Exh. SDGE-01, *Prepared Direct Testimony of Jeff DeTuri on behalf of San Diego Gas & Electric Company Chapter I – Policy*, (Feb. 2, 2026) at 11:23 – 12:1.

¹⁷¹ *Id.* at 12:1-22.

¹⁷² *Id.* at 12:21-22 (“SDG&E will continue to meet and collaborate with the CCAs as appropriate if and when they develop DF rate programs.”) (emphasis added).

1 **C. Impacts of the Lack of SDG&E Coordination with SD CCAs**

2 **Q: Please provide an overview of the impacts that SDG&E's lack of meaningful**
3 **collaboration with the SD CCAs has had and continues to have.**

4 A: As a result of this failure to comply with the Commission directive to collaborate, the
5 Application appears to have been again developed largely from the perspective of bundled
6 service customers. The absence of formal collaboration with the LSEs that serve
7 approximately 80 percent of load in SDG&E's territory has limited SDG&E's ability to
8 identify practical implementation challenges, evaluate impacts on unbundled customers,
9 and develop solutions that would allow all LSEs in SDG&E's territory to support the
10 Commission's DF objectives and for all SDG&E distribution customers to meaningfully
11 participate in DF Rates. Without remedy, SDG&E's failure to meaningfully coordinate
12 with the SD CCAs has the possibility of producing several adverse consequences for both
13 bundled and unbundled customers as it relates to the evaluation, development, and design
14 process of the Proposed DF Rates. These deficiencies in coordination contradict the
15 direction and intent of the Commission.

16 **1. The SD CCAs Have Been Unable to Offer Dynamic Rates to Their**
17 **Customers**

18 **Q: Please explain the impact of SDG&E's lack of collaboration on the availability of**
19 **dynamic rates in SDG&E's service territory.**

20 A: Because of data access limitations and the absence of coordinated DF Rate program
21 development, the SD CCAs have been unable to offer comparable dynamic rates to their
22 customers. This has created unequal access to dynamic pricing opportunities for customers

1 and has prevented a large portion of customers within SDG&E's service territory from
2 receiving DF Rate offerings from their chosen LSE.

3 The result is a market structure in which bundled customers may have access to DF
4 Rate opportunities that are effectively unavailable to similarly situated unbundled
5 customers, despite both groups contributing to system costs and being expected to support
6 State demand flexibility goals via payment of the PPP charge.

7 **2. The SD CCAs and Their Customers Have Been Unable to Learn from**
8 **Dynamic Rate Pilots**

9 **Q: Has SDG&E's failure to collaborate with the SD CCAs impacted customers' and the**
10 **SD CCA's level of experience with dynamic rates?**

11 A: Yes. The lack of meaningful collaboration and participation in prior pilot programs has
12 also deprived the SD CCAs and their customers of valuable experience with dynamic
13 pricing. Pilot programs are intended not only to test rate designs but also to build
14 institutional knowledge, customer familiarity, operational capabilities, and market
15 experience.¹⁷³ Because the SD CCAs were entirely excluded from SDG&E's limited
16 dynamic rate pilots, they have been unable to develop the requisite experience to design
17 cost-effective dynamic rates. This absence of shared learning has made it more difficult for
18 the SD CCAs to evaluate dynamic rate structures, identify customer preferences, and
19 prepare for broader deployment of dynamic rates. This has significantly compromised

¹⁷³ See, e.g., D.21-12-015 at 3, 90 ("The [VCE AgFIT] pilot will provide valuable data about the potential of dynamic rates for load shift. The results from the program may help inform other load flexibility pilots and be used to scale dynamic rates to other customers."); *id.* at 96 (finding that SCE's dynamic rate pilot "is intended to assist in assessing the costs and benefits of real-time rates, including required infrastructure, manufacturer interest and customer impacts.").

1 California's demand flexibility policies in a distribution territory in which approximately
2 80 percent of customers are served by CCAs.

3 **Q: Have CCAs in other Large IOU territories had more opportunities to participate in**
4 **dynamic rates?**

5 A: Yes. Unfortunately, the lack of a pilot developed and administered in collaboration between
6 SDG&E and the SD CCAs has placed customers in the San Diego region at a severe
7 disadvantage compared to customers in other IOU territories, where CCAs and IOUs had
8 the opportunity to gain learnings about dynamic rates prior to LMS implementation. These
9 pilots provided an important customer learning opportunity, greatly enhanced by CCA
10 participation. The Commission acknowledged the value of having CCAs engage with the
11 dynamic rate pilots in SCE and PG&E's distribution territories: for example, it found that
12 limiting participation in SCE's pilot to one CCA would "limit its potential system
13 benefits."¹⁷⁴

14 In fact, the first dynamic rate pilot in PG&E's distribution territory was initially
15 proposed and administered by CCA Valley Clean Energy Alliance ("VCE") and targeted
16 agricultural customers with irrigation pumping load ("AgFIT").¹⁷⁵ Based on the initial
17 success of VCE's AgFIT pilot, the Commission expanded it throughout PG&E's territory
18 with no enrollment cap, and expressly fostered the participation of CCAs by enabling VCE
19 to continue administering the generation portion for its customers, and providing other
20 CCAs with an incentive to enable their unbundled customers to participate.¹⁷⁶ The recent
21 mid-term evaluation of the expanded Hourly Flex Pilot found that it was "generating

¹⁷⁴ *Id.* at 87.

¹⁷⁵ *Id.*

¹⁷⁶ D.24-01-032 at COLs 1, 8.

valuable learnings and engaging customers that are interested in innovation, energy management, and potential bill savings.”¹⁷⁷ San Diego customers and non-IOU LSEs have not had these opportunities.

3. SDG&E’s Application Exhibits Defects That Earlier CCA Collaboration Could Have Helped Identify and Resolve

Q: Are there any shortcomings in SDG&E’s Proposed DF Rates Application that demonstrate the importance of meaningful stakeholder collaboration during dynamic rate development?

A: Yes. First, as discussed in Chapter IV, SDG&E’s proposed price floor and price ceiling structure appears vulnerable to both revenue under-collection and revenue over-collection under different market conditions. SDG&E’s workbook entitled “Revised Ch4_Price Cap and Floor,” demonstrates that the Proposed DF Rate design does not adequately account for changing market conditions, customer participation patterns, or evolving distributions of negative-price and high-price hours. Early involvement of the SD CCAs could have provided additional perspectives regarding customer behavior, load characteristics, and risk mitigation strategies that may have strengthened the proposal.

Second, as also discussed in Chapter IV, the Proposed DF Rates raise concerns regarding potential cost shifts among customer groups. Depending on participation patterns, customers that are unable or unwilling to take service under the Proposed DF Rates may bear costs associated with benefits received by participating customers. These risks may be particularly acute where participation differs significantly across customer classes or between bundled and unbundled customers. As reflected in SDG&E’s responses

¹⁷⁷ PG&E HFP Mid-Term Evaluation Customer Experience Attachment at 3.

1 to the SD CCAs' data requests, additional analysis is necessary to evaluate whether high
2 participation by certain groups and limited participation by others could result in
3 inequitable cost allocation outcomes.¹⁷⁸ Had SDG&E engaged the SD CCAs during the
4 rate development process, many of these concerns could have been identified earlier,
5 allowing the parties to develop alternative designs, improve modeling assumptions,
6 evaluate customer-class impacts, and address implementation barriers before filing the
7 Application.

8 As another example, SDG&E's Application excludes NEM and NBT customers.¹⁷⁹
9 This customer segment is highly informed and engaged with their energy use and is better
10 positioned to respond to dynamic pricing signals. Many of these customers have already
11 invested in technologies such as battery storage, home energy management systems, and
12 EVs that can respond to changing hourly prices. The sub-group of EV customers often
13 possess substantial load flexibility and may be able to shift charging behavior in response
14 to dynamic prices, producing meaningful benefits for both the customer and the grid at
15 large. By contrast, PG&E's recently filed application to update its LMS Compliance Plan
16 proposed to make hourly marginal cost rates available to NEM and NBT customers once
17 its DF Rates ("HFP 2.0") are implemented.¹⁸⁰ If SDG&E had collaborated with the SD
18 CCAs on its Proposed DF Rate program design and eligibility, the SD CCAs could have
19 raised the implications of excluding NEM and NBT customers for DF Rate success,

¹⁷⁸ See, e.g., A.26-02-001, SDG&E Response to SD CCAs DRs 1.02d and 1.02e, attached hereto as **Exhibit C.**

¹⁷⁹ Exh. SDGE-05-2R at 3.

¹⁸⁰ CEC Docket No. 23-LMS-01, PG&E Application for Modification to its Approved Load Management Standards Compliance Plan (Aug. 3, 2026) at 22, available at <https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=23-lms-01>.

1 drawing upon the issues observed in SDG&E's failed dynamic export pilot, which also
2 excluded such customers and had a total of zero enrolled customers.

3 For these reasons, the history of limited coordination between SDG&E and the SD
4 CCAs demonstrates the need for a formal collaboration framework going forward. Given
5 the SD CCAs' responsibility for serving approximately 80 percent of load within SDG&E's
6 service territory, meaningful involvement by all LSEs is essential to ensuring that the
7 Proposed DF Rates are effective, equitable, and capable of delivering benefits to all
8 customers.

9 **D. Goals for Effective Coordination Among SDG&E and the SD CCAs**

10 **Q: Please explain whether the Commission should require collaboration between**
11 **SDG&E and the SD CCAs moving forward.**

12 A: Yes. To remedy the defects discussed above and as a condition for any approval of this
13 Application, the Commission should require SDG&E to collaborate formally with the SD
14 CCAs on all future Proposed DF Rate development and deployment. As discussed above,
15 this is necessary to carry out prior Commission guidance recognizing that DF Rates and
16 load management programs should enable participation by both bundled and unbundled
17 customers and D.25-08-049's express requirement that the IOUs collaborate with LSEs to
18 develop LSE dynamic rates.¹⁸¹ One element of such required coordination was to "utilize
19 lessons learned from IOU DF pilots and ME&O efforts and foster customer understanding
20 of both bundled and unbundled DF rate offerings."¹⁸²

¹⁸¹ D.25-08-049 at 136, COL 34.

¹⁸² *Id.* at COL 34(b).

1 **Q: Are there any lessons learned from dynamic rate pilots in other IOU service**
2 **territories that SDG&E should take into account?**

3 A: Yes. Given that SD CCAs have not had a meaningful opportunity to participate in a
4 dynamic rate pilot with SDG&E, in its implementation of the Proposed DF Rate, at a
5 minimum SDG&E should leverage findings from the recent SCE and PG&E pilot mid-
6 term evaluations. For example, the mid-term evaluation of PG&E's HFP pilots found:

- 7 • Friction points included “complex rate design with lengthy iteration cycles,
8 fragmented communication & limited CPUC visibility into pilot
9 status/successes/challenges, inefficient data and workflow management, and
10 significant enrollment barriers. These weaknesses hinder customer uptake, some
11 partner ROI, and the pilots’ ability to deliver timely insights and optimized
12 performance at scale.”¹⁸³
- 13 • Issues are created when the key partner participation ecosystem is limited. “One
14 PG&E stakeholder states that around 60% of PG&E participation is unbundled,
15 requiring large CCA participation to increase the potential rate payer enrollee
16 pipeline. To increase CCA engagement, offer to share desirable customer data (e.g.,
17 customer performance on rate) and upskill CCAs on how to use the data most
18 effectively.”¹⁸⁴
- 19 • Areas to prioritize for enhancements:
 - 20 ○ “Improve operational transparency across partner entities by increasing
21 visibility into pilot data, customer status, and pilot requirements so partners can
22 more effectively support customers.”¹⁸⁵
 - 23 ○ “More streamlined data-sharing processes between partners can improve data
24 movement efficiency.”¹⁸⁶

¹⁸³ PG&E HFP Mid-Term Evaluation Customer Experience Attachment at 20.

¹⁸⁴ *Id.* at 24.

¹⁸⁵ *Id.* at 8.

¹⁸⁶ *Id.*

1 **Q: Do you have any specific recommendations regarding the goals of collaboration**
2 **between SDG&E and the SD CCAs?**

3 A: Yes. To address several of the Application’s shortcomings, the SD CCAs offer the
4 following recommended goals for SDG&E-SD CCA coordination in the implementation
5 of the Proposed DF Rates.

6 **1. Coordination Goal # 1: Synergize Generation and Delivery**
7 **Components of DF Rates**

8 **Q: What is the first coordination goal you propose?**

9 A: Dynamic rates can achieve their intended outcomes only if generation and delivery
10 components work together to provide customers with clear, consistent, and actionable price
11 signals.¹⁸⁷ Without coordination, these components may send conflicting incentives that
12 reduce participation, discourage load shifting, limit savings opportunities, and weaken
13 overall effectiveness. One element of the Commission’s requirement for the IOUs to
14 coordinate with the respective CCAs in their distribution territories in developing the DF
15 Rate applications was “developing generation and distribution components and customer
16 bill protection and management elements of DF rates, such as subscription design and
17 transactive options.”¹⁸⁸ The coordination recommendations in this section seek to address
18 this requirement.

¹⁸⁷ See D.25-08-049 at 136 (“all LSE DF rate customers should experience the same incentives to load shift”); *id.* at 133 (“Staff recommends that IOUs collaborate with CCAs to determine how IOU delivery rate components and CCA generation rate components will be integrated.”); *id.* at 3 (“[C]ost components should be incorporated into demand flexibility rate proposals to provide accurate price signals that promote economically efficient load shifting and support grid reliability.”).

¹⁸⁸ *Id.* at COL 34(a).

1 **a. Ensure generation and delivery rate components sync (i.e., give**
2 **a consistent price signal and use consistent methodologies)**

3 **Q: Please explain the importance of SDG&E collaborating with the SD CCAs to ensure**
4 **that the generation and delivery rate components of dynamic rates are consistent.**

5 A: In the context that the SD CCAs develop DF generation rates in coordination with
6 SDG&E's Proposed DF Rate delivery rate development, SDG&E should be required to
7 collaborate with the SD CCAs on rate development to ensure that CCA generation and
8 SDG&E delivery rate components use compatible methodologies to achieve the desired
9 outcomes. Ideally, customers should not be exposed to situations where one portion of the
10 rate encourages a certain behavior while another portion discourages it. Aligning rate
11 structures and/or components will increase customer understanding, improve load-shifting
12 performance, and maximize system benefits by producing a unified demand response
13 signal across all rate components. This coordination is particularly important for SD CCA
14 customers on dynamic rates composed of separate CCA generation and SDG&E delivery
15 components.

16 **b. Ensure that price cap and floor are appropriate, based on**
17 **historic data and forward-looking trends**

18 **Q: Please explain the importance of SDG&E collaborating with the SD CCAs to ensure**
19 **that the price cap and price floor are appropriate.**

20 A: Again, in the context that the SD CCAs develop dynamic generation rates in coordination
21 with SDG&E's Proposed DF Rate delivery component, the Commission should also
22 require SDG&E to collaborate with the SD CCAs to establish appropriate price ceilings
23 and floors used in the Proposed DF Rate designs. Generation price boundaries should not

1 be based solely on historical market outcomes but should also account for expected
2 changes in resource mix, electrification trends, evolving load patterns, grid constraints, and
3 wholesale market conditions. The SD CCAs bring unique perspectives on procurement
4 strategies, customer rate impacts, and long-term market trends that can improve the
5 appropriateness of these parameters. A collaborative review process will help ensure that
6 price caps and floors balance customer protections with the need to provide meaningful
7 incentives for demand flexibility.

8 **c. Mirror PG&E and SCE and their CCAs collaborative efforts,**
9 **including option to customize MGCC for CCAs**

10 **Q: Please explain the importance of SDG&E collaborating with the SD CCAs to allow**
11 **the SD CCAs to align their own DF rates with the structure of SDG&E's DF Rates.**

12 A: PG&E and SCE have already established frameworks that contemplate participation by
13 non-utility LSEs that at least contemplate enabling CCAs to provide their own generation
14 rates. While these frameworks could be improved upon, SDG&E should also be required
15 to adopt a collaborative model and provide the SD CCAs with sufficient flexibility to
16 customize generation-related components where appropriate, such as the hourly adder for
17 the MGCC price component. Allowing the SD CCAs to set generation pricing while
18 maintaining alignment with SDG&E delivery pricing would preserve customer choice
19 while supporting statewide demand flexibility goals.

1 **2. Coordination Goal #2: Coordinated Marketing, Education, &**
2 **Outreach, Implementation (Including Billing), and Evaluation of the**
3 **Proposed DF Rates**

4 **Q: What is the second coordination goal that you propose?**

5 A: The success of the Proposed DF Rates will depend not only on rate design but also on
6 effective customer communication. Customers often interact with both SDG&E and their
7 CCA provider and should receive consistent information regarding enrollment,
8 participation requirements, bill impacts, and opportunities to reduce costs. To avoid
9 customer confusion and maximize participation, SDG&E should work collaboratively with
10 CCAs throughout all phases of rate deployment.

11 **a. Ensure SDG&E – SD CCAs collaboration efforts include**
12 **ME&O, implementation, and EM&V to ensure rate success**

13 **Q: What does the experience from other California dynamic rate pilots reveal about the**
14 **importance of customer engagement to the success of dynamic rate implementations?**

15 A: Based on experience from dynamic rate pilots in other utility territories, dynamic rates are
16 inherently more complex than traditional time-of-use rates and customers must understand
17 not only when prices change, but also how their energy usage decisions affect their bills
18 and how they can respond to those price signals. Without robust customer education,
19 outreach, and ongoing support, customers may be unable to realize the intended benefits
20 of pricing.

21 Dynamic rates require a comprehensive engagement strategy that combines clear
22 price signals with customer education, behavioral tools, technology enablement, and

1 continuous communication.¹⁸⁹ Effective customer participation depends on customers
2 understanding why prices are changing, what actions they can take in response, and the
3 resulting bill impacts. These educational efforts are not one-time activities but rather
4 ongoing functions that must evolve as customer experience with dynamic rates grows.

5 **Q: Why is coordination between SDG&E and the CCAs necessary for effective customer**
6 **engagement?**

7 A: Given the important role that customer engagement plays in the success of rate deployment
8 and adoption, SDG&E should be required to coordinate and collaborate closely with the
9 SD CCAs in the development and implementation of customer education and outreach
10 efforts. The SD CCAs maintain direct relationships with their customers and possess
11 valuable experience designing customer-facing rates and programs, including identifying
12 customer segments that may be more interested and willing to participate in dynamic rates.
13 Leveraging these existing customer relationships can improve participation, increase
14 customer understanding, and support broader achievement of Commission policy
15 objectives.

16 Accordingly, SDG&E should be required to formally coordinate with the SD CCAs
17 in the development of customer-facing materials, enrollment pathways, implementation
18 schedules, and evaluation methodologies. Coordinated ME&O efforts will help ensure
19 customers receive consistent messaging regardless of whether they interact with SDG&E

¹⁸⁹ See, e.g., R.22-07-005, *Valley Clean Energy Alliance Opening Comments on Track B Staff Proposal to Expand Existing Pilots* (Sept. 25, 2023) at 13 (describing ME&O, strong price signals and load automation the “three-legged stool” that enabled AgFIT pilot success); R.22-07-005, Christensen Associates, *Mid-Term Evaluation of Valley Clean Energy’s Agricultural Pumping Dynamic Rate Pilot* (Dec. 22, 2023) at 50-51 (program administrator Valley Clean Energy Alliance commenting on the critical and influential role of customer education and support); PG&E HFP Mid-Term Evaluation Customer Experience Attachment at 4; VCE AgFIT Pilot Final Evaluation at 81.

1 or their CCA provider. Implementation processes require synchronization between
2 SDG&E and the SD CCAs to avoid enrollment issues that ultimately result in adverse
3 customer impacts. Lastly, joint evaluation activities will improve understanding of
4 customer response to dynamic pricing and enable refinement of future rate offerings.

5 **b. Require SDG&E to provide details on how it will work with**
6 **third party vendors and DF-enabling technologies to support**
7 **customers in automating their responses to price signals**

8 **Q: At a broad level, what is the importance of user interfaces and automation in**
9 **supporting dynamic rate implementation?**

10 A: Dynamic pricing rates are only effective when customers understand the rate, have access
11 to actionable usage and pricing information, and possess the tools necessary to respond
12 rapidly to changing price signals. A dynamic rate is not a traditional tariff under which
13 customers can take service passively. Rather, the success of dynamic rates depends on
14 customers receiving timely information, understanding the implications of that
15 information, and taking action, either manually or through automated technologies, to
16 modify consumption patterns in response to price signals. Especially during the early
17 stages of DF Rate implementation, customers will expect a high level of communication
18 with their LSE to help them better understand what opportunities exist to benefit both
19 customer bills and the grid through load-shifting in response to dynamic pricing.

1 **i. Pricing Data Access and User Interface**

2 **Q: Has SDG&E developed the tools necessary for customers to access pricing data**
3 **efficiently?**

4 A: The Application raises questions regarding whether SDG&E has adequately developed
5 these foundational elements for customer communication. SDG&E proposes to provide
6 customers access to Proposed DF Rate pricing information through a website, but *not* the
7 ability to download and utilize pricing information in forms that facilitate customer
8 decision-making, analytical review, and third-party integration on that same website.¹⁹⁰
9 Instead, Proposed DF Rate pricing information would only be through MIDAS.¹⁹¹ The
10 ability to download such prices would be through that platform, which would require a
11 customer to have the ability to code. SDG&E does not propose to make it easy to download
12 pricing information for customers that do not possess this technical knowhow, despite the
13 fact that there are no known technical barriers to doing so.¹⁹²

14 **Q: Has SDG&E developed educational materials for customers to help them understand**
15 **and respond to the Proposed DF Rates?**

16 A: No. SDG&E acknowledges that key customer-facing educational components of its
17 Proposed DF Rates implementation remain undeveloped. In response to the SD CCAs'
18 discovery, SDG&E stated that it has not yet developed the specific content, format, or
19 presentation of customer-facing displays and educational materials and instead plans to
20 develop and refine those materials after implementation of the proposed DF rates.¹⁹³ This

¹⁹⁰ Exh. SDGE-05-2R at 7; A.26-02-001, SDG&E Response to SD CCAs DR 1.04a, 1.20, 2.04(a)(a), attached hereto as **Exhibit C**.

¹⁹¹ See Exh. SDGE-05-2R at 5 (pricing will be available via MIDAS).

¹⁹² A.26-02-001, SDG&E Response to SD CCAs DR 2.04(a)(b), attached hereto as **Exhibit C**

¹⁹³ A.26-02-001, SDG&E Response to SD CCAs DR 1.18, attached hereto as **Exhibit C**.

approach creates a substantial risk that participating customers will not understand the Proposed DF Rates or how to shift load in response to the pricing signals.

Q: When should SDG&E establish the materials needed to educate customers about the Proposed DF Rates?

A: Effective customer education materials should be established prior to enrollment and deployment, not developed after the program is already underway. Without robust educational materials, intuitive customer interfaces, and clear communication regarding bill impacts and participation opportunities, SDG&E's Application risks low customer enrollment, limited engagement, and limited success in incentivizing customers to shift load in alignment with the CEC's and Commission's goals for load flexibility. These concerns are particularly relevant given the complete lack of customer participation observed in SDG&E's Dynamic Export Rate Pilot, which underscores the importance of ME&O, active engagement to ensure customer understanding, and effective program design.

ii. Load Automation

Q: What is the SD CCAs' understanding of the importance of load automation to effective dynamic rate implementation and load shift potential?

A: Numerous studies, pilot evaluations, and Commission proceedings have demonstrated that dynamic rates achieve significantly greater load-shifting outcomes when paired with enabling technologies such as smart thermostats, battery management systems, managed EV charging platforms, automated demand response technologies, and home energy management systems. Indeed, the importance of automation has been repeatedly recognized in Commission demand-flexibility proceedings, including Rulemaking 22-07-

005, where parties and pilot evaluations emphasized that automated load management is often the primary mechanism by which customers achieve meaningful and persistent responsiveness to dynamic price signals.¹⁹⁴ Dynamic rate pilots such as VCE’s AgFIT initiative have demonstrated the value of integrating technology solutions, customer controls, and automated responses into program design to increase participation and improve performance.¹⁹⁵ Customers cannot reasonably be expected to monitor hourly prices throughout the day and continuously adjust their behavior manually. Automation allows technologies to respond instantly and consistently to price signals, reducing customer burden while maximizing grid benefits.

Q: Should SDG&E coordinate with the SD CCAs regarding the ability to automate customer load shifting in response to price signals?

A: Yes. The Commission should require SDG&E to coordinate with the SD CCAs on the implementation of load automation within the Proposed DF Rate implementation process. Despite the central importance of automation to dynamic pricing success, SDG&E has provided limited information regarding how third-party technology providers will participate in the Proposed DF Rates ecosystem. SDG&E has also objected to discovery

¹⁹⁴ R.22-07-005, Christensen Associates, *Mid-Term Evaluation of PG&E’s Hourly Flex Pricing Pilot* (Aug. 3, 2026) (“Mid-Term Evaluation of PG&E HFP Pilots”) at 3 (finding that agricultural pumping customers working with an automated service provider and are technology-enabled exhibit statically significant price response during the summer months), available at: <https://pgera.azurewebsites.net/Regulation/search> (select “GRC 2023 Phase II” from the dropdown menu, select “PGE” from the Party dropdown menu, enter 08/03/26 on the Date(s) from menu); PG&E HFP Mid-Term Evaluation Customer Experience Attachment at 32 (finding that “Consistent load shifting behavior is aided by technology: Pump automation for Agriculture customers and vehicles chargers and apps for Residential.”).

¹⁹⁵ VCE AgFIT Pilot Final Evaluation at 81 (concluding that “Automating pump operations helped customers respond to prices” and noting that customers valued the automation).

1 seeking additional information regarding load automation and technology integration on
2 the grounds that such topics are not relevant and are outside the scope of the Application.¹⁹⁶

3 **Q: How should the Commission address the Application’s lack of information regarding**
4 **how automation service providers can support customers that participate in the**
5 **Proposed DF Rates?**

6 A: To remedy these important gaps, the Commission should require SDG&E to identify and
7 cooperate with the SD CCAs regarding how third-party technology providers will be
8 integrated into the Proposed DF Rate framework and how customers will access
9 automation tools that simplify participation. This information should include plans for
10 vendor engagement, interoperability standards, customer enrollment pathways, data access
11 requirements, technology qualification criteria, and customer support services that
12 facilitate automated responses to dynamic price signals. Such information is necessary for
13 parties to evaluate whether the proposed rates can realistically achieve the participation
14 levels and system benefits projected by SDG&E. For many of the reasons discussed in
15 Chapter II, the SD CCAs are positioned to assist with customer education, outreach,
16 technology adoption, and program design. The Commission should require SDG&E-CCA
17 cooperation on these important implementation questions.

¹⁹⁶ A.26-02-001, SDG&E Response to SD CCAs DR 1.24, attached hereto as **Exhibit C** (“The scope of the proceeding does not include efforts to integrate technologies to allow customers to automate their load in response to DF rates.”).

1 c. **Require that any billing updates made for the Proposed DF**
2 **Rates enable SD CCAs’ participation and consistent billing**
3 **practices**

4 **Q: Please explain why coordination between SDG&E and the SD CCAs is important**
5 **with respect to the billing system updates that will be needed to implement DF Rates?**

6 A: Any billing system enhancements funded through this Application should be designed
7 from the outset to accommodate both bundled and unbundled customers. Through
8 proceedings such as PG&E Billing Modernization, Demand Flexibility, and Net Energy
9 Metering, parties recognized the importance of IOU billing systems that can support rate
10 structures involving multiple LSEs and can facilitate customer participation regardless of
11 the generation service provider. This is especially salient in a distribution utility territory
12 primarily served by CCAs.

13 **Q: How did billing systems issues and shadow billing delays negatively impact the**
14 **dynamic rate pilots in other IOU distribution territories?**

15 A: The consequences of failing to incorporate CCA requirements into billing system design
16 are not merely hypothetical. CCAs participating in PG&E’s Hourly Flex Pricing pilots and
17 Clean Power Alliance participating in SCE’s Expanded Dynamic Rate Pilot reported
18 significant operational challenges associated with data access, customer billing, shadow
19 billing, and settlement processes.¹⁹⁷ Those participating CCAs experienced prolonged
20 delays in obtaining information necessary to validate customer bills and evaluate pilot

¹⁹⁷ PG&E HFP Mid-Term Evaluation Customer Experience Attachment at 8 (describing “sequential billing dependencies that create delays in shadow billing”); *id.* at 21 (shadow bill delays hinders customer understanding of and ability to improve load shift and partners’ (CCAs and automation service providers’) ability to guide customers to improve energy savings); *id.* at 24 (describing billing inefficiencies).

1 performance, creating administrative burdens for both the IOU and participating CCAs.¹⁹⁸

2 These experiences demonstrate the risks of developing dynamic rate billing systems
3 primarily from a utility-centric perspective and then attempting to retrofit support for CCA
4 participation after deployment. Such an approach can create substantial barriers to
5 implementation, reduce customer confidence, and impede broader adoption of dynamic
6 pricing rates.

7 **Q: How should the Commission ensure that SDG&E's billing system supports DF Rate**
8 **participation by both bundled and unbundled customers?**

9 A: To prevent these adverse outcomes, as a condition to approval of the Application, the
10 Commission should require SDG&E to demonstrate that all Proposed DF Rate calculation
11 systems, customer-facing portals, settlement processes, billing upgrades and capabilities
12 for the Proposed DF Rates will support participation by SD CCAs and their customers on
13 equal footing with bundled service customers. This includes ensuring that future billing
14 systems can accommodate generation components of DF Rates offered by non-utility
15 LSEs, provide timely and accurate interval data necessary for bill calculation and
16 settlement, and enable transparent customer-facing bill comparisons across different
17 providers.

18 **Q: Please summarize your primary recommendation in this Chapter.**

19 A: In conclusion, the Commission should order SDG&E to comply with D.25-08-049 by
20 establishing a structured process for collaboration with the SD CCAs on Proposed DF Rate
21 design and implementation on a going forward basis and as a condition to any approval of

¹⁹⁸ R.22-07-005, Christensen Associates, *Mid-Term Evaluation of Southern California Edison's Expanded Dynamic Rate Pilot* (Aug. 3, 2026) at 95 (concluding "The limited responsiveness observed among most customer groups is broadly consistent within the context of the Pilot, namely delayed Pilot bills."), served to CPUC service lists R.22-07-005, A.24-06-014 and A.24-12-008.

1 the Application. Given that CCAs serve approximately 80% of load in SDG&E's territory,
2 it is vitally important that such coordination include ME&O efforts, deployment of load
3 automation, customer billing and evaluation.

VI. Chapter 6: Necessary Modifications to Application & Recommended Conditions for Commission Approval

A. Summary	123
1. CCA access to timely and actionable customer interval meter data, at a minimum on parity with SDG&E.....	124
2. Access to near real-time energy usage data for all SDG&E distribution customers and the customer's LSE.....	124
3. Cost recovery in compliance with ratepayer indifference and cost causation principles.	124
4. DF Rate design in compliance with ratepayer indifference and cost causation principles.	124
5. Establishment of a structured CCA coordination and collaboration process on the design and implementation of DF Rates.	124
B. Timely Interval Meter Data Access.....	125
1. LSE data access parity.....	125
2. Near real-time data access for customers, authorized third parties and LSEs.	126
C. Cost Recovery Aligned With California Law and the Commission's Rate Design Principles.....	127
D. DF Rate Design in Alignment with Principles of Cost Causation and Ratepayer Indifference	128
E. CCA Collaboration and Coordination.....	130
F. Conclusion.....	131

A. Summary

Q: What will you address in this chapter of your testimony?

A: The purpose of this Chapter is to describe the conditions that the SD CCAs recommend the Commission impose as a condition to any approval of the Application. For the reasons discussed throughout this testimony, the Commission should ensure that any DF Rate framework adopted in this proceeding is designed for success in carrying out California's objectives in implementing dynamic rates, enables equitable participation by unbundled customers and avoids unreasonable cost shifting. While the SD CCAs support the

Commission’s objectives of advancing reliability, emissions reductions and affordability through dynamic rates,¹⁹⁹ those benefits can only be achieved if the underlying program infrastructure and rate design are accessible to all customers and all LSEs. As proposed, SDG&E’s Proposed DF Rates will fail to achieve those objectives unless the Commission modifies and imposes conditions to approval of the Application as summarized below and described in more detail in this chapter:

1. **CCA access to timely and actionable customer meter data, at a minimum on parity with SDG&E.**
2. **Access to near real-time energy usage data for all SDG&E distribution customers and the customer’s LSE.**
3. **Cost recovery in compliance with ratepayer indifference and cost causation principles.**
4. **DF Rate design in compliance with ratepayer indifference and cost causation principles.**
5. **Establishment of a structured CCA coordination and collaboration process on the design and implementation of DF Rates.**

Taken together, these recommendations will help ensure that the Proposed DF Rates are implemented in a manner that is effective, equitable, and consistent with California’s objectives of customer choice, competitive neutrality, affordability, reliability, and greenhouse gas reductions.

¹⁹⁹ D.23-04-040 at 4.

B. Timely Interval Meter Data Access

Q: Should the Commission condition approval of the Application on SDG&E providing the SD CCAs and all SDG&E distribution customers with timely and actionable access to meter data?

A: Yes. The Commission should require SDG&E to provide the SD CCAs and their customers with timely and actionable customer electric meter data. As discussed extensively in Chapter III, timely energy usage information is necessary to enable the load-shifting, reliability, affordability and environmental objectives of dynamic rates. Without such access, SD CCA customers will be deprived of the benefits of dynamic rates, and the Proposed DF Rates will be neither effective, nor just and reasonable.

1. LSE data access parity.

Q: Should the Commission require SDG&E to provide meter data access parity as between it and the SD CCAs as a condition to approval of the Application and implementation of Proposed DF Rates?

A: Yes. The implementation of dynamic rates depends on the rapid exchange of usage data for customer engagement, forecasting, procurement and evaluation of customer load in response to pricing signals within a timeframe that can lead to actionable load modification. As long as SDG&E retains access to information that is unavailable to non-utility LSEs, CCAs will be unable to offer their own dynamic rates, and their retail customers will remain at a structural disadvantage. Data access parity is therefore a prerequisite to competitive neutrality and meaningful customer choice.

1 To achieve data parity, the Commission should require SDG&E to make customer
2 meter data available to other LSEs in SDG&E's distribution territory when such data are
3 available to SDG&E ideally, direct from the customer's meter, or, alternatively, when such
4 data are received at SDG&E's HES. At the very minimum, based on the SDG&E's
5 responses to the SD CCAs' discovery thus far, this access could be provided when the
6 meter data are transmitted to SDG&E's Engineering Data Warehouse and its Customer
7 Information System, which occurs by 9:00 AM the morning after power flow. The latency
8 of meter data access provided to the SD CCAs should be no less than that available to
9 SDG&E.

10 **2. Near real-time data access for customers, authorized third parties and**
11 **LSEs.**

12 **Q: Should the Commission require SDG&E to provide meter data access within seconds**
13 **of power flow as a condition to approval of the Application?**

14 A: Yes. As discussed in Chapter III, customers cannot effectively respond to dynamic price
15 signals if they lack timely visibility into their own energy consumption. Near real-time
16 access to usage information is critical for customer awareness, real-time load shifting, bill
17 management, technology integration, and automated load responsiveness. Such access
18 benefits not only participating customers in terms of potential energy savings, but all
19 customers by improving reliability, reducing procurement of polluting energy at peak,
20 reducing procurement costs, and improving energy affordability.

21 Specifically, prior to the deployment of AMI 2.0, the Commission should require
22 restoration of near real-time meter data access via the ZigBee functionality available on
23 existing smart meters which was discontinued as a result of D.22-12-009. The Commission

1 should also ensure that these existing capabilities are preserved as California transitions to
2 future metering platforms, including AMI 2.0. Near real-time customer access should not
3 be treated as an optional feature or pilot capability; rather, it should be a core requirement
4 of future metering investments by ratepayers, considering that such functionality has
5 already been available via AMI 1.0 for nearly two decades and remains critical to achieving
6 California's load flexibility goals.

7 **Q: Please summarize your recommendations with respect to meter data access.**

8 A: In summary, as a condition to approval of SDG&E's Application, the Commission should
9 require SDG&E to: (1) provide timely and actionable meter data to the SD CCAs, at a
10 minimum on parity with SDG&E's receipt of such data; and (2) restore and preserve near
11 real-time meter data access to customers and their LSEs through existing and future
12 metering technologies.

13 **C. Cost Recovery Aligned With California Law and the Commission's Rate**
14 **Design Principles**

15 **Q: Should the Commission condition approval of the Application on SDG&E**
16 **demonstrating that SDG&E's implementation cost recovery is consistent with cost**
17 **causation and rate design principles?**

18 A: Yes, any approved cost-recovery framework for SDG&E's Proposed DF Rates should
19 comply with established principles of ratepayer indifference and cost causation. Customers
20 that do not receive access to or benefits from the Proposed DF Rates should not be required
21 to subsidize costs incurred on behalf of participating customers. Recovery mechanisms
22 should be structured so that costs are allocated to the customers and utility functions that
23 give rise to those costs and receive the associated benefits. Broad socialization of costs

1 without a demonstrated system-wide benefit risks creating inequitable outcomes and
2 undermining customer confidence.

3 For these reasons, the Commission should reject SDG&E's proposal to recover via
4 the PPP charge the costs of implementing its Proposed DF Rate from all customers,
5 including CCA customers that cannot meaningfully participate in the rate. Alternatively, if
6 the Commission allows SDG&E to recover its costs of implementing its Proposed DF
7 Rates through the PPP Charge and SDG&E implements the data access requirements
8 above, it should allow the SD CCAs to similarly recover their costs of implementing their
9 own DF Rates through the PPP Charge.

10 **D. DF Rate Design in Alignment with Principles of Cost Causation and Ratepayer**
11 **Indifference**

12 **Q: Should the Commission condition approval of the Application on SDG&E**
13 **demonstrating that the Proposed DF Rates themselves are consistent with cost**
14 **causation and rate design principles?**

15 A: Yes. DF Rates should not create structural winners and losers among customer classes,
16 bundled and unbundled customers, or participating and nonparticipating customers.
17 Rather, such rates should be designed with the principles established in D.23-04-040²⁰⁰ and
18 should not create unreasonable risks of over-collection, under-collection, or cross-
19 subsidization.

20 The Commission should therefore require additional analysis by SDG&E prior to
21 deployment of the Proposed DF Rates. In addition, the Commission should require ongoing

²⁰⁰ Electric Rate Design Principle 9, adopted in D.23-04-040, directs that "[r]ate design ... should avoid creating unintended cost-shifts." Similarly, Electric Rate Design Principle 8 states: "Rates should avoid cross-subsidies that do not transparently and appropriately support explicit state policy goals."

1 monitoring and evaluation of customer impacts, bill outcomes, revenue neutrality, and
2 potential cross-subsidization to ensure that the Proposed DF Rate remains consistent with
3 cost-causation principles over time. The Commission should ensure that any future
4 modifications to the tariff continue to support competitive neutrality among LSEs and do
5 not create barriers to participation by customers served by CCAs or DA providers.

6 **Q: Should the Commission also direct SDG&E to evaluate the role of NEM and NBT**
7 **customers in DF Rates?**

8 A: Yes. The Commission should also consider the role of NEM and NBT customers in the
9 future evolution of DF Rates. SDG&E's Application currently excludes such customers,²⁰¹
10 but this is shortsighted. Frequently, customers who have chosen to invest in behind-the-
11 meter DERs are motivated by the same objectives that animate California's directive to
12 implement dynamic rates: energy savings potential, reliability, and GHG emissions
13 reduction. NEM and NBT customers are likely among the customer groups best positioned
14 to respond to DF pricing signals. Many of these customers have already invested in
15 technologies such as battery storage, home energy management systems, and EVs that can
16 respond to changing hourly prices. In particular, customers with EVs often possess
17 substantial load flexibility and may be able to shift charging behavior in response to DF
18 prices, producing meaningful benefits for both the customer and the grid. The Commission
19 should therefore direct SDG&E to evaluate the feasibility and value of including NEM and
20 NBT customers as part of the Proposed DF Rate evaluation process and include such
21 customers in any future DF Rate implementation phase.

²⁰¹ Exh. SDGE-05-2R at 5.

1 The Commission should also carefully consider the interaction between DF Rates
2 and other customer-facing demand-side programs, including demand response programs,
3 managed charging initiatives, distributed energy resource programs, and future load-
4 management offerings. Issues related to dual enrollment continue to be actively evaluated
5 in other Commission proceedings.²⁰² Consequently, any restrictions on customer
6 eligibility, participation, compensation, or dual enrollment in SDG&E's Proposed DF Rate
7 design should remain consistent with broader Commission policy determinations and
8 should not prejudice outcomes being considered in parallel proceedings.

9 In summary, the Commission should ensure that SDG&E's Proposed DF Rate
10 design comply with cost causation and ratepayer indifference requirements, require
11 SDG&E to evaluate and integrate participation opportunities for NEM and NBT
12 customers, and maintain flexibility regarding dual enrollment in DR and other demand
13 flexibility programs to remain consistent with ongoing Commission policy development.

14 **E. CCA Collaboration and Coordination**

15 **Q: Finally, should the Commission condition approval of the Application on SDG&E**
16 **collaborating with the SD CCAs on DF Rate development?**

17 A: Yes, as discussed in detail in Chapter V, the Commission should require SDG&E to
18 participate in a formal, structured coordination and collaboration process with the SD
19 CCAs throughout both the design and implementation of the Proposed DF Rates. Because
20 the SD CCAs serve approximately 80 percent of electric load within SDG&E's service
21 territory, meaningful collaboration is essential to effective rate design, program

²⁰² R.25-09-004 (Order Instituting Rulemaking to Enhance Demand Response in California), *Assigned Commissioner's Scoping Memo and Ruling* (Feb. 12, 2026) at 3 (dual participation).

1 development, ME&O, technology integration, billing implementation, evaluation, and
2 continuous improvement. Such a process should provide for regular engagement,
3 information sharing, joint planning, and stakeholder review of key program elements
4 before implementation decisions are finalized.

5 **F. Conclusion**

6 **Q: Do you have any concluding thoughts you would like to share?**

7 A: Yes. The SD CCAs thank the Commission for the opportunity to provide these intervenor
8 opening comments. As filed, the approvals sought in SDG&E's Application are not just
9 and reasonable. The SD CCAs have presented specific recommendations for modification
10 to the Application and conditions to approval in alignment with D.23-04-040, D.25-08-
11 049, the questions posed in the Scoping Memo, and other aspects of California law and
12 Commission policy. The SD CCAs hope to collaborate with SDG&E to repair the
13 deficiencies in the Application and to be in a position to offer dynamic rates to their
14 unbundled customers and help to support California's policy objectives for demand
15 flexibility.

16 **Q: Does this conclude your opening testimony at this time?**

17 A: Yes, it does.

EXHIBIT A

Witness Resumes

Resume for Lucas Utouh

PROFESSIONAL EXPERIENCE

Senior Director Data Analytics and Customer Operations

San Diego Community Power

(2021 to Present)

Responsible for the development, evaluation, and implementation of San Diego Community Power's rate design proposals and related analyses presented to executive leadership and the Board of Directors. Oversee data analytics, customer operations and information technology, supporting the organization's operational, financial, and regulatory objectives. Leads customer engagement strategies for residential, commercial, and industrial customers, with a focus on participation, retention, and access to community choice energy programs and services.

Community Choice Aggregation (CCA) Operations Manager

Calpine Energy Solutions

(2012 to 2021)

Managed market analysis and operational functions related to California investor-owned utility tariffs, Advice Letters, Applications, Commission decisions, CCA rate implementation, program operations, and revenue billing processes across Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company service territories. Supported regulatory compliance and implementation activities for multiple California Community Choice Aggregation programs.

Quality Assurance Analyst

Bank of America

(2010 to 2012)

Responsible for multiple audits and statistical sampling and analysis of defaulted transactions on loans provided by the Federal Housing Administration (FHA), Veteran Affairs (VA), Government National Mortgage Association (GNMA), Taylor, Bean, and Whitaker (TBW), and EverBank.

EDUCATION AND CERTIFICATIONS

Master of Business Administration, California State University San Bernardino, 2016

Bachelor of Science, Accounting and Finance, Minnesota State University, Mankato, 2010

PREPARED TESTIMONY AND EXPERT REPORTS

1. California Public Utilities Commission Application A.21-12-006/A.21-12-007
Prepared Direct Testimony on behalf of San Diego Community Power regarding Application of San Diego Gas & Electric Company (U 902 E) for Approval of Real Time Pricing Pilot Rate. January 30, 2023.

Resume for Yichen (Aaron) Lu

PROFESSIONAL EXPERIENCE

Rates and Strategy Manager San Diego Community Power (2023 to Present)

Specialist in electric utility rate design, development, and planning. Typical assignments include analysis and strategy development in complex rate development and implementation efforts, analysis, testimony preparation and strategy development in large, complex regulatory intervention efforts regarding rates.

Electric Fuel and Procurement Principal Origination Analyst San Diego Gas and Electric Company (2021 to 2023)

Responsible for leading and coordinating complex multi-year horizon electric utility resources procurement efforts and analysis and strategy development in large, complex regulatory intervention efforts regarding resource planning and procurement.

Energy Research and Analysis Project Manager San Diego Gas and Electric Company (2019 to 2021)

Responsible for analyzing electric load forecast efforts to reflect load departure scenarios, using statistical modeling and managing partnerships with stakeholders on customer choice initiatives.

Energy Management and Regulatory Program Manager City of San Diego (2016 to 2019)

Responsible for energy consumption and billing forecasting and tracking and analysis and strategy development in large, complex regulatory intervention efforts regarding rates.

Senior Rates Regulatory Analyst Public Advocates Office, California Public Utilities Commission (2015 to 2016)

Responsible for analysis, testimony preparation and strategy development in large complex regulatory intervention efforts regarding rates. Conducted technical analysis on rate design and revenue allocation in General Rate Case phase 2 proceeding through production cost and loss of load expectation modeling.

Senior Demand Side Regulatory Analyst Energy Division, California Public Utilities Commission (2013 to 2015)

Responsible for oversight of energy efficiency ex-ante review and support on development of statewide energy efficiency savings potential and goal setting.

EDUCATION AND CERTIFICATIONS

Master of Environmental Management, Energy, Duke University, 2013
Bachelor of Science, in Environmental Systems, University of California San Diego, 2009
Bachelor of Science, Neuroscience and Physiology, University of California San Diego, 2009

Certified Energy Manager (CEM) Certified
Leadership in Energy and Environmental Design (LEED) Green Associate Certified

PREPARED TESTIMONY AND EXPERT REPORTS

1. California Public Utilities Commission Application 15-04-012
Prepared Testimony on behalf of the Office of Ratepayer Advocates regarding San Diego Gas and Electrics 2016 General Rate Case Phase 2, Chapter 6 Revenue Allocation. June 3, 2016.

Resume for Pete Polonsky

PROFESSIONAL EXPERIENCE

Senior Rates Analyst San Diego Community Power (2025 to Present)

Responsible for electric utility rate design, development, and planning. Typical assignments include analysis and strategy development in complex rate development and implementation efforts, analytical support for rate-related initiatives, and strategic support in rate-related regulatory proceedings.

Utility Analyst II Hawaii Public Utilities Commission (2021 to 2024)

Responsible for energy and economic analysis on a wide range of dockets, including distributed energy resource program development, integrated grid planning, resource procurement, innovative rate design, and incorporating energy equity into analysis and decision-making. Responsible for developing communication materials, facilitating public meetings, presenting externally on solar energy compensation policies, and testifying on behalf of the Commission to the state legislature.

Clean Energy Innovator Fellowship Hawaii Public Utilities Commission (2020 to 2021)

Researched two projects on the best practices for end-of-life management of renewables in Hawaii and the impact of COVID-19 on grid-scale dispatch and curtailment operational data for the island of Oahu.

EDUCATION AND CERTIFICATIONS

Master of Advanced Studies in Climate Science and Policy, University of California, San Diego, 2025
Bachelor of Arts, in Public Policy Studies, Duke University, 2020

EXHIBIT B

Declaration of Michael Murray on Behalf of San Diego Community Power and Clean Energy
Alliance

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

Application of San Diego Gas & Electric Company (U 902 E)
for Approval of Demand Flexibility Rates Pursuant to
Decision 25-08-049

Application No. A.26-02-001
(Filed February 2, 2026)

**DECLARATION OF MICHAEL MURRAY
ON BEHALF OF SAN DIEGO COMMUNITY POWER
AND CLEAN ENERGY ALLIANCE**

1. My name is Michael Murray. I am the President and a co-founder of Mission:data Coalition (“Mission:data”), a national coalition of over 20 technology companies that deliver data-enabled distributed energy resources and energy-management services to residential, commercial, and industrial customers. My business address is 7511 Greenwood Avenue North #1809, Seattle, Washington 98103. I make this declaration in support of the direct testimony of San Diego Community Power (“SDCP”) and Clean Energy Alliance (“CEA”) (collectively, the “SD CCAs”) in this proceeding, and specifically in support of the factual statements in the SD CCAs’ testimony regarding the technical capabilities of advanced metering infrastructure (“AMI”) to provide near real-time customer electricity-usage data to customers and to third parties authorized by customers, including load-serving entities (“LSEs”) such as the SD CCAs.
2. I have over twenty years of experience with building automation, energy management, metering, and public utility regulation. In 2004, I co-founded Lucid, an energy-management software company serving commercial building owners, where I helped develop “Building Dashboard,” one of the first real-time displays of energy usage available on the internet. I have worked for Mission:data since 2013. I have testified before the public utility commissions of California, Colorado, Georgia, Missouri, New Hampshire, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, and Texas on issues concerning customer energy data access, advanced metering, and the benefits of electronic access to energy usage data. I earned my B.A., with highest honors, from Oberlin College.
3. Mission:data advocates for customer-friendly data access policies throughout the United States in order to enable an innovative market for energy management services. As part of that work, Mission:data maintains and publishes an interactive map (the “Mission:data Map”) identifying electric utilities around the country that currently make near real-time customer energy usage data available to customers and to third parties authorized by customers, directly from smart meters. The Mission:data Map is available at: <https://explorer.missiondata.io/?display=utilities%3ArealTimeElectricUsage>.
4. The purpose of this declaration is to explain, as a technical and factual matter, the existing capabilities of AMI meters—both the first-generation “AMI 1.0” meters (including the Itron meters currently deployed by San Diego Gas & Electric Company (“SDG&E”)) and newer “AMI 2.0” meters (including Itron and Landis+Gyr meters)—to transmit highly-granular customer usage data to a customer and to third parties authorized by the customer, including

the customer's LSE, within a few seconds of power flow, without first routing that data through the utility's head-end system ("HES") or back-office processing.

5. The facts stated in this declaration are based on my personal knowledge, my professional experience, and my review of industry implementations of AMI technology. Where I describe a capability or architecture as "technically feasible," I mean the capabilities of the metering technology and the system architecture required to achieve the data transmission described. I distinguish between capabilities that have been actually deployed in operating utility systems and those that are technically feasible but are not in operation by utilities to my knowledge.
6. I use the following terms as defined below:
 - a. "AMI 1.0" or "Smart Meter 1.0" means the first generation of smart meters with two-way communications capability, including the Itron meters currently deployed in SDG&E's service territory.
 - b. "AMI 2.0" or "Smart Meter 2.0" means newer-generation advanced meters, including certain Itron and Landis+Gyr models.
 - c. "HAN device" means a device located at a utility customer's premises that can receive near real-time customer energy usage data directly from the customer's meter and can communicate with the broader internet.
 - d. "Home Area Network" or "HAN" means a local communications network at a customer's premises, to which the advanced meter (whether AMI 1.0 or AMI 2.0) is connected.
 - e. "HES" or "head-end system" means the utility's central system that collects data from meters over wide-area networks.
 - f. "Interval data" means measurements of customer electricity consumption recorded at standard intervals, such as every five minutes, fifteen minutes or one hour.
 - g. "ZigBee" means a radio-frequency communications standard used by AMI 1.0 meters to transmit near real-time usage data to HAN devices.
 - h. "Power flow" means the point in time in which electricity has been used by the customer as measured by the customer's meter.
7. "Near real-time," as used in this declaration, means within a few seconds of the power flow being measured. I do not recommend defining "near real-time" to mean "within one minute" or longer, because deployed AMI systems nationwide already deliver near real-time usage data to customers and authorized third parties within a few seconds.
8. AMI 1.0 meters, including the Itron meters currently in use in SDG&E's distribution territory, are technically capable of transmitting near real-time usage data to a HAN device at the customer premises via ZigBee radio frequency within a few seconds of power flow.
9. A HAN device paired with the AMI 1.0 meter receives the near real-time usage data and, in turn, is capable of transmitting that data to any internet destination ("URL") designated by the customer, including a third-party energy-management vendor, a community choice aggregator, or other LSE, within a few additional seconds. The total elapsed time from power flow to receipt by the designated third party at the URL is as short as six to eight seconds. This pathway requires only that ZigBee connectivity be enabled on the meter and that SDG&E connects or "pairs" the HAN device to the meter upon customer request. Customers then configure the HAN device to transmit to the customer's desired destination.
10. Under the pathway described in paragraph 9, the near real-time usage data does not pass through the utility's HES or back-office systems before reaching an off-site third party. The

data moves locally from the meter to the HAN device, and then over the internet directly to the recipient.

11. The utility's back-office processing—including validation, estimation, and editing (“VEE”) and reformatting for billing and settlement—is not a technical prerequisite for the meter to transmit near real-time data to a customer's HAN or offsite third party. Such processing is necessary and appropriate for billing-quality data used for billing and financial settlement, but it is not necessary for making near real-time usage data available to customers and third parties, such as CCAs.
12. Near real-time usage data access through the ZigBee/HAN pathway described above is not theoretical. It is deployed and operating today in numerous utility distribution territories across the United States, including those of Pacific Gas and Electric Company (“PG&E”) and Southern California Edison Company (“SCE”), NV Energy, Ameren Illinois Company, and various utilities in Pennsylvania, among others. The Mission: data Map identifies these and other jurisdictions in which near real-time customer energy-usage data are currently available directly from smart meters.
13. The AMI 1.0 meters deployed in SDG&E's service territory possess the same ZigBee technical capability described above. However, I understand that SDG&E has discontinued ZigBee/HAN connections on its AMI 1.0 meters. As a result, the near real-time usage data pathway described in paragraphs 8 through 11 is not currently available to customers, third parties like energy efficiency or demand response vendors, or CCAs in SDG&E's service territory, notwithstanding the technical capability of the installed meters to support it. This is a limitation arising from an SDG&E operational decision, not from a limitation of the meter technology itself.
14. Newer AMI 2.0 meters are also capable of transmitting near real-time usage data over Wi-Fi networks located at the customer's premises. After a Wi-Fi device is paired with the meter, AMI 2.0 meters can transmit near real-time usage data to the device as frequently as every one second using the IEEE2030.5-2018 protocol (specifically the “meter set” functionality). This local network traffic passes through the customer's router. The paired Wi-Fi device can then transmit the near real-time usage data to any third party, including a community choice aggregator or other LSE, an energy-management vendor, or any authorized internet destination—within a few seconds of power flow. The customer must configure the device to transmit to the designated destination; in some AMI deployments, the Wi-Fi device is pre-programmed to deliver data to a specific destination, making it more convenient for customers. I am aware that this AMI 2.0 Wi-Fi pathway is currently deployed and operating in the service territories of Xcel Energy in Minnesota and Colorado.
15. It is also technically feasible for some AMI 2.0 meters to transmit near real-time usage data directly to a third-party URL over the internet without a separate Wi-Fi device at the customer premises. Under this pathway, the customer would direct the utility—for example, through the utility's web portal—to send the customer's near real-time usage data to a URL designated by the customer, such as a community choice aggregator's designated URL. The utility would transmit such URL to the meter, which would take as little as a few minutes to set up. Once the URL is received by the meter, the meter would then transmit the near real-time usage data to that URL over the internet within seconds of power flow. This direct-transmission architecture is technically feasible where the meter operates on a Linux-based operating system and is joined to the customer's Wi-Fi network. I am aware that both Itron and Landis+Gyr AMI 2.0 meters operate on Linux-based operating systems, and I am aware that expert

witnesses have testified to the technical feasibility of this direct-transmission architecture for both manufacturers' meters.

16. I am not aware of any utility in the United States that has deployed the direct-transmission architecture described in paragraph 15 (i.e., without such near real-time usage data going through an on-premises device) as of the date of this declaration. I therefore describe it as technically feasible but not deployed to my knowledge. An analogous direct transmission of real-time usage data over the internet is, however, achieved today through customer-installed submetering devices for residential, commercial and industrial customers, in which a separate metering device (not a utility meter, but an off-the-shelf meter purchased by customers) installed at the premises transmits real-time usage data to any designated internet destination. Multiple manufacturers sell meters to customers directly with this capability today.
17. I understand that SDG&E is considering AMI 2.0 meters under which near real-time customer data may be made available to customers through a proprietary application. Routing near real-time data exclusively through a proprietary application makes third-party data access more restrictive than the open-pathway architectures described above. Providing direct, meter-to-URL transmittal outside of the proprietary application is technically possible, but I am not aware of any utility that has implemented such access today.
18. In summary: (a) AMI 1.0 meters, including SDG&E's existing Itron meters, are technically capable of providing near real-time usage data to customers and to offsite third parties, including the customer's LSE, within a few seconds of power flow, via the ZigBee/HAN pathway, without routing the data through the utility's HES or back-office systems; this capability is deployed and operating today in numerous U.S. utility territories, including PG&E's and SCE's; (b) AMI 2.0 meters are similarly capable of providing near real-time usage data to both customers and offsite third parties, via on-premises Wi-Fi devices (a pathway deployed today), and, as a technically feasible architecture, via direct meter-to-recipient transmission without a separate on-premises Wi-Fi device; and (c) "near real-time," as these capabilities are actually deployed, means within a few seconds of power flow—not within one minute or longer.
19. I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 11th day of September, 2026, at Seattle, Washington,

/s/ Michael Murray

Michael Murray

President, Mission:data Coalition

EXHIBIT C

SDG&E Responses to SD CCAs' Discovery in A.26-02-001

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

OBJECTIONS TO INSTRUCTIONS

1. SDG&E objects to the instructions to the extent they purport to require the individual(s) responsible for providing the response and/or designate the proper witness to cross-examine concerning the response. The responses reflect SDG&E's response as a Company to the requests and not the work of any one individual.
2. SDG&E objects to the instructions to the extent they state that the requests are ongoing in nature and require subsequent, supplemental information.
3. SDG&E objects to the instructions to the extent they request responses in multiple formats.
4. SDG&E objects to the instructions to the extent they provide shortened timelines for objections and requests for clarification.

EXPRESS RESERVATIONS

1. No response, objection, limitation or lack thereof, set forth in these responses and objections shall be deemed an admission or representation by SDG&E as to the existence or nonexistence of the requested information or that any such information is relevant or admissible.
2. SDG&E reserves the right to modify or supplement its responses and objections to each request, and the provision of any information pursuant to any request is not a waiver of that right.
3. SDG&E reserves the right to rely, at any time, upon subsequently discovered information.
4. These responses are made solely for the purpose of this proceeding and for no other purpose.

Subject to the foregoing general objections and express reservations, SDG&E responds as follows:

Question 1.01

Please refer to the Prepared Testimony of Jeff DeTuri on Behalf of San Diego Gas & Electric Company Chapter 4 –Customer Protection (“SDGE-04”) at page 3, line 17, through page 4, line 11, where SDG&E describes the Proposed DF Rate price limits of \$750/MWh (price ceiling) and \$0/MWh (price floor) for the Marginal Energy Cost, and describes the 2022-2024 three-year history of CAISO prices used to develop those price limits.

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

Question 1.01a

Provide all workpapers that led to the identification of the \$750/MWh price ceiling and \$0/MWh price floor.

SDG&E Response 1.02a:

Please see workbook “Ch4_Price Cap and Floor.”

Question 1.01b

Please explain whether SDG&E investigated price floors and price ceilings in the dynamic rate pilots of other California LSEs. If so, please provide such research and any documents that discuss, consider, analyze, or otherwise contain information comparing SDG&E's proposed price floors and price ceilings with those of the other California LSEs.

SDG&E Response 1.02b:

SDG&E did not investigate the price floors and ceilings of other dynamic rate pilots.

Question 1.01c

How often does SDG&E propose to update these price limits?

SDG&E Response 1.02c:

SDG&E has not yet determined how often the price limiters will need to be updated but anticipates that they could be updated as part of the GRC Phase 2 proceeding.

Question 1.01d

Describe what data will inform SDG&E's future updates to the price limits.

SDG&E Response 1.01d:

SDG&E has not yet determined what data may be used or considered in updating the price limits but notes that potential data could include prices, load, and revenue.

Question 1.02

Please refer to SDGE-04 at page 5, line 17, through page 7, line 7, where SDG&E provides the estimated annual bill comparison in dollars between the current rate and Proposed DF Rates for four customer classes (Table JDT-1) and the estimated monthly bill ranges for those same customer classes (Table JDT-2).

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

Question 1.02a

Please explain how the annual bill impacts in Table JDT-1 and the bill ranges in Table JDT-2 were calculated.

SDG&E Response 1.02a:

Bill impacts (Table JDT-1) were calculated as follows:

For the “Current Rate,” SDG&E used an average usage customer on the default rate for each customer class and determined their average annual usage. The average annual bill was then calculated using the effective rate at the time of filing (10/1/2025 rate change).

For the “Proposed DF Rate” values, SDG&E used the same average annual usage for each customer class as for the “Current Rate,” and calculated the estimated annual bill under the relevant Proposed DF Rate, using proposed hourly dynamic prices for MEC, top 150 hours for MGCC, top 200 hours based on circuit clustering for distribution and time of use transmission for residential, small commercial and agriculture customers, while M/L C&I transmission costs continue to be based on non-coincident and on-peak demand charges.

Bill ranges (Table JDT-2) were calculated by subtracting the lowest monthly bill amount from the highest monthly bill amount.

Question 1.02b

Please provide all workpapers used and relied upon to develop the estimates in Tables JDT-1 and JDT-2.

SDG&E Response 1.02b:

Please see workbooks, “RTPImport_BillCalc_Workpaper_Present” and “RTPImport_BillCalc_Workpaper_Proposed”. Note that the bill calculation workbooks and therefore the Table JDT-1 and JDT-2 that rely on them will be corrected, updated for the 4/1/2026 rate change, and expanded to include the new medium class in the June 1st, 2026 Supplemental Filing.

Question 1.02c

Please list the lowest- and highest-bill months for each customer class in Table JDT-2.

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

SDG&E Response 1.02c:

Please see the table below.

Class	Current Rate				Proposed DF Rate			
	Lowest Month	Lowest Amt	Highest Month	Highest Amt	Lowest Month	Lowest Amt	Highest Month	Highest Amt
Res	Jun	\$ 220.68	May	\$ 246.74	Jun	\$ 164.45	Sep	\$ 300.88
SmCom	Nov	\$ 773.98	Aug	\$ 1,150.55	May	\$ 420.24	Sep	\$ 1,100.97
M/L C&I	Feb	\$122,947.97	Jul	\$179,983.85	May	\$76,793.74	Sep	\$376,937.61
Ag	Feb	\$ 1,158.40	Aug	\$ 2,949.53	Mar	\$ 1,087.04	Sep	\$ 4,847.90

Question 1.02d

Please explain why Small Commercial is expected to save the most on monthly bills under the Proposed DF Rates.

SDG&E Response 1.02d:

SDG&E discovered errors in its calculation for the referenced table and table JDT-1 in Ex. SDGE-04. These tables will be corrected, updated for the 4/1/2026 rate change, and expanded to include the new medium commercial class in the June 1st, 2026 Supplemental Filing.

Question 1.02e

What proportion of the estimated cost savings are expected to be attributed to the commodity/generation component of the rates, and what proportion of those cost savings are expected to be attributed to the distribution and transmission components of the rates?

SDG&E Response 1.02e:

SDG&E objects to this request to the extent that it seeks analysis that has not been performed. SDG&E is providing its workbooks with this data request and the data provided should permit the SD CCAs to conduct its own analysis.

Question 1.03

Please refer to pages 174 and 244 through 245 of the Track B Working Group Report and Notice of Availability filed by SCE on October 11, 2023, in R.22-07-005 (“R.22-07-005 Track B Working Group Report”), where the report discusses how the lack of a developed “Price Machine” requires IOUs to use their own rates as a proxy for CCA rates on bills and thereby limits the data needed for CCA customers to make purchasing decisions.

Question 1.03a

Please describe the current status of the “Price Machine.”

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

SDG&E Response 1.03a:

SDG&E objects to this request on grounds that it is vague and ambiguous as to what is meant by “Price Machine” and its implication that any one definition of “price machine” exists. SDG&E further objects to this request on grounds that it assumes facts that do not exist by to the extent it implies that the report concludes that “the lack of a developed ‘Price Machine’ requires IOUs to use their own rates as a proxy for CCA rates on bills and thereby limits the data needed for CCA customers to make purchasing decisions.” The language on pages 244-245 which the question references and from which this question appears to be formulated is based on language included in the working group report by CalCCA. SDG&E does not agree that IOUs use their own rates as a proxy for CCA rates on bills, other than for the very limited purpose of calculating CARE discounts for CCA customers, and SDG&E further does not agree that it would have to use its own rates as a proxy for CCA rates on bills for purposes of the proposed DF rates. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

The references to the “Price Machine” on pages 174 and 244-245 of the Working Group report appear to reference to “price machine” described in the CalFUSE White Paper. SDG&E is not aware of any Commission approval of such a “price machine,” Commission guidance on the referenced “price machine,” or current status of such a “price machine.”

Question 1.03b

Please state whether the “Price Machine” or some variation thereof is part of SDG&E’s Proposed DF Rates in this proceeding.

SDG&E Response 1.03b:

See objections and response to 1.03(a) above.

Question 1.04

Please refer to pages 244 through 245 of the R.22-07-005 Track B Working Group Report, where SDG&E proposed “to create an online portal, for both bundled and unbundled customers, that would allow customers to view and download specific pricing and charges for a bill period,” presented as a response to SDG&E Barrier #3 (“Potential Non-Equivalent Bill Presentment under RTP”), which prevents unbundled customers from “receiving equivalent information to make informed choices with respect to TOU and RTP.”

Question 1.04a

Please state whether SDG&E proposes to implement such an online portal as part of its Proposed DF Rates.

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

SDG&E Response 1.04a:

SDG&E objects to this request as misstating the Track B Working Group Report. SDG&E further objects to this request as seeking information included in its Application and accompanying testimony. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

SDG&E's proposal with respect to communicating the hourly pricing proposed in A.26-02-001, Chapter 5, and includes a webpage for participating bundled and unbundled customers to access hourly price information. (Ex. SDGE-05 at page 7.) The website may differ from the online portal discussed in the Track B Working Group. For instance, SDG&E does not anticipate that pricing from the webpage will be downloadable.

Question 1.04b

Please state whether SDG&E intends to present its own rate as a proxy for CCA rates on customers' bills.

SDG&E Response 1.04b:

SDG&E objects to this request as vague and ambiguous as to specific customer situation and rate enrollment being referenced. For purposes of its response, SDG&E assumes that the question is seeking information about a CCA customer enrolled in SDG&E's DF delivery rate and a CCA non-DF commodity rate. This assumption is based on SDG&E's understanding, as communicated in its Application, that the CCAs are not currently developing a DF commodity rate. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

SDG&E's does not intend to use its DF commodity rate as a proxy for CCA rates. SDG&E intends to bill CCA customers based on CCA rate schedules provided to SDG&E in the same manner as it currently does.

Question 1.05

Please refer to SDGE-04 at page 8, lines 7 through 10, where SDG&E witness DeTuri provides Table JDT-4 showing how often the price ceiling and price floor would have been applied based on historical CAISO prices covering years 2022 through 2024.

Question 1.05a

Did SDG&E analyze how often the price ceiling and price floor would have been applied based on historical CAISO prices in 2021 and 2025? If yes, please provide the results of that analysis. If not, please explain why not.

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

SDG&E Response 1.05a:

SDG&E did not apply the proposed price ceiling and floor to 2021 and 2025. SDG&E considers three years a sufficient sample size and used years 2024, 2023, and 2022 of historical CAISO hourly prices. Additionally, the further the analysis goes back in history the less relevant the market data will be due to changing market conditions. SDG&E did not use 2025 historical CAISO data because the full year of data was not available when SDG&E conducted the analysis in advance of filing the application on February 2, 2026.

Question 1.05b

Please explain why the number of hours with negative prices in year 2024 was so high relative to the number of hours with negative prices in years 2022 and 2023.

SDG&E Response 1.05b:

SDG&E objects to this request on grounds that it does not have sufficient knowledge or information on which to respond. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E does not know why the number of negative hours in 2024 was higher than 2022 or 2023. However, as a general matter, SDG&E understands that negative prices result when supply exceeds demand. It is possible that there may be other reasons negative prices may occur.

Question 1.06

Please refer to the Prepared Testimony of Jeff DeTuri on Behalf of San Diego Gas & Electric Company Chapter 2 – Commodity/Generation (“SDGE-02”) at page 3, lines 16 through 19, where SDG&E witness DeTuri states that “[t]he cost of new entry approach to calculating the MGCC is the same as what SDG&E uses in calculating the GRC Phase 2 generation commodity costs, which SDG&E was specifically ordered to update pursuant to the GRC Phase 2 decision.” (citing D.25-09-006 at 24).

Question 1.06a

If approved, does SDG&E plan to update its Proposed DF Rates annually to incorporate updated MGCC values? If so, does SDG&E intend to file its MGCC updates jointly with PG&E and SCE as required by D.25-08-049, Ordering Paragraphs 4 and 5?

SDG&E Response 1.06a:

SDG&E objects to this request as misstating the language of D.25-08-049. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E will comply with the language in D.25-08-049, including Ordering Paragraphs 4 and 5.

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

Question 1.06b

If SDG&E intends to file its MGCC updates jointly with PG&E and SCE as required by D.25-08-049, Ordering Paragraphs 4 and 5, please explain why SDG&E, PG&E, and SCE did not file an update to their MGCCs on March 31, 2026, in Advice Letter 4827-E, et al.

SDG&E Response 1.06b:

As stated in Advice Letter 4827-E, et al.:

“The Joint IOUs interpret OP 4 and OP 5 as applying exclusively to the forward-looking dynamic rate proposals addressed in the Guidance Decision and ordered in OPs 1, 2, and 3 of that decision. Given that no dynamic or RTP rate design has been approved or adopted in any of these pending ratesetting proceedings, the Joint IOUs do not have any updated marginal generation capacity costs to report.”

Question 1.06c

Please confirm that SDG&E’s proposed MGCC methodology in this proceeding is not specifically designed to be the same as SCE’s and PG&E’s MGCC methodology in their respective DF rate proposals.

SDG&E Response 1.06c:

SDG&E objects to this request as vague and ambiguous as to its reference to the “DF rate proposals” of SCE and PG&E. SDG&E understands that SCE and PG&E have implemented DF pilot rates and that they are seeking to update those pilot rates in various ways. For purposes of this question, SDG&E interprets “DF rate proposals” as supplemental rate design testimony submitted by PG&E or SCE in response to the language in D.25-08-049. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E can confirm that it did not specifically design its MGCC methodology to be the same as SCE and PG&E in their respective DF rate proposals.

Question 1.07

Please refer to SDGE-02 at page 4, lines 7 through 9, and at page 12, Table JDT-2. Please explain how SDG&E used the MGCC value of \$189/kW-yr to calculate the MGCC based values shown in Table JDT-2.

SDG&E Response 1.07

SDG&E used the \$189/kW-yr as the starting point to calculate the marginal capacity cost as shown in workbook “Ch2_Marg Gen Comm Cost-Top150 (CONFIDENTIAL)” on tab “Capacity Marginal Cost”. The values from Table JDT-2 were calculated in workbook “Ch2_MGCC Rate Workbook” with each tab separately calculating the MGCC for each class.

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

Question 1.08

Please refer to Chapter 2 of A.24-09-014, PG&E 2023 General Rate Case Phase II Supplemental Testimony, Real- Time Pricing Proposal (Exh. PG&E-5) (Oct. 29, 2025),¹ page 2-3, where it states that “PG&E is working with interested CCAs to provide options to develop more customized dynamic generation rates for their customers if necessary.”

Question 1.08a

Does SDG&E intend to collaborate with CEA and SDCP to develop CCA-specific demand flexibility generation rates? If so, please describe SDG&E’s plans for such collaboration.

SDG&E Response 1.08a:

SDG&E included its description of its collaboration with CEA and SDCP in Chapter 1 of its Application testimony. (Ex. SDGE-01 at pages 11-12). As stated therein, SDG&E presented its proposed rate designs in two separate collaborative sessions with CEA and SDCP. The issue of developing CCA-specific DF generation rates was not raised by either CCA in either meeting. Further, prior to those meetings, CEA and SDCP filed Load Management Standard Compliance Plans on the CEC’s public docket indicating that they did not intend to develop LMS compliant DF rates without review of pilot study results, and in CEA’s filing, it indicated that CEA did not intend to offer DF rates until it had “assess[ed]” the results from delayed *SDG&E* dynamic rate pilots....”² Accordingly, given that (1) SDG&E was aware of the SD CCAs’ public CEC filings and (2) that the SD CCAs did not express any interest in further collaboration on a CCA DF rate at either of the two meetings set up for the express purpose of collaboration, SDG&E was unaware of any interest by either of the SD CCAs in developing a DF rate. If CEA and/or SDCP have changed their mind and is now interested in developing CCA-specific demand flexible generation rates, SDG&E is open to collaboration and discussion.

Question 1.09

Please describe the technical process by which SDG&E and/or any affiliate of SDG&E and/or Sempra Energy (“Affiliate”) first receives SDG&E distribution customers’ smart meter interval data.

SDG&E Response 1.09:

Smart Meter (SM) data is requested nightly by the SDG&E Head End System (HES) from SDG&E’s Smart Meters. This nightly request retrieves data after midnight for the last 24 hours

¹ Available at: <https://pgera.azurewebsites.net/Regulation/ValidateDocAccess?docID=849281>

² Ex. SDGE-01 at page 12 (citing Clean Energy Alliance, Clean Energy Alliance Load Management Standards Compliance Plan, Staff Report (April 1, 2025) at 3 of 4, available at: <https://efiling.energy.ca.gov/GetDocument.aspx?tn=262584#:~:text=LMS%20are%20designed%20to%20encourage,owned%20utilities%20and%20large%20CCAs>) (internal emphasis added)

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

of electric interval data and gas usage. The HES sends the data to the Meter Data Management System (MDMS) where the data is processed, and VEE (validations, edits, and estimation) is performed. Once the data is processed by the MDMS, it is sent to the Customer Information System (CIS). The CIS performs additional processing and then uses the data for billing, customer presentment, and to populate the CIS data lake, CCA data lake, and the Meter Data Processing System used by the energy procurement function. Once the data is in the CIS data lake, multiple organizations can use the data for their own business purposes such as energy efficiency and demand response, distributed energy resource integration, market settlement & regulatory reporting, and grid planning and asset management.

Aggregated gas usage data is also sent daily from the MDMS to a core gas customer report. Aggregated quarterly gas and electric data is also used for Energy Data Access regulatory reporting. Consumption data is also sent to the Engineering Data Warehouse where it's used by electric distribution teams for reliability and grid operations.

Question 1.10

Which is the first SDG&E corporate entity or Affiliate to receive the data described in 1.09 above?

SDG&E Response 1.10:

SDG&E is the first entity that receives SDG&E distribution customers' smart meter interval data.

Question 1.11

Which department or division within SDG&E or its Affiliate described in 1.10 above first receives such data?

SDG&E Response 1.11:

SDG&E's Smart Meter IT department is the first department that receives SDG&E distribution customers' smart meter interval data.

Question 1.12

How many seconds after customer load is measured via a customer smart meter is such customer's energy usage data first transmitted from the first entity to receive it described in 1.10 above to:

Question 1.12a

an Affiliate (if applicable)?

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

SDG&E Response 1.12a:

Not applicable.

Question 1.12b

a separate SDG&E department or division (if applicable)?

SDG&E Response 1.12b:

As discussed in question 1.09 above, SDG&E starts receiving the last 24 hours of interval data from its distribution customers' smart meters starting at midnight and continuing until approximately 9:00am when the VEE-validated data is sent to the CIS for additional processing. At this point, the data is between nine and thirty-three hours (32,400 – 118,800 seconds) from when the load was measured via a customer smart meter.

Question 1.13

After the first entity described in 1.10 above receives customer smart meter energy usage data, please describe every other Affiliate or internal SDG&E department and/or division, and every other third party, that receives such data, and the number of seconds in which such data are received by such Affiliate, department, division, or third party.

SDG&E Response 1.13:

SDG&E objects to this request under Rule 10.1 of the Commission's Rules of Practice and Procedure to the extent it seeks the production of information that is neither relevant to the subject matter involved in the pending proceeding nor is likely reasonably calculated to lead to the discovery of admissible evidence. SDG&E further objects to this request under Rule 10.1 of the Commission's Rules of Practice and Procedure on the grounds that the burden, expense and intrusiveness of this request clearly outweigh the likelihood that the information sought will lead to the discovery of admissible evidence.

Question 1.14

Please refer to page 7 of Utility Consumers' Action Network's March 5, 2026 Response to the Application, quoting page 252 of the R.22-07-005 Track B Working Group Report, stating: "Each of the Joint IOUs collects interval data from (virtually) every smart meter and completes VEE processes to validate the data loaded into their respective Meter Data Management Systems at least two hours before CAISO's 10 AM demand-bid window each day."

Question 1.14a

Is the statement quote above accurate? If not, please explain why it is not accurate.

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

SDG&E Response 1.14a:

No. While most interval data has been collected from the Smart Meters by two hours before 10 AM, the data is not fully VEE-validated and ready for the CCAs until additional processing is performed by the Customer Information System (CIS) (see answer 1.14b below for additional information).

Question 1.14b:

Please explain why SDG&E is unable to provide that same VEE-validated data to CCAs when that data is loaded into the Meter Data Management Systems.

SDG&E Response 1.14b:

SDG&E objects this request as unintelligible in that it assumes facts that do not exist. For instance, it assumes that data is already VEE-validated when it is loaded in the MDMS. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

The data loaded into the Meter Data Management System (MDMS) has not been VEE-validated, the MDMS is the system that performs VEE-validations. For the data to be made ready for the CCAs, the data is sent from the MDMS to the CIS, and the CIS must also perform additional processing, including associating the meter data to both a customer and the CCA, reformatting the data into the CCA data schema, and performing additional estimations for complex metering scenarios.

Question 1.15:

Please refer to page 243 of the R.22-07-005 Track B Working Group Report, where SDG&E outlined its proposal to build a “technical solution for providing near real-time interval data” that would allow CCAs to access interval data through an “application programming interface (API),” then expected to be completed in 2023.

Question 1.15a:

Does SDG&E propose to roll out the API, as envisioned in the R.22-07-005 Track B Working Group Report, if its Proposed DF Rates are approved?

SDG&E Response 1.15a

SDG&E launched the data solution, including the API interface, to the CCAs in 2023 as expected. It is actively used by the CCAs today.

Question 1.15b:

If the API is not going to be offered along with SDG&E’s Proposed DF Rates, please provide a

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

status update on the progress of the API.?

SDG&E Response 1.15b

See response to Question 1.15a

Question 1.16:

Does SDG&E's Energy Supply & Dispatch group use customers' interval meter data or any derivative data in any way?

SDG&E Response 1.16

SDG&E objects to this request on the grounds that it seeks the production of information that is neither relevant to the subject matter involved in the pending proceeding nor is reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection and subject thereto, SDG&E responds as follows:

SDG&E's energy procurement function does not use customer-specific meter data. It receives interval load data 2-3 days after the powerflow.

Question 1.16a:

If yes, does the Energy Supply & Dispatch group use or have access to this data or any derivative data in any way before SDG&E uploads the data into the Meter Data Management System?

SDG&E Response 1.16a

Please see response to 1.16.

Question 1.16b

If the Energy Supply & Dispatch group uses or has access to that data or any derivative data after SDG&E uploads that data into the Meter Data Management System, describe SDG&E's process for ensuring that CCA have access to the data at the same time the Energy Supply & Dispatch group has access to the data. If SDG&E has no such process for ensuring that CCA have access to the data at the same time the Energy Supply & Dispatch group has access to the data, please so state.

SDG&E Response 1.16b

Please see response to 1.09 and 1.16.

Question 1.16c

Describe the latency with which the Energy Supply & Dispatch group receives customer interval meter data or derivative data relative to when CCAs receive that same data.

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

SDG&E Response 1.16c

Please see responses to 1.09, 1.12, and 1.16.

Question 1.17

Please refer to Prepared Testimony of Jeff DeTuri on Behalf of San Diego Gas & Electric Company Chapter 1 – Policy (“SDGE-01”) at page 12, line 24, through page 13, line 21, where SDG&E witness DeTuri discusses CAISO’s day-ahead and 15-minute and 5-minute real-time markets in which the Proposed DF Rates could operate. Please explain how SDG&E has used and intends to use real-time or near real-time interval meter data to design, analyze, and monitor the pricing in the Proposed DF Rates derived from these markets.

SDG&E Response 1.17

SDG&E’s Application does not propose use of the sub-hourly or day-of real-time markets for its Proposed DF Rates.

Question 1.18

Please provide examples of displays and materials that SDG&E intends to provide to customers that would allow the customers to understand how the Proposed DF Rates work.

SDG&E Response 1.18

SDG&E’s proposed customer-facing displays and educational materials for DF rates are described at a high level in Chapter 6 – Marketing (Ex. SDGE-06). The specific content, format, and presentation of these materials will be informed by customer research, insights gained after implementation of the DF rates, including the proposed measurement and evaluation, and will be developed and refined after the DF rates are approved.

Question 1.19

Will the SDG&E-provided displays and materials allowing customers to understand how the Proposed DF Rates work be differentiated for residential and non-residential customers and/or specific customer classes?

SDG&E Response 1.19

As described in testimony, SDG&E’s ME&O approach is grounded in customer segmentation and the use of customer insights to customize communications for various customer segments, including residential, commercial, agricultural, and specific subgroups such as small business, low-income, and non-English-speaking customers.

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

Question 1.20

Please describe how SDG&E intends to enable bundled customers to monitor their energy usage in relation to the price signals in the Proposed DF Rates.

SDG&E Response 1.20

SDG&E will implement a dedicated webpage to serve as a centralized, customer-facing platform to provide the pricing data. Customers can access their energy usage via MyAccount.

Question 1.21

Please explain how SDG&E intends to enable unbundled customers to monitor their energy usage in relation to the distribution component in the Proposed DF Rates specifically.

SDG&E Response 1.21

SDG&E will implement a dedicated webpage to serve as a centralized, customer-facing platform to provide the pricing data. Customers can access their energy usage via MyAccount.

Question 1.22

Please explain how SDG&E intends to utilize interval meter data to conduct Marketing, Education & Outreach (or “ME&O”) to customers with respect to the Proposed DF Rates.

SDG&E Response 1.22

As described in SDG&E Responses 1.18 and 1.19, SDG&E has not yet developed its ME&O materials. The testimony explains that SDG&E plans to consider bill analysis, internal analytics, and customer insights, which may include interval data when and where applicable, to help inform ME&O activities.

Question 1.23

How will customers be able to understand their energy usage in order to be able to shift load in response to dynamic pricing signals without access to granular, realtime interval meter data such as can be provided via existing “Zigbee” smart meter capability?

SDG&E Response 1.23

SDG&E objects to this request on grounds that it introduces smart-meter related information that is not relevant to this proceeding and to which SDG&E does not admit via its response herein. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E expects customers to use day-ahead pricing, as provided to customers via the proposed DF rate website, to plan energy usage. While historical meter data may be useful to customers to

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

assess which hours they use electricity and whether that use can be shifted, SDG&E does not believe customers need access to real-time data to do such an analysis effectively.

Question 1.24

Please describe SDG&E's efforts to integrate technologies that would allow customers to automate their load in response to dynamic price signals. In providing SDG&E's answer, please confirm that those efforts will include residential customers.

SDG&E Response 1.24

SDG&E objects to this request pursuant to Rule 10.1 of the Commission's Rules of Practice and Procedure on the grounds that it seeks the production of information that is neither relevant to the subject matter involved in the pending proceeding nor is likely reasonably calculated to lead to the discovery of admissible evidence. The scope of this proceeding is limited to the design of a DF rate, implementation of a DF rate, compliance with Commission decisions and the ESJ action plan, and data sharing with the LSEs and the Commission. The scope of the proceeding does not include efforts to integrate technologies to allow customers to automate their load in response to DF rates.

END OF REQUEST

SDCCA DATA REQUEST 01
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: APRIL 22, 2026
DATE RESPONDED: MAY 6, 2026

END OF REQUEST

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

OBJECTIONS TO INSTRUCTIONS

1. SDG&E objects to the instructions to the extent they purport to require the individual(s) responsible for providing the response and/or designate the proper witness to cross-examine concerning the response. The responses reflect SDG&E's response as a Company to the requests and not the work of any one individual.
2. SDG&E objects to the instructions to the extent they state that the requests are ongoing in nature and require subsequent, supplemental information.
3. SDG&E objects to the instructions to the extent they request responses in multiple formats.
4. SDG&E objects to the instructions to the extent they provide shortened timelines for objections and requests for clarification.

EXPRESS RESERVATIONS

1. No response, objection, limitation or lack thereof, set forth in these responses and objections shall be deemed an admission or representation by SDG&E as to the existence or nonexistence of the requested information or that any such information is relevant or admissible.
2. SDG&E reserves the right to modify or supplement its responses and objections to each request, and the provision of any information pursuant to any request is not a waiver of that right.
3. SDG&E reserves the right to rely, at any time, upon subsequently discovered information.
4. These responses are made solely for the purpose of this proceeding and for no other purpose.

Subject to the foregoing general objections and express reservations, SDG&E responds as follows.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.01

Under current billing practice as part of a consolidated bill, it is the SD CCAs' understanding that for a CCA customer, SDG&E depicts the commodity charges on their portion of the bill to show the customer what they would have been charged had they been on bundled service with a line item credit offsetting the commodity charges accordingly.

Question 2.01(a)

Please confirm whether this is accurate.

SDG&E Response 2.01(a):

The above description is accurate.

Question 2.01(b)

If so, will SDG&E continue this billing practice for CCA customers enrolling in one of the Proposed DF Rates?

SDG&E Response 2.01(b):

SDG&E objects to this request on the grounds that it calls for speculation. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

The billing format for the proposed DF rates has not been finalized.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.04(a)

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 1.04(a), where SDG&E states that it plans to maintain "a webpage for participating bundled and unbundled customers to access hourly price information" but "does not anticipate that pricing from the webpage will be downloadable."

Question 2.04(a)(a)

Please explain the reasons why the pricing from the webpage will not be downloadable.

SDG&E Response 2.04(a)(a)

SDGE does not anticipate a need for downloading the hourly price information and providing downloadable prices will add additional cost, but historical price information is available upon customer request.

Question 2.04(a)(b)

Please describe any specific barriers that would prevent such price information from being downloadable.

SDG&E Response 2.04(a)(b)

There are no known technical barriers at this time.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.09(1)

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 1.09, where SDG&E explains, "Smart Meter (SM) data is requested nightly by the SDG&E Head End System (HES) from SDG&E's Smart Meters. This nightly request retrieves data after midnight for the last 24 hours of electric interval data and gas usage. The HES sends the data to the Meter Data Management System (MDMS) where the data is processed, and VEE (validations, edits, and estimation) is performed."

Question 2.09(1)(a)

Please describe the amount of time (hours, minutes, and seconds) it takes for customer interval meter data to go from the HES to the MDMS.

SDG&E Response 2.09(1)(a)

The Head-End System (HES) begins receiving customer interval meter data from SDG&E smart meters at approximately midnight. As the data is received, the HES processes the data and transfers it to the Meter Data Management System (MDMS). This process continues throughout the night and is usually completed by approximately 9:00 a.m. Therefore, it takes approximately nine hours for the process to be completed.

Question 2.09(1)(b)

Does SDG&E use such customer interval meter data in any way prior to such data having been processed and VEE having been performed by the MDMS (excluding SDG&E's act of processing and performing VEE)?

SDG&E Response 2.09(1)(b):

No.

Given the numerous process questions in this data request, SDG&E is providing details as to its process for purposes of clarification and to respond to the many data requests on this issue contained herein. SDG&E notes, however, that the information it is providing is the typical process and typical timing for the various steps in the process. There are instances where the timing and steps in the process may deviate from typical for various reasons.

As discussed above, the process beginning with the HES to the MDMS begins at approximately midnight and continues until approximately 9:00 a.m. Data that has been VEE validated in the MDMS may be transferred over to the CIS prior to 9:00 a.m. This customer interval meter data transfer from MDMS to CIS typically occurs in two batches, once at some point during the 9 am hour period and a second time at completion (around 9:00 a.m.).

Customer interval meter data (transferred in full to the CIS by approximately 9:00 a.m.) is then processed in CIS from approximately 10:00 a.m. to 2:00 a.m. CIS processing involves numerous

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

aspects of preparing the data for customer billing, customer presentment and to populate the CIS data lake and the CCA data lake. The CIS data lake and CCA data lake are populated during the 10:00 a.m. to 2:00 a.m. period as data is processed, but the data is made available for use at 2:00 a.m. once the full set of data has been processed. The process of formatting customer interval meter data into the CCA data schema includes appending key field information, such as contract account, energy service provider, contract, rate, and other relevant customer and billing attributes.

Additionally, after processing by the MDMS, customer interval meter data (by meter, not customer) is sent to the Engineering Data Warehouse where it is used for electric reliability and grid operations. This is a parallel process to this data going to the CIS.

Question 2.09(1)(b)(1)

If so, please list and describe all such use cases by SDG&E.

SDG&E Response 2.09(1)(b)(1)

N/A

Question 2.09(1)(b)(2)

Does SDG&E use such data prior to processing and validation in any way for demand response (“DR”) outreach to customers or third-party DR providers?

SDG&E Response 2.09(1)(b)(2)

SDG&E objects to this request as vague and ambiguous with respect to the term “such data” and assumes for purposes of its response that “such data” is “customer meter interval data.” Subject to and without waving the foregoing objections, SDG&E responds as follows:

No.

Question 2.09(1)(b)(2)(i)

If so, please describe all such use cases, the types of customers involved, and please list any such third parties and the type of any such entity, to SDG&E’s knowledge.

SDG&E Response 2.09(1)(b)(2)(i)

N/A

Question 2.09(1)(b)(2)(ii)

If so, please explain how SDG&E identifies customers to which it directs such outreach, such as by zip code, default load aggregation point, pricing node or the transformer that directly serves such customers.

SDG&E Response 2.09(1)(b)(2)(ii)

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

N/A

Question 2.09(1)(c)

Does any other entity, Affiliate, third party, or organization use such data in any way prior to such data having been processed and VEE having been performed by the MDMS?

SDG&E Response 2.09(1)(c)

No.

Question 2.09(1)(c)(1)

If so, please list all such entities and describe all such use cases, to SDG&E's knowledge.

SDG&E Response 2.09(1)(c)(1)

N/A

Question 2.09(1)(d)

Are there any technical barriers that would prevent SDG&E from transmitting the customer interval meter data to other LSEs in SDG&E's distribution territory when such data are transmitted to MDMS?

SDG&E Response 2.09(1)(d)

Potentially. SDG&E has not conducted an analysis of the feasibility of, or the processes and infrastructure required for providing customer interval meter data directly to other LSEs in SDG&E's distribution territory when such data is transmitted to the MDMS.

Question 2.09(1)(d)(1)

If so, please describe any such technical barriers in detail, providing evidence to support this statement.

SDG&E Response 2.09(1)(d)(1)

Please see SDG&E's response to question 2.09(1)(d)

Question 2.09(1)(d)(2)

If not, please provide any other reason why SDG&E cannot provide such data to LSEs at the time such data are transmitted to MDMS for processing and validation.

SDG&E Response 2.09(1)(d)(2)

Please see SDG&E's response to question 2.09(1)(d)

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.09(2)

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 1.09, where SDG&E explains how the customer interval meter data are transmitted to the CIS after having been processed by the MDMS.

Question 2.09(2)(a)

Please describe the amount of time (hours, minutes, and seconds) it takes for customer interval meter data to go from the MDMS to the CIS.

SDG&E Response 2.09(2)(a)

Please refer SDG&E Response 2.09(1)(b).

Question 2.09(2)(b)

Does SDG&E use the customer interval meter data in any way after such data have been processed and VEE has been performed by the MDMS and prior to SDG&E transmitting such data to CIS?

SDG&E Response 2.09(2)(b)

No, however, customer meter interval data is sent at approximately the same time to CIS and to the Engineering Data Warehouse at approximately the same time.

Question 2.09(2)(b)(1)

If so, please list and describe all such use cases by SDG&E.

SDG&E Response 2.09(2)(b)(1)

Customer interval meter data (by meter, not customer) is sent to the Engineering Data Warehouse where it is used for electric reliability and grid operations.

Question 2.09(2)(b)(2)

Does SDG&E in any way present customers with their usage data before the usage data reaches the CIS?

SDG&E Response 2.09(2)(b)(2)

No.

Question 2.09(2)(c)

Does any other entity, Affiliate, third party, or organization use such data in any way after the customer interval meter data have been processed and VEE has been performed by the MDMS and prior to SDG&E transmitting such data to CIS?

SDG&E Response 2.09(2)(c)

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

No.

Question 2.09(2)(c)(1)

If so, please list all such entities and describe all such use cases, to SDG&E's knowledge.

SDG&E Response 2.09(2)(c)(1)

N/A

Question 2.09(2)(d)

Are there any technical barriers that would prevent SDG&E from transmitting the customer interval meter data to other LSEs in SDG&E's distribution territory when such data are transmitted to CIS or prior to such transmission to CIS?

SDG&E Response 2.09(2)(d)

Potentially. SDG&E has not conducted an analysis of the feasibility of, or the processes and infrastructure required for providing customer interval meter data directly to other LSEs in SDG&E's distribution territory when such data is transmitted to the CIS or prior to such transmission to the CIS.

Question 2.09(2)(d)(1)

If so, please describe any such technical barriers in detail, providing evidence to support this statement.

SDG&E Response 2.09(2)(d)(1)

Please see SDG&E Response 2.09(2)(d).

Question 2.09(2)(d)(2)

If not, please provide any other reason why SDG&E cannot provide such data to LSEs at the time such data are transmitted to CIS for processing and validation.

SDG&E Response 2.09(2)(d)(2)

Please see SDG&E's response to question 2.09(2)(d).

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.09(3)

Please refer to SDG&E’s response to data request SDCP/CEA to SDG&E 1.09, where SDG&E explains that, when the data enters the CIS, the “CIS performs additional processing and then uses the data for billing, customer presentment, and to populate the CIS data lake, CCA data lake, and the Meter Data Processing System used by the energy procurement function.”

Question 2.09(3)(a)

Please describe the amount of time (hours, minutes, and seconds) it takes for customer interval meter data to go from the CIS to the CIS data lake, CCA data lake, and Meter Data Processing System.

SDG&E Response 2.09(3)(a)

Please refer to SDG&E Response 2.09(1)(b).

SDG&E’s Customer Information System (CIS) begins processing customer interval meter data at approximately 10:00 a.m. each day. The processing and formatting required to append key customer information are completed by approximately 2:00 a.m. the following day, at which time the data becomes available in the CCA Data Lake and accessible to Community Choice Aggregators (CCAs) through the application programming interface (API). This process takes approximately 16 hours.

CIS-processed customer interval meter data is loaded into the Meter Data Processing System and becomes available to SDG&E by approximately 5:00 a.m.

Question 2.09(3)(b)

Please explain whether the CIS “populate[s] the CIS data lake, CCA data lake, and Meter Data Processing System used by the energy procurement function” simultaneously or whether such data reaches each of those destinations with differing latencies. Please describe any differences among those latencies.

SDG&E Response 2.09(3)(b)

Please refer to SDG&E Response 2.09(1)(b).

The CIS Data Lake and the CCA Data Lake receive customer interval meter data during the 10:00 a.m. to 2:00 a.m. period (only processed data is transferred to these data lakes), and the data becomes available for use, after it is fully processed by the CIS, at approximately 2:00 a.m.

CIS-processed customer interval meter data is loaded into the Meter Data Processing System and becomes available to SDG&E at approximately 5:00 a.m.

Question 2.09(3)(c)

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Please state whether or not the CCA data lake receives data after the Meter Data Processing System receives the data.

SDG&E Response 2.09(3)(c)

Please refer to SDG&E Response 2.09(1)(b) and SDG&E Response 2.09(3)(b).

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.09(4)

Please refer to SDG&E’s response to data request SDCP/CEA to SDG&E 1.09, where SDG&E states, “Once the data is in the CIS data lake, multiple organizations can use the data for their own business purposes such as energy efficiency and demand response, distributed energy resource integration, market settlement & regulatory reporting, and grid planning and asset management.”

Question 2.09(4)(a)

Please describe the amount of time (hours, minutes, and seconds) it takes for SDG&E to provision this data to the “multiple organizations” once the said data are in the CIS data lake.

SDG&E Response 2.09(4)(a)

Please refer to SDG&E Response 2.09(1)(b).

SDG&E further clarifies that pursuant to the process described in SDG&E Response 2.09(1)(b), SDG&E makes the data available, but does not affirmatively “provision the data” to any organization.

Question 2.09(4)(b)

Please provide the names of all organizations (including all SDG&E departments and Affiliates) that have access to and use the customer interval meter data, the category of such organization (if known to SDG&E, e.g., Demand Response aggregator, scheduling coordinator, CCA, ESP, etc.) and the way such data are used, if known to SDG&E.

SDG&E Response 2.09(4)(b)

SDG&E objects to this request under Rule 10.1 of the Commission’s Rules of Practice and Procedure to the extent it seeks the production of information that is neither relevant to the subject matter involved in the pending proceeding, including Scoping Issues 7 & 8 of the Assigned Commissioner’s Scoping Memo and Ruling, nor is likely reasonably calculated to lead to the discovery of admissible evidence. See also SDCP_CEA-SDGE-DF-Rates-DR-001, SDG&E Response 1.13.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.09(5)

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 1.09, where SDG&E states, "Consumption data is also sent to the Engineering Data Warehouse where it's used by electric distribution teams for reliability and grid operations."

Question 2.09(5)(a)

Please describe exactly when in the sequence described in SDG&E's response to this request and after approximately how many seconds, minutes, and hours such data are sent to the Engineering Data Warehouse and used by electric distribution teams for reliability and grid operations.

SDG&E Response 2.09(5)(a)

Please refer to SDG&E Response 2.09(1)(b).

Typically, customer interval meter data is set from the MDMS to the Engineering Data Warehouse starting at approximately 10:00 a.m. and completing the process at approximately 2:00 p.m.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.11

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 1.11, where SDG&E states that its "Smart Meter IT department is the first department that receives SDG&E distribution customers' smart meter interval data."

Question 2.11(a)

Please state whether SDG&E's Smart Meter IT department receives the customer interval meter data before or after the data has been validated by the MDMS.

SDG&E Response 2.11(a)

The Smart Meter IT department is the technology organization responsible for operating, monitoring, and supporting SDG&E's Smart Meter systems, including the Head-End System (HES) and Meter Data Management System (MDMS). These systems receive meter data from smart meters and perform the initial validation, estimation, and editing (VEE) processes before the data is provided to downstream systems, such as the Customer Information System (CIS). As a result, the Smart Meter IT department serves as the custodian of smart meter data from the time it enters the HES through its processing in the MDMS and until it is transmitted to the CIS. The Smart Meter IT department is not an "end user" of customer interval meter data.

Question 2.11(b)

Please state whether SDG&E's Smart Meter IT department receives the customer interval meter data before or after the data has been processed by the CIS.

SDG&E Response 2.11(b)

Please see SDG&E's response to question 2.11(a).

Question 2.11(c)

Please name and describe every other SDG&E department and/or division that receives such data after SDG&E's Smart Meter IT department and please articulate those departments' and/or divisions' use cases for the data sets.

SDG&E Response 2.11(c)

SDG&E objects to this request under Rule 10.1 of the Commission's Rules of Practice and Procedure to the extent it seeks the production of information that is neither relevant to the subject matter involved in the pending proceeding, including Scoping Issues 7 & 8 of the Assigned Commissioner's Scoping Memo and Ruling, nor is likely reasonably calculated to lead to the discovery of admissible evidence. *See also* SDG&E response to SDCP_CEA-SDGE-DF-Rates-DR-001, SDG&E Response 1.13. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

Please refer to SDG&E Response 2.09(1)(b).

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.11(d)

For the departments and/or divisions named in subpart (c), please state whether such departments and/or divisions receive the data before or after the data has been validated in the MDMS.

SDG&E Response 2.11(d)

Please see SDG&E's response to question 2.11(c).

Question 2.11(e)

For the departments and/or divisions named in subpart (c), please state whether such departments and/or divisions receive the data before or after the data has been processed by CIS.

SDG&E Response 2.11(e)

Please see SDG&E's response and objections to question 2.11(c). Subject to and without waiving the foregoing objection, SDG&E responds as follows:

The only SDG&E function served by the pre-CIS processed data uploaded into the Engineering Data Warehouse is electric reliability and grid operations.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.14(b)

Please refer to SDG&E’s response to data request SDCP/CEA to SDG&E 1.14(b), where SDG&E states, “For the data to be made ready for the CCAs, the data is sent from the MDMS to the CIS, and the CIS must also perform additional processing, including associating the meter data to both a customer and the CCA, reformatting the data into the CCA data schema, and performing additional estimations for complex metering scenarios.”

Question 2.14(b)(a)

Please describe the process SDG&E uses to reformat “the data into the CCA data schema.”

SDG&E Response 2.14(b)(a)

The process of formatting customer interval meter data into the CCA data schema includes appending key field information, such as contract account, energy service provider, contract, rate, and other relevant customer and billing attributes.

Question 2.14(b)(b)

Please provide any legal, regulatory, technical or operational requirement for such reformatting.

SDG&E Response 2.14(b)(b)

SDG&E objects to this request on grounds that it calls for a legal conclusion rather than the production of evidence or clarification of a factual matter. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

From an operation and technical perspective, the reformatting of customer interval meter data into the CCA data schema is driven by operational requirements that were defined based on discussions with the CCAs and Calpine.

Question 2.14(b)(c)

Please describe what “additional estimations for complex metering scenarios” SDG&E performs.

SDG&E Response 2.14(b)(c)

For certain complex metering configurations, SDG&E requires additional system logic in its billing system to derive estimations. These may be required for scenarios such as meter relationships, that span multiple meters to derive billing.

Question 2.14(b)(d)

Please provide examples of the “additional estimations for complex metering scenarios” that SDG&E describes in response to subpart (c).

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

SDG&E Response 2.14(b)(d)

As an example, scenarios under SDG&E's Schedule "S" may require a billing relationship between Net Generating Output Meter (NGOM) and the billing meter to accurately derive the calculations. To ensure overall accuracy, additional system logic in SDG&E's billing system has been added to assist with any estimations, if they are needed.

Question 2.14(b)(e)

Please provide any legal, regulatory, technical or operational requirement for such estimations.

SDG&E Response 2.14(b)(e)

SDG&E objects to this request on grounds that it calls for a legal conclusion rather than the production of evidence or clarification of a factual matter. Subject to and without waiving the forgoing objection, SDG&E responds as follows:

See SDG&E Electric Rule 17.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.15

Please refer to SDG&E’s response to data request SDCP/CEA to SDG&E 1.15, where SDG&E confirmed that it has developed a “technical solution for providing near real-time interval data” that would allow CCAs to access customer interval meter data through an “application programming interface (API).”

Question 2.15(a)

Please describe the amount of time (hours, minutes, and seconds) between power flow and the point at which the data becomes available to CCAs via the API.

SDG&E Response 2.15(a)

SDG&E objects to this as vague and ambiguous as to the term “power flow.” SDG&E receives customer interval meter data into its HES starting at midnight each day. SDG&E does not receive customer interval meter data based on when “power flowed.”

Please refer to SDG&E Response 2.09(1)(b).

The process from when SDG&E starts to receive customer interval meter data to its HES until it is available in the CCA Data Lake (and therefore via the API) is approximately 26 hours.

Question 2.15(b)

Please explain the basis for SDG&E’s contention that the data currently provided through the API is provided in “near real time.”

SDG&E Response 2.15(b)

SDG&E considers the data provided through the API to be “near real time” because it is made available to CCAs at the earliest point after the meter data validation, processing, customer data association, and formatting are completed. Additionally, this is the terminology SDG&E and the SD CCAs have used for this process and this timeline over the year as the CCA Data Lake developed in consultation with the CCAs. SDG&E has continued to use that terminology to refer to this process and the associated timeline.

Question 2.15(c)

Please provide SDG&E’s interpretation of “near real time” in the context of the referenced API.

SDG&E Response 2.15(c)

Please see SDG&E Response 2.15(b).

Question 2.15(d)

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Please state whether the API will in any way be updated or modified if SDG&E's Application is approved.

SDG&E Response 2.15(d)

SDG&E objects to this request as calling for speculation. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E did not propose any modifications to the API in this application.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.16

Please refer to Prepared Direct Testimony of Jeff DeTuri on Behalf of San Diego Gas & Electric Company Chapter 1 – Policy at page 12, line 24, through page 13, line 21, where SDG&E witness DeTuri discusses the CAISO day-ahead market in which the Proposed DF Rates would operate.

Question 2.16(a)

Please explain how and to what extent SDG&E plans to use customer interval meter data to assess customers' responsiveness to the price signals of the Proposed DF Rates during times where the CAISO day-ahead rate is significantly higher or lower than the customers' otherwise applicable tariff rates.

SDG&E Response 2.16(a)

SDG&E plans to use customer interval meter data in its Evaluation Plans for Year 1 and Year 2, as described in Chapter 7 of SDG&E's opening testimony (SDGE-07, Prepared Testimony of Lizzette Garcia-Rodriguez on Behalf of SDG&E, Chapter 7—Measurement and Evaluation) to evaluate customer responsiveness to the price signals conveyed through the Proposed DF Rates by analyzing changes in customer electricity consumption when the CAISO day-ahead market price differs from the customer's otherwise applicable tariff rate. Because the Proposed DF Rates are based on hourly CAISO day-ahead prices, interval meter data will allow SDG&E to compare customer usage patterns across varying price conditions and assess whether customers shift or reduce consumption in response to day-ahead pricing signals.

The assessment will focus on identifying changes in customer load patterns and overall responsiveness to the economic signals embedded in the hourly day-ahead market prices. Interval meter data is an important tool for measuring customer response to the hourly day-ahead pricing signals and evaluating the effectiveness of the Proposed DF Rates in encouraging economically efficient energy use.

Question 2.16(b)

Please explain how and to what extent SDG&E plans to use Marketing, Education, and Outreach (or "ME&O") to inform customers about the Proposed DF Rate's price signals and their responsiveness to anticipated prices that are significantly higher or lower than the customers' otherwise applicable tariff rates, to assist customers in shifting load.

SDG&E Response 2.16(b)

SDG&E objects to this question to the extent it calls for speculation regarding facts that are not within SDG&E's knowledge. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

SDG&E's application proposes to use Marketing, Education, and Outreach (ME&O) activities to help customers understand how the Proposed DF Rates are informed by CAISO day-ahead market prices and how hourly price signals may vary based on expected market conditions. Consistent with the approach described in SDG&E's testimony, ME&O activities may include customer education materials, digital communications, website content, and other informational resources designed to help customers understand day-ahead pricing information and identify opportunities to shift electricity usage in response to anticipated higher- or lower-priced hours. For example, customer education materials may direct participating customers to CAISO day-ahead market hourly prices on a dedicated page of sdge.com where customers can review current and future hourly prices. In addition, SDG&E may develop an educational landing page on sdge.com that may include general Demand Flex rate educational information, guidance on how customers can plan or schedule energy-using activities when prices are lower, tutorial video support, or savings examples based on usage levels or patterns.

As customers gain experience with the Proposed DF Rates, SDG&E may use customer research, insights, evaluation activities, and lessons learned from implementation to refine ME&O strategies and educational content to further support customers' understanding of and responsiveness to day-ahead price signals.

Question 2.16(c)

Please explain how and to what extent SDG&E plans to use customer energy usage data and data regarding customers' responsiveness to the Proposed DF Rate's price signals to further develop and refine the Proposed DF Rates once they are in effect.

SDG&E Response 2.16(c)

SDG&E objects to this question on the grounds that it calls for speculation regarding facts that are not within SDG&E's knowledge, particularly with respect to how SDG&E plans to refine the Proposed DF Rates after they are in effect. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E would likely use customer energy usage data to assess customer responsiveness to DF price signals as outlined in Chapter 7 of its testimony on Measurement and Evaluation. The results of that assessment may be used to improve customer communications about any approved DF rate or to propose changes to any approved DF rate via an appropriate regulatory pathway.

Question 2.17

Please refer to Prepared Revised Direct Testimony of William G. Saxe on Behalf of San Diego Gas & Electric Company Chapter 3 – Distribution & Transmission at page 2, footnote 4, where

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

SDG&E states, “The DF distribution rates are designed based on the default rate for each customer class. Therefore, these rates are designed based on Schedule TOU-DR1 for residential, Schedule TOU-A for small commercial, Schedule AL-TOU-M for medium commercial, Schedule AL-TOU-L for Large C&I, and Schedules TOU-PA and TOU-PA3 for agricultural customers.”

Question 2.17(a)

Please explain why SDG&E chose to apply a default TOU rate rather than a rate that promotes electrification and/or enabling technologies (i.e., TOU-ELEC, EV-HP, etc.) for these referenced customer classes.

SDG&E Response 2.17(a)

The proposed DF distribution rates were designed based on the default rate for each customer class because the default rate is the standard rate that most customers take electric service on and are designed based on the behavior of most customers. Basing the proposed DF rate on the default class rate will allow for better evaluation and measurement of any adopted DF rate.

Additionally, rate designs for technology specific rates, including those listed, generally have unique rate design for their distribution and/or commodity rate components, which are two components that are unique in the rate design of the Proposed DF rates.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.18

Please refer to the Second Revised Prepared Direct Testimony of Jeff DeTuri on Behalf of San Diego Gas & Electric Company Chapter 4 – Customer Protection (“SDGE-04-R2”) at page 4, lines 1 through 19, and page 9, lines 9 through 12, where SDG&E witness DeTuri describes the Proposed DF Rate price limits of \$750/MWh (price ceiling) and \$0/MWh (price floor) for the Marginal Energy Cost and the 2022-2025 four-year history of CAISO prices used to develop those price limits (Table JDT-4).

Question 2.18(a)

If workbook “Ch4 Price Cap and Floor” provided by SDG&E in response to data request SDCP/CEA to SDG&E 1.01(a) has been updated, or any other workpaper not previously provided to SD CCAs has been used to identify the \$750/MWh price ceiling and \$0/MWh price floor, please provide all such workpapers. For clarity, please also include corrected workpapers relied upon in SDGE-04-R2.

SDG&E Response 2.18(a)

Please see “Revised Ch4 Price Cap and Floor” Excel workpaper.

Question 2.18(b)

To the extent SDG&E’s establishment of the price ceiling and price floor for the Proposed DF Rates results in undercollection or overcollection of revenue by SDG&E, will any such undercollection or overcollection in any way impact the rates of unbundled or bundled customers? Please explain why or why not and the underlying reasons.

SDG&E Response 2.18(b)

SDG&E expects that any non-zero amounts would be de minimis and therefore have little to no impact on rates. Any under or over collection of revenue would be balanced in ERRAs, in the same way it is done today when forecasted costs or sales do not exactly match actual costs or sales used to develop rates.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.19

Please refer to SDGE-04-R2 at page 6, line 7, through page 9, line 8, where SDG&E witness DeTuri provides the estimated annual bill comparison in dollars between the current rate and Proposed DF Rates for four customer classes (Table JDT-1), the estimated monthly bill ranges for those same customer classes (Table JDT-2), and an estimate of the customer protection effectiveness (Table JDT-3).

Question 2.19(a)

Please provide all workpapers used and relied upon to develop the estimates in Tables JDT-1, JDT-2, and JDT-3.

SDG&E Response 2.19(a)

Please see the “RTPImport_BillCalc” workpapers of which there are 3, “Present”, “Proposed” and “Proposed_woCP”. Note that the only difference from “Proposed” and “Proposed_woCP” is that “Proposed_woCP” does not have the customer protection price cap and price floor.

Question 2.19(b)

Please refer to SDG&E’s response to data request SDCP/CEA to SDG&E 1.02(d), where SDG&E stated that it “discovered errors in its calculation for the referenced table and table JDT-1,” and confirm that the “errors” have been corrected in SDGE-04-R2.

SDG&E Response 2.19(b)

Confirmed.

Question 2.19(c)

Please list the lowest- and highest-bill months for each customer class in Table JDT-2.

SDG&E Response 2.19(c)

Please see the below table:

Class	Current Rate				Proposed DF Rate			
	Lowest Month	Lowest Amt	Highest Month	Highest Amt	Lowest Month	Lowest Amt	Highest Month	Highest Amt
Res	Apr	\$ 135.54	Aug	\$ 252.16	May	\$ 116.26	Sep	\$ 358.77
SmCom	Nov	\$ 470.32	Aug	\$ 776.04	May	\$ 420.71	Sep	\$ 824.10
M Com	Apr	\$ 6,968.93	Aug	\$ 10,473.24	May	\$ 4,761.68	Sep	\$ 16,514.07
L C&I	Feb	\$ 164,282.29	Jul	\$ 221,988.60	May	\$ 130,589.34	Sep	\$ 295,499.47
Ag	Feb	\$ 1,352.09	Aug	\$ 3,379.43	Mar	\$ 1,340.33	Sep	\$ 4,661.39

Question 2.19(d)

Please explain why the estimated monthly bill ranges for the Medium Commercial class and Large C&I class are proportionally much greater than the estimated monthly bill ranges for other rate classes, even without the customers changing their consumption patterns.

SDG&E Response 2.19(d)

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Medium and Large C&I typically have higher usage than other rate classes and a greater range in use, which leads to bigger bill ranges.

Question 2.19(e)

Please describe at a high level the rate impacts on each rate class if one rate class were to experience maximal participation in the Proposed DF Rates and maximal responsiveness to the Proposed DF Rate's price signals while the other rate classes were to experience no participation in the Proposed DF Rates.

SDG&E Response 2.19(e)

SDG&E objects to this request on grounds that it calls for speculation. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E designed the rates to be revenue neutral. However, to the extent that there is participation and customers do shift load away from high cost hours, SDG&E would expect to see lower overall costs that should benefit all customers.

SDCP CEA DATA REQUEST 02
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: JUNE 26, 2026
DATE RESPONDED: JULY 17, 2026

Question 2.20

Please refer to the Second Revised Prepared Direct Testimony of Jeff DeTuri on Behalf of San Diego Gas & Electric Company Chapter 2 – Commodity/Generation (“SDGE-02-R2”) at page 11, lines 1 through 2, where SDG&E witness DeTuri provides an updated table of Marginal Generation Capacity Costs (“MGCC”) values for the five customer classes (Table JDT-2). Please provide the updated workpapers (“Ch2_MGCC Rate Workpaper”), which calculated the values presented in this table. an updated table of Marginal Generation Capacity Costs (“MGCC”) values for the five customer classes (Table JDT-2). Please provide the updated workpapers (“Ch2_MGCC Rate Workpaper”), which calculated the values presented in this table.

SDG&E Response 2.20

Please see the “Rev2 Ch2 MGCC Rate” workpaper.

END OF REQUEST

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

OBJECTIONS TO INSTRUCTIONS

1. SDG&E objects to the instructions to the extent they purport to require the individual(s) responsible for providing the response and/or designate the proper witness to cross-examine concerning the response. The responses reflect SDG&E's response as a Company to the requests and not the work of any one individual.
2. SDG&E objects to the instructions to the extent they state that the requests are ongoing in nature and require subsequent, supplemental information.
3. SDG&E objects to the instructions to the extent they request responses in multiple formats.
4. SDG&E objects to the instructions to the extent they provide shortened timelines for objections and requests for clarification.

EXPRESS RESERVATIONS

1. No response, objection, limitation or lack thereof, set forth in these responses and objections shall be deemed an admission or representation by SDG&E as to the existence or nonexistence of the requested information or that any such information is relevant or admissible.
 2. SDG&E reserves the right to modify or supplement its responses and objections to each request, and the provision of any information pursuant to any request is not a waiver of that right.
 3. SDG&E reserves the right to rely, at any time, upon subsequently discovered information.
 4. These responses are made solely for the purpose of this proceeding and for no other purpose.
- Subject to the foregoing general objections and express reservations, SDG&E responds as follows.

Question 3.09(1)(d)

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 2.09(1)(d), where SDG&E responds to the SD CCAs' question regarding technical barriers to providing customer interval meter data to other LSEs when they are transmitted from the HES to the MDMS with the following statement "Potentially. SDG&E has not conducted an analysis of the feasibility of, or the processes and infrastructure required for providing customer interval meter data directly to other LSEs in SDG&E's distribution territory when such data is transmitted to the MDMS."

Question 3.09(1)(d)(i)

Is SDG&E willing to perform such an analysis and provide the results to the SD CCAs in discovery?

SDG&E Response 3.09(1)(d)(i):

SDG&E objects to this request to the extent it imposes upon SDG&E an obligation to generate or create records or analysis that do not exist. This purported obligation exceeds the requirements provided by the CPUC's Discovery Custom and Practice Guidelines and California Code of

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Civil Procedure Section 2031.230. SDG&E further objects to this request as overly broad, unduly burdensome and exceeding the scope of permissible discovery under Rule 10.1. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E notes that while it is not required to generate analyses that do not already exist and that the request to do so would impose an undue burden on SDG&E, SDG&E is willing to meet and confer regarding what types of analyses the SD CCAs may be interested in, whether SDG&E can perform those analyses, and the potential burden, including time, resources, and/or costs associated with the analyses.

Question 3.09(1)(d)(ii)

If so, please provide a reasonable estimate of the amount of time (in days) required for SDG&E to perform such analysis.

SDG&E Response 3.09(1)(d)(ii):

Please see the response to 3.09(1)(d)(i).

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Question 3.09(2)(a)

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 2.09(2)(a), where SDG&E explains that customer interval meter data that have been VEE validated in the MDMS are transferred to CIS in two batches, once "at some point during the 9 am hour period and a second time at completion (around 9:00 a.m.)."

Question 3.09(2)(a)(i)

Please explain the distinction(s) between the first transfer during the "9 am hour period" and the second transfer "at completion (around 9:00 a.m.)" in terms of the content of the two data transfers.

SDG&E Response 3.09(2)(a)(i)

First, SDG&E notes that the "9 am hour period" contains a typo and should read "9 hour period" (omitting the "a.m."), which is in reference to the period between midnight until 9 a.m. Accordingly, there are typically batches of data transferred from the MDMS to the CIS, once during the midnight to 9 a.m. period and a second batch around 9 a.m.

The two transfers do not differ in the type or format of data transmitted. The distinction is that the transfers contain data for different meters.

The transfers are staged to distribute processing workload and support timely completion of downstream processing activities.

Question 3.09(2)(a)(ii)

Please explain why one batch is transferred prior to the second batch.

SDG&E Response 3.09(2)(a)(ii)

Please see the Response to 3.09(2)(a)(i).

Question 3.09(2)(a)(iii)

Please use a range of hours and minutes of the day to describe the two times of day described in SDG&E's response ("during the 9 am hour" and "around 9:00 a.m.") with more particularity.

SDG&E Response 3.09(2)(a)(iii)

The first batch is sent between midnight and 9:00 a.m, most typically around 5:00 a.m., and the second file is sent at approximately 9:00 a.m.

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Question 3.09(2)(b)(1)

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 2.09(2)(b)(1), where SDG&E explains "after processing by the MDMS, customer interval meter data (by meter, not customer) is sent to the Engineering Data Warehouse where it is used for electric reliability and grid operations."

Question 3.09(2)(b)(1)(i)

Please confirm whether the Engineering Data Warehouse receives the customer interval meter data by approximately 9:00 a.m. on the morning after the day of power flow.

SDG&E Response 3.09(2)(b)(1)(i):

Yes, the Engineering Data Warehouse receives the meter interval data by approximately 9:00 a.m. on the morning after the day of power flow.

Question 3.09(2)(b)(1)(ii)

Please describe the electric reliability functions performed by the Engineering Data Warehouse with the customer interval meter data it obtains.

SDG&E Response 3.09(2)(b)(1)(ii)

SDG&E objects to this request under Rule 10.1 of the Commission's Rules of Practice and Procedure to the extent it seeks the production of information that is neither relevant to the subject matter involved in the pending proceeding nor is reasonably calculated to lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E uses interval meter data from the Engineering Data Warehouse in planning that supports electric system reliability. Additionally, SDG&E clarifies that the Engineering Data Warehouse contains interval meter data from customers, but that data is not associated with individual customers.

Question 3.09(2)(b)(1)(iii)

Does SDG&E use such data available to the Engineering Data Warehouse to forecast day-ahead load or load for other periods of reference?

SDG&E Response 3.09(2)(b)(1)(iii)

No.

Question 3.09(2)(b)(1)(iv)

Does SDG&E use such data available to the Engineering Data Warehouse to make procurement decisions?

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

SDG&E Response 3.09(2)(b)(1)(iv)

No.

Question 3.09(2)(b)(1)(v)

Does SDG&E use such data available to the Engineering Data Warehouse to initiate program events for demand management, demand response or other purposes?

SDG&E Response 3.09(2)(b)(1)(v)

No.

Question 3.09(2)(b)(1)(vi)

Does SDG&E use such data available to the Engineering Data Warehouse for any form of customer outreach or communication?

SDG&E Response 3.09(2)(b)(1)(vi)

No.

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Question 3.09(2)(b)(2)

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 2.09(2)(b)(2), where SDG&E states that it does not in any way present customers with their usage data before such data reaches the CIS.

Question 3.09(2)(b)(2)(i)

Please describe the transmission pathway for a customer's interval meter data from the customer's meter to availability in My Energy Center, including the time frame after power flow for each step between customer energy usage and availability in My Energy Center.

SDG&E Response 3.09(2)(b)(2)(i)

SDG&E objects to this request on the grounds that it seeks the production of information that is neither relevant to the subject matter involved in the pending proceeding nor is reasonably calculated to lead to the discovery of admissible evidence. Without waiving this objection and subject thereto, SDG&E responds as follows:

As discussed in the response to Data Request Question 2.09(1)(b) and further expanded upon here, the process begins with the Head-End System (HES). Beginning at approximately midnight, the HES starts collecting prior-day interval meter data and continues doing so until approximately 9:00 a.m.

As interval meter data is collected during this nine-hour period, the HES continuously transfers the data to the Meter Data Management System (MDMS), where it undergoes validation, editing, and estimation (VEE) processing.

During the midnight-to-9:00 a.m. MDMS processing window, the MDMS typically sends customer interval meter data to the Customer Information System (CIS) in two batches. The first batch is transmitted at some point during the collection and processing period, and the second batch is sent upon completion of the process, typically around 9:00 a.m.

Customer interval meter data (transferred in full to the CIS by approximately 9:00 a.m.) is then processed in CIS beginning at 10:00 am. Individual customer usage data is available for customers to view in My Energy Center once it is fully processed. All customer interval data is typically available by 2 a.m. on the following day.

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Question 3.09(2)(b)(2)(ii)

Please state at what time relative to the time of power flow customer interval meter data are available to the customer on My Energy Center.

SDG&E Response 3.09(2)(b)(2)(ii):

Please see the response to question 3.09(2)(b)(2)(i).

Question 3.09(2)(b)(2)(iii)

Please state and describe each specific data field attached to/associated with the energy usage data in My Energy Center.

SDG&E Response 3.09(2)(b)(2)(iii)

The specific data fields are below

- Contract Account
- From Date
- To Date
- Contract
- Meter Number
- Rate
- Rate Description
- Consumption Day
- Consumption FromTime
- Consumption To Time
- Consumption
- Generation
- Net
- Unit of Measure (kWh or Therms)
- Time Of Use Type
- TOU Description
- Tier TOU Indicator
- Bill End Date
- Tile Name (signifies if usage is daily/hr/15 min)
- Result Code
- Error Reason

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Question 3.09(2)(b)(2)(iv)

Please state whether the data available in My Energy Center is the same as “Green Button” data. If applicable, please describe any differences between My Energy Center data and Green Button data.

SDG&E Response 3.09(2)(b)(2)(iv)

SDG&E My Energy Center provides access to usage graphs and data download (accessible excel version). The Green Button Download data that is also available in My Energy Center and provides customer access to customer interval meter data and is generally used for customers to share their interval meter data with third parties.

Question 3.09(2)(b)(2)(v)

Please state whether the data available in My Energy Center are the same as data that are transmitted from MDMS to CIS by SDG&E’s IT department. If applicable, please describe any differences between My Energy Center data and CIS data.

SDG&E Response 3.09(2)(b)(2)(v)

SDG&E objects to this request as vague and ambiguous with respect to what data it is referencing. For instance the first part of the question references the data transmitted from the MDMS to the CIS and the second part of the question seeks differences between data in the CIS and My Energy Center. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

Customer usage data presented in My Energy Center is sourced directly from the CIS for individual customers. Data transmitted from the MDMS to the CIS has not been processed by the CIS and may therefore differ.

Question 3.09(2)(b)(2)(vi)

If customer energy usage data are able to be associated with a particular customer account and presented to the customer via My Energy Center and to third parties for whom customers have provided access via customer consent, please describe any specific reasons why SDG&E cannot provide such data to the customer’s LSE at the same time and via the same API or other data transmission pathway?

SDG&E Response 3.09(2)(b)(2)(vi)

SDG&E objects to this request to the extent it imposes upon SDG&E an obligation to generate or create records or analysis that do not exist. This purported obligation exceeds the requirements provided by the CPUC’s Discovery Custom and Practice Guidelines and California Code of Civil Procedure Section 2031.230. SDG&E further objects to this request under Rule 10.1 of

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

the Commission’s Rules of Practice and Procedure on the grounds that the burden, expense and intrusiveness of this request clearly outweigh the likelihood that the information sought will lead to the discovery of admissible evidence. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

SDG&E has not conducted an analysis regarding barriers to any potential export by its API or other transmission pathways. One likely barrier to SDG&E providing customer interval data to the customer’s LSE at the same time and via the same API or other data transmission pathway is that the API is designed for individual, one-time data retrievals from CIS to My Energy Center. The API has not been designed for large-scale exports involving millions of interval usage records across large customer populations.

Question 3.09(2)(b)(2)(vii)

Please state whether SDG&E’s response to Request 3.09(2)(b)(2)(vi) above is limited to SDG&E’s perceived need to reformat customer interval meter data into “CCA data schema ... driven by operational requirements defined based on discussions with the CCAs and Calpine” (see SDG&E Response to SDCP CEA Second Data Request 2.14(b)(b)) and to perform data processing and validation and/or estimations required for purposes of billing. If not, please articulate any other reasons that SDG&E is unable to provide such data to the customer’s LSE.

SDG&E Response 3.09(2)(b)(2)(vii)

SDG&E objects to this request as vague and ambiguous with respect to its reference to previous data request responses without providing the full request or response herein. SDG&E further objects on grounds that the response is taken out of context and misrepresents the context in which the previous response was provided. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

For clarity, the relevant SDG&E responses and SD CCA questions, including the one cited in this question, are as follows:

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Question 2.14(b)

Please refer to SDG&E’s response to data request SDCP/CEA to SDG&E 1.14(b), where SDG&E states, “For the data to be made ready for the CCAs, the data is sent from the MDMS to the CIS, and the CIS must also perform additional processing, including associating the meter data to both a customer and the CCA, reformatting the data into the CCA data schema, and performing additional estimations for complex metering scenarios.”

Question 2.14(b)(a)

Please describe the process SDG&E uses to reformat “the data into the CCA data schema.”

SDG&E Response 2.14(b)(a)

The process of formatting customer interval meter data into the CCA data schema includes appending key field information, such as contract account, energy service provider, contract, rate, and other relevant customer and billing attributes.

Question 2.14(b)(b)

Please provide any legal, regulatory, technical or operational requirement for such reformatting.

SDG&E Response 2.14(b)(b)

SDG&E objects to this request on grounds that it calls for a legal conclusion rather than the production of evidence or clarification of a factual matter. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

From an operation and technical perspective, the reformatting of customer interval meter data into the CCA data schema is driven by operational requirements that were defined based on discussions with the CCAs and Calpine.

For purposes of this question, SDG&E’s response is limited to the “reasons that SDG&E is unable to provide such data to the customer’s LSE.”

SDG&E has not conducted an analysis regarding barriers to any potential export by its API or other transmission pathways. One likely barrier to SDG&E providing customer interval data to the customer’s LSE at the same time and via the same API or other data transmission pathway is that the API is designed for individual, one-time data retrievals from CIS to My Energy Center. The API has not been designed for large-scale exports involving millions of interval usage records across large customer populations.

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Question 3.09(2)(d)

Please refer to SDG&E's response to data request SDCP/CEA to SDG&E 2.09(2)(d), where SDG&E responds to the SD CCAs' question regarding technical barriers to providing customer interval meter data to other LSEs when they are transmitted to "CIS or prior to such transmission to CIS" with the following statement "Potentially. SDG&E has not conducted an analysis of the feasibility of, or the processes and infrastructure required for providing customer interval meter data directly to other LSEs in SDG&E's distribution territory when such data is transmitted to the CIS or prior to such transmission to the CIS."

Question 3.09(2)(d)(i)

Is SDG&E willing to perform such an analysis and provide the results to the SD CCAs in discovery?

SDG&E Response 3.09(2)(d)(i)

See response to 3.09(1)(d)(i) above.

Question 3.09(2)(d)(ii)

If so, please provide a reasonable estimate of the amount of time (in days) required for SDG&E to perform such analysis.

SDG&E Response 3.09(2)(d)(ii)

Please see response to 3.09(1)(d)(ii)

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Question 3.25

Please state and describe each specific data field attached to/associated with customer interval meter data at the point in time when such data are initially transmitted from the meter to any recipient of such data, including, but not limited to:

Question 3.25(i)

a customer's HAN device, transmitted via ZigBee radio service;

SDG&E Response 3.25(i)

When requested by a paired ZigBee-compatible Home Area Network (HAN) device, Smart Meter 1.0 electric meters transmit the following data field via ZigBee communications:

- Instantaneous Read (Watts): The customer's real-time electric demand, representing the rate of electricity consumption measured at the time of transmission, expressed in watts (W).

Question 3.25(ii)

SDG&E's HES

SDG&E Response 3.25(ii)

SDG&E the data fields for data transmitted from the meter to the HES. The data sent from the meter to SDG&E's HES is in a proprietary format and encrypted by the AMI vendor. Only the headend system can decrypt the data.

In addition to a customer's HAN device or SDG&E's HES, interval meter data can also be collected from the meter in the field by an SDG&E technician, using a Toughbook computer with an optical meter probe.

SDCP CEA DATA REQUEST 03
SDG&E DF RATES APPLICATION – A.26-02-001
SDG&E RESPONSE
DATE RECEIVED: AUGUST 19, 2026
DATE RESPONDED: AUGUST 28, 2026

Question 3.26

Please state the average number of corrections that SDG&E's VEE processes make to a single customer's interval meter data for one 24-hour period of data collection. If SDG&E is unable to state an average, please provide an approximation or estimation of the number of corrections made.

SDG&E Response 3.26

SDG&E objects to this request pursuant to Rule 10.1 of the Commission's Rules of Practice and Procedure on the grounds that the burden, expense and intrusiveness of this request clearly outweigh the likelihood that the information sought will lead to the discovery of admissible evidence. Further, SDG&E objects to the request on the grounds that the request calls for SDG&E to create documents not already in SDG&E's possession. Subject to and without waiving the foregoing objection, SDG&E responds as follows:

There have been no studies or analyses performed by SDG&E regarding magnitude of corrections made to the raw data before it enters the head-end system and after it arrives at the customer information system.

END OF REQUEST

EXHIBIT D

Select Discovery Responses from SDG&E AMI 2.0 Proceeding

SDCP/CEA DATA REQUEST
SDCP/CEA-SDGE DR-001
SDG&E SMART METER 2.0 APPLICATION (A.25-12-012)
SDG&E RESPONSE
DATE RECEIVED: February 24, 2026
DATE DUE: March 10, 2026

QUESTION 25

Please refer to Witness B. Baugh's testimony (Ex. SDG&E-05) at Figure 5-7 illustrating the interim view of foundational and Nextgen technology before the SM 1.0 systems are retired:

- a. At what point in this illustration does SDG&E plan to share data with CCAs? Please explain how SDG&E's response differs depending on whether a customer is using an SM 1.0 versus an SM 2.0.
- b. Will SDG&E send any meter usage data to its Energy Supply & Dispatch group? If so, at what point in the diagram and on what terms?
- c. When will the interim period, as illustrated in Figure 5-7, begin and how long will it last?
- d. Will there be a clear start and finish of the interim period? Or is it correct to say that the transition will be gradual?
- e. If it will be a gradual transition, will real time data be made available to customers as each new meter is installed? Or does SDG&E intend to wait until all meters are installed before providing real time data access to customers?
- f. If it will be a gradual transition, will real time data be made available to CCAs as each new meter is installed? Or does SDG&E intend to wait until all meters are installed before providing real time data access to CCAs?
- g. How does SDG&E choose which meters to replace first?

SDG&E Response:

- a. For both SM 1.0 and SM 2.0, SDG&E intends to share data with the CCAs after being loaded into the CIS. The Smart Meter 2.0 program is not expected to result in any material changes to the processes, timing, or availability of billing-quality data provided to CCAs. SDG&E's data sharing with the CCA's remains identical regardless of whether customers are equipped with Smart Meter 1.0 or Smart Meter 2.0 devices.
- b. SDG&E's energy procurement function has access to interval data after it is sent to the CIS.
- c. The interim period will last from when the first SM 2.0 meter or module is installed, and last until the final SM 1.0 meter and gas module is removed. The first meter or module is planned to be installed in 2027, and the final meter is planned to be removed by the end of 2030.³

³ Ex. SDG&E-04, page 10.

SDCP/CEA DATA REQUEST
SDCP/CEA-SDGE DR-001
SDG&E SMART METER 2.0 APPLICATION (A.25-12-012)
SDG&E RESPONSE
DATE RECEIVED: February 24, 2026
DATE DUE: March 10, 2026

- d. The transition will be gradual during the replacement of 1.0 meters and modules with 2.0 devices.
- e. Please see SDG&E's response to Question 18.c above.
- f. Please see SDG&E's response to Question 21 above.
- g. SDG&E addresses its deployment strategy and methodology for meter replacement in Ex. SDG&E-04, page BB/DC/DH-8.

**SDCP/CEA DATA REQUEST
SDCP/CEA-SDGE DR-001
SDG&E SMART METER 2.0 APPLICATION (A.25-12-012)
SDG&E RESPONSE
DATE RECEIVED: February 24, 2026
DATE DUE: March 10, 2026**

QUESTION 30

State SDG&E’s operational definition(s) of “real-time” and “near real-time” as used in SM 2.0 testimony.

SDG&E Response:

For purposes of this testimony, SDG&E does not distinguish between the terms “real-time” and “near real-time.” SDG&E uses these terms to refer to the elapsed time—typically under one minute—between when an event occurs and when it is reported to the customer, user, or system for attention.

San Diego Community Power/Clean Energy Alliance
A.25-12-012 SDGE Smart Meter 2.0 Application
SDCP_CEA-SDGE-SmartMeter2.0-DR-002
DATE RECEIVED: April 24, 2026
DATE DUE: May 15, 2026

SD CCAs to SDG&E 2.5.

Please describe how the absence of advanced metering infrastructure makes dynamic rate programs less effective and, as a consequence, can lead to customers becoming dissatisfied. If SDG&E disagrees, please explain the reasons why.

SDG&E Response to Question 2.5:

SDG&E objects to the request on the grounds that it (i) seeks information that is not reasonably calculated to lead to the discovery of admissible evidence; (ii) calls for conjecture or speculation; (iii) is vague and unintelligible and fails to identify with sufficient particularity the information or documents requested; (iv) is unduly burdensome; and (v) is designed to elicit opinion rather than facts and, thus, violates the principles underlying discovery. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

SDG&E understands this question to be a follow-up to Question 10 of SDCP/CEA Data Request No.1, which refers to the background discussion of the role of Smart Meter (SM) 1.0 technology in current utility operations set forth in Witness S. Butler's testimony (Ex. SDG&E-02) at Page 5, Lines 6-7 ("Absent [SM 1.0] advanced metering infrastructure, core utility functions become inefficient and customer dissatisfaction more likely"). In connection with dynamic rate programs, SM 1.0 advanced metering technology enabled access to the interval consumption data that is necessary to support dynamic or time-of-use (TOU) rate calculations. The absence of advanced metering infrastructure and a return to manual meter reads would create significant delay in availability of consumption data and would interfere with the availability of the granular data needed for dynamic or TOU rate calculations.

San Diego Community Power/Clean Energy Alliance
A.25-12-012 SDGE Smart Meter 2.0 Application
SDCP_CEA-SDGE-SmartMeter2.0-DR-002
DATE RECEIVED: April 24, 2026
DATE DUE: May 15, 2026

SD CCAs to SDG&E 2.7.

Please refer to the excel file named “Consolidated SM 2.0 Business Capability Maturity Assessment” provided by SDG&E in response to Question 3 in SD CCAs’ first round of discovery. In this excel file, please refer to row 80 where it states that “development / implementation of system to automatically send data directly to CCAs” and “integration with existing data systems” are needed in order for SDG&E to have the “ability to send usage data directly from meters to CCAs, bypassing back office SDG&E systems.”

a. Please explain whether the “development / implementation” of a “system to automatically send data directly to CCAs” in a way that would “bypass[] back office SDG&E systems” would reduce the latency with which CCAs receive interval meter data from SDG&E.

b. Please explain whether the “development / implementation” of a “system to automatically send data directly to CCAs” in a way that would “bypass[] back office SDG&E systems” would allow SDG&E to provide interval meter data to CCAs in real time or near real time.

c. Has SDG&E studied whether a system that sends usage data directly from meters to CCAs could “integrate with existing data systems”? If SDG&E has studied that question, please provide all reports, studies, analyses and workpapers that SDG&E or a third party prepared during such examination. If SDG&E has not studied that question, please explain why not.

d. Please confirm that SDG&E’s Application is not proposing to “send usage data directly from meters to CCAs” in a way that would allow the data to “bypass[] back office SDG&E systems.”

SDG&E Response to Question 2.7:

a. – c. SDG&E objects to these requests on the grounds that they (i) seek information that is not reasonably calculated to lead to the discovery of admissible evidence; (ii) call for conjecture or speculation; and (iii) are designed to elicit opinion rather than facts and, thus, violate the principles underlying discovery. Subject to and without waiving the foregoing objections, SDG&E responds as follows:

The Capability Maturity Assessment Document includes input provided by different business units within SDG&E regarding the following concept: “ability to send usage data directly from meters to CCAs, bypassing back office SDG&E systems.” One theoretical method of sending interval data directly from meters to CCAs would be to have the meter or AMI system designed to transmit data from a single electric meter back to two separate headends/networks (*i.e.*, the IOU network and a separate CCA network). This approach is considered at Row 222 by the IT & Analytics function and is classified

San Diego Community Power/Clean Energy Alliance
A.25-12-012 SDGE Smart Meter 2.0 Application
SDCP_CEA-SDGE-SmartMeter2.0-DR-002
DATE RECEIVED: April 24, 2026
DATE DUE: May 15, 2026

as a “Net New Capability” since, at this time, SDG&E is not aware of any commercially deployed meter or AMI system designed to transmit data from a single electric meter back through two separate communication networks/headends in parallel (*i.e.*, the IOU network and a separate CCA network).

A different approach would be to receive all meter data through the SDG&E headend, which is the current configuration, and make it directly available to CCAs by bypassing the existing SDG&E back-office systems. These back-office systems perform essential processing and controls necessary for billing, including CT/PT (current transformer / current transformer) scaling, validation, estimation, and editing (VEE) in MDMS, and final “bill-ready” checks and estimations in the Customer Information System (CIS). This is the approach considered at Row 422 (see Column I, noting that the scenario addressed involves use of the SDG&E headend/collection engine). Making customer interval data directly available to CCAs by bypassing the existing SDG&E back-office systems is not a reasonable or workable approach since complete bypass of the existing SDG&E back-office systems would impair data quality and accuracy, and would undermine the usability of the data for billing purposes.

d. Please see response to Question 2.7.a-c above.

San Diego Community Power/Clean Energy Alliance (SD CCAs)
A.25-12-012 SDGE Smart Meter 2.0 Application
SD_CCAs-SDGE- DR-003
DATE RECEIVED: June 22, 2026
DATE DUE: July 21, 2026

SD CCAs to SDG&E 3.2.

Please refer to SDG&E's response to the SD CCAs' second round of discovery at Question 2.7, where SDG&E states that one approach for sending data directly from meters to CCAs "would be to receive all meter data through the SDG&E headend, which is the current configuration, and make it directly available to CCAs by bypassing the existing SDG&E back-office systems." In this same response, please also refer to where SDG&E states, "[m]aking customer interval data directly available to CCAs by bypassing the existing SDG&E back-office systems is not a reasonable or workable approach since complete bypass of the existing SDG&E back-office systems would impair data quality and accuracy, and would undermine the usability of the data for billing purposes."

- a. Does SDG&E use interval meter data for any non-billing purposes before such data undergoes back-office systems processing? If yes, please describe all ways in which SDG&E uses such pre-processed data and at what and explain which departments receive it.
- b. Does SDG&E present energy usage information to customers, such as energy usage from the previous day, before the back-office systems perform "essential processing and controls necessary for billing"?
 - i. If yes, please explain the latency period between when power flows and when customers are able to access their own energy usage information.
 - ii. Please explain whether customers are able to share their energy usage information with authorized third parties at the same latency that they receive it themselves.
 - iii. If yes, please explain why such data cannot also be transmitted to CCAs at the same latency.
- c. Please describe the technical process and infrastructure that SDG&E would need to send interval meter data directly to CCAs in a way that would bypass the existing SDG&E back-office systems. Provide any supporting documentation or related cost information.
- d. Please refer to Figures 5-7 and 5-9 in Ex. SDG&E-05 and explain or illustrate where in those diagrams SDG&E could make meter data "directly available to CCAs" under the approach that bypasses the existing SDG&E back-office validation processes and systems.

SDG&E Response to Q2:

- a.

Yes, consumption data is sent to the Engineering Data Warehouse directly from the MDMS, where it's used by electric distribution teams for reliability and grid operations.
- b.

Yes, once customer data has been processed through Validation, Estimation & Editing (VEE) by the MDMS and loaded into the CIS, customers can view the data in parallel with the CIS performing its processing.

 - i. Customers can view their data within 5 to 34 hours after power flow processing, depending on where their meter appears in the CIS upload file sequence.

San Diego Community Power/Clean Energy Alliance (SD CCAs)

A.25-12-012 SDGE Smart Meter 2.0 Application

SD_CCAs-SDGE- DR-003

DATE RECEIVED: June 22, 2026

DATE DUE: July 21, 2026

- ii. No. Customers may manually download their data with the same latency by which the data is available to them. However, the automated process used to share data with authorized third parties does not occur until after 8:00 a.m. on the following day.
- iii. N/A

c. & d.

SDG&E objects to this request on the grounds that (i) it is vague and ambiguous, and (ii) would impose an undue burden on SDG&E by requiring it to perform studies, analyses or calculations or to create documents that do not currently exist and are not already in SDG&E's possession.

San Diego Community Power/Clean Energy Alliance (SD CCAs)
A.25-12-012 SDGE Smart Meter 2.0 Application
SD_CCAs-SDGE- DR-003
DATE RECEIVED: June 22, 2026
DATE DUE: July 21, 2026

SD CCAs to SDG&E 3.5.

Please refer to SDG&E's response to the SD CCAs' second round of discovery at Question 2.10, where SDG&E states that customer meter data used for "real-time operational notifications and alerts" is distinct from "real-time or near-real-time granular customer energy consumption data." Please also refer to SDG&E's response to the SD CCAs' second round of discovery at Question 2.14, where SDG&E discusses the data sources that could support enhanced "transformer-to-meter mapping." Please also refer to the excel file named "Consolidated SM 2.0 Business Capability Maturity Assessment" referenced by the SD CCAs throughout the SD CCAs' second round of discovery. In this excel file, please refer to row 420 where it states that SM 2.0 would be capable of "[b]road dynamic management of electricity demand by controlling customer loads in real-time or near-real-time in response to grid conditions and other factors (also expand on any capabilities around load throttling, microgrid applications). Company is looking to enhance existing functionality."

- a. Please explain exactly what specific meter data (usage, voltage, etc.) SDG&E will use for each of the following purposes, if SDG&E's SM 2.0 application is approved: (i) "real-time operational notifications and alerts," (ii) "transformer to meter mapping," and (iii) "[b]road dynamic management of electricity demand."
- b. For each of the purposes in subpart (a), please explain whether any of the utilized meter data would need to be validated through the validation, estimation, and editing (VEE) process in the Meter Data Management System. If so, explain which types of meter data would or would not need to be verified and why.
- c. Please identify all SDG&E departments that will have access to real-time or near real-time meter data under the SM 2.0 proposal and describe whether any of those access rights are materially more favorable than those available to CCAs currently or as proposed.

SDG&E Response to Q5:

- a.
 - (i) Please see SDG&E's response to SDCP_CEA-SDGE- DR-002, Question 2.10.
 - (ii) Transformer to meter mapping input data examples may include, but are not limited to: Voltage, phase, power quality.
 - (iii) At this time SDG&E is not proposing dynamic load management.
- b.

Customer consumption data used for billing purposes is subject to the VEE process within the Meter Data Management System (MDMS). VEE is designed to ensure that billed quantities are accurate, complete, and suitable for financial settlement, including detection and correction of missing, anomalous, or erroneous interval data.

By contrast, the meter data used for grid-related purposes (including transformer-to-meter mapping, phase identification, and other operational analytics) serves a different functional objective and is therefore not

San Diego Community Power/Clean Energy Alliance (SD CCAs)
A.25-12-012 SDGE Smart Meter 2.0 Application
SD_CCAs-SDGE- DR-003
DATE RECEIVED: June 22, 2026
DATE DUE: July 21, 2026

subject to the same VEE requirements.

c. Please see SDG&E's response to SDCP_CEA-SDGE DR-001, Question 1.14, subsections b-f.

San Diego Community Power/Clean Energy Alliance (SD CCAs)
A.25-12-012 SDGE Smart Meter 2.0 Application
SD_CCAs-SDGE- DR-003
DATE RECEIVED: June 22, 2026
DATE DUE: July 21, 2026

SD CCAs to SDG&E 3.9.

Referring to SDG&E's response to the SD CCAs' first round of discovery at Question 26, please provide for each customer class, one example of a 24-hour customer meter dataset at each of the following phases of data processing. Please provide each dataset in the native executable format that SDG&E receives it at its head end system once per 24 hours (post-midnight) as described in the referenced response. To the extent present, please remove any personally identifying customer information in your response. For each dataset in subparts (a)–(d), please provide the data in the native format used by the system in question (e.g., CSV, XML, or other structured file) and identify any fields removed to protect customer privacy.

- a. Before the data enters the Head-End System.
- b. After the data leaves the Head-End System but before it enters the Meter Data Management System.
- c. After the data leaves the Meter Data Management System but before it enters the Customer Information System.
- d. After the data leaves the Customer Information System.
- e. On average, what is the magnitude of corrections made to the raw data before it enters the head-end system and after it arrives at the customer information system?
- f. Provide any studies, analysis, supporting documents, or other materials that quantify the magnitude of corrections made to raw meter data before or after it enters the head-end system.

SDG&E Response to Q9:

- a.
The data between the meter and the headend is in a proprietary format and encrypted by the AMI vendor. Only the headend system can decrypt the data, therefore, sample data cannot be provided.
- b.
Data leaving the Head-End system is encrypted so a readable example of SDG&E data cannot be provided; our SM 1.0 vendor has provided a non-SDG&E example of the content. This data is in-memory transient data, which does not exist once data is consumed by the Meter Data Management System (MDMS). Please see attached file titled, "Head-End to MDMS example.txt."
- c.
Please see the attached files listed below which show example electric interval data as it moves from the MDMS to the Customer Information System (CIS). This data is from the SDG&E production dataflow, so the premise ID, service point ID, and meter number have been obfuscated:
 - 01111156390001_602.txt (residential 60-minute single channel intervals)
 - 02222380020001_606.txt (residential 15-minute two-channel intervals)
 - 04444068900002_306.txt (basic polyphase two-channel 15-minute intervals – generally associated with small commercial customers)

San Diego Community Power/Clean Energy Alliance (SD CCAs)
A.25-12-012 SDGE Smart Meter 2.0 Application
SD_CCAs-SDGE- DR-003
DATE RECEIVED: June 22, 2026
DATE DUE: July 21, 2026

- 03333552850001_405_ with CT PT 80.txt (advanced polyphase two-channel 15-minute intervals – generally associated with larger commercial/industrial customers). This example shows the data after the current transformer (CT) / potential transformer (PT) multipliers have been applied.
- Schema definition: MDPS to CIS Data Format File Electric intervals.xlsx.

d.
SDG&E objects to this request pursuant to Rule 10.1 of the Commission’s Rules of Practice and Procedure on the grounds that the burden, expense and intrusiveness of this request clearly outweigh the likelihood that the information sought will lead to the discovery of admissible evidence. Additionally, SDG&E objects to the request on the grounds that the request calls for SDG&E to create documents not already in SDG&E’s possession. Subject to and without waiving the foregoing objection, SDG&E responds as follows.

Creating examples of all the data after it leaves the CIS would involve considerable burden; and would require sample selection and confidential data obfuscation that is not already in SDG&E’s possession.

Notwithstanding the forgoing, one of the example repositories of the data after it leaves the CIS, is the SDG&E CCA Data lake which is accessible by CCAs within SDG&E’s service territory.

e.
SDG&E objects to this request pursuant to Rule 10.1 of the Commission’s Rules of Practice and Procedure on the grounds that the burden, expense and intrusiveness of this request clearly outweigh the likelihood that the information sought will lead to the discovery of admissible evidence. Further, SDG&E objects to the request on the grounds that the request calls for SDG&E to create documents not already in SDG&E’s possession. Subject to and without waiving the foregoing objection, SDG&E responds as follows.

There have been no studies or analyses performed by SDG&E regarding magnitude of corrections made to the raw data before it enters the head-end system and after it arrives at the customer information system.

f.
SDG&E objects to this request pursuant to Rule 10.1 of the Commission’s Rules of Practice and Procedure on the grounds that the burden, expense and intrusiveness of this request clearly outweigh the likelihood that the information sought will lead to the discovery of admissible evidence. Further, SDG&E objects to the request on the grounds that the request calls for SDG&E to create documents not already in SDG&E’s possession. Subject to and without waiving the foregoing objection, SDG&E responds as follows.

San Diego Community Power/Clean Energy Alliance (SD CCAs)

A.25-12-012 SDGE Smart Meter 2.0 Application

SD_CCAs-SDGE- DR-003

DATE RECEIVED: June 22, 2026

DATE DUE: July 21, 2026

There have been no studies or analyses performed by SDG&E regarding studies, analysis, supporting documents, or other materials that quantify the magnitude of corrections made to raw meter data before or after it enters the head-end system.

EXHIBIT E

Evidence of Latency of Interval Meter Data Provided by SDG&E to SD CCAs



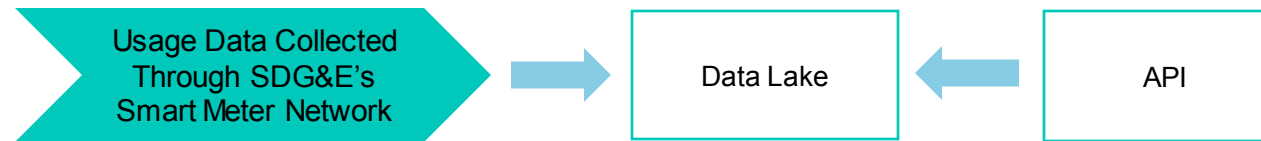
SDG&E and San Diego Region CCA Monthly Touchpoint

May 11, 2023

Project Update: Interval Data Sharing

Solution Overview

- Based upon the use case provided by the CCAs, SDG&E is building a technical solution for providing near real-time interval data
- Once complete, interval data for customers on CCA service will be accessible for the CCAs / Calpine to access. SDG&E will provide an API for the CCAs / Calpine to access the data directly through the interface (self-service)
- Leverages interval data in a new SDG&E Data Lake
- Solution requires CCAs/Calpine to build an interface to sync up with SDG&E's API



Timing: When will SDG&E be able to implement the transfer? How quickly will the data be transmitted?

- SDG&E expects to have its solution completed in early Q4 2023
- Joint testing with CCAs/Calpine will need to begin in August 2023
- SDG&E will be setting up an API design and file format walkthrough meeting with the technical teams for the CCAs and Calpine in July

Billing Quality: How quickly can SDG&E get billing quality interval data to CCA?

- Interval data will be available for access through the self-service solution two to three days after it has been recorded in the meter
- Estimated data will be updated with actual data as it becomes available

Project Update: Interval Data Sharing

Scope of Data: What is the detail of customer data being provided?

- CCAs/Calpine will only have access to data for their customers
- The same level of customer information currently provided in the EDI transactions (814, 867) will be made available in the solution
- Each request will have a max of one week's worth of interval data. There is a limit of 7 requests per CCA that can be submitted each day
- Upon implementation, SDG&E will make one year's worth of historical data usage data available

Data Access: Who gets the data? Where will data be transmitted? Can it be transmitted to CCA and Calpine?

- The information will be made available for the CCAs and Calpine to access. CCAs and Calpine will need to build an integration to the provided API to access the data.
- The data will be transmitted based upon the specific request from the API. Requests can be processed throughout the day and will take less than 30 minutes to fulfill

Data Format: What will be the data format? What are the system requirements for CCA to receive?

- The requested data will be provided in a pipe-delimited text format
- To request and receive the data the CCAs and Calpine will need to build an integration to access SDG&E's API

Cost: What is the cost structure for the solution? What is the monthly forecasted cost?

- The cost structure is based upon the specific number of requests that the CCAs/Calpine make ("per transaction" cost)
- Assuming 7 requests per day, every day, for an entire month, the cost would equate to ~\$1k for the month

From: Nordin, Sara H SNordin@sdge.com 
Subject: FW: Interval Data Lake Solution Meeting - Follow-Up
Date: August 29, 2023 at 12:47 PM
To: Lucas Utouh LUtouh@sdcommunitypower.org, Carly Newman cnewman@sdcommunitypower.org
Cc: Skeen, Jennifer (Contractor) JSkeen1@sdgecontractor.com

SN

Hi Lucas-

It came to my attention that we didn't respond to this question yet... I have this note from Chris but I don't know if it made it your way, so my apologies for the oversight.

So just to make sure you have the info on MV-90 meter interval data, please see below.

Thanks,

Sara

From: Swartz, Christopher D
Sent: Wednesday, August 2, 2023 10:23 AM
To: Nordin, Sara H SNordin@sdge.com
Cc: Nguyen, Olivia ONguyen@sdge.com
Subject: Interval Data Lake Solution Meeting - Follow-Up

Hi Sara,

As follow-up to our meeting on Friday, we were able to confirm that MV-90 Meter interval data will be available in the new Interval Data Lake solution. This data will be available in the same near-real time capacity, as the SDG&E Smart Meter data (2-3 days).

Chris Swartz

Sr. Group Product Manager

Digital Energy 4 Customer

(858) 654-8759



EXHIBIT F

Mission: data Map of Current Access to Real-time Energy Usage Data

SOURCE: Mission:data Coalition, available at:
<https://explorer.missiondata.io/?display=utilities%3ArealTimeElectricUsage>

