SDG&E RESIDENTIAL UNTIERED ELECTRIFICATION RATE - A.21-09-001 DATE RECEIVED: December 6, 2021 DATE RESPONDED: December 20, 2021

General Objections:

SDG&E objects to the definitions and instructions included in this data request on the grounds that they are overbroad, unduly burdensome, and seek information that is irrelevant to the subject matter involved in the pending proceeding and/or not reasonably calculated to lead to the discovery of admissible evidence, and therefore, beyond the requirements of CPUC Rule of Practice and Procedure 10.1. SDG&E also notes that special interrogatory instructions of this nature are expressly prohibited by California Code of Civil Procedure Section 2030.060(d). SDG&E further objects to the continuing and indefinite nature of this request on the grounds that it is unduly burdensome. Continuing interrogatories are expressly prohibited by California Code of Civil Procedure Section 2030.060(g). SDG&E will provide all responsive documents and information in existence at the time of its response.

1. Please provide complete workpapers, in Excel format where available, for SDG&E's application.

SDG&E Response:

Subject to and without waiving the foregoing general objections, SDG&E responds as follows:

Please see the attached documents titled "Updated_CONFIDENTIAL - Illustrative Rate Design A2109001.xlsx" and "TOU-ELEC Bill Model A2109001 (Amended Proposal).xlsx".

"Updated_CONFIDENTIAL – Illustrative Rate Design_A2109001.xlsx" contains nonpublic "protected materials" (i.e., trade secret, market sensitive, or other confidential and/or proprietary information) as determined by SDG&E in accordance with the provisions of Decision 06-06-066 and subsequent decisions. The Protected Materials have been highlighted in yellow. The confidentiality declaration of Hannah Campi is also provided.

- 2. Please identify where to find in SDG&E's workpapers the following:
 - a. the calculation of the proposed new TOU-ELEC rate;
 - b. the marginal costs used to develop the proposed new TOU-ELEC rate. Please indicate whether these marginal costs are the same as those that SDG&E filed in its most recent general rate case Phase 2 application A. 19-03-002. If they are different, please indicate what the differences are.
 - c. The data underlying Figure HC-1.

- 1. Please see the attached documents titled "Updated_CONFIDENTIAL Illustrative Rate Design A2109001.xlsx"
- 2. See response to 2a.
- 3. See response to 2a, "Determinants" tab.
- 3. At page GM-5, SDG&E's testimony states that "SDG&E's rate proposal in this testimony reflects selected feedback" from the workshops that SDG&E held on the design of an electrification rate.

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Please specify exactly what feedback SDG&E included in exactly which elements of SDG&E's proposal, with specific reference to the presentations at those workshops.

SDG&E Response:

As stated in the Revised Direct Testimony of Gwendolyn Morien at GM-4:13-14 and GM-5:1-2, SDG&E's proposal reflects considerations about the level of the fixed charge, potential revenue undercollections, cost shifting, and TOU pricing differentials. Intervenor feedback reflected in the application is not limited to the specific intervenor presentations in Attachment A to the Revised Direct Testimony of Gwendolyn Morien, but also reflects participating parties' verbally expressed concerns.

In workshops, SDG&E presented an illustrative flat fixed charge of \$35/month. In order to better reflect cost causation principles, SDG&E in its application proposed a fixed charge more aligned with the costs customers impose on the grid. Therefore, customers with low demand will benefit from having a lower fixed charge, while customers who impose more costs on the grid through higher demands will have a higher fixed charge.

Certain parties verbally expressed concern for low-income customers and cost shifting to non-participating customers. SDG&E's application proposes an income-qualified option for California Alternate Rates for Energy (CARE) and Family Electric Rates Assistance (FERA) customers that has a 50% discount on the fixed charge, as shown in the Revised Direct Testimony of Hannah Campi on HC-13.

Additionally, SDG&E's rate proposal includes elements designed to mitigate cost shifting from participating customers, as discussed at GM-14-15.

4. Please identify what costs are included in the proposed TOU-ELEC rate's monthly fixed charges. Does the monthly fixed charge include distribution system costs as well as customer-related costs? Please provide a summary of the types of costs and amounts that are included in the illustrative TOU-ELEC rate \$ per month fixed charge tiers (see Table HC-4).

SDG&E Response: Please see the attached documents titled "Updated_CONFIDENTIAL - Illustrative Rate Design A2109001.xlsx" "Tiered Customer Charge" tab.

5. Please explain whether or not (and why) the TOU-ELEC rate option would be available to customers that have installed a solar PV system, but not another DER technology (storage, an EV, or a heat pump).

SDG&E Response:

As stated in the Revised Direct Testimony of Gwendolyn Morien, SDG&E was ordered in D.20-03-003 to file an application for an optional residential rate that would be available to customers with qualifying technologies, which are: energy storage, EVs, and/or heat pumps for water heating or climate control. Customers who have installed one or more of the three qualifying technologies, regardless of whether they do or do not have a solar PV system, are eligible to take service on the proposed rate. Additionally, SDG&E is proposing that customers who take service on the NEM Reform Tariff adopted in D.20-08-020 be allowed to take service on TOU-ELEC.

6. Please explain why TOU-ELEC would be open to NEM 3.0 (Reform Tariff) customers, but not existing NEM (1.0 and 2.0) customers. (See page GM-13, lines 1-4).

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SDG&E Response:

SDG&E objects to this request on the grounds that it is unintelligible in that it assumes facts that do not exist.

Notwithstanding the foregoing objection, SDG&E responds as follows: The referenced lines of SDG&E's testimony do not propose to limit eligibility of TOU-ELEC to NEM 3.0 Reform Tariff customers and exclude NEM 1.0 and 2.0 customers.

7. Please explain why the TOU-ELEC rate option would not be available to customers that have installed a smart thermostat. Why did SDG&E limit TOU-ELEC to just three DER technologies (storage, an EV, or a heat pump)?

SDG&E Response:

As stated in D.20-03-003, Ordering Paragraph (OP) 10, and on GM-1:11-15, SDG&E was ordered to propose a rate that was available to the three technologies referenced: storage, EV, and/or heat pump for water heating or climate control.

8. Please provide, or identify where to find, workpapers supporting the 8.7 c/kWh reduction in the volumetric rate that results from residential customers paying higher fixed charges. (See page GM-11, line 14).

SDG&E Response:

SDG&E's 8.7 c/kWh reduction can be calculated by comparing the volumetric total distribution rate of its non-CARE default residential rate, TOU-DR1 (\$0.12180), to the proposed illustrative volumetric total distribution rate of TOU-ELEC (\$0.03524), based on rates effective June 1, 2021. These rate components are presented on the 'Rates' tab of the workpaper provided in response to Question 1 "TOU-ELEC Bill Model A2109001 (Amended Proposal).xlsx".

9. Please provide workpapers for the TOU-DER illustrative total rates shown in Table 1 (page GM-14).

SDG&E Response:

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 reasonably calculated to lead to the discovery of admissible evidence. TOU-DER is not in scope within this proceeding. Further, SDG&E objects to this request on the grounds that it requires SDG&E to provide documents previously produced. Such documents are already in SEIA's possession. SDG&E's workpapers for TOU-DER were provided to SEIA through a data request in R.20-08-020.

- 10. Please provide, if available:
 - a. A representative 8760 hourly load profile for the residential customers with non-coincident peak demands that fall into each of the tiers of SDG&E's proposed demand-differentiated monthly fixed charge (see Table HC-4). Thus, this question asks for four (4) representative 8760 hourly residential load profiles. If these profiles are not available, please provide separate 8760 hourly load profiles that are representative of SDG&E's residential

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- customers in each of these rate schedules DR, TOU-DR1, DR-SES, and all EV schedules.
- b. Any representative 8760 hourly load profiles that SDG&E has developed for residential customers who adopt one or more of the qualifying technologies for the proposed TOU-ELEC rate.
- c. Any estimate that SDG&E has developed of the expected mix of the three qualifying technologies (as presented on pages GM-7 to GM-10) that SDG&E expects TOU-ELEC customers to adopt.
- d. The "aggregated customer load profiles" that SDG&E used to calculate bill impacts in Attachment A to Ms. Campi's testimony.
- a. Please see the attached document titled "A.21-09-001 SEIA DR01Q10a.xlsx"
- b. SDG&E has not developed specific representative load profiles for residential customers who adopt one or more of the qualifying technologies for the proposed TOU-ELEC rate, other than the profiles included in the workpapers provided in response to Question 1.
- c. SDG&E objects to this request on the grounds that it would impose an undue burden on SDG&E by requiring it to perform studies, analyses or calculations or create documents that do not currently exist.
- d. See response to Question 1.
- 11. Page GM-14 of Ms. Morien's testimony concedes that "this rate offering may create inequity between customers who adopt specific technologies and those who cannot," then discusses the concern that this rate may create a "cost shift." Please provide:
 - a. SDG&E's definition of "cost shift" as that term is used on page GM-14. Does SDG&E mean a shortfall in costs recovered under the proposed TOU-ELEC compared to costs recovered under the residential default rate, or a shortfall in recovering SDG&E's cost of service for residential customers?
 - b. Any calculation or analysis that SDG&E has performed of the cost recovery under the proposed TOU-ELEC rate versus cost recovery under SDG&E's default residential rate.
 - c. Any calculation or analysis that SDG&E has performed comparing the cost recovery under the proposed TOU-ELEC rate versus SDG&E's residential cost of service.
 - d. Any calculation of the expected cost shift (as that term is used on page GM-14) in millions of dollars per year, if the TOU-ELEC rate achieves its full 40,000 customer subscription.
 - e. The basis for SDG&E's proposed limit of 40,000 on customer subscriptions to TOU-ELEC
 - f. SDG&E's plans, if any, to re-evaluate TOU-ELEC if and when SDG&E reaches the proposed limit of 40,000 on customer subscriptions to TOU-ELEC. When and in what proceeding would SDG&E propose that this re-evaluation occur?

- a. In this context, SDG&E is referring to the shortfall in costs recovered under the proposed TOU-ELEC compared to costs recovered under the residential default rate.
- b. See attached file titled "A.21-09-001 SEIA DR01Q11b.xlsx"
- c. SDG&E objects to this request on the grounds that it would impose an undue burden on SDG&E by requiring it to perform studies, analyses or calculations or create documents that do not currently exist.
- d. See response to question 11b.

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- e. SDG&E's proposed cap of 40,000 participants is in part based on the file provided in response to question 11b. As stated on GM-14, SDG&E aims to balance incentivizing adoption of eligible technologies with any cost shifting that may occur.
- f. 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. As stated on GM-15:17-22: "SDG&E proposes to review this rate three years from its date of implementation to assess customer adoption trends, whether cost shifting has occurred, if changes should be made to the tariff to address the cost shift, and whether to change the customer participation cap. Thus, if SDG&E implements this rate by 2023, the review would commence by the end of 2026. SDG&E anticipates this review could be incorporated into the next GRC Phase 2 that occurs after this rate is implemented, which is expected to be filed in 2026."
- 12. SDG&E's proposed TOU-ELEC fixed charge will be based on "the average of the [residential customer's] three maximum monthly demands in the last 12 months." Please answer the following questions about a residential customer's three maximum monthly demands.
 - a. What is the time period (in minutes) over which a residential customer's maximum monthly demand will be measured?
 - b. Will this maximum monthly demand be measured by calendar month or by the customer's monthly billing period?
 - c. Do SDG&E's residential customers have access to their maximum monthly or daily demand data today? If they do, please explain:
 - i. Whether and where this monthly demand is shown on a customer's monthly bill or online on the customer's SDG&E account webpage(s).
 - ii. What are the exact steps that a customer would need to take to obtain or download the data needed to determine their maximum monthly demand for both the current monthly billing period and the last 12 months?
 - d. How does SDG&E plan to notify TOU-ELEC customers of their "three maximum monthly demands in the last 12 months." Will these three values be shown on a customer's monthly bill or online on the customer's SDG&E account webpage(s)?
 - e. Please explain when and how SDG&E will inform prospective TOU-ELEC customers of their "three maximum monthly demands in the last 12 months" so that they can evaluate the economics of investing in qualifying distributed energy resources (DERs) and taking service under TOU-ELEC.
 - f. Please explain why Ms. Morien's testimony was modified to change the original description of "three daily maximum noncoincident demands" to the revised "three monthly maximum noncoincident demands." What clarification or change to SDG&E's proposal was intended by this modification?

- a. Peak demand would be measured based on one hour intervals.
- b. The maximum monthly demand will be measured over the customer's billing period.
- c. Yes
 - i. SDG&E customers currently can access their maximum monthly demand on their monthly bills, which can be accessed online through MyAccount. Currently, a customer with at

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least 12 months of bills could review their prior 12 months of bills and see their maximum monthly demands for each billing period.

- ii. SDG&E objects to the request to the extent that it 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. SDG&E further 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: See response to question 12(c)(i) above. As this rate design has not been adopted, SDG&E does not have detailed implementation information developed at this time for TOU-ELEC, and the steps may differ from how a customer may currently access this data.
- d. SDG&E objects to the request to the extent that it 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. SDG&E further 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: Subject to and without waiving the foregoing objection, SDG&E responds as follows: See response to Question 12c. SDG&E does not have detailed implementation information developed at this time.
- e. SDG&E objects to the request to the extent that it 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. SDG&E further 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: SDG&E anticipates communicating these hours to customers; SDG&E has not speculated on how to inform prospective TOU-ELEC customers of their three maximum monthly demands over the past 12 months associated with this proposed rate design as it has not been approved by the Commission, and therefore, would be premature.
- f. SDG&E revised its testimony from "three daily maximum noncoincident demands" to the revised "three monthly maximum noncoincident demands" primarily in an effort to minimize implementation costs. SDG&E currently stores residential customer maximum monthly demands in each billing period. Leveraging existing customer data will reduce implementation costs when compared to SDG&E's original proposal.
- 13. Page GM-2 of Ms. Morien's testimony notes that SDG&E has not previously offered a demand-based residential rate, and asserts that the structure of the proposed demand-based monthly fixed charge under TOU-ELEC is "innovative." Please provide any research that SDG&E has conducted on whether, when, and where other electric utilities in the U.S. have obtained regulatory approval for residential demand charges or demand-based monthly fixed charges for residential customers. Please provide specifics on those other utilities and their residential rate schedules that include either residential demand charges or demand-based monthly fixed charges. Please also provide any instances that SDG&E is aware of when regulators have declined to adopt proposals for either residential demand charges or demand-based monthly fixed charges.

SDG&E Response:

SDG&E objects to the request on the grounds that it 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. Notwithstanding the foregoing objection, SDG&E responds as follows: SDG&E does not

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possess any research responsive to this request, nor is SDG&E aware of any instances where regulators have declined similar proposals.

14. Figure HC-1 shows the percentages of residential customers under the DR, TOU-DR1, DR-SES, and EV rate schedules that fall into various tranches of maximum noncoincident demands. For each of these tranches and each of these rate schedules, please provide the percentage of customers in that tranche and that rate schedule that are also net energy metering (NEM) customers with an installed solar system.

SDG&E Response:

RATE	T1	T2	2	T3	T4
DR	g	9%	26%	44%	50%
DRSES	100)%	100%	100%	100%
TOUDR1	9	8%	11%	25%	30%
ALL EV	18	3%	35%	43%	55%

- 15. Please provide:
- a. The total number of residential customers that SDG&E serves.
- b. The number of residential customers taking service under each of these rate schedules: DR, TOU-DR1, DR-SES, and all EV schedules.
- c. The number of NEM customers in each of these rate schedules: DR, TOU-DR1, DR-SES, and all EV schedules.
 - a. SDG&E serves 1,294,879 residential accounts.

b.

DR	470,093
DRSES	32,197
TOUDR1	555,394
ALL EV	18,569

c.

DR	80,250
DRSES	32,190
TOUDR1	35,610
ALL EV	7,557

16. Please provide all data requests that SDG&E has received from other parties concerning this application. This is a continuing request, should SDG&E receive further data requests after December 6, 2021. After reviewing these requests, SEIA plans to request SDG&E's responses to certain data request questions from other parties. If SDG&E has established an online data repository for data request responses, please indicate how SEIA can access this repository.

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OBJECTION: SDG&E objects to the continuing and indefinite nature of this request on the grounds that it is unduly burdensome. Continuing interrogatories are expressly prohibited by California Code of Civil Procedure Section 2030.060(g). SDG&E will provide all responsive documents in existence at the time of its response. Should SEIA seek to update its request, SDG&E will respond to such a request as a new data request in the future. Subject to and without waiving the foregoing objections, SDG&E responds as follows.

All data requests received by SDG&E in this proceeding, including and public responses that SDG&E has provided to parties to date can be found at the web address below. https://www.sdge.com/rates-and-regulations/proceedings/Application-for-a-Residential-Untiered-Time-of-Use-Rate-with-a-Fixed-Charge