

**NRDC DATA REQUEST**  
**NRDC-SDG&E-DR-02**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**SDG&E RESPONSE**  
**DATE RECEIVED: May 31, 2017**  
**DATE RESPONDED: June 8, 2017**

Please provide electronic responses to the following questions related to San Diego Gas & Electric's Application 17-01-020, *Application of San Diego Gas & Electric Company (U 902-E) For Authority to Implement Priority Review and Standard Review Proposals to Accelerate Widespread Transportation Electrification*.

If partial responses are available prior to the response date specified above, please provide them as they become available. If any of the questions below are not clear or are otherwise objectionable, please contact me so that we may clarify or resolve any issues.

**Responses to questions 1-4 should be prioritized, given they could inform the briefs due June 16<sup>th</sup> on the priority review projects.**

Responses should be provided to myself at [mbaumhefner@nrdc.org](mailto:mbaumhefner@nrdc.org) and Melissa Whited at [mwhited@synapse-energy.com](mailto:mwhited@synapse-energy.com).

## **DATA REQUEST**

### **Questions:**

- 1) For the system, please provide a backcasting analysis for each of the years 2014 – 2016 to identify the event trigger hours (i.e., the hours in which the C-CPP would have been applied, were it in place at the time).

#### **SDG&E Response:**

Please see the attached file titled "NRDC DR02 – Q1 – System Hours 2014-2016.xlsx".

- 2) For each distribution circuit, please provide a backcasting analysis for each of the years 2014 – 2016 to identify the event trigger hours (i.e., the hours in which the D-CPP would have been applied, were it in place at the time).

#### **SDG&E Response:**

The attached files "NRDC DR02 – Q2 – Circuit Hours 2014 (Confidential).xlsx", "NRDC DR02 – Q2 – Circuit Hours 2015 (Confidential).xlsx," and "NRDC DR02 – Q2 – Circuit Hours 2016 (Confidential).xlsx" contain Protected Material (as defined in the Non-Disclosure and

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Protective Agreement between SDG&E and NRDC [“NDA”]) and are being produced subject to the terms of such NDA.

- 3) Please refer to the Prepared Direct Testimony of Cynthia Fang, page CF-23. Please provide the Company’s definition of “M/L C&I customers”.

**SDG&E Response:**

For purposes of this rate design, SDG&E defines M/L C&I customers as those customers taking service under Schedules AD, AL-TOU, DG-R, AY-TOU, A6-TOU, and OL-TOU. Although applicability varies slightly between the M/L C&I schedules, generally speaking, M/L C&I customers are those with a Maximum Monthly Demand which is greater than 20kW.

- 4) Regarding the Commercial GIR:

- a. Please explain whether the Commercial GIR would only be made available to customers participating in SDG&E’s proposed Fleet Delivery Services project, or whether it would also be made available to other commercial customers.

**SDG&E Response:**

As noted on page CF-4 of the Prepared Direct Testimony of Cynthia Fang, SDG&E proposes to make the GIRs optionally available to all customers.

- b. If the Commercial GIR would only be available to commercial customers participating in the Fleet Delivery Services project, please explain what tariffs other commercial customers with EVs or EV charging infrastructure would take service on.

**SDG&E Response:**

Please see the response to question 4a.

- c. Please discuss how SDG&E’s current commercial tariffs encourage or discourage commercial customers from installing EV charging infrastructure for their customers or employees.

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**SDG&E Response:**

This rate structure encourages customers, including commercial charging customers that install EV charging infrastructure, to respond to price signals that promote reduction of both coincident and noncoincident peak demand.

SDG&E's current commercial tariffs are designed to reflect the recovery of utility cost of service for Medium and Large Commercial and Industrial ("M/L C&I") customers, subject to various regulatory requirements.

In order to be truly cost-based, a typical electric rate would have to reflect the following structure:

- Customer Costs – SDG&E incurs these costs on a fixed basis for each interconnected customer whether or not the customer uses electricity; therefore, customer costs should be recovered in a fixed or monthly charge (\$/month).
- Distribution Demand Costs – SDG&E incurs these costs independent of energy usage. These costs are incurred on the basis of local capacity needs to meet the combined maximum demand of customer recovered on non-coincident demand ("NCD"), distribution demand costs should be recovered in a NCD charge (\$/NCD – kW).
- Generation Capacity Costs – SDG&E does not incur these costs on the basis of energy usage, but rather on the basis of meeting net peak capacity needs of the system; therefore, system capacity costs should be recovered in a demand charge consistent with the time period in which those costs occur, which is demand at the time of net system peak when SDG&E may require additional capacity (\$/peak-kW).
- Commodity Energy Costs – SDG&E incurs these on a variable basis (based on energy usage) and the cost depends on the time of delivery. Therefore, these costs should be recovered in an energy charge (\$/kWh) that varies by time period.

M/L C&I rates approach cost-based, as they receive service under an unbundled rate structure that has:

- 1) distribution costs recovered through a monthly service fee and demand charges, excluding program costs;
- 2) transmission costs recovered through demand charges including RS;
- 3) commodity costs recovered through a peak demand charge and TOU energy rates; and
- 4) all other costs recovered through energy rates.

- d. Please discuss whether SDG&E is considering any modifications to commercial tariffs for customers without fleet delivery vehicles to encourage greater adoption of EVs. If yes, please describe what modifications SDG&E is considering and when such tariffs would be implemented.

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**SDG&E Response:**

SDG&E is not considering any modifications to its existing commercial tariffs as part of this proceeding.

- 5) Please provide a bill impact analysis for a representative sample of EV customers using 2016 data. For each customer, please calculate the customer's annual bill under a hypothetical scenario in which the Company's proposed GIR is in effect, versus what the customer's actual bill was on the EV-TOU or EV-TOU 2 rate.

**SDG&E Response:**

Please see the file titled "TURN\_SDGE\_DR\_01 Q14 Bill Calculation," which was prepared in response to a similar question in TURN's DR01 in this proceeding. This file is available at the link below:

<https://www.sdge.com/regulatory-filing/20491/application-sdge-authority-implement-priority-review-and-standard-review>

[Data Responses > TURN > TURN-DR-01 (with attachments) > TURN\_SDGE DR\_01 Q14 Bill Calculator.xlsx]

Below is the language that accompanied the original response to TURN.

This will allow for an illustrative sample bill/calculation model of winter and summer months for Commercial GIR, Residential GIR, and Public Charging GIR. The model calculates illustrative monthly bills based on 2016 calendar year with 2016 CAISO Day Ahead Hourly Price, top 150 hours of system peak in 2016 for the C-CPP Hourly Adder, and 5 options of top 200 hours of circuit peak in 2016 for the D-CPP Hourly Adder.

The default scenario provided in the model assumes a customer on the proposed Residential GIR with monthly energy usage of 1,000 kWh during the summer months and 900 kWh during the winter months. Additionally, for both the summer and winter months, 25% of the customer's energy usage occur during the Super Off-Peak period for weekdays and 60% of energy usage occur during the Super Off-Peak period for weekends/holidays. Please see the "Inputs" tab.

The model's illustrative bill output categorizes the monthly bill by each component of the proposed GIR (Grid Integration Charge (GIC), Hourly Base Rate, and Dynamic Adders). The output also calculates the monthly billing units used to determine the monthly bill. Variations between months occur based on differences in CAISO Day Ahead Hourly Prices and occurrence of Dynamic Adder events. Please see the "Bill Estimate" tab.

For other assumptions and to calculate different rate and usage scenarios, the attached bill

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calculation model allows the user to calculate illustrative monthly bill for each proposed GIR (Commercial GIR, Residential GIR, and Public Charging GIR), and current standard commercial schedule AL-TOU (01-01-2017) and current standard residential Electric Vehicle schedule EV-TOU-2 (01-01-2017) for comparison purposes. Please follow the instructions on the “Inputs” tab.

- 6) Separately for the EV-TOU and EV-TOU 2 rates, please provide a representative sample of EV customer load profiles on an hourly basis. Please remove any customer identifying information.

**SDG&E Response:**

Please see the attached file titled “NRDC DR02 – Q6 – EV Load Shapes.xlsx,” which contains the average hourly load profiles for customers on SDG&E’s EV-TOU and EV-TOU-2 rates. Note, the EV-TOU-2 numbers have been split into NEM and Non-NEM.