

**ORA DATA REQUEST**  
**ORA-SDG&E-DR-02**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**SDG&E RESPONSE**  
**DATE RECEIVED: March 22, 2017**  
**DATE RESPONDED: April 7, 2017**

**INSTRUCTIONS**

You are instructed to answer the following Data Requests in the above-captioned proceeding, with written, verified responses per Public Utilities Code §§ 309.5 and 314, and Rules 1.1 and 10.1 of the California Public Utilities Commission's Rules of Practice and Procedure. Restate the text of each request prior to providing the response. For any questions, email the ORA contact(s) above with a copy to the ORA attorney.

Each Data Request is continuing in nature. Provide your response as it becomes available, but no later than the due date noted above. If you are unable to provide a response by this date, notify ORA as soon as possible, with a written explanation as to why the response date cannot be met and a best estimate of when the information can be provided. If you acquire additional information after providing an answer to any request, you must supplement your response following the receipt of such additional information.

Identify the person providing the answer to each data request and his/her contact information. Responses should be provided both in the original electronic format, if available, and in hard copy. (If available in Word format, send the Word document and do not send the information as a PDF file.) All electronic documents submitted in response to this data request should be in readable, downloadable, printable, and searchable formats, unless use of such formats is infeasible. Each page should be numbered. If any of your answers refer to or reflect calculations, provide a copy of the supporting electronic files that were used to derive such calculations, such as Excel-compatible spreadsheets or computer programs, with data and formulas intact and functioning. Documents produced in response to the data requests should be Bates-numbered, and indexed if voluminous. Responses to data requests that refer to or incorporate documents should identify the particular documents referenced by Bates-numbers or Bates-range.

If a request, definition, or an instruction, is unclear, notify ORA as soon as possible. In any event, answer the request to the fullest extent possible, specifying the reason for your inability to answer the remaining portion of the Data Request.

SDG&E General Objections:

Regarding the request for contact information, contact with SDG&E should be coordinated through SDG&E's case manager for this proceeding: Jennifer Wright ([JWright@semprautilities.com/858-654-1891](mailto:JWright@semprautilities.com/858-654-1891)).

**DATA REQUEST**

**ORA DATA REQUEST**  
**ORA-SDG&E-DR-02**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**SDG&E RESPONSE**  
**DATE RECEIVED: March 22, 2017**  
**DATE RESPONDED: April 7, 2017**

1. Please provide workpapers showing the derivation of SDG&E's proposed rates.

**SDG&E Response (Provided by Cynthia Fang):**

Pursuant to CPUC Decision D.06-06-066, the attached file "ORA\_SDGE\_DR\_02 – Q1 (Confidential)" contains confidential information and is protected from disclosure.

2. For each of SDG&E's existing electric vehicle (EV) rates, please provide the number of customers on the rate and, if applicable, any caps on the total number of customers.

**SDG&E Response (Provided by Randy Schimka):**

As of March 1, 2017, there are 253 customers on rate EV-TOU, and 8,729 customers on rate EV-TOU2, for a total of 8,982 EV rate customers. There are no caps on these two rates.

- a. If SDG&E is aware of any non-EV customers being on its EV rates, please break down these rates by the number of EV customers vs. non-EV customers.

**SDG&E Response (Provided by Randy Schimka):**

SDG&E is not aware of any non-EV customers being on EV rates.

- b. If SDG&E is aware of any EV customers being on non-EV specific rates (e.g. ATOU), please also provide the number of EV customers on those rates.

**SDG&E Response (Provided by Randy Schimka):**

As of March 1, 2017, SDG&E is aware of 8,982 EV rate customers that are signed up for residential EV rates (EV-TOU or EV-TOU2). Since SDG&E estimates that there are 23,650 EVs in its service territory as of March 1, 2017, SDG&E estimates that there are currently 14,668 EVs in SDG&E's service territory that are not on an EV rate. Since the owner identities and addresses of those vehicles are unknown, SDG&E does not know what rate(s) the remaining 14,668 EVs are on.

However, as a second data point, SDG&E is currently soliciting signups for the EV Climate Credit that all EV drivers are eligible for. Some of the data collected in the signup process for that program are the driver's name, address, account number, and current rate. Signups will close in May, but the four weeks of EVCC signup data collected so far from 3,408 drivers indicates that 1,506 are on EV rates. The 28 customers that declared GR or GR-LI have to be clarified, since those are gas rates. Responses collected to date are as follows:

**ORA DATA REQUEST**  
**ORA-SDG&E-DR-02**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**SDG&E RESPONSE**  
**DATE RECEIVED: March 22, 2017**  
**DATE RESPONDED: April 7, 2017**

- Rate DM (5)
- Rate DR (1,555)
- Rate DR-LI (81)
- Rate DR-SES (111)
- Rate TOU-DR (6)
- Rate DR-TOD PSH (53)
- Rate DR-TOU (6)
- Rate EV-TOU (21) – Residential EV Rate
- Rate EV-TOU2 (1,485) – Residential EV Rate
- Rate GR (27)
- Rate GR-LI (1)
- Rate Multiple (1)
- Rate TOU-DR-E1 (7)
- Rate TOU-DR-E2 (26)
- Rate TOU-DR-E3 (23)

Total: 3,408

3. How would SDG&E determine whether distribution upgrades at the primary, secondary, and customer levels are needed to enable commercial EV charging? How is clustering considered?

**SDG&E Response (Provided by Randy Schimka):**

Upon receiving a notice from the customer that they are adding load to their electric service, SDG&E would perform a voltage drop and flicker calculation to determine whether the transformer, secondary and service are adequately sized. SDG&E would also review the upstream distribution system to ensure that primary cables and fusing devices are properly sized.

- a. What is the size of the allowance granted under Line Extension Rules 15 and 16 for distribution upgrades pertaining to incremental commercial EV load? Are there any demarcations associated with the size (i.e. costs associated with accommodating incremental EV load at various sizes)? How about residential EV load?

**SDG&E Response (Provided by Randy Schimka):**

Allowances for incremental commercial EV load are calculated specifically for each customer. Rule 15.C.2<sup>1</sup> supplies the formula for non-residential allowance calculation.

---

<sup>1</sup> Sheet 4 in SDG&E Rule 15: [http://regarchive.sdge.com/tm2/pdf/ELEC\\_ELEC-RULES\\_ERULE15.pdf](http://regarchive.sdge.com/tm2/pdf/ELEC_ELEC-RULES_ERULE15.pdf)

**ORA DATA REQUEST**  
**ORA-SDG&E-DR-02**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**SDG&E RESPONSE**  
**DATE RECEIVED: March 22, 2017**  
**DATE RESPONDED: April 7, 2017**

Allowance = Net Revenue / Cost of Service Factor. The net revenue is calculated based on the incremental EV load added and the specific customer's energy rate. Therefore, in the commercial space, each customer's allowances will be specific to the EV load they add and the electric rate at which they are being billed. There is no general "size" that could be assumed for all customers. Residential allowances, however, are applied as a flat rate as filed under SDG&E Rule 15.C.3. The current Permanent Residential Service allowance is \$2,841.00.

4. In its testimony, SDG&E proposes a Grid Integration Charge (GIC) that is "based on a customer's maximum annual demand" (p. CF-14). How will maximum annual demand be measured? Will it be measured for the full year prior to and including the current month, or on a calendar-year basis, or another basis? If it is another basis, please describe the process.

**SDG&E Response (Provided by Cynthia Fang):**

For SDG&E's proposed GICs, a customer's Maximum Annual Demand is defined as "the highest Maximum Monthly Demand for the current and prior eleven months" (Footnote 25 on page CF-24 of the Testimony of Cynthia Fang). Additionally, the GIC includes an exemption for demand that occurs during the super-off peak period. As noted in the Testimony of Cynthia Fang, "this exemption would result in demand that occurs during the super off-peak period from being excluded from the determination of maximum demand for the application of the GIC" (Page CF-20).

5. For each circuit providing service to commercial customers, please:

- a. Provide the sum of all customers' maximum non-coincident demands for each circuit for each of the most recent 12 months. For each circuit, please also provide a chart displaying the how many customers peak in each hour for each of the most recent 12 months.
- b. Provide the maximum demand registered on each respective circuit for each of the most recent 12 months. Please also indicate the timing of peak for each circuit.

**SDG&E Response (Provided by Cynthia Fang):**

Pursuant to CPUC Decision D.97-10-031, the attached files listed below contain confidential information and are protected from disclosure.

- "ORA\_SDG&E\_DR\_02 – Q5A1 (Confidential)" - monthly sum of all customers' maximum non-coincident demands for each circuit (that provides service to commercial customers) for the most recent 12 months.

**ORA DATA REQUEST**  
**ORA-SDG&E-DR-02**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**SDG&E RESPONSE**  
**DATE RECEIVED: March 22, 2017**  
**DATE RESPONDED: April 7, 2017**

- “ORA\_SDG&E\_DR\_02 – Q5A2 (Confidential)” - charts of each circuit (that provides service to commercial customers) displaying the number of customers’ monthly peak by each hour for the most recent 12 months.
- “ORA\_SDG&E\_DR\_02 – Q5B (Confidential)” - monthly maximum demand registered on each circuit (that provides service to commercial customers) for the most recent 12 months.

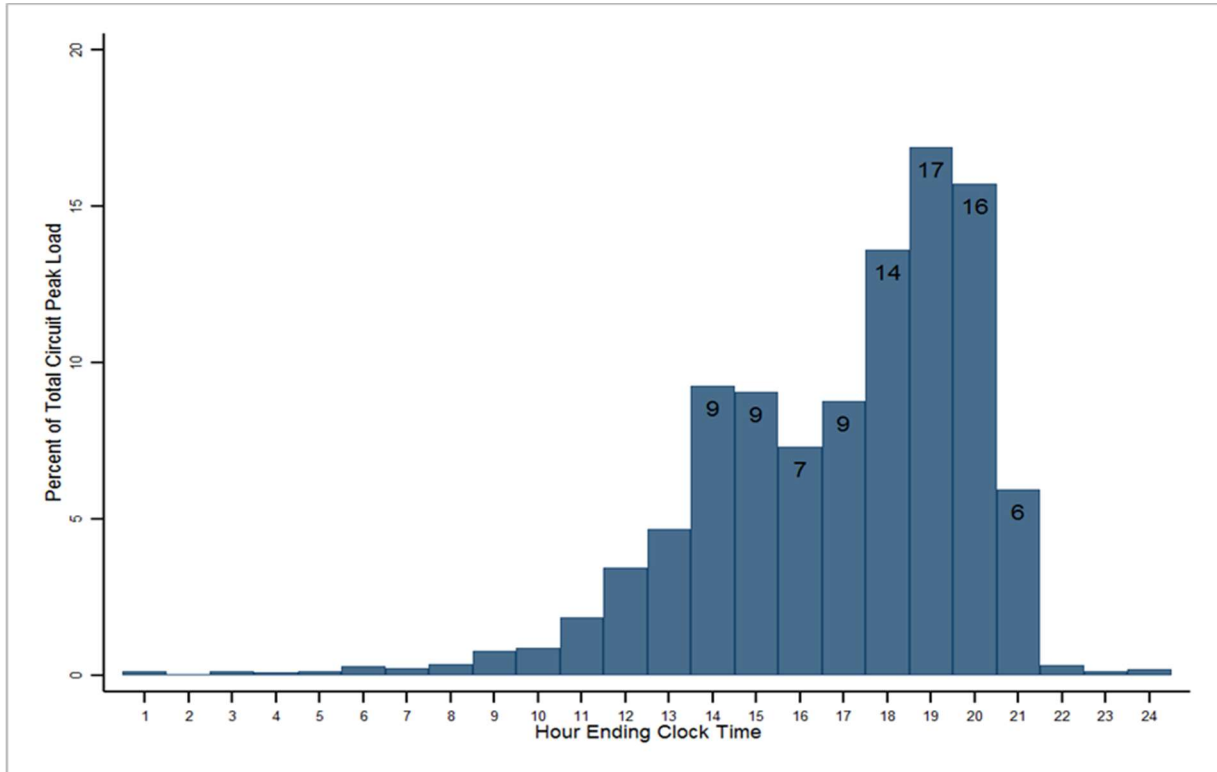
6. Please provide a graph similar to chart 5-2 in SDG&E’s testimony, but where each circuit is weighted by its peak load (i.e. the y-axis should be Percent of Total Circuit Peak Load).

**SDG&E Response (Provided by Cynthia Fang):**

Please see the chart below for hourly distribution of 2014-2016 SDG&E circuit peaks weighted by its peak load.

The chart below presents the information previously provided in Chart 5-2 (page CF-21 of the Testimony of Cynthia Fang) modified to reflect weighting each circuit by its peak load. This results in circuits with greater peak demands being given more weight relative to the frequency approach of giving each circuit peak an equal weight provided in Chart 5-2 of Testimony of Cynthia Fang (Page CF-21).

**ORA DATA REQUEST**  
**ORA-SDG&E-DR-02**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**SDG&E RESPONSE**  
**DATE RECEIVED: March 22, 2017**  
**DATE RESPONDED: April 7, 2017**



7. In SDG&E’s description of the C-CPP adder (p. CF-16), it says that “the CPP Adder is applied to the pre-defined 7-hour event period of 11 a.m. to 6 p.m., resulting in total annual CPP hours of 0 to 126 hours.” Does SDG&E propose to use the same 11am to 6pm CPP period for its three GIR rates or the newer CPP period proposed in its 2016 General Rate Case Phase 2 (2-6pm)?

**SDG&E Response (Provided by Cynthia Fang):**

The CPP period of 11 a.m. to 6 p.m. referenced in the testimony of Cynthia Fang (Page CF-16) was regarding the current CPP program. Under SDG&E’s proposed GIRs, the C-CPP Hourly Adder is applied on an hourly basis to “the top 150 system peak hours on a day ahead basis” (Page CF-17 of the Testimony of Cynthia Fang), and can occur at any hour of any day and is not based on TOU periods.

8. How many hours will the Distribution Critical Peak Pricing (D-CPP) period cover?

- a. Will the D-CPP be determined based on the loads of each of SDG&E’s circuits over all hours of 2016 or another method? If it will be based on another method, please provide a

**ORA DATA REQUEST**  
**ORA-SDG&E-DR-02**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**SDG&E RESPONSE**  
**DATE RECEIVED: March 22, 2017**  
**DATE RESPONDED: April 7, 2017**

list of the steps and a description of each method to determine each circuit's D-CPP period.

**SDG&E Response (Provided by Cynthia Fang):**

The D-CPP Hourly Adder is applied to the “top 200 circuit peak hours on a day-ahead basis” (Page CF-19 of the Testimony of Cynthia Fang) when the forecasted load exceeds a threshold level. For each individual circuit, the threshold level is based on the prior year's top 200 hours on that circuit. When the forecast identifies an hour exceeding the circuit's threshold level, the D-CPP Hourly Adder will be applied.

9. Please provide a Contribution to Margin study in which SDG&E compares the benefits (i.e. payments) of EV customers under its Residential and Commercial GIR rates to a “price floor” of the marginal cost of distribution, marginal cost of energy and the sum of non-by passable charges. The non-bypassable charges should include Transmission, Public Purpose Program, Nuclear Decommissioning, Competition Transition, New System Generation, Department of Water Resources Bond, and Power Cost Indifference Amount (PCIA) charges. The amount recovered from customers and the price floor should be expressed in \$/kWh and should be calculated for the first five years (i.e. the entire period of the phase-in of the Grid Integration Charge).

**SDG&E Response (Provided by Cynthia Fang):**

SDG&E has not performed a Contribution to Margin Study to compare SDG&E's proposed Residential and Commercial GIR rates to a “price floor” of the marginal cost of distribution, marginal cost of energy and the sum of non-by passable charges. Such Contribution to Margin Study would require the GIR customer's load information, and given that these customers are new customers, SDG&E cannot provide a Contribution to Margin Study.

Based on the definition of “price floor” provided in the question above, customers enrolled in the GIR rates will pay:

- The class equivalent charges associated with the non-by passable charges, which include Transmission, Public Purpose Program, Nuclear Decommissioning, Competition Transition, New System Generation, and Department of Water Resources Bond listed above with the exclusion of PCIA.
- Commodity costs, which include CAISO Day Ahead Hourly Price, which is equivalent to the marginal energy cost and 50% of generation capacity costs.
- All distribution costs with distribution customer costs and 80% of distribution demand costs recovered through the GIC component. The remaining 20% of distribution demand costs are recovered through the D-CPP Adder.

**ORA DATA REQUEST**  
**ORA-SDG&E-DR-02**  
**SDG&E SB 350 TRANSPORTATION ELECTRIFICATION PROPOSALS (A.17-01-020)**  
**SDG&E RESPONSE**  
**DATE RECEIVED: March 22, 2017**  
**DATE RESPONDED: April 7, 2017**

As such we believe that the GIR rates will sufficiently cover the “price floor” mentioned above.

10. Are the three grid integration rates (GIRs) designed to be revenue neutral compared to customers’ otherwise applicable tariffs (OATs)? If so, are they revenue neutral with respect to the entire customer class or just to EV customers? Please provide estimates of revenue shortfalls if 5%, 10%, 50% or 100% of current EV customers migrated to the new GIRs.

**SDG&E Response (Provided by Cynthia Fang):**

The three GIRs are designed to be revenue neutral by customer class. SDG&E expects that the EV customers are to be new customers and not current EV customers; therefore, estimates of revenue shortfalls cannot be performed.

END OF REQUEST