**A.14-11-003 and A.14-11-004 Sempra Utilities’ 2016 TY GRC**

**TURN Data Request**

**Data Request Number:** TURN-SDG&E-13 (Electric Distribution Capital)

**Date Sent:** May 26, 2015

**Response Due:** June 9, 2015

Please provide an electronic response to the following questions. A hard copy response is unnecessary. The response should be provided on a CD sent by mail or as attachments sent by e-mail to the following:

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| --- | --- | --- | --- |
| Marcel Hawiger  The Utility Reform Network  785 Market Street, Suite 1400  San Francisco, CA 94103  [marcel@turn.org](mailto:marcel@turn.org) | Bob Finkelstein  The Utility Reform Network  785 Market Street, Suite 1400  San Francisco, CA 94103  [bfinkelstein@turn.org](mailto:bfinkelstein@turn.org) | Eric Borden  The Utility Reform Network  785 Market Street, Suite 1400  San Francisco, CA 94103  [eborden@turn.org](mailto:eborden@turn.org) |  |

For each question, please provide the name of each person who materially contributed to the preparation of the response. If different, please also identify the SDG&E witness who would be prepared to respond to cross-examination questions regarding the response.

For any questions requesting numerical recorded data, please provide all responses in working Excel spreadsheet format if so available, with cells and formulae functioning.

For any question requesting documents, please interpret the term broadly to include any and all hard copy or electronic documents or records in SDG&E’s possession.

1. In Tab A of the Excel spreadsheet included in the response to question 8a from TURN-SDG&E-DR-05, SDG&E provided historical peak load, capacity of equipment, and percentage of peak load data for equipment in SDG&E’s GRC distribution capital expenditure estimate (SDG&E-09, witness Jenkins). Please provide the following clarifications to the data:
   1. The “capacity of equipment” cable capacities are provided in “A” units.
      1. What does “A” stand for?
      2. Please provide the capacity of these circuits in kilowatts (kW) and identify the conversion factor used.
   2. Please provide a qualitative description of how “percentage of peak load forecasted” (beginning in row 41 of the spreadsheet in Tab A) is calculated in each year and identify how solar distributed generation capacity on a substation/circuit is factored in to the calculation. What year solar distributed generation capacity is used for the 2014, 2015, and 2016 percentage of peak load calculations?
   3. Please provide a quantitative example, identifying each input, of how “percentage of peak load forecasted” (beginning in row 41 of Tab A) is calculated in each year and identify how solar distributed generation capacity on a substation/circuit is factored in to the calculation. If forecasts are used please provide the source of these forecasts.
   4. In the calculation of “percentage of peak load forecasted” is 2013 solar distributed generation on each circuit/substation added to the peak load forecast for years 2014, 2015, and 2016? Please explain how the capacity of solar distributed generation is calculated or forecasted for each year’s percentage. Please provide all sources of information.
   5. Please provide the calculation and all inputs of the “peak load forecasted” calculation for 2014-2016 in Excel format for each of the following projects: Salt Creek Substation project, the Mira Sorrento Substation project, and the C917, CC: New 12kV Circuit project. For example, one of the substations for the Mira Sorrento project is called “North City West.” The Excel spreadsheet provided shows this substation reaching 99% of capacity in 2014. Please provide all of the inputs and data used to derive the 99% and how they are used to calculate the percentage. The response to this question, should, at a minimum, show the amount and derivation of solar distributed generation in the calculation of each percentage.
2. In SDG&E-09 (Jenkins), p. JDJ-30, beginning on line 17, the testimony describes the “Mira Sorrento 138/12kV Substation project.” This project is comprised of the “North City West,” “Mesa Rim,” “Genesee,” and “Torrey Pines” substations. Assume for purposes of these questions that the “North City West” and “Mesa Rim” substations did **not** have projected overloads and did **not** need to be upgraded or replaced. Under these assumptions, what portion of the total project’s costs (totaling $12,218,000 shown on p. JDJ-27, SDG&E-09) could be eliminated?
   1. Please list a dollar ($) and percentage (%) of the total project’s costs ($12,218,000) amount that would be eliminated in this scenario.
   2. Please list the pieces of equipment and related costs that would be eliminated in this scenario.
3. SDG&E’s response to question 8c from TURN-SDG&E-DR-05 summarizes historical distributed solar generation capacity for distribution projects. The capacity of solar generation on circuits has the unit “A.”
   1. What does “A” stand for?
   2. Please provide the capacity of solar distributed generation on all circuits in the referenced table in kilowatts (kW) and identify the conversion factor used.
4. What percentage of circuits in SDG&E’s system has primarily commercial/industrial customers and what percentage primarily residential customers? Please provide supporting workpapers and calculations. TURN defines “primarily” as more than 50% of annual load. If SDG&E defines “primarily” differently, please include an explanation of its definition and the basis for that definition.
5. What percentage of SDG&E’s circuits experience an annual peak (either generally or in 2014) prior to 5:00 p.m.? If SDG&E does not know an exact percentage, please provide a reasonable estimate of the percentage of circuits that peak before 5:00 p.m.
6. SDG&E’s response to question 8b from TURN-SDG&E-DR-05 provided forecasted load on equipment in SDG&E’s GRC estimate of distribution capital expenditure. In Tab B of the Excel attachment in SDG&E’s response, Circuits “C1223” and “C912” are forecasted to reach 78% and 83% of their capacity in 2016 and 2014 respectively. Please explain in detail why each of these circuits requires capital expenditure when it is below 90% of equipment loading?