**DATA REQUEST**

**SUBJECT: SUPPLEMENTAL WORKPAPER – SEASONAL BASELINE ADJUSTMENT (SDG&E WITNESS J. MONDRAGON)**

**Attachment A**

1. Data is described as an average from 2013 to 2017. What controls are placed on the data in regard to baseline calculations (overall usage increase/decrease) and percentage of baseline used to set allowance (e.g. 50% to 60% for Basic electric)?

a. Describe all relevant parameter changes for this time period (e.g. changes to baseline

allowance, increasing rooftop solar effect on average usage and other major usage

effects).

**SDG&E Response to Question 1:**

1. The data is based on actual customer usage from 2013, 2014, 2015, 2016, 2017, without any further exclusions or modifications, except for the exclusion of Schedule DM.
2. All residential customers except for customers on Schedule DM.

2. Baseline Columns headers in Attachment A use the word “bound” – not “allowance.” What does this mean?

**SDG&E Response to Question 2:**

1. “Bound” refers to the legislative requirement that identifies a range, defined by an upper bound and a lower bound, for baseline allowances – more specifically, “50 *(lower bound)* to 60 *(upper bound)* percent of average residential consumption of these commodities, except that, for residential gas customers and for all-electric residential customers, the baseline quantity shall be established at from 60 *(lower bound)* to 70 *(upper bound)* percent of average residential consumption during the winter heating season.”

3. Columns for Baseline 50%, 60% and 70% seem to be neither allowances nor usage. What is

it measuring and why are there three columns? For row 6 Attachment A, all columns,

illustrate the formulas used to determine the cell values. Display quantitative results with

enough digits past the decimal to illustrate *all* effects.

**SDG&E Response to Question 3:**

1. The data refers to daily kWh allowance in accordance with the given percentage threshold. Three columns are provided to illustrate the daily allowances at the upper and lower bounds of 50%/60%/70% for the legislated ranges for baseline described further in the response to Q2 above. The file has been formatted to include more decimal spaces.

**Attachment B**

4. For a given usage level, such as January, 500 kWh, bills for All Electric are lower than

Basic Service, presumably due to a higher baseline allowance. But of course, All Electric

customers by not having gas service tend to use more electricity per capita, per square foot.

What is the average All Electric usage compared to Basic Service?

**SDG&E Response to Question 4:**

1. Please refer to attached file in the “Increment Data” tab for the average consumption comparison figures (column labeled Average CTB).

**Attachment C**

5. This data is collapsed over all usage buckets. It leads to more normal patterns of differentiation by climate zone (e.g. more usage in winter for colder regions). However, looking at the first row, for instance (January Basic Service), the Average Consumption figure (on the far right) is higher than all the figures for the various baselines (50%, 60% and 70%). Again what is being measured?

**SDG&E Response to Question 5:**

1. In any distribution, averages can be impacted by outlier values. Baseline calculations, on the other hand, attempt to calculate the threshold where the area under both the CTB\_PD curve and the desired threshold represents either 50%/60%/%70 of the total area, respectively. In the vast majority of cases, the distribution of customer consumption within a given consumption range can have the majority of customers align toward the lower threshold of the consumption range but also have a large enough subset of customers that align at the upper threshold of the consumption range. As the kWh consumption range increases, we tend to see this skewing effect on the AVG\_CTB\_PD calculation in a positive direction. Inversely, as the kWh consumption range decreases, we tend to see this skewing effect on the AVG\_CTB\_PD calculation in a negative direction, which is predominately caused by increased NEM penetration as well as a decreased spread between the lower and upper thresholds of the kWh consumption range. Comparing Attachments A & C shows how segmenting the aggregations in Attachment A to specific kWh consumption ranges can reduce the impact of the skew effect, whereas the outliers present in Attachment C can have a more profound impact on the skew effect.

**Incremental Data**

6. What does “Grp\_A” and all the other “Grps” refer to?

**SDG&E Response to Question 6:**

1. "GRP" refers to the kWh consumption range displayed within the column. The groups are alphabetized to allow for conventional sorting from low to high kWh consumption buckets.

7. Total Bills” appears in this tab and is defined as:



Does “total bills” refer to a) the number of accounts, b) the cumulative number of kWh or c) the cumulative total of dollars billed?

**SDG&E Response to Question 7:**

1. A bill refers to a single account receiving a single bill showing consumption within a single month. Total Bills therefore refers to the sum of all bills received within a given month over the course of the 5-year period of analysis. Dividing this value by 5 would calculate the average number of bills sent to customers within a given month each year.

8. On the first data row 5, AVG\_CTB\_PD is less than or equal to the values of CTD\_PD\_BL\_50 (60 or 70). In contrast, however, on many of the entries, such as row 1782, AVG\_CTD\_PD is greater than the value for the baseline columns (28.1 vs 25 for subsequent columns). Explain.

**SDG&E Response to Question 8:**

1. Please refer to the response to Question # 5

9. Does SDG&E keep track of net energy metering (NEM) customers’ baseline usage versus those of non-NEMs?

**SDG&E Response to Question 9:**

1. No, SDG&E looks at baseline for residential customers as a group and currently does not segment baseline between NEM and non-NEM residential customers.

a. If the answer above is yes, please provide the current baseline usage separating NEM

vs non-NEM by climate zones.

**SDG&E Response to 9.a:**

1. N/A

b. If the answer above is no, what operational challenges, does SDG&E have to

developing separate baseline quantity for customers with and without distributed

energy resources?

**SDG&E Response to 9.b:**

1. SDG&E would not be able to implement any structural changes to baseline, such as the development of separate baseline values for NEM versus non-NEM residential customers, until after full implementation of SDG&E’s new CIS program.

c. If the answer above is no, how will SDG&E account for usage met by customer side

generation, as required in PU Code 739(a)(1)?

**SDG&E Response to 9.c:**

1. When developing baseline studies, the historic usage of residential customers with customer generation located on the customer side of the meter are included. However, if the Commission were to determine that to “appropriately account for any consumption that is met by residential customer generation located on the customer’s side of the meter” required separate baseline for NEM and non-NEM residential customers, then separate metering would be necessary to measure customer generation, which currently does not exist. Implementation for separate baselines for NEM and non-NEM residential customers would need to occur post-CIS implementation for SDG&E.