**DATA REQUEST**

**SUBJECT: CALCULATION OF EFFECTIVE DEMAND FACTORS (EDF)**

TURN’s opening testimony provided an illustration, which SDAP has repeated in its rebuttal, where there are four residential customers with 2 kW loads within a single hour which occur in different quarters of the hour relative to each other. Both TURN and SDAP allege that the EDF calculation would assume 8 kW of load rather than 2 kW of load for that hour, assumed to be the circuit peak hour. See: TURN, April 6, 2020, p.18, lines 11-13 & SDAP, May 4, 2020, p. 15, lines 12-14.

1. Assume that the load is zero for each customer in the three quarters of the hour during which each one does not experience the 2 kW of load referenced above. In this case, does the Smart Meter measure the load for that hour to be 2 kW, or one quarter of that, i.e., 0.5 kW? In other words, is instantaneous demand data available from the Smart Meters, or does SDG&E merely, in calculating EDFs, treat the load in the peak hour as equal to the kWh in that single hour?

**SDG&E Response:** Residential smart meters record hourly kWh, which, by definition, is the average demand over the hour. If a customer uses 2 kW for a quarter of the hour and 0 for the remainder of the hour, the value the meter would record would be .5 kWh. Instantaneous demand is not recorded by SDG&E smart meters.

2. SDG&E’s response to TURN Data Request #1, Question #25, states “The decision to use hourly data to build EDFs was made because hourly data is available for all of SDG&E’s customers, whereas 15-minute data is only available for all Non-Residential customers and a subset of Residential customers.” Suppose there were four ***non***-residential customers with 2 kW loads within a single hour which occur in different quarters of the hour relative to each other. Would SDG&E, in calculating the EDFs, assume that the load for each customer is 0.5 kW or 2 kW? That is, does the EDF calculation assume diversity within the hour for non-residential customers but not for residential customers?

**SDG&E Response:** SDG&E used hourly kWh data for all Effective Demand Factors (EDFs) for consistency across all customer classes and did not treat residential and non-residential classes differently. No assumptions were made about energy or demands.

3. If diversity within the hour was assumed for non-residential customers but not for residential customers, would SDG&E support re-designing the EDFs so they are calculated in a consistent manner for residential and non-residential customers?

**SDG&E Response:** Please see response to question 2.