**SUBJECT: “EV HP WORKPAPERS CHAPTER 2.XLSX”**

**1. Where did San Diego Gas and Electric Company (SDG&E) get the billing determinants found in cells B8:B9, B22:B26, D29, D33, and B77:B98 of the tab “EV-HP Rate Design Modifications”? Do all of these billing determinants correspond to the AL-TOU rate schedule?**

**SDG&E Response:**

The billing determinants in the workpaper cells identified above reflect Schedule AL-TOU 2019 determinants used to develop current SDG&E electric rates effective June 1, 2019 per SDG&E Advice Letter 3377‑E, approved by Energy Division letter on June 21, 2019.

**2. Please provide the annual billing determinants for AL-TOU (or whatever schedule the billing determinants referenced in question 1 come from). Break out the kWh billing determinants by season and by hour (24 values for each season).**

**SDG&E Response:** The billing determinant presented in Column B of the “EV-HP Rate Design Modifications” tab of the WS Direct Testimony Workpapers file reflect the annual 2019 billing determinants for Schedule AL-TOU. The only Schedule AL-TOU Secondary and Primary 2019 determinants for customers less than 500 kWh not used and thus not presented in that workpaper are the billing determinants for the Basic Service Fee and kWh on a System Net basis, which are presented in the table below:



**3. Does SDG&E view the 50% subscription charge “discount” on the first 25 kW of demand (see cell F15 of tab “EV-HP Rate Design Modifications,” which is set at $114/25 kW or half the amount of AL-TOU non-coincident demand charges) as a revenue shortfall? If so, how would this revenue be recovered from ratepayers? Please explain SDG&E’s reasoning for offering the first 25 kW subscription charge at a lower rate.**

**SDG&E Response:** The first subscription charge increment (i.e., the first tranche from 0 kW to 25 kW) is half the cost of subsequent increments. This is not a discount. The first subscription charge increment is based on 12.5 kW of demand. Subsequent tranches of 25 kW will stack on top of the first tranche and therefore the total subscription charge paid by the customer incorporates this initial tranche of 12.5 kW of demand. This reflects that the customer’s actual noncoincident demand is unlikely to be a perfect multiple of 25 kW, and will fall somewhere in the middle of this first or marginal subscription charge increment.

SDG&E does not consider this a revenue shortfall because if the first subscription charge increment was the full cost of subsequent increments ($228/25 kW for customers taking service at the secondary voltage level) most customers would be overbilled relative to their actual noncoincident demand. The only customers that would not be overbilled are those with noncoincident demand in perfect multiples of 25 kW.

**4. If the electric vehicle-high power (EV-HP) load imposes more costs on the distribution system than EV-HP customers pay in rates (say, for instance, that EV-HP customers have much higher load factors than AL-TOU customers and thus their cost of service is significantly higher than AL-TOU’s), how would SDG&E recover the revenue shortfall? How would recovery be apportioned between the medium and large commercial & industrial (M/L C&I) class and other classes? What portions would the residential and small commercial classes be responsible for?**

**SDG&E Response:** As stated in the EV-HP policy testimony (Prepared Direct Testimony of Brittany Applestein Syz, pages BS-2 and BS-15), the cost of the EV-HP subscription charge discount, that recovers distribution non-coincident demand costs, will be recorded in a two-way balancing account and recovered from all customers through Public Purpose Program (PPP) charges. This is designed so that any revenue under-collection or over-collection resulting from the subscription charge discount will be recovered from all customers based on the customer class allocations factors adopted for Electric Program Electric Charge (EPIC), which is a non-low-income component of the PPP rate. The current customer class allocation factors adopted for recovery of EPIC authorized revenues are shown in the table below:

 

As stated on pages WS-3 and WS-4 of the Prepared Direct Testimony of William G. Saxe, SDG&E is proposing to recover allocated distribution on-peak demand costs through on-peak energy charges. Any revenue under-collection or over-collection that results from EV-HP customers paying rates that do not properly reflect the recovery of the distribution on-peak costs to serve them will be handled in SDG&E’s GRC Phase 2 proceedings and its distribution balancing account. Once SDG&E has the information on customers being served on EV-HP, SDG&E will incorporate this information into its next GRC Phase 2 proceeding to reflect the load and resulting cost information to serve EV-HP customers. Until such EV-HP information is included in SDG&E’s GRC Phase 2 proceedings, distribution on-peak revenue under-collections or over-collections that result under the EV-HP distribution rates will be handled in SDG&E’s two-way distribution balancing account based on the authorized allocation for distribution revenues. The current class allocation factors for adopted for recovery of authorized distribution revenues are shown in the table below:



Please note that EV-HP customers with significantly higher load factors than AL-TOU customers on-average will most likely be better off on Schedules AL-TOU and AL-TOU2 rates and thus, presumable would not opt into the EV-HP rate. It would be the customers with significantly lower load factors than AL-TOU customers that would opt into the EV-HP rate.

**5. Does SDG&E plan to perform a cost-of-service study on the EVP HP load that takes service under the EV-HP rate in its next GRC Phase 2 (2022)?**

**SDG&E Response:** The marginal cost-of-service study that will be performed in SDG&E’s next GRC Phase 2 will incorporate the loads of all customers served by SDG&E, including EV-HP customers.

**6. Does SDG&E have any plans to track the costs that are imposed by new EV-HP customers on the grid, e.g. facility-related costs such as upgrades to final line transformers and service drops, and upgrades to distribution assets further upstream such as secondary voltage distribution lines or circuit feeders? If so, please explain how SDG&E plans to track these costs.**

**SDG&E Response:** SDG&E tracks costs regarding upgrades relating to EV infrastructure installations for the reoccurring Joint Investor-Owned Utility (IOU) Load Research Reports.[[1]](#footnote-2) SDG&E does not propose to track costs related to EV-HP customers in particular.

**7. The “EV-HP Rate Design Modifications” tab shows transmission demand charge replacement rates per kWh (cells D37:D38) and RS demand charge replacement rates per kWh (cells D42:D43), which are based on SDG&E’s vehicle-to-grid-integration (VGI) rate. Please provide the workpapers, with all formulae and references intact, showing the derivation of these replacement rates.**

**SDG&E Response:** The EV-HP replacement rates shown in the “EV-HP Rate Design Modifications” tab of the WS Direct Testimony Workpapers” file are the VGI transmission and RS rates implemented on June 1, 2019 per SDG&E Advice Letter 3377-E, approved by Energy Division letter on June 21, 2019.

1. *See* D.13-06-014 OP 4. Historical Joint IOU Load Research Reports are available at <https://www.cpuc.ca.gov/zev/>. [↑](#footnote-ref-2)