PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE SAN FRANCISCO, CA 94102-3298



Data Request to San Diego Gas & Electric Company Regarding its Proposals Filed in A.17-01-020

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Response Due: April 10, 2017

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SDG&E should provide answers to the following questions and data to support the answers where applicable. These questions relate to SDG&E's overall proposal and to the "priority review" proposals. In light of the Prehearing Conference held on March 16, 2017, the Administrative Law Judge may instruct Applicants to formally file their Data Responses.

Overall Application

- 1. For SDG&E's Chart 1-2 (p. MMS-17), what are the sources of data for SDG&E's "emissions goals" and "forecasted emissions under current controls?"
- 2. Provide workpapers in Excel format showing the cost assumptions SDG&E used to develop the proposed program budgets. This should include details about capital costs and expenses for each proposed program.
- 3. Provide the model, including associated spreadsheets with formulas, used to calculate the CO₂, NO_x and VOC emissions reductions associated with SDG&E's proposed programs, as identified in Chapter 8 of SDG&E's testimony.

- 4. In Figures 8-8, and 8-9, SDG&E shows the impacts of unmanaged and managed charging on load. Further clarify SDG&E's assumptions (footnote 26) regarding EV load and availability of renewables under the managed and unmanaged scenarios.
- 5. Are the emissions factors included in the modeling SDG&E-specific? If not, why not?
- 6. Please detail assumptions on cost-effectiveness analyses and provide accompanying spreadsheets including:
 - a. Infrastructure analysis lifetime, projected utilization rate of the charging equipment, vehicle mileage by vehicle age, and load factor impacts.
 - b. Any utility specific cost characteristics for electricity generation.
- 7. What research or literature review did SDG&E complete prior to developing its portfolio of proposals? Include details of studies and results from previous pilot projects that were considered.
- 8. Does SDG&E propose that its rates should go through the priority review process? If so, why?
- 9. How will SDG&E implement any priority review projects that are approved before the corresponding rates?
- 10. What alternatives to full utility ownership of the infrastructure and electric vehicle supply equipment did SDG&E consider?
- 11. SDG&E describes Electric Vehicle Infrastructure Training Program certification (p. MMS-16). Please provide more information about this certification, including which organization develops or certifies the program and how it contributes to safety.

Fleet Delivery Services Program

- 1. In SDG&E's Fleet Delivery Services proposal, it is proposing to own all of the charging equipment. Will there be a participation payment? If so, how will it be calculated?
- 2. How long will SDG&E own and maintain the charging equipment associated with the Fleet Delivery Services program?
- 3. What class of vehicles are the UPS trucks associated with the Fleet Delivery Services proposal? Do they use standard L2 electric vehicle service equipment (EVSE)? Would the other project partners use standard, commercially available technology?
- 4. What information does the data logger involved in the Fleet Delivery Services project collect? Is it different than what could be collected by the EVSE? How will SDG&E use this information?

San Diego International Airport (SDIA) Ground Support Equipment (GSE) Program

- SDG&E states that it has worked with SDIA to review ground support equipment GSE growth and energy usage. What are the lessons learned? Please provide any relevant data associated with this review to support any conclusions or recommendations SDG&E has developed.
- 2. Why hasn't SDIA installed any charging ports since 2013?
- 3. It appears that electric vehicles were purchased in 2006 through 2014. What is the reason additional vehicles have not been purchased since 2014?
- 4. Does SDG&E intend to wait until funding is secured for new electric GSE before developing new charging equipment? Have GSE operators shown interest in and ability

- to procure electric GSE to participate in the project? Please provide estimated numbers of GSE necessary prior to SDG&E making initial investments.
- 5. Will ownership of EVSE and associated infrastructure at SDIA require an easement for SDG&E? Is this feasible for SDIA? Are there any logistical concerns with SDG&E requiring access to a secure airport site?
- 6. How will the load of electric GSE be managed and optimized with SDIA's on-site solar generation?
- 7. What rate will the GSE at SDIA be on? Is SDIA a single SDG&E customer or is each GSE operator/vendor at the airport a separate customer?
- 8. SDG&E proposes to install load research meters, EVSE, and data loggers for its SDIA infrastructure project. What is the function of the load research meter and data loggers that cannot be accomplished with the submeter in the EVSE?
- 9. Will the participating customer pay any participation payment?
- 10. Has SDG&E engaged any union or organized labor groups in pilot development?

Port of Long Beach Electrification Program

- 1. In its Port Electrification proposal, SDG&E states that EVSEs for electric forklifts and other electric port equipment are not developed to allow the equipment to respond to price signals. What automation technology needs to be developed and how does the pilot address this?
- 2. How will the new electric load at the Port of Long Beach be managed, especially if the EVSE does not allow for response to price signals?
- 3. Which rate will SDG&E apply to the new electric port equipment?
- 4. SDG&E proposes to install load research meters, EVSE and data loggers for its port electrification project. What is the function of the load research meter and data loggers that cannot be accomplished with the submeter in the EVSE?
- 5. Will the participating customer pay any participation payment?
- 6. Has SDG&E engaged any union or organized labor groups in pilot development?

Electrify Local Highways Program

- 1. What research has SDG&E and/or Caltrans conducted to ensure the four sites selected for the Electrify Local Highways project have enough EV demand to fully utilize the proposed equipment installation?
- 2. Why are direct current fast charging (DCFC) stations necessary for long dwell-time Caltrans park-and-ride lots?
- 3. Are the selected Caltrans park-and-ride lots open 24 hours per day?
- 4. What information is available from the existing Caltrans site with EV charging? What information is available from other park-and-ride locations that offer EV charging? What lessons learned can be applied at the four sites in this project?
- 5. How will SDG&E apply the grid-integrated rate at the Caltrans sites?
 - a. What does a customer need to do to pay via their SDG&E bill?
 - b. If the hourly pricing is not displayed on the EVSE, how can SDG&E encourage drivers to charge based on pricing if they do not use the app?

- 6. SDG&E states that it included "all the construction costs" in its project budget. Does this include SDG&E paying for construction costs that are related to renovating the Caltrans sites, but not directly related to installing EVSE?
- 7. Will parking spaces be reserved for EV drivers only? Is there any charge for parking when not charging?
- 8. Since SDG&E has not yet assessed what electrical infrastructure would be necessary, if one project is much more expensive than anticipated, will SDG&E abandon this project?
- 9. Will these sites be reported to the US DOE's Alternative Fuels Data Center?¹

Dealership Incentives Program

- 1. Describe SDG&E's current work with car dealerships on promoting EV sales.
- 2. Are there any other pilots or programs working with car dealerships that SDG&E can leverage, such as the CVRP? Can SDG&E leverage existing efforts, such as Plug-In America's dealer advisory council?²
- 3. Provide more information on the proposed education and outreach materials.
 - a. Will they be offered to the broader public or dealers not participating in the program?
 - b. Will dealers and salespeople be educating customers purchasing EVs about the benefits of a TOU rate?
 - c. What existing dealership incentive programs are being used as examples in developing this program?
- 4. If there are more than 200 salespeople interested in participating in the Dealership Incentives Program, how will SDG&E select participants? If there are fewer than 200 salespeople interested in participating in the Dealership Incentives Program, how will SDG&E encourage more participation?
- 5. How many dealerships in SDG&E territory are in the New Car Dealers Association or Auto Alliance and eligible to participate in the Dealership Incentive Program?
 - a. How many total sales people work at the eligible dealerships?
 - b. What are the dealerships' current annual EV sales rates?
- 6. SDG&E states that sales people receive a low commission of \$150-200 per EV. What is the average commission for selling internal combustion engine cars?

Green Taxi/Rideshare Program

- 1. Will the charging stations SDG&E builds for its Green Taxi/Rideshare Program be open for use by non-participants and the general public? If not, why not?
- 2. Why do all customers using the charging stations in the Green Taxi/Rideshare Program have to enroll in an SDG&E tariff? Since SDG&E intends to own the stations, couldn't it provide a rate directly to the driver so non-customers could use the facilities?
- 3. Provide additional information about the 2010/2011 vehicle incentive program mentioned in the Green Taxi/Rideshare Program proposal.
 - a. Who funded the incentives?
 - b. Who was eligible to receive the incentives?

¹ http://www.afdc.energy.gov/fuels/electricity_locations.html.

² https://pluginamerica.org/dealers/.

- c. What were the results of the program in terms of EV adoption rates?
- 4. Given the state's Clean Vehicle Rebate Program and Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project, why is a \$10,000 vehicle incentive necessary?
- 5. How does SDG&E intend to coordinate the charging schedules of the different vehicle and fleet types to ensure optimal charger utilization?
- 6. SDG&E is proposing to install L2 EVSE at TNC drivers' homes.
 - a. Is SDG&E proposing to own and maintain this equipment?
 - b. How does SDG&E intend to maintain the EVSE? Does this require an easement?
 - c. What happens if the customer is no longer a TNC driver, if they no longer own an EV, or if they move? How does SDG&E monitor these conditions?
- 7. If the Green Taxi drivers receive an EV fueling credit of \$4,000, essentially making charging "free," how can they be incentivized to charge at optimal times without a price signal?
- 8. Could the TNC portion of the pilot apply to TNC drivers that already own an EV, or does this only apply to drivers who purchase an EV as part of the pilot?
- 9. What current or past work with shuttles is SDG&E leveraging for this pilot?
- 10. Has SDG&E engaged any union or organized labor groups in pilot development?