**SECOND SET OF DATA REQUESTS BY UTILITY CONSUMERS’ ACTION NETWORK**

**UCAN Data Requests to SDG&E in A.17-01-020**

Date: July 20, 2017

Responses

Due: August 3, 2017

To: SDG&E

From: UCAN

Donald Kelly.

3405 Kenyon Street, Suite 401

San Diego, CA 92110

(619) 610-9001

Data Request No: 2

(Please see instructions below)

**INSTRUCTIONS:**

Pursuant to rule 10.1 of the California Public Utilities Commission’s Rules of Practice and Procedure UCAN hereby submits this data request for information from SDG&E. If you will be unable to meet the above deadline, or need to discuss the content of this request, please call UCAN counsel at the number(s) shown above before the due date.

If you are unable to provide the information by the due date, have an objection to any request, or plan to assert a privilege to any request, please provide a written explanation to UCAN’s counsel seven calendar days before the due date. Please also explain why the response date cannot be met and your best estimate of when the information can be provided.

If you are asserting an objection or privilege, please provide the specific nature of that objection or privilege claimed and the facts upon which such claim is based. If any document is redacted, please clearly identify and describe any information that is redacted from the document and provide an explanation for the redaction. Please identify the person who provides the response and his (her) phone number. Provide electronic responses if possible.

If a document is available in Word or Excel format, do not send it as a PDF file. All data responses need to have each page numbered, referenced, and indexed so worksheets can be followed. If any number is calculated, include a copy of all electronic files so the formula and their sources can be reviewed.

These data requests shall be deemed continuing in nature so that you shall produce any additional or more current information that come to your attention after your initial responses have been sent up to the time of hearing or settlement.

1. What metrics will be tracked to determine the success or failure of SDG&E’s home charging proposal, e.g., number of incremental EVs installed, percentage of EV owners on the VGI rate, number of EV owners with Level 2 chargers, positive RIM test based on actual rather than expected program statistics? For each performance metric, what is the threshold for success?
2. How does SDG&E plan to monitor performance of the home charging program over the installation period? Assuming the program is approved, will SDG&E recalculate the cost effectiveness tests based on actual performance to compare to pre-program expected calculations?
3. Have any criteria been developed to determine whether to continue charger installations, stop further installations or modify the program to improve performance, e.g. modify incentive structure or the EV rate structure? Has SDG&E developed any “off ramps” for this project should costs exceed estimates, or if benefits are less than anticipated?
4. What will a typical existing EV owner save under the discounted VGI rate compared to the EV-TOU rate?

* How does SDG&E anticipate recovering any revenue shortfall from the discounted VGI rate?

1. Of the 90,000 Level 2 chargers to be installed in residential homes, how many are expected to be associated with new EV purchases versus existing EVs?
2. Are all EV owners (both new and existing) eligible for this program, or just those individuals who purchase or lease an EV after the program is initiated?
3. In testimony, SDG&E witness Randy Schimka in Vol 4; page RS-9 at footnote 27 has estimated the cost to install one level 2 home charger as follows: $600 for the charger (EVSE), and an average $1,425 for the installation, and $206 for permits, for a total of $2,231.
4. For the installation estimate of $1,425, please provide a breakdown of what this amount covers.
5. Does this $1,425 figure anticipate a customers’ home will require upgrades to accommodate a level 2 EV charger?

* Of the projected 90,000 homes that SDG&E anticipates providing level 2 EV charging, please provide the estimate on the percentage of homes that SDG&E believes will need electrical upgrades to accommodate level 2 EV home charging.

1. At the CPUC workshop in July, Mr. Schimka noted that he is aware of and has pictures of improper installations of EV charging equipment at peoples’ homes that posed safety hazards. Please detail:

* How many instances is Mr. Schinka aware of where an improper EVSE installation posed a safety hazard.
* How many of these instances involved permitted work?
* Please provide copies of any pictures, reports or any other documents that detail these observed safety hazards from improper installation.

1. Does the amount SDG&E has estimated for the Level 2 charger costs, installation costs and permitting fees include funds to cover other costs i.e., an allocation of fixed corporate or other overheads, e.g., A&G? If you included an allocation of overhead or other fixed costs, were these incremental costs associated with the incremental EVs purchased or an allocation of total overhead costs?
2. Please list the overhead and other fixed costs included in the SDG&E Level 2 charger cost, if any? Please identify the relevant cost driver, e.g., number of employees, kWh energy, revenues, etc.?
3. Other than increasing the number of EV chargers in the SDG&E service area to promote increased EV purchases, what other standard review program options were considered and rejected that would increase the number of EV purchases in San Diego, e.g., were direct incentive to offset EV capital cost premium considered?
4. SDG&E predicts that the premium in cost for EVs over conventional vehicles will decline over time. In light of this prediction, why not wait until these premiums decline before initiating an expensive program to promote and install Level 2 chargers?
5. In your preliminary CE analysis, did you consider a “wait/defer” option to test whether ratepayers and customers are better off when EV costs are closer to the cost of conventional vehicles?
6. Does SDG&E have similar predictions regarding when EV technology will improve to extend miles driven on a single charge? If so, please quantify the expected net benefit of a program deferral until the EV price premium declines, i.e. the incremental savings to ratepayers and EV owners from a deferral.
7. As the premium in EV cost declines over time (as claimed in SDG&E’s proposal), what percentage of new EV purchases will SDG&E attribute to the reduction in vehicle cost and what percentage of new EV purchases will SDG&E attribute to the utility-owned charger program? Please explain.
8. What is the expected life of the currently available EVs on the market that would use a Level 2 charger?
9. What is the expected life of the Level 2 charger?
10. How did you reconcile the unequal EV and Level 2 charger lives for the CE analysis?
11. Assuming an EV owner requires one full charge daily and uses the EV-TOU or VGI rate optimally (to receive the lowest bill), which rate is least expensive for the customers’ EV charging and what savings can be expected? (Compare only the EV charging portion of the bill in each case).
12. Since EV-TOU is a whole house rate, why offer the VGI rate as a whole house rate when doing so makes household operation so much more complicated? Doesn’t VGI make more sense as an EV only rate and the less complex EV-TOU make more sense as a whole house rate?
13. Which of the cost effectiveness tests, i.e., RIM, PCT, PAC, TRC and/or SCT, are appropriate for the evaluation of the utility-owned charger program? Is the EV charger program considered a load building, fuel substitution or treated the same as DR/EE programs for evaluation using the standard California Cost Effectiveness (CE) tests?
    1. Which cost effectiveness tests are appropriate for load building?
    2. Which cost effectiveness tests are appropriate for fuel substitution?
    3. If fuel substitution, what costs and benefits associated with the alternative fuel were included in the CE analysis? (Use electrification of natural gas processes as an example of what alternative fuel costs and benefits to consider).