

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA**



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Order Instituting Rulemaking on the Commission's own motion to consider alternative-fueled vehicle tariffs, infrastructure and policies to support California's greenhouse gas emissions reduction goals.

Rulemaking 09-08-009
(Filed August 20, 2009)

**SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M)
MOTION TO CORRECT THE RECORD**

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Dated February 1, 2011

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**I.
INTRODUCTION**

Pursuant to the Commission's Rules of Practice and Procedure, San Diego Gas & Electric Company ("SDG&E") files this Motion to Correct the Record ("Motion") as it pertains to certain items in the Revised Issues Papers and Energy Division Staff Workshop Reports which misstate or omit key facts in order that the Commission can base its decision on an accurate record.

**II.
SPECIFIC CORRECTIONS**

SDG&E provides corrections first to the Staff Issues Paper on the Utility Role in Supporting Plug-In Electric Vehicle Charging followed by corrections to the related Energy Division Staff Workshop Report and then provides corrections to The Staff Issues Paper on Revenue Allocation and Rate Design followed by corrections to the related Energy Division Staff Workshop Report. As appropriate, additions to text are shown in italics and deletions are shown as strikethroughs.

A. Corrections to Staff Issues Paper: the Utility Role in Supporting Plug-In Electric Vehicle Charging dated December 10, 2010:

1. Section 1.1 PEV Charging Equipment. To correct a technical omission, add the following at the end of the first bullet paragraph addressing service panel size:

The panel must have an ampacity rating to handle the total electric demand of the home.

2. Section 1.2 Metering, page 5, should be corrected as follows:

a. The first full paragraph on page 5 states that: “The AMI meters currently being deployed by the three investor owned utilities (“IOUs”) cannot” perform certain listed functions. The statement and associated bullets are incorrect as written. Current AMI meter functionality is not based solely on the meter itself. The meter is dependent on “back office” software which actually handles perceived meter functions. The process of adding or subtracting energy usage between meters is not done in the meter, but is handled with AMI software located at an SDG&E facility.

b. Under the “Accuracy” bullet, the sentence stating: “AMI meters currently being installed by the CA IOUs are rated at .25% accuracy” is incorrect. The bullet should be revised by adding the following comment:

The accuracy class for the AMI meters used by SDG&E for residential meters is .5% and for commercial meters is .2%.

c. Under the “Data Storage Capability” bullet, the statement that: “AMI meters generally store one day to one month of data.” is not accurate for SDG&E. The following sentence should be added to the bullet:

SDG&E’s AMI meters can hold up 365 days of single channel, 60 min. interval data.

3. Section 1.4 Party Perspectives on PEV Metering Issues, page 6, fails to correctly present SDG&E’s position to the Commission for its consideration. To correct this omission, add the following sentence after the bulleted list of functionalities:

Although meters currently have many functions, some of these functions will create additional costs to activate and utilize, so functionality must be considered in light of the associated costs

4. Section 1.5 Metering Requirements, page 7 should be corrected. Under the “Direct Access” paragraph – the statement: “For instance, the meters must measure load on hourly intervals.” is not completely accurate. The following sentence should be added to clarify the above statement:

The requirement is 15 minutes of data for any customer on a time sensitive (Time Of Use) rate.

5. Section 1.6 Meters and Smart Grid Communication Functions, page 8: For a more accurate statement of the facts relating to the issue considered, add the following sentence to the end of the last paragraph:

The PEV meter need only communicate the electricity usage in a secure and reliable manner.

6. Section 2.5 Submetering, Page 18, Billing Flexibility, states: "This metering arrangement may require additional utility back office costs." This statement does not reflect fully SDG&E's statement of relevant facts in its comments on this issue thus failing to present the issue fully to the Commission for its consideration. SDG&E's statements of facts and its position are as follows:

- As referenced in SDG&E's response to the first issues paper (pg.10), SDG&E does not have an automated process for accommodating subtractive billing within its billing system. As such, this metering setup will, without exception, require additional back office costs. SDG&E estimates that for every 7,000 - 8,000 vehicles added, an additional \$54,000 would be required to support this approach. These costs include the initial manual configuration of the two meters within the billing system and any on-going incremental maintenance, troubleshooting and support.
- As referenced in SDG&E's response to the first issues paper (pg.10), subtractive billing will need to be fully explained to customers in order to make the billing transparent and understandable. This effort will take additional resources for the communication with customers.
- As referenced in SDG&E's response to the first issues paper (pg.4), at this time, the submetering approach is not a cost-effective and viable long-term approach beyond the PEV experimental rate study and that further research will need to be done in this area as the PEV market matures.

To correct these omissions, the record should be revised by adding SDG&E's comments to the current text to read as follows:

This metering arrangement may require additional utility back office costs. SDG&E does not have an automated process for accommodating this type of billing within its billing system. As such, this metering setup will, without exception, require additional back office costs. SDG&E estimates that for every 7,000 - 8,000 vehicles added, an additional \$54,000 would be required to support this approach. These costs include the initial manual configuration of the two meters within the billing system and any on-going incremental maintenance, troubleshooting and support. Subtractive billing will need to be fully explained to customers in order to make the billing transparent and understandable. This effort will take additional resources for the communication with customers. Further, at this time, the submetering approach is not a cost-effective and viable long-term approach beyond the initial pilot program and that further research will need to be done in this area as the PEV market matures.

B. Corrections to the Energy Division Staff Workshop Report on The Utility Role to Support Plug-in Electric Vehicles Workshop held September 27, 2010 (First Workshop Report)

1. The First Workshop Report, Party Positions, page 2 provides: "**The majority of parties thought that PEV submeters should be owned by a customer or a third party.**"

SDG&E's position, not reflected in this sentence and thus not presented to the Commission by the Report for its consideration, is that submetering should only be made an option to customers if the costs to implement it are reasonable. SDG&E's comments at page 3 on the first issues paper state SDG&E's intention to determine the costs of submetering in the course of the EV Study as follows:

"The temporary use of SDG&E submetering and subtractive billing will allow SDG&E to determine the resources required to offer submetering and subtractive billing to PEV customers."

SDG&E's comments at page 6 on the first issues paper state SDG&E's reluctance to place submeters on the customer side as follows:

"Table 6 recommends that the PEV meter and EVSE be owned by the customer under the submetering arrangement. The option of submeter ownership should remain an open issue until business models are more fully developed. In any event, any party owning the submeter should be responsible for fulfilling the State's meter requirements and for any necessary interface with utility billing systems."

The revised passage therefore should read as follows:

The majority of parties thought that PEV submeters should be owned by a customer or a third party. *The temporary use of SDG&E submetering and subtractive billing will allow SDG&E to determine the resources required to offer submetering and subtractive billing to PEV customers. Table 6 recommends that the PEV meter and EVSE be owned by the customer under the submetering arrangement. The option of submeter ownership should remain an open issue until business models are more fully developed. In any event, any party owning the submeter should be responsible for fulfilling the State's meter requirements and for any necessary interface with utility billing systems.*

C. Corrections to the Staff Issues Paper: Revenue Allocation and Rate Design, Facilitating Plug-In Electric Vehicle Integration, December 2010 (revised)

1. Section 3.2 Electric Rules, page 17, last sentence of the third paragraph, should be revised as follows to correctly reflect SDG&E's interpretation and application of relevant rules set forth in its comments in the proceeding:

In summary, upstream of the service point, ~~system upgrade costs are the~~ *service replacement upgrade cost is subject to allowance, which is ratebased, and any excess service costs are paid by the customer. Upstream of the service, any distribution upgrade costs are borne by the utility and rate based.* ~~while~~ *Downstream of the service point (customer side of the service point) the customer is responsible for the costs.*

2. Section 3.2 Electric Rules, starting on page 18, “Rule 2”, starting on the last paragraph of page 18, should be revised to state:

It bears noting that there exists a distinction between standard installation and **‘special facilities.’** Standard installation ~~typically represents the overhead service, closest to the primary line,~~ *that installation which is necessary to provide service and typically represents one overhead or underground service per premise from the closest available distribution source to the closest acceptable point of service on the premise, the cost of providing which, is collected in the distribution component of each ratepayer, up to the allowance. In other words, the upgrade cost is shared amongst all customers in that class. Special facilities, however, are those, as defined by Rule 2, that are non-standard and paid by the customer only, and at cost. These facilities can include, but are not limited to ~~underground service,~~ those over and above which are necessary to provide to the customer, service that extends beyond the closest acceptable point of service on the premise, a second service of the same class which is separated from the first service by a distance less than the minimum acceptable to the utility, power quality conditioning equipment, ~~customer connection costs,~~ installation of facilities downstream of the meter, ~~facilities where the cost is in excess of the standard extension allowances,~~ and alternate service equipment. Monthly maintenance fees are also paid by the customer for special facilities.*

The changes are necessary to correctly reflect SDG&E’s current interpretation and application of Rule 2 and its comments thereon in the proceeding.

2. Section 3.2 Electric Rules, page 19, paragraph four:

Strike this paragraph in its entirety as its discussion is incorrect because for residential distribution systems, the transformers are of the same size whether they are overhead or underground. Overhead distribution systems on the whole are easier to maintain because they are completely visible and more readily accessible than the underground systems. This allows for the same type of work to be done faster on an overhead system. The ability to locate faults is infinitely faster in the overhead than the underground. Overhead transformers come in the same size as underground transformers, so from a capacity stand point, the two systems are equal as to the number of homes they can serve. Because overhead wiring is exposed to the air, it has better heat

dissipation ability and as such can have better voltage characteristics. Diversity factors account for how often the load is simultaneously generated amongst the homes connected to a transformer. This factor is the same for overhead and underground and is exclusive of the transformer. Although the utility does have larger transformers for underground than overhead, this is not a factor in residential neighborhood systems since the transformer size never exceeds the largest overhead single phase transformer. The weight of an overhead service is not high enough to become a consideration and since they are visible and can be worked by a single worker, they are easier to maintain. ~~With regard to transformers, underground services or pad-mounted services, are characteristically of larger capacity and easier to maintain than overhead transformers. Though underground transformers may possess the capacity to serve a greater number of homes, they also typically have much lower diversity factors than overhead transformers. Overhead services, or pole-mounted services, have weight constraints and are typically of smaller capacity and more difficult to maintain. Overhead transformers have the capacity to serve fewer homes and larger diversity factors as a result.~~

3. **Section 3.2 Electric Rules, page 20, Rules 15 and 16**, Paragraph 1, sentence 1 incorrectly uses the term, “primary services”. The term ‘primary’ refers to a level of voltage. Rule 15 addresses distribution line extensions, which would include both primary and secondary level of voltage. The proper terminology for this paragraph is “distribution facilities” and should be corrected to read:

Electric Rule 15³⁸ pertains to “primary services” the extension of distribution facilities.

4. **Section 3.2 Electric Rules, page 20, Rules 15 and 16**, Paragraph 2, sentences 1 and 2 are inaccurate as written, To correct this inaccuracy, delete:

“Electric Rule 16³⁹ pertains to ‘secondary’ services. This Rule is applicable to both utility service facilities that extend from utility’s distribution lines to the service point.”

and replace with:

Electric Rule 16³⁹ pertains to the extension of service facilities. This Rule is applicable to both primary and secondary voltage facilities that extend from utility's distribution lines to the customer’s point of service (service delivery point). Service facilities are those facilities which are designed to supply one service to a premise or building. That service could provide power to multiple meters or customers who are all connected to the same customer point of service (service delivery point).

5. **Section 3.2 Electric Rules, pages 20-21, Rules 15 and 16** Paragraph 4, sentence 4, is not completely accurate as written and can be corrected by adding the phrase “the utility” as follows:

If the cost of the secondary system upgrade is less than or equal to the allowance, the customer, residential or non-residential, pays *the utility* nothing upfront.

6. **Section 3.2 Electric Rules, Rules 15 and 16**, page 21, paragraph 2, is not completely accurate as written and can be corrected revised as follows:

The original paper makes references to service facilities as “secondary” and Rule 15 facilities as “primary”. It is incorrect to make those associations as the difference between Rule 15 and 16 is how many points of service are being provided, not the voltage of the lines or how many meters are served.

Therefore, if the Rule 15 costs exceed the customer’s remaining allowance, the balance is subject to refund, per a Rule 15 contract, for a 10 year period. A refundable amount, however, is the amount paid by a customer toward the cost of an oversized, or non-standard, primary system upgrade that is utilized by the customer, or other customers', over a ten year period. During the 10 year period, if a new service or new Rule 15 extension (with a second contract), having excess allowance, connects to the Rule 15 distribution system, the excess allowance is refunded to the applicant who signed the original Rule 15 contract. The customer is refunded a portion of the capital cost when additional load is added to the primary line. Only actual refunded amounts are added to the rate base. Customers also have a non-refundable option of paying half the upgrade Rule 15 costs. ~~the primary system only~~

7. **Section 3.2 Electric Rules, Rules 15 and 16**, page 21, paragraph 4, is not completely accurate as written and can be corrected by replacing the term “Residential Service Facilities” with the term “Service Extension” and revise as follows:

Electric Rule 15(c)1, pertaining to the primary distribution system dictates that the utility will “complete a Distribution Line Extension without charge, provided [the utility's] total estimated installed costs does not exceed the allowances from permanent, bona-fide loads to be served by the Distribution Line Extension within a reasonable time, as determined by [the utility]. The allowance will first be applied to the *Service Extension Residential Service Facilities (aka. the secondary)*, in accordance with Rule 16. Any excess allowance will be applied to the Distribution Line Extension to which the Service Extension is connected *[aka. the primary].”*

8. **Section 3.2 Electric Rules, Rules 15 and 16**, Page 22, paragraph 2 is not completely accurate as written because it creates confusion and can be corrected by, changing the word “ratepayer” to “customer” as follows:

Currently system upgrades that are due to 'new load' from a PEV are not explicitly referenced in the tariff rules. However, for the sake of example, if a residential PEV owning customer in PG&E's territory upgrades his/her secondary services to accommodate PEV charging and the cost to do so is equal to, or less than, \$1918, then the ~~ratepayer~~ *customer* pays nothing upfront and the cost is ratebased. If a non-residential customer, a public charging facility owner perhaps, upgrades its secondary services to accommodate PEV charging and the cost to do so is equal to, or less than, the Net Revenue divided by a Cost-of-Service factor, that customer pays nothing upfront.

9. **Section 3.2 Electric Rules, Rules 15 and 16**, Page 22, paragraph 3 is not completely accurate because the terms ‘secondary’ and ‘primary’ refer to voltage level. The proper terminology to differentiate between that portion of the system that is connected to the customer’s panel and that portion that supports more than one customer is to describe these portions as “distribution” and “service”. These are the terms used in Rule 15.C.1. The paragraph can be corrected by rewording as follows:

Table 3 below, describes the difference between existing and new service as it pertains to new load for residential and nonresidential customers. Existing service is in reference to capacity upgrades on premises and New service represents capacity upgrades required due to no pre-existing infrastructure. Per Rule 15(C)1, should the ~~secondary system~~ *Service Extension* capacity upgrade cost be less than the allowance, the excess will then be applied to the ~~primary system~~ *Distribution Line Extension* upgrade costs.

10. **Section 3.2 Electric Rules, Rules 15 and 16**, Page 22, Table 3 is not completely accurate as written and can be corrected as follows:

The term “Primary” should be replaced with the term “Distribution”. The term “Secondary” should be replace with the term “Service” as follows:

Table 3

	Existing Service Capacity Upgrade		New Service Capacity Upgrade	
Designation	Primary Distribution (Rule 15)	Secondary Service (Rule 16)	Primary Distribution (Rule 15)	Secondary Service (Rule 16)
'New Load'	Refund Eligible; plus Excess Allowance	Allowance Eligible	Refund Eligible; plus Excess Allowance	Allowance Eligible
Residential		Fixed Allowance		Fixed Allowance
Non-Residential		Refund Eligible; Formulaic Allowance		Refund Eligible; Formulaic Allowance

D. Energy Division Staff Workshop Report, Revenue Allocation and Rate Design Workshops, September 29 and 30, 2010 (Second Workshop Report)

1. The Second Workshop Report, Page 2, next to the last paragraph provides: "Longer term, parties asserted a need to revisit how PUC 740.8 defines 'ratepayer interests' in the context of rate design of PEVs". SDG&E suggests the full text of the referenced statute, set out below, should be added to the report for the Commission's consideration:

Public Utilities Code 740.8: As used in Section 740.3, "interests" of ratepayers, short- or long-term, mean direct benefits that are specific to ratepayers in the form of safer, more reliable, or less costly gas or electrical service, consistent with Section 451, and activities that benefit ratepayers and that promote energy efficiency, reduction of health and environmental impacts from air pollution, and greenhouse gas emissions related to electricity and natural gas production and use, and increased use of alternative fuels.

2. The Second Workshop Report, Party Positions, page 6, in the third paragraph provides: "Parties were seemingly in agreement that a whole-house single meter opt-in non-tiered TOU rate would be adequate in the near term and could perhaps be phased out in the long-term." This is incorrect.

SDG&E stated in its December 3, 2010 comments at page 8 that "rate arbitrage created by ignoring AB1X/SB695 implications in optional residential TOU rates" should be avoided, an end that "must be achieved through thoughtful and orderly steps which are best balanced by each individual utility given where each utility stands in terms of rates, PEV penetration, system requirements, and other factors." Therefore, to correct this inaccuracy, the Second Workshop Report, page 2 should be amended to read as follows:

Many parties were seemingly in agreement that a whole-house single meter opt-in non-tiered TOU rate would be adequate in the near term and could perhaps be phased out in the long-term. However, SDG&E stated that rate arbitrage created by ignoring ABIX/SB695 implications in optional residential TOU rates need to be avoided. This as well as other rate design issues are most appropriately addressed by each individual utility in order to adequately incorporate each utilities unique context of existing rates, PEV penetration, system requirements, and other factors.

III CONCLUSION

Wherefore, for the above stated reasons, SDG&E respectfully moves the Commission to accept SDG&E's corrections to the record as set forth above.

Dated February 1, 2011

Respectfully submitted,

By /s/ Steven D. Patrick
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CERTIFICATE OF SERVICE

Pursuant to the Commission's Rules, I hereby certify that I have this day served a copy of the foregoing **SAN DIEGO GAS & ELECTRIC COMPANY (U 902 M) MOTION TO CORRECT THE RECORD** on all parties of record in **R.09-08-009** by electronic mail and by U.S. mail to those parties who have not provided an electronic address to the Commission.

Copies were also sent via Federal Express to Administrative Law Judge Regina DeAngelis and Commissioner Michael Peevey.

Dated at Los Angeles, California, this 1st of February, 2011.

/s/ Marivel Munoz

Marivel Munoz

CALIFORNIA PUBLIC UTILITIES COMMISSION
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