

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



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Order Instituting Rulemaking to Consider Alternative-  
Fueled Vehicle Programs, Tariffs, and Policies.

Rulemaking 13-11-007  
(Filed November 14, 2013)

**REPLY COMMENTS OF THE UTILITY REFORM NETWORK  
ON PROPOSED DECISION AUTHORIZING FURTHER  
EXTENSION OF THE INTERIM POLICY REGARDING ELECTRIC  
TARIFF RULES 15 AND 16**



Lower bills. Livable planet.

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May 31, 2016

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ON PROPOSED DECISION AUTHORIZING FURTHER EXTENSION OF THE  
INTERIM POLICY REGARDING ELECTRIC TARIFF RULES 15 AND 16**

Pursuant to Rule 14.3 of the Commission’s Rules of Practice and Procedure, the Utility Reform Network (“TURN”) submits these replies to comments on the Proposed Decision of Commissioner Peterman.<sup>1</sup> TURN did not submit opening comments on the Proposed Decision. TURN replies to the Opening Comments of the California Energy Storage Alliance (“CESA”). TURN opposes two changes recommended by CESA which go beyond the purpose and justification for subsidizing certain interconnection costs which would otherwise be borne by a customer seeking to install an electric vehicle charging system at their home.

**1. CESA’s Recommended Finding of Fact and Related Conclusion of Law Regarding Inclusion of Electric Vehicle Supply Equipment in Rules 15 and 16 is Overly Broad**

CESA recommends extending Rule 15 and 16 allowances for “[t]he full cost of electric vehicle supply equipment installed in accordance with industry standard specification.”<sup>2</sup> The language is overly broad because “electric vehicle supply equipment” (EVSE) may include equipment outside the scope of Rules 15 and 16, including the charging stations themselves or other equipment not owned by the utility. By contrast, Rule 15 and 16 in this context are meant to address “residential service facility upgrade costs as a result of home-based electric vehicle charging.”<sup>3</sup> There is no factual data to support a change that could seriously alter the careful balance struck to allow for the subsidization of EV home charging without unfairly shifting costs

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<sup>1</sup> The PD is entitled “Decision Authorizing Further Extension of the Interim Policy Regarding Electric Tariff Rules 15 and 16,” and was mailed on May 5, 2016.

<sup>2</sup> CESA Comments, Proposed Findings of Fact, Appendix A. TURN’s recommendations apply to both CESA’s Recommended Finding of Fact (#5) and the related Proposed Conclusion of Law (#3) in Appendix A to CESA’s comments. CESA does not discuss this change in the text of its comments.

<sup>3</sup> PD, p. 1.

for upgrades that exceed the standard allowance.

## **2. The Commission Should Not Raise the Current Cap on Residential Charging for Rules 15 and 16**

CESA states that the current 7 kilowatt (kW) maximum for electric vehicle supply equipment under Rules 15 and 16 is too low and should be raised to 18 kW, the highest allowed under the charging standard (SAE J1772):

“The 7 kW cap on charging capability of EVSEs is much too low, and should be raised to at least 18 kW per port to stay abreast of clear PEV market trends and to match the PEV industry specification of SAE J1772, which allows up to 80 Amps per EVSE. Rules 15 and 16, and related utility tariffs currently in effect should be modified accordingly to capture the full actual cost of PEV state-of-the-art charging station cost to residential consumers.”<sup>4</sup>

CESA’s comments ignore data on how consumers interact with residential charging infrastructure, and the recommendation to increase the per port power level to 18 kW would result in significantly increased costs to non-participating ratepayers that are not necessary for EV adoption.

One of the largest studies on consumer interaction with charging infrastructure found that drivers plug in their EV overnight at the residence for an average of 12 hours. By contrast, even at power levels less than 7 kW, usually participants were still able to charge their vehicle in just 1 to 3 hours.<sup>5</sup> Given long periods parked at the residence and relatively short daily commute patterns, the Department of Energy states that even lower Level 1 charging can “easily provide

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<sup>4</sup> CESA Comments, p. 3.

<sup>5</sup> Vehicles “usually only took 1 to 3 hours to charge completely.” Idaho National Laboratory, *Plugged In: How Americans Charge Their Electric Vehicles*, <https://avt.inl.gov/sites/default/files/pdf/arra/SummaryReport.pdf>, p. 16. Nissan Leafs and Chevy Volts were tracked in the study and have L2 charging capability less than 7 kW.

all of a driver's needs.”<sup>6</sup> While TURN agrees that battery range and Level 2 power levels will increase, low charge levels at the residence (and other “long dwell-time” locations) will continue to be sufficient for many drivers because charge time is based on the length of a driver’s daily commute, not the total capacity of the vehicle’s battery.

Further, 18 kW per port is much too large to be considered for allowances under Rules 15 and 16. Considering average households in California have peak load less than 3 kW,<sup>7</sup> the installation of up to an 18 kW charger would dramatically increase the load for a household and likely for the entire circuit, resulting in potentially significant service line upgrade costs. Such a change could significantly disrupt the balance of interests between EV owners and non-participants that is the basis for the “interim policy” of subsidizing costs above the standard allowance. The Proposed Decision notes that total subsidy costs in PG&E’s service territory to date have been relatively low, at \$152,750. However, all of these costs were created by only 29 customers, who received an average subsidy of \$5,267 for service line upgrades.<sup>8</sup> Moreover, the subsidy for “service line upgrades” may significantly underestimate the costs to ratepayers of distribution system upgrades due to EV charging.<sup>9</sup> Dramatically increasing the allowable charging level could easily cause a large increase in the subsidized amount for both service lines and distribution system upgrades. Instead, the Commission should require the utilities to provide more detailed information concerning: 1) the types of customer EVSE facilities, and 2) the

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<sup>6</sup> Department of Energy (DOE), Alternative Fuels Data Center (AFDC), [http://www.afdc.energy.gov/fuels/electricity\\_infrastructure.html](http://www.afdc.energy.gov/fuels/electricity_infrastructure.html).

<sup>7</sup> California Energy Commission (CEC), *California Energy Demand 2014-2024 Demand Forecast*, <http://www.energy.ca.gov/2013publications/CEC-200-2013-004/CEC-200-2013-004-V2-CMF.pdf>, pp. 19, 51. Figures demonstrate PG&E and SCE peak residential demand are expected to remain below 3 kW.

<sup>8</sup> PD, p. 2.

<sup>9</sup> The utilities estimate that total upgrades (including distribution system upgrades that are normally paid for by all ratepayers) due to EV charging cost \$3.606 million. Joint IOU Load Research Report, Dec. 24, 2015, p. 9.

nature of both service line and distribution system upgrades; as part of their future Load Research Reports. Such information will provide necessary data for evaluating the impacts of the interim policy prior to its proposed expiration on June 30, 2019.

Given that no need has been demonstrated and the potentially adverse impacts of increasing allowed charge levels for common facility treatment under Rules 15 and 16, CESA's recommendation should be denied.

May 31, 2016

Respectfully submitted,

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