

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

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 R.13-11-007

**GREEN POWER INSTITUTE AND COMMUNITY ENVIRONMENTAL COUNCIL
REPLY COMMENTS ON ORDER INSTITUTING RULEMAKING**

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GREEN POWER INSTITUTE AND COMMUNITY ENVIRONMENTAL COUNCIL REPLY COMMENTS ON ORDER INSTITUTING RULEMAKING

The Green Power Institute and the Community Environmental Council (GPI/CEC) respectfully submit these reply comments on the **Order Instituting Rulemaking**, mailed November 22, 2013, and the accompanying staff report on Vehicle-Grid Integration.

The Green Power Institute is the renewable energy program of the Pacific Institute, a non-profit environmental and social advocacy group. Under the direction of Dr. Gregory Morris, the Green Power Institute performs research and provides advocacy on behalf of renewable energy systems and the contribution they make to reducing the environmental impacts of today's energy systems. The Green Power Institute is located in Berkeley, California.

The Community Environmental Council (Council) is a member-supported environmental non-profit organization formed in Santa Barbara in 1970 and is the leading environmental organization in the Central Coast region of California. The Council is a member of the steering committee of Plug in Central Coast (PCC), one of the EV Readiness regions funded by the Department of Energy and the California Energy Commission. The Council provided significant input into PCC's forthcoming EV Readiness Plan, and works frequently with local businesses, governments, and residents as they purchase EVs, build charging infrastructure, and develop EV friendly policies. The Council's state policy work is directly informed by experience with what has worked, or is likely to work, at the local level and is almost unique in combining on-the-ground work on a number of energy and climate change-related issues with concurrent work on state and federal policy development. The Council is also pioneering a number of on-the-ground activities to promote alternative transportation and EVs. In 2004, the Council shifted its primary focus to energy and transportation issues and is spearheading a regional effort to wean our communities from fossil fuels, on a net basis, during the next two decades. More information on the Council and its energy programs may be found at www.cecsb.org.

I. Development of principles

A number of parties raise the need to identify general principles to guide the Commission's work in this proceeding. We strongly agree with this recommendation and propose the following, which match some of the principles raised by others:

- The Commission and stakeholders should focus on issues that have the potential for maximum impact on accelerating AFV adoption, rather than on what is most expedient
- The Commission should consider the changing utility landscape in its policy conclusions and keep in mind the need to facilitate new utility business models as the traditional model increasingly fails under the weight of the “prosumer” revolution
- Simpler solutions should be preferred over more complex solutions, all else being equal
- The Commission and stakeholders should always be cognizant of the now mandated requirement that ratepayer benefits include consideration of the environmental benefits of alternative fuels (SB 76)
- The Governor's goal of 1.5 million ZEVs by 2025 should be considered a floor, not a ceiling, and market transformation should continue to be the goal as it was in R.09-08-009

II. Responses to other parties

a. TURN

GPI/CEC appreciate TURN's consistent concerns about potential ratepayer costs resulting from the Commission's AFV policies. We note, however, that TURN seems to focus too much on ratepayer short-term costs and not enough on the long-term cost and environmental benefits from policies that the Commission supports, including AFV policies. TURN's

mission statement¹ includes foremost an appeal to clean energy, at the “lowest prices possible.” We would urge the Commission and TURN to always be cognizant of the environmental benefits as well as costs, and focus as much on longer-term cost benefits as much as on short-term ratepayer costs from certain policies. For example, TURN does not mention or seem to consider the fact that SB 76 (adding Pub. Util. Code section 740.8²) mandates that Commission consideration of ratepayer benefits resulting from AFVs include consideration of environmental benefits.

Moreover, it is very likely that any California policies designed to accelerate the AFV market and help this new market get to scale will result in far lower costs to ratepayers in the long-term – particularly when we compare the relatively small costs being contemplated by the Commission in terms of new policies.

We provide additional more detailed comments below.

TURN states (p. 2):

TURN notes, however, that “supporting and facilitating” rapid commercialization of PEVs is different than causing such commercialization. In TURN’s view, the purpose of this OIR should be to determine the most efficient way for utilities to be prepared for and to facilitate the electric vehicle commercialization that the State intends to promote. The utilities, however, do not have the primary responsibility for this commercialization, and it is not the responsibility of utility ratepayers to provide incentives to commercialize PEVs in California. There are already myriad benefits that act to incentivize PEV ownership. The Federal government offers a tax credit of between \$2,500 and \$7,500¹ and California provides a \$2,500 rebate² on the purchase of new, qualified EVs.

¹ TURN’s mission statement includes foremost an appeal to clean energy and highest quality at the lowest prices possible for residential households, small businesses through legal advocacy at the utilities, California and federal policy development, and community organizing throughout California.”

² Section 740.8 states: “In Section 740.3, “interacts” “ratepayers” short-term direct benefits that are specific to ratepayer of safer, more reliable, electrical service, consistent with Section 451, and activities that benefit energy efficiency, reduction of health and environmental impacts from air emissions related to electricity and natural gas production and use, and fuels.”

GPI/CEC feel that this approach is too narrow and fails to appreciate both the environmental benefits to ratepayers from EV acceleration, and the longer-term financial benefits to ratepayers. We and other parties have recommended in opening comments a number of ways that the Commission and IOUs could help to accelerate EV adoption. It is our hope that TURN will support at least some of these recommendations, under the broader rationales that we have described here.

TURN states, similarly, (p. 10): “The Commission should not direct the utilities to provide financing to customers to encourage PEV adoption and should, in fact, adopt a policy against such a practice.”

We reiterate our hope that TURN will shift to a broader consideration of the environmental and long-term financial benefits to ratepayers and we urge the Commission to reject TURN’s recommendation in this regard.

With respect to charging station installation, TURN states (p. 12):

As for third-party charging installations, there are a number of developments that show utility involvement in financing is not necessary. The U.S. Department of Energy has already financed the installation of more than 3,000 charging stations nationwide through the EV Project,²⁴ with more than 1,000 of them installed in California.²⁵ On the private side, ChargePoint, a network of independently owned charging stations, is responsible for the installation of almost 14,500 public charge stations, which are owned by 2,000 different owners.²⁶ ChargePoint announced a partnership with a finance company (i.e., Key Equipment Finance) on October 16, 2013 to launch a \$100 million lease-to-own program that gives small and medium sized companies and municipalities the opportunity to install chargers with no upfront costs.

While TURN is correct in its listing of existing programs for charging station installations, TURN’s comments ignore the fact that existing programs have deployed a limited number of Level 2 chargers (a fraction compared to the 160,000 EVs currently on the road), and with the increased scale of EV purchases, new models of deploying infrastructure are needed. Existing programs have also not been very successful in deploying DC Fast

Chargers or for higher wattage Level 2 chargers, and these faster chargers are critical to mainstream adoption of EVs and enabling those without garages to consider EV purchases. Moreover, the fact that there are existing programs does not mean that additional support is not necessary or that a Commission-designed program couldn't be superior to existing programs. While EV sales growth is strong now there is no guarantee that it won't slow down dramatically in the near future. To meet the Governor's 1.5 million ZEV goal by 2025 will require robust efforts by state agencies and all stakeholders.

With respect to leveraging IOU financing ability, GPI/CEC fully support ChargePoint's suggestion, discussed below, that the Commission work with IOUs and other potential financiers to create an EVSE Deployment Fund.

b. ChargePoint

ChargePoint urges a broader consideration of the appropriate level of charging in different situations (pp. 5-6):

Another mistaken assumption that needs to be addressed and corrected from the outset is that a particular level of charging service may be inherently preferable from a policy perspective. Nothing could be further from the truth. Overly simplistic statements such as the unqualified preference for Level 1 charging voiced by one or two participants at the December 4 workshop may be misleading and are unhelpful.

GPI/CEC agree that there is no "right" answer when it comes to the preferred wattage for charging stations. We recognize that Level 1 chargers have minimal impact on the grid and can aid in VGI solutions because vehicles are charging for longer periods. However, while Level 1 may be appropriate today for many home chargers and workplace settings, it is certainly not the most appropriate type for public or workplace charging in all circumstances. Public chargers need to charge vehicles as quickly as possible because it is almost always the case that EV owners need to minimize time spent charging. Level 2 or DC Fast Chargers are the most appropriate for public charging stations and we discuss below

some ways in which the business model for Level 2 or DC Fast Chargers could be improved. Workplace charging could utilize Level 1, 2 or Fast Chargers but in most cases it seems that a mix of Level 1 and 2 is the most appropriate.

ChargePoint states (p. 10): “These comments envision a possible role for the utility as an equity sponsor or commercial participant in an ‘EVSE Deployment Fund’ and/or utilization of existing utility-sponsored financing programs (e.g. on-bill financing).” ChargePoint adds (p. 12): “As a potential participant in financing, the utility could actively promote rapid acquisition of EV charging infrastructure. Importantly, the ability of the utility to enter into large scale deployment programs as an investor in a third party model would facilitate the interest of the financial community and enable the attraction of long term capital into this sector.”

GPI/CEC agree strongly with these recommendations, which are in line with our opening comments that the Commission create a hybrid IOU/3rd party model in which IOUs and other financiers provide the funding for EVSE deployment and third parties actually do the deploying.

ChargePoint states (p. 11): “Now the solar sector is transitioning to a 100% private-funded model as the lowest-cost funding providers (banks, institutional funds, etc.) have seen the track record of solar and are committing large pools of capital to fund future growth.”

This statement isn’t entirely accurate because solar still enjoys the 30% Investment Tax Credit and, for commercial customers, the accelerated MACRS depreciation option, which is equivalent to about 20% additional cost reduction. Accordingly, there are still substantial subsidies available for solar. That said, ChargePoint’s general comment is well-taken: markets will be more healthy when they can thrive without government help.

ChargePoint recommends (p. 13) that the Commission convene a workshop to focus on financing issues and we fully support this recommendation. ChargePoint also recommends

that On-Bill Financing (OBF) be fully considered for its potential in financing EVSE. Again, we agree, but as we detailed in opening comments it seems that OBF could be more broadly helpful in the AFV context in terms of helping to finance vehicles and/or batteries as well as EVSE.

c. CAISO

CAISO urges creation of simpler opportunities for EV owners to monetize the grid benefits of EVs (p. 4):

At this time, electric vehicle owners lack an opportunity to participate in any type of real-time retail grid service or program outside of becoming a wholesale market participant. This fact is forcing electric vehicle owners to examine participation in the ISO market as a wholesale grid resource, which arguably creates more complex regulatory and technical challenges. The ISO believes less complex retail opportunities exist for vehicle grid integration. In this regard, the absence of retail rate structures that adjust dynamically to grid conditions or seasonal load patterns is a problem.

And (id.):

[A]n important step that the CPUC should consider now is encouraging the development of a hierarchical method of signaling where transmission level needs can be sent to the utility distribution companies who can consume and further refine the signal before transmitting the signal to devices at the distribution level.

GPI/CEC heartily agree with these statements and we look forward to working with CAISO and other stakeholders in this proceeding and other forums to make these recommendations reality.

d. PG&E

GPI/CEC are happy to see PG&E mirror generally our view on the major obstacles to accelerating EV adoption. For example, PG&E states (p. 2): “From the research that PG&E has conducted, the major impediments to PEV adoption are:

- (1) The upfront cost of the PEV;
- (2) The range and associated amount of retail PEV charging infrastructure available;
and
- (3) Consumer knowledge and awareness of the benefits and costs of PEVs.”

We highlighted in opening comments our view that the lack of sufficient education and outreach is the major obstacle to accelerating EV adoption, but we are happy that PG&E includes this issue in the top three.

PG&E states, however (p. 2): “PG&E does not recommend a focus on PEV electric rates, because the research PG&E has conducted has found that this is not a major impediment to PEV adoption. Based on PG&E’s experience with PEV customers, to the extent that rates are sustainable, easily explainable to customers, and provide a simple understanding of incentives included in the rates, then PEV rates are not an impediment to PEV adoption.”

While we recognize that PG&E has a good rate structure for charging stations, GPI/CEC respectfully disagree with PG&E that EV electric rates are not an impediment to customer EV adoption. It is the case statewide that only about 20% of EV owners are opting for EV rates – as SCE and PG&E stated at the Dec. 4 workshop. If this is the case, it seems that additional rate design, as well as more education and outreach, is called for to improve this adoption rate of EV-specific rates, due to the advantages that these rates offer over default rates. As we have stated previously in R.09-08-009, while EV purchase rates are continuing to grow at this early stage in the market, if EV owners don’t in general realize the cost savings they feel are due from switching from gasoline to electricity, the market may well take a downturn. Accordingly, we urge the Commission to maintain a focus on improving rate design for EVs.

Similarly, PG&E states (pp. 3-4):

Thus, instead of having Track 2 of the Rulemaking concentrating on PEV rates,

PG&E recommends that the Commission instead evaluate the appropriate role of the utility in the PEV market and the business cases associated with PEV infrastructure deployment. PG&E believes that a sustainable PEV charging ecosystem needs to be developed to help alleviate the range concerns of customers. PG&E recommends that the Commission and stakeholders evaluate under what conditions and with what market participants PEV charging infrastructure can be self-sustaining, so that the Commission policies can be developed consistent with the need to mitigate the range concerns of PEV customers.

While we disagree with PG&E that rate design is not a concern, we do agree that the Commission should also focus on mitigating range anxiety through more and better public charging opportunities. We made a number of recommendations along these lines in our opening comments and make additional comments in these reply comments.

e. SCE

SCE states in opening comments (p. 3): “SCE recommends that the OIR include a more complete list of key adoption drivers to accelerate the market, including market education, vehicle features, and infrastructure.” We are pleased to see that SCE agrees with our recommended prioritization of market education as a key tool for accelerating EV adoption, as we argued in opening comments. We agree also with SCE that vehicle features and infrastructure issues are important in accelerating EV adoption.

We also agree with SCE’s recommendation (p. 4) to “address as an immediate priority how existing storage procurement categories might be modified to better accommodate PEVs.”

SCE states (p. 2): “SCE proposes a four-track structure that would begin with light-duty plug-in electric vehicles (PEVs), continue with medium- and heavy-duty PEVs, then address all other transportation electrification, and explore natural gas vehicles after transportation electrification has been explored.” SCE fleshes out this recommendation at page 5.

GPI/CEC agree with this recommendation in terms of phasing and adding tracks for different types of vehicles. We also recommended, however, in opening comments, that the Commission add a track on education and outreach. We hope that SCE supports this recommendation in reply comments.

We support SCE's recommended (p. 12) "additional VGI uses cases: Increased adoption of time-of-use (TOU) rates, increased use of lower charging levels, and used PEV batteries in stationary applications."

GPI/CEC disagree with SCE's opposition to IOU financing for EVs or batteries (p. 3): "For the reasons discussed below, utilities should not provide acquisition incentives or financing for PEVs or batteries, which is not in the ratepayers' interest and is appropriately the role of financial and other lending institutions." SCE also states (p. 28) its opposition to allowing or requiring IOUs to finance EV purchase or battery purchases, noting that the "utilities' existing financing programs are limited to non-residential customers due to state and federal lending laws."

There are many ways in which IOU capital and low-interest rates, and/or On-Bill Financing, could and should help significantly in this area. As mentioned above, GPI/CEC support ChargePoint's proposed EVSE Deployment Fund and we look forward to further discussion with SCE and other IOUs on this issue. Similarly, we feel that there is a potentially strong role for IOU financing in EV purchasing and battery leasing programs.

SCE states (p. 10): "The Commission should evaluate the ratepayer benefits of lower charging levels for PEVs, the current market conditions and trends for charging levels, and the limitations of PEVs to provide grid services based on battery size, charging rate, average miles driven, and PEV ranges." We reiterate our comments above, that lower charging levels aren't always the best and, in the case of public charging and some workplace charging, are inappropriate. We add, also, that higher wattage charging will likely support distribution grid upgrades, which will not only add to IOU rate-base, but will also make the

grid more resilient, particularly as VGI options become widespread.

GPI/CEC agree with SCE's recommendation (p. 12) that a "future workshop should include discussion of (1) VGI guiding principles, (2) market status and trends, (3) technology status, (4) lessons learned since the launch of PEVs, and (4) R&D needs (including codes and standards)." We also support other party recommendations for workshops on specific topics and we feel that with the broad scope of this proceeding a number of additional workshops are warranted.

f. SDG&E

SDG&E has shown that utilities can do much to advance EVs. There seems to be a difference in attitude on this issue between SDG&E and some other utilities and we encourage the Commission and the IOUs to work together on a common vision for EV advancement. For example, we fully support SDG&E's statement as follows (p. 11-12): "PEVs have a tremendous potential to assist with storage solutions and increase the utilization of renewable energy resources, as part of an overall VGI platform. In the near term, PEVs can be part of broader load management solutions, as well as a Demand Response program resource."

Similarly, SDG&E states (p. 2): "SDG&E asks the Commission to exercise its oversight role and use the utilities as a vehicle to accelerate the growth in the overall AFV market, as was done during the formative years in the development of the energy efficiency market."

And: (p. 4): "What are the market barriers and gaps in the AFV market? Little progress has been made in the development of grid-integrated charging services in line with the objectives of the VGI White Paper. SDG&E believes strong utility leadership is necessary to achieve these objectives, which can be achieved in a manner that supports market-based solutions, fosters innovation, and addresses environmental justice interests."

We applaud SDG&E for its leadership on EVs and look forward to further leadership in the future.

SDG&E also highlights the need to ensure that under-served populations of ratepayers are fully included in the nascent EV revolution (p. 4): “What geographic locations or customer segments are currently underrepresented or underserved? This rulemaking should immediately address how best to ensure that all customer segments have access to charging services – and in light of the VGI objectives, grid-integrated charging services for Multi-unit Dwelling and workplace customers.” GPI/CEC support this recommendation.

SDG&E also recommends that the Commission re-visit previous decisions about the appropriate role for IOU ownership of charging facility (p. 5):

Ensuring utility infrastructure is available to meet the AFV energy needs of SDG&E’s customers in a manner that provides benefits to all customers is an immediate priority. The growth in and expansion of pricing, technology and business model options should be encouraged. To that end, utilities should be allowed to actively participate in all aspects of transportation electrification, including owning and operating grid-integrated charging facilities. The CPUC can oversee this activity to ensure that it does not stifle market competition and that there is adequate availability of grid-integrated charging infrastructure for all customers.

GPI/CEC supports reconsidering this issue. While we believe that third parties are generally better suited to construct, maintain and own charging facilities, we are not opposed to reconsidering this issue. In particular, IOUs may be in a key position to expand DCFC deployment. They can easily identify areas with sufficient power in high traffic areas, are accustomed to investment in electric infrastructure, and are best positioned to mitigate the impacts of fast charging on the grid. We also encourage DCFC rates that are reasonable, particularly to encourage off-peak fast charging. An easy preliminary step would be to require SCE and SDG&E to offer rates for DCFCs similar to PG&E’s A-1 rate, where a higher base kWh rate is exchanged for waiving of demand charges for DCFCs. Expanded DCFC infrastructure and affordability is key to mainstream adoption of PEVs, and also becomes an equity issue as such fast-charging infrastructure makes it easier for those

without garages or residential PEV charging access to consider PEVs. We recommend additional consideration of IOU investment in this category of the public EV charging market. We have also recommended that IOUs work with third parties in a hybrid model under which IOUs finance charging station installations, but there may be a role for IOUs to also own and operate at least some stations if they are motivated to do so.

We also agree with NRDC's recommendation, discussed below, that there may be a role for IOUs to own submeters, in the absence of viable third party options in this area. SDG&E mirrors this point (p. 8): "Regulatory prohibition against utility owned PEV submetering will need to be revisited, especially if grid-integrated charging is at stake.... Only the utility has the (proprietary) information necessary to implement grid-integrated charging optimization with its distribution system conditions. The California Independent System Operator (CAISO) does not have utility grid condition visibility."

SDG&E opposes, however, OBF (or OBR as SDG&E labels it) in the EV space (p. 12):

Utility pilot programs in the energy efficiency area are currently exploring the concept of On-Bill Repayment ("OBR") which has yet to be implemented. SDG&E submits that the market conditions surrounding the need for OBR are a unique solution in the energy efficiency market and are not directly applicable to AFV adoption and EVSE installation. Any consideration of OBR repayments in this rulemaking proceeding should prudently be considered only after reviewing the results of these energy efficiency OBR pilots.

Under the rationales discussed above, GPI/CEC strongly support full consideration of OBF/OBR for EV purchases, battery leasing, and/or installation of charging stations. We urge the Commission to not preclude this option until it has been thoroughly examined.

g. NRDC

NRDC recommends that the Commission re-visit the customer-side energy storage procurement target set in R.10-12-007 (p. 8): "[T]he Commission may wish to reconsider what appears to be a hard cap on customer-side resources. If VGI or other customer-side

solutions are shown to be more cost-effective than storage in the distribution or transmission ‘domains,’ the 200 MW cap could inflate costs for the body of utility customers. Likewise, the cap could artificially limit the number of PEV customers who are able to receive compensation for value they provide to the grid.” GPI/CEC support NRDC’s suggestion that the customer-side storage cap should be re-considered in this proceeding, in light of the very substantial storage capacity that is likely to come online in the coming years from EV sales and charging. The 200 MW cap on customer-side storage procurement is not, however, in any way a cap on utility storage procurement (see D.13-10-040).

NRDC reprises previous comments about the importance of allowing IOUs to own dedicated meters in the absence of viable third parties (p. 8):

As noted in the several instances in the Energy Division Whitepaper, dedicated PEV load may be required to unlock much of the value associated with VGI. Unfortunately, it remains unclear if utilities are allowed to provide customers with lower cost dedicated meter solutions. The sub-metering pilot created by D. 13-11-002 is valuable, but will only serve a maximum of 1,500 customers, will not be complete for several years, will likely not provide a solution that works for customers who already have simple Level 1 and 2 equipment, and is dependent upon the participation of third-party charging service providers whose futures are uncertain. The need remains for utility-provided solutions that could be made available to all customers.

GPI/CEC support NRDC’s recommendation in this area. While we would generally prefer third party ownership of meters and EVSE, we are not entirely opposed to IOU ownership if there is no third party market for this technology.

NRDC fleshes out its recommendation (p. 8):

One such solution, the use of second utility meters in-series, does not need a pilot—it has already been proven in the field by both the Sacramento Municipal Utility District and SDG&E and demonstrated to significantly reduce customer installation costs, simply by altering the location at which the second utility meter is installed. The Commission previously directed utilities to offer customers second meter solutions; it should make it clear they are free to do so in a manner that minimizes customer costs.

NRDC adds (pp. 8-9): “Likewise, the Commission should direct the utilities to develop even lower cost solutions that need not rely on “revenue-grade” metering. When all load is captured by a standard utility master meter and all billing conducted by the utility, the sub-meter need not be revenue-grade.”

Again, GPI/CEC support these recommendations because of their potential for ratepayers to enjoy lower rates and lower upfront costs than would otherwise be the case.

NRDC supports the benefits of robust education and outreach efforts (p. 11). We agree also on this and have called in opening comments for the Commission to open a third track to focus exclusively on education and outreach.

GPI/CEC agree wholeheartedly with NRDC’s recommendation on p. 13: “the Commission should make the price of electricity as a transportation fuel transparent and comprehensible by translating the prices of TOU rates into dollars-per-gallon equivalent terms, or ‘eGallons,’ using the methodology employed by the Department of Energy.”

This is an educational issue and we recommend that this issue be added to the new Track III on education and outreach.

h. Clean Coalition

The Clean Coalition urges the Commission to recognize the ability of EVs to “flatten the duck” in terms of statewide load profiles during summer months (p. 6):

DR programs and tariffs can incentivize customers to shift power consumption towards low net demand periods where over-generation may occur, lifting the belly of the “duck”. The dotted red line indicates the net load curve predicted by CAISO for 2020, while the solid red line shows how adding timely EV charging, as shown by the blue dashed line, can help smooth the net load profile. This example illustrates the positive effect on net load and evening ramp requirements resulting from 6,000 MWh of EV charging in the afternoon, with a maximum of 1,500 MW during any

one hour. This is especially relevant where EVs charging is near or co-located with distributed PV generation at home and work.

GPI/CEC support this recommendation and it seems that even if a small percentage of the 10 GW load by 2025, from EVs, signs up for VGI the duck will indeed be flattened considerably.

The Clean Coalition also highlights the new distribution grid planning process required by AB 327 (p. 9):

Distribution grid modernization and upgrade planning processes required under AB 327 should be addressed in this Proceeding and informed by EV and EV+PV experience and adoption targets. Assembly Bill (AB) 327, signed in 2013, requires the IOUs to submit a distributed resources plan no later than July 1, 2015. This plan must account for DG, energy efficiency, energy storage, electric vehicles and demand response technologies.

We agree with the Clean Coalition that AB 327 issues should be addressed in this proceeding and we look forward to further dialogue on this important new feature of utility planning.

i. EV Grid

EV Grid calls for adding one or more workshops highlighting the cross-cutting issues between proceedings (p. 3): “We believe that periodic cross-proceeding-cutting Stakeholder workshops would be of exceptional value in breaking down the ‘regulatory maze’ barrier.”

GPI/CEC agree with this recommendation and we recommend that the Commission convene an all-party meeting early in 2014 to address the many cross-cutting issues that the OIR itself highlights.

j. NRG

GPI/CEC have raised the need to fully address NEM issues in the EV charging context, and

other parties are now recognizing the importance of this issue. We agree with NRG's statement (p. 8):

Furthermore, clarification that NEM applies to behind-the-meter energy storage devices (including V2G resources) is needed to avoid unintended financial penalties for providing services such as regulation, ramping, or distribution system support."

Similarly, NRG urges (p. 9): Clarify that fast-track interconnection and NEM are not precluded for V2G." Again, we agree with this recommendation.

III. Conclusion

GPI and CEC appreciate the very thorough comments submitted by multiple parties in this proceeding and we look forward to an exciting 2014 as we watch the AFV field blossom further.

Dated: December 20, 2013, at Berkeley, California.

Respectfully Submitted,



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