BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue the Development of Rates and Infrastructure for Vehicle Electrification.	Rulemaking 18-12-006 (Filed December 13, 2018)

COMMENTS OF THE VEHICLE-GRID INTEGRATION COUNCIL ON THE TRANSPORTATION ELECTRIFICATION FRAMEWORK (SECTIONS 6, 11.1, AND 11.2)

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In accordance with Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), the Vehicle-Grid Integration Council[1] ("VGIC") hereby submits these comments on the *Administrative Law Judge's Ruling Adding Staff Proposal for a Draft Transportation Electrification Framework to the Record and Inviting Party Comments* ("Ruling") issued by Administrative Law Judge ("ALJ") Patrick Doherty on February 3, 2020. Pursuant to *Email Ruling Resetting Procedural Schedule for Comments on Transportation Electrification Framework Sections* issued by ALJ Sasha Goldberg on August 4, 2020, VGIC timely files these comments on Sections 6, 11.1, and 11.2 of the Draft Transportation Electrification Framework ("Draft TEF") on August 21, 2020.

I. <u>INTRODUCTION.</u>

A. Overview of VGIC

[1] VGIC member companies and supporters include American Honda Motor Co., Inc., Connect California LLC, Enel X North America, Inc., Fiat Chrysler Automobiles, Ford Motor Company, General Motors Company, Nissan North America, Inc., Nuvve Corporation, and Toyota Motor North America, Inc. The views expressed in these Comments are those of VGIC, and do not necessarily reflect the views of all of the individual VGIC member companies or supporters. (https://www.vgicouncil.org/).

VGIC is a 501(c)6 membership-based advocacy group committed to advancing the role of electric vehicles ("EVs") and vehicle-grid integration ("VGI") through policy development, education, outreach, and research. VGIC supports the transition to decarbonized transportation and electric sectors by ensuring the value from EV deployments and flexible EV charging and discharging is recognized and compensated in support of achieving a more reliable, affordable, and efficient electric grid.

B. Organization of VGIC's Comments

VGIC's comments are organized as follows:

- First, VGIC addresses **specific questions on Sections 11.1** of the Draft TEF posed by the Commission and in **Energy Division Staff Paper on VGI Issues**.[2] In responding to these questions, VGIC provides several recommendations for the Commission's consideration.
- Second, VGIC addresses **several questions and recommendations on Section 11.2** related to marketing education and outreach ("ME&O"). VGIC provides several recommendations for the Commission's consideration.
- Finally, VGIC provides a **summary of recommendations** from its answers to these questions.

II. COMMENTS ON DRAFT TEF SECTION 11.1: VGI AND STAFF PAPER ON VGI ISSUES.

[2] *Vehicle Grid Integration Implementation and the Draft Transportation Electrification Framework,* Energy Division Staff Paper (August 10, 2020)

A. *Section 11.1, Question 1: How can Energy Division staff and the investor-owned utilities ("IOU") align the implementation of SB 676 (Bradford, 2019) with the IOUs' Transportation Electrification Plan ("TEP") development?*

Consistent with the Joint Comments on VGI Issues filed August 17, 2020[3], VGIC recommends that the Commission issue guidance to the IOUs on VGI implementation that includes a "Model VGI Portfolio," the recommended components of which we describe in detail in those comments[4]. This guidance should include a directive for IOUs to develop and implement their own VGI Portfolios beginning in 2021 (if not sooner for some program elements). This VGI Portfolio development and approval processes could either function as a standalone effort or be incorporated into the TEF and TEP process. VGIC's preference is for each VGI Portfolio to initially be a standalone effort, for a few reasons discussed in the Joint Comments on VGI Issues[5], before being referenced and incorporated into the Final TEF, future TEF updates, and ongoing TEPs. This is also sensible because not all VGI activities are necessarily contingent on IOU programs or ratepayer funding.

B. *Section 11.1, Question 2: Will existing activities such as the interagency VGI Working Group provide sufficient output and identifiable next steps to specifically target IOU VGI activities?*

VGIC is grateful for the time and thoughtfulness of all who participated in the nearly year-long interagency VGI Working Group ("VGI WG"). VGIC addresses specific VGI WG

[3] *Joint Comments of the Vehicle-Grid Integration Council, Enel X North America, Inc., Advanced Energy Economy, California Energy Storage Alliance, ChargePoint, Inc., Environmental Defense Fund, Greenlots, Natural Resources Defense Council, and Siemens on Email Ruling Seeking Party Comment on Vehicle-Grid Integration Issues,* August 17, 3030 in DRIVE OIR (R. 18-12-006)
[4] *Id* at 8-14.
[5] *Id* at 6.

policy recommendations identified in the Energy Division Staff Paper on VGI in II.D and II.E below.

C. *Section 11.1, Question 3: What is the appropriate role of community choice aggregators ("CCAs") and other load-serving entities ("LSEs") to advancing VGI? How should their participation in VGI services be addressed in the IOUs' TEPs?*

Effective implementation of VGI strategies likely requires some level of coordination (whether direct or indirect) between IOUs and CCAs or other LSEs, such as to align EV rate options. While VGIC believes the Commission has limited ability (if any) to direct CCA actions related to VGI, we also believe the Commission should be cognizant of any barriers (whether intentional or not) that IOU actions may cause for CCA efforts to spur beneficial electrification through VGI. For example, VGIC is aware that some CCAs are taking action to better align the time coincidence of their renewable resource mix and their loads. VGI is seen as a critical tool in this effort. Distribution rates or resource planning requirements that are not conducive to these efforts could be seen as a barrier.

Additionally, as described in our August 17, 2020 Joint Comments, VGIC is eager to find ways to unlock incremental Low-Carbon Fuel Standard ("LCFS") credits available from ***non-metered*** smart charging pathways that are currently not being claimed. This is distinct from ***metered*** incremental credits that are currently being captured by LSEs, automotive original equipment manufacturers ("OEMs"), and third-party EV service providers ("EVSP") alike. If captured, these non-metered, incremental LCFS credits could serve as a substantial funding source for new VGI-related activities, including demonstration projects. It is VGIC's understanding that under current Air Resources Board ("ARB") regulations, only electric distribution utilities (i.e. the IOUs) are able to claim these credits but are currently not doing so. To the extent that the IOUs are not taking this action, CCAs or other entities may be well positioned to do so. VGIC recommends that the Commission work with ARB to resolve this issue to ensure that IOU actions (or lack thereof) on obtaining incremental non-metered LCFS credits do not stymie the ability of CCAs or other entities to claim these credits instead.

D. *Staff Paper questions on implementing VGI near-term priorities:*

a. *What, if any, VGI related topics should be included in the list of pre-TEP topics that could be included as part of a pre-TEP program application or pilot proposal to be filed as a pre-TEPs; and*

In Comments on TEF Section 5, VGIC recommended the Commission not necessarily limit the IOUs' pre-TEP program proposals to a list of priority areas identified in the TEF.[6] VGIC reiterates this recommendation and believes that pre-TEP VGI-related topics should also not be limited to a set list. Instead, VGIC recommends that the Commission direct IOUs to develop VGI Portfolios during the pre-TEP timeframe, and later referencing and incorporating these VGI Portfolios into each IOU's TEP. In the Joint Comments on VGI Issues, VGIC offers additional detail and justification for the development of comprehensive standalone VGI Portfolios before the TEP process is complete. [7]

[6] *Opening Comments of VGIC on TEF Sections 2, 3.1, 3.2, 3.3, 4, and 5* (March 6, 2020) https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M328/K692/328692746.PDF at 8.
[7] *Joint Comments of the Vehicle-Grid Integration Council, Enel X North America, Inc., Advanced Energy Economy, California Energy Storage Alliance, ChargePoint, Inc., Environmental Defense Fund, Greenlots, Natural Resources Defense Council, and Siemens on Email Ruling Seeking Party Comment on Vehicle-Grid Integration Issues,* August 17, 3030 in DRIVE OIR (R. 18-12-006) at 6.

b. What other mechanism(s) currently allow, or could be modified to allow, implementation of the near-term VGI recommendations under the DRIVE OIR? Alternatively, would an alternative proceeding outside of the DRIVE OIR provide sufficient authority in lieu of taking action within the OIR?

Near-term VGI recommendations should be considered in the DRIVE OIR via IOU applications for VGI Portfolios. VGIC believes that this mechanism provides the most sensible pathway for implementing near-term VGI strategies. The DRIVE OIR offers a forum for the consolidated, coordinated approach needed to advance transportation electrification ("TE") and VGI. However, as discussed in the Joint Comments on VGI Issues, some elements of VGI Portfolios may utilize funding from parallel proceedings. For example, rate elements of VGI Portfolios may need to be decided in parallel proceedings. Ultimately, VGIC does not recommend an alternative proceeding outside of the DRIVE OIR to address VGI, as it is wholly unnecessary given the scope of the DRIVE OIR and would inhibit progress on implementation of valuable VGI strategies.

E. VGIC comments and references in response to Staff Paper Appendix containing feedback on specific VGI policy recommendations.

VGIC appreciates the effort by the Commission and Energy Division Staff to solicit feedback from a broad set of stakeholders on VGI, and specifically commends Staff for their dedication in responding to the long list of relevant VGI Working Group policy recommendations. Due to the various VGI-related issues open for comment in quick succession (i.e. TEF Tech and Standards, VGI, and Rates Sections, and Ruling Seeking Comments on VGI Issues), VGIC offers the below Table 1 to assist in cross-referencing VGI Working Group policy recommendations with VGIC Comments filed in the DRIVE OIR. Table 1 is based on the August 10, 2020 VGI Staff Paper, with the additional fourth and fifth columns containing VGIC comments and page number references to recommendations provided in previously-filed VGIC comments (including Joint Comments on VGI Issues, filed August 17, 2020). See Table 1 below.

Table 1

VGI WG#	***VGI WG Policy Action***	***ED Staff feedback***	*Comments of VGIC*	*Reference to Previously Filed VGIC Comments*
1.16	**EV export bill credit (under NEM or another framework)**	**What options should be considered for providing value for exports to the grid? What methods should be used to determine compensation levels for exports to the grid? Should the number of customers eligible for such a mechanism be limited? Identify advantages and disadvantages of each approach.**	VGIC offered high-level concepts for a V2G export bill credit in Joint Comments on VGI Issues, and will provide more detailed comments on an EV export bill credit for the upcoming TEF Section 9 comment period.	Joint Comments on VGI Issues at 11.

2.03	**Establish "reverse EE" rebates (pay for performance?) for EVSE installations that build permanent midday load**	**Staff does not recommend additional near-term action under the DRIVE OIR.** **Staff recommends focusing in the near term on incentives such as TOU and dynamic TOU rates listed in draft TEF section 9 that support both this use case, i.e. uptake of mid-day solar, as well as other use cases such as night-time wind and discharge during periods of peak demand. This recommendation could be reconsidered later.**	VGIC does not dispute Staff's characterization of similar benefits being provided by static and dynamic TOU rates. However, we would point to a major touchpoint of this recommendation with those contained in the Load Shift Working Group report,[8] submitted January 31, 2019 in response to Decision 17-10-017. This report was intended to launch a new rulemaking to consider implementation of new load shift products as described in that report, which has not yet occurred A specific component of this policy recommendation could be focused on workplace charging, as discussed in the Joint Comments on VGI Issues referenced on the right.	Joint Comments on VGI Issues at 9.
2.04	**Enable customers to elect a BTM load management**	**1) Whether IOUs consider an EV EMS when determining the need for a utility service connection upgrade; or instead**	Consistent with VGIC's recommendations in Reply Comments on TEF Sections 7&8 and Joint Comments on VGI issues, we	VGIC Comments on TEF Sections 7 and 8 at 17-19.

[8] https://gridworks.org/wp-content/uploads/2019/02/LoadShiftWorkingGroup_report.pdf

	option to avoid distribution upgrades	**sum the maximum nameplate capacity load from each EVSE; 2) whether any barriers would prevent IOUs from offering this technology to participants in existing and future IOU TE infrastructure programs as a "non-wires" alternative to physical upgrades to IOU and customer-side electrical capacity; 3) what info/demos are needed to evaluate the potential to use EV EMS to manage concentrated loads to avoid utility distribution system transformer or feeder upgrade; 4) other potential barriers and opportunities for EV EMS**	believe this can be accomplished through a tariff-based option that encourages EV customers to defer distribution upgrades through Automated/Active Load Management. In addition to this, further distribution capacity deferrals could be pursued through other program elements, such as competitive solicitation options that are more fully described in the Joint Comments. We note that this latter element of tariffed options for distribution deferrals intersects with Policy Recommendation 2.22, for which the Staff VGI Whitepaper references this recommendation.	VGIC Reply Comments on TEF Sections 7 and 8 at 5-9. Joint Joint Comments on VGI Issues at 9-10.
2.11	**Create an EV dealership VGI upfront incentive program whereby utilities can reward dealers for installing or enabling VGI**	**Staff suggests that parties comment on the appropriate process to further evaluate this recommendation.**	VGIC recommends that consideration of customer acquisition/participation incentives occur in the VGI Portfolio process recommended in Joint Comments on VGI Issues. Notably, VGIC recommends that greater emphasis of these incentives be placed on direct OEM-customer interaction ("upstream incentives"), with a smaller	Joint Comments on VGI Issues at 8-9.

	functionality at point of sale		portion focused on dealerships ("point of sale").	
2.21	**Public charger ancillary services program**	**Parties may provide comments related to any sections of the draft TEF that are open for public comment and are relevant to this idea.**	VGIC submitted this recommendation during the VGI WG process. Joint Comments on VGI Issues detail a broader recommendation for public charging enhancements. VGIC also notes that in addition to public chargers, a similar program could be targeted towards commercial fleets.	Joint Comments on VGI Issues at 12-13.
4.04	**Perform detailed cost-effectiveness analysis for specific VGI use-cases in programs/measures that are ratepayer funded, in order to quantify the impact on EV customer, ratepayer, utility, and society at large.**	**Address whether to include this requirement, and if so, how this analysis would be conducted and why.**	VGIC agrees with elements (4) to consider Ratepayer Impact Measure and (5) ensure only incremental costs of VGI measures are considered. However, we recommend the Commission not include this requirement in the near-term, and we offer a detailed justification in support of this in Joint Comments on VGI Issues.	Joint Comments on VGI Issues at 15-17.

7.13	**Create a mechanism which allows for quick approval of demonstrations for technology and to determine market interest**	**Staff suggests that parties comment, in response to VGI section 11.1 of the draft TEF, on whether the scope of an Emerging Technology program (if adopted in a final CPUC decision on the TEF) should include these types of VGI demonstrations and market support, and if so what type of budget is appropriate for these activities and why.**	VGIC believes that the Emerging Technology program withing the TEF could ultimately be an appropriate home for future demonstration projects. In this case, we believe some portion of this budget should be focused on advancing VGI technologies. However, consistent with our recommendations above, we believe that demonstrations for VGI should still proceed now, prior to the TEF adoption. This is particularly necessary to overcome barriers (whether real or perceived) for V2G applications.	VGIC Comments on TEF Sections 7 and 8 at 2-5 and 20.

III. COMMENTS ON DRAFT TEF SECTION 11.2: ME&O.

A. Section 11.2, Question 1: Should the IOUs' funds for TE ME&O efforts be capped at a specific percentage for each TE program or as a single budget across all their programs? If yes, please justify why and propose a methodology.

As a general matter, VGIC is concerned that a budget cap could place artificial restrictions on ME&O efforts. However, if such a budget cap is applied, VGIC believes it should be applied at the portfolio level to ensure sufficient flexibility among programs. Additionally, VGIC recommends that a certain portion of the ME&O budget be set aside for VGI-related purposes since these efforts are likely to require more targeted ME&O to engage new or existing EV owners in VGI rate and program options. For example, outreach efforts to promote incentives for L2 EVSE are likely to look quite different from those designed to educate customers on VGI rate options. This would also be consistent with the recent SCE Charge Ready application, which adopted separate budgets for TE advisory services and Charge Ready 2 program-specific marketing.[9]

Additionally, VGIC agrees with Energy Division Staff's recommendation in the Draft TEF to:

> "Where feasible, the IOUs should coordinate their outreach about grid management and EV charging behavior across the IOU territories, particularly for customers that may need to charge their vehicles in multiple service territories. The IOUs should consider budgeting for a third-party to implement this educational effort to increase awareness of EV rates and the grid impacts of EV charging. The IOUs should consider using a single ME&O administrator to avoid duplicative efforts and ensure

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[9] *Proposed Decision Authorizing Southern California Edison Company's Charge Ready 2 Infrastructure and Market Education Programs* (A. 18-06-015) July 27, 2020
https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M344/K059/344059748.PDF

> message coordination across the IOUs' programs as well with the other external entities described above."[10]

VGIC strongly supports the consideration of well-coordinated ME&O budgets, developed in TEPs, to inform EV customers of the lower cost of fueling EVs using dynamic rate options and other VGI opportunities. This is consistent with VGI WG policy recommendation 9.03, which also offers that this ME&O for VGI should ramp up in tandem with overall TE efforts.

B. VGIC response to Staff Paper Appendix feedback on VGI policy recommendation 9.03.

The August 17, 2020 Joint Comments on VGI Issues offers as an example dedicating a 10-15% share of total ME&O costs to VGI. VGIC believes this is appropriate because success for many forms of VGI is critically dependent upon customer education and participation, to communicate the overall value that VGI services can provide those customers. In response to the second question in the Staff Paper Appendix feedback on recommendation 9.03, VGIC believes that effective ME&O strategies for VGI benefit greatly from close coordination with market actors. For this reason, VGIC recommends the Commission direct IOUs to explore pathways to partner with automotive OEMs and EVSPs to exchange best practices and align ME&O efforts.

IV. SUMMARY OF RECOMMENDATIONS.

In responding to the questions above, VGIC proposes several recommendations, which can be summarized as follows:

Section 11.1 and Staff Paper

[10] Draft TEF at 143.

- Consistent with the Joint Comments on VGI Issues filed August 17, 2020, VGIC recommends the Commission issue guidance to the IOUs on VGI implementation that includes a "Model VGI Portfolio."
- This guidance should include a directive for IOUs to develop and implement their own VGI Portfolios, which should initially be a standalone effort before being referenced and incorporated into the Final TEF, future TEF updates, and ongoing TEPs.
- The Commission should be cognizant of any barriers (whether intentional or not) that IOU actions may cause for CCA efforts to spur beneficial electrification through VGI.
- The Commission should work with ARB to ensure that IOU actions (or lack thereof) on obtaining incremental non-metered LCFS credits do not stymie the ability of CCAs or other entities to claim these credits instead.
- The Commission should not necessarily *limit* the IOUs' pre-TEP VGI-related program proposals to a list of priority areas. Instead, the Commission should direct IOUs to develop VGI Portfolios during the pre-TEP timeframe, and later reference and incorporate these VGI Portfolios into each IOU's TEP.
- Near-term VGI recommendations should be considered in the DRIVE OIR via IOU applications for VGI Portfolios. VGIC does not recommend an alternative proceeding outside of the DRIVE OIR to address VGI.
- VGIC offers Table 1 to assist in cross-referencing VGI Working Group policy recommendations – and Staff's comments on each – with VGIC Comments filed in the DRIVE OIR.

Section 11.2

- If ME&O budget caps are applied, they should be applied at the portfolio level to ensure sufficient flexibility among programs.
- A certain portion of ME&O budgets should be set aside for VGI-related purposes since these efforts are likely to require more targeted ME&O to engage new or existing EV owners in VGI rate and program options. For example, 10-15% share of total ME&O costs should be dedicated to VGI.

- VGIC recommends the Commission direct IOUs to explore pathways to partner with automotive OEMs and EVSPs to exchange best practices and align ME&O efforts.
- VGIC strongly supports the consideration of well-coordinated ME&O budgets, developed in TEPs, to inform EV customers of the lower cost of fueling EVs using dynamic rate options and other VGI opportunities. ME&O for VGI should also ramp up in tandem with overall TE efforts.

V. CONCLUSION.

VGIC appreciates the opportunity to submit these opening comments on VGI and ME&O sections of the Draft TEF. We look forward to further collaboration with the Commission and stakeholders on this initiative.

Respectfully submitted,

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