

**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 (SECTION 9, 10, AND 12)**

Edward Burgess
Policy Director

Zach Woogen
Senior Analyst

VEHICLE-GRID INTEGRATION COUNCIL
2150 Allston Way, Suite 400
Berkeley, California 94704
Telephone: (510) 665-7811
Email: vgicregulatory@vgicouncil.org

Dated: September 11, 2020

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In accordance with Rules of Practice and Procedure of the California Public Utilities Commission (“Commission”), the Vehicle-Grid Integration Council¹ (“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 Section 9, 10, and 12 of the Draft Transportation Electrification Framework (“Draft TEF”) on September 11, 2020.

I. INTRODUCTION.

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 multidimensional value from EV adoption 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 provides several general observations and recommendations on Transportation Electrification and Customer Rates for the Commission’s consideration.
- Second, VGIC addresses **specific questions on Sections 9 and 10** of the Draft TEF posed by the Commission and in **Energy Division Staff Paper on VGI Issues**.²

II. OVERARCHING OBSERVATIONS REGARDING EV CUSTOMER RATES

VGIC responds to the Commission’s specific questions on TEF Section 9 in Section III of our comments below. However at the outset we would like to make a few general observations about the role of rates in promoting VGI and TE overall.

- **Rate design can be an effective tool to help accelerate TE overall and VGI in particular.**

VGIC believes that EV rate design can be leveraged to accelerate EV and EVSE production by enabling VGI as a means of a) lowering the total cost of EV ownership, b) providing a revenue to OEMs and EVSPs for administering certain rate programs, rebates

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

or load management schemes, and c) assuring that vehicles remain connected to allow for automated dispatch in support of VGI goals.

- **Increasingly dynamic rate options are generally more favorable for VGI:**

VGIC generally supports increased use of dynamic rates, which we believe can ultimately be accomplished in a variety of ways (some of which are not mutually exclusive) including the following:

- Real-time options including 1) direct wholesale market participation, 2) indirect wholesale price exposure (e.g. like SDG&E's Power Your Drive program)
- Enhanced TOU options, including, 1) Increased CPP options with tiered structures for competitive kW pricing, 2) Increased on/off peak price differentials.
- Extension of dynamic rate concepts above to distribution system costs.

- **In designing EV rates, consideration should be given to the fact that EV adoption generally provides to downward pressure on rates.**

VGIC notes that EVs contrasts with other forms of DER (e.g. rooftop solar) that typically lead to lower volumetric sales, thereby putting upward pressure on rates. As such, we believe there should be less emphasis or concern about potential cross-subsidies within EV rates, and more emphasis on exploring EV rate design as a means to further TE policy objectives and introduce new business opportunities for EV industry participants and vehicle owners.

- **Advanced rate options can be implemented without the need for new direct metering equipment**

Implementing advanced rate or bill credit options can be achieved without resorting to expensive new metering infrastructure that will likely deter customer participation. Instead, interval data can be more cost effectively be provided through EVSE submetering or advanced OEM telematics. These approaches have been proposed in other jurisdictions as a means for calculating bill credits. Additionally, if OEMs' or EVSPs' capabilities are leveraged to provide this data and recruit customers to perform grid-beneficial behavior, VGIC believes they should be appropriately compensated for doing so.

III. COMMENTS ON DRAFT TEF SECTION 9 (TRANSPORTATION ELECTRIFICATION AND CUSTOMER RATES) AND STAFF PAPER ON VGI ISSUES.

A. Section 9, Question 1: To what extent should investor-owned utilities (IOU) collaborate on rate designs and related customer education efforts across service territories? Could one IOUs take the lead in providing guidance on future electric vehicle (EV) rate design plans or should each IOU file separate plans that comply with the guidance described below?

VGIC commends the Commission and IOUs for their commitment to improving the EV rate design process, and we offer several specific recommendations in response to this question. First, VGIC recommends the Commission allow pathways for IOUs within California to replicate successful rate options on an expedited basis. For example, if a rate has been successfully implemented by one IOU, another IOU should be able to replicate is on an expedited basis. This can facilitate further standardization across IOU service territories, and is a necessary step to maintain momentum in implementing successful EV rates on a statewide basis. Second, VGIC strongly encourages the Commission to issue guidance that maximizes the level of IOU

coordination on customer education efforts related to rates. It is imperative that a coordinated approach to marketing, education, and outreach (“ME&O”) related to rates be implemented not only across IOUs, but also in close collaboration with EV original equipment manufacturers (“OEMs”), EVSE OEMs, and EV service providers (“EVSP”), given the opportunity to leverage the unique and strong position of these competitive customer-facing market actors.³ VGIC addresses this potential in greater detail in its Comments and Reply Comments on the TEF VGI Section, which discusses the potential for “upstream” incentives for customer recruitment and retention.

B. Section 9, Question 2: What aspects of rate design and related outreach are most important to improve the customer experience and advance widespread transportation electrification?

As an initial matter, VGIC commends the PUC, the IOUs, and other California stakeholders for the significant progress that has been made in recent years on improving rate design for EV customers. In many respects, California is the most advanced state in the U.S. in terms of the variety and sophistication of EV retail rate options. However, that does not mean that there is no room for improvement, nor does it mean that current rate options are sufficient to support California’s ambitious transportation electrification goals. VGIC sees three main aspects of rate design that could be improved to advance widespread transportation electrification:

1. Create more widely available dynamic EV rate options and/or improve the non-dynamic components of existing EV rate options
2. Offer discount rate options for advanced/automated load management

³ See *Comments of VGIC on TEF VGI and ME&O* and *Reply Comments of VGIC on TEF VGI and ME&O* for detailed recommendations.

3. Offer rate or bill credits to encourage and compensate customers for the value of energy exported to the grid from vehicles

We describe each of these below in greater detail.

1. As part of the TEF, the PUC should direct IOUs to create more widely available dynamic EV rate options and/or improve the non-dynamic components of existing EV rate options

VGIC and many other parties have identified TOU rates as one of the core components of encouraging robust managed charging and ultimately providing value to V2G functionality if appropriate retail rate credits are provided to exported energy. Additionally, VGIC recognizes that California is generally a leader in developing advanced TOU rates for electric vehicles. However, VGIC notes that even the advanced TOU rates that exist in California today are still only a partial solution for encouraging managed charging and other VGI functionality that is dependent on dynamic rates. For example, we observe the following regarding to the IOUs' current or proposed commercial EV rate options:

- PG&E's subscription rate concept is essentially a flat monthly charge, which gives customers little-to-no control over minimizing day to day charging costs other than avoiding overage charges.⁴
- SCE's current commercial EV rates include a demand charge holiday, however as these demand charges are restored in 2024, they will return to a non-dynamic rate structure that will remain a barrier to EV adoption.

⁴ While the subscription level could theoretically be reset on a periodic basis, this does not provide a level of dynamic pricing incentives that would affect day-to-day charging decisions.

- SDG&E’s Power Your Drive rate, while perhaps the most dynamic retail rate option in California, also includes a static “Base Rate” component of \$0.14/kWh. Moreover, this option is limited to only a small pool of eligible participants.

Given these limitations, we believe it is important to establish a framework to continuously evaluate and improve upon dynamic rate offerings. The Electric Vehicle Rate Evolution (EVREV) plan approach outlined in the Draft TEF could be one avenue for this. Additionally, in its August 17, 2020 comments VGIC and other joint stakeholders proposed a VGI Portfolio approach that could also be a venue for holistically evaluating EV rate options.

In each of the three rate examples outlined above, VGIC believes that even more dynamic rate options can and should be considered, and should also made available to all commercial EV customers, and as an option for residential customers. To do so, VGIC believes the dynamic elements of these rates could also be extended to the portion of distribution system costs associated with the subscription charge (PG&E), demand charge (SCE), or base rate (SDG&E) components.⁵ Temporarily setting aside the commodity portion of rates (which are addressed further below), below are some conceptual approaches for how these currently non-dynamic components could be made more dynamic:

Dynamic Distribution Rate Approaches

- **Approach 1 - Enhanced Volumetric TOU:**

This approach would simply convert each non-dynamic rate components to a volumetric TOU rate. This is similar to how SCE is currently operating under its present demand charge holiday (in SCE’s case, this would depend upon the holiday being extended,

⁵ VGIC notes that SDG&E’s dynamic rate option does have a distribution adder component, but that it is limited to 200 hours per year, rather than being reflected in all hours.

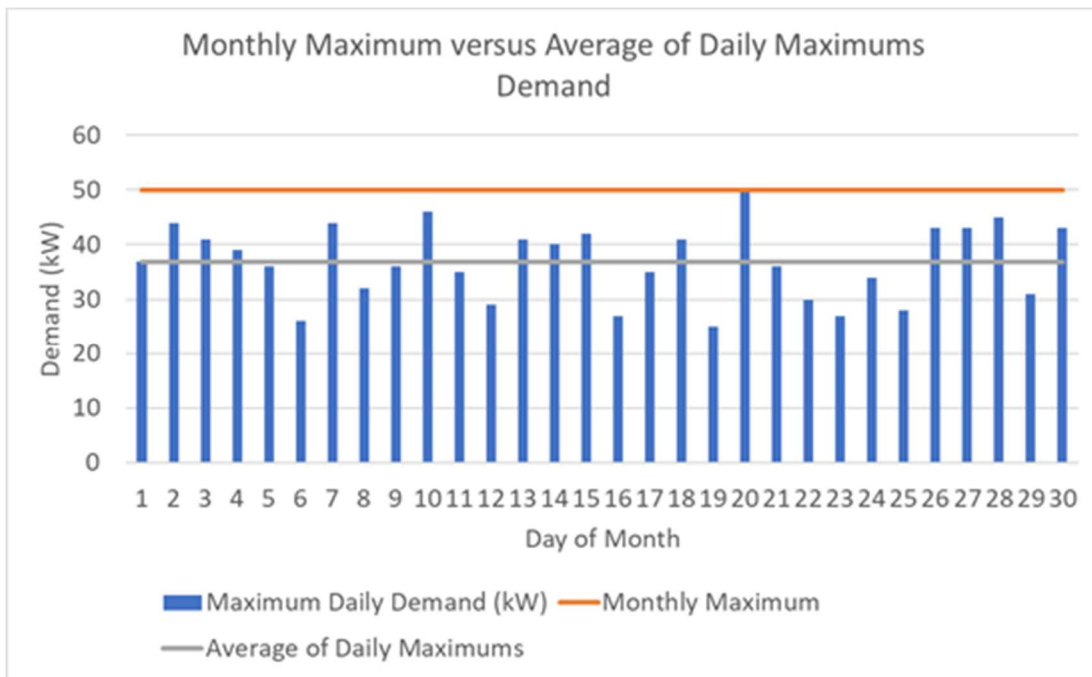
and/or the volumetric components being updated). In many respects this would approximate a coincident demand charge, in lieu of the traditional non-coincident demand charge. An adaptive framework could also be used to update the TOU time periods on a more frequent and regular basis as the needs of the grid evolve. These frequent updates would match the capabilities of EV Fleet owners to actively manage charging load, which may contrast with a typical residential customer. To the extent that OEMs or EVSPs can serve as an intermediary for managing charging load, residential customers could also increasingly be exposed to these frequent updates. OEMs and EVSPs can help customers adapt to new EV TOU rate windows “behind the scenes” while minimizing customer confusion.

- **Approach 2 - Partially Dynamic Demand Charge:**

VGIC views this approach as “second best” alternative to a volumetric TOU (or fully dynamic rate), would be a more dynamic demand charge could be considered in lieu of traditional demand charge approaches.⁶ Traditional demand charges typically **do not** work well for EV customers because they penalize customers for a single hour of high demand, even if that hour is not peak coincident, and even if their overall charging behavior over the course of a month is generally aligned with the needs of the grid. Moreover, if a customer records a high demand early in the month, there is little-to-no incentive to optimize charging behavior for the rest of the month. Instead, it should be possible to design a demand rate that is more flexible and dynamic, which would encourage customers to charge in an optimal manner on every day during the month,

⁶ Note that this approach could also be used for facility-specific, or non-coincident secondary distribution system costs for which a TOU rate may not be appropriate. Additionally, this is applicable only if demand charge holidays are phased out as planned (VGIC may support continuation of current demand charge holidays).

while still reflecting the principles of cost causation. One approach might be an “average of daily maximum demand” whereby the billing determinant is based on the average of daily maximum demand values (versus a single monthly maximum value). This would give customers a clear incentive to optimize charging behavior by reducing demand every single day, and receive a commensurate benefit for doing so. The chart below illustrates the concept for a hypothetical commercial customer. This option could also be further enhanced by allowing for aggregating (or submetering) of charging stations in similar locations on the primary distribution system to take advantage of load diversity (while recognizing that this may not be feasible for customer-specific facilities, or secondary distribution costs).



Dynamic Commodity Charges

Under either of the two approaches outlined above, or for any other approach, VGIC recommends evolving the commodity portion of EV rates towards a fully dynamic or “real-time”

option. This could be through a similar approach to SDG&E's Power Your Drive Program, but offered to all EV customers, including residential customers, instead of only a small subset. For residential customers, VGIC further recommends that vehicle telematics and EVSE submetering could be used as a means of recording real-time charging behavior in lieu of expensive new metering equipment that is likely to present a major barrier to adoption.

2. As part of the TEF, the PUC should direct IOUs to offer discounted rate options for Active/Automated Load Management ("ALM")

As discussed in VGIC's Reply Comments on TEF Sections 7 and 8, an Automated/Active Load Management ("ALM") approach could help to defer distribution system upgrades required for new charging equipment and/or overall EV load.⁷ The entities responsible for implementing these load management actions (e.g. EV owners, OEMs, EVSPs, etc.) should be provided corresponding compensation for avoiding these costs that benefit all ratepayers. In the case where the ALM provider is also the retail customer this compensation could be offered in the form of a retail rate discount or bill credit. For example, as detailed in the Reply Comments referenced above, a discount of \$0.14/kWh could be applied to a hypothetical ALM system that helped to avoid \$2,800 in distribution system upgrades or make-ready improvements.⁸ Since these discounts are intended to capture marginal distribution system costs, they could be applied under any of the Dynamic Distribution Rate options described above. Alternatively, the compensation could be provided as a direct payment or rebate to an OEM or EVSP who successfully manages the customer's charging load rather than through a retail rate discount.

⁷ Reply Comments of VGIC on TEF Sections 7 and 8 at 5-9.

⁸ Assumes 2000 kWh/yr in charging load, and 10-year EVSE life. See Reply Comments of VGIC on TEF Sections 7 and 8 at 5-9 for more information on cost recovery and potential revenue sharing options.

3. As part of the TEF, the PUC should direct IOUs to offer rate offsets or bill credits to compensate for the value of energy exported to the grid from EVs through V2G capabilities.

VGIC believes that V2G compensation is a high priority issue, and associated compensation mechanisms must be addressed in parallel to addressing technical barriers in order to unlock the full potential of VGI. One such compensation mechanism is a retail rate offset or bill credit associated with exports. This is discussed more fully in our comments in Section E below.

C. VGI Staff Paper, VGI WG Recommendation 1.01: Rate design for demand charge mitigation.

Please refer to VGIC comments above in Section B-1 on “Dynamic Distribution Rate Approaches”

D. VGI Staff Paper, VGI WG Recommendation 1.09: NEM for EVs

VGIC is generally supportive of increasing the number of rate options available to EV customers, including NEM options. We believe that optionality is critical to developing nascent markets and allowing customers to choose the solutions which are optimal for their unique needs. As such, we believe that expanding the eligibility of NEM for SCE and SDG&E commercial EV customers to match what already is available for PG&E customers is a sensible approach.

E. VGI Staff Paper, VGI WG Recommendation 1.16: Credit for V2G Exports

The VGI WG Final Report clearly concluded that the potential to leverage V2G technology represents a tremendous opportunity for the state of California. As discussed in comments on the

TEF VGI Section and VGI Issues, the VGIC finds ample justification for the Commission to issue guidance on VGI that promotes no-regrets investments in V2G. Most notably, V2G can support grid reliability (including meeting peak net load), help integrate renewables, aid community resilience, and accelerate transportation electrification. Standards development organizations (“SDOs”) are actively advancing strategies to alleviate technical barriers to V2G Alternating Current (“V2G AC”) interconnection. If adopted, the recent Rule 21 Proposed Decision will require IOUs to support the work of SDOs, develop pathways to interconnect V2G AC pilots, and streamline processes to interconnect and track V2G Direct Current (“V2G DC”).⁹ These technology and standards developments have provided greater certainty to OEMs as they pursue new product developments. However, technology and standards work must be accomplished in parallel to the development of compensation mechanisms to incentivize customers and market actors to deploy beneficial V2G capabilities. This is especially true if these capabilities are expected to be deployed at scale to support the grid’s needs.

VGIC recognizes that some VGI compensation pathways could involve direct participation in CAISO wholesale markets through either the Non-Generator Resource or Proxy-Demand Response models. VGIC supports continued development of these options through engagement with the CAISO. However, VGIC believes that these direct wholesale pathways may not be appropriate for V2G due their exclusion of exports. Even if exports were included, they may not be appropriate for all retail customers due to a) the complexity of wholesale market participation and cost-prohibitive requirements for metering and telemetry, b) ongoing controversies over retail versus wholesale charging rates for behind-the-meter resources, and c)

⁹ *Proposed Decision Adopting Recommendations from Working Groups Two, Three, and Subgroup*, filed by Administrative Law Judge Anne E. Simon (“ALJ”) on August 20, 2020 in R.17-07-007.

the fact that these approaches narrowly limit compensation to wholesale market values which may not capture the full set of societal and economic benefits V2G can provide.

As such, VGIC strongly encourages the Commission to explore additional options for compensating energy exported to the grid under a V2G approach. As highlighted in the VGI Staff Paper, several mechanisms warrant consideration, and VGIC believes the following options may represent some possible compensation pathways:

- Integration into Net Energy Metering (“NEM”) Tariff options (either in its current iteration or as part of the forthcoming “NEM 3.0”)
- A new, standalone feed-in tariff
- A V2G export bill credit administered as part of the TEPs or proposed VGI Portfolio.

Each of these strategies has advantages and drawbacks. Under the NEM approach, VGIC could envision a similar approach to stationary energy storage which would involve revising the California Energy Commission’s (“CEC”) Renewable Portfolio Standard (“RPS”) Guidebook to allow V2G to become eligible as an “addition or enhancement.” This approach would offer the same advantages that has made NEM a successful program for helping to scale up distributed solar resources such as simplicity for customers and streamlined interconnection. However, unless changes are made to the definition of NEM-eligible resources, current NEM rules could limit compensation to the subset of V2G use cases in which V2G exports are paired with eligible renewable generation. This would effectively exclude all EV customers who do not have on-site renewable energy generation. Additionally, for certain OEMs, a compensation pathway that is solely dependent on retail customer rate offsets via NEM presents a challenge in terms of justifying investments in V2G technologies. While there are advantages to being able to advertise these features to new EV owners, a more direct revenue stream could enhance the business case for OEMs to build robust V2G capabilities into future EV model designs.

A feed-in tariff approach represents a sensible alternative to NEM, however it also faces some similar challenges. Specifically, if the feed-in tariff is designed similarly to CPUC's existing ReMAT program, it may be constrained by the limitations of PURPA which would also require pairing with an eligible generator. This would similarly exclude use cases without on-site renewables. Notwithstanding these issues, VGIC strongly supports further exploration of a feed-in tariff-style approach as a medium-term strategy for enabling V2G. In particular, this could offer a more direct revenue stream for OEMs and EVSPs to help justify robust V2G investments. However, certain challenges would still need to be resolved regarding eligibility, compensation structure, and other program features. We would encourage the PUC staff to consider a separate proceeding that could help to begin developing this program and resolve these issues.

Given these limitations, at this time, VGIC recommends the Commission focus on developing a *V2G Export Bill Credit* option as a primary near-term option for retail customer V2G compensation. As discussed in previous comments, VGIC envisions a VGI Portfolio framework, which includes a V2G bill credit program, could be developed within the DRIVE OIR and eventually integrated into each IOU's TEPs. A *V2G Export Bill Credit* would provide a bill credit to retail customers (or V2G providers) that export power from their V2G-capable EV/EVSE that the [redacted] value to the grid [redacted] at the time of export (and any other values deemed appropriate). To accelerate the nascent V2G market, VGIC posits the credit value will need to be large enough to meaningfully spur customer adoption and familiarity with V2G technologies. As a starting point, VGIC recommends the Commission consider setting a compensation level that is commensurate with the customer's ¹⁰ retail rate option. [redacted] This approach has similar advantages to net energy metering which was instrumental in advancing distributed solar in its infancy.

¹⁰ A secondary option could be to provide credit at hourly wholesale rates similar to the Power Your Drive program. However, VGIC does not recommend this approach given the drawbacks described in these comments.

Namely, it is simple for customers to understand, limits administrative burden, and is a good proxy for grid value (at least for low penetration levels). Meanwhile, the credit can be administered transparently in accordance with CPUC Rate Principle 8 (“Incentives should be explicit and transparent”) and gradually adjusted upward or downward as experience is gained. Moreover, VGIC believes that tying a credit to prevailing EV TOU rates could provide a substantial customer benefit that would encourage both overall EV adoption and V2G participation. The table below provides an illustrative example of the potential V2G value for an EV customer (or V2G implementer) using their vehicle to export energy during peak hours:

[A]	300	Wh per mile vehicle efficiency
[B]	25	miles per day traveled
[C]=[A]*[B]	7.5	kWh mobility usage per day
[D]	5	kW charging power
[E]=[C]/[D]	1.5	hours to recharge mobility power
[F]	8	hours of dwell time during off-peak rate window
[G]=[F]-[E]	6.5	available off-peak hours for arbitrage
[H]	6	hours of dwell time during on-peak rate window
[I]	\$0.15	off-peak rate per kWh
[J]	\$0.45	on-peak rate per kWh
[K]=[D]*[H]	30	kWh charging for V2G
[L]=[K]*0.9	27.0	kWh discharging for V2G (assumes 90% RTE)
[M]=[J]*[L]-[I]*[K]	\$7.65	V2G credit (less charging cost)
[N]	200	days per year
[O]=[M]*[N]	\$1,530	annual V2G value

Furthermore, VGIC recommends the Commission and IOUs consider how vehicle telematics and/or EVSE submetering can assist tracking V2G exports, as opposed to requiring new metering equipment. VGIC has observed that onerous metering requirements tend to limit customer enrollment in EV rates and VGI programs, and strongly recommends the Commission

avoid imposing such requirements whenever possible. Instead, the Commission should consider the lower-cost options embedded within the EV and/or EVSE. For example, V2G bill credits could be easily determined using OEM telematics or EVSE submetering data on hourly vehicle charging/discharging either independently or in combination with existing utility interval meter data. Additionally, VGIC previously commented on the role OEMs/EVSPs could play in enrolling customers and promoting ongoing participation in VGI rates and programs through upstream incentives. These enrollment and participation incentives could be co-developed with a V2G credit program and any associated data requirements. VGIC also encourages the Commission to consider how an approach that directly includes OEMs in delivering bill credits could also help resolve the challenge of offering a direct revenue stream to justify V2G investment. For example, one approach would be to remunerate the bill credits directly to OEMs that could demonstrate verified V2G exports and allow them to pass a significant fraction of these savings on to participating EV customers through a lease or other arrangement. This is somewhat analogous to a “community solar”-style approach for V2G. Regarding the feasibility of this arrangement, VGIC notes that vehicle telematics and EVSE submetering have been leveraged for EV TOU charging incentive programs proposed by utilities in other jurisdictions (e.g. National Grid in Massachusetts, or Xcel Energy in Minnesota), and thus there is some precedent for this type of approach.

VGIC recognizes VGIC recognizes IOUs and other parties have previously cautioned against exploring V2G export compensation, citing the nascency of the market. VGIC believes the development of a compensation mechanism for V2G exports is one of the central catalysts required to overcome the “chicken or egg” problem that has plagued V2G market development

to date. Even so, to address these concerns VGIC offers the following recommendations on appropriately scaling the V2G export bill credit and ensuring value of V2G is fully considered.

1. Appropriately scaling V2G

VGIC recognizes that there may be concerns with the possible ratepayer cost impacts of an open-ended V2G export credit option. While we believe it is premature to determine the net impact to ratepayers at this time (including costs, benefits, and participation rates), we acknowledge that some safeguards may be appropriate. As such, we recommend the Commission consider an initial V2G bill credit participation cap of 450,000 customers which roughly equates to 30% of California's 1.5 million EV by 2025 target. Priority should be provided to EV customers on TOU rates that can provide (or have an OEM/EVSP provide) hourly charging data. We believe that this cap should be reevaluated if it is reached. Additionally, as noted above, an alternative crediting option may to link the bill credit to hourly wholesale market rates (rather than retail TOU rates), similar to the SDG&E Power Your Drive program. If customers choose this option, we believe there should be no cap on the number of eligible participants.

2. Additional studies can help inform future V2G export credit options.

As mentioned, additional studies on the value of V2G may be helpful in informing the future direction of V2G bill credits. However, VGIC believes it is premature to conduct these until there is more experience with how EV customers, OEMs, and EVSPs are actually performing on V2G deployment. It is also premature to determine if our recommended approach would yield a net cost or net benefit to customers, however we are eager to engage with the PUC and other stakeholders to discuss how this analysis should be conducted. In conducting this valuation, VGIC notes that it will be important to weigh not only the potential ratepayer cost of V2G bill credits, but also:

a) the grid value from the following: avoided energy costs, avoided capacity costs, avoided line losses, avoided GHG emissions, avoided transmission and distribution costs, etc., and

b) the ratepayer impact value to non-participants from increased kWh sales as EV adoption rates increase.

F. VGI Staff Paper, VGI WG Recommendation 1.18: Partially dynamic rates

VGIC is generally supportive of fully dynamic rates to the extent they are feasible. VGIC believes they are feasible in most cases, however, we recognize that in some cases, IOUs may not be able to offer fully dynamic rates for certain secondary distribution system related costs and would encourage consideration of partially dynamic rates as a “second best” option in those instances. This was discussed above in Section B-1.

IV. COMMENTS ON DRAFT TEF SECTION 10

A. Section 10.4, Question 1: Should the California Public Utilities Commission (CPUC) consider applications from community choice aggregators (CCA) for approval to develop their own programs, or administer a portion of the investor-owned utilities’ (IOU) authorized transportation electrification (TE) programs using budgets that are recovered through IOU customer rates?

At this time, VGIC does not have a view on whether CCAs should be considered as program implementers but is open to the concept. That said, we believe the Commission has little to no jurisdiction over CCAs in this matter and this would only be viable if the CCAs did so voluntarily. If they did choose to participate, VGIC views CCAs as potentially constructive partners in helping deliver VGI related programs and activities. Specifically, CCAs have a unique and important understanding of local issues and complexities within their service territories, and this capability should be leveraged to advance VGI and TE more broadly. For

example, implementation of the ALM tariff concept described above is well suited for CCAs to leverage both due to their need to lower charging infrastructure costs, and due to their knowledge of local electrical codes and standards that can ensure safe implementation ALM requirements. Additionally, CCAs may have useful knowledge of how best to harmonize OEM telematics data for use in VGI-related activities.

V. CONCLUSION.

VGIC appreciates the opportunity to submit these opening comments on Rates, Partnerships, and Emerging Technology sections of the Draft TEF. We look forward to further collaboration with the Commission and stakeholders on this initiative.

Respectfully submitted,



Edward Burgess

Policy Director

VEHICLE-GRID INTEGRATION COUNCIL

2150 Allston Way, Suite 400

Berkeley, California 94704

Telephone: (941) 266-0017

Email: eburgess@vgicouncil.org

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