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

Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Reliable Electric Service in California in the Event of an Extreme Weather Event in 2021.	Rulemaking 20-11-003 (Filed November 19, 2020)

OPENING COMMENTS OF THE VEHICLE-GRID INTEGRATION COUNCIL ON THE PHASE 2 PROPOSED DECISION DIRECTING PACIFIC GAS AND ELECTRIC COMPANY, SOUTHERN CALIFORNIA EDISON COMPANY, AND SAN DIEGO GAS & ELECTRIC COMPANY TO TAKE ACTIONS TO PREPARE FOR POTENTIAL EXTREME WEATHER IN THE SUMMERS OF 2022 AND 2023

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In accordance with the Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), the Vehicle-Grid Integration Council ("VGIC") hereby submits these opening comments on the *Proposed Phase 2 Decision Directing Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company to Take Actions to Prepare for Potential Extreme Weather in the Summers of 2022 and 2023* ("PD"), issued by Administrative Law Judge ("ALJ") Anne E. Simon on October 29, 2021. Pursuant to the guidance provided in the PD, these comments are being timely filed and served on November 10, 2021.

I. INTRODUCTION.

VGIC is a 501(c)6 membership-based advocacy group committed to advancing the role of electric vehicles ("EV") and vehicle-grid integration ("VGI") through policy development, education, outreach, and research. VGIC supports the transition to a decarbonized transportation and electric sector 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.

VGIC is generally supportive of the PD establishing Emergency Load Reduction Program ("ELRP") customer group A.5, which represents a significant opportunity to both advance the VGI industry and deliver much needed grid reliability benefits. VGIC believes that both EVs and EV supply equipment ("EVSE") that is either currently deployed or expected to be deployed offer the technical capabilities to support the grid in times of stress. However, the proper market incentives must be put into place to incent load reductions and exports from these resources. The establishment of a payment mechanism for EV/VGI aggregations as contemplated in the PD would provide such an incentive. Additionally, VGIC supports other aspects of the PD that will further help to facilitate this process. This includes: 1) approval of virtual aggregation and submetering under group A.5, 2) the provision that Vehicle-to-Grid ("V2G") EVSE may be exempt from smart inverter requirements, 3) eligibility for both V1G and V2G operations, 4) the establishment of a 30-hour minimum dispatch requirement, and 5) the ELRP rate increase to $2/kWh. With this in mind, VGIC offers comments, summarized below, in support of the PD but also provides recommendations on how ELRP customer group A.5 can be further enhanced to prepare for potential extreme weather events in Summer 2022 and 2023.

- The blanket prohibition on dual participation for ELRP subgroup A.5 should be modified to allow for certain dual uses that are appropriate and consistent with previous commission direction to broadly promote optional dynamic EV rates.
- The PD should more clearly and explicitly state that V2G exports may exceed site load or virtually aggregated site load.
- The PD should provide more detailed direction on ELRP group A.5 implementation, including a "go live" date of June 2022, consideration of a third-party administrator to

streamline VGI aggregator participation, a standard offer contract that is easily renewable, a process for identifying and communicating the 30 dispatch hours, and the process for virtual aggregation of standalone EVSE meter data with host site load.

- The increased ELRP compensation rate should be adopted, but should be reconsidered if group A.5 participation is low after the summer 2022. In such a case an additional rebate or compensation rate should be considered.
- The Commission should not lose sight of additional issues that need to be resolved to unlock VGI capabilities, including several key issues specific to bidirectional charging.

II. THE PROHIBITION ON DUAL PARTICIPATION FOR ELRP SUBGROUP A.5 SHOULD BE LIFTED AS IT IS INCONSISTENT WITH PREVIOUS COMMISSION DIRECTION TO BROADLY PROMOTE OPTIONAL DYNAMIC EV RATES.

VGIC reiterates our support for the Commission establishing ELRP customer group A.5, which would create a pathway for aggregations of EV/EVSE resources to support the grid through load reductions and bidirectional operations. As proposed, customers in group A are not allowed to participate in supply-side demand response programs and customers in subgroup A.5 are not permitted to enroll in real-time price ("RTP") equivalent tariffs.[1] VGIC believes this blanket prohibition on dual participation is unnecessarily restrictive, especially as ELRP remains the *only* available program that will compensate customers for V2G exports. Meanwhile, the Commission has recently proposed to adopt Pacific Gas and Electric Company's ("PG&E") Optional Day-Ahead Hourly Real-Time Rate ("DAHRTP") for commercial EV customers, [2] has directed San Diego Gas & Electric Company ("SDG&E") to propose a dynamic rate for commercial EV

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[1] PD Attachment 2 at 6.

[2] *Proposed Decision Authorizing Pacific Gas and Electric Company to Implement an Optional Day-Ahead Real Time Rate for Commercial Electric Vehicle Customers,* issued October 18, 2021 in Application 20-10-011.

customers,[3] and is proposing to authorize an Southern California Edison Company ("SCE") dynamic pricing pilot in this PD.[4] This creates an "either or" scenario, in which customers must choose to elect a favorable EV rate or enroll in the ELRP program. For example, a customer may want to enroll under PG&E's DAHRTP rate and manage charging to reduce their costs, however this would preclude them from participating in ELRP group A.5. Only the latter pathway would compensate V2G exports, therefore the customer would have to choose between year-round V1G operations to reduce their costs and V2G operations during 30 hours to support the grid. VGIC believes this "either or" scenario does not support the overall intent of ELRP to unlock additional load reductions in times of extreme grid stress. In addition, it will lead to underutilized EV/EVSE assets and does not support the maximization of VGI pursuant to SB 676 and the VGI Strategies Decision (D.20-12-029).

The necessary constructs are already in place to allow for dual participation. While customers on these dynamic rates must take service under a separate meter until a submetering protocol is adopted,[5] customers under subgroup A.5 would be permitted to virtually aggregate load with the separately metered EV/EVSE. In addition, the Incremental Load Reduction ("ILR") framework has already been approved and would be used for subgroup A.5 customers, thereby offering a tool to mitigate any double counting issues. Notably, subgroup A.3 customers, which may include V2G resources, *can* participate if they are on RTP-equivalent rates, and the ILR is used to determine compensation in these cases. VGIC recommends the PD be revised to clarify

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[3] D. 20-12-023. *Decision Authorizing San Diego Gas & Electric Company Rate for Electric Vehicle High Power Charging,* issued December 21, 2020 in Application 19-07-006, at page 38, ordering paragraph 9.

[4] PD at 91.

[5] *Proposed Decision Authorizing Pacific Gas and Electric Company to Implement an Optional Day-Ahead Real Time Rate for Commercial Electric Vehicle Customers,* issued October 18, 2021 in Application 20-10-011 at 22.

that customers participating in subgroup A.5 may take service under RTP-equivalent tariffs, and that the ILR will be used to compensate incremental load reductions to mitigate double counting. In other words, EV/EVSE customers on a dynamic rate could be allowed to participate ELRP but have compensation limited to exports. At a minimum, dual participation should be permitted for months outside of the May through October ELRP season, such that VGI customers can take advantage of these other opportunities to reduce their charging costs and support the grid.

In addition, the PD is silent on the participation of subgroup A.5 resources in the VGI pilots proposed per Decision ("D.") 20-12-029 and currently pending before the Commission.[6] Notably, both PG&E and SCE proposed VGI pilots that include bidirectional operations. VGIC believes VGI pilot participants should be eligible to participate in ELRP subgroup A.5 to support the grid during times of extreme need. The PD should clarify that this is the case for VGI pilot participants in order to maximize the capabilities from deployed and soon-to-be-deployed VGI-capable EV/EVSE.

III. THE PD SHOULD MORE CLEARLY AND EXPLICITLY STATE THAT V2G EXPORTS MAY EXCEED SITE LOAD OR VIRTUALLY AGGREGATED SITE LOAD.

VGIC commends the Commission for allowing bidirectional operations under ELRP. The PD states that:

> "the VGI aggregator is permitted to virtually aggregate separately metered EVSE with other load and generation (if any) at any electrically contiguous host site to allow export from the EVSE to reduce the host site's load and export from such aggregation up to the

[6] PG&E Advice Letter 6259-E: *Request for Approval of PG&E's VGI Pilots in Compliance with Decision 20-12-029.* July 15, 2021.
SCE Advice Letter 4542-E: *Request for Approval of Proposed Vehicle Grid Integration Pilots*. July 15, 2021.

> **sum of the net export allowed by any available Rule 21 permits of the EVSE site and the host site**" [7] (emphases added).

VGIC believes it is critical that the PD permit V2G exports be limited only by the Rule 21 export permit, and generally supports the language quoted above. V2G resources should be able to export up to the nameplate export capacity indicated on the Rule 21 interconnection agreement. Notably, the Staff Concept Paper detailed that "virtual load aggregation of all stand-alone EVSEs and the related host site **must not be negative at any time**" [8] (emphasis added). Had this language from the Staff Concept Paper been preserved, the amount of V2G exports permitted would be limited to site load, which would be a critical misstep and fail to leverage latent energy storage capacity. As such, VGIC supports the proposed language in the PD, but requests that it be amended to provide additional clarity, thereby leaving no doubt to the VGI aggregators and IOU teams responsible for coordinating EVSE interconnection and implementation of ELRP. Specifically, VGIC recommends the PD Attachment 2 be amended as follows at page 15:

> "the VGI aggregator is permitted to virtually aggregate separately metered EVSE with other load and generation (if any) at any electrically contiguous host site to allow export from the EVSE to reduce the host site's load and export from such aggregation up to the sum of the net export allowed by any available Rule 21 permits of the EVSE site and the host site. To clarify, the VGI aggregator is permitted to allow export from the EVSE that may exceed the host site's load."

IV. THE PD SHOULD PROVIDE MORE DETAILED DIRECTION ON IMPLEMENTATION OF ELRP CUSTOMER GROUP A.5.

To ensure the investor owned utilities ("IOUs") follow through on implementation of ELRP customer group A.5, the Commission should establish a "go-live" date for A.5 of June 2022.

[7] PD Attachment 2 at 15.

[8] Staff Concept Paper at 10.

VGIC believes this will help to focus IOU and industry efforts to establish the necessary processes to ensure smooth operation of EV/EVSE capabilities for grid reliability during extreme weather events. In addition, the PD should specify that IOUs may consider contracting with a third-party administrator to ensure consistency across the IOUs, rather than requiring aggregators to interface with each IOU separately. VGIC also recommends a standard offer contract be offered to group A.5 aggregators, and that this standard offer contract include a simple annual aggregator renewal process for summer of 2023 and beyond. Furthermore, the PD should direct IOUs to propose the intended protocol for identifying and communicating the 30 dispatch hours that would be relatively easy to implement in the near-term. To provide clarity to industry partners, the IOUs' Advice Letter detailing implementation should also describe the process for virtual aggregation of standalone EVSE meter data with host site load to calculate the ILR for settlement purposes.

V. THE PROPOSED ELRP COMPENSATION RATE SHOULD BE ADOPTED, BUT AN ADDITIONAL REBATE OR OTHER COMPENSATION SHOULD BE ADOPTED IF GROUP A.5 PARTICIPATION IS LOW AFTER THE SUMMER 2022.

VGIC believes the establishment of ELRP subgroup A.5 represents a significant step forward toward unlocking broader VGI capabilities. The 30-hour dispatch requirement and increased ELRP compensation rate will help to support project economics for customers looking to install VGI-capable EV/EVSE. However, additional steps should be taken to provide just compensation for the full value that these resources can provide to the grid, or allow value-stacking. VGIC reiterates its proposal in Opening Testimony to offer an additional rebate, bill credit, or gift card to participating residential EV customers or small commercial EVSE site hosts of $20/month.[9] VGIC believes that a higher rebate amount may be more appropriate for larger EVs

[9] Opening Testimony of Ed Burgess on Behalf of Vehicle Grid Integration Council (September 1, 2021) at 15.

or EVSE site hosts, for example $240/month (assuming 60 kW charging level versus 5 kW for residential). While this recommendation is not incorporated into the PD, VGIC believes this could support market transition and initial enrollment for customers if customer or aggregator interest and participation is low at the end of summer 2022. VGIC recommends the PD require IOUs to present ELRP group A.5 enrollment and participation data at an October 2022 stakeholder workshop. At this workshop, stakeholders can engage in discussion on whether a rebate or other additional compensation may be needed to facilitate ELRP group A.5 customer and aggregator participation in 2023 and beyond. VGIC notes that an additional rebate or other compensation may not be needed in the long-term/in future years as customers and aggregators become more familiar with the benefits of participating in ELRP. At a minimum, the PD should establish a process to consider iterative improvements of this nature in future phases of this proceeding.

VI. THE COMMISSION SHOULD NOT LOSE SIGHT OF ADDITIONAL ISSUES THAT NEED TO BE RESOLVED TO UNLOCK VGI CAPABILITIES, INCLUDING SEVERAL KEY ISSUES SPECIFIC TO BIDIRECTIONAL CHARGING.

VGIC reiterates its support for the proposed ELRP group A.5, which represents a significant step forward for VGI and bidirectional charging. However, critical barriers to VGI implementation remain unaddressed, and establishing ELRP group A.5 should not distract from progress on these barriers. For example, VGIC has raised the matter of V2G rate design – critical to advancing VGI – in this Emergency Reliability proceeding (R.20-11-003), the DRIVE OIR (R.18-12-006), PG&E's DAHRTP Application (A.20-10-011), the Rule 21 Interconnection proceeding (R.17-07-007), and the Self-Generation Incentive Program proceeding (R.20-05-012). However, the Commission has yet to provide any indication as to which policy forum will address the issue or when it will be addressed. VGIC believes this issue to be incredibly time-sensitive, as it may take time to resolve and, if left unaddressed, will result hundreds of megawatts of latent energy storage capacity in the form of deployed V2G-capable vehicles and EVSE. Another important issue that remains unaddressed is the ability for certain classes of V2G EVSE to qualify for direct or make-ready funding support.

With this in mind, VGIC respectfully urges the Commission to indicate how and when it plans to address the issue of V2G rate design. In addition, eligibility for certain bidirectional chargers under existing or planned programs should be scoped into an existing or future proceeding. If left unaddressed, these barriers will severely hamper the ability for California to develop its V2G market and maximize VGI pursuant to SB 676.

VII. CONCLUSION.

VGIC appreciates the opportunity to these comments on the PD. We look forward to further collaboration with the Commission and stakeholders on this initiative.

Respectfully submitted,
/s/ Edward Burgess
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VEHICLE-GRID INTEGRATION COUNCIL

Date: November 10, 2021