

**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)

**REPLY 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**

Edward Burgess
Senior Policy Director

Zach Woogen
Policy Specialist

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

November 16, 2021

**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)

**REPLY 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**

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 reply comments on the *Proposed Phase 2 Decision Directing Pacific Gas and Electric Company (“PG&E”), Southern California Edison Company (“SCE”), and San Diego Gas & Electric Company (“SDG&E”) to Take Actions to Prepare for Potential Extreme Weather in the Summers of 2022 and 2023* (“PD”), issued by Administrative Law Judge Anne E. Simon on October 29, 2021. Pursuant to the guidance provided in the PD, these reply comments are being timely filed and served on November 16, 2021.

I. THE PD – IN RECOGNITION OF A NASCENT MARKET – APPROPRIATELY PROPOSES FLEXIBLE OPTIONS TO ALLOW ELECTRIC VEHICLES TO SAFELY DISCHARGE.

The PD would adopt a flexible approach to interconnecting Vehicle-to-Grid (“V2G”) direct current (“DC”) electric vehicle supply equipment (“EVSE”) as detailed in Attachment 2:

“In recognition of a nascent market, any direct current (DC) V2G electric vehicle supply equipment (EVSE) that has been certified to UL 1741, but not the updated smart inverter certification standard required in Rule 21, may interconnect for the purposes of participating in the ELRP, subject to all other Rule 21 interconnection requirements.”¹

VGIC strongly supports this provision and agrees that it will significantly support the development of California’s V2G market and VGI goals pursuant to SB 676. However, in opening comments

¹ PD Attachment 2 at 6.

on the PD, PG&E and SCE opposed this approach.² SCE argues that exempting V2G DC EVSE from updated smart inverter certification standard (i.e., UL 1741 SA) “should only be adopted in the Rule 21 Proceeding.”³ PG&E asserts that “any modifications to these requirements should be appropriately considered within the Rule 21 proceeding, instead of this Rulemaking.”⁴

VGIC disagrees with the assertion that modifications to interconnection requirements should be considered exclusively within the Rule 21 proceeding. Interconnection topics, including revisions to interconnection processes, fall within the defined scope of this proceeding as detailed in *Assigned Commissioner’s Amended Scoping Memo and Ruling for Phase 2*, which lists “interconnection” and “other opportunities to reduce demand or net demand including virtual power plants, distributed energy resource (DER) export, distributed generation” as in-scope topics.⁵ Furthermore, the clear intent of the July 30, 2021 emergency proclamation supports the consideration of any and all reasonable pathways to expedite and expand interconnection to additional resources, including V2G DC EVSE, that can increase supply or reduce peak load and net peak load.⁶

Moreover, this specific exemption is both appropriate and critically necessary to leverage the latent V2G capacity that is currently or will soon be deployed.⁷ VGIC believes this will provide important support for the nascent V2G market, and strongly urges the Commission to adopt the language proposed in Attachment 2 exempting V2G DC EVSE from the updated smart inverter certification standard required in Rule 21.

² PG&E Opening Comments at 11 and SCE Opening Comments at 7.

³ SCE Opening Comments at 7.

⁴ PG&E Opening Comments at 11.

⁵ *Assigned Commissioner’s Amended Scoping Memo and Ruling for Phase 2* issued on August 10, 2021 by Assigned Commissioner Marybel Batjer. Pages 4-5.

⁶ See <https://www.gov.ca.gov/2021/07/30/governor-newsom-signs-emergency-proclamation-to-expedite-clean-energy-projects-and-relieve-demand-on-the-electrical-grid-during-extreme-weather-events-this-summer-as-climate-crisis-threatens-western-s/> (Press Release) and <https://www.gov.ca.gov/wp-content/uploads/2021/07/Energy-Emergency-Proc-7-30-21.pdf> (Proclamation of a State of Emergency).

⁷ See VGIC Opening Testimony at pages 7-9 for a list of available and upcoming V2G products and available information on the certifications of each product.

In addition, VGIC opposes PG&E’s assertion that “any references to UL 1741 should be specified with the letters ‘SA’ for consistency purposes.”⁸ The PD at Attachment 2 explicitly states that UL 1741 is required for participating V2G DC EVSE, and specifies that the updated smart inverter standard required in Rule 21 (i.e., UL 1741 **SA**) is **not** required. PG&E’s conflation of the standard (UL 1741) and its smart inverter supplement (UL 1741 **SA**) is concerning. If the CPUC were to consider PG&E’s recommendation, it would risk undermining the clear intent of the PD and Attachment 2 to support the nascent V2G market by exempting ELRP Group A.5 customers with V2G DC EVSE from Rule 21 smart inverter requirements (i.e., UL 1741 SA). Moreover, in contrast with PG&E’s assertion, the smart inverter supplement (UL 1741 **SA**) is focused on smart inverter capabilities, rather than safety. The critical safety elements of the standard are found in UL 1741, not the SA supplement. Notably, systems that have safely interconnected and operated in parallel to the grid to date have been certified only to UL 1741, and not the updated smart inverter, therefore VGIC questions PG&E’s assertion that being certified to the **SA** supplement is an important safety measure. With this in mind, VGIC reiterates its recommendation that the Commission adopt the language on this issue as proposed in the PD and Attachment 2.

II. PG&E’S OPENING COMMENTS REGARDING V2G EXPORTS HIGHLIGHT VGIC’S RECOMMENDATION THAT THE PD SHOULD MORE CLEARLY AND EXPLICITLY STATE THAT V2G EXPORTS MAY EXCEED SITE LOAD OR VIRTUALLY AGGREGATED SITE LOAD.

VGIC reiterates its support for the Commission allowing bidirectional operations under ELRP. The PD Attachment 2 states:

“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**”⁹ (emphases added).

In VGIC’s opening comments, we noted that 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**”¹⁰ (emphasis added). The language in the Staff Concept Paper therefore appears to be replaced by

⁸ PG&E Opening Comments at 11.

⁹ PD Attachment 2 at 15.

¹⁰ Staff Concept Paper at 10.

the language in the PD. VGIC supports the proposed language in the PD, and in opening comments requested 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. In opening comments, PG&E states the following:

“The PD states that ‘the virtual load aggregation of all stand-alone EVSEs and related host site must not be negative at any time.’ PG&E requests clarification on how NEM customers can participate under the restriction if emergency events are called when the customer’s NEM generator is exporting to the grid.”¹¹

In citing the Staff Concept Paper language (i.e. “must not be negative at any time”), PG&E demonstrates the precise misinterpretation of the PD that VGIC expressed concern over in our opening comments. PG&E appears to interpret the Staff Concept Paper language, found in PD Section 4.1.7.1 “Background on ELRP EV/VGI” merely as context, as the PD’s adopted direction. Based on PG&E’s misinterpretation, VGIC remains convinced that the PD should be revised to clarify that the language in PD Section 4.1.7.3 “Adopted Direction for ELRP Group A.5, EV/VGI Aggregation” and Attachment 2 supersedes the proposed language in the Staff Concept Paper. The California Energy Storage Alliance (“CESA”) also highlighted this issue and recommended that additional clarity be provided to specify that V2G exports may exceed site load.¹²

VGIC is concerned that the lack of clarity in the PD as written may undermine the underlying intent of the PD to allow V2G exports that exceed site load. With this in mind, VGIC reiterates its recommendation that 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.**”

¹¹ PG&E Opening Comments at 12.

¹² CESA Opening Comments at 13.

III. VGIC STRONGLY OPPOSES PG&E’S ASSERTION THAT A RULE 21 INTERCONNECTION AGREEMENT IS NECESSARY TO PARTICIPATE IN ELRP GROUP A.5.

The PD Attachment states that an ELRP group A.5-eligible VGI aggregation may consist of “any combination of electric vehicles and charging stations – including those that are capable of managed one-way charging (V1G) and bi-directional charging and discharging (V2G).”¹³ Meanwhile, in opening comments on the PD, PG&E states “PG&E would like to clarify that a Rule 21 Interconnection Agreement (IA) is necessary regardless of whether there is an export permit needed to be a pre-requisite to participate in A.4 (VPP) **and A.5 (VGI)**” (emphasis added).¹⁴ VGIC disagrees with PG&E’s assertion that a Rule 21 IA is necessary to participate in ELRP group A.5, as customers participating only in one-way charging mode should under no circumstances be subject to Rule 21. PG&E’s suggestion is wholly inconsistent with Decision 20-09-035, Finding of Fact 191, which states that “current rules and practice confirm that, in the case of unidirectional charge-only V1G, Rule 21 does not apply but Rules 2, 15, and 16 are applicable.”¹⁵ VGIC therefore opposes PG&E’s assertion that a Rule 21 Interconnection Agreement be required for participation in ELRP Group A.5.

IV. CONCLUSION.

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

Respectfully submitted,

/s/ Edward Burgess

Edward Burgess

Senior Policy Director

VEHICLE-GRID INTEGRATION COUNCIL

Date: November 16, 2021

¹³ PD Attachment 2 at 6.

¹⁴ PG&E Opening Comments at 4.

¹⁵ D.20-09-035 at 194. See also Ordering Paragraph 38 at 218.