BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U902E) for Approval of Commercial Electric Vehicle Dynamic Rate.	Application No. 21-12-008 (Filed December 17, 2021)

RESPONSE OF THE VEHICLE GRID INTEGRATION COUNCIL TO THE APPLICATION OF SAN DIEGO GAS & ELECTRIC COMPANY FOR APPROVAL OF COMMERCIAL ELECTRIC VEHICLE DYNAMIC RATE

Edward Burgess
Senior Policy Director
Zach Woogen
Policy Specialist
Vehicle-Grid Integration Council
2150 Allston Way, Suite 400
Berkeley, California 94704
Tel: (510) 665-7811
Email: vgicregulatory@vgicouncil.org

January 20, 2022

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Application of San Diego Gas & Electric Company (U902E) for Approval of Commercial Electric Vehicle Dynamic Rate.	Application No. 21-12-008 (Filed December 17, 2021)

RESPONSE OF THE VEHICLE GRID INTEGRATION COUNCIL TO THE APPLICATION OF SAN DIEGO GAS & ELECTRIC COMPANY FOR APPROVAL OF COMMERCIAL ELECTRIC VEHICLE DYNAMIC RATE

In accordance with Rules of Practice and Procedure of the California Public Utilities Commission ("Commission"), the Vehicle Grid Integration Council ("VGIC") hereby responds on behalf of its members to the *Application of San Diego Gas & Electric Company* ("SDG&E") *for Approval of Commercial Electric Vehicle Dynamic Rate* ("Application"). Pursuant to Rule 2.6 of the Rules of Practice and Procedure, VGIC timely files this response on January 20, 2022.

I. INTRODUCTION.

A. Overview of VGIC

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. VGIC generally supports the increased use of dynamic pricing as an option for retail rate customers with EVs

As a general principle, VGIC supports dynamic pricing options for Electric Vehicle customers. VGIC believes that dynamic pricing options – if designed appropriately – and other VGI strategies can help contribute to the following policy objectives:

- advance the state's transportation electrification goals by reducing the total cost of EV ownership,
- deliver increased value to utility customers, including both EV and non-EV owners,
- support customer and community resiliency, including during Public Safety Power Shutoffs ("PSPS") and other resilience events
- support grid reliability, including during extreme heat events or other times of high stress on the grid
- foster a growing market for VGI services.

VGIC appreciates SDG&E's effort to develop a dynamic EV rate option and commends the company for being the first California IOU to propose an optional V2G-Export rate. VGIC is continuing to review the specific details of SDG&E's proposal, however based on its initial review VGIC believes the proposal could be a constructive step towards encouraging more EV customers utilize to dynamic rate options and be adequately compensated for VGI services.

The Application has the potential to advance VGI by incorporating dynamic rate options and promoting the use of bidirectional EV supply equipment ("EVSE"). VGIC believes the V2G-Export rate design should be enhanced to be in closer alignment with Ordering Paragraph ("OP")

9 of Decision ("D.") 20-12-023, which directs SDG&E to file an application for a dynamic rate option for EV customers. VGIC stresses that Commission decisions supporting VGI strategies, including those founds in elements of the proposed V2G-Export rate, are critical for manufacturers and service providers to accelerate product development activities. VGIC also reserves the right to provide more detailed feedback at a later date, including any recommendations for how the proposal could be improved.

II. ISSUES TO BE CONSIDERED.

A. Applicability to Both Charging Energy and Exported Energy

In the Application, SDG&E explains that the proposed V2G-Export rate will: "provide compensation for grid exports *only*."[1] SDG&E's Prepared Testimony further states that "V2G-Export does not set rates for energy *imports* from the grid" and "only this customer's *exports* to the grid will be compensated by Schedule V2G-Export."[2] While SDG&E makes clear it's proposal to limit the dynamic rate to grid exports, neither the Application or accompanying Testimony offer any explanation as to why customers seeking to import energy from the grid may not enroll in the dynamic EV rate. Notably, D.20-12-023 directing SDG&E to file the Application cites D.19-10-055, which directed PG&E to propose a dynamic commercial EV rate.[3] PG&E displayed leadership in filing its Day-Ahead Hourly Real-Time Pricing ("DAHRTP") Application ("A.") 20-10-011, which offers a dynamic rate to commercial EV customers for energy imports. Importantly, PG&E's program offers compensation for exports at the dynamic rate for customers that are enrolled in NEM, and a subsequent phase of the proceeding asks PG&E to propose its plan to

[1] Application at 2.
[2] Prepared Testimony of Taylor Marvin at 3.
[3] D.20-12-023 at 27.

expand this eligibility to other customers.[4] It is unclear based on SDG&E's Application and Prepared Testimony why it did not follow PG&E's lead and provide an optional dynamic EV rate for customers wishing to charge their vehicles according to a more dynamic price signal, rather than limiting this price signal to exports only. VGIC believes dynamic rate offerings can promote V1G operations, not just V2G, which could unlock significant savings for a greater number of EV customers. While the number of V2G-capable products and services are growing, adoption is nascent relative to V1G-capable products and services. It is not clear yet whether a robust market for "export only" V2G capabilities will emerge in isolation. Instead, exports should be considered an extension of the benefits that V1G and V2B can provide, and VGIC believes the intent behind D.20-12-023 was to promote VGI broadly, not just V2G. As such, VGIC strongly urges SDG&E file a revised or amended proposal detailing a dynamic EV rate that applies to *both* energy imports to charge EVs and V2G exports.

B. Customer Eligibility

OP 9 of D.20-12-023 orders SDG&E to "file an optional dynamic rate application within 12 months of this decision." [5] While D.20-12-023 approves a commercial rate for separately metered EVs, OP 9 does not specifically direct SDG&E to file an optional dynamic rate that applies only to separately-metered commercial customers.

VGIC believes eligibility should be expanded to include additional customer types, such as those with combined EV charger and building/facility load. This would be consistent with the 2018 Electric Power Research Institute ("EPRI") Technical Report *Commercial Electric Vehicle Rate Design: Stakeholder Interview Results*, which states that "Most [participants] expressed an

[4] See *Assigned Commissioner's Amended Scoping Memo and Ruling,* December 17, 2021 in A.20-10-011.
[5] D.20-12-023, Ordering Paragraph 9 at 38.

interest in combined EV charger and building/facility load."[6] Promoting combined EV charger and building/facility loads may also help to enable other VGI strategies, such as vehicle-to-load ("V2L") for both customer bill management or backup power / resiliency applications. VGIC notes that the pending EVSE submetering protocol would facilitate expanding the dynamic rate to customers with combined EV charger and building/facility loads. Additionally, customer should be permitted to use EV-based measurement to participate in the proposed rate.

Lastly, the Commission's direction in OP 9 does not appear to limit SDG&E from proposing similar dynamic rate constructs to other types of EV customers. As such, VGIC believes the V2G-Export rate could serve as a useful model not just for commercial customers, but also for residential customers should be evaluated from that perspective as well.

C. Dual Participation in Emergency Load Reduction Program

In prepared testimony, SDG&E explains that "to prevent double compensation, customers receiving export credit under V2G-Export cannot simultaneously receive export credit through the Emergency Load Reduction Program ("ELRP")." [7] VGIC agrees that resources should not receive double compensation, but offers an alternative solution that could meaningfully encourage participation in both the V2G-Export rate and ELRP, which would maximize the ability for EVs to support grid reliability and affordability while also advancing VGI strategies and TE more broadly. SDG&E should compensate V2G exports according to the V2G-Export rate during all hours other than ELRP dispatch hours. Notably, the D.21-12-015 approving ELRP Group A.5 had initially proposed to prohibit dual participation in ELRP and real-time equivalent rates. However, in reviewing the record and revising the proposed decision, the Commission took decisive action

[6] See Prepared Testimony of PG&E in A.20-10-011. Attachment A at 1-AtchA-38.
[7] Prepared Testimony of Taylor Marvin at 5.

to allow dual participation. To remain consistent with Commission direction, SDG&E should permit dual participation in the proposed Application.

D.21-12-015 adopts minimum VGI dispatch hours of 30 hours per season as an incentive for customers to participate in ELRP Customer Subgroup A.5.[8] Until a more robust framework to prevent double compensation for distributed energy resources ("DERs") is developed, VGIC recommends as an interim measure that SDG&E implement a manual system to track when exports take place and ensure that exports during the minimum 30-hours of ELRP dispatch are compensated at $2/kWh. Any V2G exports made outside of ELRP dispatch hours should be compensated based on the CAISO LMP per SDG&E's proposed V2G-Export rate. VGIC believes this to be a reasonable near-term solution given the limited number of customers that will be enrolling in the V2G-Export rate at this early stage of market development.

Furthermore, VGIC is concerned that the proposed exclusion of dual participation will effectively mean that SDGE's V2G-Export program will be competing with the ELRP program. Since SDG&E has discretion over how it administers both programs, including marketing, education, and outreach ("ME&O"), the utility could attempt to steer customers towards one program or the other. VGIC strongly believes that the implementation of the V2G-Export rate should not come at the expense of the ELRP and the proposed participation rules should be modified as outlined above. Moreover, ME&O efforts for V2G-export should not eclipse efforts to enroll customers in ELRP.

D. Applicability of Smart Inverter Requirements

[8] D.21-12-015 at 39.

In D.21-12-015 and the accompanying Attachment 2 ELRP program guidance, the Commission provides flexible options to allow EVs to safely discharge for purposes of ELRP even if the system is not certified to the UL 1741 SA smart inverted supplement. As VGIC understands it, the core UL 1741 standard covers the safety requirements of Rule 21, whereas the SA smart inverter supplement addresses the "smart" features that inverters can also possess, but are not required to ensure safe grid operations. In adopting ELRP Subgroup A.5 in D.21-12-015, the Commission demonstrated definitive leadership on V2G and capitalized on an "opportunity to deploy and scale this resource, which will be critical in the coming years to ensure EVs can enhance reliability." In recognition of this sentiment and California's broader VGI goals, VGIC believes it would be reasonable to consider extending the UL 1741 SA exemption to V2G-Export rate customers. VGIC posits a consistent policy for V2G interconnection will promote simultaneous customer enrollment in both ELRP and the V2G-Export rate, which is permitted under D.21-12-015 and should be similarly permitted under the proposed Application.

III. CATEGORIZATION, HEARINGS, AND SCHEDULE.

VGIC agrees that this Application should be categorized as a "ratesetting" proceeding. VGIC also agrees that evidentiary hearings are likely necessary.

IV. SERVICE.

Service of notices, orders, and other correspondence in this proceeding should be directed to VGIC at the address set forth below:

Edward Burgess

Vehicle-Grid Integration Council

2150 Allston Way, Suite 400

Berkeley, California 94704

Tel: (501) 665-7811

E-mail: vgicregulatory@vgicouncil.org

V. **CONCLUSION.**

VGIC appreciates the opportunity to submit this response to SDG&E's proposed V2G-Export rate application. 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
2150 Allston Way, Suite 400
Berkeley, California 94704
Tel: (510) 665-7811
Email: vgicregulatory@vgicouncil.org

Date: January 20, 2022