

April 1, 2021

CPUC Energy Division Tariff Unit
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Re: Protest of the Vehicle-Grid Integration Council to Advice Letter 4439-E of Southern California Edison

Dear Sir or Madam:

Pursuant to the provisions of General Order 96-B, the Vehicle-Grid Integration Council (“VGIC¹”) hereby submits this Protest to the above-referenced Advice Letter 4439-E of Southern California Edison Company (“SCE”), *Southern California Edison Company’s Recommendations Regarding Deployment of Automated Load Management in the Charge Ready 2 Program* (“Advice Letter”), submitted on March 12, 2021.

I. INTRODUCTION.

With the unanimous approval of Decision (“D.”) 20-12-029 on December 17, 2020, VGIC commended the Commission for implementing vehicle-grid integration (“VGI”) strategies pursuant to SB 676 and other VGI strategies deemed reasonable by the Commission. D.20-12-029 also strove to implement some of the primary recommendations and outcomes of the lengthy and resource-intensive VGI Working Group process, which produced a Final Report of the California Joint Agencies Vehicle-Grid Integration Working Group, as well as subsequent formal party comments on VGI issues. VGIC was generally pleased to see party recommendations referenced and adopted in D.20-12-029. VGIC thus believed a strong foundation for pursuing VGI strategies had been laid, and that subsequent actions taken in response to the Ordering Paragraphs (“OP”) of that Decision would follow suit and fulfill the vision of SB 676. VGIC was encouraged by several of the OPs in the Decision including OP 7 which required SCE to file a Tier 2 AL within 90 days describing the potential for deployment of Automated Load Management (“ALM”) technology and recommendations regarding deployment of ALM in the Charge Ready 2 (“CR2”) program.

¹ VGIC member companies and supporters include American Honda Motor Co., Inc., Enel X North America, Inc., Fermata, LLC., Fiat Chrysler Automobiles, Ford Motor Company, General Motors Company, Nissan North America, Inc., Nuvve Corporation, The Mobility House, Toyota Motor North America, Inc., and Ossiaco, 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/>).

Subsequently, SCE submitted the Advice Letter on March 12, 2021 pursuant to OP 7. The Advice Letter contains SCE’s assessment of the potential for deploying ALM technology. SCE’s assessment concluded that existing demand response (“DR”) programs and time-of-use (“TOU”) rates already provide incentives to reduce or shift load, and that customers may independently choose to install ALM to automate the process of complying with TOU rates. SCE’s Advice Letter also notes that site hosts are required to enroll in a DR program and the meter serving the electric vehicle supply equipment (“EVSE”) load must be served by a TOU rate plan. The Advice Letter therefore contains the recommendation that SCE deems these requirements as appropriate for incentivizing and deploying ALM within CR2. The Advice Letter therefore does not propose any changes to CR2 beyond those already described in the December 2, 2020 Advice Letter 4363-E, and does not include any detailed assessment of ALM potential.² VGIC views this lack of a potential assessment as a major omission and believes it constitutes sufficient justification that the Advice Letter should not be approved as submitted.

In reviewing the Advice Letter, VGIC believes that SCE’s conclusion that existing requirements within CR2 are sufficient to incentivize ALM do not align with D.20-12-029 or fulfill the vision of SB 676. VGIC believes the Commission’s intent is well-articulated in page 28 of D.20-12-029, which directs the IOUs to “identify in all future applications for TE programs how they will deploy customer-side ALM at host sites where this technology will support TE installation at equal or lesser costs than hardware-based electrical capacity while meeting TE charging needs.”³ Moreover, VGIC views the shortcoming of the Advice Letter as particularly troublesome given that this may set a precedent that D.20-12-029 and SB 676 need not be taken seriously by investor-owned utilities (“IOUs”) as they continue to plan and implement transportation electrification programs, rules, and/or tariffs.

VGIC thus submits this protest to the Advice Letter on the grounds that SCE’s assessment is insufficient in evaluating the potential for deploying ALM technology as a means to avoid new distribution system upgrades and/or increase charging port deployment on existing services lines. These potential uses of ALM are not necessarily incentivized through the DR and TOU rate requirements. Subsequently, SCE’s recommendations for deploying ALM in CR2 are not commensurate with the full potential of ALM, thereby failing to comply with OP 7 of D.20-12-029.

II. DISCUSSION.

² See SCE AL 4363-E, *Southern California Edison Company’s Charge Ready Demand Response Program Implementation Plan Pursuant to Decision 20-08-045*, which proposes to extend the Charge Ready DR pilot through 2022 and transition to a full-scale Charge Ready DR program by January 2023.

³ D.20-12-029 at 28.

This directive does not apply to CR2, as it is not a “future application” in this context of D.20-12-029.

A. The Advice Letter’s description of the potential for ALM deployment misses the most critical opportunity for the technology to meet California’s transportation goals more cost-effectively.

While VGIC agrees with SCE that “DR programs and TOU rates are currently available to provide incentives or rate discounts to customers who respond to signals to reduce or shift their load,”⁴ we believe that this assessment conflates ALM with DR programs and TOU rates. ALM is in fact a solution set that can provide distinct grid service benefits from those provided by DR programs and TOU rates. This indicates a potential misunderstanding on the part of SCE related to the full range of opportunities that could be realized by all utility customers, EV owners, and EVSP providers through ALM, in addition to DR and TOU. SCE is correct that ALM software can facilitate participation in DR programs by curtailing load during times of grid stress, including by exporting energy if the DR program recognizes and compensates vehicle-to-grid (“V2G”) exports. Similarly, customers may elect to use ALM software to manage charging (and discharging) in response to TOU rates, shifting load to support daily reductions in peak demand. However, in addition to supporting system-wide reductions in peak demand through DR and TOU, ALM solutions can also provide important benefits at the distribution level by reducing distribution system upgrade costs tied to site-specific EVSE installations. If customers are given the opportunity to voluntarily elect ALM software during the installation of their EVSE, that ALM software can assure that maximum site charging load would not exceed a specified kW capacity that could otherwise trigger an upgrade. Not only would this minimize the costs and time of any distribution infrastructure needed to accommodate higher a kW charging threshold, but it could also minimize the need for new service drops, help accommodate more charging ports in locations where new service drops are infeasible, and help stretch authorized TE dollars further.

With these facts in mind, VGIC notes that the IOUs have an inherent incentive to pursue additional distribution upgrades and new service drops (rather than use existing service drops) since these incremental capital costs will generally increase the IOUs’ rate base, upon which they earn an authorized rate of return. Conversely, the IOUs may have an inherent disincentive to pursue ALM solutions, even if doing so might be in the best interest of their customers and California’s transportation electrification goals more broadly.

Likewise, SCE’s notion that ALM is already encouraged by existing DR offerings may be partly true for customers on Critical Peak Pricing (“CPP”) rates. However, for EVSE installations that require new service drops (which might otherwise be avoided through the use of ALM), many DR opportunities are unavailable due to the lack of a baseline load, especially in the case of bidirectional (i.e., V2G) EV/EVSE. This reduces the ability of EV load to participate in revenue generating DR opportunities that may accelerate EV adoption.

Additionally, while VGIC believes that ALM can provide broad benefits to a variety of stakeholders, it is crucial that ALM be offered as a voluntary option for customers such that there is no adverse impact on EV customer experience. Ensuring a positive experience for EV drivers and site hosts is

⁴ Advice Letter at 2.

central to accelerating EV adoption in support of California’s electrification goals. However, we firmly believe that even in a voluntary context, some customers will still choose to pursue ALM, particularly if doing so has benefits in terms of reducing the total cost of transportation electrification (e.g., if there is an added incentive to do so).

In the context of CR2, a site host electing an ALM software solution could meet their charging needs while potentially reducing utility-side installation costs. On a programmatic level, this could result in more chargers being deployed under the same approved \$436 million budget for CR2. As illustrated in VGIC’s comments on implementation of AB 841, VGIC believes a customer incentive, perhaps in the form of a rebate or rate discount, would be warranted and necessary to achieve these ratepayer savings and stretch CR2 dollars further.⁵ A “shared savings” model could be utilized to simultaneously achieve ratepayer benefits from reduced utility-side upgrades and site host benefit from the incentive. This approach balances ratepayer savings from ALM with customer choice and the need to maximize charger deployment under the previously authorized CR2 funds.

B. Approving the Advice Letter as filed would set a concerning precedent of deprioritizing the implementation of SB 676.

VGIC has major concerns over the precedent that could be set by both this Advice Letter and the recent advice letter filings of SCE, San Diego Gas & Electric Company, and Pacific Gas and Electric Company for the establishment of new EV Infrastructure Rules.⁶ Approving the Advice Letters without taking any additional actions towards constructive ALM solutions could send signal that the IOUs, and the Commission, are not taking certain provisions of SB 676 and D.20-12-029 seriously. VGIC has appreciated the IOUs’ efforts in the lengthy and arduous VGI Working Group process, subsequent formal comment in R.18-12-006, and the many follow-on items related to the implementation of SB 676. We recognize that the IOUs have engaged in good faith in these forums to advance VGI, however this Advice Letter raises new concerns for VGIC if no further action is taken. We hope to work constructively with SCE and the other IOUs towards identifying and implementing these additional ALM opportunities, as well as other provisions of D.20-12-029. In that regard we urge SCE to consider a revised approach that lays out steps for additional ALM evaluation and implementation focusing on the use of ALM for distribution system benefits.

Finally, the Advice Letter could do more to spell out ALM opportunities for specific customer types. While ALM should be offered as an option to all customer types and ultimately be up to site hosts to choose if ALM is right for their charging needs, VGIC believes that ALM solutions may be a logical fit for certain use cases such as workplace charging and MUDs, where vehicles tend to have relatively long dwell times. Notably, these are the same types of site hosts where TE could critically benefit disadvantaged communities and low-income customers. While an equity lens

⁵ *Comments of the Vehicle-Grid Integration Council on the Assigned Commissioner’s Ruling Regarding Implementation of Assembly Bill 841* (February 5, 2021) and *Reply Comments of the Vehicle-Grid Integration Council on the Assigned Commissioner’s Ruling Regarding Implementation of Assembly Bill 841* (February 19, 2021) in R.18-12-006.

⁶ See SDG&E AL 3705-E, SCE 4429-E, and PG&E AL 6102-E. VGIC notes these ALs may not fully comply with D.20-12-029 OP 5, which requires ALM to be considered into all future applications, rules, and tariff filings that seek to advance TE.

should be applied to all TE programs and VGI strategies, VGIC notes that allowing customers to elect ALM solutions may be a particularly effective strategy to ensure equitable deployment of EVSE.

As noted in VGIC's comments on AB 841 implementation,⁷ VGIC reiterates that ALM itself should not be a requirement for all or any sites, but rather should be offered as an option for customers to choose if they determine it best fits their needs, perhaps after consultation with the utility and/or a third-party entity.

III. ALTERNATIVE SOLUTION.

VGIC notes that the Energy Division has issued an Advice Letter Suspension Notice, suspending the Advice Letter 120 days beginning April 11, 2021. VGIC respectfully requests this time be used to convene an additional stakeholder workshop or a working group, or otherwise seek and further refine proposals from stakeholders on how ALM can be promoted in CR2, and in TE activities more broadly. Following a stakeholder workshop or working group, a workshop or working group report should be entered into the record and party comments on the report should be requested. The process of entering the stakeholder effort into the formal record of the proceeding is critical to ensure that Commission action can be taken based on a well-constructed record.

The focus of this stakeholder effort could include (but not necessarily be limited to) a focus on the following key issues:

1. Technical validation

VGIC believes that ALM technology is ready for widespread implementation, and notes it is already being pursued by many solution providers in today's market in California and internationally. We recognize that there may be some uncertainty on the part of the IOUs on whether certain novel load control systems can be depended upon to limit maximum draw. As such, we recommend a process to identify which hardware and software solutions are already providing this service and could be validated for the purpose of ALM services.

2. Identification of candidate ALM customers and locations

As part of a stakeholder process, VGIC recommends that SCE and the IOUs begin an effort to generally identify the types of locations and/or customers that may be most suitable for applying ALM solutions that limit distribution upgrades.

⁷ *Comments of the Vehicle-Grid Integration Council on the Assigned Commissioner's Ruling Regarding Implementation of Assembly Bill 841* (February 5, 2021) in R.18-12-006 at 5 and *Reply Comments of the Vehicle-Grid Integration Council on the Assigned Commissioner's Ruling Regarding Implementation of Assembly Bill 841* (February 19, 2021) in R.18-12-006 at 3.

3. Incentives for customer participation

VGIC acknowledges that several important elements of any ALM incentive design need to be further developed, particularly with the advent of AB 841 which could eliminate much of the incentive for customers to pursue ALM in the first place. Some relevant questions on VGIC's proposed ALM incentive that could be considered at an upcoming stakeholder convening are provided below:

- Should CR2 site hosts receive different treatment under an ALM incentive than EVSE site hosts not participating in a TE program?
- How could specific avoided cost components be linked to different incentive mechanisms for promoting ALM (i.e., upfront incentives vs ongoing bill credit)? For example, could an upfront incentive be tied to known costs avoided by using an existing service (e.g. new meter and new service drop)? Meanwhile could a predetermined bill credit/rate discount be applied to avoided costs associated with the secondary distribution system?
- If a bill credit is used to promote ALM for customer that choose these solutions, how should the credit be calculated (e.g., how are incremental upgrade costs identified in CR2? Could circuit-specific loading level be considered, like the "circuit adder" included in SDG&E's Power Your Drive VGI Rate?)
- What percent of total savings from ALM should be shared with the ALM-provider/host site and what percent should be reserved in the CR2 budget for other sites? Should an additional share of savings be offered to customers pursuing ALM-enabled EVSE in underserved communities?

VGIC believes that such an effort would benefit both an eventual resolution of SCE's Advice Letter, as well as the implementation of both SB 676 and AB 841.

To be clear, VGIC believes the broader implementation of CR2, as detailed in AL 4438-E *Southern California Edison Company's Proposed Schedule CRP, 'Charge Ready Program', to Implement Charge Ready 2* should not be delayed, as CR2 will meaningfully and directly accelerate transportation electrification by supporting EVSE deployment. However, VGIC recommends the Commission indicate a date certain for when SCE must offer ALM (for distribution cost avoidance) as a voluntary option to participating CR2 site hosts alongside an ALM incentive to promote adoption of this option. This implementation of ALM should not be limited to new CR2 site hosts assessing their installation needs, but also to both existing TE program customers and customers seeking to install EVSE outside of TE programs (including through distribution upgrades covered by AB 841).

If the Commission chooses to approve the Advice Letter as filed – although VGIC reiterates this would send a clear signal about the value placed on D.20-12-029 and SB 676 and place a concerning precedent – CR2 should be updated in the future to incorporate the strategies to promote

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ALM solutions and standard evaluation criteria to determine host sites where ALM would be beneficial to be developed by each IOU pursuant to OP 5.

IV. CONCLUSION.

VGIC appreciates the opportunity to submit this protest to SCE's Advice Letter. 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

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Service lists R.18-12-006, A.18-06-015