

Rulemaking No.: R.20-11-003

Exhibit No.: AEE-01

Date: September 1, 2021

Witness: Noah Garcia

Commissioner: Marybel Batjer

ALJs: Brian Stevens and Sarah R. Thomas

**OPENING PHASE II PREPARED TESTIMONY OF NOAH GARCIA ON
BEHALF OF ADVANCED ENERGY ECONOMY**

Rulemaking R.20-11-003

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

Phase II – Reliability for 2022-2023 – Update

Table of Contents

I. INTRODUCTION.....	2
II. OPENING TESTIMONY	3
a. Demand Reduction	3
b. Smart Thermostats	7
c. Utility-Scale Storage, Import, and Generation	8
III. CONCLUSION	9
APPENDIX A – Statement of Qualifications	10

1 **I. INTRODUCTION**

2
3 **Q. Please explain the purpose of AEE’s testimony and its interest in this proceeding.**

4 A. AEE submits this opening testimony in response to the Commission’s e-mail ruling on
5 Staff concepts to address Summer 2022 and 2023 peak reliability needs. AEE is a
6 national business association focused on making energy use secure, clean, and affordable.
7 We represent over 100 member companies that span the advanced energy and
8 transportation sectors, many of which are headquartered in California. AEE’s members
9 provide an array of energy products and services in the state, including large-scale
10 renewables and storage, distributed solar and storage, electric vehicle (EV) charging
11 equipment and software, energy efficiency, demand response (DR), advanced metering
12 infrastructure, and grid management software.

13
14 AEE appreciates Staff’s effort to quickly develop draft proposals to bolster reliability in
15 coming years. It is clear from Governor Newsom’s July 30 Emergency Proclamation that
16 near-term actions must fully leverage the capabilities of advanced energy resources to
17 enhance the reliability and flexibility of the grid. Further reliance on backup fossil fuel
18 generation is not only fundamentally inconsistent with California’s climate policy and
19 equity goals, it also artificially limits the potential for renewables, storage, DR, EVs, and
20 other DERs to provide cost-effective grid services that mitigate potential grid disruptions
21 like those experienced in August 2020. AEE provides comments on a narrow set of
22 Staff’s proposals identified in the August 16 e-mail ruling (Staff Proposal).

1 **II. OPENING TESTIMONY**

2
3 **a. Demand Reduction**

4
5 **Q. Does AEE have specific recommendations regarding modifications introduced in the**
6 **section titled “Demand Reduction” in the Staff Proposal?**

7 Yes. Staff proposes several modifications to the Emergency Load Reduction Program
8 (ELRP), including an increase in energy-based compensation rates for certain customers,
9 streamlining measures to reduce customer barriers to enrollment, expansion of ELRP to
10 residential customers, and a new pilot to test vehicle-grid integration (VGI) aggregation
11 to support the effectiveness of ELRP. AEE generally welcomes these program
12 modifications as they will likely boost participation in the program, provide incremental
13 opportunities for DERs to support grid needs, and yield additional demand reductions
14 during net system peaks.

15
16 AEE offers several additional modifications and proposals with the intention of
17 supporting the success of ELRP. First, the Staff Proposal recommends raising the ELRP
18 incentive to \$2/kWh for Group A participants only; if the Commission raises the ELRP
19 incentive, it should apply to all ELRP-eligible participants, including those in Group B.
20 Additionally, to meaningfully address ELRP enrollment issues, AEE recommends that
21 the ELRP include capacity payments in addition to the energy-based compensation
22 already offered in the program. As noted by the Joint Demand Response Parties (JDRP)
23 in November, it is challenging to see “a viable pathway for third-party aggregators to
24 attract and enroll customers and help guarantee and deliver on customer performance in

1 an energy-only program that lacks a standby payment and minimum or maximum number
2 of guaranteed dispatches.”¹ Capacity payments are critical for retaining customers and
3 providing greater assurance that demand reductions will be achieved when called upon.
4 We respectfully request the Commission consider this critical program addition to ensure
5 that the capabilities of DERs to reduce and shift loads are properly recognized in
6 California’s evolving resource adequacy framework and that attainable demand
7 reductions are achieved in the near-term. If the Commission does not incorporate
8 capacity payments into its ELRP modifications, additional revenue opportunities may be
9 needed to achieve meaningful customer participation levels. For example, introducing a
10 minimum number of dispatch hours will support DR providers’ ability to enroll
11 customers and deliver load reductions during net peak periods.

12
13 **Q. Does AEE have an additional response to Staff’s proposal to expand ELRP to**
14 **residential customers?**

15 A. Yes. AEE also supports the expansion of the ELRP to include residential customers;
16 however, there are substantial administrative issues that would have to be resolved prior
17 to implementation. First, further clarification is needed on the role of utilities and third-
18 party aggregators in the residential space to ensure that competitive concerns are properly
19 addressed. Additionally, if the residential ELRP expansion is administered through the
20 utilities, additional clarification is needed on the ability of utilities to automatically enroll
21 all eligible residential customers prior to next summer and provide bill credits for
22 demonstrated load reductions; at a minimum, the Commission would also need to ensure

¹ JDRP Opening Comments on Order Instituting Rulemaking at 7-8, filed November 30, 2020.

1 that this proposal does not unduly hinder DR providers' ability to support residential DR
2 and ensure compliance with non-discrimination provisions in the Commission's Rule 24
3 concerning customer DR participation. While it appears that residential customers would
4 be automatically enrolled in ELRP according to Staff's proposal, AEE also recommends
5 clarifying that a residential ELRP expansion will not require customers to acquire a
6 CAISO Resource ID number or take similar steps that would otherwise unduly dampen
7 customer participation and interest in the program. It is also not clear in the Staff
8 Proposal how third-party aggregators would get compensated for responding to events
9 triggered by Flex Alerts or Grid Alerts; it is AEE's position that this issue should be
10 addressed early in the program development process to ensure that customers are able to
11 respond to CAISO signals.

12
13 **Q. Does AEE have an additional response to Staff's proposed VGI Aggregation Pilot?**

14 A. Yes. Regarding the VGI Aggregation Pilot, AEE is encouraged by Staff's interest in
15 pursuing this concept and recommends the Commission continue to accelerate VGI. As
16 greater numbers of EVs show up on the grid, there exists significant potential to
17 aggregate and modify flexible charging loads to support system reliability. AEE is
18 supportive of aggregating both separately-metered and sub-metered EV charging to
19 ensure that load reductions from EVs are maximized during grid events. Where feasible,
20 the Commission could require utilities implementing the VGI Aggregation Pilot to collect
21 data and report on metrics required by D.20-12-029 in R.18-12-006.² This requirement
22 would make it easier to compare the performance of the VGI pilots proposed by utilities

² D.20-12-029 at 78, R.18-12-006, issued December 21, 2020.

1 in R.18-12-006 with the VGI Aggregation Pilot and inform how reliability-oriented EV
2 managed charging programs could be scaled to meet grid needs. Customers that are
3 participating in any of the utility VGI pilot programs should be eligible to participate in
4 the VGI Aggregation Pilot unless their participation in the VGI Aggregation Pilot would
5 directly conflict with or provide double compensation for services provided under the
6 utility pilots.

7
8 **Q. Does AEE have additional recommendations regarding storage metering**
9 **requirements vis-à-vis ELRP?**

10 A. Yes. Regarding storage's participation in ELRP, the CAISO adopted the Metered-
11 Generator Output (MGO) methodology for both energy storage and EV supply
12 equipment, and energy storage systems participating directly in the CAISO markets have
13 already been using this direct metering MGO methodology. AEE proposes that the same
14 sub-metered methodology be extended to stationary energy storage systems participating
15 in the ELRP. Allowing energy storage systems to be separately metered and participate as
16 a single site or an aggregation of storage systems, similar to Staff's VGI Aggregation
17 Pilot proposal, would allow a greater variety of participation options for DER
18 technologies and sites.

19
20 **Q. Does AEE have recommendations on proposed modifications to the Demand**
21 **Response Auction Mechanism (DRAM)?**

22 A. Yes. AEE broadly supports supplemental DRAM auctions and encourages the
23 Commission to increase the DRAM budgets to encourage incremental load reductions. At

1 the same time, AEE recommends against adding additional requirements – including
2 proposed bid caps for DR participating in the day-ahead market and real-time market –
3 under accelerated timeframes where additional capacity is needed in the near-term.³ At a
4 minimum, the Commission should consider reviewing the results of 2022 DRAM
5 auctions without bid caps and take additional stakeholder feedback before imposing
6 additional requirements on DRAM auctions in 2023.

7
8 **b. Smart Thermostats**

9
10 **Q. Does AEE have recommendations regarding concepts introduced in the Staff**
11 **Proposal under the section titled “Smart Thermostats”?**

12 A. Yes. Under the Smart Thermostats section of Staff’s proposals, Staff proposes several
13 changes to how smart thermostats participate in customer programs. AEE broadly
14 supports conditioning customers’ acceptance of a smart thermostat incentives on their
15 participation in DR programs. Again, to the extent smart thermostat customers use the
16 residential ELRP program to satisfy this requirement, the Commission must clarify how
17 third-party aggregators will receive compensation for responding to Flex Alerts initiated
18 by CAISO. Given Staff’s proposal that most residential customers would likely be
19 automatically enrolled in the residential ELRP, most customers will probably default to
20 participating in the ELRP.

21

³ Staff Proposal at 11.

1 AEE also generally supports efforts to develop a combined EE-DR cost-effectiveness
2 tool in a manner that facilitates increased smart thermostat deployment and aggregation
3 opportunities. Smart thermostats plainly provide both EE and DR benefits that must be
4 fully considered to ensure that this technology is adequately valued for the grid services it
5 can provide. We encourage the Commission to provide additional detail on when the
6 cost-effectiveness tool will be released and how it relates to complementary Commission
7 efforts to appropriately evaluate the cost-effectiveness of other DERs.

8
9 **c. Utility-Scale Storage, Import, and Generation**

10
11 **Q. Does AEE have recommendations regarding concepts introduced in the Staff**
12 **Proposal under the section titled “Utility-Scale Storage, Import, and Generation”?**

13
14 A. Yes. While AEE recognizes that development of large-scale resources is not entirely under
15 the control of load serving entities (LSEs), a performance incentive mechanism that rewards
16 LSEs for accelerated procurement may motivate additional early procurement of certain
17 resources by summer of 2022. Such an approach could allow for a certain dollar amount
18 incentive per megawatt of incremental net qualified capacity delivered by August 1, 2022,
19 above and beyond an LSE’s minimum procurement obligations established in D.21-06-035.⁴
20 If effective, the Commission could consider extending the incentive to additional years.

21

⁴ D.21-06-035 at 56-68, R.20-05-003, issued June 30, 2021.

1 **III.CONCLUSION**

2

3 **Q. Does this conclude your opening testimony?**

4 A. Yes, it does. AEE appreciates the opportunity to submit opening testimony on Staff's
5 proposals and looks forward to continued engagement in this proceeding.

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

1 **APPENDIX A – Statement of Qualifications**

2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24

Q. Please state your name, occupation and business address.

A. My name is Noah Garcia and I am a Policy Principal at Advanced Energy Economy (AEE.) My business address is 1010 Vermont Avenue NW, Suite 1050, Washington, D.C., 20005. I am testifying on behalf of AEE.

Q. Please describe your professional and educational background.

A. I have been a Policy Principal at AEE for the past year, where I have represented AEE in a range of regulatory proceedings before this Commission and other Western public utilities commissions on issues pertaining to distributed energy resources (DERs), integrated resource planning, and electric vehicles (EVs). Prior to joining AEE, I was a consultant at ICF where I supported alternative fuel vehicle and fuels projects and analyses for government and industry clients. Prior to ICF, I was a clean transportation analyst at the Natural Resources Defense Council where I supported the organization’s efforts to advance transportation electrification through regulatory engagement on the East Coast and Midwest. I have a Masters in Public Policy from Stanford University and a Bachelors in International Relations from Stanford University.

Q. Have you previously testified before the California Public Utilities Commission (Commission)?

A. No, I have not previously testified before the Commission.

1 **Q. Was Exhibit AEE-01 prepared by you or under your supervision?**

2 A. Yes.

3

4 **Q. Are the statements made in your testimony true and correct to the best of your**
5 **knowledge?**

6 A. Yes.

7

8 **Q. To the extent that your testimony contains expressions of opinion, do they represent**
9 **your best professional judgment?**

10 A. Yes.

11

12 **Q. Do you adopt Exhibit AEE-01 as your sworn testimony in Phase II of R.20-11-003?**

13 A. Yes.

14

15 **Q. Does this concluded your statement of qualifications?**

16 A. Yes, it does.

17

18