DOCKETED	
Docket Number:	25-IEPR-05
Project Title:	Load Shift Goal Update
TN #:	264604
Document Title:	350 Bay Area Comments - IEPR Load Flexibility Goal workshop
Description:	N/A
Filer:	System
Organization:	350 Bay Area
Submitter Role:	Public
Submission Date:	7/9/2025 5:02:07 PM
Docketed Date:	7/9/2025

Comment Received From: 350 Bay Area
Submitted On: 7/9/2025
Docket Number: 25-IEPR-05

350 BA comment on IEPR Load Flexibility Goal workshop

Additional submitted attachment is included below.

350 Contra Costa
350 East Bay
350 San Francisco
350 Marin
350 Silicon Valley
350 Sonoma
Napa Climate NOW!

July 9th 2025

From: 350 Bay Area

Re: IEPR Commissioner Workshop updating the Load Flexibility Goal, June 25th 2025

We congratulate the CEC, as well as CPUC and CAISO, on thoughtful progress toward implementing the legislatively mandated goal of seven Gigawatts of Demand Flexibility by 2030. This goal is of particular importance in assuring that California utilizes existing grid capacity more effectively, as this can speed progress toward meeting our renewable energy goals as well as right sizing investment in grid infrastructure, the most rapidly increasing portion of California electricity bills.

Description of 350 Bay Area:

350 Bay Area is a non-profit organization focused on ensuring a sustainable climate and associated environmental and economic justice for all, with a reach of over twenty-two thousand people, primarily concentrated in the nine Bay Area counties. The vast majority of 350 Bay Area's supporters obtain residential electrical service from Pacific Gas & Electric or from Community Choice Energy organizations. We thus comment from both an environmental and ratepayer perspective.

Comments:

1) The CEC analysis presented at the workshop indicates that the greatest potential growth Is likely to occur in the load modifying resources due to the projected increase in transportation and building electrification loads. Staff expressed concern that business as usual is not projected to meet the state's 7GW goal. We endorse the CEC staff intent to do more detailed demand flexibility modeling of different scenarios. In that regard, we find these figures from the Ava

Clean Energy load management standards report encouraging. Managed charging of 1200 residential batteries demonstrated not only more consistent charging during peak solar generation hours, but also controlled output over the 4 evening hours of peak grid demand, as well as more complete utilization of residual battery capacity The systematic impact on reducing peak load in this modest pilot study suggests that with appropriate incentives, load flexibility from residential, and potentially vehicle, batteries can provide increased load flexibility near term, even without exporting to the grid. [1]

Figure 1 Non-Managed Residential Battery Performance

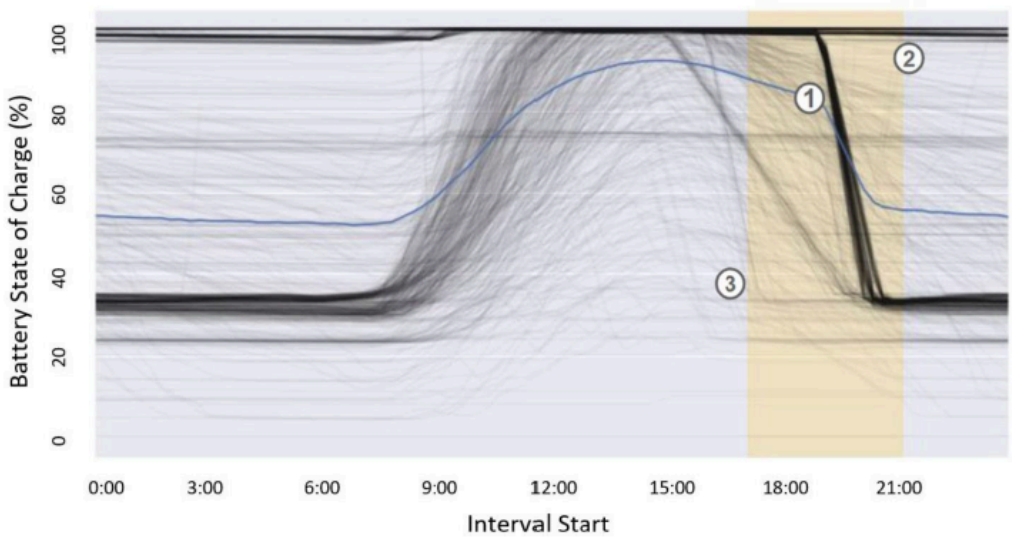

Figure 1 shows how residential battery systems charge and discharge when not actively managed. Each black line represents a single battery, and the blue line represents the average state of charge across all batteries. When operating without coordination, the portfolio fails to maximize load modification benefits, as evidenced by:

1. Batteries dispatch for TOU, and generally are set to discharge over 1-2 hours, which does not align with entirety of grid stress event
2. Batteries are in back-up only mode and do not dispatch in the evenings
3. Batteries are configured to maximize self-consumption and may not dispatch during evening hours

[1] TN 262660 Ava Community Energy Revised Load Management Standards Compliance Plan 4/11/2025 p 41-42

Figure 2 Managed Battery Performance

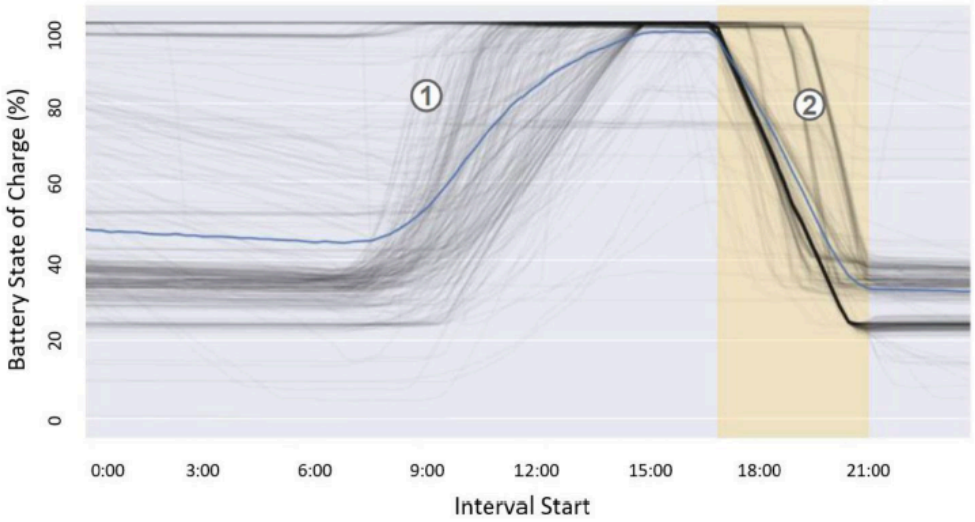

Figure 2 shows how customer battery systems charge and discharge when actively managed. Each black line represents a single battery, and the blue line represents the average state of charge across all batteries. When operating with coordination, the portfolio maximizes load modification, as evidenced by:

1. Batteries charge at controlled rates during times of high solar generation
2. Batteries discharge at an optimized rate to ensure constant output throughout the contracted four-hour window (shown in beige)

2) Both Commissioner McAllister and Vice Chair Gunda encouraged consideration of improving load factor as a metric which could reinforce efficient use of grid infra-structure. We strongly agree with this concept and want to highlight the availability of standards and examples. As mentioned in the meeting chat by Bruce Nordman, Australia manages capacity in coordination with the customer today with Dynamic Operating Envelopes (DOE) using IEEE 2030.5 (a limit-based model for their PV export case). Also OpenADR 3.0 supports Dynamic Operating Envelopes as well as a permission-based mechanism designed around the EV import case.

3) Commissioner McAllister noted that the CEC database of AMI data could be useful for analyses and modeling. While the data in the current CEC database is essentially the previous year's data, we note that Denmark receives meter data for their population on a daily basis. We hope that given the central importance of data for California energy planning that there is

consideration of how the CEC database might be relevant to current efforts by the Data Working Group in CPUC Proceedings R22-11-013.

4) We note the inherent complexities and duplication caused by the multiple separate demand flexibility programs in California. As mentioned in the stakeholder survey, and documented by several presentations at the recent Davis summit, a single program would be preferable. There are current budget challenges for several of the California demand response programs, others are sunsetting. The workshop concluded that business as usual will not meet the 7 GW goal. This would seem to be an opportune time for consideration of a major policy change for California's demand flexibility program.

Thank you for the opportunity to comment.

Claire Broome for
350 Bay Area