October 22, 2020

The Honorable Chris Holden
Assembly Utilities and Energy Committee
State Capitol
Sacramento, CA 95814

RE: Near-term Actions to Enhance California Electric System Reliability

Dear Chair Holden:

Our Coalition appreciates the prompt and thorough release of the Preliminary Root Cause Analysis (Preliminary Analysis) by the California Independent System Operator (CAISO), California Public Utilities Commission (CPUC), and California Energy Commission (CEC), in response to Governor Newsom's request to investigate the rolling blackouts that occurred on August 14 and 15, 2020. While the Preliminary Analysis recommends near and longer-term actions the State should take to improve reliability, there are immediate opportunities available to enhance California's Resource Adequacy (RA) program to address existing reliability issues and support more preferred energy resources. We propose

the following specific, immediate regulatory actions in response to the near-term, preliminary recommendations in the Preliminary Analysis:

I. **Provide Certainty for the Reliability Value of 4-hour Energy Storage Resources:** The CPUC should guarantee the RA counting of existing energy storage resources at the time of development.
II. **Ensure Energy Storage Resources Can Respond to Grid Stress:** The CAISO should reevaluate its Minimum Charge Requirement proposal to ensure storage resources can continue to contribute to reliability within the CAISO's footprint.
III. **Fully Value Behind the Meter Energy Storage:** The CAISO should amend the Proxy Demand Resource tariff to allow exported energy from BTM storage resources to satisfy a market bid and the CPUC should devise a clear and straightforward methodology for assigning capacity value to those resources.
IV. **Eliminate Limitations on the Procurement of Demand Response:** The CPUC should suspend their recently adopted DR procurement cap for 2021.
V. **Streamline and Simplify CPUC Load Impact Protocol Process:** The CPUC should take measures to reduce the cost and complexity of LIP evaluations to DR providers. Additionally, the CPUC should update LIPs or devise a new, separate process to assign capacity value to aggregated BTM storage.

We appreciate the consideration of the above measures, detailed below, that will expedite the development of additional clean energy resources to bolster the reliability of California's grid in 2021 and beyond.

Sincerely,

The California Clean Resource Adequacy Coalition

California Efficiency and Demand Management Council

California Energy Storage Alliance

Central Coast Community Energy

Clean Power Alliance

CleanPowerSF

East Bay Community Energy

Enel North America

Leap Energy

Marin Clean Energy

OhmConnect

Silicon Valley Clean Energy

Sonoma Clean Power

Sunrun

Tesla

Voltus

CC:
Governor Gavin Newsom
CA Assembly Utilities and Energy Committee Members
CA Senate Energy, Utilities and Communications Committee

CPUC President Marybel Batjer
CAISO CEO Eliott Mainzer
CEC Chair David Hochschild

About the CA Clean RA Coalition:

Our coalition is made up of a group of California load-serving entities (LSEs), clean energy technologies, generators, demand response providers, trade organizations and advocates who are, or represent, active participants in the California electricity market. We hold shared goals of building California's clean energy future through the deployment of clean sources of electricity and reliability. Jointly, our coalition serves over 8 million Californians, has deployed over 10,000 MWs of clean electricity generation and employs thousands of individuals in the state's clean energy workforce.

Actions to Accelerate the Deployment of Energy Storage Resources

I. Provide Certainty for the Reliability Value of 4-hour Energy Storage Resources

Regulatory certainty is needed in order to swiftly bring the volumes of additional resources online that the CEC, CAISO and CPUC agree are required to meet reliability needs. The CPUC, CAISO, and the CEC have recognized that the integration of significant renewable generation calls for the addition of complementary resources able to shift their electric output to the times of greater grid stress. In this context, the Coalition requests that the CPUC provide much-needed assurance about the future reliability value of standalone energy storage resources. Currently, LSEs and developers face risk that this Resource Adequacy (RA) value will erode over time, jeopardizing the ability to invest in the quantities of storage resources that the state's planning processes indicate are required to ensure reliability.

The CPUC should clarify how existing storage resources will be treated in the event of a transition to an alternative reliability counting methodology, by committing to guarantee the RA counting of existing energy storage resources at the time, or by applying a marginal counting approach that would ensure a resources marginal RA value will be respected so that the expected reliability value of energy storage resources does not decrease as new incremental storage is brought online.

II. Ensure Energy Storage Resources Can Respond to Grid Stress

The events of mid-August 2020 highlight the need for resources that are able to rapidly respond to grid conditions in order to mitigate net load variations derived from the integration of renewable generation. Given California's commitment to decarbonize its electric sector, as embodied by the passage of Senate Bill (SB) 100, the need for flexibility and responsiveness within the State's grid will continue to grow in coming years. The Coalition is thus concerned with the CAISO's proposal within the RA Enhancements initiative to restrict the participation of storage assets by applying a minimum charge requirement (MCR) that would effectively nullify these resources' ability to respond to real-time conditions. The CAISO's proposal would seriously hinder market participation by eroding the necessary revenue streams available to storage resources; increasing reliability risks by constraining flexible RA supply; and, potentially discriminating against storage resources while running afoul of CAISO principles of competition and efficient market-oriented policy. As such, the coalition requests the CAISO reevaluate

this proposal in light of the need for flexibility and pursue market-oriented modifications to ensure these resources continue to contribute to reliability within the CAISO's footprint.

Actions to Fully Value Behind the Meter Energy Storage Resources

III. Amend the Proxy Demand Resource Tariff and CPUC RA Treatment to Fully Value Behind the Meter Energy Storage

Homes and businesses across California have increasingly been installing battery storage resources paired with rooftop solar over the past few years to provide backup power during the seasonal power shutoff events. When aggregated together and intelligently dispatched in response to CAISO grid conditions, these solar-charged batteries can provide hundreds of MWhs of clean peaking energy generation to help alleviate power shortages.

At present, however, California does not have policies and programs in place to allow these resources to make full use of their capacity to help the grid during power shortages and to be fairly compensated for that service. Tariffs and programs that allow behind-the-meter (BTM) resources to participate in wholesale markets were designed either for demand-reducing technologies or large wholesale generators – and not aggregations of small/medium batteries. For example, CAISO's Proxy Demand Resource (PDR) tariff was designed for load reduction only and does not recognize energy sent to the grid from behind the meter, making it unworkable for customers with variable daily load and incompatible with maximizing battery dispatch during Flex Alert Events and other times when energy consumption is already reduced.

CAISO should amend the PDR tariff to allow exported energy to satisfy a market bid, even if exports are not compensated in the wholesale market, and the CPUC should devise a clear and straightforward methodology for assigning capacity value to those resources. Doing so would allow CCAs to develop programs that enable BTM battery customers to provide RA capacity value on the same basis as that assigned to large-scale batteries and fossil power plants. CCAs would then be able to compensate battery customers through an RA contract or program to help them finance the cost of the battery.

Actions to Develop Additional Demand-side Resources

IV. Eliminate Limitations on the Procurement of Demand Response

While the Preliminary Analysis highlights the need to develop additional demand-side resources by 2021, the CPUC recently capped procurement of DR resources by LSEs at 8.3% of their respective RA requirements. However, because non-IOU LSEs receive a share of the RA capacity from IOU DR programs, they are limited in the amount of additional third-party DR they can procure because the unused DR headroom from one LSE cannot be used by another LSE. Further, LSEs that choose not to procure DR effectively cap the amount of incremental DR that can collectively be procured to below the level intended by the CPUC. This is contrary to the primary recommendation in the Preliminary Analysis that more resources, specifically DR, be procured for 2021. DR is especially well-positioned to help avoid a similar situation to the events of mid-August 2020 because it can be made available quickly compared to many other resources and it is available in the early evening hours when the Stage 3 alerts went into effect.

V. Streamline and Simplify CPUC Load Impact Protocols for Demand Response and Behind-the-Meter Energy Storage

As of the 2020 RA program year, all DR resources - whether they are run by IOUs or third-parties - are required to qualify the capacity they may count as RA using the CPUC's Load Impact Protocols (LIPs). Adopted in 2008, the LIPs were intended for application to IOU-run DR programs that are structured and managed much differently than third-party DR programs. The current LIP process is unnecessarily complex and expensive for third-party DR providers and presents a significant barrier to competing in California's RA market. Moreover, the current process is unable to provide a real-time understanding of third-party DR providers' portfolios given the backward-looking nature of the LIPs. The state should therefore take measures to reduce the cost and complexity of LIP evaluations to third-party DR providers - for example, by providing public funds for independent LIP evaluators and waiving LIP reporting requirements not essential to qualifying DR providers' capacity for RA. The LIP process should also be modified to allow for more frequent updates to RA capacity values to incentivize continued innovation by third-party DR providers.

While the Coalition supports the measures to improve the overall efficiency of the LIP process, additional consideration is needed with regards to their suitability for different types of new demand-side technologies. As energy storage systems become increasingly common at homes and businesses, these resources are likely to comprise a growing portion of the state's DR portfolio. Since provision of energy from BTM storage devices is fundamentally different from traditional load reduction, the CPUC should either update the LIPs with a section addressing the unique attributes of aggregated battery storage or devise a new process separate from the LIPs to assign capacity value to aggregated BTM storage. These changes are necessary because the current LIPs utilize regression analysis to normalize DR program performance to average weather conditions which is more appropriate for load-backed DR. However, DR backed by battery storage is less temperature-dependent and can be measured using a metering device attached to the battery, making the existing LIP process ill-suited for these technologies.