February 16, 2023

Email to: docket@energy.ca.gov
Docket Number: 21-ESR-01
Subject: CESA's Comments on Draft Clean Energy Reliability Investment Plan

Re: Comments of the California Energy Storage Alliance on the Draft Clean Energy Reliability Investment Plan

Dear Sir or Madam:

The California Energy Storage Alliance ("CESA") appreciates the opportunity to comment on the Draft Clean Energy Reliability Investment Plan ("Draft CERIP") published on February 9, 2023. CESA acknowledges the efforts of the California Energy Commission ("CEC") to respond to the requirements of Senate Bill ("SB") 846 and develop a plan to accelerate the deployment of clean energy resources as part of a broader $1-billion investment plan and in support of the state's reliability challenges.

CESA is a 501(c)(6) organization representing over 100 member companies across the energy storage industry. CESA member companies span the energy storage ecosystem, involving many technology types, sectors, configurations, and services offered. As the definitive voice of energy storage in California, CESA is involved in a number of both near-term emergency reliability and long-term planning proceedings and initiatives in which energy storage is positioned to support a more reliable, cleaner, and more efficient electric grid. As energy storage is a key resource that will be deployed by the Clean Energy Reliability Investment Plan ("CERIP"), CESA's background and experience in providing technical and policy insights are of particular relevance to this matter.

I. INTRODUCTION AND SUMMARY.

In 2022, Senate Bill ("SB") 846 authorized the extension of the Diablo Canyon Nuclear Power Plant ("DCPP") to provide additional capacity for California's electric system through 2030. However, SB 846 also identified that DCPP will likely not be a long-term resource available for our 2045 clean energy goals and that other clean energy resources will be needed in order for the state to both meet our climate goals and maintain electric system reliability. Therefore, SB 846 authorizes the appropriation of up to $1 billion for CERIP to "[support] programs and projects that accelerate the deployment of clean energy resources, support demand response, assist ratepayers, and increase energy reliability."[1] The CEC has been tasked with developing CERIP and considering how to use this funding for near-, mid-, and long-term resource needs.

[1] SB 846 at Section 12(a).

Overall, CESA is generally supportive of the CEC's proposed framework and prioritization of funding across the different initiatives, with a focus in Year 1 (2023-2024) on enabling investments. As the CEC explains, the first year of the CERIP program year can be best spent on taking immediate action on certain long lead time activities, as well as in providing supplementary funds to advance near-term reliability needs. Meanwhile, funding priorities and allocations in Years 2 and 3 are indicative and directional, with a focus on scaling demand-side and supply-side resources but given the need to potentially develop and fine-tune the specific details of these initiatives, CESA agrees that these funding areas can wait to future years. As mentioned above, CESA largely supports the Draft CERIP outlined by the CEC but provides the following comments:

- Adding additional funding to the Distributed Electric Backup Assets ("DEBA") and Demand Side Grid Support ("DSGS") programs is the most effective way of adding additional capacity for emergency events.

- Further discussions are needed surrounding the logistics and rollout of a Central Procurement Mechanism ("CPM") before funds are spent.

- The funding allocations to expedite interconnection and permitting are appropriate and could benefit from potentially additional funds as well as refinement on specific areas of investment.

- The future program year funding allocations should be further developed and refined through workshops in 2023.

II. ADDING ADDITIONAL FUNDING TO THE DEBA AND DSGS PROGRAMS IS THE MOST EFFECTIVE WAY OF ADDING ADDITIONAL CAPACITY FOR EMERGENCY EVENTS.

CESA supports the CEC's proposal to include $33 million to provide additional Extreme Event Support in the near term, leveraging existing or soon-to-be-launched program vehicles in the DSGS and DEBA programs. DSGS and DEBA are both programs that are being developed/modified and overseen by the CEC and provide ready-made vehicles for the disbursement of funding for emergency reliability. The programs are designed to work in tandem, with DEBA providing funding to help the purchase of physical distributed energy resource ("DER") assets, such as distributed energy storage, microgrids, fuel cells, and more, that would then serve as dispatchable emergency supply or load reduction. One mechanism by which these resources may provide this emergency response is through DSGS, which is currently constructed as a demand response ("DR") program that provides event parameters and compensation for emergency response. While DEBA and DSGS are designed to work in tandem, there will also be resources that access DEBA funding and provide emergency response through an alternative mechanism. There will also be DSGS resources with existing physical assets that do not require DEBA funding.

In the Draft CERIP, the CEC also outlines that some funding may be directed towards specific industries, particularly the agricultural and water sectors.[2] CESA is supportive of the inclusion of these sectors as important industries where demand reduction can be achieved; however, CESA favors the allocation of this funding toward the general DEBA/DSGS program budgets rather than creating particular carve-outs for these customer segments. For DEBA, where funding may already be split between different segments, including bulk grid investments, grant-funding opportunities ("GFOs") as currently proposed by CEC staff, the DEBA team at the CEC should have discretion to add this funding to the segments they deem appropriate, especially after initial data is gathered during and after the program launch. For DSGS, which has one statewide budget, funding should be allocated to that general budget, instead of being reserved for a particular customer segment.

Given that this funding is designed to support near-term needs and is designed to prioritize resources that can provide emergency capacity in Summer 2024, CESA encourages the CEC to allow the market to naturally provide signals as to which segments and industries can provide this capacity in the quickest timeframe. This likely includes the agricultural and water sectors, but also other sectors, including other non-residential commercial and industrial facilities, other public sector facilities, or even aggregations of residential homes, where standardized technologies and simplified interconnection and permitting processes can allow projects to come online quickly. Making the funding widely available will allow customers that can move quickly to access funding and join programs by Summer 2024. For this reason, CESA recommends that as many customers and project types as possible, including agricultural customers and water facilities, be eligible for DEBA and DSGS. The CEC should ensure that eligible customers are aware of the program through marketing, education, and outreach ("ME&O") surrounding the program and that adequate application support and technical assistance is available for those customers that require it.

III. FURTHER DISCUSSIONS ARE NEEDED SURROUNDING THE LOGISTICS AND ROLLOUT OF A CENTRAL PROCUREMENT MECHANISM BEFORE FUNDS ARE SPENT.

Another element of the CEC's Draft CERIP is the inclusion of $32 million for to help the Department of Water Resources ("DWR") create and administer a CPM. The CEC states that the CPM will procure "long-lead time resources (e.g., geothermal, offshore wind, pumped hydro),"[3] which, "require years of planning and strategic financing mechanisms to develop."[4] This $32 million in funding is only expected to aid in the staffing and building of the CPM, not resource procurement.

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[2] *See* Draft CERIP at 14 discussing Emergency Reliability investments: "Augment investments to support near-term electric system reliability, including during extreme weather conditions. This funding allocation will prioritize energy resources that can be deployed and available by June 2024. This may include additional funding for the DSGS Program or DEBA Program that support additional demand reduction opportunities in industries such as agricultural and water sectors."

[3] Draft CERIP at 10-11.

[4] Ibid.

In Governor Newsom's Budget Change Proposal ("BCP"), there is discussion around the need for CPMs, given the difficulty smaller load-serving entities ("LSEs") might face procuring long-lead time, diverse, and large ("LLTDL") energy resources.[5] CESA fully agrees in concept that there could be significant benefits of and perhaps need for a centralized entity to procure LLTDL resources, given the identified need for many of these resources, particularly long-duration energy storage, in Integrated Resource Planning ("IRP") and SB 100 modeling conducted to date, and the barriers that are faced when LSEs only have to procure small portions of these resources and are unable to take advantage of economies of scale. The BCP outlines two potential CPMs: the investor-owned utilities ("IOUs") for the LSEs under the jurisdiction of the California Public Utilities Commission ("CPUC") and DWR for publicly-owned utilities ("POUs"), which are not in the CPUC's jurisdiction.

For central procurement taking place under the CPUC's oversight, CESA believes that further discussion is needed to determine how a CPM would interact with the existing procurement requirements in the CPUC's IRP process. This will be a complex discussion surrounding the current IRP procurement obligations, how resources would be identified for central procurement, obligations of LSEs to contribute towards the costs of CPM resources, the ability of LSEs to opt-in or out of particular procurements or the CPM generally and crediting of capacity towards LSE obligations. If a programmatic approach is adopted in the CPUC's IRP proceeding (R.20-05-003), there are also questions as to the appropriate entity, framework, and procurement process for implementing the CPM.

Similar discussions need to occur at the CEC for the POUs, with additional emphasis on the need to identify the resources that would be procured by DWR as the CPM for these LSEs. Unlike the CPUC's process, the CEC does not go through a biannual IRP process to identify system-wide supply needs and the optimal resource portfolio. Instead, as CESA understands it, the CEC has an oversight role by which they verify that POUs are complying with state law (*e.g.,* Renewable Portfolio Standard ["RPS"], SB 100, SB 1020 requirements) and have sufficient resources to meet load, but ultimately each POU creates its own resource portfolio to meet these requirements. The CEC in tandem with the CPUC and the California Air Resources Board ("CARB") does do some capacity expansion modeling to identify an optimal resource portfolio for SB 100 needs, but this is only done every four years. Currently, it is unclear how the CEC and/or DWR would ultimately identify the types and amounts of resources that should be procured via the CPM for POUs.

Without a clear plan for how resources would be identified, procured, and credited, CESA believes that it may be premature to direct funding towards creating the infrastructure of DWR's CPM. Instead, it may be prudent for the CEC to lead a proceeding on how to structure the CPM and engage the POUs to ensure that the CPM procurements align with their internal supply planning processes and POU-specific goals or mandates. CESA also has general questions about the appropriate entity to play the CPM role, which could be DWR but could also be through collective

[5] *See Budget Change Proposal Supporting Energy Reliability and the Clean Energy Transition*. Available at: https://esd.dof.ca.gov/Documents/bcp/2324/FY2324_ORG3360_BCP6739.pdf

procurement through existing joint powers authority put in place by different utilities and load-serving entities ("LSEs") already.

In sum, by no means does CESA oppose CPM procurement. In fact, CESA sees tremendous value and potential need for having such a vehicle where procurement could facilitate the development of LLTDL resources that defray total costs and/or various risk factors (*e.g.*, new technology), such as offshore wind, geothermal, LDES, and possibly other types of emerging technologies. However, until some of the above questions are first addressed, CESA hesitates to support immediate and automatic designation of DWR as the CPM entity and associated "standup" activities.

IV. THE FUNDING ALLOCATIONS TO EXPEDITE INTERCONNECTION AND PERMITTING ARE APPROPRIATE AND COULD BENEFIT FROM POTENTIALLY ADDITIONAL FUNDS AS WELL AS REFINEMENT ON SPECIFIC AREAS OF INVESTMENT.

CESA fully supports the $15 million in proposed Year 1 funding allocation to expedite interconnection and permitting processes, which was described in the Draft CERIP as supporting reduced time to review projects needed for reliability and decarbonization goals. Indeed, CESA agrees with the critical importance of this enabling investment category, such that CESA would support even higher allocations, potentially shifting some of the proposed funding allocations for the CPM standup costs. It is unclear if $32 million is the appropriate amount for setting up the CPM, but the challenge of expediting interconnection and permitting is clear and immediate.

Furthermore, the details of the specific investments to expedite interconnection and permitting processes should be discussed with stakeholders because funding could be directed toward all range of areas, including immediate staffing of engineers, automation tools, permitting guidebooks, and/or workforce development and capacity building strategies. Any of these areas could immediately exhaust this pool of funds, so it will be important to ensure that the best bang-for-buck investment areas are identified and pursued. To this end, it will be important to also highlight what and where the issues actually are. For example, when it comes to interconnection, it is unclear if the problem with delays and backlogs can be solved with manpower alone given the scarcity of electrical engineers in the nation. On the permitting side, battery storage projects could benefit from funds to support consistent fire code interpretation and application in local permitting processes, while non-lithium energy storage technologies could use funds to support the establishment of initial pathways to permitting and approval given the fact that many local jurisdictions will be reviewing new technologies for the first time. Altogether, these funds could be used in many different ways, where clearer diagnosis of the problem and identification of the most impactful solution(s) is needed.

V. THE FUTURE PROGRAM YEAR FUNDING ALLOCATIONS SHOULD BE FURTHER DEVELOPED AND REFINED THROUGH WORKSHOPS IN 2023.

CESA fully supports the significant allocation of future program year funds toward scaling the deployment of both demand-side and supply-side solutions given the record-level buildout rates required of new resources to meet the state's reliability needs and decarbonization goals. CESA generally agrees with the breakdown between demand-side and supply-side solutions, as well as the potential initiatives within each of these categories.

For demand-side resources, CESA agrees that distributed storage, including for non-lithium solutions, vehicle-to-home/building, and repurposed batteries, has tremendous potential and could benefit from funds that facilitate scaling. CESA would add to this list behind-the-meter ("BTM") thermal energy storage and small-scale pumped hydro storage ("tank on a hill"). Whether lithium or not, CESA would generally argue that local distributed storage (*e.g.*, community-scale IFOM storage, C&I storage, low-income residential storage) could benefit from funds to support scaling since this market segment has not been procured at the speed and scale of transmission-connected resources. In shaping the demand-side initiatives, the CEC should therefore consider the balance between a focus on diversification with scaling. Lastly, CESA is particularly intrigued by the potential initiative for Innovation Grants, which is a concept that we would support since it would facilitate the creation of "strategies" or approaches that would help scale the entire demand-side resource category, regardless of technology type.

For supply-side resources, CESA particularly supports a potential initiative on non-lithium LDES technologies. Even with the allocations made to the CEC's separate LDES Program, the scale and magnitude of energy storage needs at large and specifically long-duration capacity needs are significant, where the CERIP initiative can support the scaling of various LDES technologies, completing the potential focus of the LDES Program on facilitating first-of-a-kind commercial deployments. As expressed in CESA's comments to the CEC's LDES Program, different technologies face different commercialization and scaling paths, with some benefiting from minimum economic portfolio and purchase orders to scale manufacturing and others benefiting from minimum economic project sizes to account for certain upfront capital and construction costs.

However, as future program year allocations, CESA believes that there is some time in 2023 for the CEC to host workshops to shape some of the specific initiatives for the scaling of demand-side and supply-side resources, respectively. With some of these overlooked or diverse technology and resource types that would benefit from funding support through the CERIP, it will be important to understand their respective scaling challenges in order to structure these initiatives in ways to precisely address their deployment barriers and make the best use of these clean energy investment funds.

VI. CONCLUSION.

CESA appreciates the opportunity to provide these comments and feedback on the Workshop and looks forward to collaborating with the CEC and other stakeholders in this docket.

Respectfully submitted,

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