

May 13, 2020

Governor Gavin Newsom 1303 10th St, Suite 1173 Sacramento, CA 95814

The Honorable Anthony Rendon, Speaker California State Assembly State Capitol, Room 219 Sacramento, CA 95814

The Honorable Toni G. Atkins, Senate President Pro Tempore California State Senate State Capitol, Room 205 Sacramento, CA 95814

Dear Governor Newsom, Speaker Rendon, and pro Tempore Atkins:

On behalf of the California Energy Storage Alliance (CESA), I write to highlight how energy storage solutions can be optimal tools for reinvigorating our California economy from the economic damage of COVID-19 while also furthering and bolstering our environmental, resiliency, and clean-grid goals. We hope you will consider the below recommendations for how energy storage solutions can be used to springboard California's economy.

Energy storage continues to be seen as a key enabler for our cost-effective clean energy economy. The California Public Utilities Commission foresees the need for over 11,000 MWs of new energy storage by 2030 for our California grid to enable the continued transformation to a low carbon future. Energy storage solutions enable renewables integration, provide reliability solutions for key physical grid needs, such as clean power needs in urban ("local") areas, and enables our transportation sector to drive on clean energy. Energy storage is a proven effective fast-track solution set. It acts as an investment multiplier through jobs-creation, cost-savings and health benefits for ratepayers while improving the utilization of our clean energy and grid resources, including growth of renewable generation capabilities which might otherwise be curtailed or sent out of state.

¹ "2019-2020 Electric Resource Portfolios to Inform Integrated resource Plans and Transmission Planning", D.20-03-028, CPUC, pg. 46 (Table 8). This table references a 38 Million Metric Ton GHG Reduction Scenario by 2030.



<u>About CESA:</u> CESA represents over 80 companies focused on supporting California's clean energy goals through the deployment and smart operation of energy storage solutions.² CESA promotes technologyneutral energy storage solutions, and represents batteries, flywheels, chemical storage, compressed-air energy storage, thermal storage, pump-hydro storage, and more.

Recommended Actions:

CESA highlights multiple ways that energy storage solutions can align with and support the state's economic *and* climate goals in the near term.

Energy storage solutions include:

- Direct aggressive grid-deployments of energy storage to meet 2030 and 2045 needs CPUC studies show needs of nearly 11,000 MWs by 2030.³
- Maintain or exceed current renewable deployments and GHG reductions The energy storage
 industry is prioritizing California's needs and will continue to support California with energy
 storage solutions. The continuity of the California clean energy goals and energy storage
 procurements should be continued and not disrupted. More aggressive clean energy goals will
 promote further industry engagement, investment, and lower per unit costs.
- Support Federal or State efforts for an energy storage Investment Tax Credit Investment tax
 credits for energy storage will attract private equity investment capital and benefit Californians
 who have and will continue to deploy energy storage solutions to support clean energy,
 customer, and grid uses.
- Augment and expand the Self-Generation Incentive Program with an expanded budget for
 'equity project' funding Customer-sited energy storage is a key solution to resiliency needs and
 to saving customers money. Increasing the funding allocation to the 'equity budget' could be a
 simple near-term way to promote rapid helpful storage deployments and economic relief in
 disadvantaged areas of California.

² 174 Power Global, 8minutenergy Renewables, Able Grid Energy Solutions, Aggreko, Amber Kinetics, Ameresco, Aparrent, Arevon Energy Management by Capital Dynamics, Avangrid Renewables, B2U Storage Solutions, Better Energies, Boston Energy Trading & Marketing, Bright Energy Storage Technologies, Buchalter, Carrier, Clean Energy Associates, ConEd Battery Development, Connect California, Customized Energy Solutions, Dimension Renewable Energy, Doosan GridTech, Eagle Crest Energy, East Penn Manufacturing, EDF Renewable Energy, Emera, Enel X, Energport Inc., Energy Storage Response Group, Energy Vault, Engie, ESS Inc., esVolta, Fluence, Form Energy, General Electric, Gridwiz, Hecate Energy, Highview Power, Honda, Hydrostor, Jensen Hughes, Lendlease Energy Development, LG Chem Power, Li-Ion Tamer, Lockheed Martin AES, LS Power Development, Malta, NantEnergy, NEC Energy Solutions, Inc., NextEra Energy Resources, NEXTracker, NGK Insulators, Nostromo, NRStor, Nuvve, Ormat/Viridity, Plus Power, PolyJoule, PXiSE, Quidnet Energy, Range Energy Storage, RAW Energy, Recurrent Energy, Reimagine Power, RWE, Southwest Generation Company, Stem, Stoel Rives, Elsys, Sumitomo Electric, Sunrun, Swell Energy, Tenaska, Tenaska Power Services Company, Trane, UL, VRB Energy, Wartsila, WattTime, Wellhead Electric and Zitara Technologies. The views expressed in this letter are those of CESA, and do not necessarily reflect the views of all individual CESA member companies. (http://storagealliance.org).



- Direct accelerated 'hybridization' of existing California thermal power plants Energy storage additions to thermal plants can be made quickly, leverage existing interconnections, and can dramatically reduce carbon, criteria pollutants, and water usage as proven by the Southern California Edison's thermal facilities.⁴
- Accelerate and expand deployments of storage for wildfire mitigation and/or mitigation of public-safety power shutoffs – These actions should include community-related solutions that enable storage deployments that can also serve and receive credit as "Resource Adequacy" during normal grid-operations. Such solutions can offset thermal or back-up fossil generation deployments.
- Diversify the storage fleet in California with additions of long-duration storage or other diverse storage deployments These actions will ensure California relies on an array of solutions, decreasing risks and augmenting our energy tool kit.
- Establish supportive financing structures for storage deployments, including for Community
 Choice Aggregators (CCAs) State-backed financing for quasi-governmental entities with limited
 credit records will help to deploy storage quickly and cost-effectively at scales needed to meet
 California's needs.
- Allow special considerations and contracting or financing for infrastructure projects These
 projects, including pump-hydro projects, should be able to compete to serve California's storage
 needs. These projects can be long-lived but may require infrastructure-type financing
 structures.
- Continue to preserve and protect existing energy storage contracts State and legislative
 direction that honors existing contracts will help ensure continued storage deployments. Such
 efforts should also ensure contracts are fairly counted in Resource Adequacy evaluations, where
 disruptive changes to rules should be avoided, e.g. by grandfathering. Resource Adequacy
 contracts should generally be safeguarded or 'fixed' for 20-year periods, and the continued
 value of CCA energy storage contracts should be authorized.
- Continue to fund clean energy related state agencies to ensure California's progress and
 continued leadership Our California agencies are important stewards for state clean energy
 efforts and policies. The budgets for these agencies and any applicable programs should be
 continued with full authorizations.

CESA recognizes the hard work of many Californians, including our leaders, in this difficult time. It remains important that we consider both near-term and long-term state goals. Deployments of energy storage are synergistic for CA and qualify as no-regrets actions, preparing us for our clean-energy future and enabling near-term actions so that storage comes online in cost-effective ways at the right time, e.g. over the next decade. These actions also benefit Californians by phasing in the storage across time,

⁴ "Hybrid Storage Technology: Initial Assessment of the Greenhouse Gas reduction and Economic Savings from Hybrid EGT® Adoption in California", Gridwell Consulting, July 2018, pgs. 27-29. See also "SCE Unveils World's First Low Emission Hybrid Battery Storage, Gas Turbine Peaker System," at https://energized.edison.com/stories/sce-unveils-worlds-first-low-emission-hybrid-battery-storage-gas-turbine-peaker-system.



saving Californians money, cleaning California's air, reducing California's Carbon footprint, and providing California jobs.

I welcome any discussion on these matters and all the best.

Sincerely,

Alex J. Morris

Executive Director

California Energy Storage Alliance

www.storagealliance.org