April 7, 2021

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

Dear Chair Holden:

We write to provide you with the fifth monthly report on actions our respective organizations are taking ahead of this summer in response to the August 2020 extreme heat wave and rotating outages. The actions summarized below are those the California Public Utilities Commission (CPUC), California Energy Commission (CEC) and California Independent System Operator (CAISO) have taken since our last monthly report submitted to you on March 12, 2021.

We thank you, again, for the opportunity to provide this report. If you or committee staff have any questions, please do not hesitate to contact any of our respective government affairs representatives: Grant Mack (Grant.Mack@cpuc.ca.gov), Anna Ferrera (Anna.Ferrera@energy.ca.gov), or Quentin Foster (QFoster@caiso.com).

Sincerely,

Marybel Batjer
President, California Public Utilities Commission

David Hochschild
Chair, California Energy Commission

Elliot Mainzer
President & Chief Executive Officer, California Independent System Operator

Combined Energy Resource Planning & Procurement Actions April 2021			
Responsible Entity	**Actions**	**Milestone(s)**	**Status**
CPUC	**Emergency Reliability Rulemaking (R.20-11-003).** This proceeding was initiated to establish policies, processes, and rules to ensure reliable electric service in California in the event of an extreme weather event in 2021. ▪ In a February 11, 2021 decision (D.21-02-028), the CPUC directed the state's three large investor-owned utilities (IOUs) to seek contracts for additional supply-side capacity. The IOUs filed Advice Letters seeking approval for approximately 564 MW by summer 2021. The CPUC approved those contracts on March 18. ▪ On March 25, 2021, the CPUC approved and directed (D.21-03-056) the IOUs to take multiple actions to avert the potential need for rotating outages in the summers of 2021 and 2022, including launching a new statewide Emergency Load Reduction Program pilot, modifying the IOUs' existing demand response and Critical Peak Pricing programs, funding a new statewide Flex Alert paid-media campaign, and authorizing additional capacity procurement to meet an increased planning reserve margin of 17.5 percent. More information on R.20-11-003 is available at: https://www.cpuc.ca.gov/summerreadiness/	Approve IOU Advice Letters by mid-March 2021 CPUC vote on proposed decision on March 25, 2021 IOU procurement and program implementation	Completed Completed In progress
CPUC	**Project Progress Tracking**. The CPUC is tracking progress on generation and battery storage projects that are currently under construction in California to ensure there are no CPUC-related regulatory barriers that would prevent them from being completed by their targeted online dates.	Release LSE data aggregation by Q2 2021	In progress

	▪ In November 2020, the CPUC prepared an analysis and slide deck on new resources in development across multiple proceedings, available at: https://www.cpuc.ca.gov/WorkArea/DownloadAsset.aspx?id=6442466860 ▪ In Q2 2021, the CPUC will be releasing an aggregation of the data collected from Integrated Resource Plans filed by load-serving entities (LSEs) in September 2020. The will data include information on existing, development, and planned resources. ▪ The CPUC is also tracking progress against the 3,300 MW NQC (Net Qualifying Capacity) procurement ordered in D.19-11-016. On February 1, 2021, LSEs that elected to self-provide their procurement obligation submitted reports to the CPUC on the status of their projects. CPUC staff is working to quality control and analyze this data. In these updates, LSEs confidentially provided detailed information regarding the cause of any delays and plans for remediation. In Q2 of 2021, the CPUC will use the data from the February 2021 filings to determine whether any of the projects under D.19-11-016 have suffered delays or failure that necessitate the need for backstop procurement.	Determine whether backstop procurement is necessary by Q2 2022	
CPUC	**Improve Load Scheduling Accuracy** – The CPUC is exploring technical solutions needed to allow its jurisdictional IOUs to provide customer usage data to community choice aggregators (CCAs) and energy service providers (ESPs) more frequently to improve load scheduling accuracy.	Ongoing conversations with IOUs, CCAs, and ESPs	In progress
CPUC	**Replacement Resources for Diablo Canyon** – The CPUC directed all CPUC-jurisdictional LSEs to submit Integrated Resource Plans that include procurement of their share of replacement power for the retirement of the Diablo Canyon Nuclear Power Plant. On February 22, 2021, the CPUC issued a ruling in the IRP proceeding seeking feedback on mid-term reliability analysis and proposed procurement requirements for LSEs. The	Review party comments	In progress

	ruling recommends that the CPUC order procurement of 7,500 MW of new net qualifying capacity to come online in the years 2023–2025. The CPUC hosted a workshop on this ruling to facilitate dialogue with stakeholders ahead of the party comment deadline. A proposed decision on replacement resources for Diablo Canyon is expected in Q2 of 2021.		
CPUC	**Resource Adequacy (RA) Rulemaking (R.19-11-009)** – The CPUC hosted several workshops in February 2021 on reliability proposals/topics including planning reserve margin, import rules, hybrid resource qualifying capacity rules, demand response qualifying capacity rules, changes to the RA penalty structure, and larger structural changes to the RA framework. A proposed decision in this proceeding is expected in June of 2021.		In progress
CPUC	**Integrated Resource Planning (IRP) Procurement Framework** – The CPUC hosted a workshop in December 2020 on a proposal regarding how the CPUC would order procurement to complement the procurement by LSEs in response to the planning track activities of IRP and various CPUC procurement programs. This proposed framework is intended to provide a conceptual foundation for all future procurement informed by the IRP process. The February 22, 2021 ruling on mid-term reliability referred to above seeks feedback from stakeholders on "phase one" of the proposed framework, i.e., that relating to procurement in the current cycle of IRP.	Review party comments	In progress
CAISO	**Market Enhancements for Summer 2021 Readiness** – On March 24, the CAISO Board of Governors approved a package of market enhancements to prepare for this upcoming summer, which are targeted to be in place by June 15, 2021. The package was filed at the Federal Energy Regulatory Commission (FERC) on March 26. The package consists of three principal changes: 1) providing imports a make-whole payment under specified tight supply conditions if settlement at CAISO market prices does not cover the energy bid price to provide greater incentives for import supply during tight supply conditions; 2) pricing contingency	Approved by the CAISO Board of Governors March 24	Implement ation summer 2021

	reserves used to serve load based on the market's energy bid cap when the CAISO is arming load to meet the CAISO balancing authority area's contingency reserve requirement to provide strong price signals for additional supply during very tight supply conditions; and 3) enhancements to facilitate greater dispatch of reliability demand response resources through the market to preserve strong price signals during tight supply conditions. The proposal allows reliability demand response resources to be dispatched in hourly blocks, fifteen-minute intervals, or five-minute intervals. The Board also approved changes to the CAISO's resource interconnection request process to expedite bringing more supply online by summer 2021, by removing a cap on behind-the-meter expansions and allowing the CAISO to temporarily award deliverability to new resources. On March 10, the CAISO presented two additional market enhancements to the EIM Governing Body for their approval. These two changes consisted of 1) addressing the EIM's resource sufficiency evaluation to better ensure each balancing authority area participates in the EIM with sufficient resources, and 2) addressing a market modeling issue regarding energy interchanges between EIM balancing authority areas and the CAISO balancing authority area that caused operational issues during last summer's tight conditions. The EIM Governing Body approved these changes under their primary approval authority and they were included on the Board of Governors' consent agenda. The CAISO is also considering market enhancements for managing load, export and wheel through scheduling priorities for the CAISO balancing authority area, and expecting to bring these changes to the CAISO Board of Governors and EIM Governing Body in April, with a target to be in place by July 1, 2021.		
CAISO	**Operating Procedure 4420 Modifications** – The CAISO is developing criteria that will allow the use of firm load to meet the North American Electric Reliability Corporation (NERC)-required contingency reserves and	Drafting modifications to	In progress

	the dispatch of procured spinning reserve resources. This will allow the CAISO to minimize, if not avoid, the shedding of firm load during periods of resource deficiency. These criteria will be incorporated into the CAISO Operating Procedure 4420 Alerts, Warnings, and Emergencies.	Operating Procedure 4420	
CAISO, CEC	**Increased Coordination with Non-CPUC-jurisdictional Entities Regarding Additional Procurement** – The CAISO and CEC have begun outreach to understand the procurement positions of non-CPUC-jurisdictional entities and concerns, if any, for summer 2021. Thus far, non-CPUC jurisdictional entities surveyed have *de minimis* levels of solar penetration and largely rely on dispatchable renewables and hydro. Nonetheless, a limited number of non-CPUC local regulatory authorities have voluntarily increased their planning reserve margins or components thereof in preparation for summer.	Conducted outreach to non-CPUC jurisdictional entities	In progress
CAISO	**Further Analysis of Proxy Demand Response (PDR) and RDRR Performance** – The CAISO has reached out to demand response providers to better understand the discrepancy between metered load drop from summer 2020 versus credited and shown resource adequacy amounts. As a consequence, the CAISO is contemplating potential baseline adjustment increase(s) during stressed grid conditions. The CAISO aims to coordinate with demand response providers as well as with the CPUC so that the CAISO's baseline adjustment works well with the CPUC's new pilot Emergency Load Response Program.	Conducted outreach to demand response providers and considering next step options	In progress
CAISO	**Credits Against Resource Adequacy Obligations** – The CAISO continues to work with the CPUC, local regulatory authorities, and stakeholders to resolve issues around resources credited against resource adequacy requirements.	Targeted resolution August 1, 2021	In progress
CAISO	**Resource Adequacy Market Rule Enhancements** – On March 24, the CAISO Board of Governors approved the first phase of the resource adequacy enhancements initiative. These changes were filed with FERC on March 29. Phase 1 of this initiative consists of three changes: 1) a	Approved by the CAISO Board of	Implement ation summer 2021

	minimum state of charge requirement for resource adequacy storage resources that will be in place on an interim basis, while the CAISO and stakeholders consider market enhancements to better manage storage resources as key reliability resources; 2) enhancements to the existing planned outage process that will better ensure planned outages are fully replaced with substitute capacity or subject to performance penalties; and 3) expanding the CAISO's local capacity procurement mechanism backstop authority to ensure sufficient energy in local capacity areas. Implementation for first and second enhancements are targeted to be in place by this summer, and the third by resource adequacy year 2022.	Governors March 24	
CAISO	**Hybrid and Co-located Storage Resource Enhancement** – On November 18, the CAISO Board of Governors approved the second phase of policies to support and enable the use of hybrid and co-located resources, which comprise a significant portion of the new capacity expected to be online by summer 2021. The Federal Energy Regulatory Commission approved the first phase of this effort and the CAISO implemented these changes on December 1. The second phase of this effort will be implemented in Fall 2021. On December 17, the CAISO Board of Governors approved a methodology for calculating cost-based bids to which storage resources may be mitigated. This enhances the CAISO's ability to efficiently dispatch storage resources through its market.	First phase completed on December 17, 2020 Second phase to be implemented Fall 2021	In progress
CAISO	**Reliability Must-run (RMR) Designation to Preserve Grid Reliability in 2021** – In addition to the 250 MW power plant approved as a Reliability Must Run (RMR) resource by the CAISO Board of Governors in December 2020, the Board voted on March 24 to designate a 34.5 MW power plant as a system RMR resource to help ensure the reliable operation of the transmission system in 2021 and prevent its imminent retirement. The CAISO's analysis concluded that the capacity provided by the RMR designation is necessary to maintain system-wide reliability needs and meet NERC and WECC operational standards, especially during the summer evenings.		Completed on March 24, 2021

CEC	**CEC 2020 CA Electricity Demand Update** – The CEC adopted the California Energy Demand 2020-2030 Forecast Update at its January 25 business meeting. This update to the previously adopted electricity demand forecast incorporates an additional year of historical data, more recent economic and demographic outlooks, and revised vehicle electrification, self-generation and battery storage forecasts. It also includes revised hourly and monthly peak electricity demand for the CAISO control area, as well as annual peak forecasts for 1-in-2, 1-in-5, 1-in-10 and 1-in-20 weather scenarios. Additionally, as part of the 2020 IEPR, staff conducted an exploratory analysis which found that 1-in-30 temperature conditions would lead to, on average, a 1.1 percent increase in peak load beyond what would be expected for a 1-in-20 temperature event.	Volume III (demand forecast) of the 2020 IEPR was adopted at the March 17, 2021 CEC Business Meeting.	Completed on March 17, 2021
CEC, CPUC	**Efficiency Improvements to the Natural Gas Powerplant Fleet** – On December 2, the CEC, in collaboration with the CPUC, and in coordination with the CAISO, hosted a workshop to highlight to electricity stakeholders a range of options for incremental upgrades at existing natural gas power plants to increase their capacities to help address potential generation supply concerns for Summer 2021 and beyond. The workshop highlighted several projects that add up to 100 MW of additional capacity that could be available for Summer 2021. Since the workshop, the CPUC has been coordinating with the generators to realize this potential. The CEC has already reviewed and approved multiple requests for software and equipment improvements for these projects, and additional requests are expected prior to summer.	The CPUC has been coordinating with the generators to realize this potential. The CEC has reviewed and approved multiple requests for software and equipment improvements for these projects, and additional requests are	In progress

		expected prior to summer.	
All	**Demand Response Round Table** – The CAISO, CEC and CPUC held a second Demand Response Round Table with industry stakeholders to discuss strategies to maximize the potential of demand response in the short and long term.		Completed on March 16, 2021