



California ISO



January 11, 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 second monthly report on actions our respective organizations are taking by next 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 December 1, 2020. Those actions and efforts since our last report include the following:

Actions to Support Summer 2021 Reliability

- **Final Root Cause Analysis:** In January, the CAISO, CPUC and CEC will release the Final Root Cause Analysis of the August 2020 heat wave and rotating outages. The Final Root Cause Analysis, which considers additional data not available when the Preliminary Root Cause Analysis was published in October, does not substantively change the preliminary report's findings and confirms the three major factors that led to the rotating outages: 1) the climate change-induced extreme heat wave across the western United States resulted in the demand for electricity exceeding the existing electricity resource planning targets. The existing resource adequacy and resource planning processes are not designed to fully address an extreme heat wave like the one experienced in mid-August; 2) in transitioning to a reliable, clean, and affordable resource mix, resource adequacy and planning targets have not kept pace to ensure sufficient resources that can be relied upon to meet demand in the early evening hours. This makes balancing demand and supply more challenging. These challenges were amplified by the extreme heat wave; and 3) some practices in the day-ahead energy market exacerbated the supply challenges under highly stressed conditions.

- **CPUC Expedited Procurement Proceeding:** The CPUC held a Prehearing Conference, published a Scoping Memo, and issued three rulings in the recently opened proceeding focused on expedited procurement of Summer 2021 reliability resources. One of these rulings provided guidance for stakeholder proposals for expedited procurement of “demand-side” resources such as demand response and critical peak pricing tariffs, as well as a proposal to continue funding for and modernize the Flex Alert program. Two additional rulings focused on expedited procurement of “supply side” resources such as obtaining additional megawatts (MW) from existing power plants, re-contracting with resources at risk of retirement that are falling off contracts, and/or contracting for any additional battery storage resources from recent solicitations that could be brought online by this summer. One of these rulings, which was issued by President Batjer on December 28, directs Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company to seek contracts for additional power capacity to be available by the summers of 2021 and 2022. This ruling also directed the investor-owned utilities (IOU) to ensure the procured capacity is available for the net peak hours. The IOUs must bring contracts meeting the requirements of the directive to the CPUC by February 15, 2021.
- **CPUC Backstop Procurement Mechanism Decision:** The CPUC issued the Final Decision establishing the process for IOUs to “backstop” CPUC-ordered procurement if the procurement activities of non-IOU load serving entities (i.e., Community Choice Aggregators or Direct Access Energy Service Providers) are determined to be falling short of procurement goals.
- **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.
- **Reliability Must-run (RMR) Designation to Preserve Grid Reliability In 2021 –** The CAISO Board of Governors voted to designate a 250 MW power plant as a system RMR resource to help ensure California has the capacity and energy needed to meet next summer’s electricity

demand. The CAISO's supply analysis concluded that the capacity provided by the RMR designation may be necessary to serve load and meet North American Electric Reliability Corporation (NERC) and Western Electricity Coordinating Council (WECC) operational standards, especially during the summer evenings.

- **Department of Market Monitoring (DMM) Report Finds No Single Cause**
– The DMM, which serves as the independent market monitor for the CAISO and Western Energy Imbalance Market, published a report on November 24, 2020 that supported the joint entities' Preliminary Root Cause analysis. DMM also found no evidence of market manipulation or generation withholding. DMM held a public call on December 18 to discuss its findings.
- **CAISO and CPUC Summer 2021 Readiness Webpages** – In early December, the CAISO and CPUC launched webpages dedicated to providing timely updates to stakeholders on their respective efforts to prepare for Summer 2021. The CAISO webpage is: <http://www.caiso.com/about/Pages/News/SummerReadiness.aspx>. The CPUC webpage is: <https://www.cpuc.ca.gov/summerreadiness/>.
- **CAISO Three-Year Policy Initiatives Roadmap and Annual Plan** – In December, the CAISO presented its 2021 Three-Year Policy Initiatives Roadmap and Annual Plan, which serves as a work plan to ensure new policies and tools are in place to meet the needs of the market. The CAISO has reprioritized its market policy development roadmap to focus on the near term need to address issues to help with Summer 2021 market efficiency and reliability, while maintaining momentum and engagement on regional market initiatives.
- **Penalty Prices and Scheduling Priorities** – On November 20, the CAISO conducted a public workshop on penalty pricing and scheduling priorities as identified in the Preliminary Root Cause Analysis. The CAISO requested stakeholder input by December 9 to evaluate the need for additional changes. The CAISO announced its intent to consider changes to scheduling priorities in its December 23 notice announcing Market Enhancements for Summer 2021 Readiness initiative.
- **Summer 2021 Readiness Initiative** – The first stakeholder meeting on this initiative was held on January 6 and focused on near term efforts necessary to enhance market rules and procedures to help ensure grid reliability in summer 2021. The CAISO will also host workshops on January 12 and 13 to discuss potential market enhancements, including export and load scheduling priorities. Stakeholders will be invited to present during the workshops on how Balancing Authority

Areas (BAAs) in the Western Electricity Coordinating Council treat exports. As the urgency of these changes necessitates an expedited stakeholder process, any proposed market rule changes will be presented at the Western Energy Imbalance Market (EIM) Governing Body and the CAISO Board of Governors open meetings in March 2021, as appropriate.

- **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.
- **Proposed Resource Adequacy Obligation Crediting** – The CAISO is working expeditiously and collaboratively with the CPUC, local regulatory authorities and stakeholders to resolve issues around the credits given to certain resources to meet resource adequacy requirements and how those are shown to the CAISO for reliability purposes.
- **Planned Outage Rules** – The CAISO, through its Resource Adequacy Enhancements stakeholder process has proposed changes its resource adequacy market rules to ensure planned outages do not create unnecessary reliability risk. On December 17, the CAISO released a draft final proposal with the intent of bringing it before its Board of Governors for consideration for approval in the first quarter of 2021.

Actions to Support Mid- and Long-Term Reliability

- **Replacement Resources for Diablo Canyon Retirement** – The CPUC directed all CPUC-jurisdictional Load Serving Entities to submit Integrated Resource Plans that include procurement of their share of replacement power for the retirement of the Diablo Canyon Nuclear Power Plant. The proceeding timeline calls for a ruling in early 2021 that will contain analysis and proposals for any necessary procurement in the 2024-2025 timeframe to replace the Diablo Canyon Nuclear Power Plant and identify the need for any additional power to ensure reliability in response to the submitted plans.

- **Integrated Resource Planning (IRP) Procurement Framework** – The CPUC hosted a workshop on a proposal regarding how the CPUC would order procurement to complement the procurement by Load Serving Entities 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.

- **CEC 2020 CA Electricity Demand Update Workshop:** On December 4, the CEC presented the results of the 2020 forecast update for 2019-2030. Of significance are the results of the peak forecast for 2022, which will form the basis for the resource adequacy planning for Summer 2022 at the CPUC. In addition to the standard peak forecasts (1-in-2, 1-in-5, 1-in-10 and 1-in-20 probability weather scenarios), the 2020 forecast update also includes a 1-in-30 peak forecast (reflecting a low probability weather scenario similar to heat storm experienced in August of 2020) for situational awareness and to help support future planning improvements. The next formal step in the process is for staff to complete finalization of the results and present the forecast at the January 25 Business Meeting for potential adoption by CEC Commissioners.

- **Flexible Demand Appliance Standards:** On December 14, the CEC held a workshop to inform a rulemaking to establish standards and labeling requirements for appliances that promote flexible demand technologies, which can schedule, shift, or curtail electric demand of appliances to reduce greenhouse gases emitted from electricity generation. This rulemaking was authorized by Senate Bill 49 (SB 49, Chapter 697, Statutes of 2019). Demand flexibility can also help manage energy costs and enhance grid reliability.

- **Resource Adequacy Market Rule Enhancements** – The CAISO has proposed a process for evaluating monthly resource adequacy supply plans and triggering backstop procurement if necessary. The CAISO posted a draft final proposal on December 17 focused on enhancements to the planned outage process, new rules for resource adequacy imports, minimum charge requirements for resource adequacy storage resources, and backstop capacity procurement process enhancements for local energy sufficiency. These changes are scheduled to be presented to the CAISO Board of Governors at the March 2021 open meeting for implementation as early as 2021 for addressing resource adequacy in 2022. Also, on December 17, the CAISO posted straw proposals on the portfolio assessment of the system resource adequacy showings and sufficiency

assessments, Unforced Capacity (UCAP) requirements counting, minimum system resource adequacy requirements, flexible resource adequacy, and backstop capacity procurement for portfolio assessment deficiencies.

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

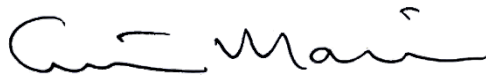
Sincerely,

A handwritten signature in blue ink that reads "Marybel Batjer". The signature is fluid and cursive, with the first name being more prominent.

Marybel Batjer
President, California Public Utilities Commission

A handwritten signature in black ink that reads "David Hochschild". The signature is cursive and somewhat stylized, with the first name being the most legible part.

David Hochschild
Chair, California Energy Commission

A handwritten signature in black ink that reads "Elliot Mainzer". The signature is cursive and somewhat stylized, with the first name being the most legible part.

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