

# Memorandum

**To:** ISO Board of Governors

**From:** Stacey Crowley, Vice President, External and Customer Affairs

Mark Rothleder, Vice President, Market Quality and California Regulatory Affairs

**Date:** December 11, 2019

**Re:** **State, Regional and Federal Affairs update**

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*This memorandum does not require Board action.*

## STATE AFFAIRS

### Regulatory update

#### **Integrated resource plan proceeding – proposed Reference System plan:**

On November 6, California Public Utilities Commission (CPUC) Administrative Law Judge to the Integrated Resource Plan (IRP) proceeding released a Ruling recommending a portfolio to serve as the Reference System Plan (RSP). The Reference System Plan is a single portfolio of resources that represents a least-cost, least-risk pathway to achieving the recommended 46 million metric tons (MMT) state-wide greenhouse gas (GHG) emissions target and other Senate Bill 350 requirements. The proposed Reference System Plan, also referred to as the 46 MMT alternate scenario, has the following incremental buildouts by 2030: 2,837 MW of in-state wind, 11,774 MW of solar photovoltaic, 11,384 MW short-duration battery storage, 222 MW demand response, and 2,000 MW of generic effective capacity.

The CPUC defines generic effective capacity as a “perfectly dispatchable peaker with zero-emissions.” The generic effective capacity was manually added by CPUC Energy Division staff after the original portfolio was found to not meet the basic 1-in-10 loss of load expectation reliability metric. While the addition of such capacity restored reliability to acceptable limits, the inclusion of generic capacity and ultimately transference of such a portfolio to the ISO for transmission planning purposes is problematic. First, the ISO relies on the CPUC to provide reliability and policy-driven portfolios to the ISO’s transmission planning process based on the CPUC’s jurisdiction over procurement. The ISO uses the CPUC-developed portfolios to perform reliability, policy and economic assessments in the transmission planning process, with a particular emphasis on identifying policy-driven transmission needs necessary to accommodate renewable generation. As a result of this coordination, the ISO approves transmission projects based on the CPUC-developed portfolios. However, because “generic effective

capacity” does not exist, there is also no way for the ISO to include this capacity in its transmission planning assessments. The ISO cannot model generic effective capacity because such capacity has no operating characteristics, is not specified as renewable or non-renewable, has no GHG emissions profile, cannot be identified as a single resource or many resources, and has no specific location on the grid. Consequently, if the ISO removes the 2,000 MW of generic capacity from the portfolio, the ISO will be using a portfolio that CPUC Energy Division staff demonstrated to be unreliable, typically showing reliability needs in the evening net peak hours after the sun sets. Secondly, the generic capacity (or lack thereof) will also have a significant impact on the transmission planning process because 2,000 MW of capacity can change the power flows in the ISO’s modeling, thereby affecting the outcome of the transmission plan. As an example, the ISO may identify reliability issues in its transmission planning analyses, but will not be able to differentiate whether the removal of the generic capacity creates the shortfall or whether another transmission-related issue caused the reliability issue. This would create significant obstacles to approving potentially necessary transmission projects. If the ISO is required to use portfolios with significant amounts of generic resources in the transmission planning process, the ISO runs the risk of delaying action on needed upgrades, or potentially initiating action where it is not warranted.

Given the significant impact of this portfolio, the ISO discussed alternatives with CPUC staff and conducted three *ex parte* calls with decision makers to highlight the above concerns. The ISO continues to engage in the Integrated Resource Plan proceeding and will provide additional modeling to inform the process.

#### **Integrated resource plan proceeding – procurement to address capacity shortfall:**

On November 7, the CPUC voted 5-0 on a revised Proposed Decision substantially aligning with the ISO’s recommendations on addressing the near-term capacity shortfall. The final Decision (1) requires 3,300 MW of incremental procurement by 2023 allocated system-wide, and (2) establishes a specific schedule for once-through cooling compliance date extensions ranging from one to three years by taking into consideration impacts on disadvantaged communities and natural resource use. However, the Decision would only qualify an import as incremental procurement if it dynamically transferred or pseudo tied to the ISO system. The CPUC, in coordination with the ISO and the California Energy Commission, will recommend its schedule for once-through cooling compliance date extension at the State Water Resources Control Board for approval in 2020.

#### **Resource adequacy proceeding:**

On November 13, the CPUC issued its Order Instituting Rulemaking (OIR) to oversee the resource adequacy program. In this new proceeding, the CPUC has in scope an examination of structural changes to the resource adequacy program to address energy attributes or hourly capacity requirements, given the changing landscape of the resource fleet and load serving entities. The ISO strongly supports this effort to reform the program at

both the system and local levels as it is clear that the resource adequacy program must be updated to ensure that capacity is available to meet the peak hour and energy requirements across all hours. The CPUC will also look at its maximum cumulative capacity buckets to address increasing reliance on use-limited resources to meet reliability needs, and consider whether the Commission should cap quantities of imports and/or use-limited resources (such as demand response) consistent with monthly and/or annual load duration curves.

Importantly, the CPUC will also consider expanding the resource adequacy program to consider multi-year system and flexible capacity needs (local capacity requirements were expanded to a three-year horizon last year). The CPUC is also considering program refinements including market power mitigation measures, counting conventions and requirements for hydro resources, hybrid resources, third-party demand response resources, and marginal effective load carrying capability counting conventions for solar, wind and hybrid resources.

The ISO supports all of the above in-scope issues but also recommends that the CPUC address rules for counting resource adequacy imports and begin considering how to properly account for forced outages and development of new flexible resource adequacy requirements.

Finally, the CPUC on November 27 issued a proposed decision on an interim hybrid resource counting methodology but the ISO encourages the CPUC to develop permanent counting rules for these resources in this proceeding given the critical role these resources will likely play in meeting the identified capacity shortfalls.

### **Legislative update**

#### **Legislature:**

The Legislature adjourned on September 13 for Interim Study Recess. The Legislature reconvenes for the second half of the two-year Regular Session on January 6, 2020.

### **REGIONAL AFFAIRS**

#### **Western Energy Imbalance Market (EIM):**

The WAPA-Desert Southwest region based in Phoenix has started a study comparing the Western EIM with Southwest Power Pool's (SPP) energy imbalance service. At a public meeting on November 12, the ISO and SPP each provided separate educational training sessions. The study is expected to be completed during summer 2020.

#### **Extended day-ahead market (EDAM) stakeholder process:**

The market design stakeholder process for extended day-ahead market initiative commenced in October with an issue paper and public webinar to outline the suggested topics, workshops, and timeline. Initial stakeholder comments were due on November

22, and 25 sets of comments were submitted and are posted on the stakeholder process page. The comments are being reviewed and will be used to structure the workshops during the first half of 2020, which will address resource sufficiency, transmission availability and pricing, and GHG emissions.

### **Western Energy Imbalance Market governance**

#### **EIM Governing Body:**

The EIM Governing Body held an in-person meeting on December 4 in Las Vegas, NV. The members received updates from the Regional Issues Forum and Body of State Regulators. The Governing Body also received a briefing from the ISO on system market power mitigation, which outlined Management's plan to initiate a stakeholder process to develop a system-level market power mitigation design. The next EIM Governing Body meeting is January 22 in Folsom, CA.

In addition, the EIM Governance Review Committee (GRC), a temporary advisory group to the EIM Governing Body and ISO Board of Governors, held its first meeting on December 4 in Las Vegas, NV. In a public session, the GRC elected Therese Hampton as Chair, and Rebecca Wagner as Vice-chair. Chair Hampton gave an update on GRC planning and the GRC received a briefing from ISO staff on the ISO stakeholder process. The next public meeting will be held January 21 in Folsom, CA.

#### **Body of State Regulators:**

The Body of State Regulators will have its next in-person meeting on April 29 in Albuquerque, NM in conjunction with the spring 2020 Committee on Regional Electric Power Cooperation meetings.

#### **Regional Issues Forum:**

The Regional issues forum held its final public meeting of 2019 on December 3 in Las Vegas, NV. They heard updates from several new Western EIM entrants, including the Modesto Irrigation District and Turlock Irrigation District. There was also a panel discussion on resource sufficiency and resource adequacy. In addition, Angela Amos of the Federal Energy Regulatory Commission made a presentation on price formation. During the meeting, the liaisons also announced the posting of the final summary of the June 18 Carbon Workshop. The 2020 Regional Issues Forum meeting schedule has been posted online, and the next meeting is scheduled for March 11 in Phoenix, Arizona.

## **FEDERAL AFFAIRS**

#### **Administration:**

Energy Secretary Rick Perry stepped down from his position on December 1.

**Congress:**

On November 19, the House passed a short-term Continuing Resolution funding federal government agencies at current levels through December 20. The Senate approved the measure on November 21 and the President signed the bill that day, avoiding a government shutdown. Both House and Senate have now agreed on allocation levels for the 12 annual spending bills, helping appropriators to negotiate specific agency funding for congressional approval before the December 20 deadline.

On November 19, the Senate Energy and Natural Resources Committee cleared the nominations of James Danly to be a Commissioner at the Federal Energy Regulatory Commission for a term lasting until June 30, 2023, and Daniel Brouillette to be Secretary of Energy, replacing Rick Perry. Mr. Danly's nomination has not yet been scheduled for a full Senate vote on confirmation. On December 2, the full Senate approved Mr. Brouillette's nomination by a vote of 75-15. Mr. Brouillette has been Deputy Secretary of Energy since August of 2017.

**Legislation:**

S. 2556, "Protecting Resources on the Electric Grid with Cybersecurity Technology Act" ("PROTECT Act"), introduced on September 26. Senator Lisa Murkowski; 0 cosponsors. Establishes a grant program at the Department of Energy to advance cybersecurity of rural electric cooperatives and municipal utilities. Directs FERC to provide incentives for utility cybersecurity investments. Status: Referred to the Senate Committee on Energy and Natural Resources. Hearing held on November 6. An amendment in the nature of a substitute was reported favorably out of Committee on November 19.

S. 2657, "Advanced Geothermal Innovation Leadership Act of 2019" ("AGILE Act:"), Introduced on October 22. Sponsor: Senator Lisa Murkowski (R-AK); 1 cosponsor. Amends the Energy Policy Act of 1992 to provide for an updated assessment of geothermal resources and support development and demonstration of advanced geothermal technologies. Eligible projects include a variety of commercial applications, including the use of geothermal energy as a grid management resource or for seasonal energy storage. Modifies the definition of renewable energy to include thermal energy. Authorizes \$150M annually in program funding from 2020 through 2024. Status: Referred to the Senate Committee on Energy and Natural Resources. Joint staff amendment in the nature of a substitute passed out of Committee by voice vote on November 19.

S. 2668, "Solar Energy Research and Development Act of 2019," introduced on October 22. Sponsor: Senator Kyrsten Sinema (D-AZ); 0 cosponsors. Establishes a program for research, development and demonstration of solar energy technologies within the Department of Energy aimed at improving efficiency, reliability, resilience, security and capacity of solar energy to useful forms. Eligible projects include a wide variety of

technologies, including solar technologies that enable safe grid operating conditions; integration of solar technologies into smart grid, transmission and distribution systems; and regional and national electric system balancing and grid security. Status: Referred to the Senate Committee on Energy and Natural Resources. Passed out of Committee by voice vote on November 19.

S. 2702, “Integrated Energy Systems Act of 2019,” introduced on October 24. Sponsor: Senator Jim Risch (R-ID); 1 cosponsor. Requires the Secretary of Energy to establish a cross-agency research and development program aimed at expanding emissions-reducing energy technologies; modernizing energy infrastructure with emissions-reducing technology to promote grid stability, ramping load following, rapid start, intermittency and resiliency; and mitigating transmission congestion and grid vulnerabilities. Authorizes \$50 million in program funding from FY 2020 through FY 2029. Status: Referred to the Senate Committee on Energy and Natural Resources. Joint staff amendment in the nature of a substitute passed out of Committee by voice vote on Tuesday, November 19.

S. 2714, “ARPA-E Reauthorization Act of 2019,” introduced on October 28. Sponsor: Senator Chris Van Hollen (D-MD); 1 cosponsor. Reauthorizes funding for the Advanced Research Projects Agency – Energy, focusing on improving the resilience, reliability and security of infrastructure to produce, deliver and store energy, and other purposes. Increases the funding authorization for the agency from \$428 million in FY 2020 to \$750 million in 2024. Status: Referred to the Senate Committee on Energy and Natural Resources. Passed out of Committee by voice vote on November 19.