



Memorandum

To: ISO Board of Governors and WEIM Governing Body
From: Elliot Mainzer, President and Chief Executive Officer
Date: January 30, 2024
Re: CEO report

This memorandum does not require ISO Board of Governors or WEIM Governing Body action.

INTRODUCTION

For my first CEO report of the New Year, I will provide an update on how the ISO supported regional reliability during January's extreme cold, a report on new resources added in 2023, the latest quarterly benefits reports for the Western Energy Imbalance Market, next steps on our tariff filing for the ISO's extended day-ahead market, an update on our subscriber participating transmission owner model, phase 2 of our interconnection process enhancements initiative and our deliverability assessment methodology, and the latest on our transmission service and market scheduling priorities design.

JANUARY'S EXTREME COLD

With much of the Western United States experiencing a stretch of very cold weather over the long Martin Luther King, Jr. holiday weekend January 13-15, some areas experienced record-setting levels of demand that strained available resources.

This event was regional in nature, with the Pacific Northwest and Rocky Mountain states seeing unusually severe winter weather punctuated by extreme cold, snow and high winds. To provide an idea of the magnitude of the cold in some parts of the West, Portland and Seattle had temperatures drop into the teens, it fell to 10 degrees in Boise and minus-10 degrees in Spokane. Milder conditions in California and the Desert Southwest saw more typical temperatures for this time of year.

The extreme cold weather caused grid conditions to be strained, prices were high and six balancing authority areas in the Pacific Northwest issued energy emergency alerts (EEA). The alerts ranged from EEA Watch and EEA1 for most balancing authority areas to EEA3 in one case.

Prior to the event, we were in close coordination with market participants to ensure awareness of potential impacts to resources, gas supply and unit availability and outages. And once again, ISO markets proved to be an effective tool in maintaining system reliability. Market exports, including WEIM transfers from California and the Southwest, helped in meeting demand across the region. The California ISO supported areas in the Northwest by clearing extraordinarily high levels of exports, exceeding 6,000 megawatts (MW) in the real-time market on January 13, 14 and 15.

During this critical period, the ISO became a net exporter for all hours of the day. Market participants were also able to depend on wheel-through transactions across the ISO system.

Participation in the market also allowed access to assistance energy transfers. A number of balancing areas that requested assistance managing their grid conditions were able to obtain help from the WEIMs assistance energy transfer program, an opt-in feature that allows WEIM participants to receive market transfers during strained grid conditions. Over the holiday weekend, three entities elected to opt-in and three had done so earlier, for a total of six.

There was also very effective communication and coordination throughout the event between RC West and the impacted neighboring areas, as well as coordination and outreach through our Joint Information Center that serves as our liaison with internal and external stakeholders during grid events, and through our Customer Support teams.

There is no question that balancing authorities in the West were able to take advantage during the cold snap of the WEIMs geographic and resource diversity and the value of the West's significant transmission interconnectivity. This was similar to what occurred last July, when the Pacific Northwest and California WEIM participants aided the Desert Southwest with exported electricity during an extreme heat wave. This cooperation also mirrored the kind of assistance the ISO received during the September 2022 extended heat wave when exports from Pacific Northwest WEIM participants helped the ISO maintain grid stability.

NEW RESOURCES

As highlighted in my Year in Review that was posted on the ISO's Energy Matters blog in December, 2023 was a consequential and productive year for the grid. That certainly was reflected in the large amount of new resources efficiently onboarded last year. Overall, we added to the system 5,660 MW of new resources that were fully operational at the end of 2023. We added another 1,134 MW in what's referred to as COMX, or Commercial Operation for Markets, which means the resources have been built but, for a variety of reasons, won't all be fully operational for up to another six months or so.

Nearly half of those new resources added in 2023 that are operating now – 2,684 MW – were battery storage systems. Those resources have provided a significant boost to system reliability, particularly during the hot summer months when we are working to meet net peak demand. Another 835 MW of battery resources are in COMX, and those are also expected to be fully operational in the coming months.

When we take a step back and look at the overall progress made on integrating battery storage into our system, it represents a real California success story. At the end of 2020 we had just 220 MW of battery storage resources available to grid operators. At the close of 2023, we had 7,188 MW of battery storage on the grid, a more than 30-fold increase in just three years. That is the result of some visionary state policymakers and hard work by the utilities, generators, contractors and many other people who helped make it happen. It is also a pace that we will need to maintain for a number of years.

WESTERN ENERGY IMBALANCE MARKET (WEIM) BENEFITS TOP \$5 BILLION

On January 31, we posted the WEIM Benefits Report for the fourth quarter of 2023 and it showed continued growth in the financial benefits accruing to participants in the WEIM with a cumulative total that now stands at \$5.05 billion. We continue to show the very tangible cost savings associated with participating in the market and perhaps just as importantly, since the report was posted just several weeks after the cold weather mentioned earlier, we also know that the WEIM has tremendous value related to reliability and sharing of resources. We have had tangible reliability benefits for WEIM participants in the summer and this latest event in January again drove home how helpful the market can be in keeping the lights on when grid conditions are strained. The cost savings continue to grow as our markets expand and both the reliability and financial benefits are something we are excited to see grow with the launch of our extended day-ahead market (EDAM). These benefits reflect a great deal of hard work and coordination both within the ISO and with our neighbors throughout the region and it's gratifying to see such important benefits.

EXTENDED DAY-AHEAD MARKET UPDATE

All of us at the ISO were extremely excited and appreciative of the Federal Energy Regulatory Commission's (FERC) broad acceptance on December 20, 2023, of our tariff provisions for the extended day-ahead market (EDAM) design, which was an important milestone reflecting all the hard work done by our team and so many others across the West. We were also heartened when the deadline to file a request for rehearing the Commission's order on EDAM and our day-ahead market enhancements (DAME) tariff provisions passed without any submissions. That means the order is final and not subject to further appeal.

Soon after FERC's order, the EDAM team went to work defining the next steps for the one provision where FERC has requested additional information. Our EDAM transmission revenue recovery proposal was rejected without prejudice and we are now planning to launch a stakeholder process in the first quarter of 2024 to resolve FERC's expressed concerns. We expect to submit a filing later in the year.

It is also worth noting that we are on track to submit our DAME-EDAM compliance filing on February 16, which will include tariff changes associated with: considerations that ISO will use to derive the imbalance reserve deployment factor it will include in the business practice manual, clarification of the balancing area by balancing area market power mitigation procedures, removal of provisions regarding the transmission revenue recovery mechanism, also known as the EDAM access charge, and other minor clarifications we committed to undertake in our answer.

SUBSCRIBER PARTICIPATING TRANSMISSION OWNER MODEL

On January 12, we filed a response to FERC on the deficiency letter received from the Commission regarding our request for approval of the subscriber participating transmission owner model. FERC raised five questions, all focusing on mechanics surrounding the non-subscriber usage rate. Our response includes explanations and tariff clarifications responsive to FERC's requests and we look forward to the next steps in this process. Comments are due on February 2.

I also wanted to note that Pattern Energy in January submitted its application for its SunZia transmission line to become a subscriber participating transmission owner under ISO operational control. A public Notice about the application and the stakeholder review process it initiates was posted on January 24. Stakeholders have 60 days to comment on the application from the day of the Notice, with comments due by March 25.

The 552-mile SunZia project will connect generation resources in the Southwest with markets and customers in California and Arizona. We look forward to further exploring SunZia's interest in bringing clean wind energy from New Mexico into the ISO balancing authority.

INTERCONNECTION PROCESS ENHANCEMENTS (IPE) PHASE 2 AND DELIVERABILITY ASSESSMENT METHODOLOGY

As we continue onboarding large amounts of clean energy to the system, interconnection reform, as we have discussed here in the past, is increasingly critical. Our team has been working hard with stakeholders to redesign the interconnection process in a manner that will enable greater efficiency and certainty for interconnection customers, load-serving entities, and the ISO, while aligning with FERC's July 2023 order on interconnection.

Central to our proposal is the zonal approach, which operationalizes the Memorandum of Understanding we signed with the California Public Utilities Commission and California Energy Commission in December 2022. The zonal approach will prioritize interconnections in areas where transmission either exists or has been approved through the Transmission Plan. Additional reforms will shift the interconnection request process from one that is currently more speculative and informational to one requiring greater investment in and advancement of generation projects prior to the interconnection request window. Only the most advanced and commercially viable projects will move to the study process, resulting in more meaningful study results and greater efficiency for the ISO and transmission owners involved in completing the studies. The ISO is working to keep the process efficient and progressive, with the goal of moving commercially viable projects toward completion and creating more limitations around projects that fail to demonstrate continued and consistent progress.

The ISO team is refining details on these changes in track two of the initiative and plans to release a draft final proposal on February 8. You will also be hearing from Neil Millar, our Vice President of Infrastructure & Operations Planning, about why these reforms necessitate postponement of our next interconnection window, otherwise known as Cluster 16, which had been set to open this April. The ISO's interconnection queue now contains more than 160 gigawatts (GW) of resources, with an additional 354 GW of Cluster 15 applications in 2023. We need to implement the new FERC requirements and IPE reforms to process these interconnection requests in a timely manner and maintain the necessary pace of onboarding new resources.

To make sure we get these reforms right, the has ISO engaged stakeholders through a series of intensive working group meetings, where stakeholders and staff openly discussed underlying challenges with the current process and worked collaboratively to identify solutions. We remain on track with our intention of bringing a final comprehensive package of reforms to the ISO Board of Governors for approval in May.

In January, the ISO also made final a set of changes to its deliverability assessment methodology. These changes reflect the continued evolution of grid needs to enable and support the clean energy transition underway in California, as well as careful consideration of risk tolerances in balancing reliability requirements with the need for timely connections of deliverable resources to the grid. These changes are anticipated to make more deliverability available or available earlier than would have occurred previously.

Several of the changes can be implemented in the 2024 Transmission Plan Deliverability (TPD) allocation process and could provide some additional TPD allocations or at least remove some upgrade requirements for certain projects. The ISO expects that the suite of changes will unlock deliverability while maintaining reliability and upholding the integrity of resource adequacy program practices and principles. No modifications to the ISO tariff are necessary, as most of the changes are ISO management functions, with limited changes to our Generator Interconnection and Deliverability Business Practice Manual.

TRANSMISSION SERVICE AND MARKET SCHEDULING PRIORITIES DESIGN

In January, we also started manual implementation of the recently FERC-approved transmission service and market scheduling priorities design. On January 16, we published the monthly available transfer capability (ATC) numbers on select interties for next summer – June 2024 and beyond. On January 18 through the 31st, we opened a request window where market participants can submit ATC requests for the upcoming summer to establish wheeling through priority across our system.

We recognize that our regional partners are in the midst of planning their summer operations and we wanted to start manual implementation of the approved design to support these preparations. We will be conducting this manual process in February and March as well, at which point we expect the implementation of new systems and functionality in April that will automate the ATC publication, request submission, and evaluation prior to the summer. This will also enable the reservation of daily ATC for establishing wheeling through priority in June and beyond.