



Memorandum

To: ISO Board of Governors and WEIM Governing Body
From: Elliot Mainzer President and Chief Executive Officer
Date: May 4, 2022
Re: CEO report

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

INTRODUCTION

For my May CEO Report, I will touch on the outstanding work by staff to publish our extended day-ahead market (EDAM) straw proposal, an update on some of the work taking place that is complementary to EDAM, our new 2022-2026 Strategic Plan, the Western Energy Imbalance Market's (WEIM) historic milestone of more than \$2 billion in benefits for participants and the addition of two new members, the ISO's new records for renewables powering the grid, an update on our preparations for the summer of 2022, progress on interconnection queue reform, the final release of the ISO's 20-Year Transmission Outlook, and our decision regarding workplace flexibility.

EDAM STRAW PROPOSAL

On April 28, 2022, we reached an important milestone with the posting of the straw proposal for the EDAM initiative. I am deeply appreciative of all the excellent, hard work done by the ISO's EDAM team and by our partners and stakeholders to get this document out on the street. The straw proposal was published on schedule following weeks of extensive collaboration by ISO staff and stakeholders from across the Western Interconnection to develop a market structure that will enable entities outside the ISO balancing authority area to participate in an enhanced day-ahead market, while still maintaining their individual balancing authority autonomy.

Under the EDAM, participants will realize important reliability and economic benefits by leveraging resource diversity across the Western Interconnection. The proposal addresses key areas that include resource sufficiency, transmission compensation, and accounting for GHG programs within the EDAM footprint.

I am excited about the in-person stakeholder meetings scheduled for May 25-26, and the discussions we will be having with stakeholders on the proposal, as they prepare to submit their written comments by our June 16 deadline. It is also important to keep in mind that this is our *straw* proposal. We will have iterations of revised proposals as we go through the stakeholder process and make sure the voices of our many partners are reflected in the final design. At the same time, the WEIM Governance Review Committee has been looking at appropriate governance-related enhancements.

When we set off to develop the EDAM, we felt it was equally important to enhance other elements of our day-ahead and real-time market design to optimize the benefits we can obtain from the EDAM. Therefore, we are working on four other initiatives simultaneously that support and feed into the EDAM market design efforts.

DAY-AHEAD MARKET ENHANCEMENTS

The first of these efforts is the day-ahead market enhancement (DAME) initiative, where we are engaging with stakeholders to develop an imbalance reserve product that procures capacity in the day-ahead market to ensure there is sufficient capacity to meet real-time energy imbalance needs. The imbalance reserve product will be an important part of the extended day-ahead market because it will increase economic benefits by optimizing this reserve capacity across the West. We posted a third revised straw proposal for the DAME initiative on April 22 that addressed extensive feedback from stakeholders. We held our first stakeholder meeting to discuss the third revised straw proposal on April 29 and continue to work with stakeholders on this important initiative.

RESOURCE SUFFICIENCY EVALUATION

We have also been working over the past year with stakeholders to enhance the accuracy of the resource sufficiency evaluation (RSE) in the WEIM. We are now entering a second phase in that effort in which we will look more closely at alternatives to the current consequence of failing the tests, which today could limit transfers to a balancing authority area that may be in need of transfers to maintain its reliable operations. We will be considering potential methods to compensate energy transfers between balancing authority areas under emergency and normal conditions. We will continue to engage stakeholders in more workshops to review analyses related to several aspects of the RSE that we view as crucial for considering additional changes. We intend to post a straw proposal on these topics this summer, recognizing that stakeholders have requested we implement any necessary changes as soon as possible. The results of this effort to improve the WEIM's RSE for the real-time market will also likely inform the approach taken for the EDAM's RSE conducted in the day-ahead market.

WHEEL THROUGHGS

As part of the transmission services and market scheduling priorities initiative, we are developing a long-term approach for external entities to obtain high-priority scheduling rights to wheel across the ISO's system. The ultimate goal of this initiative is to replace current wheeling limitations with a refined process that will contribute to efficient and reliable West-wide collaboration. Late last year, we held a series of workshops on this topic and have since engaged OATI consultants to help us develop a straw proposal, reflecting what we already heard during the workshops and for comprehensive stakeholder review later this spring.

PRICE FORMATION ENHANCEMENTS INITIATIVE

Finally, as we look to extend the day-ahead market, it is also critical that we consider enhancements to the market design overall that strive to improve efficiency and reliability through market price signals. We are about to launch an important price formation initiative in which we

will examine enhancements to scarcity pricing and pricing of fast-start resources' contributions to grid reliability. As we noted in the EDAM straw proposal, we will also be examining the EDAM market power mitigation given the interdependency of scarcity pricing and market power mitigation.

FINAL 5-YEAR STRATEGIC PLAN

The ISO's new 2022-2026 Strategic Plan is now final and ready for approval at this meeting. The Plan is the result of extensive engagement and outreach with our ISO Board of Governors, the WEIM Governing Body and a broad range of customers and stakeholders within California and throughout the West. The Plan will serve as the central organizing principle for the ISO and guide the priorities of our internal and external efforts over the coming years. The Plan will also support our work to deploy human and financial resources as efficiently as possible and ensure we are meeting the most pressing needs of our customers and stakeholders in California and throughout the region. And it will help us continue to retain and attract a highly skilled and engaged workforce through a flexible and individualized approach to remote work in a post-pandemic world.

WEIM'S HISTORIC MILESTONE AND ADDING TWO NEW PARTICIPANTS

On April 21, we announced that the WEIM surpassed more than \$2 billion in cumulative benefits since the rapidly growing real-time market was launched in 2014. As I said in our media release, this milestone really is further evidence of the value of West-wide market coordination. We are excited about continuing to work with all of our great partners to bring even more value to the people we serve.

We were also able to announce in March that Avista Utilities and Tacoma Power, which serve a combined 600,000 electricity customers in the Pacific Northwest, have officially joined the WEIM. And, as you know, we announced on May 3 that Bonneville Power Administration and Tucson Power are now active WEIM participants. With these four new participants, the WEIM has 19 members serving nearly 77% of the demand for electricity in the Western U.S.

Onboarding of new participants continues to go very well and we have great appreciation for these utilities and for their partnerships and all the hard work that has gone into these agreements. They bring tremendous value to the WEIM and we look forward to creating significant economic and environmental value for their customers.

NEW RECORDS FOR RENEWABLES

In mid-April, we announced that the ISO set a new record for electricity generated by renewables on the ISO grid, with 97.6% of power coming from clean sources on April 3. We went on to set a new record on the afternoon of April 30 when 99.87% of the ISO grid was being served by renewables.

As with the last record set in March, these new benchmarks occurred briefly. But they provided another compelling glimpse of what the grid can look like when we reach the carbon-free future called for in California energy policy.

These accomplishments are a tribute to the hard work and collaboration of a lot of people, from policymakers and system operators and many others in California and across the West, and the records demonstrate progress made to reliably achieve the state's clean energy goals. There are, however, many pieces that still need to fall into place before we have a fully operational decarbonized grid for longer periods of time throughout the year.

SUMMER READINESS ACTIVITIES

Final preparation is underway to ensure summer readiness as we get ready to roll out changes and cross check our communications and operations protocols between the ISO and our partners.

Among other actions, our 2022 Summer Loads and Resources Assessment is scheduled to be released after this week's Board meetings with a broad stakeholder call scheduled to review the details of the report with our stakeholder community.

Key findings of the Assessment include:

- The added net qualifying capacity (NQC) from June 1 2021 to June 1, 2022 will be more than 4,000 megawatts;
- From September 1, 2021 to September 1, 2022, the increase will be 2,582 MW NQC;
- This gain is offset by a 1,005 MW higher load forecast for 2022 based on the latest CEC forecast;
- While hydro conditions have rebounded as of today to better align with last year, hydro conditions on April 1, 2022 were 38% of average. In April 2021, they were 60% of average;
- The new resources added since last year are helping improve performance, providing marginal improvement despite the hydro conditions;
- As in the past few years, we remain vulnerable to widespread heat events that drive up load and compromise import levels, especially with hydro conditions again being significantly below average.

We also held our second Summer Readiness Leadership Roundtable on April 27, bringing together 28 entities for a robust conversation about summer preparedness across the collective footprint. Also discussed were anticipated reliability concerns, changes that have occurred on the system since last year, and opportunities identified for deeper collaboration to ensure well-coordinated actions that will be critical again this year as we strive collectively for reliable summer operations.

I appreciate the leadership engagement and the shared responsibility to work together at a deeper level across our organizations. Some of the key take-aways and themes that we heard during the Roundtable discussion with attendees included:

- The global impacts of the supply chain and the impact it has on development projects is a concern as expected projects could see delays;
- This could impact the future more as we look towards 2023 and 2024 supply and is a significant common theme;
- A number of entities expressed concern for increased load peaks this summer but said overall they feel prepared;

- There is concern about inflation and the cost of lithium and the potential impact on battery storage;
- Despite some improvement in hydro conditions, it will be important to efficiently manage hydro for ramp hours later in the September/October timeframe;
- Wildfire risk and extreme heat events are a common concern across the region;
- New battery storage coming online is helping the supply picture;
- Overall, increased coordination across the footprint is beneficial given the growing interdependency of our collective operations.

Also, on May 1 we rolled out the new NERC standard emergency alert levels which will provide more consistency and clarity in communicating alert levels. To ensure customer readiness and preparedness, we have provided customer training and are reviewing external communications protocols with various stakeholder groups.

Other summer readiness activities that are taking place internally include refreshing our incident command response in relation to grid emergencies to ensure coordinated communications between our operations staff and external entities through tabletop exercises and drills that will take place in early May. As we do every year, our operations teams will be conducting summer outlook meetings in person at the ISO the week of May 16. Emergency processes and procedures will be reviewed and tested under a peak-load scenario. Also, the ISO's summer outlook, load and weather forecasts, and Cal Fire forecasts will be evaluated for any potential operational planning concerns and activities.

We have several other summer preparedness activities underway with customers and stakeholders, including specific meetings with state agencies, the investor-owned utilities and other customer groups focused on the Emergency Load Reduction Program (ELRP) where the Resource Adequacy outlook, demand response programs and communications protocols are reviewed. Regular coordination meetings with senior level officials at the investor-owned utilities that were initiated last year are also well underway for summer 2022 planning.

INTERCONNECTION QUEUE REFORM

I would also like to report on the ISO's progress on interconnection queue reform. Following a flood of new applications in April of 2021 that added more than 53 GW of renewable generation and more than 100 GW of storage to the queue, the ISO sought some immediate relief to manage the volume and embark on a queue reform effort. Later in this meeting, you will be asked to approve the first phase of those enhancements. These include measures to better align projects moving through the queue with procurement interest, and measures to "raise the bar" for projects in the queue to enable more viable projects to proceed and encourage those that are less viable to step aside.

We are also developing additional enhancements in a second phase that is well underway and that will be brought to you in the fall. We have received widespread support for the need for enhancements, and while varying stakeholder commercial interests regarding these highly sensitive topics will rarely generate 100% alignment with these types of changes, we have received excellent cooperation and support for the efforts and appreciate the active industry engagement as we work on these enhancements.

In addition, we are examining the need for several more immediate changes to our annual transmission planning process and expecting to begin a stakeholder process on those changes more immediately. Further, we have started a review of the FERC Notice of Proposed Rulemaking (NOPR) on this issue that was released recently. The proposed rulemaking anticipates widespread changes across all public utility transmission providers for regional transmission planning, cost allocation, and generation interconnection processes. On this latter issue of the NOPR, I will be keeping you informed of our review once we sift through the full details of the extensive 347-page document.

FINAL 20-YEAR TRANSMISSION OUTLOOK

Our 20-Year Transmission Outlook is now final after revisions made in response to feedback from members of the BOG and from stakeholders. We have added language to the report that further contextualizes and clarifies the cost ramifications over the next 20 or 30 years. The new language spells out, among other things, that depending on what ultimately gets built and the methodology of cost allocations, not all the new transmission costs would be borne by California ratepayers.

Also, in response to stakeholder comments, the impact of all the transmission costs were translated into an annualized cost impact assuming the projects would be phased in between 2030 and 2040. Using the economic parameters employed by the ISO in our annual transmission planning process, these costs translate to approximately 1.5 cents per kWh, phased in between 2030 and 2040. And we note that this impact must be considered in the context of the diverse fleet of resources they access and the benefits provided by a diversified resource fleet in reducing total costs to consumers. We are now looking forward to our next steps and continued coordination with the CPUC, CEC and others on improved coordination around transmission planning, the integrated resource planning process, procurement, and transmission queuing.

WORKPLACE FLEXIBILITY DECISION

As all of you know, like so many organizations, the ISO's workforce and our activities in the labor market have been significantly affected by the pandemic. Specifically, we have seen an increase in retirements and voluntary resignations as well as challenges with recruiting. One way we will be responding to changes in the labor market is to adopt a contemporary approach to workplace flexibility, which we announced in an email to all employees on April 1.

This model is based largely on an individualized approach to flexibility, allowing our employees, in consultation with their managers, to work where they are most productive. Our employees have been steadfast in maintaining their commitment to the work we do and have maintained their tremendous productivity throughout the past two years. I am confident that they will thrive and continue delivering on our commitments to our stakeholders, customers and to the public. I am pleased to report that we have already experienced a benefit from this model in our ability to attract top talent into the ISO.

We have some additional refinements to be made on this new model and will be working on making our policies and procedures final during the month of May and following up with

implementation. Also, over the next three to 18 months, we will making changes to our Folsom campus to maximize its benefit to employees and stakeholders.

Additionally we have started to open the Folsom campus to stakeholder meetings and are excited to welcome our stakeholders back to in-person meetings when feasible. For those meetings where we start to offer in-person engagement, we will also offer virtual options to allow for greater flexibility.