

Memorandum

To: ISO Board of Governors
From: Elliot Mainzer, President & Chief Executive Officer
Date: November 1, 2021
Re: CEO report

This memorandum does not require Board action.

INTRODUCTION

With this report, I touch on resource adequacy and transmission planning, EDAM development, the ISO's October 28 Storage Forum and ISO participation at COP 26.

RESOURCE ADEQUACY AND TRANSMISSION PLANNING

With the recent heavy rains and snow in California, we have put summer 2021 officially behind us and have turned our attention to winter reliability and summer 2022 and beyond. With global and national concerns about natural gas price volatility and supply uncertainty, we are coordinating with the CPUC, CEC and others on winter reliability. According to the CPUC's October 21st Winter 2021-22 Southern California Reliability Assessment, the most significant risk variables are cold and dry weather conditions combined with an extended outage of the El Paso interstate pipeline in Arizona. The report concludes, "Service to most core – or residential and small business – customers is not at risk under current conditions. However, there is uncertainty regarding gas supplies to SoCalGas' Southern Zone, which serves San Diego, Riverside, and Imperial counties, due to the El Paso interstate pipeline outage. Curtailments, or shut-offs, of customers in the Southern Zone are a possibility this winter if the pipeline is not repaired. When demand cannot be met, SoCalGas implements its curtailment process, which begins with noncore electric generation customers and proceeds as laid out in SoCalGas Tariff Rule 23." We will continue to monitor and evaluate conditions in coordination with the CPUC, CEC and other entities in California.

Turning to summer 2022 and beyond, we are in the process of reviewing the CPUC's most recent Proposed Decision on Summer 2022-23 that was released on October 29. The CPUC found that a range of 2,000-3,000 MW of new supply- and demand-side resources will help address grid reliability in the most extreme circumstances in 2022 and 2023. At the ISO, our primary focus is ensuring sufficient interconnection and transmission capacity to connect the next wave of clean capacity resources necessary to come on-line the next few years to meet CPUC and other procurement goals. This work is paired with on ongoing efforts to complete the

2021-22 transmission planning cycle and produce the findings from our 20-year Transmission Outlook in early 2022. We are currently refining transmission planning, integrated resource planning and procurement processes and timetables in coordination with the CPUC and CEC and are holding stakeholder meetings to identify practical and actionable reforms to address the major backlog of requests in our transmission queue. This work comes at the same time that we recently submitted comments to the Federal Energy Regulatory Commission under their Advanced Notice of Public Rulemaking on transmission planning and interconnection reform. In that docket we highlighted the benefits of more proactive and forward-looking transmission planning processes. The ISO is committed to continued leadership, innovation and collaboration in making transmission planning and interconnection as effective and efficient as possible for those who depend on our grid and to partner effectively with other transmission providers on inter-regional transmission development.

EXTENDED DAY-AHEAD MARKET (EDAM) DEVELOPMENT

We continue to receive positive feedback and high levels of engagement following our Extended Day-Ahead Market Forum on October 13. As we position EDAM as the next major step in West-wide market integration, we are preparing for our first formal stakeholder meeting on November 12. In advance of that meeting, we have been engaging stakeholders from across multiple sectors on the timing, cadence, format and inclusion model for the stakeholder process. We are mobilizing for a very intensive and focused stakeholder process in order to have a completed market design by the end of 2022, implementation testing and participant readiness across 2023, and a first class of EDAM market participants ready for onboarding in early 2024.

The stakeholder process for EDAM will seek to harness the collective knowledge and experience of stakeholders across the West. The ISO will provide meeting facilitation, content synthesis and drafting, but EDAM is going to be – in the words of FERC Commissioner Allison Clements – a market “designed by Westerners for Westerners.” The ISO looks forward to the active engagement of our partners across the region in meeting these ambitious timetables and making EDAM a reality. The ISO recognizes that the work on EDAM is incremental to a significant workload on other issues as well, some of which are precursors to EDAM design, including wheel-throughs and imbalance reserves. In addition to working to fill existing vacancies and de-prioritizing non-essential work, we are also evaluating overall personnel requirements and will consider bringing on additional supporting resources as necessary to meet our significant workload requirements. The pandemic has created challenging labor market conditions for the ISO and others in our sector.

OCTOBER 28 STORAGE FORUM

The ISO continues to be at the forefront of the energy storage revolution. We expect to have 3,000 MW of lithium-ion storage on our grid by the end of 2022 and are working with market participants and other stakeholders to envision the next wave of market design enhancements. Such design enhancements will be necessary to fully unlock the potential of energy storage resources of diverse durations and technologies to provide clean capacity and reliability services to the California grid. As part of this dialogue, the ISO held a virtual Storage Forum on October 28 that was attended by over 700 people. The Storage Forum included a set of very informative panel discussions hosted by ISO Market Surveillance Committee member Ben Hobbs and a group of top experts in the field of market design and technology innovation. The panelists

offered many insights and addressed questions from the audience that will help inform goals and objectives for the ISO's storage enhancements initiative. Thanks to the ISO's Storage Sector Lead Gabe Murtaugh for his leadership in organizing the Forum and to Ben Hobbs and the other panelists for their contributions to a very informative session.

The Storage Forum came just two days after FERC accepted the ISO's energy storage and distributed energy resources (ESDER) 4 tariff revisions. ESDER began in 2015. Over its four phases, the ISO has published 28 policy papers, reviewed stakeholder comments 40 times, and held 62 public stakeholder meetings. ESDER resulted in 6 separate tariff filings with 13 distinct sets of enhancements. I am very grateful for the work of all the ISO staff and stakeholders who helped support this very important initiative. With the advent of our storage enhancements initiative, this most recent FERC filing likely represents the end of the ESDER initiative, but the ISO is excited to maintain its global leadership role in helping enable energy storage as a key technology on the path to a reliable, clean power system.

ISO PARTICIPATION AT COP 26

The 26th UN Climate Change Conference will be in Glasgow, Scotland from Oct. 31 to Nov. 12. I will be appearing virtually on a panel on Thursday, November 4 entitled Unlocking Grids to Decarbonize Power Systems Globally with the G-PST Consortium. I have been asked to provide a brief overview of California's progress on renewables and the role we see consortium research playing as we move toward a carbon-free grid.

The ISO is one of six system operators from around the world who are founding members of the G-PST Consortium. We and the other founding system operators from the UK, Australia, Ireland, Texas and Denmark are leading a Research Agenda Group to help inform the large-scale research and development investments that must occur to fully integrate all the renewable resources coming online in California and around the world.

Our work with the G-PST facilitates our ability to stay up to date about what others are doing to address operational challenges and also helps us fulfill our goal of sharing our expertise, best practices and lessons learned with other nations who are working to successfully integrate clean energy onto their grids in a reliable and affordable fashion.

The ISO has been involved with the G-PST Consortium since its launch just two years ago and I am honored to be participating in this important event. We will all be time challenged, however. Because of our time difference with Scotland, my panel begins at 4:30 a.m. Pacific Time. You can watch it live on the U.S. Center YouTube Channel [here](#). I also expect the session to be archived on that site for viewing at a more convenient hour.

All of us at the ISO are looking forward to a busy and productive fall season.