

# Memorandum

**To:** ISO Board of Governors  
**From:** Steve Berberich, President and Chief Executive Officer  
**Date:** July 20, 2017  
**Re:** CEO report

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*This memorandum does not require Board action.*

## OVERALL SYSTEM CONDITIONS

System conditions have been challenging with two heat waves so far this year and a number of fires burning across the system. The most recent fires of concern, the Whittier and Garza fires, burned near transmission lines and threatened local reliability. As with most of the fires, we thank the brave men and women who work closely with us and the affected utilities to contain the fires while helping protect critical transmission assets.

During a west-wide heat wave on June 20 and 21, the ISO declared a flex alert requesting conservation on the system. Over the preceding weekend, in reviewing generating assets and likely load profiles, and with outages and competition from other Western Balancing Authorities, we had a forecast capacity margin of only 92 MWs – a very slim margin – for Monday June 20 precipitating the flex alert. We credit conservation efforts with reducing demand significantly and preserving reliability on those two days.

## SOLAR ECLIPSE

The ISO is in the final planning stages for the upcoming solar eclipse which will occur the morning of August 21. Preparation will culminate in the days leading up to the eclipse as we have clearer information on weather and load conditions. Based on our simulations, we believe we can adequately manage the large ramp out and ramp in of solar resources. We have also been working with the California Public Utilities Commission and the Utilities on coordination efforts. Of critical importance is that load patterns remain predictable that day in order to manage the extreme ramps. We ask the public to be alert to communications on how to shape loads that day, any flex alerts or other notices on the eclipse' expected impact on the electric system.

## DELTA ENERGY CENTER

On January 29, the Calpine Delta Energy Center (880 MW) experienced a fire in the steam turbine collector house and has been out of service. To help manage the heat waves, Calpine made modifications allowing the unit to operate without the steam generator – up to approximately 500 MW. We are very appreciative of Calpine's efforts to restore at least

partial operation thereby helping us ensure reliability in the Bay Area during recent heat waves.

## **ENERGY STORAGE AND DISTRIBUTED ENERGY RESOURCES INITIATIVE**

The central focus of the energy storage and distributed energy resources (ESDER) initiative is to lower barriers and enhance the ability of transmission grid-connected energy storage and distribution-connected resources to participate in the ISO market. The number and diversity of these resources are growing and represent an increasingly important part of the resource mix. Integrating these resources will help lower carbon emissions and add operational flexibility.

The ESDER initiative is a comprehensive, long-term initiative covering several related but distinct topics. ESDER Phase 2 targets specific enhancements for demand response resources' participation in the ISO market. The proposal includes new types of demand response performance measures which will lower barriers to ISO market participation. The proposal also includes revisions to the definition of station power to provide increased regulatory certainty to storage resources.

## **ALISO CANYON**

The joint summer analysis is complete and, assuming there are no significant disruptions to the gas or electrical systems, we should be able to reliably serve all customers for the balance of the summer. The risk remains associated with loads higher than predicted, outages on the gas system or significant transmission system outages impacting the import of power, any one of which could impact electric reliability.

The ISO has taken a number of steps during the Aliso Canyon outage and we will be asking, at this Board meeting, to make a number of the mitigations permanent. In the long run, these measures will improve gas/electric coordination not only associated with Aliso Canyon but across the wider spectrum of system coordination.

## **AUDIT COMMITTEE**

The Audit Committee serves as a critical sub-committee and often has the opportunity to see deeper into ISO operations and the Board of Governors recognize the value of that insight. Governor Ash Bhagwat has resigned from the Audit Committee consistent with the rotation process the Board recently developed to expose more Governors to the ISO operations. We thank Governor Bhagwat for all he has contributed to the Audit Committee since its formation as a separate advisory committee. The Board will select a new Audit Committee chair and a new member, to replace Governor Bhagwat.

## **RENEWABLE ENERGY PRODUCTION**

The most recent solar peak of 9,914 MW occurred on June 17, 2017 12:12 pm. The most recent wind generation peak of 4,985 MW was set on May 16, 2017 at 5:26 pm. Geothermal, small hydro and other renewables also contribute to California's renewables mix.