California Independent System Operator Corporation



Memorandum

To: ISO Board of Governors

From: Steve Berberich, President and Chief Executive Officer

Date: September 5, 2013

Re: CEO report

This memorandum does not require Board action.

OVERALL CONDITIONS

While temperatures have remained mild, fires continue to plague the state and dry conditions persist. We have had several transmission line de-rates and outages due to fires burning near transmission lines, most recently during the week of August 26 when the Deer Fire caused significant de-rates of the California-Oregon intertie. Peak load conditions and Santa Ana winds are common in September in Southern California and it is usually one of the most challenging operating periods.

From a load perspective, in late June - early July there was a period of high temperatures statewide. Since that time, temperatures have tended to be normal or below normal. A "Flex-Alert" was declared for Monday, July 1, and Tuesday, July 2, for Northern California. At that time, high load conditions, coupled with a Diablo Canyon outage resulted in severely limited available resources. We are deeply gratified to say that the public responded well to the call for conservation and demand subsided.

On August 29, a restricted maintenance alert was issued for Southern California due to gas system constraints. In a gratifying display of gas/electric coordination, Southern California Gas alerted us that there were potential gas pressure issues that may impact supply to generators. We helped them by ensuring additional gas consumption was not added to the system by limiting maintenance to ensure generators that were online remained online, and additional less efficient units didn't become needed.

SAN ONOFRE WORKING GROUP

As previously reported, the ISO has been part of a working group to develop recommendations in response to the San Onofre retirement, which creates a complicated mix of needs for local capacity and energy within constrained load pockets, voltage support in the immediate area of San Onofre, and resources that can respond in time to address contingencies. The challenge is complicated further by the compliance deadlines for several large once-through cooled power plants in the region. The working group released a preliminary set of recommendations on September 3 that describe an "all of the above"

resource mix of preferred resources, transmission, and generation solutions. The working group's preliminary report¹ summarizes its recommendations as follows:

- (1) Consider to procure/develop about 3,250 MW of preferred resources -- local energy efficiency, demand response, renewable generation, combined heat and power, and storage – for a target of about 50% of needs.²
- (2) Consider to procure/develop the transmission, including infrastructure that provides voltage support or enhances resource sharing between Orange County and San Diego, and procure/develop about 3,000 MW of conventional generation, to meet the remaining needs in the region, including load growth.³
- (3) Establish backstop permits so that once-through cooling requirements can be quickly deferred and/or generation resources can be quickly deployed in the event needed resources in (1) or (2) are not fully developed on a schedule to meet reliability needs.

The CPUC has a procurement proceeding underway where many of these issues will arise. In addition, the ISO will identify possible transmission solutions for your consideration in January, which could significantly reduce the need for generation. The recommendations resulting from the ISO process will become inputs into the needs addressed in the CPUC long-term procurement proceeding currently underway.

ENERGY IMBALANCE MARKET

Implementation of the energy imbalance market with our first partner – PacifiCorp -- is making quick progress. The market design proposal has gone through three revisions and will be released in draft final form on September 23. The market design details will be presented to the Board for consideration at the November board meeting. In addition, an EIM governance paper was published on August 13 and discussed a week later at the ISO's stakeholder meeting in Portland, Oregon. It will go through two more revisions before coming before the Board at the December board meeting. Necessary modifications to the ISO and PacifiCorp IT systems are moving along well and tracking to the timeline. We know the schedule is aggressive and we are working with stakeholders to fully understand how the market will work and designing safeguards to ensure no stakeholder is disadvantaged when the market goes live.

³ This requires procurement of about 1,500 MW of conventional generation in addition to what is already authorized.

¹ "Preliminary Reliability Plan for LA Basin and San Diego", prepared by staff of the California Public Utilities Commission, California Energy Commission, and California Independent System Operator, for the September 9, 2013 Joint CEC-CPUC Workshop Southern California Electricity Infrastructure and Reliability Issues, posted on the CEC website on August 30, 2013.

² This requires procurement of about 1,000 MW of preferred resources in addition to what is already being counted on.

RENEWABLE GENERATION

Solar generation repeatedly reached new peaks since my last CEO report. The most recent solar generation peak of 2,573MW was set on August 9, 2013, at 12:44 p.m. The wind generation peak remained as reported in the last memo, of 4,302MW, June 23 at 12:22 a.m.