

Memorandum

To: ISO Board of Governors

From: Keith Casey, Vice President, Market & Infrastructure Development

Date: March 15, 2012

Re: Briefing on the 2012 Summer Loads and Resources Assessment

This memorandum does not require Board action.

Overview

The initial ISO assessment for summer 2012 showed adequate resources to handle a broad range of operating conditions. However, the analysis was completed before the announcement regarding the risk of a longer outage at the San Onofre Nuclear Generating Station (SONGS). The ISO cautions that if both unit 2 and 3 remain offline this summer, Southern California may face local reliability issues. Managing the impacts and contingencies in San Diego and the ISO portion of the grid serving the Los Angeles Basin will be essential for maintaining reliability.

We are working together with Southern California Edison and San Diego Gas & Electric as well as others to develop mitigation measures should the SONGS units not return to service this summer. Technical studies are underway and we will present the system updates at the March 22-23 Board of Governors meeting.

The ISO may call on demand response and interruptible load programs during periods of strain on the grid. Similarly, *Flex Alerts* (paid and nonpaid TV and radio conservation appeals) are effective in reducing demand if issued well in advance of peak periods so consumers can respond. The *Flex Alerts* could generate 1,000 MW or more of conservation this summer if the level of funding for the program is significant.

Dry winter impacts

Statewide snow water content measured on March 1, 2012 was 30% of the April 1 average. The runoff forecasts in the early summer months are well below average for all the basins. As of the date of this report, California is facing one of lowest snowpack levels in history, even with recent storms. Hydroelectricity capacity available to serve peak summer demand is expected to be reduced from what it would be under normal years by 1,137 MW.

Key reservoir levels are currently not of concern because of above average precipitation in previous years.

Outlook for operating reserves

If both SONGS units return to service in time for the peak summer period, the planning reserve margin for summer 2012 is projected to be significantly greater than the California Public Utilities Commission 15% resource adequacy requirements. Operating reserves margins would be more than adequate as well and the probability of involuntary load curtailment is low. In fact, the chance of rotating outages would be less than 1% for the ISO as a system for a fourth consecutive year. Even one SONGS unit back in operation could significantly relieve the local constraints in Southern California.

Other specific key findings

The annual ISO summer assessment projects likely peak demand along with available supply and imports levels.

- The ISO peak demand is projected to reach 46,352 MW during summer 2012, under normal conditions. This is 923 MW more than the actual peak of 45,429 MW recorded in 2011, but less than the 2011 forecast under normal temperatures. The decrease in the 2012 peak demand forecast is because of Moody's Analytics conservative economic recovery prediction for 2012 as compared to its 2011 economic forecast.
- The ISO projects that 50,341 MW of net qualifying capacity will be available for summer 2012, which is a 757 MW increase from June 1, 2011. The net qualifying capacity is the maximum capacity eligible and available for meeting the CPUC resource adequacy requirement counting process.
- Summer imports under high peak demand conditions are projected to vary from 8,600 MW to 11,400 MW for the ISO. The service territories of SCE and SDG&E could see 8,800 MW to 11,300 MW of imports. Imports into PG&E are likely to range from 1,400 MW to 3,400 MW for NP26.

Summer preparedness activities

In addition to producing the summer assessment and sharing its findings, the ISO also hosts summer preparedness meetings with the Western Electricity Coordinating Council (western regional reliability organization), Cal Fire, electric and gas utilities, and adjacent balancing authorities. The ongoing relationships help ensure everyone is ready to respond effectively and collaboratively during times of system stress.

Year round, ISO grid operators undergo a week of simulator training every other month. Multiple scenarios are used including a wide range of natural disasters as well as a variety of challenging grid conditions to test relevant operating procedures and best utility practices. In conjunction with the California Electric Training Advisory Committee, the ISO also holds annual summer operations workshops to coordinate with neighboring grid operators, training together so that we are ready for major heat waves or fires this summer that could cause system disturbances.