

Memorandum

To: ISO Board of Governors

From: Karen Edson, Vice President, Policy and Client Services

Date: November 6, 2014

Re: State, Regional and Federal Affairs Update

This memorandum does not require Board action.

STATE AFFAIRS

Regulatory Update

Overgeneration Communication Campaign:

The ISO is beginning to inform a broad audience about the significant challenges and wide range of opportunities surrounding the future energy landscape. While it is widely known that the focus on greenhouse gas reduction and the resulting shift toward renewable energy resources is bringing previously unanticipated issues, the details of those issues and the opportunities created by them are less well known.

One of the main issues is overgeneration. In the past, overgeneration has been a relatively rare instance typically occurring in the middle of the night, for example, during spring snow melts with excess hydro energy and large base-load nuclear plants on-line. Data submitted by the ISO in testimony at the current long term procurement plan proceeding, however, shows that due to the abundance of solar energy and load reduction programs, overgeneration may soon be a daily occurrence, and will occur in the middle of the day. Without effective means to address the challenge of daily overgeneration events, there may be need for significant curtailments to renewable resources, which would negatively impact greenhouse gas reductions.

The ISO has begun targeted communications with influential groups in many forums including the California Public Utilities Commission's (CPUC) Energy Division and Office of Ratepayer Advocates, the California Energy Commission (CEC), the Environmental Defense Fund, the Natural Resources Defense Council, UC Davis Energy Institute, the Industrial Environmental Association of San Diego, the Large Solar Association, and more. In this communication effort, the ISO is pointing to the emerging reliability issues as we shift our energy resource base and is urging a reconsideration of the current policy and regulatory framework. The reliability challenges of overgeneration are also an opportunity to

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enable a holistic and balanced approach across multiple economic sectors in maintaining, or even enhancing progress toward California's sustainable energy goals.

US EPA Proposed Standards for Greenhouse Gas Emissions – New, Modified or Reconstructed Electric Generating Units:

On January 8, 2014, the US Environmental Protection Agency proposed standards for greenhouse gas emissions from new, modified or reconstructed electric generating units under Section 111(b) of the Clean Air Act.

Earlier this year, ISO staff participated in developing comments included in a May 8, 2014 letter from the California Air Resources Board (CARB) to EPA, focused on the portion of the 111(b) standard pertaining to *new sources*. In that letter, CARB urged EPA to consider more refined subcategorization of electric generating units beyond the proposed categorization of large and small base load units:

- The proposed emission limitations are feasible for base load generation, but EPA needs to recognize operational differences between electric generating units serving different functions.
- The size-based standards do not fully acknowledge the changes in the electric power sector leading to shifts in how natural gas-fired electric generating units are operated. There is a need for more flexible and less base load units to support and integrate the growing level of renewable resources.
- Flexible electric generating units with the ability to cycle during the day and ramp up
 and down to different outputs have different emissions profiles compared to those
 that are operated as either base load or peaker units. Frequent cycling and ramping
 decreases thermal efficiency and increases greenhouse gas emissions per MWh
 compared to units providing base load energy.

In their request for comments on the portion of the proposed standard for *modified and* reconstructed sources (referred to by CARB as 111(b) +), EPA signaled that they were listening to the May 8 comments when they indicated they were "soliciting comment on whether a separate standard should be established for load-following" natural-gas units as distinct from base load units. EPA suggested that this subcategoriztion of the standard could apply during periods "when electric sales are between 33 to 60 percent of the potential electric output."

ISO staff had the opportunity to review an October 16, 2014, 111(b)+ letter from CARB to EPA. In that letter, CARB recommended the following:

 Base load electric generating units (60% to 100% capacity factor) have a limit of 825 lbs CO2/MWh.

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- Flexible electric generating units (33% to 59% capacity factor) have a limit of 1,100 or 1,000 lbs CO2/MWh (based on size as currently proposed).
- Peaker electric generating units (less than 33% capacity factor) have an emissions factor that considers the variability in operating conditions and need for peaking units.

ISO staff agrees with the CARB recommendations and will collaborate with CARB, CEC and CPUC as needed to assist EPA by providing additional information as the agency works to finalize the standard by June 2015.

Legislative Update

On October 15, Senator Kevin de León was sworn in as Senate President Pro Tempore, replacing termed-out President Pro Tem Darrell Steinberg.

November 30 will mark the official end of the current two-year session, and the legislature will reconvene December 1 for an Organizational Session to start of the new two-year session. Prior to that date, Assembly Speaker Atkins and Senate Pro Tem de León will likely announce the membership of both houses' energy committees, including the Chairs and Vice-Chairs.

In the last report, four bills were mentioned that were awaiting the Governor's signature. The following three were signed into law:

SB 699 (Hill) Public utilities: electrical corporations.

This bill requires the CPUC, in a new proceeding, or new phase of an existing proceeding, to commence on or before July 1, 2015, to consider adopting rules to address security threats to the distribution systems of electrical corporations.

SB 1090 (Fuller) Electricity: rates: default time-of-use pricing.

This bill requires the CPUC to consider evidence addressing the extent of hardship to customers living in hot, inland areas, and to residential customers living in areas with hot summer weather before requiring or authorizing an electrical corporation to employ default time-of-use pricing rates for residential customers.

SB 1414 (Wolk) Electricity: demand response.

This bill requires utilities to build the procurement of demand response into their resource adequacy plans. In a recent amendment, the bill also requires the ISO to work with the CPUC and CEC to ensure that changes in demand caused by load modifying demand response are reflected in the CEC's Integrated Energy Policy Report forecast, as well as in planning proceedings and associated analyses. The agencies are also to encourage reflection of these changes in demand in the operation of the grid.

The following bill was vetoed:

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SB 38 (Padilla) Electrical restructuring.

This was a clean-up bill aimed at deleting obsolete provisions of law that were codified during electric restructuring. In his veto message, the Governor cited his concern that the bill would "inadvertently take away the California Public Utility Commission's authority to continue enforcing the collection of some residual bond expenses."

FEDERAL AFFAIRS

Administration:

<u>Short-term funding bill signed into law</u>: On September 23, President Obama signed into law a Fiscal Year 2015 Continuing Resolution (H.J. Res.124) that funds government programs from October 1 through December 11, 2014 at the current annual cap rate of \$1.012 trillion. The House and Senate approved the funding bill on September 18.

Transitions:

- Elizabeth Sherwood-Randall was sworn in as Deputy Secretary of Energy on
 October 6, replacing Daniel Poneman, who announced in June that he would resign
 this year. Sherwood-Randall was confirmed by the Senate on September 18. She
 was previously the coordinator for defense policy and arms control at the National
 Security Council. The position of Deputy Secretary is the second-in-command at the
 Department of Energy and is the principal point of contact with the utility industry on
 cybersecurity initiatives.
- Jeff Baran, a former aide to Congressman Henry Waxman (D-33rd District Los Angeles) was sworn in on October 15 as a member of the Nuclear Regulatory Commission (NRC). Baran was confirmed by the Senate on September 16 and will serve the remainder of a term ending June 30, 2015. Stephen Burns, former general counsel at the NRC, was also confirmed by the Senate on September 16 and is expected to be sworn in early in November. Burns is scheduled to serve a full term through June 30, 2019.
- NRC Chair Allison Macfarlane announced on October 21 that she will resign from her position, effective January 1, 2015, to direct George Washington University's Center for International Science and Technology Policy. Dr. Macfarlane has been director of the agency since June 9, 2012 and was confirmed in 2013 for a term extending through June, 2018.

NRC finds no seismic danger at Diablo Canyon: On September 10 the NRC issued a statement that the agency has found no seismic safety issues at the Diablo Canyon nuclear power plant. The statement by the agency's Director for Operations, Mark Sartorius, responded directly to a report filed by a former plant inspector recommending that the facility be closed until further seismic studies could be completed.

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Congress:

"Lame duck" outlook: During the post-election lame duck session, which begins on November 12, Congress will be faced with funding government programs through the balance of the Fiscal Year, which ends on September 30, 2015. Whether that will be accomplished through an omnibus appropriations bill or another Continuing Resolution has not yet been determined. Other actions could include extension of expiring tax provisions, including the production and investment tax credits for renewable energy projects, and action on cybersecurity information sharing legislation sponsored by Senator Dianne Feinstein (D-CA), S. 2588, which was approved by the Senate Intelligence Committee in July. If approved by the full Senate, the bill would have to be reconciled with the House version, H.R. 624, which passed the House in April of 2013. The U.S. Chamber of Commerce has been actively encouraging passage of the cybersecurity information sharing legislation.

<u>Nuclear plant relicensing hearing planned</u>: Senator Barbara Boxer (D-CA) has announced that she will hold an oversight hearing in December on NRC steam generator replacement licensing before the Senate Environment and Public Works Committee, which she chairs. The announcement follows a report released on October 7 by the NRC Inspector General evaluating 2009 actions by agency inspectors in approving replacement of steam generators at the San Onofre nuclear power plant without requiring relicensing.

McNerney chairs Grid Innovation Caucus: On September 19, Congressman Jerry McNerney (D-9th District – Pleasanton) announced that he will co-chair the Congressional Grid Innovation Caucus along with Congresswoman Renee Elmers (R-NC). The goal of the Caucus is to educate Members of Congress and their staffs about the importance of the electric grid to the economy and the role that innovations will play in development of the modern grid.

STRATEGIC ALLIANCES AND REGIONAL AFFAIRS

Energy Imbalance Market (EIM):

<u>Tariff stakeholder process</u>: On October 20 FERC issued an order that closes open issues on the EIM tariff prior to go-live. The order dealt with several topics, including the transmission usage charge, resource sufficiency, and greenhouse gas matters. The order denies all requests for rehearing, provides some clarification, and accepts the ISO's compliance filing subject to a further compliance filing.

<u>EIM Implementation</u>: Parallel operations during October was a big success and allowed PacifiCorp and the ISO to focus on price results in a production-like environment. The successful implementation of the full network model expansion on October 15 paved the way for successfully moving EIM into full operation with financially binding dispatches and settlements on November 1.

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Although the overall EIM launch was successful, there were some challenges leading to price volatility, primarily in the first 11 hours. The volatility in prices was seen mostly in the PacifiCorp service territory and due to a number of data and software factors during the initial transition from systems in the parallel environment to actual production mode. The ISO has initiated price corrections for the first 11 full hours after launch and is assessing other price results, as part of its normal process.

We are seeing initial results that clearly indicate that the EIM is optimizing transfers. Transfers from PacifiCorp to CAISO have been optimized ranging from 150 MW CAISO to PacifiCorp to 300 MW PacifiCorp to CAISO. Also, from PacifiCorp East to PacifiCorp West has been averaging 52 MW.

<u>NV Energy</u>: Project implementation for NV Energy is underway and the first major milestone has been reached with the export of NV Energy's network model to the ISO. NV Energy has started its stakeholder process for tariff modifications required in their open access tariff. The next round of stakeholder meetings will be held December 2-3. NV Energy plans to file their tariff changes at FERC in early March to support the October 2015 implementation.

<u>Transitional Committee</u>: The eleven-member Transitional Committee met again on October 23 in Sacramento at the California Energy Commission offices. They received several briefings from ISO management on status of the energy imbalance market. They also received a briefing from Eric Hildebrandt, Director of Market Monitoring, on general Department of Market Monitoring activities as well as more specifics in regards to the energy imbalance market. Mr. Hildebrandt offered to provide additional briefings after market is implementation.

As stated in a memo and briefing to the Board at their September meeting, Chair Wagner has established two working groups of the committee to focus on the structure and scope of governance issues, as the committee works towards providing a proposal for stakeholder input. Several documents have been posted on the EIM Transitional Committee webpage which summarize the general board and committee structures of other ISO or RTOs, collected by ISO staff at the request of the committee. Chair Wagner will continue to provide briefings to the Board and get feedback as they move through the process. Their next meeting is scheduled for November 20 in San Francisco.

Northwest Power Pool Market Operator Request for Proposal: The Northwest Power Pool continues its work to develop an EIM for the northwest. The general bid spec was released on October 31. Although release of the detailed technical spec has been delayed, we expect that the submittal deadline will remain at December 19. We will respond to the request for proposal highlighting the benefits and success of the ISO's EIM design.

Regional outreach: Our EIM outreach work continues on several fronts. In coordination with PacifiCorp, presentations to regional groups continue to provide information and beneficial discussion on EIM issues. The ISO has developed computer-based training which offers additional opportunity for education on EIM matters. Ongoing discussions continue with other interested balancing authority areas and their state regulators.

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