

GENERAL SESSION MINUTES BOARD OF GOVERNORS MEETING December 17-18, 2014 ISO Headquarters Folsom, California

December 18, 2014

The ISO Board of Governors convened the general session meeting at approximately 9:00 a.m. and the presence of a quorum was established.

ATTENDANCE

The following members of the ISO Board of Governors were in attendance:

Richard Maullin, Chair Ash Bhagwat Angelina Galiteva Dave Olsen

The following members of the executive team were present at the meeting: Steve Berberich, Keith Casey, Petar Ristanovic, Mark Rothleder, Eric Schmitt, Karen Edson, Roger Collanton, Ryan Seghesio, and Becky Regan.

GENERAL SESSION

The following agenda items were discussed in general session:

PUBLIC COMMENT

No public comment was offered at this time.

DECISION ON GENERAL SESSION MINUTES

Governor Galiteva moved for approval of the ISO Board of Governors general session minutes for the November 13, 2014 meeting. The motion was seconded by Governor Olsen and approved 4-0-0.

CEO REPORT

Steve Berberich, President and CEO, provided an overview of the following sections of his report: overall conditions, energy imbalance market update, Harry Allen-Eldorado transmission line, and renewable generation. Mr. Berberich informed the Board that FERC



recently approved the ISO's Order 1000 compliance filing and noted that the order acknowledged that the California ISO was the first ISO to be 100% compliant. He next discussed the energy imbalance market and stated that the ISO was continuing to work with PacifiCorp to address issues such as pricing, outage coordination and continuing education on new processes. Mr. Berberich provided a progress update on the implementation of NV Energy into the energy imbalance market. He next discussed the importance of the Harry Allen-Eldorado transmission line proposal that was going before the Board at this meeting. He concluded his report by discussing solar and wind generation peaks. Discussion followed regarding the 2014 corporate goals and the Board commended the efforts of ISO staff in making such outstanding achievements on the goals.

EIM TRANSITIONAL COMMITTEE CHAIR REPORT

Stacey Crowley, Director – Regional Affairs, provided an update on behalf of Committee Chair Rebecca Wagner on recent activities of the EIM Transitional Committee, as Chair Wagner was ill. Ms. Crowley stated the next Committee meeting would be held on Friday, December 19 via teleconference. She noted the Committee would receive the following general session briefings: update on EIM deployment and briefing on EIM year-one enhancements initiative. Ms. Crowley provided a brief status update on the governance issue paper and stated the January 12, 2015 Committee meeting would be held in Phoenix, AZ.

DECISION ON HARRY ALLEN-ELDORADO TRANSMISSION PROJECT

Roger Collanton, Vice President, General Counsel and Chief Administrative Officer, acknowledged receipt of the following three public comment letters: Office of the Governor of Nevada, Senator Reid, and LS Power Development.

Keith Casey, Vice President – Market and Infrastructure Development, provided a background overview and stated that decision on this item had been deferred from the March 2014 Board meeting so that the ISO could conduct further analysis given NV Energy's interest in participating in the energy imbalance market. Mr. Casey also noted that the ISO would continue to work on efforts associated with interregional coordination as related to cost allocation.

Robert Sparks, Manager, Regional Transmission – South, provided an update on the Harry Allen-Eldorado 500 kV transmission project and stated that the analysis of the project in the 2013-14 Transmission Plan had been updated to include NV Energy's participation in the energy imbalance market. Mr. Sparks stated the expected cost of the project was \$182M. Mr. Sparks stated that the results of the updated analysis were presented to stakeholders on November 20, 2014. He provided an overview of a graph that depicted the benefit-cost ratios of the project and stated that the benefit-cost ratio ranged from 1.20 to 1.06. Mr. Sparks next discussed the stakeholder process and noted that stakeholders provided both supportive comments as well as concerns. He provided an overview of the key concerns expressed by stakeholders. Mr. Sparks stated that Management recommended approval of



the project as the financial benefits were expected to exceed its costs and that the project provided reliability and renewable integration benefits for the ISO system. He stated that, if the project is approved, the competitive solicitation process would be initiated in January 2015.

Public comment

John King, on behalf of LS Power, provided comments in support of approval of the project, as the study results, while conservative in nature, demonstrated that it was an economic project for California ratepayers.

Catherine Hackney, on behalf of Southern California Edison, provided comments in support of approval of the project, but requested that the ISO continue its work on interregional efforts, as this was the second interregional project that allocated costs to California ratepayers.

Discussion followed regarding cost allocation and Mr. Casey clarified that the Harry Allen-Eldorado project was studied as a regional project for California ratepayers and the primary drivers were of benefit to the California ISO footprint. Discussion followed and the Board emphasized the importance of continuing to explore interregional cost allocation going forward. Mr. Berberich provided responding remarks and noted that interregional cost allocation needed to be a guiding principle. Discussion followed regarding flexible capacity and Mr. Casey stated that there would be a 2015 stakeholder initiative to address flexible capacity requirements.

Motion

Governor Bhagwat:

Moved, that the ISO Board of Governors approves the Harry Allen-Eldorado 500 kV transmission project as part of the ISO 2013-2014 Transmission Plan, and as described in the memorandum dated December 10, 2014.

The motion was seconded by Governor Olsen and approved 4-0-0.

DECISION ON PRICING ENHANCEMENTS PROPOSAL

Roger Collanton, Vice President, General Counsel and Chief Administrative Officer, acknowledged receipt of the following public comment letter: Powerex

Mark Rothleder, Vice President of Market Quality and Renewable Integration, provided introductory remarks and addressed the concerns raised in the letter from Powerex regarding force majeure events.



Greg Cook, Director – Market and Infrastructure Policy, provided an overview of Management's proposal on pricing enhancements and further discussed the following four provisions contained in the proposal: administrative pricing rules, validation of bids with transmission rights, compounded pricing of multiple contingencies, and multiplicity of prices. Mr. Cook stated that FERC directed the ISO to clarify its administrative pricing rules after the September 8, 2011 outage event. He described how the proposal used a tiered approach for pricing. Mr. Cook discussed how the proposal was modified to address concerns raised by the Market Surveillance Committee. He next discussed why Management proposes to modify the validation rules in the bid submission process to reject bids with errors instead of converting them to normal self-schedules. Mr. Cook next described why Management seeks to modify contingency modeling in the market optimization to price only the most limiting contingency. He then discussed how Management also seeks to enhance the pricing formulation to ensure a unique pricing solution to transmission constraints to help eliminate pricing solution uncertainty. He provided an overview of a graph that depicted an example of multiple prices when the intertie limit was zero in one direction.

Mr. Cook provided an overview of the stakeholder process and noted there is broad support for the proposal. He stated that there is general support for the pricing rules but further discussed one concern related to force majeure events. He concluded his presentation by discussing the benefits of the proposal and stated that it would establish simple and practical administrative pricing rules that would minimize settlement impacts when prices could not be generated through normal market mechanisms. He stated the other proposed pricing enhancements would lead to more efficient pricing in the ISO market.

Public comment

Roy Kuga, on behalf of Pacific Gas and Electric Company, provided comments in support of Management's proposal and commended ISO staff for determining the right balance on the issues within the scope of the proposal.

Motion

Governor Galiteva:

Moved, that the ISO Board of Governors approves the pricing enhancements proposal as described in the memorandum dated December 10, 2014; and

Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposed tariff change.

The motion was seconded by Governor Bhagwat and approved 4-0-0.



BRIEFING ON COMMITMENT COSTS POLICY INITIATIVE

Greg Cook, Director – Market and Infrastructure Policy, provided a briefing on the commitment costs policy initiative. Mr. Cook provided a background overview and noted that in 2012, the Board had approved provisions to allow generators to recover additional start-up and minimum load costs. He stated that the ISO has commenced a new stakeholder initiative to revisit the policy with the goal of fully mitigating pipeline reliability concerns. Mr. Cook stated that despite the work with stakeholders, including interstate and intrastate pipeline companies, the ISO has not yet been able to find a path forward that fully addresses pipeline reliability concerns. He stated that Management will further consider this issue in light of key industry changes that are underway.

Mr. Cook discussed the stakeholder process and stated that stakeholders generally supported the ISO's position on pipeline penalties, but noted that some concerns remained related to cost recovery. He provided an overview of several initiatives underway to increase bidding flexibility and to address gas cost recovery. Mr. Cook stated that Management believed the commitment costs policy initiative should be closed, and that Management is committed to continuing to monitor changes in the gas industry. Brief discussion followed regarding the impact of penalty costs to the gas pipeline companies.

DECISION ON FY2015 BUDGET

Ryan Seghesio, Chief Financial Officer and Treasurer, provided an overview of the 2015 budget and noted the proposed budget continued to reflect the ISO's focus on costs and efficiencies. Mr. Seghesio stated that the stakeholder budget process began in June 2014. He stated that the proposed revenue requirement slightly increased from \$198.0 million to \$198.5 million. He stated that the proposed O&M budget also slightly increased from \$164.4 million to \$165.1 million. He discussed how the ISO was leveraging an activity-based costing structure for further transparency. Mr. Seghesio reviewed a graph that depicted net debt service and noted the debt service requirement would remain at \$16.9 million. Mr. Seghesio stated that the capital project budget would continue to be funded through the revenue requirement. He concluded his presentation by providing an overview of the operating reserve credit and grid management charge rates. Brief discussion followed and the Board commended the efforts of the finance team.

Motion

Governor Olsen:

Moved, that the ISO Board of Governors approves the 2015 revenue requirement and Capital/Project budgets as set forth in Attachment A to the memorandum dated December 10, 2014; and



Moved, the ISO Board of Governors authorizes Management to take all necessary and appropriate actions to implement the 2015 grid management charge rates reflecting the 2015 budget.

The motion was seconded by Governor Galiteva and approved 4-0-0.

AUDIT COMMITTEE UPDATE

Governor Bhagwat, Audit Committee Chair, provided an overview of the following Audit Committee matters heard earlier that day: operations audit acceptance, briefing on settlement systems audit and the briefing on the issuance of the 2014 SSAE 16 audit, and the scope of the 2015 SSAE 16 audit. Governor Bhagwat requested that the Board adopt the following motion as recommended by the Audit Committee:

Motion

Governor Galiteva:

Moved, that the ISO Board of Governors, as recommended by the Audit Committee, accepts the audit opinion issued on December 5, 2014 by PricewaterhouseCoopers LLP for the testing of specified control room operational processes for 2014, as attached to the memorandum dated December 10, 2014.

The motion was seconded by Governor Maullin and approved 4-0-0.

DECISION ON MODIFICATIONS TO THE AUDIT COMMITTEE CHARTER

Roger Collanton, Vice President, General Counsel and Chief Compliance Officer, provided an overview of the proposed modifications to the Audit Committee Charter. Mr. Collanton described how this proposal derived from the annual review of the Charter and that the proposed modifications clarify roles and responsibilities of the Audit Committee members as well as make stylistic changes. Mr. Collanton stated that the Audit Committee had been briefed on the proposed edits at the prior two Audit Committee meetings.

Motion

Governor Galiteva:

Moved, that the ISO Board of Governors approves the modifications to the Audit Committee Charter as attached to the memorandum dated December 10, 2014.

The motion was seconded by Governor Maullin and approved 4-0-0.



BRIEFING ON MARKET PERFORMANCE

Mark Rothleder, Vice President – Market Quality and Renewable Integration, provided the Board a briefing on market performance. Mr. Rothleder stated the full network model expansion was implemented on October 15, 2014 and that the PacifiCorp energy imbalance market launched on November 1, 2014. He described how the full network model expansion accounted for flows caused by external balancing areas' activity. Mr. Rothleder described how the accuracy metric indicated improved flow modeling with implementation of the full network model. He discussed how the deployment of the energy imbalance market extended real-time market functions to the Western Interconnection.

Mr. Rothleder next provided an overview of three graphs that depicted: 15-minute transfers between PacifiCorp and the ISO, 15-minute price frequency in PacifiCorp East (PACE) and PacifiCorp West (PACW), and 5-minute price frequency in PACE and PACW. He stated that the energy imbalance market was dispatching participating resources as designed to balance real-time supply and demand across the energy imbalance market areas. He stated the ISO would continue to track energy imbalance market regional benefits and provide quarterly public reports.

INFORMATIONAL REPORTS

There were no questions on the following informational reports: regulatory update, State, Regional and Federal affairs update, business practice manual change management report, Market Surveillance Committee update, Department of Market Monitoring update, master stakeholder engagement and release plans

ADJOURNED

There being no additional general session matters to discuss, the general session was adjourned at approximately 10:45 a.m.