

GENERAL SESSION MINUTES BOARD OF GOVERNORS MEETING July 24, 2019 ISO Headquarters Folsom, California

July 24, 2019

The ISO Board of Governors convened the general session meeting at approximately 3:00 p.m. and the presence of a quorum was established.

ATTENDANCE

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

Dave Olsen, Chair Angelina Galiteva, Vice Chair Ash Bhagwat, via teleconference Severin Borenstein Mary Leslie

The following members of the executive team were present throughout the meeting: Steve Berberich, Keith Casey, Mark Rothleder, Petar Ristanovic, Eric Schmitt, Roger Collanton, Stacey Crowley, Ryan Seghesio and Jodi Ziemathis

GENERAL SESSION

The following agenda items were discussed in general session:

PUBLIC COMMENT

There was no general public comment.

DECISION ON GENERAL SESSION MINUTES

Governor Borenstein moved for approval of the Board of Governors general session minutes for the May 15-16, 2019 meeting. The motion was seconded by Governor Leslie and approved 4-0.

CEO REPORT

Governor Bhagwat joined the meeting via teleconference.

Steve Berberich, President and CEO, provided an overview of the following sections of his CEO report: overall system conditions, reliability coordinator services, Public Safety Power Shutoffs, regional day-ahead market, and updated renewable energy production numbers.

CorpSec/S. Karpinen Page 1 of 5



Brief discussion followed and the Board commended the efforts of everyone involved in the Reliability Coordinator project.

EIM GOVERNING BODY CHAIR REPORT

Carl Linvill, Chair of the EIM Governing Body, provided highlights of the EIM Governing Body's June 28, 2019 meeting in Salt Lake City, Utah, which included the EIM Governing Body voting unanimously in favor of the real-time market neutrality settlement proposal, which is on the Board's consent agenda at this meeting. Mr. Linvill provided an update on the selection process for the vacant seat on the Governing Body and stated he believed that the position would likely be filled at the next meeting, on August 28 in Portland, Oregon. He noted the Regional Issues Forum would take place on August 27. Mr. Linvill provided highlights of various outreach efforts with western stakeholders and commissioners.

DECISION ON CONSENT AGENDA

Roger Collanton, Vice President, General Counsel and Chief Compliance Officer, provided an overview of the consent agenda process and informed the Board a motion was before them if they didn't have any further questions.

Governor Galiteva:

Moved, that the ISO Board of Governors approves the July 24, 2019 consent agenda comprised of proposed changes to the real-time imbalance energy offset calculation, 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 proposal described in the memorandum to the EIM Governing Body dated June 21, 2019, including any filings that implement the overarching initiative policy but contain discrete revisions to incorporate Commission guidance in any initial ruling on the proposed tariff amendment.

The motion was seconded by Governor Borenstein and approved 5-0.

AUDIT COMMITTEE UPDATE

Governor Olsen informed the Board that the Audit Committee had accepted receipt of the ISO financial statements and FERC Form No. 1 unqualified audit reports prepared by PricewaterhouseCoopers, and requested that the Board now accept those audit reports, as recommended by the Audit Committee.

Motion

CorpSec/S. Karpinen Page 2 of 5



Governor Galiteva:

Moved, that the Audit Committee of the ISO Board of Governors accepts the audited financial statements issued April 17, 2019 by PricewaterhouseCoopers, as attached to the memorandum dated July 17, 2019; and

Moved, that the Audit Committee of the ISO Board of Governors accepts the FERC Form No. 1 audit report, issued April 17, 2019 by PricewaterhouseCoopers, as attached to the memorandum dated July 17, 2019.

The motion was seconded by Governor Borenstein and approved 5-0.

BRIEFING ON 2019 POLICY ROADMAP

Greg Cook, Executive Director, Market and Infrastructure Policy, provided the Board a briefing on the 2019 policy roadmap and noted that it is presented each year to the Board and EIM Governing Body. Mr. Cook provided an overview of the following five initiatives that were added since the last update in December 2018: (1) real-time market neutrality settlement, (2) FERC Order No. 831 – bid cap, (3) import bid cost verification, (4) hybrid (solar + storage) resources, and (5) capacity procurement mechanism – soft offer cap. Mr. Cook next explained why the following two initiatives had been removed: (1) day-ahead market enhancements – 15-minute granularity, and (2) storage as a transmission asset. He also noted that Management was on track to bring the transmission access charge structure enhancement to the Board in February 2020 to ensure coordination and alignment with the extended day-ahead market policy.

Mr. Cook next described how Management was continuing to analyze the need for system market power mitigation measures, as well as further congestion revenue rights market enhancements. He concluded his presentation by providing an overview of several graphs that depicted the impact these efforts have had with regards to CRRs. Keith Casey, Vice President – Market and Infrastructure Development, noted that the informational report provided by the Department of Market Monitoring contained a section on this topic, which also contained encouraging results.

BRIEFING ON SYSTEM MARKET POWER ASSESSMENT

Brad Cooper, Senior Manager – Market Design Policy, provided the Board a briefing on the system market power assessment, and described how Management has committed to analyzing system-level market competiveness and addressing identified issues after DMM raised concerns in its 2017 annual report. Mr. Cooper stated that Management recently published analysis results and has begun discussing the appropriate next steps with stakeholders and the Market Surveillance Committee. He described how the ISO's analysis shows a relatively small number of hours that the ISO balancing area is not competitive at

CorpSec/S. Karpinen Page 3 of 5



the system level. Mr. Cooper provided an overview of various measures that could address increased price-cost markup during times of tight supply. Mr. Cooper concluded his presentation by reviewing next steps, which included a written opinion by the Market Surveillance Committee, and a follow-up briefing to the Board, which is currently on track for November 2019. Discussion ensued regarding the types of approaches that were considered in the study, as well as the Market Surveillance Committee's role with regard to mitigation options. Mr. Berberich, Dr. Casey and Mr. Cooper responded to various Board inquiries. Dr. Casey further discussed next steps and described why the summer of 2020 was not a feasible option for implementation.

Public comment

Eric Eisenman, on behalf of Pacific Gas and Electric Company, acknowledged the efforts of ISO staff. Mr. Eisenman provided further comments and requested more transparency to stakeholders in a few areas, including the amount of price-cost markups. Dr. Casey provided responsive comments.

Catherine Hackney, on behalf of Southern California Edison, acknowledged the efforts of ISO staff. Ms. Hackney provided further comments regarding the CPUC's IRP proceeding and urged the ISO to continue to look at system market power mitigation and identify solutions. Brief discussion followed.

Mark Smith, on behalf of Western Power Trading Forum, acknowledged the efforts of ISO staff. Mr. Smith provided further comments and noted WPTF and Calpine supported the ISO continuing its efforts in this area by taking a cautious and conservative approach.

BRIEFING ON CALIFORNIA'S PUBLIC SAFETY POWER SHUT-OFF PROGRAMS

John Phipps, Director – Real Time Operations, provided the Board a briefing on California utilities' Public Safety Power Shut-Off (PSPS) programs. Mr. Phipps described how the investor owned utilities (IOUs) have these programs to protect public safety. He noted these programs are independent of the ISO's responsibilities. Mr. Phipps provided an overview of the principles the ISO established to facilitate Public Safety Power Shut-Off outages. He provided an overview of two PSPS scenarios – the first where there was no impact to ISO generation or transmission, and the second where the ISO would be unable to meet demand. Brief discussion followed. Mr. Phipps stated the IOUs' PSPS plans require a patrol of the circuits that were de-energized before being re-energized. Brief discussion followed and he stated that complete restoration could take several days or longer, depending on the size of the event.

BRIEFING ON RENEWABLE AND ENERGY STORAGE PROJECTS IN THE GENERATOR INTERCONNECTION QUEUE

CorpSec/S. Karpinen Page 4 of 5



Steve Rutty, Director – Grid Assets, provided the Board a briefing on renewable and energy storage projects in the generator interconnection queue. Mr. Rutty reviewed graphs that depicted the current and projected renewable generation capacity by resource type, and conventional and renewable interconnect by county. Mr. Rutty provided an overview of the following queue statistics: 66,716 MW of renewable energy projects and 45,583 MW of energy storage projects. Mr. Rutty noted that numbers for the new cluster 12 on slide 3 have already changed given the queue's fast moving dynamic. Brief discussion followed regarding the queue map.

INFORMATIONAL REPORTS

There were no comments or questions on the following informational reports: business practice manual change management report, Department of Market Monitoring update, market performance report, market initiatives release plan, regulatory report, state, regional and federal affairs update, Market Surveillance Committee report, and quarterly financial report.

ADJOURNED

There being no additional general session matters to discuss, the general session was adjourned at approximately 4:45 p.m.

CorpSec/S. Karpinen Page 5 of 5