

GENERAL SESSION MINUTES ISO BOARD OF GOVERNORS MEETING December 13-14, 2012 ISO Headquarters Folsom, California

December 14, 2012

The ISO Board of Governors convened the general session meeting at approximately 9:30 a.m. and the presence of a quorum was established.

ATTENDANCE

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

Bob Foster, Chair Ash Bhagwat Angelina Galiteva Richard Maullin David Olsen

The following members of the officer team were present: Steve Berberich, Keith Casey, Petar Ristanovic, Brenda Thomas, Mark Rothleder, Nancy Saracino and Greg Fisher, Corporate Secretary

GENERAL SESSION

The following agenda items were discussed in general session:

PUBLIC COMMENT

Mark Smith, on behalf of Calpine, provided comments regarding the follow three Management proposals: bid cost recovery mitigation measures, mitigation of exceptional dispatch in real-time and transmission constraint relaxation parameter modification. Mr. Smith provided an overview of concerns with the proposals and provided highlights of the December 11 public comment letter provided to the board regarding the transmission constraint relaxation parameter modification proposal.

Keith Casey, Vice President of Market and Infrastructure Development, provided responsive comments and noted these matters would be further discussed after Management's proposal on the topics.

CorpSec/S. Karpinen Page 1 of 11



Greg Fisher, Assistant General Counsel – Corporate and Corporate Secretary, acknowledged the following public comment letters as provided to the Board: Calpine and Large-Scale Solar Association.

Alan Comnes, on behalf of Large-Scale Solar Association, provided comments in follow-up to the generator project downsizing proposal presented to the Board in September 2012. Mr. Comnes provided an overview of the December 11 public comment letter provided to the Board. Mr. Casey provided responsive comments and committed to exploring concerns regarding generator downsizing flexibility further if found to be a priority interest of stakeholders. Mr. Casey reconfirmed the ISO's commitment to report to the Board in 2013 on the status of the initial generator downsizing window and to discuss the potential for recommending a second downsizing window.

DECISION ON GENERAL SESSION MINUTES

Governor Galiteva moved for approval of the Board of Governors general session minutes for the November 1, 2012 meeting. The motion was seconded by Governor Maullin and approved 5-0-0.

DECISION ON BID COST RECOVERY MITIGATION MEASURES

Greg Cook, Director – Market Design and Infrastructure Policy, provided the Board with an overview of Management's proposal on bid cost recovery mitigation measures. Mr. Cook described the following two cost-recovery mechanisms: bid cost recovery and residual imbalance energy. He then described how the changes to cost recovery stemmed from the renewable integration initiative and the October 2012 FERC order that approved emergency changes to the residual imbalance energy settlement rules to address immediate market concerns. Mr. Cook described why Management was recommending two metrics to adjust bid cost recovery for undelivered energy. He also described why Management was recommending adjustments to the bid cost used for cost recovery in certain circumstances. Mr. Cook provided an overview of minimum load cost recovery and start-up and shut-down instructions. He then described the stakeholder process and noted that the proposal provided a balanced approach to address stakeholder concerns. Mr. Cook concluded his presentation by discussing the benefits of the proposal.

Public comment

Jeffrey Nelson, on behalf of Southern California Edison, provided supportive comments on Management's proposal and commended ISO staff on the stakeholder process. Mr. Nelson also agreed with concerns raised by the Department of Market Monitoring and the Market Surveillance Committed and agreed that additional monitoring was recommended.

CorpSec/S. Karpinen Page 2 of 11



Ellen Wolfe, on behalf of Western Power Trading Forum, provided supportive comments on Management's proposal and commended ISO staff on the stakeholder process. Ms. Wolfe also agreed with concerns raised by the Department of Market Monitoring and the Market Surveillance Committed and agreed that additional monitoring was recommended.

Discussion followed and Mr. Casey confirmed the ISO's commitment to continue to monitor the proposal and revise if necessary.

Market Surveillance Committee

Jim Bushnell, on behalf of the Market Surveillance Committee, provided supportive comments on Management's proposal and provided highlights of the Market Surveillance Committee opinion on mitigation measures for bid cost recovery. Dr. Bushnell further discussed some concerns and noted that further monitoring by the ISO was recommended.

Motion

Governor Galiteva:

Moved, that the ISO Board of Governors approves the proposal regarding bid cost recovery mitigation measures as described in the memorandum dated December 6, 2012; and

Moved, that the ISO Board of Governors authorizes Management to make all the 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 5-0-0.

DECISION ON MITIGATION OF EXCEPTIONAL DISPATCH IN REAL-TIME

Greg Cook, Director – Market Design and Infrastructure Policy, provided the Board with an overview of Management's proposal on mitigation of exceptional dispatch in the real time market. Mr. Cook described the method for determining when mitigation would be applied to exceptional dispatch in the real time market. He noted the proposal had been vetted with stakeholders and the Market Surveillance Committee. He further described how the proposal filled a specific gap and fit within the existing framework for mitigation of exceptional dispatch. Mr. Cook provided an overview of the primary concerns and noted that the concerns of stakeholders and the Market Surveillance Committee had been considered. Mr. Cook concluded his presentation by providing an overview of the benefits of the proposal.

CorpSec/S. Karpinen Page 3 of 11



Market Surveillance Committee

Jim Bushnell, on behalf of the Market Surveillance Committee, provided supportive comments on Management's proposal and provided highlights of the Market Surveillance Committee opinion on mitigation measures for exceptional dispatch in real time. Dr. Bushnell further discussed some concerns and noted that further monitoring by the ISO was recommended.

Discussion followed regarding whether all exceptional dispatches should be mitigated. Eric Hildebrandt, Director of Market Monitoring, provided responsive comments pertaining to future enhancements to the mitigation process. Discussion followed and Mark Rothleder, Vice President of Market Quality and Renewable Integration, discussed a root cause analysis of exceptional dispatches that had been performed earlier in the year. Discussion followed, and Management committed to providing the Board with periodic updates on its efforts to address exceptional dispatch.

Public comment

Ellen Wolfe, on behalf of Western Power Trading Forum, provided comments on Management's proposal and emphasized that nobody likes exceptional dispatches and that something needs to be done to reduce applicable exceptional dispatches.

Jeffrey Nelson, on behalf of Southern California Edison, provided comments on Management's proposal and noted support to address the exceptional dispatch issue.

Discussion followed regarding the volume of exceptional dispatches in comparison with others in the industry.

Motion

Governor Maullin:

Moved, that the ISO Board of Governors approves the proposal regarding mitigation of exceptional dispatch, as described in the memorandum dated December 6, 2012; and

Moved, that the ISO Board of Governors authorizes Management to make all the 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 5-0-0.

CorpSec/S. Karpinen Page 4 of 11



DECISION ON TRANSMISSION CONSTRAINT RELAXATION PARAMETER MODIFICATION

Nan Liu, Manager – Market Development and Analysis, provided an overview of Management's proposal on the transmission constraint relaxation parameter modification. Mr. Liu provided a background overview of the transmission constraint parameter and noted that real-time congestion offsets allocated to load had increased by a factor of five in 3rd quarter 2012. He then addressed other contributing causes of, and actions to address, increases in real-time congestion offset costs. Mr. Liu discussed a diagram that depicted how convergence bidding contributed to cost increases and then described the sensitivity analysis. Mr. Liu provided an overview of the stakeholder process and noted the comments reflected supplier concerns and demand support. He then provided an industry comparison overview with other ISO and RTO practices. Mr. Liu concluded his presentation by reviewing the benefits of the proposal. Discussion followed regarding the parameters associated with the transmission relaxation constraint case studies, transmission constraint locations and pricing. Additional discussion followed regarding potential sunset provisions and requests to have the ISO further monitor the issue.

Public comment

Jeffrey Nelson, on behalf of Southern California Edison, provided comments in support of Management's proposal and noted he looked forward to working with Management further regarding virtual bidding issues.

Ellen Wolfe, on behalf of Western Power Trading Forum, provided comments in opposition of Management's proposal and noted WPTF would likely be providing comments to FERC. Discussion followed regarding the proposal and Mr. Rothleder confirmed that the current bid cap of \$1000 was not a price cap, as prices could rise above. Mr. Rothleder committed that Management would report to the Board by December 2013 on its findings regarding the monitoring results and the effectiveness of the new parameter.

Roy Kuga, on behalf of Pacific, Gas and Electric Company, provided comments in support of Management's proposal and then noted concerns with real-time price spikes.

Motion

Governor Bhagwat:

Moved, that the ISO Board of Governors approves the proposal to lower the transmission constraints relaxation parameter from \$5,000/MW to \$1,500/MW as described in the memorandum dated December 6, 2012; and

CorpSec/S. Karpinen Page 5 of 11



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

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

DECISION ON 2013 BUDGET

Ryan Seghesio, Chief Financial Officer and Treasurer, provided the Board an overview of the proposed 2013 budget and noted that the budget development timeline spanned from June through December. Mr. Seghesio described how the proposed budget exhibited fiscal discipline while providing for the ISO's long-term viability. He stated that Management proposed that the revenue requirement be increased to \$196 million to fund capital expenditures and noted how that figure represented only a 3.2% increase over the last seven years. He noted that the proposed O&M budget decreased by \$0.1 million, to \$162.9 million. Mr. Seghesio also provided an overview of the activity based costing structure. He then described how debt service collections would decrease by \$3.8 million in 2013 and how the debt service collection adjustment in 2012 shifted \$16 million of debt service collection to the 2013 budget. Mr. Seghesio noted that the capital/project budget would continue to be funded through the revenue requirement. Mr. Seghesio concluded his presentation by reviewing a table that depicted the grid management charge rates. Brief discussion followed.

Motion

Governor Galiteva:

Moved, that the ISO Board of Governors approves the 2013 O&M and Capital/Project budgets as set forth in Attachment A to this memorandum dated December 6, 2012; and

Moved, the ISO Board of Governors authorizes Management to take all necessary and appropriate actions to implement the 2013 grid management charge rates reflecting the 2013 budget.

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

RECESSED

There being additional general session matters to discuss, the general session was recessed at approximately 12:00 p.m.

CorpSec/S. Karpinen Page 6 of 11

FINAL Approved: February 7, 2013

December 14, 2012

RECONVENED

The ISO Board of Governors reconvened the general session meeting at approximately 12:30 p.m. and the presence of a quorum was established.

ATTENDANCE

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

Bob Foster, Chair Ash Bhagwat Angelina Galiteva Richard Maullin David Olsen

The following members of the officer team were present: Steve Berberich, Keith Casey, Petar Ristanovic, Brenda Thomas, Mark Rothleder, Nancy Saracino and Greg Fisher as Corporate Secretary

GENERAL SESSION

The following agenda items were discussed in general session:

AUDIT COMMITTEE UPDATE

Governor Bhagwat, Chair of the Audit Committee, provided highlights of the general session of the Committee earlier in the day and requested that the Board accept the 2012 Operations Audit as recommended by the Committee.

Motion

Governor Foster:

Moved, that the ISO Board of Governors accepts the compliance assessment issued on November 30, 2012 by PricewaterhouseCoopers LLC for the testing of specified control room operational processes for 2012, as recommended by the Audit Committee.

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

CorpSec/S. Karpinen Page 7 of 11



BRIEFING ON NUCLEAR GENERATION STUDIES PRELIMINARY RESULTS

Neil Millar, Executive Director of Infrastructure Development, provided the Board with a briefing on the preliminary results of the nuclear generation studies, specifically the impact of the absence of the Diablo Canyon and San Onofre nuclear power plants. Mr. Millar described how the mid-term study was contingency planning for future unplanned long-term outages and the long-term study had been undertaken as part of the utilities' relicensing assessments. Mr. Millar provided an overview of key load forecast and resource assumptions and noted that the results were preliminary. He further described several mid and long term mitigation alternatives. Mr. Millar noted that significant uncertainty was inherent in the studies and conclusions, and that Management's preliminary conclusions reflected least-regret considerations. Mr. Millar concluded his presentation by providing highlights of the 2013-13 transmission planning cycle.

Discussion followed, including scenarios taken into consideration, distributed resources, storage, and imports of renewables, CPUC's base case portfolios, energy efficiency assumptions and reserve requirements. Further discussion followed regarding looking at the political feasibility analysis going forward.

Public comment

Jeffrey Nelson, on behalf of Southern California Edison, informed the Board that SCE would be reviewing Management's presentation and following up the next week with the ISO regarding comments as well as SCE's own internal studies.

Discussion followed regarding SONGS and plans for summer 2013, including the importance of having synchronous condensers at Huntington Beach. The Board requested that Management provide a summer 2013 update at the next meeting.

BRIEFING ON MARKET DESIGN AND INFRASTRUCTURE POLICY INITIATIVES

Greg Cook, Director – Market Design and Infrastructure Policy, provided the Board with a briefing on market design and infrastructure policy initiatives. Mr. Cook informed the Board that a recent FERC order and stakeholder comments led Management to extend the schedule for implementing the flexible ramping product with a proposed Board decision in May 2013. Mr. Cook noted that FERC Order No. 764 requires the ISO to offer 15-minute scheduling opportunity for intertie resources. He provided an overview of the proposed implementation schedule of renewable integration market design changes. He also described the annual stakeholder initiatives catalog process and stated the process categorized and ranked identified market design and infrastructure policy enhancements. Mr. Cook noted that stakeholder input as well as ISO analysis was used to rank discretionary market initiatives. He then briefly addressed the top five ranked discretionary

CorpSec/S. Karpinen Page 8 of 11



market design initiatives. Mr. Cook noted how some work had already begun on some of the highly ranked initiatives and concluded by discussing the benefits of the proposed improvements. Discussion followed regarding 15-minute schedules for wind and whether wind should be on automatic generation control. Mr. Casey provided further comments and discussed the challenges associated with assessing and ranking the initiatives given the ISO's limited resources.

Public comment

Roy Kuga, on behalf of Pacific, Gas and Electric Company, provided comments in support of Management's proposed plan and the stakeholder process.

BRIEFING ON IMPERIAL VALLEY AREA POLICY-DRIVEN TRANSMISSION ELEMENTS

Keith Casey, Vice President of Market and Infrastructure Development, provided introductory comments and informed the Board that Management had previously committed to briefing the Board on all policy-driven transmission elements under \$50 million, prior to making a decision.

Neil Millar, Executive Director of Infrastructure Development, informed the Board that the ISO has been working collaboratively with the Imperial Irrigation District and was proposing to approve policy driven transmission elements costing less than \$50 million. Mr. Millar reviewed a diagram that depicted the proposed transmission elements and noted that the proposal supported policy direction received from both the CPUC and CEC. He then discussed the stakeholder process and provided an overview of the general comments received. Mr. Millar concluded his presentation by discussing next steps, including Management's approval of the transmission elements and the ISO initiating a competitive solicitation process for the development of the approved policy development elements. Discussion followed and Management confirmed that while this policy driven project did not have a reliability need, many policy driven projects do have side benefits of reliability.

Jamie Asbury, on behalf of Imperial Irrigation District, provided supportive comments and acknowledged appreciation to ISO staff. Ms. Asbury also discussed the importance of balancing costs.

DECISION TO MODIFY BOARD COMPENSATION

Nancy Saracino, Vice President, General Counsel and Chief Administrative Officer, provided introductory remarks and noted that Board compensation had not been modified in six years. Ms. Saracino described the competitive benchmarking that Management had reviewed to make the recommended change in Board compensation, and confirmed that the competitive data, contained in a proprietary

CorpSec/S. Karpinen Page 9 of 11



report, had been provided to the Board for its consideration in executive session. She noted that the benchmarking placed the California ISO Board compensation well below the compensation paid to governing board members of other independent system operators and regional transmission operators. Ms. Saracino further discussed the uniqueness of the California ISO Board with regard to the higher frequency of meetings throughout the year in public settings.

Greg Fisher, Assistant General Counsel – Corporate and Corporate Secretary, provided the Board with an overview of the proposed modifications to Board compensation, including an increase of \$250 per=meeting for preparation and attendance. Mr. Fisher also proposed that the Audit Committee receive a preparation fee for Audit Committee meetings held on the same day as a Board meeting. Discussion followed and Chairman Foster emphasized the importance of keeping the Board a public service Board while not falling too far below industry practices. He also referenced the competitive benchmarking as important to the Board's consideration.

Motion

Governor Maullin:

Moved, that in accordance with Article III, Section 16 of the bylaws, the ISO Board of Governors hereby modifies the compensation to Board members for their service to the California ISO effective December 13, 2012:

- The standard annual retainer paid to a Governor shall be \$20,000, paid in accrued quarterly installments;
- A fee of \$750 shall be paid for each day of participation at a noticed in-person meeting, and a fee of \$500 shall be paid for each day of participation in a noticed teleconference meeting;
- A fee of \$750 for each meeting day shall be paid for time spent preparing for a noticed in-person meeting, and a fee of \$500 for each meeting day shall be paid for time spent preparing for a noticed teleconference meeting;
- For Board Committee meetings noticed adjacent to a Board of Governors meeting on the same day, Committee members shall be paid a preparation fee for the Committee meeting. The fee shall be \$750 for time spent preparing for a noticed in-person meeting, and a fee of \$500 for time spent preparing for a noticed teleconference meeting;
- Governors who are not also Committee members will not be compensated for optional attendance at a Committee meeting noticed for a date not adjacent to a Board of Governors meeting;

CorpSec/S. Karpinen Page 10 of 11



- A fee of \$750 shall be paid for each day of in-person participation at ISO-sponsored stakeholder events where the Chief Executive Officer specifically requests Governor attendance;
- A fee of \$750 shall be paid to new Governors for participation in the ISO's Board member orientation process;
- Reasonable expenses associated with in-person or teleconference meetings shall be reimbursed;
- Governors who attend meetings or events as representatives of the Board, including ISO/RTO Council meetings and other electric utility or power industry meetings, at the request of the Chair or ISO Management in consultation with the Chair, are not eligible for compensation but shall be eligible for reimbursement of reasonable expenses, as deemed appropriate and approved by the Chair of the Board:
- Governors shall be eligible for conference fees and reasonable expenses associated with seminars, training and conferences related to corporate governance or best practices for Governing Boards, deemed appropriate and approved by the Chair of the Board; and
- Reimbursements for reasonable expenses, as set forth above, shall be in compliance with the ISO Travel Policy for Governors.

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

INFORMATIONAL REPORTS

Nancy Saracino, General Counsel and Chief Administrative Officer, provided highlights of the ISO's recent filing to request declaratory relief from FERC. The ISO's filing asked that FERC confirm that J.P. Morgan does not have consent rights under an agreement between J.P. Morgan and AES related to whether AES could proceed with a project to install synchronous condensers at the Huntington Beach power plant to support grid reliability in the summer of 2013.

There were no questions or comments on the following informational reports: operations report, quarterly financial report, legislative and state regulatory update, business practice manual change management report, market surveillance committee update, department of market monitoring report, master stakeholder engagement plan, and the transmission maintenance coordination committee update.

ADJOURNED

There being no additional general session matters to discuss, the general session was adjourned at approximately 2:00 p.m.

CorpSec/S. Karpinen Page 11 of 11