

GENERAL SESSION MINUTES ISO BOARD OF GOVERNORS MEETING September 10-11, 2009 ISO Headquarters Folsom, California

September 10, 2009

Mason Willrich, Chair of the ISO Board of Governors, called the general session meeting to order at approximately 2:20 p.m. Roll call was taken and the presence of a quorum was established.

ATTENDANCE

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

Mason Willrich, Chair Tom Page Linda Capuano Laura Doll

The following members of the officer team were present: Yakout Mansour, Karen Edson, Steve Berberich, Jim Detmers, and Nancy Saracino.

GENERAL SESSION

The following agenda items were discussed in general session:

PUBLIC COMMENT

Rexford Wait, on behalf of Nevada Hydro Company and representing the Lake Elsinore Advanced Pump Storage Project and Talega-Escondido / Valley-Serrano 500-kV Transmission Line Project, presented comments in support of the project. Mr. Wait expressed concern regarding project delays. Mr. Detmers offered an offline discussion regarding the project status. Mr. Mansour provided a brief project background and noted that the project had not yet been defined and was awaiting interpretation of a Federal Energy Regulatory Commission finding. Discussion followed and the Board noted that if Mr. Wait chose to take part in the ISO process in lieu of going back to FERC, he should come back to the Board if there was a problem entering that process. Further discussion followed regarding the background of the project.



DECISION ON MINUTES

Governor Capuano moved for the approval of the ISO Board of Governors general session minutes for July 20, 2009. The motion was seconded by Governor Doll, and approved 4-0-0.

OPERATIONS UPDATE

Jim Detmers, Vice President of Operations, provided the Board with an operations overview. Mr. Detmers noted that the markets had been working well but noted that the California wildfires had been a challenge to the system. Mr. Detmers provided a high-level overview of the steps taken by the operations floor to keep the system running. Mr. Detmers noted his appreciation for Cal Fire and the operations' staff throughout California. Mr. Detmers concluded his report by providing a status of hydro conditions.

BRIEFING ON 2009-2011 MARKET INITIATIVES ROADMAP

Margaret Miller, Senior Market Design and Policy Specialist, provided the Board with an overview of the elements needed to enhance the ISOs existing market design. Ms. Miller stated the following market enhancements would deliver new functionality and would provide key market and operational benefits: payment acceleration, standard capacity product ancillary services must offer obligation, proxy demand resource, scarcity pricing, multi-stage generator modeling, participating load, and convergence bidding. Ms. Miller provided a high-level overview of the functionalities of each of the proposed enhancements. Ms. Miller concluded her presentation by noting that the market initiatives roadmap process that would prioritize future market initiatives was currently underway.

Janet Morris, Program Office Director, provided the Board with an overview of the market initiatives roadmap and stated the release plan was derived from the ISOs strategic plan, FERC orders, stakeholder input, and lessons learned. Ms. Morris noted that based on lessons learned, the ISOs release plan would reduce implementation risk in major ISO projects including underestimation of full effort, incomplete and changing requirements, and resource constraints. Ms. Morris stated that the delivery and deployment phases would benefit from the planning investments and other process improvements. Ms. Morris concluded her presentation by reviewing the detailed implementation release plan and noted that multi-stage generating unit modeling and convergence bidding may move to a fall 2010 implementation. Discussion followed regarding the wind forecasting initiative and Ms. Morris noted it would be implemented by the end of the month.

Public Comment

Mark Smith, on behalf of Calpine, provided comments about implementation timing for multistage generator unit modeling and noted the importance of this proposed enhancement. Mr. Smith provided comments in support of an April 1, 2010 implementation. Mr. Smith also provided comments on exceptional dispatch and commended the ISO for the progress made in this area.



Elizabeth Dorman, on behalf of the California Public Utilities Commission, commented on convergence bidding and noted concern about too early of an implementation date and requested that the ISO gain experience with zonal virtual bidding prior to the design on nodal product. Ms. Dorman requested that the implementation of convergence bidding remain December 2010 as opposed to moving implementation to October 2010 to allow for further analysis of the product.

Ellen Wolfe, on behalf of Western Power Trading Forum, provided comments regarding implementation timings for multi-stage generating modeling and convergence bidding. Ms. Wolfe addressed the September 10 WPTF letter and requested that multi-stage generation modeling be implemented in spring 2010. Ms. Wolfe also requested that implementation of convergence bidding take place as early as possible, but no later than December 2010.

Brian Hitson, on behalf of Pacific Gas and Electric Company, provided comments and noted the importance of the market initiatives release plan. Mr. Hitson also noted the importance of taking the time to get the design and technical issues done up front – not just the policy issues.

Discussion followed and Mr. Mansour provided an overview of the challenges associated with multi-stage generating modeling and convergence bidding. The Board emphasized the importance of noting the critical path on future release diagrams. Mr. Berberich noted his agreement with the public comments and then further described how the ISO was addressing lessons learned. Discussion followed regarding lessons learned from other ISOs and Mr. Berberich noted that the California ISOs technology was unique. Keith Casey provided further comments from the market monitoring perspective. The Board requested future updates on the market initiatives release plan, including multi-stage generating modeling and convergence bidding. Brief discussion followed.

DECISION ON ANCILLARY SERVICES PROCUREMENT IN HOUR-AHEAD SCHEDULING PROCESS

Greg Cook, Market Design and Regulatory Policy Manger, provided the Board with an overview of Management's proposal on ancillary services procurement in hour ahead scheduling process (HASP) and dispatch logic. Mr. Cook noted that prior to the start of the new market, the ISO deferred implementation of this market functionality due to limitations surrounding the inability to dispatch energy from operating reserves procured from non-dynamic system resources in HASP. Mr. Cook described how the proposal addressed constraints of non-dynamic system resources and noted it would only apply to contingency dispatch situations. Mr. Cook concluded his presentation by stating that implementation was targeted for April 1, 2010.

Public Comment

No public comment was offered at this time.

Board Decision

Ms. Saracino clarified that the word "tariff" had been removed from the original language for consistency in motion language surrounding FERC filings.



Governor Capuano:

Moved, that the ISO Board of Governors approves the market rule changes necessary to allow procurement of ancillary services in hour ahead scheduling process from non-dynamic system resources as described in the memorandum dated September 2, 2009; 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 these policies.

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

DECISION ON PROXY DEMAND RESOURCE

Proposal

Margaret Miller, Senior Market Design and Policy Specialist, provided the Board with an overview of proxy demand resource and noted it moved the ISO closer towards active demand response participation in markets. Ms. Miller noted that proxy demand resource satisfied stakeholders' request for a more flexible demand response product and met FERC Order 719 requirements. Ms. Miller stated that the ISO worked closely with stakeholders to develop key elements of the proposal. Ms. Miller provided an overview of remaining stakeholder concerns and noted that the stakeholders generally agreed with the proposal. Ms. Miller concluded her presentation by stating that implementation was targeted fro April 1, 2010.

Public Comment

Karl Meeusen, on behalf of the California Public Utilities Commission, provided generally supportive comments on Management's proposal and noted the CPUC would be opening a related proceeding. Mr. Meeusen commented on the Market Surveillance Committee Opinion and expressed concerns pertaining to market monitoring and ancillary services settlements. Discussion followed regarding minimum bid prices, FERC requirements and the CPUC process.

Steve McCarty, on behalf of Pacific Gas and Electric Company, provided comments in support of Management's proposal and commended the stakeholder process. Mr. McCarty noted there was still work to be done and expressed concern with getting the bulk of PG&Es demand response into proxy demand resource by 2010. Mr. McCarty emphasized the importance of monitoring the new product.

Lawrence Olivia, on behalf of Southern California Edison, provided comments in support of Management's proposal and commended the stakeholder process. Mr. Olivia said there was more work to be done at the retail level and supported the forthcoming CPUC proceeding. Mr. Olivia expressed concern with getting the bulk of SCEs demand response into proxy demand resource by 2010.

Discussion followed regarding smart grid initiatives and the integration of consumers into the wholesale markets. The Board commended the efforts of stakeholders and ISO staff and



commented on the importance of an expeditious CPUC proceeding. Discussion followed regarding the status of proxy demand resources in comparison to gas turbines. Discussion ensued and Management confirmed that proxy demand resources would not qualify as an alternative energy sources. Discussion followed.

Jim Bushnell, with the Market Surveillance Committee, provided comments on the Market Surveillance Committee's May 1, 2009 Opinion entitled "The California ISO's Proxy Demand Resource Proposal" and addressed cautionary concerns related to the baseline. Discussion followed and Keith Casey provided comments from the market monitoring perspective and emphasized that the real value of the program rested with the controls and resources put in place to monitor those controls. Discussion followed regarding the proposals impact on customers and it was noted that the focus should be on setting up the right incentives.

Board Decision

Motion

Governor Doll:

Moved, that the ISO Board of Governors approves the proposed proxy demand resource product, as described in the memorandum dated September 2, 2009; and That the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement this proposal.

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

DECISION ON MODIFYING RULES LIMITING SUPPLY BID POOL IN THE INTEGRATED FORWARD MARKET

Proposal

Mark Rothleder, Principal Market Developer, provided the Board with a briefing on Management's proposal to modify rules limiting supply bid pool in the integrated forward market. Mr. Rothleder stated the current rule limited the resources available to the integrated forward market. Mr. Rothleder discussed the July 26 case example and described how scarcity occurs if bid-in load exceeds ISO forecast. Mr. Rothleder provided an overview of the four alternative approaches that were considered to address the limit on the integrated forward market supply bid pool issue. Mr. Rothleder stated that Management was recommending the elimination of the limit in the integrated forward market supply pool approach. Discussion followed regarding the benefits of using all bids in the integrated forward market as a short-term solution. Mr. Rothleder noted that using bid-in demand curve in the local market power mitigation was the generally agreed upon approach for the long-term solution. Discussion followed.



Public Comment

Doug Parker, on behalf of Southern California Edison, provided supporting comments on Management's proposal as a short-term solution.

Brian Hitson, on behalf of Pacific Gas and Electric Company, provided supporting comments on Management's proposal as a short-term solution.

Board Decision

Motion

Governor Capuano:

Moved, that the ISO Board of Governors approves the policy to eliminate the current restriction on the supply bid pool for the integrated forward market so that all supply bids will be considered, as described in the memorandum dated September 2, 2009; 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 this policy.

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

BRIEFING ON EXCEPTIONAL DISPATCH

Greg VanPelt, Grid Operations Interim Director, provided the Board with an overview of exceptional dispatch and the importance of exceptional dispatch in meeting reliability requirements. Mr. VanPelt noted exceptional dispatch was being used more than expected but stated that the ISO was committed to reducing reliance on exceptional dispatches. Mr. VanPelt informed the Board that an exceptional dispatch strike team had been formed to evaluate the situation. Mr. VanPelt noted that the ISO has made progress in reducing reliance on exceptional dispatches in the day-ahead market and that the overall volume of exceptional dispatch had been significantly reduced. Mr. VanPelt noted that exceptional dispatches were a small portion of total load, and a smaller percentage as load increased. Mr. VanPelt concluded his presentation by reviewing the steps underway to reduce reliance on exceptional dispatches and noted that exceptional dispatches may always be required for adverse operating conditions or intertie reductions. Discussion followed regarding the training and adaptability of operations floors with the new market systems.

RECESSED

There being additional general session items to discuss, the general session of the ISO Board of Governors meeting was recessed at approximately 5:30 p.m.



September 11, 2009

RECONVENED

Mason Willrich, Chair of the ISO Board of Governors, reconvened the general session meeting to order at approximately 9:10 a.m. Roll call was taken and the presence of a quorum was established.

ATTENDANCE

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

Mason Willrich, Chair Tom Page Linda Capuano Laura Doll

The following members of the officer team were present: Yakout Mansour, Karen Edson, Steve Berberich, Jim Detmers, and Nancy Saracino.

GENERAL SESSION

The following agenda items were discussed in general session:

PUBLIC COMMENT

Eric Brooks, on behalf of San Francisco Green Party, provided comments on the global energy crisis.

Joshua Arce, on behalf of Brightline Defense Project, provided comments and expressed the importance of environmental justice and community concerns.

DECISION ON PAYMENT ACCELERATION

Nancy Traweek, Director of Operations Support and Settlements, provided the Board with a background overview and stated the ISO was executing its payment acceleration dry run in preparation for implementation on November 1, 2009. Ms. Traweek noted that a key component of payment acceleration was a change from monthly to semi-monthly invoicing. Ms. Traweek described how charge codes for congestion revenue rights and the participating intermittent resource program would not settle on a neutral basis as charge codes for these items had a monthly settlement netting element. In order to assure neutrality, Ms. Traweek stated that the charges for these items needed to be calculated on a daily basis and reconciled on a monthly basis. Ms. Traweek stated that the proposal solved accounting issues without a negative impact to participants. Ms. Traweek concluded her presentation by noting that the proposal was vetted



with stakeholders and there was no opposition to the proposal. Discussion followed regarding the acceleration of payments as a result of the modification.

Motion

Governor Capuano:

Moved, that the ISO Board of Governors approves the policy regarding the daily settlement of charge types relating to the participating intermittent resource program and congestion revenue rights, as described in the memorandum dated September 2, 2009; 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 this policy.

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

DECISION ON INTERIM ALLOCATION OF REAL-TIME IMBALANCE ENERGY OFFSET

Greg Cook, Market Design and Regulatory Policy Manager, provided the Board with an overview of Management's interim allocation of real-time imbalance energy offset proposal. Mr. Cook described how high costs drove the need to re-examine the real-time energy offset costs allocation method and that a need arose to revise the allocation method to reflect cost causation more equitably. Mr. Cook further described the main factors that were causing the high real-time energy offset costs and provided the Board with an overview of the ISOs observations after analysis of the April data. Mr. Cook reviewed the considerations that were underway for the longer-term solution and noted that for near-term, Management recommended exempting load-following metered subsystem from real time offset costs. Mr. Cook concluded his presentation by reviewing next steps and noted that the proposal for the longer-term solution would go to the Board in October. Discussion followed.

Public Comment

Tony Zimmer, on behalf of Northern California Power Agency, provided comments in support of the proposal and commended the ISO stakeholder process.

Board Decision

Motion

Governor Capuano:

Moved, that the ISO Board of Governors approves the interim exemption of loadfollowing metered subsystems demand, which includes exports, from allocation of real time imbalance energy offset costs until a longer-term solution can be developed, as



described in the memorandum dated September 2, 2009; 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 this proposal.

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

DECISION ON AMENDMENT TO THE LARGE GENERATION INTERCONNECTION PROCEDURES

Stephen Rutty, Grid Assets Manager, provided the Board with an overview of Management's proposal to amend the large generation interconnection procedures and described transmission planning components, such as who pays what and when. Discussion followed regarding cost recovery. Mr. Rutty noted that the slides had been updated from what was provided in the Board materials and handed out at the meeting. Mr. Rutty described an illustrated transmission project financing example. Mr. Rutty provided a background of the Board's 2008 approval of the reformed large generation interconnection procedures. Mr. Rutty noted that estimated network upgrade costs from phase 1 studies varied widely. Mr. Rutty stated that Management was proposing to reduce the financial security requirements and timing for postings. Mr. Rutty illustrated how the proposal affected initial financial security postings for transition cluster project. Mr. Rutty stated that Management was also proposing to reduce the financial security at risk upon project withdrawal and to add flexibility for projects in the transition cluster. Mr. Rutty noted the many stakeholders supported the proposal and then reviewed the remaining stakeholder reservations. Mr. Rutty noted that the proposal balanced the need for meaningful financial requirements with the need to allow viable projects to move forward. Discussion followed regarding the projects in the transmission cluster and in response to a request from the Board, Mr. Rutty stated he would find out how many had power purchase agreements.

Public Comment

Ms. Saracino recognized public comment letters submitted by: SunPower, First Solar, Large-scale Solar Association, Solar Millennium, and Terra-GenPower.

Christopher Ellison, on behalf of Large-scale Solar Association, provided supporting comments on Management's proposal and commended the stakeholder process. Mr. Ellison stated that there was more work to be done but supported the current proposal.

Greg Blue, on behalf of SunPower Corporation, provided supporting comments on Management's proposal and commended the ISO for its responsiveness to stakeholder concerns.

Bernard Remy, on behalf of Terra-GenPower, provided supporting comments on Management's proposal. Mr. Remy noted there was still more work to be done and expressed concern with the cap.



Brian Biering, on behalf of First Solar, provided supporting comments on Management's proposal and stated much more work was needed and requested that the stakeholder process be reconvened to address remaining concerns.

Susan Schneider, on behalf of CalWEA, provided supporting comments on Management's proposal and commended the stakeholder process. Ms. Schneider agreed that more work was needed before moving to phase 2.

Susan Schneider, on behalf of Solar Millennium, provided supporting comments on Management's proposal but noted that a lower cap was preferred. Ms. Schneider commented on the additional work still to be done.

Jim Filippi, on behalf of Next Light Renewable Power, provided supporting comments on Management's proposal and commended the responsiveness of the ISO on the issue.

Sean Beatty, on behalf of Mirant, provided supporting comments on Management's proposal and commended the expeditious efforts of the ISO staff.

Steve Williams, on behalf of San Diego Gas and Electric Company, provided supporting comments on Management's proposal and requested that it be deemed a short-term solution. Mr. Williams requested that the stakeholder process reopen to address the issue and further discussed concerns with the LGIP process.

John King, on behalf of LS Power, noted agreement with SDG&Es comments. Mr. King requested approval of Management's proposal and commended the stakeholder process. Mr. King requested that the stakeholder process be reopened to address remaining issues in preparation for phase 2.

Thomas Flynn, on behalf of Southern California Edison, commended the efforts of the ISO staff in the stakeholder process. Mr. Flynn stated that SCE generally supported Management's proposal but expressed cautionary remarks on the proposal. Mr. Flynn requested that the ISO and the Board remain open to additional modifications to the proposal at its December Board meeting.

Eric Eisenman, on behalf of Pacific Gas and Electric Company, commended the ISO staff for their work on the proposal. Mr. Eisenman stated that PG&E generally supported Management's proposal but noted that they felt the proposed decrease in the initial posting was too much. Mr. Eisenman requested the ISO staff brief the Board at its December meeting.

Kerry Hattevik, on behalf of NRG Energy, commended the responsiveness of the ISO staff. Ms. Hatteuik noted agreement with Mr. King's request to reopen the stakeholder process to address remaining phase 2 issues. Ms. Hatteuik supported the request for a Board briefing in December.



Mr. Mansour commended the ISO staff and market participants on a successful stakeholder process. Mr. Mansour noted that he did not want the interconnection process to be an obstacle for reaching the renewable portfolio standard goals. Mr. Mansour provided a high-level overview of the steps already taken as well as next steps, and emphasized the importance of a December briefing to the Board. Mr. Mansour noted the importance of making the findings of the Renewable Energy Development Institute process real.

Discussion followed and the Board acknowledged its appreciation for the constructive feedback from the stakeholders and requested a further briefing on the matter at its December meeting.

Board Decision

Motion

Governor Capuano:

Moved, that the ISO Board of Governors authorizes the amendments to the Large Generator Interconnection Procedures as described in the memorandum dated September 2, 2009; and

Moved, that the Board authorizes Management to make all the necessary and appropriate filings with FERC to implement proposal.

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

DECISION REGARDING CONDITIONAL APPROVAL TO EXTEND EXISTING RMR CONTRACTS FOR 2010

Gary DeShazo, Director of Regional Transmission North, provided the Board with an overview the components of the reliability must-run process. Mr. DeShazo addressed circumstances surrounding the local generation needs of San Francisco and the resulting controversies concerning the renewal of the Potrero power plant. Mr. DeShazo noted the importance of the TransBay Cable project in relation to the closure of the Potrero plant and informed the Board that the reliability must-run contract would allow for an early termination when TransBay became operational. Mr. DeShazo provided an overview of the pre-determined resource adequacy process. Mr. DeShazo stated that reliability must-run contracts ensured adequate capacity and sometimes ensured required services not covered by the resource adequacy contracts. Mr. DeShazo noted that resource adequacy contracts provided for the bulk of local reliability needs and that the total number of reliability must-run contracts continues to decrease each year. Mr. DeShazo described the reasons why reliability must-run designations were extended on a conditional basis.



Public Comment

Manuel Ramirez, on behalf of the San Francisco Public Utilities Commission, provided comments and noted the City's active involvement in the matter. Mr. Ramirez requested that Potrero Unit 3 not be extended.

Steven Moss, on behalf of San Francisco Community Power, provided comments regarding the lack of need for Potrero Unit 3 and requested its closure as soon as the TransBay Cable project came online.

Eric Brooks, on behalf of San Francisco Green Party, provided comments and requested that Potrero Unit 3 was closed by the end of 2009 and noted that if not the entire unit then only keep one turbine running.

Joshua Arce, on behalf of Brightline Defense Project, provided comments in support of the closure of the Potrero Unit 3 by the end of the year and requested that renewal of Units 4, 5 and 6 be contingent upon cancellation once TransBay Cable came online. Mr. Arce further addressed the September 10 letter submitted by Senator Mark Leno and provided copies of the letter to the Board.

Eddie Ahn, on behalf of Brightline Defense Project, provided comments and addressed a handout entitled "Solar Power as Peaker Power" that was distributed to the Board.

Marie Harrison, on behalf of Greenaction, provided comments in support of the closure of the Potrero generating units and noted that the need for 25 mw did not warrant keeping the units open. Ms. Harrison commented on environmental hazards associated with the Potrero plant.

Mr. DeShazo addressed the public comment concerns and explained the analysis and assumptions associated with 25 mw gap, including completion of the TransBay Cable project. Discussion followed regarding a further analysis by the ISO once TransBay Cable was online and 2010 load forecasts becoming available. Governor Page discussed residential solar photovoltaic and how is should be accounted for in load forecasts as it was currently treated as demand reduction not a demand resource. Discussion followed the relation between resource adequacy agreements and reliability must-run agreements.

Board Decision

Motion

Governor Capuano:

Moved, that the ISO Board of Governors authorizes Management to extend the RMR contracts for any of the RMR Units listed on Attachment 1, consistent with the criteria described in the memorandum dated September 2, 2009.

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



BRIEFING ON ISO MARKETS

Debi Le Vine, Director of Market Services, provided the Board with an overview of the ISO new market performance. Ms. Le Vine described how the market publishing processes were performing well and that positive real-time load aggregation point prices were predominately under \$1,000.00. Ms. Le Vine noted the ISO was monitoring congestion revenue rights revenue adequacy. Ms. LeVine stated that the ISO was continuing to timely publish settlement statements and invoices and continued to receive fewer settlement statement disputes than expected. Ms. Le Vine described improvements made since the last meeting and concluded by providing an overview of future improvements that were under review. Discussion followed.

BRIEFING ON IRON POINT FACILITY

Steve Berberich, Vice President of Technology and Corporate Services and Chief Financial Officer, provided the Board with an update on the Iron Point facility and noted that the project remained principally on schedule and budget. Mr. Berberich discussed events that would be occurring over the next 30 days. Mr. Berberich concluded his presentation by providing an overview of the project schedule.

INFORMATIONAL REPORTS

There were no comments on the informational reports.

ADJOURNED

There being no additional general session items to discuss, the general session of the ISO Board of Governors meeting was adjourned at approximately 12:10 p.m.