

GENERAL SESSION MINUTES ISO BOARD OF GOVERNORS MEETING May 16-17, 2012 ISO Headquarters Folsom, California

<u>May 16, 2012</u>

The ISO Board of Governors convened the general session meeting at approximately 1:00 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 Ashutosh Bhagwat Angelina Galiteva Richard Maullin David Olsen

The following members of the officer team were present: Steve Berberich, Keith Casey, Karen Edson, Petar Ristanovic, Brenda Thomas, Eric Schmitt and Greg Fisher on behalf of Nancy Saracino

GENERAL SESSION

The following agenda items were discussed in general session:

PUBLIC COMMENT

Greg Fisher, Assistant General Counsel - Corporate, acknowledged receipt of the following public comment letters from: California Energy Commission, Wellhead Electric, and Interstate Renewable Energy Council.

DECISION ON GENERAL SESSION MINUTES

Governor Galiteva moved for approval of the Board of Governors general session minutes for the March 22-23, 2012 meeting. The motion was seconded by Governor Foster and approved 4-1-0, with Governor Olsen abstaining.



CEO REPORT

Steve Berberich, President and CEO, provided welcoming comments to Governor Olsen. Mr. Berberich then provided an update on renewables and an overview of the following sections of his CEO Report: Pacific/Southwest power outage, summer grid outlook, support for distributed resources, regulatory must-take generation, and the Department of Market Monitoring's Annual Report.

DECISION ON REGULATORY MUST-TAKE GENERATION SCHEDULING PRIORITY

Greg Cook, Director – Market and Infrastructure Development, provided a historical overview of regulatory must-take generation and noted that these types of resources have received scheduling priority in the ISO market and have been exempted from tariff provisions. Mr. Cook stated that the proposal would provide a limited scheduling priority to combined heat and power resources. Mr. Cook noted that the scheduling priority would protect host industrial process from curtailment when participating in the ISO market. Mr. Cook stated that the proposal should provide more dispatch flexibility from existing combined heat and power resources. Mr. Cook provided an overview of the stakeholder process and discussed remaining concerns. Mr. Cook concluded his presentation by reviewing the benefits of the proposal. Brief discussion followed regarding the estimated amount of capacity available under the proposal.

Public comment

Robert Weisenmiller, Chair of the California Energy Commission, provided comments in support of Management's proposal and further discussed the benefits of combined heat and power resources. Chair Weisenmiller provided an overview of combined heat and power policies and concluded by highlighting the benefits of Management's proposal.

Marc Ulrich, on behalf of Southern California Edison, acknowledged staff efforts, provided supportive comments on Management's proposal and noted that SCE was looking forward to seeing the tariff language to ensure it supported the proposal's framework.

Beth Vaughan, on behalf of the California Cogeneration Council, provided an organizational overview and acknowledged staff efforts. Ms. Vaughan provided supportive comments on Management's proposal and noted the Council was also interested in seeing the final tariff language.

Michael Aleantar, on behalf of the Cogeneration Association of California and Energy Producers and Users Coalition, provided an organizational overview and provided comments in support of Management's proposal.



Dariush Shirmohammadi, on behalf of the California Wind Energy Association, provided an organizational overview as well as a historical viewpoint of regulatory must-take matters. Mr. Shirmohammadi provided comments on Management's proposal and noted concern that the proposal did not provide equal treatment for curtailment of certain facilities and requested that the proposal address this concern.

Keith Casey, Vice President of Market and Infrastructure Development, provided responsive comments regarding the scope of the proposal and noted that the concerns raised by Mr. Shirmohammadi would be addressed as part of a stakeholder initiative scheduled to commence in July 2012. Mr. Shirmohammadi provided responsive comments. Brief discussion followed.

<u>Motion</u>

Governor Bhagwat:

Moved, that the ISO Board of Governors approves the proposed policy change regarding regulatory must-take generation scheduling priority, as described in the memorandum dated May 9, 2012; 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 Galiteva and approved 5-0-0.

DECISION ON COMMITMENT COSTS REFINEMENTS

Greg Cook, Director – Market and Infrastructure Development, provided an overview of Management's proposal and stated that the ISO market provides resources with the ability to indicate and recover costs of committing a resource. Mr. Cook noted that the ISO also uses cost-based calculations in other circumstances and further described those instances. Mr. Cook stated that the proposal included a number of enhancements to the current proxy cost calculations and registered cost cap. Mr. Cook provided an overview of the additional elements that were proposed to be included in proxy cost calculations. Mr. Cook concluded by providing an overview of the benefits of the proposal and noted it was largely supported by stakeholders.

Public comment

Eric Leuze, on behalf of GenOn Energy, acknowledged staff efforts and provided comments in support of Management's proposal, including reduction of the registered cost cap to 150%.



Brian Theaker, on behalf of NRG Energy, acknowledged staff efforts and provided generally supportive comments on Management's proposal. Mr. Theaker provided further comments regarding NRG's remaining concerns with the proposal.

Mark Smith, on behalf of Calpine, acknowledged staff efforts and provided supportive comments on Management's proposal, but noted some disappointment that the registered cost cap had declined.

Jeffrey Nelson, on behalf of Southern California Edison, acknowledged staff efforts and provided generally supportive comments, but requested that the proposal not be approved in its entirety as related to the treatment of start-up costs.

Mr. Cook provided responsive comments and further discussed implementation timeframes of the proposed enhancements.

Eric Hildebrandt, Director of Market Monitoring, provided supportive comments on the overall proposal. Mr. Hildebrandt recommended that the concept of including an additional cost for major maintenance be further discussed in an upcoming stakeholder process.

Discussion followed regarding revisiting the registered cost cap. Mr. Berberich provided comments regarding the ISO's commitment to continue looking at ways the generators can more fully recover costs associated with providing capacity in the ISO market.

Jim Bushnell, Member of the Market Surveillance Committee, provided supportive comments on Management's proposal and noted highlights on the Market Surveillance Committee Opinion titled "Bid Cost Recovery Mitigation Measures and Commitment Costs Refinement."

Motion

Governor Maullin:

Moved, that the ISO Board of Governors approves the proposed tariff change regarding modifications to the provisions for commitment costs as described in the memorandum dated May 9, 2012; 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 Galiteva and approved 5-0-0.



DECISION ON RESOURCE ADEQUACY DELIVERABILITY FOR DISTRIBUTED GENERATION

Lorenzo Kristov, Principal – Market and Infrastructure Policy, provided an overview of Management's proposal and noted that the proposal would create a streamlined process for distributed generation to provide resource adequacy capacity. Mr. Kristov discussed the ISO's comprehensive stakeholder process and noted the proposal had broad stakeholder support. Mr. Kristov stated the proposed annual process would consist of two new steps. Mr. Kristov further described the two steps: perform distributed generation deliverability studies, and allocate distributed generation deliverability resulting from studies.

Discussion followed regarding the quality of the resource portfolios. Keith Casey provided comments and noted the ISO was working closely with the California Public Utilities Commission to further improve the process. Discussion followed.

Public comment

Molly Sterkel, on behalf of the California Public Utilities Commission, acknowledged staff efforts and provided comments in support of Management's proposal, including the current implementation timeline. Ms. Sterkel acknowledged that the CPUC had work to do in this area and stated that the CPUC would be addressing these issues later in the year. Discussion followed regarding projections on how the process could be expedited.

Dariush Shirmohammadi, on behalf of California Wind Energy Association, provided a historical viewpoint of the transmission development process. Mr. Shirmohammadi provided further comments noting concern with Management's proposal and requested that the ISO modify its assessment process.

Jeffrey Nelson, on behalf of Southern California Edison, provided comments in support of Management's proposal, but requested that the ISO allocate distributed generation deliverability directly to load-serving entities.

<u>Motion</u>

Governor Galiteva:

Moved, that the ISO Board of Governors approves the proposal regarding resource adequacy deliverability for distributed generation, as described in the memorandum dated May 9, 2012; 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 Olsen and approved 5-0-0.



DECISION ON DISPATCH PRIORITY OF OPERATING RESERVES

Nancy Traweek, Director – System Operations, provided an overview of Management's proposal regarding dispatch priority of operating reserves. Ms. Traweek noted that current requirements limit quick response under certain conditions and then provided a background overview regarding examples of contingency events that would trigger the need to dispatch operating reserves. Ms. Traweek then provided an overview of two scenarios that addressed recovery from non-significant as well as significant contingency events. Ms. Traweek noted that stakeholders were generally supportive of the proposal and concluded her presentation by providing an overview of the proposal's benefits. Discussion followed regarding the response time of energy-only resources.

Public comment

Brian Theaker, on behalf of NRG Energy, provided comments of concern regarding Management's proposal and stated NRG would like to see a better market solution to resolve slower response times of energy-only resources.

Ms. Traweek provided responsive comments and stated that the ISO's primary concern was reliability and noted that Management did not anticipate using this product often. Mr. Berberich provided additional comments and emphasized the importance of grid reliability.

<u>Motion</u>

Governor Maullin:

Moved, that the ISO Board of Governors approves the proposed tariff change regarding prioritization of operating reserves, as described in the memorandum dated May 9, 2012; 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 Foster and approved 5-0-0.

BRIEFING ON COST ALLOCATION GUIDING PRINCIPLES

Mark Rothleder, Executive Director – Market Analysis and Development, provided the Board with a briefing on the ISO's cost allocation guiding principles. Mr. Rothleder noted that industry changes warranted reexamining traditional methods for allocating ISO market costs. Mr. Rothleder stated that allocation of costs based



on causation would incentivize behavior to reduce costs. Mr. Rothleder then discussed the following seven cost allocation guiding principles: causation, comparable treatment, accurate price signals, incentivize behavior, manageable, synchronized, and rational. Mr. Rothleder noted that application of these principles might create inherent tensions that would also require proper balancing. Mr. Rothleder concluded his presentation by noting that Management intended to apply these guiding principles to new and existing market products and refine the principles as needed.

Public comment

Jim Caldwell, on behalf of the Center for Energy Efficiency and Renewable Technologies, provided comments regarding the draft principles and noted the importance of applying the principles to cost allocation. Mr. Caldwell requested that the 'duty to mitigate' be added as a principle.

Kristin Burford, on behalf of the Large-Scale Solar Association, provided comments regarding the draft principles and noted concern about the abbreviated stakeholder process. Ms. Burford provided an overview of remaining concerns and requested additional time for stakeholder input prior to application of the principles.

Valerie Seymour, on behalf of the Clean Coalition, provided comments regarding the draft principles and noted the importance of cost allocation. Ms. Seymour requested that the ISO consider principles for distribution level interconnection projects in the near future.

Dariush Shirmohammadi, on behalf of the California Wind Energy Association, provided an overview of comments made at a prior Board meeting regarding market products and resource changes. Mr. Shirmohammadi provided further comments and stated that the first step should be to leverage and enhance the existing market mechanisms first.

Eric Eisenman, on behalf of Pacific Gas and Electric Company, acknowledged staff efforts and provided comments in support of the draft principles. Mr. Eisenman further discussed the benefits of proper cost allocation.

Marc Ulrich, on behalf of Southern California Edison, provided comments regarding the draft principles and noted the importance of cost causation. Mr. Ulrich provided further comments in support of the draft principles and commended the effectiveness and transparency aspects associated with the principles.

Discussion followed regarding striking a balance of stakeholder concerns on the principles as well as how the principles would continue to be refined as market products are developed. Discussion followed regarding cost allocation, flexible



ramping, economical bidding and state policy goals. Closing remarks were made regarding the importance of guidance principles.

ACCEPTANCE OF AUDIT OF FINANCIAL STATEMENTS AND FERC FORM 1

Ryan Seghesio, Chief Financial Officer & Treasurer, informed the Board that Management had completed the annual financial process that included the annual audited financial statements and the annual FERC Form 1. Mr. Seghesio provided highlights of the 2011 audited financial statements and further discussed key components of the balance sheet.

Sean Barry, with PricewaterhouseCoopers, provided the Board with an overview of the results of the 2011 financial audit and noted that the audit opinions were unqualified. Mr. Barry provided an overview of the general purposes and statutory requirements surrounding the two audits. Mr. Barry provided an overview of FERC (FASB) vs. GASB reporting. Mr. Barry provided the Board with an overview of key audit areas and advised that PwC's independence was a key element of the audit relationship.

Mr. Barry concluded his presentation by reviewing the external auditor required communications and encouraged communication and feedback from the Board.

<u>Motion</u>

Governor Galiteva:

Moved, that the ISO Board of Governors accepts the financial statements of the ISO for the years ended December 31, 2011 and 2010, as audited by PricewaterhouseCoopers, and as attached to the memorandum dated May 9, 2012: and

Moved, that the ISO Board of Governors accepts the FERC Form No. 1 for the years ended December 31, 2011 and 2010, as audited by PricewaterhouseCoopers, and as attached to the memorandum dated May 9, 2012.

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

BRIEFING ON SCOPE OF 2012 OPERATIONS AUDIT

Nancy Traweek, Director – System Operations, provided the Board with a historical overview of the operations audit and noted that it was an independent audit review that was required by the tariff. Ms. Traweek noted that PricewaterhouseCoopers would be conducting the 2012 audit. Ms. Traweek stated that the scope was determined generally by stakeholder feedback, PricewaterhouseCoopers input and Management. Ms. Traweek informed the Board that the audit scope would be the



validation of the day-ahead process. Ms. Traweek concluded her presentation by reviewing the audit schedule and noted that the results would be presented to the Board at the December meeting. Brief discussion followed.

BRIEFING ON RENEWABLE GENERATION IN THE ISO GENERATOR INTERCONNECTION QUEUE

Bob Emmert, Manager – Interconnection Resources, provided the Board with an update on the status of renewable generation in the ISO generator interconnection queue since the last update in October 2011. Mr. Emmert discussed the current and projected renewable generation capacity in operation within the ISO, as well as the change in renewable capacity in the queue since the last update.

Mr. Emmert concluded his presentation by providing an overview of renewable projects in the ISO queue by size and type. Discussion followed regarding the importance surrounding achievement of the 2020 policy goals. Additional discussion followed regarding the addition of a matrix showing the percentage of signed power purchase agreement projects coming online.

DEPARTMENT OF MARKET MONITORING BRIEFING

Eric Hildebrandt, Director of Market Monitoring, provided the Board a briefing that covered highlights of the 2011 Annual Report on Market Issues and Performance, prepared by the Department of Market Monitoring. Mr. Hildebrandt stated the total annual wholesale costs load decreased 6% after accounting for lower gas prices. Mr. Hildebrandt noted that some smaller components of total costs increased, but had declined by the end of 2011. Mr. Hildebrandt stated that the ISO was on the verge of dramatic increase in solar and wind resources within the ISO system. Mr. Hildebrandt stated that net operating revenues earned by typical new gas units from the ISO energy market continued to fall well short of the fixed costs of new capacity.

Mr. Hildebrandt concluded his report by reviewing several recommendations going forward. Brief discussion followed regarding the additional capacity coming online.

Public comment

Mark Smith, on behalf of Calpine, provided comments on how net operating revenues earned by typical new gas units from the ISO energy market continued to fall well short of the fixed costs of new capacity. Discussion followed regarding the ongoing collaboration among the agencies to address the issue.

INFORMATIONAL REPORTS

There were no questions or comments on the following informational reports: regulatory report, operations report, financial report, market performance report, legislative and state regulatory update, business practice manuals change management report, market surveillance committee update, market initiatives



release plan and stakeholder engagement charts, and the Transmission Maintenance Coordination Committee update.

ADJOURNED

There being no additional general session matters to discuss, the general session was adjourned at approximately 5:30 p.m.