

Memorandum

To: ISO Board of Governors

From: Laura Manz, Vice President - Market & Infrastructure Development

Date: March 18, 2009

Re: ***Decision on Standard Resource Adequacy Capacity Product and Resource Adequacy Must Offer Obligation***

This memorandum requires Board action.

EXECUTIVE SUMMARY

In response to stakeholders' request to develop a standard capacity product to facilitate buying, selling and trading of capacity to meet RA requirements, Management proposes the ISO Board of Governors (the Board) adopt a *standardized trading platform* for resource adequacy (RA) contracting. This platform should streamline the contracting process and provide incentives for resource owners to increase their availability to the California Independent System Operator Corporation (the ISO). Management also proposes expanding the current *RA must offer obligation*¹ to include ancillary services in addition to energy. These enhancements should result in improved market and grid operations.

Management recommends this in order to:

1. Improve grid reliability;
2. Streamline stakeholder contracting and improve tradability;
3. Meet regulatory requirements; and
4. Implement standard RA capacity product promptly.

MOTION

Moved, that the ISO Board of Governors approves the policy to implement the standard resource adequacy capacity product and enhance the resource adequacy must offer obligation to include ancillary services, as detailed in the memorandum dated March 18, 2009, and

¹ The must offer obligation is a requirement that scheduling coordinators for RA resources make their RA capacity available to the ISO in accordance with Section 40.6 of the ISO tariff.

That the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement these changes.

BACKGROUND

The development of the *standard RA capacity product* has been an evolutionary process, beginning in 2007 with a proposal submitted to the California Public Utilities Commission (CPUC) by a broad coalition of stakeholders during the Commission's long term RA proceeding.² In this proposal, stakeholders suggested that the ISO adopt certain tariff amendments to standardize aspects of bilateral RA contracts, to facilitate the contracting process. Stakeholders sent a follow up letter reiterating this request, which was provided to the Board in early 2008. The standard RA capacity product was included in the ISO's *Market Initiatives Roadmap* and in July 2008 was identified as stakeholder's highest priority initiative out of a list of over 70 other projects.

CRITERIA

Management used four criteria in the development of the standard RA capacity product proposal.

1. *Improve grid reliability* – The proposal should enhance grid reliability through an accepted set of standards and incentives in the tariff that will increase the availability of RA resources;
2. *Streamline stakeholder contracting* – The proposal should facilitate stakeholder contracting negotiations through a common set of standards in the ISO tariff;
3. *Meet regulatory requirements* – The proposal should address regulatory requirements of both the Federal Energy Regulatory Commission (FERC) and the CPUC. In its September 21, 2006 order, FERC required the ISO to create performance criteria for RA resources within 12 months of the start up the Market Redesign and Technology Upgrade (MRTU). The CPUC initiated Phase 2 of its resource adequacy proceeding which requested proposals for a standard RA capacity product; and
4. *Implement standard RA capacity product promptly* – The proposal should account for implementation constraints that will enable implementation in time for 2010 RA showing (in October 2009).

² CPUC – Amended proposal of Calpine Corporation, Coral Power, L.L.C., Constellation Energy Commodities Group, Inc., Constellation Newenergy, Inc. J. Aron & Company, Pacific Gas and Electric Company, Strategic Energy, L.L.C., Alliance for Retail Energy Markets, Western Power Trading Forum, Mirant California, LLC, Mirant Delta, LLC and Mirant Potrero, LLC, APS Energy Services and Energy Users Forum (“Joint Parties”) for a Standardized Resource Adequacy Contract and Associated Resource Obligations, Rulemaking 05-12-013 Order Instituting Rulemaking to Consider Refinements to and Further Development of the Commission's Resource Adequacy Requirements Program (Dec 12, 2007).

STAKEHOLDER PROCESS

In August 2008, Management began the stakeholder process by publishing an issue paper which described the breadth of issues associated with standard RA capacity product design. Stakeholders provided a wealth of oral and written comment for a straw proposal created and published in November 2008. Management proposed a set of principles to define the product, set forth availability standards based on each specific resource's forced outage data, and suggested that a performance incentive structure could be established either on a financial basis (apply penalties and bonuses) or physical basis. Doing so on a physical basis means reducing the amount of capacity that a resource is qualified to sell in fulfillment of RA obligations due to its lack of availability. If a physical penalty is imposed, the resource's capacity is reduced in the next period, not immediately reducing the amount of capacity a resource can offer in future years due to poor performance. Stakeholders (including Calpine, State Water Project (SWP), California Energy Resources Scheduling (CERS), California Forward Capacity Market Advocates (CFCMA), California Municipal Utility Association (CMUA), CPUC, and The Utility Reform Network (TURN)) preferred financial penalties because the impact was more immediate and direct.

Based on stakeholder input, in December 2008 Management produced an updated straw proposal which further streamlined and clarified the elements of the standard RA capacity product. One significant change in this proposal, based on overwhelming stakeholder agreement, was the move to a single availability target based on the historic performance of the RA resource fleet during peak hours of the previous year, rather than a unit-specific metric for each resource. Many stakeholders (including Calpine, CFCMA, California Wind Energy Association (CalWEA), Alliance for Retail Energy Markets (AREM), Pacific Gas & Electric (PG&E), and Mirant) commented that the standard should be calculated in this manner because the resource specific proposal treated poorer performing units in the same manner as high performing resources. A "stellar" performer could be penalized for performing a little worse than last year while a "poor" performer may not be penalized at all for providing the same poor performance. Another key element was the decision to adopt performance incentives that were financially based rather than applying adjustments to the amount of a resource's available capacity. Management added a new unit substitution feature to the proposal to increase flexibility for resource owners to avoid financial penalties while on a forced outage.

Many stakeholders were concerned that the implementation of the standard RA capacity product could conflict with provisions of existing contracts and wanted to ensure there would be no overlap in performance requirements. In January of this year, the *Draft Final Proposal*, among other things, outlined rules for contract holders that wished to grandfather their existing RA capacity arrangements.

Another significant change in the *Draft Final Proposal* was the deferral of the standard RA capacity product implementation for RA resources whose qualifying capacity, as determined by the CPUC, was based on historic actual output data. Management determined that these types of resources may be double-penalized if performance standards were applied to their already limited capacity. These types of resources include wind,

solar, Qualifying Facilities³ and demand response. Management plans to revisit the treatment of these resource types in conjunction with future changes to the CPUC counting rules.

Also, based on stakeholder input, Management further refined the availability standard to change the performance metric so that is based on 3 years of historic data rather than a single year.

In early February Management produced a white paper targeting specific issues for further discussion, in preparation for the 2nd Draft Final Proposal published at the end of February. This final paper refined the proposal based on additional stakeholder discussions and input. The grandfathering proposal was significantly liberalized to enable contract holders to exempt any contract signed prior to January 1, 2009 from compliance with standard RA capacity product availability rules. Also, Management made the availability standards more specific by establishing a target availability value for *each month* based on the actual RA fleet forced outage data during each respective month over the last three years rather than a single target for the entire compliance year. Finally, Management further defined the availability standard related to ambient outages and further refined the unit substitution proposal.

RECOMMENDATION

The current RA process has been functioning since 2006, though with significant limitation because it lacks standardized availability standards for RA contracted resources. As a result, currently there are no provisions designed to meet the ISO's reliability needs or to provide a standardized contractual framework for trading RA capacity among market participants. Therefore, Management is recommending certain enhancements to be implemented in time for the 2010 RA contracting year:

- Implementation of an availability standard in the ISO tariff. To ensure enough generation capacity to meet ISO needs, Management expects that the full contracted amount of capacity of RA resources will be available to the ISO, i.e., the resource is not on a forced equipment outage or derate that diminishes its ability to provide the full amount of its contractual capacity obligation. Under the standard RA capacity product, resource availability will be measured on a monthly basis and compared against a single availability target based on the historic performance of the RA resource fleet during the peak hours of each month of the previous three years.
- Implementation of availability incentives. This proposal will provide incentives for each resource to meet or exceed the target availability standard. On a monthly basis Management will assess non-availability charges to resources whose availability fall short of the target and will provide credit payments to resources whose availability exceeds the target. Availability payments will be funded on a revenue-neutral basis through the financial penalty revenues.
- Functionality to allow for resource substitution. This provision allows a supplier of RA capacity tied to a specific generating unit to substitute an alternative resource in the event of a forced outage. The

³ A Qualifying Facility (QF) is a generating facility which meets the requirements for QF status under the Public Utility Regulatory Policies Act of 1978.

resource owners benefit from this provision by avoiding potential charges for non-availability and the ISO benefits by allowing additional flexibility to avoid backstop procurement.

In conjunction with the standard RA capacity product effort, Management also recommends a critical enhancement to the existing RA must offer obligation that will enable the ISO to optimize use of the energy supply and ancillary services capabilities of RA capacity in its markets. The addition of the ancillary services must offer obligation will not alter the RA must offer obligation as defined today, nor will it be dependent on whether or not the RA capacity is subject to the standard RA capacity product availability provisions. Rather, this feature simply allows the ISO to optimize the use of energy and ancillary services of RA capacity resources subject to the RA must offer obligation.

MANAGEMENT RECOMMENDATION

Management recommends that the Board approve the standard resource adequacy capacity product proposal and resource adequacy must offer enhancements as described above.