



Memorandum

To: ISO Board of Governors

From: Steve Berberich, Vice President, Technology and Corporate Services and
Chief Financial Officer

Date: February 3, 2010

Re: Briefing on 2010-2011 Market Initiatives Release Plan

This memorandum does not require Board action.

EXECUTIVE SUMMARY

Market initiative releases continue to deploy at a rapid pace. The latest, the winter release, was deployed at year-end 2009 and included the standardized resource adequacy capacity product. Staff is currently focused on testing the spring 2010 release functionality as well as the development of multi-stage generator modeling planned for October 1, 2010. The early 2011 release containing convergence bidding functionality is also on track.

The California Independent System Operator Corporation is further evaluating market performance and analyzing data to propose several new market initiatives to stakeholders. Implementation plans for proposed new market initiatives are being assessed while policy is being formulated to ensure that the resulting market design is cost effective. Roll out dates will be jointly determined based on market need and implementation effort. This collaborative approach is improving our ability to implement the market initiatives release plan according to schedule and cost objectives.

THE RELEASE PLAN

Spring 2010 release

The spring 2010 release will deliver key market functionalities that were deferred until after the deployment of the new market. This release includes four key initiatives: *forbidden operation regions, scarcity pricing, procurement of ancillary services in the hour-ahead scheduling process, and proxy demand resource.*

Forbidden operation regions provides software functionality in the real-time for units with forbidden operating regions. The current status of this initiative is as follows:

- Software changes in the core real-time market application were delivered in December 2009 and have undergone extensive testing and validation;
- Staff has filed tariff language that allows the ISO to comply with the Federal Energy Regulatory Commission order to re-instate the real-time forbidden region functionality;
- Market simulation scenarios have been defined and reviewed with stakeholders and will begin on March 1, 2010; and
- Management has rescheduled forbidden operating region deployment for two weeks later than previously communicated. Deployment on April 15, 2010 will allow for separation of this deployment from critical functionality being deployed on April 1, 2010 and May 1, 2010. This will reduce the risk for ISO operations and stakeholders.

Scarcity pricing enhances the current pricing mechanism and raises ancillary services prices if there are insufficient ancillary services bids to meet procurement targets and satisfies FERC's *September 2006 MRTU Order* directing the ISO to implement a more comprehensive reserve shortage mechanism within 12 months of the new market implementation.

- Software changes in the core market applications were delivered in January 2010 and are undergoing extensive testing;
- Staff has filed tariff language that allows the ISO to comply with the FERC order to enable scarcity pricing policy;
- Market simulation scenarios have been defined and reviewed with stakeholders and will begin on March 1, 2010; and
- Management confirms that scarcity pricing is on track for deployment on April 1, 2010, as planned.

Procurement of ancillary services in the hour-ahead scheduling process (HASP) allows dispatch of energy from operating reserves procured from non-dynamic system resources in the hour-ahead timeframe. Management is moving forward with implementation as follows:

- Software changes in the core market applications were delivered in January 2010 and are undergoing extensive testing;
- Staff has filed tariff language that allows the ISO to comply with the FERC order to enable ancillary services in the HASP policy;

- Market simulation scenarios have been defined and reviewed with stakeholders and market simulation will begin on March 1, 2010; and
- Management confirms that procurement of ancillary services in HASP is on track for deployment on April 1, 2010, as planned.

Proxy demand resource is a new demand response product which allows demand resources to directly participate in the ISO market and meets the requirements for comparable treatment of generating and non-generating resources in accordance with FERC Order No. 719. Management is moving forward with implementation as follows:

- Discussions with market participants continued during a January 5, 2010 release planning workshop regarding the implementation plan
- Testing of software changes continue, including the new demand response system;
- Coordination with the California Public Utilities Commission continues to occur, enabling facilitation of CPUC actions required to fully implement proxy demand resource; and
- Proxy demand resource remains on track for deployment on May 1, 2010, based on progress made to date.

Summer 2010 release

A new market initiative is planned for the summer of 2010 based on the recent conclusion of the policy stakeholder process and a decision on the implementation plan. Additional implementation information will be provided as the plan progresses.

Price correction make-whole payment to accepted demand bids is being presented to the Board this month. Price corrections have led to instances in which demand bids that were cleared in the market are no longer economical when evaluated against the corrected price. This can affect bids for internal ISO demand or exports in the integrated forward market, as well as export demand in the hour-ahead scheduling process. The ISO is proposing a “make-whole” payment mechanism to compensate market participants for adverse financial impacts in cases when prices are corrected in a way that is not consistent with their accepted demand bids.

- Staff reviewed implementation impacts with market participants during a release planning workshop on January 5, 2010; and
- Based on the level of effort and other implementation considerations, pending Board authorization to proceed, Management proposes a deployment in the summer of 2010.

Data release – transmission constraints

Management is responding to stakeholders requesting the release of additional information enabling them to better understand market results and participate more effectively in the ISO market. The first phase of this initiative addresses the need for additional transparency of transmission constraint information. New information requirements are being proposed to the Board this month as a result of these efforts. The implementation plan for this initiative is still being determined.

Fall 2010 release

Multi-stage generator modeling incorporates software functionality for units with multiple configurations, such as combined cycle generating plants or resources with real-time forbidden operating regions. The current status of this initiative is as follows:

- Continued progress on the design and development of software changes required to support multi-stage generator modeling;
- Publication of technical specifications on December 31, 2009 to allow market participants adequate time to prepare their systems for market simulation;
- Introduction of risk mitigation measures, including a dedicated vendor manager, testing coordinator and market simulation coordinator; and
- Confirmation that multi-stage generator modeling is on track for deployment on October 1, 2010, based on progress made to date.

Early 2011 release

The early 2011 release includes convergence bidding and further refinements to the participating load program.

Convergence bidding allows market participants to place purely financial bids at particular pricing nodes in the day-ahead market. Convergence bids cleared in the day-ahead market at day-ahead prices are liquidated in the hour-ahead or real-time market at the applicable hour-ahead or real-time prices. The market participant thus earns or is charged the difference between the day-ahead price and the applicable hour-ahead or real-time price at the location of the cleared bid. Convergence bidding will enable market participants to hedge exposure to real-time price volatility and will provide other market efficiency benefits through increasing liquidity in the markets as well as price convergence between day-ahead and real-time prices. The current status of this initiative is as follows:

- The first draft of tariff language for stakeholder review was posted in December 2009, and is planned to be filed with FERC in the first quarter of 2010;

- Stakeholder processes concluded for remaining policy issues, including the convergence bidding data release and electronic tagging timing requirements and will be presented to the Board this month;
- Management is actively engaged with its primary software vendor in the software design and development phases of convergence bidding and is conducting tests to determine practical limits to make the software implementation more predictable; and
- Staff is currently executing a project plan to deploy convergence bidding on February 1, 2011.

Participating load refinements further enhances the ability of participating load resources to be bid and optimized in the market with most of the available market features like generating resources. These refinements will help complete the demand response product offering. The participating load refinements are planned for deployment on February 1, 2011.

LOOKING FORWARD

Based on ten months of experience with the deployment of the new market, Management is making recommendations regarding further refinements and direction of the market design. As such, there are several new market initiatives underway that will be added to the *2010-2011 Market Initiatives Release Plan* as they are defined through the stakeholder process.

We are also continuing to improve our release planning process by incorporating lessons learned. As an example, ISO implementation staff is engaging earlier in the conceptualization of new market initiatives to determine impacts to internal and external business processes, external system interfaces, and other touch points with market participants. The impacts are assessed from a level of effort and cost perspective to ensure that the resulting market design can be cost effectively implemented and with reduced complexity. The intention is to present the implementation efforts as part of the draft final proposal and, with market participants, jointly determine the implementation date that optimizes the priority of the change with the project costs and other constraints. The result should be a more predictable and achievable market initiatives release plan.

The following list represents active market initiatives that will follow to this process:

- Standards for energy storage / Non-generation resources in ancillary services markets;
- Daily bidding of start up and minimum load costs;
- Dynamic scheduling and pseudo ties;
- Data release phase 3

- Standard capacity product phase 2; and
- All other market initiatives to be initiated in 2010.

Management continues to appreciate the participation of market participants throughout implementation activities and will continue to rely on stakeholder input to guide the market initiatives release plan.

Attachment 1 Updated Release Plan

