

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

**California Independent System) Docket Nos. ER06-615-____
Operator Corporation) ER02-1656-____**

**MOTION OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR
CORPORATION FOR WAIVER OF OBLIGATIONS TO IMPLEMENT MARKET
DESIGN MODIFICATIONS OR, IN THE ALTERNATIVE, FOR EXTENSION OF
TIME**

The California Independent System Operator Corporation (“ISO”)¹ respectfully submits this motion for a permanent waiver of directives set forth in certain Commission orders that require the ISO to implement the following market design elements:

- Assess whether and how to develop more flexibility in connection with ancillary services substitution;
- Implement two-tier allocation of real-time bid cost recovery uplift;
- Implement bid cost recovery changes to account for units running over multiple operating days; and
- Implement multi-hour constraints in the residual unit commitment process.²

¹ Capitalized terms not otherwise defined herein have the meanings set forth in appendix A to the ISO tariff. References to numbered sections are references to sections of the ISO tariff unless otherwise specifically noted.

² See *California Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274, at PP 143, 301, 303, 533, 539 (2006) (“September 2006 order”), *order on reh’g*, 119 FERC ¶ 61,076, at PP 55-56, 87, 309 (2007) (“April 2007 order”); *California Indep. Sys. Operator Corp.*, 139 FERC ¶ 61,206, at PP 26-28 (2012) (“June 2012 order”). The ISO files this motion pursuant to Rules 212 and 2008(a) of the Commission’s Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 385.2008(a).

Good cause exists for the Commission to relieve the ISO of the requirement to implement these market design elements. The Commission issued these directives in 2006 and 2007 as part of the initial design of the ISO's nodal market. These directives were implemented before the ISO and its stakeholders had any experience with nodal markets in the region. Since that time, the ISO has made numerous modifications and improvements to its market design,³ and soon the ISO will implement additional significant market enhancements that provide numerous benefits to customers, including the promotion of broader and more effective integration of renewable resources and optimal coordination on the west-wide grid. Specifically, the ISO is changing its real-time market design to provide for a single fifteen-minute market clearing that clears both internal and external resources, thereby providing greater inertia intra-hour scheduling flexibility.⁴ Finally, the ISO will be implementing a new energy imbalance market with neighboring balancing authority areas in October 2014. This market will provide for optimal real-time congestion management across multiple balancing authority areas.⁵ These market design enhancements

³ For example, the Commission recently approved improved bid cost recovery rules that provide greater incentives for resources to submit economic decremental bids into the real-time market in order to provide greater flexibility for variations on renewable output. *California Indep. Sys. Operator Corp.*, 145 FERC ¶ 61,254 (2013).

⁴ The Commission recently approved these market design enhancements. *California Indep. Sys. Operator Corp.*, 146 FERC ¶ 61,204 (2014). The Commission held that these changes will promote "more efficient scheduling of all resources due to more granular forecasts and shortened lead times, consistent settlements of internal and inertia transactions in one market at one price, options for retaining hourly scheduling on the inertias to avoid seams issues while other balancing authorities in the West transition to 15-minute scheduling, and more appropriate treatment of [variable energy resources] than the existing participating intermittent resource program. *Id.* at P 53.

⁵ On February 28, 2014, the ISO filed tariff revisions in Docket No. ER14-1386 to implement the new energy imbalance market effective October 1, 2014.

will support the region's ambitious renewable portfolio standards and environmental goals and will also further the Commission's objective to eliminate barriers to the integration of renewable resources in organized wholesale electricity markets.

Moving forward with recent market design enhancements has taken a significant amount of time and effort by the ISO, its stakeholders, and the Commission itself. These important initiatives have been carefully charted and balanced to ensure such changes are made effectively and efficiently, and to the extent possible, mitigating for any unintended consequences. As reflected by the results of the ISO's stakeholder initiative catalog process, there was no apparent stakeholder interest in pursuing the aforementioned market design elements that were the subject of directives in 2006 and 2007 instead of the significant and important market enhancements the ISO is about to implement based on current policy drivers and stakeholder priorities. The ISO has signaled to stakeholders that it intends to seek relief from the directives identified in this motion and no stakeholder has expressed a concern to the ISO. Further, neither the ISO nor market participants have identified any major market flaw, adverse market outcome, or other problem in the absence of these market design elements.

For these reasons, the ISO requests that the Commission eliminate each of the directives identified in this motion and permit the ISO to consider whether comparable market design elements are justified in the normal course of developing and prioritizing stakeholder initiatives through the ISO's annual stakeholder initiative cataloging process. If the Commission denies the waiver

request, either as to all of the directives or a subset thereof, the ISO respectfully requests a three-year extension, until April 2017, to submit a filing that addresses any directive or directives that have not been waived. Such a filing would explain why the specified directive or directives are no longer needed under the market design in effect at that time.

I. Background

On April 1, 2009, the ISO commenced operation of locational marginal price based day-ahead and real-time markets, as approved by the Commission in a number of orders.⁶ The ISO developed the new market design pursuant to lengthy stakeholder and Commission processes. Some market participants requested additional market design elements that the ISO could not accommodate at the start of the new market. As a result, the Commission required the ISO to adopt specified enhancements after its initial implementation of the market. The ISO has since designed and implemented most of those additional elements.⁷ In addition, in response to evolving market needs, the ISO

⁶ The September 2006 order conditionally accepted tariff provisions to implement the current market design that the ISO had filed in this proceeding on February 9, 2006 (“February 2006 tariff filing”), and the April 2007 order granted in part and denied in part requests for clarification and rehearing of the September 2006 order. The current market design went into effect on March 31, 2009 for an initial trade date of April 1, 2009.

⁷ See, e.g., *Cal. Indep. Sys. Operator Corp.*, 130 FERC ¶ 61,122 (2009) (conditionally accepting the ISO’s convergence bidding design developed in response to P 452 of the September 2006 Order and P 117 of the April 2007 Order); *Cal. Indep. Sys. Operator Corp.*, 131 FERC ¶ 61,280 (2010) (conditionally accepting the ISO’s scarcity reserve pricing mechanism proposal in response to a directive in PP 1078-79 of the September 2006 Order); *Cal. Indep. Sys. Operator Corp.*, 132 FERC ¶ 61,087 (2010) (conditionally accepting the ISO’s multi-stage generating resource modeling proposal in response to a directive in P 573 of the September 2006 Order).

has developed and implemented other significant market enhancements that have provided significant improvements to the overall market design.⁸

On March 28, 2012, the ISO filed a motion for an extension of time until April 30, 2014 to address certain directives from the September 2006 and April 2007 orders (“March 2012 motion”). The March 2012 motion explained that

[t]he extension of time will enable the ISO and stakeholders to consider more closely whether and how the ISO and stakeholders should integrate the Commission-mandated enhancements into the overall market design. Prior to April 2014, the ISO will submit a filing with the Commission with either the proposed tariff provisions to implement the Commission-mandated enhancements or, if supported by stakeholders and actual evidence, an explanation of why these enhancements are no longer needed under the ISO’s changing market design.⁹

The Commission granted the March 2012 motion in the June 2012 order.¹⁰

Over the last two years, however, issues involving the implementation of regional renewable portfolio standards and efforts to advance the integration of variable energy resources in accordance with Commission policy initiatives have consumed ISO market design efforts. In this regard, the ISO has conducted extensive stakeholder processes and a number of major studies to evaluate changing system needs in light of both regional and federal policy initiatives intended to promote the increased penetration of variable energy resources and the retirement of existing fossil-fueled resources. In response to these policy

⁸ See, e.g., *Cal. Indep. Sys. Operator Corp.*, 136 FERC ¶ 61,239 (2011) (accepting proposed revisions to the ISO tariff regarding dynamic transfers of energy and ancillary services into and out of its balancing authority area).

⁹ March 2012 motion at 3-4.

¹⁰ June 2012 order at PP 26-28.

initiatives, the ISO launched a stakeholder effort, referred to as the renewable integration market product review process, to consider the ISO's existing market rules and develop enhancements to reliably and economically integrate the additional variability expected from these resources. Phase I of this effort resulted in a tariff amendment filed in September 2013 to: (1) lower the energy bid floor from negative \$30/MWh to negative \$150/MWh; (2) change the bid cost recovery settlement rules to pay bid cost recovery separately for the day-ahead and real-time markets rather than netting bid costs and market revenues across the two markets; and (3) modify the ISO's payment rules for start-up and minimum load costs, unrecovered energy bid costs, and residual imbalance energy. The Commission conditionally accepted these market design enhancements on December 19, 2013.¹¹

The ISO also developed another set of market enhancements intended to allow the ISO to more effectively and efficiently integrate significant quantities of variable energy resources, to align its market design with certain reforms mandated in the Commission's Order No. 764,¹² and to address identified inefficiencies in the ISO's real-time market in a manner that will also facilitate reinstatement of convergence bidding on the interties. The Commission

¹¹ *Cal. Indep. Sys. Operator Corp.*, 145 FERC ¶ 61,254 (2013) ("December 2013 order").

¹² *Integration of Variable Energy Resources*, Order No. 764, FERC Stats. & Regs. ¶ 31,331, *order on reh'g and clarification*, Order No. 764-A, 141 FERC ¶ 61,232 (2012), *order on clarification and reh'g*, Order No. 764-B, 144 FERC ¶ 61,222 (2013) (collectively, "Order No. 764").

approved these market design enhancements, including the introduction of a fifteen-minute market, effective May 1, 2014.¹³

In 2013, the Commission accepted an implementation agreement between the ISO and PacifiCorp setting forth the terms under which the ISO will modify and extend its existing real-time energy market systems to provide energy imbalance market service to PacifiCorp's balancing authority areas.¹⁴ On February 28, 2014, the ISO filed tariff revisions to implement this real-time energy imbalance market that will allow balancing authorities throughout the western United States to voluntarily participate in that market to be operated by the ISO. The ISO intends to implement this energy imbalance market on October 1, 2014.¹⁵

The changing landscape of the ISO's market design has decreased the relevance of market design elements identified in this motion. Given these significant changes to the ISO's markets, the ISO and stakeholder may wish to revisit one or more of the elements identified in this motion based on actual experience with the current market design, but it is no longer necessary to direct the ISO to do so.

¹³ *California Indep. Sys. Operator Corp.*, 146 FERC ¶ 61,204.

¹⁴ *California Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,298 (2013).

¹⁵ On February 28, 2014, the ISO filed tariff revisions in Docket No. ER14-1386 to implement the new energy imbalance market. Materials related to the stakeholder process for the real-time energy imbalance market are available on the ISO website at <http://www.caiso.com/informed/Pages/StakeholderProcesses/EnergyImbalanceMarket.aspx>.

II. Good Cause Exists To Grant Waiver of the Requirement for the ISO To Implement Certain Market Design Elements

The Commission will waive the requirement to comply with a prior Commission directive for good cause shown. For example, the Commission found that good cause existed to grant waiver of a compliance requirement in a recent proceeding involving ISO New England Inc. (“ISO-NE”). The design of ISO-NE’s forward capacity market incorporates locational pricing in which capacity zones are modeled to permit zonal price separation when binding constraints arise. The Commission granted ISO-NE’s motion for waiver of a directive to model eight capacity zones in the New England region instead of continuing to model the existing four capacity zones, based on evidence provided by ISO-NE and its commitment to engage its stakeholders in ongoing review of how the capacity zones and the associated zonal requirements are determined. The Commission granted ISO-NE’s motion subject to that commitment and an obligation to develop an adequate process for determining the appropriate number and boundaries of capacity zones over time as conditions change.¹⁶ Likewise, the Commission should grant the ISO’s waiver request and allow the ISO and stakeholders to evaluate the need for and priority of the specified modifications through the ISO’s ongoing stakeholder initiative cataloging process.

Similarly, in 2012, the ISO filed a motion for waiver of the directive in paragraph 244 of the September 2006 order that the ISO implement an interface between the ISO’s outage reporting web-enabled interface, referred to as

¹⁶ *ISO New England Inc.*, 143 FERC ¶ 61,198, at PP 29-35 (2013).

Scheduling and Logging for the ISO of California or “SLIC,” and the ISO system that accepts and validates bids, referred to as Scheduling Infrastructure Business Rules or “SIBR.” The ISO explained that the cost of a SLIC-to-SIBR interface would outweigh any benefits. Based on experience after implementation of the ISO’s new markets and feedback obtained through the ISO’s stakeholder process, market participants agreed that such an interface was unnecessary. In the June 2012 order, the Commission found that good cause existed to grant the ISO’s motion for waiver.¹⁷ The Commission explained that it has consistently permitted the ISO and its stakeholders to “prioritize certain market enhancements so that changes are implemented efficiently.”¹⁸ Comparable circumstances exist here to warrant a permanent waiver of the specified modifications.

The Commission should find that good cause exists to grant this motion for waiver of the compliance obligations. The Commission issued the orders containing the compliance obligations more than six years ago, long before the ISO and stakeholders gained experience with the ISO’s nodal market design. Since that time, the ISO has made numerous improvements to its nodal market design. The ISO will soon implement even more significant changes. These efforts have resulted in significant changes in circumstances compared to those that existed when the Commission issued its September 2006 and April 2007 orders. These significant changes require the ISO and its stakeholder to prioritize market design enhancements that make the most sense under a

¹⁷ June 2012 order at PP 23, 31.

¹⁸ June 2012 order at P 27.

different market structure. In particular, such an assessment involves consideration of costs and benefits by the ISO and its stakeholders. The ISO believes the benefits of the market design elements identified in this motion may no longer support the costs of undertaking to design and implement them. As part of the annual stakeholder process to prioritize market design initiatives, the ISO informed stakeholders that it would submit a filing to the Commission during the first quarter of 2014 to waive the market design elements identified in this motion. Stakeholders know the ISO has not initiated processes to design these market elements, and no stakeholder raised an objection to the ISO or advocated that the ISO take different action. Below, the ISO discusses the specific directives for which the ISO requests a waiver.

A. Development of More Flexibility in Connection with Ancillary Services Substitution

1. Background

In 2006, several market participants argued that providing scheduling coordinators with the ability to substitute an ancillary service for reasons other than an outage could improve the ancillary services procurement process and provide for a secondary ancillary services market.¹⁹ The ISO responded that it would explore the issue of providing scheduling coordinators with the ability to

¹⁹ See September 2006 order at PP 296, 299. Ancillary service substitution occurs in the hour-ahead scheduling process and is the substitution of a resource that was awarded ancillary services in the day-ahead market for another resource that will provide those awarded ancillary services. April 2007 order at P 85 n.98.

substitute ancillary services for reasons other than an outage for inclusion in a subsequent market release.²⁰

In its September 2006 order, the Commission recognized the ISO's commitment and directed the ISO to address the flexibility of ancillary services procurement in future market releases.²¹ The Commission denied a request for rehearing on the issue in the April 2007 order.²²

In its March 2012 motion, the ISO explained that, since the implementation of its nodal market design, the ISO had considered and implemented multiple market enhancements to make ancillary service procurement more efficient.²³ The ISO also explained that, as part of its 2011 market design initiatives process, the ISO solicited comments from stakeholders to assess the priority of various market design issues. In connection with this effort, Southern California Edison ("SCE") submitted comments that stated it expects the ISO to include the issue of ancillary service substitution in phase 2 of the ISO's renewable integration market and product review initiative. The ISO did not receive any additional comments from stakeholders on this issue.²⁴

²⁰ See September 2006 order at P 297.

²¹ September 2006 order at PP 301, 303.

²² April 2007 order at P 87.

²³ March 2012 motion at 18-19 (citing applicable Commission orders and materials provided in ISO stakeholder processes).

²⁴ March 2012 motion at 19.

In the June 2012 order, the Commission granted the ISO's request for extension of time until April 30, 2014 to assess whether and how to develop more flexibility in connection with ancillary services substitution.²⁵

2. Good Cause Exists To Grant Waiver

Good cause exists to grant waiver of the requirement that the ISO assess whether and how to develop more flexibility in connection with ancillary services substitution. In the context of the ISO's stakeholder catalog initiative process, stakeholders have not expressed interest in pursuing this initiative. In addition, the ISO's current tariff provisions governing ancillary services procurement are just and reasonable without this additional flexibility because they permit the ISO to secure sufficient capacity at relatively low prices without the need for allowing scheduling coordinators to substitute one resource for another resource for economic reasons. This design feature merely presents an arbitrage opportunity for ancillary service suppliers for which there is no need or any clear market efficiency or reliability benefit. By shuffling a fleet of resources supporting an ancillary service award or self-provision schedule after the fact, a scheduling coordinator might realize a gain by using a resource with lower fixed or variable costs, but this gain does not make procurement of ancillary services any more efficient or reduce costs to ratepayers.

Apart from SCE suggesting that the ISO examine this market design element as part of its renewable integration market and product review initiative, no other stakeholder has expressed an interest in pursuing this matter. In fact,

²⁵ June 2012 order at PP 26, 28.

one stakeholder subsequently expressed support for the ISO to seek further deferral of this initiative.²⁶ As a result of this lack of stakeholder interest and the ISO's other efforts to refine ancillary services procurement, the ISO has not taken steps to implement this particular functionality. The ISO has, however, considered the benefits of ancillary service substitution for reasons other than an outage. These benefits are speculative when considered against the fact that the ISO will incur software and system development costs to implement such ancillary service substitution.

Over the last two years, the ISO has continued to enhance its ancillary services market to make ancillary service procurement more efficient. As directed by the Commission, in 2013 the ISO implemented market functionality to consider a resource's performance when awarding regulation up and regulation down capacity. Based on the accuracy of resources' response to ISO control signals, this functionality will allow the ISO market to target procurement of regulation capacity that is more accurate in responding to the control signals.²⁷ In 2013, the ISO also implemented new rules to ensure resources do not receive capacity payments of self-provision credits when day-ahead awarded or self-

²⁶ See *2012 Stakeholder Initiatives Catalog* at 37-38 (Dec. 4, 2012), available on the ISO website at <http://www.caiso.com/informed/Pages/StakeholderProcesses/StakeholderInitiativesCatalogProcess.aspx>.

²⁷ *California Indep. Sys. Operator Corp.*, 140 FERC ¶ 61,206 (2012); *California Indep. Sys. Operator Corp.*, 142 FERC ¶ 61,233 (2013). The Commission originally accepted the tariff revisions to implement the functionality effective January 1, 2013, but subsequently the Commission granted successive motions for extension of time filed by the ISO to implement the functionality effective May 1, 2013 and then effective June 1, 2013. *California Indep. Sys. Operator Corp.*, 141 FERC ¶ 61,184 (2012); Notice of Extension of Time, Docket Nos. ER12-1630-000, *et al.* (Apr. 30, 2013).

provided ancillary service capacity becomes unavailable before real-time.²⁸ This enhancement will increase cost savings in connection with overall ancillary services procurement in the ISO market.

The ISO is also continuing to explore the development of a flexible ramping product to procure sufficient ramping capability through economic bids²⁹ and is pursuing contingency modeling enhancements to ensure the market has procured sufficient capacity to meet 30-minute ramping needs arising from transmission contingencies.³⁰ As a result of the time and effort devoted to these and other market enhancement issues over the past two years, the ISO has not developed a proposal to allow for ancillary service substitution for reasons other than an outage.

Even without these further enhancements, the ISO's current ancillary services market is just and reasonable without the ability to substitute a resource supporting an ancillary service award or self-provision. The ISO procures a variety of ancillary services and appropriately compensates each resource based on opportunity cost.³¹ Also, under the ISO tariff all qualified resources such as generation, storage, and demand response may offer ancillary services

²⁸ *California Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,276 (2013). Pursuant to this Commission order, the new rules went into effect on October 1, 2013.

²⁹ Information concerning the ISO's flexible ramping product stakeholder initiative is available on the ISO website at <http://www.caiso.com/informed/Pages/StakeholderProcesses/FlexibleRampingProduct.aspx>.

³⁰ Information concerning the ISO's contingency modeling enhancements stakeholder initiative is available on the ISO website at: <http://www.caiso.com/informed/Pages/StakeholderProcesses/ContingencyModelingEnhancements.aspx>

³¹ See tariff section 11.10.

capacity.³² The ISO optimizes this capacity with energy in the day-ahead market to obtain the most efficient feasible outcome.³³

Further, market participants have the ability to substitute resources supporting ancillary service capacity in the event of an outage. This opportunity allows each market participant some ability to maintain its ancillary service award if its underlying resource experiences an outage. The ISO believes that the need for substitution beyond these circumstances is largely speculative. For example, a market participant may be able to benefit financially by substituting a unit that is less expensive to operate than the unit associated with a day-ahead ancillary services award or self-provision schedule. While this arbitrage opportunity could result in an economic gain for that supplier of ancillary services, it does not make the overall procurement of ancillary services any more efficient.

All else being equal, allowing ancillary services substitution for reasons other than an outage would not result in an increase in reliability. For example, the substituted unit may or may not have the capability to more accurately follow a control signal or to follow an initial unit that is already synchronized in the case where the initial unit was providing non-spinning reserve. On the other hand, the ISO would need to qualify that the substituted resource meets the minimum requirements to maintain sufficient reserves.

The Commission should weigh the fact that this specific market design element provides no market efficiency or reliability benefits, but instead creates

³² See tariff section 8.1.

³³ See tariff section 8.3.1.

unnecessary arbitrage opportunities and would involve implementation costs. This effort may include the development of mechanisms to re-optimize the substituted resource in the ISO energy and ancillary services markets. This additional re-optimization would require system changes. Based on other software deployments, the ISO estimates that the cost of these changes could easily exceed \$2 million in design and deployment costs. For all of the reasons explained above, the Commission should find that good cause exists to relieve the ISO of the requirement to develop more flexibility in connection with ancillary services substitution.

B. Two-Tier Allocation of Real-Time Bid Cost Recovery Costs

1. Background

The ISO tariff requires bid cost recovery costs incurred in the real-time market to be allocated to all load-serving entities in a single-tier allocation according to demand, which includes all metered demand plus exports from the ISO balancing authority area.³⁴ These bid cost recovery costs derive from payments made to supply resources to guarantee their bid costs in the event resources are dispatched to an output where the resource's energy bid is higher than the market-clearing locational marginal price.³⁵ The ISO tariff also provides recovery for a resource's start-up and minimum load costs in the event these costs are not recovered through market payments.³⁶ Real-time bid cost recovery

³⁴ Tariff section 11.8.6.6.

³⁵ Tariff section 11.8.

³⁶ Tariff section 30.4.

costs derive from payments made to resources for costs due to dispatch by the real-time market, as opposed to resources' costs for schedules produced by the integrated forward market and residual unit commitment, both of which are conducted in the day-ahead market. To determine a resource's eligibility for bid cost recovery, a resource's market bid costs and revenues are netted across the day-ahead and real-time markets for the same trading day.³⁷

In response to the February 2006 tariff filing seeking approval of the ISO's nodal market design, the California Department of Water Resources State Water Project ("SWP") argued that this general allocation scheme could result in the socialization of real-time bid cost recovery costs without regard to the fact that these costs should be attributed to load whose day-ahead cleared demand is less than their actual demand.³⁸ SWP suggested that real-time bid cost recovery should be allocated using a two-tiered allocation approach, such as the ISO uses for day-ahead bid cost recovery costs.³⁹ This two-tiered approach consists of first allocating day-ahead bid cost recovery costs to virtual demand positions that result in the integrated forward market clearing more supply than necessary to serve actual real-time demand. The remainder is then allocated to metered demand and exports. A similar allocation scheme for real-time bid cost recovery costs would presumably allocate the first tier to demand not scheduled in the day-ahead market.

³⁷ See tariff section 11.8.

³⁸ See September 2006 order at P 537.

³⁹ See tariff section 11.8.6.4.1.

In the September 2006 order, the Commission found that SWP's recommendation to allocate such costs using a two-tier method similar to the day-ahead allocation method was reasonable and directed the ISO to modify its tariff accordingly.⁴⁰ In the April 2007 order, the Commission granted rehearing with respect to the two-tier allocation of real-time bid cost recovery costs. It agreed with the ISO that the disparities between the forecast and real-time demand are problematic and could lead to costs which cannot accurately be attributed to a specific market participant. The Commission, therefore, accepted the tariff language the ISO had originally filed to implement the allocation of real-time bid cost recovery costs. However, the Commission also directed the ISO to work with stakeholders to develop a proposal for two-tiered allocation of real-time bid cost recovery costs that could be included in a future release of the ISO's current market design.⁴¹

The ISO first considered this directive through the convergence bidding stakeholder process by developing a proposal to implement two-tiered allocation of real-time bid cost recovery costs concurrently with the implementation of convergence bidding. However, after the ISO and market participants gained additional experience with the actual market, other market design enhancements related to bid cost recovery became a higher priority for the ISO and stakeholders. In particular, a significant portion of bid cost recovery costs in 2011 was due to adverse market participant behavior, which the ISO addressed

⁴⁰ See September 2006 order at P 539.

⁴¹ April 2007 order at P 309.

through two emergency filings that eliminated costs related to those practices.⁴² In the context of the ISO's stakeholder initiative catalog process, stakeholders have indicated little need for this enhancement, particularly when compared with other, more pressing issues, and no stakeholder raised an objection to the ISO's recommendation to address this issue at a later time.⁴³

In its March 2012 motion, the ISO requested an extension of time until April 30, 2014 to implement a two-tier cost allocation scheme for real-time bid cost recovery costs. The Commission granted the ISO's request in the June 2012 order.⁴⁴

2. Good Cause Exists To Grant Waiver

Good cause exists to grant waiver of the requirement that the ISO satisfy the directive to implement a two-tier allocation scheme for real-time bid cost recovery costs. The directives in the September 2006 and April 2007 orders to implement a two-tier cost allocation scheme for real-time bid cost recovery costs were issued over six years ago, two and a half years before the ISO's locational marginal pricing based market was implemented in 2009. The two-tier allocation directives were based on a bid cost recovery design where bid costs and market revenues were netted across the two markets. Over the past two years, the ISO and stakeholders have been developing various components of market design

⁴² The two tariff amendment filings were accepted in *California Indep. Sys. Operator Corp.*, 135 FERC ¶ 61,110, *clarified*, 137 FERC ¶ 61,180 (2011), and *California Indep. Sys. Operator Corp.*, 136 FERC ¶ 61,118 (2011).

⁴³ March 2012 motion at 10-11.

⁴⁴ June 2012 order at PP 26-27.

enhancements that will significantly change the day-ahead and real-time markets, including bid cost recovery in those markets.

The ISO's recent market design enhancements include separate calculation and payment of bid cost recovery for the day-ahead and real-time markets. These market design changes will eliminate the current netting of a resource's bid costs and revenues across the day-ahead and real-time markets for the same trading day.⁴⁵ In the December 2013 order, the Commission accepted these tariff revisions and the ISO plans to implement them in 2014.⁴⁶

Over the past five years that the ISO has employed the single-tiered real-time uplift allocation, neither the ISO, nor the Department of Market Monitoring, nor market participants have identified any adverse market outcome resulting from this methodology. There is no evidence that the ISO's bid cost recovery provisions, as enhanced by the changes recently approved by the Commission, will be unjust and unreasonable without a two-tiered allocation of real-time bid cost recovery costs. The purpose of the ISO's recently approved proposal to modify its bid cost recovery rules and lower the bid floor was to obtain greater real-time flexibility so that the ISO can more economically dispatch resources and reduce rigidities that historically lead to greater real-time uplift costs. The lack of real-time flexibility is a contributing factor to real-time uplift costs that are incurred to deal with variability beyond under-scheduled load or over-scheduled virtual supply. The recently approved changes will allow the ISO to efficiently

⁴⁵ See tariff section 11.8.

⁴⁶ December 2013 order, 145 FERC ¶ 61,254.

dispatch a more liquid stack of real-time bids, regardless of the causal factors, thereby decreasing real-time commitment costs generally.

Moreover, the separation of the day-ahead and real-time bid cost recovery processes represents a shift in the cost accounting of real-time bid costs that must be carefully considered before attempting to design a new cost allocation scheme. The design of a cost allocation scheme based on the old market design may have created an unintended incongruence between how the costs are incurred and how they are allocated. The separation of the day-ahead and real-time bid cost recovery accounting processes has eliminated an element of the old market design that gave rise to SWP's concern, *i.e.*, commingling of day-ahead and real-time uplift accounting. Now, however, with the separation of the two markets the real-time market uplift is less impacted by the clearing of virtual positions taken in the day-ahead market, if at all.

All of these developments have obviated the need for a mandate for two-tiered allocation of real-time bid cost recovery costs. Instead, to address the potential increase in overall bid cost recovery payments under the new market rules, the ISO committed to improve the transparency of bid cost recovery uplift payments by revising its current monthly reports to track the impact of these revisions and to include this information as a standing item on the agenda for the ISO's Market Performance and Planning Forum stakeholder meetings.⁴⁷ These ISO monitoring and reporting commitments will allow the ISO and stakeholders to identify any issues that might arise under the new bid cost recovery rules that

⁴⁷ December 2013 order at PP 41-42.

might support a future change in bid cost recovery cost allocation provisions. At this point, however, it is reasonable to allow the ISO to examine any tiered allocation of real-time bid cost recovery costs in this context and eliminate the requirement to implement this market design element. If, in time, the ISO and stakeholders determine it is worth pursuing this cost allocation feature, then the ISO and stakeholders can take up this issue in due course.

C. Bid Cost Recovery for Units Running Over Multiple Operating Days

1. Background

Under the ISO tariff, a resource's eligibility for bid cost recovery is determined based on the resource's commitment during a given day.⁴⁸ This is because the ISO day-ahead market commitment processes consider whether to commit a resource based on the resource's parameters as they apply for a single 24-hour period. If a resource operates across different 24-hour periods, the resource's minimum run time beyond the run hours of the day is not considered in the day-ahead market optimization. Thus, if a resource's run time exceeds a 24-hour period, the ISO's day-ahead market may commit the resource during a 24-hour period based on its start-up costs having to be recovered within the hours of the day being optimized. However, in calculating the bid cost recovery payments, the ISO does not spread the cost of start-up over multiple days or account for revenues outside of the 24-hour period in which a unit was committed. For example, if the ISO committed a unit for hour ending 23:00 which

⁴⁸ Tariff section 11.8.5.

then ran into the subsequent day, only the revenue for hour ending 23:00 and 24:00 on day one would be included in the day-one bid cost recovery calculation to cover start-up and other costs.

In response to the February 2006 tariff filing seeking approval of the ISO's nodal market design, SCE suggested that these tariff provisions were problematic because they do not fully consider units which have minimum run times that exceed a calendar day. SCE requested that the Commission direct the ISO to divide the start-up costs (but not necessarily all bid cost recovery costs) by the total run time of the unit even if the run time exceeds the 24 hours of a calendar date.⁴⁹ The ISO agreed to make the appropriate software enhancements to allow for this change in a future release of the current market design.⁵⁰ In the September 2006 order, the Commission directed the ISO to develop and file with the Commission a plan to address bid cost recovery for units facing these types of constraints for implementation by "release 2" of the current market design.⁵¹

In its March 2012 motion, the ISO requested an extension of time until April 30, 2014 to implement bid cost recovery for units running over multiple operating days. The ISO explained that its analysis showed that an ISO resource commitment extended beyond a single trading day in only 3 percent of all day-ahead commitments for the period of 2009-2011. The low occurrence of

⁴⁹ See September 2006 order at P 531.

⁵⁰ See September 2006 order at P 532.

⁵¹ September 2006 order at P 533. "Release 1" refers to the initial implementation of the current market design, and "release 2" refers to later enhancements to the current market design.

such events made this issue less urgent and resulted in stakeholders assigning this issue a low priority in the ISO's market initiatives process.⁵² The ISO also explained that redesigning the integrated forward market and residual unit commitment would require significant changes to the rules for committing units and the corresponding bid cost recovery rules.⁵³ The Commission granted the ISO's request for an extension of time in the June 2012 order.⁵⁴ Since then, the ISO has found that resource commitment extending beyond a single trading day in 2012 was 2 percent and in 2013 was 0 percent of all day-ahead commitments.

2. Good Cause Exists To Grant Waiver

Good cause exists to grant waiver of the requirement that the ISO implement bid cost recovery for units running over multiple operating days. As discussed above with regard to two-tier allocation of real-time bid cost recovery uplift, the implementation of pending market design enhancements will significantly change the day-ahead and real-time markets, including bid cost recovery in those markets. The Commission premised the directive in the September 2006 and April 2007 orders to implement bid cost recovery for units running over multiple operating days on the market design approved in those orders. The Commission approved the ISO's enhanced bid cost recovery provisions as just and reasonable and they do not include rules addressing bid cost recovery for units with a run time of more than 24 hours. To the extent any

⁵² March 2012 motion at 14.

⁵³ March 2012 motion at 14-15.

⁵⁴ June 2012 order at P 26.

issues arise under the new bid cost recovery design, they can be identified as a result of the ISO's commitment to improve the transparency of bid cost recovery uplift payments by revising its current monthly reports to track the impact of these revisions and to include this information as a standing item on the agenda for the ISO's Market Performance and Planning Forum stakeholder meetings. Given the relatively few instances in which ISO resource commitment extended beyond a single trading day from 2009-2012, the Commission should grant a permanent waiver of the directive to address this issue and permit the ISO and stakeholders to consider in due course whether there is a need for additional bid cost recovery rules under the new market design.

D. Multi-Hour Constraints in the Residual Unit Commitment Process

1. Background

The residual unit commitment process under the ISO tariff ensures that sufficient resources are available to satisfy the ISO's demand forecast while optimizing individual hourly constraints.⁵⁵ In response to the ISO's February 2006 tariff filing for approval of nodal markets, SCE argued that this tariff provision does not honor all bid parameters of system resources because it only requires the ISO to consider system resources that are eligible to participate in residual unit commitment on an hourly basis. SCE asserted that the residual unit commitment would not be able to consider other bid parameters such as multi-hour block intertie constraints submitted in conjunction with energy bids to the

⁵⁵ See tariff section 31.5.1.1.

day-ahead market by system resources. SCE contended that this could result in the ISO committing a system resource in the residual unit commitment for a period that is inconsistent with the scheduling coordinator's offer for the resource.⁵⁶

In the September 2006 order, the Commission directed the ISO to examine whether it could revise its software by release 1 to honor multi-hour block inertia constraints as a bidding parameter of system resources under the residual unit commitment. The Commission also directed the ISO to report in a compliance filing whether it would be able to do so, and if not, to report when the ISO could implement the software revisions.⁵⁷ The ISO sought rehearing of these directives and also reported that this modification would have cost approximately \$500,000, including support for additional functional and integration testing, and would take up to 14 additional weeks to develop and test.⁵⁸

In the April 2007 order, the Commission found that the costs of implementation and potential delay in market design implementation cited by the ISO outweighed the potential benefits of including this functionality at that time. Consequently, the Commission granted the ISO's request for rehearing on this

⁵⁶ See September 2006 order at P 141.

⁵⁷ September 2006 order at P 143.

⁵⁸ See April 2007 order at P 56.

matter and directed the ISO to implement this bidding parameter in a subsequent market release.⁵⁹

In the March 2012 motion, the ISO explained its request to postpone making changes to the market to include this functionality until the ISO settled on a new market design for the integrated forward market and residual unit commitment. The ISO also explained that since the start of the current market design, the lack of this functionality has not resulted in any market efficiency or performance issue.

In the June 2012 order, the Commission granted the ISO's request for extension of time until April 30, 2014 to implement multi-hour constraints in the residual unit commitment process.⁶⁰

2. Good Cause Exists To Grant Waiver

Good cause exists to grant waiver of the requirement that the ISO satisfy the directive to implement multi-hour constraints in the residual unit commitment process. As explained above, the ISO and stakeholders have been developing various market design enhancements that will significantly change the day-ahead and real-time markets over the next several months. Implementation of this market design element will have a significant impact on the residual unit commitment process. Further, the ISO and stakeholders may develop a proposal in the future to integrate the integrated forward market and the residual unit commitment, which would clearly impact the residual unit commitment.

⁵⁹ April 2007 order at PP 55-56.

⁶⁰ June 2012 order at P 26.

Finally, in the ISO's stakeholder catalog initiative process, stakeholders have repeatedly rated this market design modification as a low priority.⁶¹ In that process, stakeholders have not asserted that they now consider multi-hour constraints in the residual unit commitment process to be a significant priority. For these reasons, the Commission should grant a permanent waiver of the directive to address this issue and permit the ISO and stakeholders to consider in due course through the annual stakeholder catalog initiative process whether there remains a need to apply multi-hour constraints in the residual unit commitment process.

III. In the Alternative, Good Cause Exists To Grant the ISO an Extension of Time until April 30, 2017

If, despite the reasons explained above, the Commission does not grant a permanent waiver of each directive to implement the specific market elements discussed above, the ISO requests in the alternative that the Commission find that good cause exists to grant the ISO an extension of time until April 30, 2017 to submit a filing that either addresses the specific directive (or directives) that the Commission has not waived or explains why the specified market design modification(s) are no longer needed under the market design in effect at that time.⁶² This additional time is necessary to allow the ISO and stakeholders to gain experience with enhancements to the ISO's market design planned for implementation this year and to thoroughly consider whether and how the

⁶¹ March 2012 motion at 17-18.

⁶² As with a motion for waiver of compliance obligations, the Commission will grant a motion for an extension of time for good cause shown. See, e.g., June 2012 order at P 26.

directives should be addressed given these significant changes. The ISO, however, strongly encourages the Commission to eliminate the directive to pursue these market design elements absent some compelling showing that they are needed to address a significant market issue.

IV. Conclusion

For the foregoing reasons, the Commission should find that good cause exists to grant a permanent waiver of the ISO's obligation to implement certain market design elements required by the September 2006, April 2007, and June 2012 orders as discussed above. In the alternative, even if the Commission denies a permanent waiver of any of the specific directives discussed above, the Commission should grant the ISO an extension of time until April 30, 2017 to submit a filing that addresses any such specific directive(s) or explains why the market element(s) is no longer needed under the market design in effect at that time.

Respectfully submitted,

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Dated: March 24, 2014

CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Washington, D.C. this 24th day of March, 2014.

/s/ Sean Atkins
Sean Atkins