



July 26, 2013

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Re: California Independent System Operator Corporation Docket No. ER13-____-000; Tariff Amendment - Payment Rescission Rules for Ancillary Services

Dear Secretary Bose:

The California Independent System Operator Corporation (ISO) submits proposed tariff provisions to rescind capacity payments associated with awarded or self-provided ancillary services capacity that the ISO determines is not available before real-time due to a resource constraint.¹ On June 27, 2013, the Commission accepted these tariff revisions effective October 1, 2013.² In this filing, the ISO requests an effective date for these tariff revisions of November 1, 2013. This effective date coincides with the ISO's planned release of market enhancements for the fall of 2013.³

I. Background and Request for New Effective Date

The ISO currently disqualifies unavailable ancillary service capacity prior to the real-time market so that it can procure replacement ancillary services. On January 4, 2013, the ISO submitted tariff revisions to rescind capacity payments

¹ The ISO submits this filing pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13. Capitalized terms not otherwise defined have the same meaning as set forth in ISO tariff, appendix A, master definitions supplement.

² *Cal. Indep. Sys. Operator Corp.*, 143 FERC ¶ 61,276 (June 2013) (*June 2013 Order*).

³ ISO External Market Simulation Plan Fall Release 2013, Section 2.1 at 6: "Fall 2013 Release initiatives will be activated in the Production environment on November 1st, 2013." <u>http://www.caiso.com/Documents/Fall2013ReleaseMarketSimulationPlanV1_0.pdf</u>

when the ISO disqualifies this unavailable capacity because of a resource constraint.⁴ The ISO has included a copy of its earlier tariff amendment as Attachment A hereto and incorporates that tariff amendment by reference into this filing. On June 27, 2013, the Commission accepted these tariff revisions effective October 1, 2013. In its *June 2013 Order*, the Commission stated that if the ISO "finds that it is unable to implement its proposal by its requested effective date, it should make a filing with the Commission pursuant to the Federal Power Act."⁵

At the time the ISO filed its tariff amendment in Docket ER13-707, the ISO had tentatively scheduled its fall release for market enhancements on October 1, 2013. However, the scheduled date for the fall release has changed. On July 22, 2013, the ISO posted its fall 2013 release market simulation plan.⁶ The plan sets forth the schedule for market simulation of various initiatives to allow participants an opportunity to test their systems and procedures in advance of the market implementation.⁷ The market simulation plan provides that the ISO will promote the initiatives that comprise the fall release into production on November 1, 2013. For this reason, the ISO is requesting a new effective date for its tariff revisions accepted by the Commission's *June 2013 Order*.

There are good reasons to allow the ISO an additional month to implement its new payment rescission rules at the same time that it implements other initiatives as part of its fall release. By implementing a consolidated release of initiatives, the ISO can better manage numerous processes and software code changes in a streamlined and controlled manner. In addition, a consolidated release of initiatives allows the ISO to support a larger volume of enhancements while minimizing both technical and financial impacts to the ISO and its market participants. For these reasons, the ISO requests that the Commission accept the tariff revisions submitted in this filing, effective November 1 2013. The ISO does not expect any stakeholder opposition to this request.

⁴ See, ISO tariff amendment dated January 4, 2013 in Docket ER13-707. <u>http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=13147647</u>

⁵ June 2013 Order at P 12 and fn 12.

⁶ <u>http://www.caiso.com/Documents/Fall2013ReleaseMarketSimulationPlan-</u> <u>MeetingsScheduledJul22_2013.htm</u>

⁷ In addition to this initiative, the market simulation will cover the following initiatives: Commitment Costs Refinement, Renewable Integration Market and Product Review - Phase 1 with Bid Cost Recovery Post Emergency and Mandatory Multi-Stage Generation, Replacement Requirement for Scheduled Generation Outages - Phase 2 Annual, and Participating Intermittent Resource Program Logic Changes.

II. Communications

Communications regarding this filing should be addressed to the following individuals, whose names should be put on the official service list established by the Commission with respect to this submittal:

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III. Service

The ISO has served copies of this transmittal letter, and all attachments, on the California Public Utilities Commission, the California Energy Commission, and parties with effective scheduling coordinator service agreements under the ISO tariff. In addition, the ISO is posting this transmittal letter and all attachments on the ISO Web site.

IV. Attachments

The following attachments, in addition to this transmittal letter, support the instant filing:

Attachment A	Copy of January 3, 2013 tariff amendment submitted in ER13-707.
Attachment B	Revised ISO tariff sheets
Attachment C	Proposed changes to the ISO tariff shown in black-line format ⁹

⁸ 18 C.F.R. § 385.203(b)(3).

⁹ The tariff language in black-line format presented in this filing shows no changes in comparison to the clean tariff sheets. The ISO is only proposing to modify the effective date of the tariff language from October 1, 2013 to November 1, 2013. This information appears in the meta-data of the tariff record and, therefore, the change does not appear in black-line format.

V. Conclusion

The ISO's tariff amendment seeks only to extend by one month the effective date of tariff revisions that the Commission has already accepted. These tariff provisions extend payment rescission rules to day-ahead ancillary services capacity that the ISO disqualifies before real-time. The ISO requests an order accepting this tariff amendment effective November 1, 2013 to coincide with the ISO's planned fall release of market enhancements.

Please contact the undersigned if you have any questions regarding this matter.

Respectfully submitted,

By: /s/ Andrew Ulmer

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Attorneys for the California Independent System Operator Corporation

Attachment A – Jan 3, 2013 Amendment Payment Rescission Rules for Ancillary Services California Independent System Operator Corporation July 26, 2013



California Independent System Operator Corporation

January 4, 2013

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Re: California Independent System Operator Corporation Docket Nos. ER13-____-000; Tariff Amendment - Payment Rescission Rules for Ancillary Services

Dear Secretary Bose:

The California Independent System Operator Corporation (ISO) submits proposed tariff provisions to rescind capacity payments associated with awarded or self-provided ancillary services capacity that the ISO determines is not available before real-time due to a resource constraint.¹ The ISO requests an order accepting these tariff provisions on or before June 28, 2013 and an effective date of October 1, 2013 subject to two weeks prior written notice to the Commission as to the actual effective date. This effective date coincides with the ISO's currently planned release of market enhancements for the fall of 2013. The ISO requests that the Commission waive the requirement of 18 C.F.R. § 35.3 that a rate schedule be filed not more than 120 days from the effective date.

Currently, the ISO disqualifies unavailable ancillary service capacity prior to the real-time market so that it can procure replacement ancillary services. Through this tariff amendment, the ISO proposes to modify the settlement treatment of this capacity when the ISO determines such capacity will not be available in real-time because of a resource constraint. This rule will apply equally to all resources providing ancillary services capacity. The ISO requests an order four months in advance of the effective date of this tariff amendment so that the ISO and market participants will have sufficient time to test upgrades to market systems and validate changes to the settlement charge codes before the ISO places the proposed rule changes into production.

¹ The ISO submits this filing pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d, and Section 35.13 of the Commission's regulations, 18 C.F.R. § 35.13. Capitalized terms not otherwise defined have the same meaning as set forth in ISO tariff, appendix A, master definitions supplement.

I. Background and Summary of Tariff Amendment

The ISO procures four ancillary services through its markets: regulation up, spinning reserve, non-spinning reserve and regulation down.² The ISO establishes minimum procurement requirements for these ancillary services in order to meet applicable reliability standards, but may also establish more stringent criteria for the procurement of ancillary services or procure additional ancillary services as conditions warrant.³ Scheduling coordinators submit bids and submissions to self-provide ancillary services from resources that meet technical certification requirements. The ISO attempts to procure 100 percent of its ancillary services requirements in the day-ahead market based on the ISO's day-ahead demand forecast net of self-provided ancillary services.⁴ The ISO market pays a marginal clearing price for ancillary service obligations based on the market value of the scheduling coordinator's accepted self-provided ancillary services.

Since implementing its nodal market design in 2009, the ISO has taken steps to improve the efficiency of ancillary services procurement. For example, at the end of 2009, the ISO started to use a regulation forecasting procurement tool that adjusts the procurement requirements for regulation in the day-ahead market throughout the operating day based on anticipated demand levels as well as potential changes in generator and intertie schedules.⁵ In 2011, the ISO introduced an enhancement in the procurement of ancillary services that recognizes resources' operational ramp rates.⁶ This feature provides greater assurance that ancillary services awarded to a resource in the day-ahead market will be deliverable in real-time. As part of its efforts to improve the efficiency of ancillary service markets, the ISO also identified a gap in how the ISO market systems settle ancillary services capacity that the ISO disqualifies prior to the real-time market.

² See generally ISO tariff section 8.1 *et seq*. The ISO does not have an auction market for voltage support or black start services.

³ See ISO tariff section 8.2.3, 8.2.3.1, and 8.2.3.2.

⁴ See ISO tariff section 8.3.1.

⁵ See Technical Bulletin 2009-12-2 AS Procurement Regulation dated December 30, 2009 http://www.caiso.com/Documents/TechnicalBulletin-ASProcurement-Regulation.pdf

⁶ See Technical Bulletin 2011-05-01 Dynamic Ramp Rate in Ancillary Service procurement dated May 17, 2011 <u>http://www.caiso.com/Documents/TechnicalBulletin-DynamicRampRate_AncillaryServiceProcurement.pdf</u>

After the close of the day-ahead market, the ISO analyzes ancillary service awards and submissions to self-provide ancillary services to ensure that resources can actually provide the service in real-time given changes in system conditions or resource operating capabilities. In the event the ISO determines that a day-ahead award or a submission to self-provide ancillary services is not available prior to real-time, the ISO disqualifies that capacity to permit the ISO's market systems to procure replacement ancillary services to meet ancillary service requirements.⁷ Under its current settlement rules, the ISO assesses whether resources provided ancillary service capacity in real-time after the fact. This process determines if ancillary service constraint prevented the ISO from accessing the ancillary services capacity, the ISO rescinds the capacity payments based on the weighted average of the ancillary service marginal prices and ancillary service award amounts for a resource across the day-ahead market, hour ahead scheduling process and real-time market.⁸

In practice, the ISO examines the ability of a resource to perform against resources' awarded and self-provided ancillary services capacity calculated as of the real-time pre-dispatch process. Under the ISO's real-time market processes, the ISO accounts for capacity from day-ahead awards or self-provisions as a day-ahead self-schedule. This process excludes from the day-ahead self-schedule capacity that has been disqualified prior to real-time. As a result, the ISO has not applied its payment rescission rules to day-ahead ancillary services capacity that is disqualified before real-time. Resources, accordingly, have been paid for this capacity even though it is not available to serve the ISO market in real-time.

Table 1 identifies the financial impact of the ISO's current settlement practices for calendar years 2010 and 2011 in connection with capacity that it disqualified before the real-time market. Had the ISO market not paid for this capacity, overall ancillary service procurement costs for these years would have been reduced by approximately 5 percent. The ISO expects this tariff amendment will increase the efficiency of ancillary service procurement because the market will no longer shoulder the cost of day-ahead ancillary services capacity that cannot provide the service and is disqualified before real-time because of a resource-related constraint.

⁷ In its stakeholder process, the ISO referred to this mechanism as ancillary services forced buy-back. ISO tariff section 8.3.1 permits the ISO to procure additional ancillary services in the hour-ahead scheduling process and the real-time market based on "available awarded Day-Ahead Ancillary Services." When day-ahead ancillary services are not available, the ISO uses what it refers to as a "buy-back tool" to facilitate incremental procurement of ancillary services.

Table 1 – 2010 and 2011 Costs Associated with Ancillary Services Capacity
Disqualified Prior to Real-Time ⁹

Year	Day-ahead AS	Real-time AS	Disqualifications
	costs	costs	
2010	\$ 67,983,905	\$ 7,827,432	\$ 2,573,943
2011	\$ 97,811,377	\$ 9,660,109	\$ 5,923,700
Total	\$ 165,795,282	\$ 17,487,541	\$ 8,497,644

Pursuant to this tariff amendment, however, if a resource's capacity is disqualified prior to the real-time market as a result of an internal transmission constraint the resource will continue to receive its day-ahead ancillary service capacity payment. The reason for this treatment is that the ISO disqualifies the capacity for reasons not related to the ability of the resource to perform. This exception is consistent with the ISO's current payment rescission rules that the ISO applies after the operating hour to capacity the ISO determines was not available to the market.

II. The ISO's proposed revisions are aligned with existing ancillary service capacity payment rescission rules

Under the ISO's tariff, payment rescission rules apply to ancillary services if the capacity is undispatchable, unavailable or undelivered capacity.¹⁰ The ISO makes these determinations after the operating hour. The determinations include an assessment of whether or not a resource with an ancillary service capacity award or self-provision was capable of providing the capacity in real-time based on a resource's operating characteristics. Additionally, the ISO rescinds payments for regulation up and regulation down, if a resource is not on automatic generation control, is not running, or has other configuration or equipment limitations.¹¹

Undispatchable capacity is ancillary service capacity that was not available because of a resource derate or outage of a resource.¹² For instance, if

⁹ See Addendum to Draft Final Proposal at 9. <u>http://www.caiso.com/Documents/AddendumDraftFinalProposal_AncillaryServicesBuyBack.pdf</u>

¹⁰ See ISO tariff sections 8.10.8 *et seq.*

¹¹ See ISO tariff section 8.10.8.6.

¹² The ISO tariff defines undispatchable capacity as "Ancillary Services capacity that receives an AS Award and Self-Provided Ancillary Services capacity, or capacity committed in RUC, that is not available for use due to a derate or Outage of the resource. Undispatchable Capacity includes AS Awards for Spinning Reserve and Non-Spinning Reserve capacity that are

a 100 MW resource receives an 80 MW non-spinning reserve award but is derated to 50 MW in real-time, then the ISO will consider 30 MW of the awarded capacity as undisaptchable and will rescind capacity payments for that amount.

Unavailable capacity is ancillary services capacity that was not available for dispatch to provide energy in real-time.¹³ For instance, if the ISO determines that a resource deviates from its day-ahead schedule and supplies uninstructed imbalance energy from capacity that is obligated to supply spinning reserve or non-spinning reserve, the ISO will rescind payments for the capacity used to supply uninstructed imbalance energy.

Undelivered capacity is ancillary services capacity that the ISO dispatched to provide energy but which the resource did not provide as expected energy from the dispatch.¹⁴ The ISO's real-time market calculates energy expected to be generated or consumed by a resource, based on the dispatch of that resource and modified by any applicable dispatch operating point corrections. If a resource does not provide a portion of this expected energy resulting from the dispatch of ancillary services capacity, the ISO will rescind payments for that capacity.

If, however, a resource's ancillary service capacity becomes unavailable because of an internal transmission constraint, as opposed to a resource-related constraint, the resource continues to receive its day-ahead capacity payment because the ISO's market systems do not attempt to dispatch ancillary service capacity when an internal transmission constraint makes that capacity unavailable. These ancillary service payment rescission rules do not currently extend to ancillary service capacity that becomes unavailable between the dayahead market and the real-time market because of a resource constraint. Table 2 identifies the current operation of the ISO's payment rescission rules and the operation of these rules under the ISO's proposed tariff amendment.

not available for use due to Ramp Rate constraints (e.g., operational Ramping ability is lower than Operating Reserve Ramp Rate)." See ISO tariff, Appendix A, Master Definition Supplement.

¹³ The ISO tariff defines unavailable capacity as "Ancillary Services capacity that receives an AS Award and Self-Provided Ancillary Services capacity that was not dispatched by the CAISO but where all or a portion of the capacity was not available for Dispatch to provide Energy in Real-Time. *See* ISO tariff, Appendix A, Master Definition Supplement.

¹⁴ The ISO tariff defines undelivered capacity as follows: "Ancillary Services capacity that receives an AS Award and Self-Provided Ancillary Services capacity, or capacity committed in RUC that was dispatched by the CAISO to provide Energy but where a certain percentage or more of the Expected Energy was not provided in Real-Time, which percentage is determined as specified in the applicable Business Practice Manual. " *See* ISO tariff, Appendix A, Master Definition Supplement.

Current rules	Payment rescission rules apply to undispatchable capacity, unavailable capacity and undelivered capacity. The ISO makes this assessment after the operating hour.
Proposed Rules	As today, payment rescission rules will apply to undispatchable capacity, unavailable capacity and undelivered capacity. The ISO will continue to make this assessment after the operating hour.
	Payment rescission rules will also apply to capacity disqualified between the day-ahead and real time market, if the ISO determines the capacity is not available due to a resource constraint.

Table 2 – Current and Proposed Payment Rescission Rules

Table 3 reflects how the ISO's current payment rescission rules apply to two different resources with day-ahead ancillary services capacity awards of 100 MW, each at \$3 MWh. In this example, the ISO has disqualified a portion of Resource B's capacity before real-time because of a resource constraint. Resource B keeps its payments for 100 MW of ancillary service capacity even though only 80 MW of its ancillary capacity was available to the ISO market in real-time.

Market Process	Resource A	Resource B
Day-ahead ancillary service capacity award	100 MW	100 MW
Day-ahead ancillary service settlement	\$300	\$300
Ancillary service capacity disqualified before real- time market	0 MW	20 MW

Table 3 – Current Settlement Practices¹⁵

¹⁵ In its Addendum to the Draft Final Proposal for this initiative, the ISO has provided additional examples of how the ISO's market systems currently settle ancillary services capacity and how similar units can receive different payments. *See* Addendum to Draft Final Proposal at 7.

http://www.caiso.com/Documents/AddendumDraftFinalProposal_AncillaryServicesBuyBack.pdf

Market Process	Resource A	Resource B
Ancillary services	100 MW	80 MW
capacity available in real-		
time		
Quantity of ancillary	0 MW	0 MW
serves capacity subject		
to payment rescission		
Net settlement for day-	\$300	\$300
ahead ancillary services		
capacity award		

Table 4 reflects the settlement treatment the ISO is proposing in this tariff amendment for the same resources. As in Table 3, both resources receive dayahead ancillary services capacity awards of 100 MW each at \$3 MWh. The ISO's disqualifies a portion of resource B's capacity before real-time because of a resource constraint. In this example, the ISO will rescind capacity payments for the disqualified capacity.

Market Process	Resource A	Resource B
Day-ahead ancillary service capacity award	100 MW	100 MW
Day-ahead ancillary service settlement	\$300	\$300
Ancillary service capacity disqualified before real- time market	0 MW	20 MW
Ancillary services capacity available in real- time	100MW	80 MW
Quantity of ancillary serves capacity subject to payment rescission	0 MW	20 MW
Net settlement for day- ahead ancillary services capacity award	\$300	\$240

Table 4 – Proposed Settlement Practices

III. Proposed tariff amendments

The ISO's proposed tariff amendments comprise two general categories: (1) clarifications concerning ISO ancillary service procurement practices; and (2)

revisions to describe how the ISO will settle ancillary service capacity disqualified before real-time. In addition, the ISO has included a revision to its tariff to clarify its use of a weighted average of the ancillary service marginal prices and ancillary service award amounts for a resource across the day-ahead market, hour ahead scheduling process and real-time market when calculating the rescission of ancillary services capacity payments.

In tariff section 8.3.1, the ISO proposes to add language to clarify the ISO's existing practice of procuring incremental ancillary services after the close of the day-ahead market based in part on a determination of whether ancillary services capacity awarded or self-provided in the day-ahead market is not available as a result of a resource constraint or transmission constraint. This language provides that resource constraints may include, but are not limited to, a resource outage or ramp rate constraints. This language also clarifies that incremental procurement of ancillary services capacity will exclude capacity that the ISO has determined is not available.

The ISO proposes to add a new tariff section to describe the application of payment rescission rules to capacity that the ISO disqualifies before real-time. Section 8.10.8.7 describes that payment rescission rules will apply to ancillary services capacity that the ISO determines is not available prior to real-time because of a resource constraint. Likewise, this section describes that the ISO will rescind credits to reduce scheduling coordinators ancillary service obligations when the ISO determines day-ahead or self-provided ancillary service capacity is not available prior to real-time because of a resource constraint. If, however, a resource's capacity is not available because of an internal transmission constraint, the scheduling coordinator will continue to receive a capacity payment or, in the case of a self-provision, a reduction to its ancillary service obligations. This exception will treat disgualified ancillary service capacity in a manner comparable to capacity that the ISO determines is unavailable after the operating hour. The exception is appropriate because the resource has provided its capacity to the market and a transmission constraint beyond the resource's control has made the capacity unavailable.

The ISO can differentiate between resource and transmission constraints because the ISO models known transmission constraints in the day-ahead market. Transmission constraints that arise after the close of the day-ahead market require operator intervention to effect a disqualification of ancillary service capacity. The ISO will flag these operator interventions to ensure resources retain their capacity payment when the ISO disqualifies ancillary services capacity as a result of an internal transmission constraint. The ISO's market systems identify resource constraints and will disqualify ancillary services capacity before real-time to facilitate incremental procurement as needed.

Section 8.10.8.7 also explains that for dynamically scheduled resources or pseudo-tie resources, the ISO shall treat a reduction in the operating transfer capability at an intertie that is registered in the ISO's outage management system between the day-ahead market and real-time unit commitment as a transmission constraint, not a resource-related constraint. The ISO will deem all other constraints that limit the market's access to ancillary services capacity from dynamic resources or pseudo-tie resources as resource constraints. This provision ensures that dynamically scheduled and pseudo-tie resources will receive similar treatment to internal resources. Dynamically scheduled and pseudo-tie resources will not face rescission of ancillary service capacity payments because an internal transmission constraint beyond their control causes the ISO to disqualify their awarded or self-provided capacity.¹⁶ In connection with this change, the ISO also proposes to modify Section 11.10.9.1. This modification clarifies that the ISO will only rescind capacity payments for day-ahead market ancillary services awards that the ISO determines are not available because of an intertie de-rate for non-dynamic system resources. Again, dynamic resources and pseudo-tie resources will not have their capacity payment rescinded for this reason. This is appropriate for the same reasons applicable to internal resources as discussed above.

Finally, the ISO proposes to modify Section 11.10.9 to clarify its existing practice of using a weighted average ancillary service marginal price from the day-ahead market, hour ahead scheduling process and real-time market to assess whether to rescind a capacity payment for any particular ancillary service. Under this tariff provision, if the weighted average ancillary service marginal price is less than or equal to zero the ISO will not rescind a resource's capacity payment. Again, this language reflects the ISO's existing payment rescission practices.¹⁷ The ISO seeks clarification of this tariff language because the current tariff states that rescission of payments shall not apply to a capacity payment for any particular ancillary service if the ancillary service marginal price is less than or equal to zero. Absent this clarification, the current tariff language could create potential confusion over whether the ISO uses a weighted average ancillary service marginal price in making an assessment.

http://www.caiso.com/rules/Pages/BusinessPracticeManuals/Default.aspx

¹⁶ Section 1.2.1.8 of Appendix N to the ISO's current tariff provides: "All dynamic Energy transfers associated with CAISO procurement of Spinning Reserve and Non-Spinning Reserve from a Pseudo-Tie Generating Unit will be afforded similar treatment (i.e., treatment as internal CAISO Balancing Authority Area Generation, except that it will be subject to Congestion determined by the scheduling capacity of the associated pre-determined CAISO Intertie)."

¹⁷ See e.g. ISO Business Practice Manual for Settlements and Billing, Configuration Guide 6124 at 5.

IV. Stakeholder process

The ISO conducted a stakeholder process over several months to develop this tariff amendment. As part of this process, the ISO published an issue paper and iterative proposals. The ISO accepted written comments, held conference calls with stakeholders and refined its proposal through this process.¹⁸ In response to comments made by stakeholders before the ISO Board of Governors, the ISO committed to refine the proposal further to ensure it treated dynamically scheduled and pseudo-tie resources on a basis comparable to resources located within the ISO's balancing authority area.

In April 2012, the ISO published an issue paper that identified a gap in how the ISO market systems settle ancillary service capacity awards and selfprovisions that are disqualified prior to real-time. The ISO proposed to apply payment rescission rules to all disqualifications of ancillary service capacity that occur before real time. In response to the ISO's issue paper, stakeholders raised concerns that the ISO should not rescind payments when ancillary services capacity was unavailable through no fault of the resource such as a transmission constraint or as a result of actions taken by the ISO to convert capacity into energy as part of real-time dispatch. Some stakeholders argued the ISO should shelve this proposal and focus its resources on other issues, including improving the modeling of the day-ahead market in order to reduce the need to disqualify ancillary service capacity. Other stakeholders argued that the ISO's market processes are disqualifying expensive day-ahead ancillary service capacity in favor of procuring less expensive ancillary services available in real-time.

The ISO published a draft final proposal in May 2012. In its draft final proposal, the ISO responded to stakeholder concerns but did not modify its proposal to rescind payments for disqualified capacity resulting from a transmission constraint. The ISO explained that rescinding payments because the capacity is unavailable before real-time was consistent with how the ISO treats ancillary services capacity impacted by an intertie outage that occurs after the day-ahead market but before real-time.¹⁹ In response to concerns regarding converting ancillary services into energy, the ISO explained that the cooptimization of energy and ancillary services in the real-time market system does not result in rescission of a capacity payment. Under the ISO's proposal, a resource with an available ancillary service capacity award that is economically

¹⁸ More information concerning the ISO's stakeholder process, including copies of stakeholders' comments, is available at the following web site: <u>http://www.caiso.com/informed/Pages/StakeholderProcesses/AncillaryServicesForcedBuyBack.a</u> <u>spx</u>

¹⁹ See ISO tariff section 11.10.9. 1.

dispatched for energy will continue to keep their capacity payment or, in the case of self-provisions, maintain its credit against the scheduling coordinator's ancillary service obligation.

In response to comments that the ISO should focus on improving the modeling of the day-ahead market in order to reduce the need to disqualify ancillary service capacity, the ISO explained that grid conditions between the day-ahead and real-time markets can change and potentially decrease the capability of resources to provide previously awarded capacity. This fact will remain true no matter what improvements the ISO makes to its day-ahead model. Accordingly, disqualification of ancillary services capacity and incremental procurement of ancillary service capacity will in all likelihood continue under the ISO's current market design.

In response to concerns that the ISO's market optimization in the hour ahead scheduling process and real-time unit commitment process does not honor the ancillary service awards in the day-ahead market but instead forces disqualifications of more expensive day-ahead capacity, the ISO explained that this is not the case. The ISO's market systems protect day-ahead ancillary service awards with self-provision priorities in real-time to prevent such an outcome. This same mechanism is used to protect energy self-schedules.

The ISO received additional comments on its draft final proposal, including a recommendation that the ISO assess reasons for the disqualification of ancillary services capacity as well as incremental ancillary service procurement costs. This data, stakeholders argued, may in time help facilitate allocation of incremental procurement costs associated with the disqualification of ancillary services capacity. During the stakeholder process, the ISO provided additional information to stakeholders concerning historical costs of disqualified ancillary service capacity.²⁰ Table 5 reflects these settlement values separated by transmission and resource constraints for 2010 and 2011. This data reflects that, during 2010 and 2011, resource constraints resulted in the majority of ancillary service disqualifications. In time, similar data may serve as the basis for a cost allocation approach for incremental procurement of ancillary service capacity, but the ISO believes that any such proposal should occur as part of a general review of ancillary services procurement cost allocation and will require significant input from stakeholders.

 ²⁰ ISO Ancillary Services Forced Buy Back Addendum Draft Final Proposal dated June 11,
 2012 at 9.
 http://www.caiso.com/Documents/AddendumDraftFinalProposal AncillaryServicesBuyBack.pdf

Year and Ancillary Service	Disqualification Resulting from Transmission Constraint	Disqualification Resulting from Resource Constraint	Total
2010	\$13,469.98	\$2,560,473.86	\$2,573,943.84
NONSPIN	\$0.00	\$262,708.88	\$262,708.88
REGDOWN	\$47.55	\$615,019.02	\$615,066.57
REGUP	\$469.45	\$645,093.48	\$645,562.93
SPIN	\$12,952.98	\$1,037,652.48	\$1,050,605.46
2011	\$328,159.41	\$5,595,540.82	\$5,923,700.23
NONSPN	\$2,708.75	\$313,519.39	\$316,228.15
REGDOWN	\$118,271.81	\$780,205.30	\$898,477.10
REGUP	\$159,076.98	\$1,148,974.60	\$1,308,051.58
SPIN	\$48,101.87	\$3,352,841.53	\$3,400,943.40
Total for 2010 and 2011	\$341,629.39	\$8,156,014.68	\$8,497,644.07

Table 5 - Settlement values for Disqualifications Resulting from Transmission and Resource Constraints

After the issuance of its draft final proposal, stakeholders continued to advocate that the ISO should not rescind ancillary services capacity payments when capacity awarded or self-provided was not available before real-time because of an internal transmission constraint. Based on these comments and a further review of the operation of existing payment rescission rules, the ISO created an addendum to its draft final proposal that permits a resource to maintain its capacity payment in instances when ancillary services capacity is disgualified because of an internal transmission constraint. As explained in Section II, under the ISO's current payment rescission rules the ISO does not rescind payments for ancillary services capacity awarded or self-provided by internal resources that becomes unavailable in real-time as a result of an internal transmission constraint. During public discussion of this initiative at the ISO's Board of Governors meeting in July 2012, stakeholders argued that the ISO should also treat pseudo-tie or dynamically scheduled resources in a manner comparable to internal resources. The ISO agreed and committed to include tariff provisions that allow a pseudo-tie or dynamically scheduled resource to maintain capacity payments when its ancillary service capacity is disqualified as a result of an intertie derate. Here, the resource has provided its capacity to the market and an internal transmission constraint beyond the resource's control has made the capacity unavailable.

During the months of August and September 2012, the ISO held stakeholder meetings to discuss proposed tariff language to implement this initiative. The ISO also accepted written comments on proposed tariff language

and has incorporated comments it received through this process into the tariff language submitted with this filing. Overall, the ISO believes its stakeholders now support this proposal.

V. Effective date and Request for Order

The ISO requests that the Commission make the tariff revisions contained in this filing effective as of October 1, 2013, and therefore respectfully requests that the Commission waive the requirement of 18 C.F.R. § 35.3 that a rate schedule be filed not more than 120 days from the effective date. This date coincides with the current date of the ISO's planned fall 2013 market release. Based on current workloads, including but not limited to implementation of a performance payment for regulation services pursuant to Commission Order 755, the ISO believes the earliest that it can implement the proposed tariff revisions is the fall 2013 market release. The ISO asks for an October 1, 2013 effective date, subject to two weeks prior notice to the Commission as to the actual effective date. The Commission has previously approved this approach to establish an effective date when, where as here, an entity is implementing automated software systems.²¹

The ISO also requests that the Commission issue an order on its proposed tariff revisions on or before June 28, 2013. Receipt of an order by this date is necessary to provide the ISO and market participants with certainty regarding the proposed rule changes in advance of completing and testing upgrades to market systems and settlement charge codes.

Enhancements to ISO's systems are required as part of the ISO's proposed rule changes to capture data associated with a manual disqualification of an ancillary service capacity. Specifically, the ISO will develop an outage log in the ISO's outage management system to document these disqualifications. The ISO will also design and create new data payloads that it must integrate into the settlement system. The ISO can initiate this work in advance of receiving an order, but obtaining regulatory approval creates certainty with respect to completing the necessary system changes in a timely manner and establishing clear expectations.

Implementation of the ISO's proposed tariff changes impacts each ancillary service procured in the day-ahead market. As a result, the tariff revisions require changes to a number of charge codes in the ISO's settlement systems. The ISO will develop the configuration guides as part of its Business Practice Manuals to ensure the rules for each charge code align with the proposed tariff revisions. The ISO provides these guides to market participants for their review and to allow them to make necessary changes to their own

21

See ISO New England Inc. 137 FERC ¶ 61,120 (November 2011) at P 30.

systems. Obtaining an order in late June will allow the necessary Business Practice Manual changes to be incorporated in time for implementation of the new settlement provisions.

Once the ISO completes its system and charge code changes, the ISO plans to conduct a market simulation. Scheduling coordinators will have an opportunity to review settlement results and submit concerns during the market simulation. After the ISO completes its market simulation, the ISO plans to move the system changes and applicable charges codes into final testing and production during the fall of 2013.

VI. Communications

Communications regarding this filing should be addressed to the following individuals, whose names should be put on the official service list established by the Commission with respect to this submittal:

Anthony Ivancovich* Deputy General Counsel California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630 Tel: (916) 608-7135 Fax: (916) 608-7222 aivancovich@caiso.com Andrew Ulmer* Director, Federal Regulatory Affairs California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630 Tel: (202) 239-3947 Fax: (916) 608-7222 aulmer@caiso.com

* Individuals designated for service pursuant to Rule 203(b)(3).²²

VII. Service

The ISO has served copies of this transmittal letter, and all attachments, on the California Public Utilities Commission, the California Energy Commission, and parties with effective scheduling coordinator service agreements under the ISO tariff. In addition, the ISO is posting this transmittal letter and all attachments on the ISO Web site.

VIII. Attachments

The following attachments, in addition to this transmittal letter, support the instant filing:

²² 18 C.F.R. § 385.203(b)(3).

Attachment A	Revised ISO tariff sheets
Attachment B	Proposed changes to the ISO tariff shown in black-line format
Attachment C	Materials presented to the ISO's Board of Governors as well as a record of the Board of Governor's vote.

IX. Conclusion

The ISO's tariff amendment extends existing payment rescission rules to day-ahead ancillary services capacity that the ISO disqualifies before real-time. The amendment treats all market participants in a comparable manner by rescinding payments for ancillary service capacity that the ISO determines is not available, regardless of whether that determination is made before or after the operating hour. The ISO requests an order accepting this tariff amendment on or before June 28 2013, and a proposed effective date of October 1, 2013, subject to two weeks prior notice to the Commission as to the actual effective date. As explained in this filing, this effective date coincides with the ISO's current plans to release market enhancements in the fall of 2013.

Please contact the undersigned if you have any questions regarding this matter.

Respectfully submitted,

By: /s/ Andrew Ulmer

Nancy Saracino General Counsel Anthony Ivancovich Deputy General Counsel Andrew Ulmer Director, Federal Regulatory Affairs California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630 Tel: (202) 239-3947 Fax: (916) 608-7222 aulmer@caiso.com

Attorneys for the California Independent System Operator Corporation Attachment A – Clean Tariff

Tariff Amendment – Payment Rescission Rules for Ancillary Services

California Independent System Operator

Fifth Replacement FERC Electric Tariff

January 4, 2013

8.3 Procurement; Certification And Testing; Contracting Period

8.3.1 Procurement Of Ancillary Services

The CAISO shall operate a competitive Day-Ahead Market, HASP, and Real-Time Markets to procure Ancillary Services. The Security Constrained Unit Commitment (SCUC) and Security Constrained Economic Dispatch (SCED) applications used in the Integrated Forward Market (IFM), HASP, and the Real-Time Market (RTM) shall calculate optimal resource commitment, Energy, and Ancillary Services Awards and Schedules at least cost to End-Use Customers consistent with maintaining System Reliability. Any Scheduling Coordinator representing resources, System Units, Participating Loads, Proxy Demand Resources or imports of System Resources may submit Bids into the CAISO's Ancillary Services markets provided that it is in possession of a current certificate for the resources concerned. Regulation Up, Regulation Down, and Operating Reserves necessary to meet CAISO requirements not met by selfprovision will be procured by the CAISO as described in this CAISO Tariff. The amount of Ancillary Services procured in the IFM is based on the CAISO Forecast of CAISO Demand and the forecasted intertie schedules in HASP for the Operating Hour net of (i) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services and (ii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of additional Ancillary Services procured in the HASP is based on the CAISO Forecast of CAISO Demand, the Day-Ahead Schedules established net interchange, and the forecast of the Intertie Schedules for the Operating Hour in the HASP net of (i) available awarded Day-Ahead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, and (iii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of Ancillary Services procured in the Real-Time Market is based upon the CAISO Forecast of CAISO Demand and the HASP Intertie Schedule established net interchange for the Operating Hour net of (i) available awarded Day-Ahead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which

includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, (iii) additional Operating Reserves procured in HASP, and (iv) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The CAISO may procure incremental Ancillary Services in the Real-Time Market based in part on a determination during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment that any Ancillary Services capacity awarded or self-provided in the Day-Ahead Market is not available as a result of a resource constraint or Transmission Constraints. Resource constraints may include but are not limited to an Outage of a resource or Ramp Rate constraints. Incremental procurement in the Real-Time Market will exclude Ancillary Services Capacity the CAISO has determined is not available.

The CAISO will manage the Energy from both CAISO procured and Self-Provided Ancillary Services as part of the Real-Time Dispatch. In the Day-Ahead Market, the CAISO procures one-hundred (100) percent of its Ancillary Service requirements based on the Day-Ahead Demand Forecast net of Self-Provided Ancillary Services. After the Day-Ahead Market, the CAISO procures additional Ancillary Services needed to meet system requirements from all resources in the Real-Time Market. The amount of Ancillary Services procured in the HASP and Real-Time Market is based on the CAISO Forecast of CAISO Demand for the Operating Hour net of Self-Provided Ancillary Services.

The CAISO procurement of Ancillary Services from Non-Dynamic System Resources in the HASP is for the entire next Operating Hour. The CAISO procurement of Ancillary Services from all other resources in the Real-Time Market is for a fifteen (15) minute time period to which the relevant RTUC applies. The CAISO's procurement of Ancillary Services from Non-Dynamic System Resources in HASP and from Dynamic System Resources and internal Generation (which includes Generation from Generating Units that are Pseudo-Ties to the CAISO Balancing Authority Area) in the Real-Time Market is based on the Ancillary Service Bids submitted or generated in the HASP consistent with the requirements in Section 30. The CAISO may also procure Ancillary Services pursuant to the requirements in Section 42.1 and as permitted under the terms and conditions of a Reliability Must-Run Contract.

The CAISO will contract for long-term Voltage Support service with owners of Reliability Must-Run Units under Reliability Must-Run Contracts. The CAISO will procure Black Start capability through individual contracts with Scheduling Coordinators for Reliability Must-Run Units and other Generating Units which have Black Start capability. These requirements and standards apply to all Ancillary Services whether self-provided or procured by the CAISO.

8.10.8.7 Rescission of Payments for Resource and Transmission Constraints

If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a resource constraint, then payments for that capacity will be rescinded in accordance with Section 11.10 or, in the case of Self-Provided Ancillary Services capacity, that capacity will not be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4.

If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a Transmission Constraint, then payments for that capacity will not be rescinded, except as provided in section 11.10.9.1 for System Resources or, in the case of Self-Provided Ancillary Services capacity, that capacity will continue to be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4.

For purposes of applying this Section to Dynamic Resources or Pseudo-Tie resources, the CAISO shall treat a reduction in the Operating Transfer Capability at an Intertie between the Day-Ahead Market and Real-Time Unit Commitment that is registered in SLIC or any successor outage management system as a Transmission Constraint. For all other constraints that cause the CAISO to determine that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity from Dynamic Resource or Pseudo-Tie resources is not available, the ISO shall treat these constraints as resource constraints.

11.10.9 Settlements Of Rescission Of Payments For AS Capacity

The rescission of payments for Ancillary Services for Undispatchable, Unavailable, and Undelivered Capacity applies to Ancillary Services that are awarded in the Day-Ahead Market, HASP, or Real-Time Market and the rescission will be the weighted average of the Ancillary Service Marginal Prices (ASMPs) and Ancillary Services Award amounts for a resource across the Day-Ahead Market, HASP, and Real-Time Market. For Self-Provided Ancillary Service capacity that becomes Undispatchable Capacity, Unavailable Capacity, or Undelivered Capacity, the rescission of Ancillary Services self-provision in the Day-Ahead Market, HASP, and Real-Time Market reduces the relevant Scheduling Coordinator's effective Ancillary Services self-provision in the Ancillary Services cost allocation, effectively resulting in a charge back at the relevant Ancillary Services rate. The rescission of payments in this Section 11.10.9 shall not apply to a capacity payment for any particular Ancillary Service if the weighted average Ancillary Service Marginal Price (ASMP) is less than or equal to zero (0).

11.10.9.1 Rescission Undispatchable AS

If a Scheduling Coordinator has Undispatchable Capacity that it is obligated to supply to the CAISO during a Settlement Interval, the Ancillary Service capacity payment for the amount of Energy that cannot be delivered from the Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource for the Settlement Interval shall be rescinded; provided, however, that to the extent an Ancillary Service procured in the IFM from a Non-Dynamic System Resource to the CAISO Balancing Authority Area becomes Undispatchable Capacity due to an Intertie transmission derate before the Operating Hour for which it was procured, in rescinding the Ancillary Service capacity payment, the CAISO shall credit back to the Scheduling Coordinator any charge for Congestion assessed pursuant to Section 11.10.1.1.1, but at the lower of the Day-Ahead and simple average of the fifteen (15) minute Real-Time Shadow Price over the applicable Trading Hour on the corresponding Intertie.

Attachment B – Marked Tariff

Tariff Amendment – Payment Rescission Rules for Ancillary Services

California Independent System Operator

Fifth Replacement FERC Electric Tariff

January 4, 2013

8.3 Procurement; Certification And Testing; Contracting Period

8.3.1 Procurement Of Ancillary Services

The CAISO shall operate a competitive Day-Ahead Market, HASP, and Real-Time Markets to procure Ancillary Services. The Security Constrained Unit Commitment (SCUC) and Security Constrained Economic Dispatch (SCED) applications used in the Integrated Forward Market (IFM), HASP, and the Real-Time Market (RTM) shall calculate optimal resource commitment, Energy, and Ancillary Services Awards and Schedules at least cost to End-Use Customers consistent with maintaining System Reliability. Any Scheduling Coordinator representing resources, System Units, Participating Loads, Proxy Demand Resources or imports of System Resources may submit Bids into the CAISO's Ancillary Services markets provided that it is in possession of a current certificate for the resources concerned. Regulation Up, Regulation Down, and Operating Reserves necessary to meet CAISO requirements not met by selfprovision will be procured by the CAISO as described in this CAISO Tariff. The amount of Ancillary Services procured in the IFM is based on the CAISO Forecast of CAISO Demand and the forecasted intertie schedules in HASP for the Operating Hour net of (i) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services and (ii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of additional Ancillary Services procured in the HASP is based on the CAISO Forecast of CAISO Demand, the Day-Ahead Schedules established net interchange, and the forecast of the Intertie Schedules for the Operating Hour in the HASP net of (i) available awarded Day-Ahead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, and (iii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of Ancillary Services procured in the Real-Time Market is based upon the CAISO Forecast of CAISO Demand and the HASP Intertie Schedule established net interchange for the Operating Hour net of (i) available awarded Day-Ahead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which

includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, (iii) additional Operating Reserves procured in HASP, and (iv) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. <u>The CAISO may</u> procure incremental Ancillary Services in the Real-Time Market based in part on a determination during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment that any Ancillary Services capacity awarded or self-provided in the Day-Ahead Market is not available as a result of a resource constraint or <u>Transmission Constraints</u>. Resource constraints may include but are not limited to an Outage of a resource or Ramp Rate constraints. Incremental procurement in the Real-Time Market will exclude Ancillary Services Capacity the CAISO has determined is not available.

The CAISO will manage the Energy from both CAISO procured and Self-Provided Ancillary Services as part of the Real-Time Dispatch. In the Day-Ahead Market, the CAISO procures one-hundred (100) percent of its Ancillary Service requirements based on the Day-Ahead Demand Forecast net of Self-Provided Ancillary Services. After the Day-Ahead Market, the CAISO procures additional Ancillary Services needed to meet system requirements from all resources in the Real-Time Market. The amount of Ancillary Services procured in the HASP and Real-Time Market is based on the CAISO Forecast of CAISO Demand for the Operating Hour net of Self-Provided Ancillary Services.

The CAISO procurement of Ancillary Services from Non-Dynamic System Resources in the HASP is for the entire next Operating Hour. The CAISO procurement of Ancillary Services from all other resources in the Real-Time Market is for a fifteen (15) minute time period to which the relevant RTUC applies. The CAISO's procurement of Ancillary Services from Non-Dynamic System Resources in HASP and from Dynamic System Resources and internal Generation (which includes Generation from Generating Units that are Pseudo-Ties to the CAISO Balancing Authority Area) in the Real-Time Market is based on the Ancillary Service Bids submitted or generated in the HASP consistent with the requirements in Section 30. The CAISO may also procure Ancillary Services pursuant to the requirements in Section 42.1 and as permitted under the terms and conditions of a Reliability Must-Run Contract.

The CAISO will contract for long-term Voltage Support service with owners of Reliability Must-Run Units under Reliability Must-Run Contracts. The CAISO will procure Black Start capability through individual contracts with Scheduling Coordinators for Reliability Must-Run Units and other Generating Units which have Black Start capability. These requirements and standards apply to all Ancillary Services whether self-provided or procured by the CAISO.

8.10.8.7 [NOT USED] Rescission of Payments for Resource and Transmission Constraints If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a resource constraint, then payments for that capacity will be rescinded in accordance with Section 11.10 or, in the case of Self-Provided Ancillary Services capacity, that capacity will not be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4.

If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a Transmission Constraint, then payments for that capacity will not be rescinded, except as provided in section 11.10.9.1 for System Resources or, in the case of Self-Provided Ancillary Services capacity, that capacity will continue to be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4.

For purposes of applying this Section to Dynamic Resources or Pseudo-Tie resources, the CAISO shall treat a reduction in the Operating Transfer Capability at an Intertie between the Day-Ahead Market and Real-Time Unit Commitment that is registered in SLIC or any successor outage management system as a Transmission Constraint. For all other constraints that cause the CAISO to determine that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity from Dynamic Resource or Pseudo-Tie resources is not available, the ISO shall treat these constraints as resource constraints.

11.10.9 Settlements Of Rescission Of Payments For AS Capacity

The rescission of payments for Ancillary Services for Undispatchable, Unavailable, and Undelivered Capacity applies to Ancillary Services that are awarded in the Day-Ahead Market, HASP, or Real-Time Market and the rescission will be the weighted average of the Ancillary Service Marginal Prices (ASMPs) and Ancillary Services Award amounts for a resource across the Day-Ahead Market, HASP, and Real-Time Market. For Self-Provided Ancillary Service capacity that becomes Undispatchable Capacity, Unavailable Capacity, or Undelivered Capacity, the rescission of Ancillary Services self-provision in the Day-Ahead Market, HASP, and Real-Time Market reduces the relevant Scheduling Coordinator's effective Ancillary Services self-provision in the Ancillary Services cost allocation, effectively resulting in a charge back at the relevant Ancillary Services rate. The rescission of payments in this Section 11.10.9 shall not apply to a capacity payment for any particular Ancillary Service if the <u>weighted average</u> Ancillary Service Marginal Price (ASMP) is less than or equal to zero (0).

11.10.9.1 Rescission Undispatchable AS

If a Scheduling Coordinator has Undispatchable Capacity that it is obligated to supply to the CAISO during a Settlement Interval, the Ancillary Service capacity payment for the amount of Energy that cannot be delivered from the Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource for the Settlement Interval shall be rescinded; provided, however, that to the extent an Ancillary Service procured in the IFM from a <u>Non-Dynamic</u> System Resource or a Pseudo-Tie of a Generating Unit to the CAISO Balancing Authority Area becomes Undispatchable Capacity due to an Intertie transmission derate before the Operating Hour for which it was procured, in rescinding the Ancillary Service capacity payment, the CAISO shall credit back to the Scheduling Coordinator any charge for Congestion assessed pursuant to Section 11.10.1.1.1, but at the lower of the Day-Ahead and simple average of the fifteen (15) minute Real-Time Shadow Price over the applicable Trading Hour on the corresponding Intertie.

Attachment C – Materials Presented to ISO Board of Governors Tariff Amendment – Payment Rescission Rules for Ancillary Services California Independent System Operator Fifth Replacement FERC Electric Tariff

January 4, 2013



Memorandum

To: ISO Board of Governors

From: Keith Casey, Vice President, Market & Infrastructure Development

Date: July 5, 2012

Re: Decision on Modifying Rules for Rescission of Ancillary Service Capacity Payment

This memorandum requires Board action.

EXECUTIVE SUMMARY

Management proposes to modify the settlement treatment of ancillary service capacity awarded in the day-ahead market that is later deemed unavailable prior to the real-time market. After the close of the day-ahead market, the ISO analyzes ancillary service awards to ensure that resources are able to provide the service in real-time given changes in system conditions or resource operating limitations. In the event that a dayahead ancillary service award is determined to be unavailable prior to the real-time pre-dispatch process, the ISO procures additional ancillary services to meet reserve requirements.

Currently, resources still receive a capacity payment when the day-ahead awarded ancillary service capacity is determined to be unavailable prior to the real-time pre-dispatch process. Management proposes to rescind payments for ancillary service capacity awarded in the day-ahead market that is later determined to be unavailable prior to the real-time pre-dispatch process due to changes in a resource's operating limitations. However, if a resource's capacity becomes unavailable due to an internal transmission outage or other change in system conditions that are outside of a resource's control, the resource will continue to receive its day-ahead ancillary service capacity payment.

Management proposes the following motion:

Moved, that the ISO Board of Governors approves the proposed tariff change regarding modifying the rules for recession of ancillary service capacity payment, as described in the memorandum dated July 5, 2012; and

Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate fillings with the Federal Energy Regulatory Commission to implement the proposed tariff change.

DISCUSSION AND ANALYSIS

Since implementing the new wholesale market design in 2009, Management has worked to enhance the efficiency of the ISO's ancillary services markets, including the real-time ancillary service qualification method. Last year, the ISO introduced the use of dynamic ramp rates in ancillary services capacity procurement. This feature provides greater assurance that ancillary service capacity awarded to a resource in the dayahead market will be deliverable in real-time. In connection with these efforts, Management identified a gap in how the ISO market systems settle ancillary service capacity awards that are subject to cancelation between the close of the day-ahead market and the real-time pre-dispatch process.

Ancillary service awards in the day-ahead market can be canceled when system conditions change due to generation or transmission outages that occur after the close of the day-ahead market, but before the real-time pre-dispatch process. These changes cause previously scheduled capacity to become unavailable. Awards can be canceled due to changes in a resource's physical operating limitations that occur after the day-ahead market award. Changes in a resource's physical operating limitation can be caused by a change in the ramp rate submitted by the resource or a de-rate of the resource's output capability. To maintain required reserve levels, in the real-time pre-dispatch process, the market optimization procures additional ancillary services to replace day-ahead ancillary service awards that were canceled.

Cancelation of ancillary service awards can be initiated manually by operators or through the ISO's automated market systems. Under the existing tariff, resources with ancillary service capacity awards determined to be unavailable <u>after</u> the real-time pre-dispatch process have their day-ahead capacity payments rescinded. The current ancillary service payment rescission rules, however, do not extend to ancillary service capacity that becomes unavailable <u>between</u> the day-ahead market and the real-time pre-dispatch process.

Management believes this inconsistent settlement treatment should be corrected and proposes to apply its payment rescission rules to ancillary service capacity awarded in the day-ahead market that later, before the real-time pre-dispatch, becomes unavailable as a result of a change in the resource's operating limitations. However, if a resource's capacity becomes unavailable due to a change in system conditions outside its control, such as an internal transmission outage, the resource will continue to receive its day-ahead capacity payment. This change in settlement rules will ensure that resources will be compensated only when the resource can provide ancillary services capacity to the market.

POSITIONS OF THE PARTIES

Stakeholders are generally supportive of the proposed market enhancements. The final proposal addresses concerns raised by stakeholders regarding rescission of payments when changes in system conditions are outside of their control. Management

addressed this concern by retaining the rule that allows resources to maintain their day-ahead payment for ancillary service capacity, if the capacity becomes unavailable due to internal transmission outages.

CONCLUSION

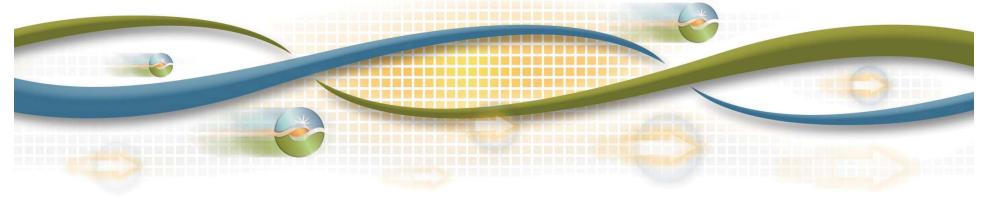
Management requests Board approval of the proposed modifications to the rules for rescission on ancillary service capacity payment as described in this memorandum. The modified rules will provide consistent settlement treatment for the rescission of ancillary service capacity awarded in both the day-ahead and real-time markets.



Decision on Modifying Rules for Rescission of Ancillary Services Capacity Payment

Greg Cook Director, Market and Infrastructure Development

Board of Governors Meeting General Session July 12-13, 2012



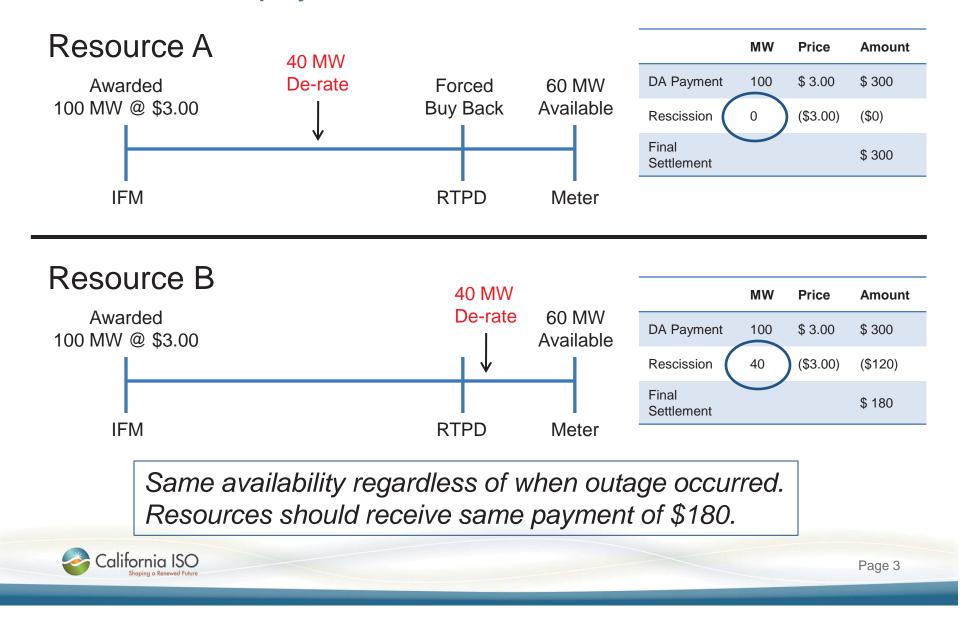
Day-ahead capacity awards can be cancelled due to system changes after the day-ahead market closes

- Generation outage
- Transmission outage
- Initiated by operators or market optimization

Ensures additional ancillary services are procured in real-time to meet reliability standards



Proposal addresses inconsistent ancillary services rescission of payments



Stakeholders generally support the proposal. Major concerns were addressed through stakeholder process.

- Suppliers concerned with the rescission of payments due to changes in system conditions out of their control
 - Proposal revised so that payments are not rescinded if capacity becomes unavailable due changes in system conditions.



Management recommends modifying rules for rescission of ancillary services capacity payments.

- Provides consistent settlement treatment for the rescission of ancillary service capacity awarded in both the day-ahead and real-time markets.
- Does not harm generators when unavailable capacity is caused by changes in system conditions that are outside of their control.





Board of Governors July 12-13, 2012 Decision on Modifying Rules for Rescission on Ancillary

Service Capacity Payment

<u>Motion</u>

Moved, that the ISO Board of Governors approves the proposed tariff change regarding modifying the rules for recession of ancillary service capacity payment, as described in the memorandum dated July 5, 2012; and

Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate fillings with the Federal Energy Regulatory Commission to implement the proposed tariff change.

Moved: Galiteva Second: Maullin

Board Action: Passed		Vote Count: 5-0-0
Bhagwat	Y	
Foster	Y	
Galiteva	Y	
Maullin	Y	
Olsen	Y	

Motion Number: 2012-07-G3

FERC rendition of the electronically filed tariff records in Docket No. ER13-00707-000 Filing Data: CID: C001183 Filing Title: 2013-01-04 Tariff Amendment - Payment Rescission Rules for Ancillary Services Company Filing Identifier: 393 Type of Filing Code: 10 Associated Filing Identifier: Tariff Title: CAISO eTariff Tariff ID: 11 Payment Confirmation: Suspension Motion: N

Tariff Record Data: Record Content Description, Tariff Record Title, Record Version Number, Option Code: 8.3.1, Procurement Of Ancillary Services, 6.0.0, A Record Narative Name: Tariff Record ID: 5948 Tariff Record Collation Value: 131230176 Tariff Record Parent Identifier: 5947 Proposed Date: 2013-10-01 Priority Order: 500 Record Change Type: CHANGE Record Content Type: 1 Associated Filing Identifier:

The CAISO shall operate a competitive Day-Ahead Market, HASP, and Real-Time Markets to procure Ancillary Services. The Security Constrained Unit Commitment (SCUC) and Security Constrained Economic Dispatch (SCED) applications used in the Integrated Forward Market (IFM), HASP, and the Real-Time Market (RTM) shall calculate optimal resource commitment, Energy, and Ancillary Services Awards and Schedules at least cost to End-Use Customers consistent with maintaining System Reliability. Any Scheduling Coordinator representing resources, System Units, Participating Loads, Proxy Demand Resources or imports of System Resources may submit Bids into the CAISO's Ancillary Services markets provided that it is in possession of a current certificate for the resources concerned. Regulation Up, Regulation Down, and Operating Reserves necessary to meet CAISO requirements not met by self-provision will be procured by the CAISO as described in this CAISO Tariff. The amount of Ancillary Services procured in the IFM is based on the CAISO Forecast of CAISO Demand and the forecasted intertie schedules in HASP for the Operating Hour net of (i) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services and (ii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of additional Ancillary Services procured in the HASP is based on the CAISO Forecast of CAISO Demand, the Day-Ahead Schedules

established net interchange, and the forecast of the Intertie Schedules for the Operating Hour in the HASP net of (i) available awarded Day-Ahead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, and (iii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of Ancillary Services procured in the Real-Time Market is based upon the CAISO Forecast of CAISO Demand and the HASP Intertie Schedule established net interchange for the Operating Hour net of (i) available awarded Day-Ahead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, (iii) additional Operating Reserves procured in HASP, and (iv) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The CAISO may procure incremental Ancillary Services in the Real-Time Market based in part on a determination during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment that any Ancillary Services capacity awarded or self-provided in the Day-Ahead Market is not available as a result of a resource constraint or Transmission Constraints. Resource constraints may include but are not limited to an Outage of a resource or Ramp Rate constraints. Incremental procurement in the Real-Time Market will exclude Ancillary Services Capacity the CAISO has determined is not available. The CAISO will manage the Energy from both CAISO procured and Self-Provided Ancillary Services as part of the Real-Time Dispatch. In the Day-Ahead Market, the CAISO procures onehundred (100) percent of its Ancillary Service requirements based on the Day-Ahead Demand Forecast net of Self-Provided Ancillary Services. After the Day-Ahead Market, the CAISO procures additional Ancillary Services needed to meet system requirements from all resources in the Real-Time Market. The amount of Ancillary Services procured in the HASP and Real-Time Market is based on the CAISO Forecast of CAISO Demand for the Operating Hour net of Self-Provided Ancillary Services.

The CAISO procurement of Ancillary Services from Non-Dynamic System Resources in the

HASP is for the entire next Operating Hour. The CAISO procurement of Ancillary Services from all other resources in the Real-Time Market is for a fifteen (15) minute time period to which the relevant RTUC applies. The CAISO's procurement of Ancillary Services from Non-Dynamic System Resources in HASP and from Dynamic System Resources and internal Generation (which includes Generation from Generating Units that are Pseudo-Ties to the CAISO Balancing Authority Area) in the Real-Time Market is based on the Ancillary Service Bids submitted or generated in the HASP consistent with the requirements in Section 30. The CAISO may also procure Ancillary Services pursuant to the requirements in Section 42.1 and as permitted under the terms and conditions of a Reliability Must-Run Contract.

The CAISO will contract for long-term Voltage Support service with owners of Reliability Must-

Run Units under Reliability Must-Run Contracts. The CAISO will procure Black Start capability

through individual contracts with Scheduling Coordinators for Reliability Must-Run Units and other

Generating Units which have Black Start capability. These requirements and standards apply to

all Ancillary Services whether self-provided or procured by the CAISO.

Record Content Description, Tariff Record Title, Record Version Number, Option Code: 8.10.8, Rescission Of Payments For Ancillary Service Capacity, 10.0.0, A Record Narative Name: Tariff Record ID: 5996 Tariff Record Collation Value: 172945728 Tariff Record Parent Identifier: 5988 Proposed Date: 2013-10-01 Priority Order: 500 Record Change Type: CHANGE Record Content Type: 1 Associated Filing Identifier:

If Ancillary Services capacity that receives an AS Award or Self-Provided Ancillary Services capacity provided from a resource is Undispatchable Capacity, Unavailable Capacity, or Undelivered Capacity during the relevant Settlement Interval, then payments will be rescinded as described in this Section 8.10.8 and settled in accordance with Section 11.10.9. If the CAISO determines that non-compliance of a resource, with an operating order or Dispatch Instruction from the CAISO, or with any other applicable technical standard under the CAISO Tariff, causes or exacerbates system conditions for which the WECC imposes a penalty on the CAISO, then the Scheduling Coordinator of such resource shall be assigned that portion of the WECC penalty which the CAISO reasonably determines is attributable to such non-compliance, in addition to any other penalties or sanctions applicable under the CAISO Tariff.

8.10.8.1 Rescission of Payments for Undispatchable Ancillary Service Capacity

The CAISO shall calculate the Real-Time ability of each Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource to deliver Energy from Ancillary Services capacity or Self-Provided Ancillary Services capacity for each Settlement Interval based on its maximum operating capability, actual telemetered output, and Operational Ramp Rate as described in Section 30.10. To make this determination for Multi-Stage Generating Resources the CAISO shall use the MSG-Configuration-specific Maximum Operating Limit and Operational Ramp Rate. System Resources that are awarded Ancillary Services are required to electronically tag (E-Tag as prescribed by the WECC) the Ancillary Services capacity. If the amounts of Ancillary Services capacity in an electronic tag differ from the amounts of Ancillary Services capacity for the System Resource, the Undispatchable Capacity will equal the amount of the difference, and will be settled in accordance with the provisions of Section 11.10.9.1.

8.10.8.2 Rescission of Payments for Unavailable Ancillary Service Capacity

If the CAISO determines that a Scheduling Coordinator has supplied Uninstructed Imbalance Energy to the CAISO during a Settlement Interval from the capacity of a resource that is obligated to supply Spinning Reserve or Non-Spinning Reserve to the CAISO, payments to the Scheduling Coordinator for the Ancillary Service capacity used to supply Uninstructed Imbalance Energy shall be eliminated to the extent of the deficiency, in accordance with the provisions of Section 11.10.9.2. For Multi-Stage Generating Resources that have supplied Uninstructed Imbalance Energy from capacity obligated to supply Spinning or Non-Spinning Reserves, the CAISO shall calculate the capacity for which payments will be rescinded at the Generating Unit or Dynamic Resource-Specific System Resource level, as applicable, and will use the MSG Configurationspecific Maximum Operating Limit.

8.10.8.3 Rescission of Payments for Undelivered Ancillary Service Capacity

For each Settlement Interval in which a resource fails to supply Energy from Spinning Reserve or Non-Spinning Reserve capacity in accordance with a Dispatch Instruction, or supplies only a portion of the Energy specified in the Dispatch Instruction, the capacity payment will be reduced to the extent of the deficiency, in accordance with the provisions of Section 11.10.9.3.

8.10.8.4 Rescission of Ancillary Service Capacity Payments for Non-Generator Resources

THIS TARIFF SECTION WILL BECOME EFFECTIVE ON NOVEMBER 27, 2012.

For Non-Generator Resources, payment for Ancillary Service capacity will be rescinded, in accordance with the provisions of Section 11.10.9, to the extent the resource is unable as a result of its MWh constraint to generate Energy or consume Energy continuously to support its self-provision or award of Ancillary Services.

8.10.8.5 [NOT USED]

8.10.8.6 Rescission of Payments for Regulation Up and Regulation Down Capacity THIS TARIFF SECTION WILL BECOME EFFECTIVE ON NOVEMBER 27, 2012.

Payment for Regulation Up and Regulation Down capacity will be rescinded, in accordance with the provisions of Section 11.10.9, if the resource providing Regulation Up and Regulation Down capacity: (i) is off Regulation or off Automatic Generation Control, (ii) is not running, (iii) is not providing sufficient Regulating Range, (iv) is generating outside the Regulating Range, (v) has a Regulating Range that overlaps with its Forbidden Operating Regions, or (vi) has telemetry equipment that is not available. In addition to these criteria, payment for Regulation Up and Regulation Down capacity to Non-Generator Resources will be rescinded, in accordance with the provisions of Section 11.10.9, to the extent the resource is unable as a result of its MWh constraint to generate Energy (or curtail Energy consumption) continuously to support its self-provision or award of Regulation Up or unable as a result of its MWh constraint to consume Energy (or increase Energy consumption) continuously to support its self-provision or award of Regulation Down, whether or not the resources use Regulation Energy Management.

8.10.8.7 Rescission of Payments for Resource and Transmission Constraints

If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a resource constraint, then payments for that capacity will be rescinded in accordance with Section 11.10 or, in the case of Self-Provided Ancillary Services capacity, that capacity will not be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4.

If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a Transmission Constraint, then payments for that capacity will not be rescinded, except as provided in section 11.10.9.1 for System Resources or, in the case of Self-Provided Ancillary Services capacity, that capacity will continue to be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4. For purposes of applying this Section to Dynamic Resources or Pseudo-Tie resources, the CAISO shall treat a reduction in the Operating Transfer Capability at an Intertie between the Day-Ahead Market and Real-Time Unit Commitment that is registered in SLIC or any successor outage management system as a Transmission Constraint. For all other constraints that cause the CAISO to determine that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity from Dynamic Resource or Pseudo-Tie resources is not available, the ISO shall treat these constraints as resource constraints.

8.10.8.8 [NOT USED]

Record Content Description, Tariff Record Title, Record Version Number, Option Code: 11.10.9, Settlements Of Rescission Of Payments For AS Capacity, 5.0.0, A Record Narative Name: Tariff Record ID: 6118 Tariff Record Collation Value: 278972768 Tariff Record Parent Identifier: 6109 Proposed Date: 2013-10-01 Priority Order: 500 Record Change Type: CHANGE Record Content Type: 1 Associated Filing Identifier:

The rescission of payments for Ancillary Services for Undispatchable, Unavailable, and

Undelivered Capacity applies to Ancillary Services that are awarded in the Day-Ahead Market,

HASP, or Real-Time Market and the rescission will be the weighted average of the Ancillary

Service Marginal Prices (ASMPs) and Ancillary Services Award amounts for a resource across

the Day-Ahead Market, HASP, and Real-Time Market. For Self-Provided Ancillary Service

capacity that becomes Undispatchable Capacity, Unavailable Capacity, or Undelivered Capacity,

the rescission of Ancillary Services self-provision in the Day-Ahead Market, HASP, and Real-

Time Market reduces the relevant Scheduling Coordinator's effective Ancillary Services self-

provision in the Ancillary Services cost allocation, effectively resulting in a charge back at the relevant Ancillary Services rate. The rescission of payments in this Section 11.10.9 shall not apply to a capacity payment for any particular Ancillary Service if the weighted average Ancillary Service Marginal Price (ASMP) is less than or equal to zero (0).

11.10.9.1 Rescission Undispatchable AS

If a Scheduling Coordinator has Undispatchable Capacity that it is obligated to supply to the CAISO during a Settlement Interval, the Ancillary Service capacity payment for the amount of Energy that cannot be delivered from the Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource for the Settlement Interval shall be rescinded; provided, however, that to the extent an Ancillary Service procured in the IFM from a Non-Dynamic System Resource to the CAISO Balancing Authority Area becomes Undispatchable Capacity due to an Intertie transmission derate before the Operating Hour for which it was procured, in rescinding the Ancillary Service capacity payment, the CAISO shall credit back to the Scheduling Coordinator any charge for Congestion assessed pursuant to Section 11.10.1.1.1, but at the lower of the Day-Ahead and simple average of the fifteen (15) minute Real-Time Shadow Price over the applicable Trading Hour on the corresponding Intertie

11.10.9.2 Rescission of Payments for Unavailable Ancillary Service Capacity

Payments to the Scheduling Coordinator representing the Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource for the Ancillary Service capacity used to supply Uninstructed Imbalance Energy shall not be eliminated to the extent of the deficiency if: (i) the deficiency in the availability of Ancillary Service capacity from the Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource is attributable to control exercised by the CAISO in that Settlement Interval through AGC operation, an RMR Dispatch Notice, or an Exceptional Dispatch; or (ii) a penalty is imposed under Section 8.10.7 with respect to the deficiency.

In calculating the amount of the payment to be rescinded under Section 8.10.8.2, the CAISO shall reduce the payment for Ancillary Service capacity otherwise payable for the Settlement Interval by the product of the applicable prices and the amount of Ancillary Service capacity from which

the Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource has supplied Uninstructed Imbalance Energy in that Settlement Interval.

11.10.9.3 Rescission of Payments for Undelivered Ancillary Service Capacity.

If the total metered output of a Generating Unit, Participating Load, System Unit or System Resource is insufficient to supply the amount of Instructed Imbalance Energy associated with a Dispatch Instruction issued in accordance with awarded or self-provided Spinning Reserves or awarded or self-provided Non-Spinning Reserves in any Settlement Interval, then the capacity payment associated with the difference between the scheduled amount of each Ancillary Service for which insufficient Energy was delivered and the actual output attributed to the response to the Dispatch Instruction shall be rescinded. If, after the issuance of a Dispatch Instruction associated with Non-Spinning Reserves, the actual response of a Proxy Demand Resource is insufficient to supply the amount of Instructed Imbalance Energy associated with a Dispatch Instruction issued in accordance with awarded or self-provided Non-Spinning Reserves, then the capacity payment associated with the difference between the scheduled amount and the actual amount attributed to the response to the Dispatch Instruction (as established pursuant to the applicable Business Practice Manual) shall be rescinded. However, no capacity payment shall be rescinded if the shortfall in the metered output of the Generating Unit, Participating Load, Proxy Demand Resource, System Unit, or System Resource is less than a deadband amount published by CAISO on the CAISO Website at least twenty-four hours prior to the Settlement Interval. For any Settlement Interval with respect to which no deadband amount has been published by the CAISO, the deadband amount shall be zero MWh.

11.10.9.4 Allocation of Rescinded Ancillary Services Capacity Payments

Payments rescinded pursuant to Sections 8.10.8 and 11.10.9 shall be allocated to Scheduling Coordinators in proportion to their Ancillary Services Obligation for the same Trading Day.

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Document Content(s)	
2013-01-04 Transmittal - AS Buy Back Amdt.PDF	-15
2013-01-04 Att. A - Clean Tariff AS Buy Back Amdt.PDF	6-20
2013-01-04 Att. B - Marked Tariff AS Buy Back Amdt.PDF2	1-25
2013-01-04 Att. C - Board Materials AS Buyback Amdt.PDF	6-35
FERC GENERATED TARIFF FILING.RTF	6-43

Attachment B – Clean

Payment Rescission Rules for Ancillary Services

California Independent System Operator Corporation

July 26, 2013

8.3 Procurement; Certification And Testing; Contracting Period

8.3.1 Procurement Of Ancillary Services

The CAISO shall operate a competitive Day-Ahead Market, HASP, and Real-Time Markets to procure Ancillary Services. The Security Constrained Unit Commitment (SCUC) and Security Constrained Economic Dispatch (SCED) applications used in the Integrated Forward Market (IFM), HASP, and the Real-Time Market (RTM) shall calculate optimal resource commitment, Energy, and Ancillary Services Awards and Schedules at least cost to End-Use Customers consistent with maintaining System Reliability. Any Scheduling Coordinator representing resources, System Units, Participating Loads, Proxy Demand Resources or imports of System Resources may submit Bids into the CAISO's Ancillary Services markets provided that it is in possession of a current certificate for the resources concerned. Regulation Up, Regulation Down, and Operating Reserves necessary to meet CAISO requirements not met by self-provision will be procured by the CAISO as described in this CAISO Tariff. The amount of Ancillary Services procured in the IFM is based on the CAISO Forecast of CAISO Demand and the forecasted intertie schedules in HASP for the Operating Hour net of (i) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services and (ii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of additional Ancillary Services procured in the HASP is based on the CAISO Forecast of CAISO Demand, the Day-Ahead Schedules established net interchange, and the forecast of the Intertie Schedules for the Operating Hour in the HASP net of (i) available awarded Day-Ahead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, and (iii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of Ancillary Services procured in the Real-Time Market is based upon the CAISO Forecast of CAISO Demand and the HASP Intertie Schedule established net interchange for the Operating Hour net of (i) available awarded DayAhead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, (iii) additional Operating Reserves procured in HASP, and (iv) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The CAISO may procure incremental Ancillary Services in the Real-Time Market based in part on a determination during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment that any Ancillary Services capacity awarded or self-provided in the Day-Ahead Market is not available as a result of a resource constraint or Transmission Constraints. Resource constraints may include but are not limited to an Outage of a resource or Ramp Rate constraints. Incremental procurement in the Real-Time Market will exclude Ancillary Services Capacity the CAISO has determined is not available.

The CAISO will manage the Energy from both CAISO procured and Self-Provided Ancillary Services as part of the Real-Time Dispatch. In the Day-Ahead Market, the CAISO procures onehundred (100) percent of its Ancillary Service requirements based on the Day-Ahead Demand Forecast net of Self-Provided Ancillary Services. After the Day-Ahead Market, the CAISO procures additional Ancillary Services needed to meet system requirements from all resources in the Real-Time Market. The amount of Ancillary Services procured in the HASP and Real-Time Market is based on the CAISO Forecast of CAISO Demand for the Operating Hour net of Self-Provided Ancillary Services.

The CAISO procurement of Ancillary Services from Non-Dynamic System Resources in the HASP is for the entire next Operating Hour. The CAISO procurement of Ancillary Services from all other resources in the Real-Time Market is for a fifteen (15) minute time period to which the relevant RTUC applies. The CAISO's procurement of Ancillary Services from Non-Dynamic System Resources in HASP and from Dynamic System Resources and internal Generation (which includes Generation from Generating Units that are Pseudo-Ties to the CAISO Balancing Authority Area) in the Real-Time Market is based on the Ancillary Service Bids submitted or generated in the HASP consistent with the requirements in Section 30. The CAISO may also

procure Ancillary Services pursuant to the requirements in Section 42.1 and as permitted under the terms and conditions of a Reliability Must-Run Contract.

The CAISO will contract for long-term Voltage Support service with owners of Reliability Must-Run Units under Reliability Must-Run Contracts. The CAISO will procure Black Start capability through individual contracts with Scheduling Coordinators for Reliability Must-Run Units and other Generating Units which have Black Start capability. These requirements and standards apply to all Ancillary Services whether self-provided or procured by the CAISO.

8.10.8.7 Rescission of Payments for Resource and Transmission Constraints

If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a resource constraint, then payments for that capacity will be rescinded in accordance with Section 11.10 or, in the case of Self-Provided Ancillary Services capacity, that capacity will not be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4.

If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a Transmission Constraint, then payments for that capacity will not be rescinded, except as provided in section 11.10.9.1 for System Resources or, in the case of Self-Provided Ancillary Services capacity, that capacity will continue to be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4. For purposes of applying this Section to Dynamic Resources or Pseudo-Tie resources, the CAISO shall treat a reduction in the Operating Transfer Capability at an Intertie between the Day-Ahead Market and Real-Time Unit Commitment that is registered in SLIC or any successor outage management system as a Transmission Constraint. For all other constraints that cause the CAISO to determine that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity from Dynamic Resource or Pseudo-Tie resources is not available, the ISO shall treat these constraints as resource constraints.

11.10.9 Settlements Of Rescission Of Payments For AS Capacity

The rescission of payments for Ancillary Services for Undispatchable, Unavailable, and Undelivered Capacity applies to Ancillary Services that are awarded in the Day-Ahead Market, HASP, or Real-Time Market and the rescission will be the weighted average of the Ancillary Service Marginal Prices (ASMPs) and Ancillary Services Award amounts for a resource across the Day-Ahead Market, HASP, and Real-Time Market. For Self-Provided Ancillary Service capacity that becomes Undispatchable Capacity, Unavailable Capacity, or Undelivered Capacity, the rescission of Ancillary Services self-provision in the Day-Ahead Market, HASP, and Real-Time Market reduces the relevant Scheduling Coordinator's effective Ancillary Services selfprovision in the Ancillary Services cost allocation, effectively resulting in a charge back at the relevant Ancillary Services rate. The rescission of payments in this Section 11.10.9 shall not apply to a capacity payment for any particular Ancillary Service if the weighted average Ancillary Service Marginal Price (ASMP) is less than or equal to zero (0).

11.10.9.1 Rescission Undispatchable AS

If a Scheduling Coordinator has Undispatchable Capacity that it is obligated to supply to the CAISO during a Settlement Interval, the Ancillary Service capacity payment for the amount of Energy that cannot be delivered from the Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource for the Settlement Interval shall be rescinded; provided, however, that to the extent an Ancillary Service procured in the IFM from a Non-Dynamic System Resource to the CAISO Balancing Authority Area becomes Undispatchable Capacity due to an Intertie transmission derate before the Operating Hour for which it was procured, in rescinding the Ancillary Service capacity payment, the CAISO shall credit back to the Scheduling Coordinator any charge for Congestion assessed pursuant to Section 11.10.1.1.1, but at the lower of the Day-Ahead and simple average of the fifteen (15) minute Real-Time Shadow Price over the applicable Trading Hour on the corresponding Intertie.

Attachment C – Marked

Payment Rescission Rules for Ancillary Services

California Independent System Operator Corporation

July 26, 2013

8.3 Procurement; Certification And Testing; Contracting Period

8.3.1 Procurement Of Ancillary Services

The CAISO shall operate a competitive Day-Ahead Market, HASP, and Real-Time Markets to procure Ancillary Services. The Security Constrained Unit Commitment (SCUC) and Security Constrained Economic Dispatch (SCED) applications used in the Integrated Forward Market (IFM), HASP, and the Real-Time Market (RTM) shall calculate optimal resource commitment, Energy, and Ancillary Services Awards and Schedules at least cost to End-Use Customers consistent with maintaining System Reliability. Any Scheduling Coordinator representing resources, System Units, Participating Loads, Proxy Demand Resources or imports of System Resources may submit Bids into the CAISO's Ancillary Services markets provided that it is in possession of a current certificate for the resources concerned. Regulation Up, Regulation Down, and Operating Reserves necessary to meet CAISO requirements not met by self-provision will be procured by the CAISO as described in this CAISO Tariff. The amount of Ancillary Services procured in the IFM is based on the CAISO Forecast of CAISO Demand and the forecasted intertie schedules in HASP for the Operating Hour net of (i) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services and (ii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of additional Ancillary Services procured in the HASP is based on the CAISO Forecast of CAISO Demand, the Day-Ahead Schedules established net interchange, and the forecast of the Intertie Schedules for the Operating Hour in the HASP net of (i) available awarded Day-Ahead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, and (iii) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The amount of Ancillary Services procured in the Real-Time Market is based upon the CAISO Forecast of CAISO Demand and the HASP Intertie Schedule established net interchange for the Operating Hour net of (i) available awarded DayAhead Ancillary Services, (ii) Self-Provided Ancillary Services from resources internal to the CAISO Balancing Authority Area (which includes Pseudo-Ties of Generating Units to the CAISO Balancing Authority Area) and Dynamic System Resources certified to provide Ancillary Services, (iii) additional Operating Reserves procured in HASP, and (iv) Ancillary Services self-provided pursuant to an ETC, TOR or Converted Right. The CAISO may procure incremental Ancillary Services in the Real-Time Market based in part on a determination during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment that any Ancillary Services capacity awarded or self-provided in the Day-Ahead Market is not available as a result of a resource constraint or Transmission Constraints. Resource constraints may include but are not limited to an Outage of a resource or Ramp Rate constraints. Incremental procurement in the Real-Time Market will exclude Ancillary Services Capacity the CAISO has determined is not available.

The CAISO will manage the Energy from both CAISO procured and Self-Provided Ancillary Services as part of the Real-Time Dispatch. In the Day-Ahead Market, the CAISO procures onehundred (100) percent of its Ancillary Service requirements based on the Day-Ahead Demand Forecast net of Self-Provided Ancillary Services. After the Day-Ahead Market, the CAISO procures additional Ancillary Services needed to meet system requirements from all resources in the Real-Time Market. The amount of Ancillary Services procured in the HASP and Real-Time Market is based on the CAISO Forecast of CAISO Demand for the Operating Hour net of Self-Provided Ancillary Services.

The CAISO procurement of Ancillary Services from Non-Dynamic System Resources in the HASP is for the entire next Operating Hour. The CAISO procurement of Ancillary Services from all other resources in the Real-Time Market is for a fifteen (15) minute time period to which the relevant RTUC applies. The CAISO's procurement of Ancillary Services from Non-Dynamic System Resources in HASP and from Dynamic System Resources and internal Generation (which includes Generation from Generating Units that are Pseudo-Ties to the CAISO Balancing Authority Area) in the Real-Time Market is based on the Ancillary Service Bids submitted or generated in the HASP consistent with the requirements in Section 30. The CAISO may also

procure Ancillary Services pursuant to the requirements in Section 42.1 and as permitted under the terms and conditions of a Reliability Must-Run Contract.

The CAISO will contract for long-term Voltage Support service with owners of Reliability Must-Run Units under Reliability Must-Run Contracts. The CAISO will procure Black Start capability through individual contracts with Scheduling Coordinators for Reliability Must-Run Units and other Generating Units which have Black Start capability. These requirements and standards apply to all Ancillary Services whether self-provided or procured by the CAISO.

8.10.8.7 Rescission of Payments for Resource and Transmission Constraints

If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a resource constraint, then payments for that capacity will be rescinded in accordance with Section 11.10 or, in the case of Self-Provided Ancillary Services capacity, that capacity will not be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4.

If the CAISO determines that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity is not available during the Hour-Ahead Scheduling Process or Real-Time Unit Commitment as a result of a Transmission Constraint, then payments for that capacity will not be rescinded, except as provided in section 11.10.9.1 for System Resources or, in the case of Self-Provided Ancillary Services capacity, that capacity will continue to be compensated at the user rate as described in Sections 11.10.2, 11.10.3 and 11.10.4. For purposes of applying this Section to Dynamic Resources or Pseudo-Tie resources, the CAISO shall treat a reduction in the Operating Transfer Capability at an Intertie between the Day-Ahead Market and Real-Time Unit Commitment that is registered in SLIC or any successor outage management system as a Transmission Constraint. For all other constraints that cause the CAISO to determine that any Day-Ahead Market award for Ancillary Services capacity or Self-Provided Ancillary Services capacity from Dynamic Resource or Pseudo-Tie resources is not available, the ISO shall treat these constraints as resource constraints.

11.10.9 Settlements Of Rescission Of Payments For AS Capacity

The rescission of payments for Ancillary Services for Undispatchable, Unavailable, and Undelivered Capacity applies to Ancillary Services that are awarded in the Day-Ahead Market, HASP, or Real-Time Market and the rescission will be the weighted average of the Ancillary Service Marginal Prices (ASMPs) and Ancillary Services Award amounts for a resource across the Day-Ahead Market, HASP, and Real-Time Market. For Self-Provided Ancillary Service capacity that becomes Undispatchable Capacity, Unavailable Capacity, or Undelivered Capacity, the rescission of Ancillary Services self-provision in the Day-Ahead Market, HASP, and Real-Time Market reduces the relevant Scheduling Coordinator's effective Ancillary Services selfprovision in the Ancillary Services cost allocation, effectively resulting in a charge back at the relevant Ancillary Services rate. The rescission of payments in this Section 11.10.9 shall not apply to a capacity payment for any particular Ancillary Service if the weighted average Ancillary Service Marginal Price (ASMP) is less than or equal to zero (0).

11.10.9.1 Rescission Undispatchable AS

If a Scheduling Coordinator has Undispatchable Capacity that it is obligated to supply to the CAISO during a Settlement Interval, the Ancillary Service capacity payment for the amount of Energy that cannot be delivered from the Generating Unit, Participating Load, Proxy Demand Resource, System Unit or System Resource for the Settlement Interval shall be rescinded; provided, however, that to the extent an Ancillary Service procured in the IFM from a Non-Dynamic System Resource to the CAISO Balancing Authority Area becomes Undispatchable Capacity due to an Intertie transmission derate before the Operating Hour for which it was procured, in rescinding the Ancillary Service capacity payment, the CAISO shall credit back to the Scheduling Coordinator any charge for Congestion assessed pursuant to Section 11.10.1.1.1, but at the lower of the Day-Ahead and simple average of the fifteen (15) minute Real-Time Shadow Price over the applicable Trading Hour on the corresponding Intertie.
