

March 29, 2017

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. ER17- \_\_\_\_-000**

**Filing to Extend Protective Measures for Qualifying Variable  
Energy Resources by One Year and Request for Waiver of the  
60-Day Notice Requirement**

Dear Secretary Bose:

The California Independent System Operator Corporation (CAISO) submits this tariff amendment to extend, for an additional year, the protective measures for qualifying variable energy resources that the Commission approved in 2014 that would otherwise expire on April 30, 2017.<sup>1</sup>

The CAISO proposed these protective measure as part of its transition to a fifteen-minute market structure. This market structure offered features that benefit variable energy resources, but certain older variable energy resources had a limited ability to curtail output in response to a CAISO dispatch instruction, either due to physical or contractual limitations. The protective measures, therefore, retained certain tariff provisions applicable to variable energy resources for a three-year transition period to allow these resources to resolve contractual issues and enhance their systems so they can participate in the CAISO markets more effectively. At the time the CAISO proposed the protective measures, the CAISO believed that three years would be sufficient time for these resources to address their physical and contractual limitations. Since then, the CAISO has determined that not all of these resources have been able to address these issues. Accordingly, a limited one-year extension is appropriate so the remaining resources subject to the protective measures can address these limitations.

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<sup>1</sup> The CAISO submits this filing pursuant to section 205 of the Federal Power Act (FPA), 16 U.S.C. § 824d.

The CAISO has no reason to believe that the magnitude of the costs of maintaining these protective measures will increase significantly if the Commission grants the requested one-year extension. Extending the protective measures by one year also represents a just and reasonable middle course between the alternative stakeholder proposals either to extend the protective measures for a much longer period or to eliminate the protective measures even though some variable energy resources have not resolved their physical and contractual limitations.

The CAISO respectfully requests that the Commission waive the 60-day notice requirement to permit these tariff revisions to become effective May 1, 2017, *i.e.*, 33 days after the date of this filing. Granting the waiver will prevent the protective measures from expiring on April 30, 2017 and will instead allow them to continue in effect uninterrupted until exactly one year later, April 30, 2018.

## **I. Background**

### **A. Tariff Amendment Implementing Three-Year Transition Period for Protective Measures**

In 2013, the CAISO filed a tariff amendment to implement several enhancements to its real-time market, including the new fifteen-minute market structure, in response to the Commission's directives in Order No. 764 regarding integration of variable energy resources.<sup>2</sup> These tariff enhancements included protective measures for variable energy resources utilizing older technologies that were subject to power purchase agreements that explicitly prohibited them from voluntarily responding to real-time price signals.<sup>3</sup> To qualify for protective measures, resources had to meet several requirements, including the resource owner executing an affidavit certifying that the variable energy resource met criteria set forth in the CAISO tariff to receive the protective measures.

Variable energy resources receiving protective measures would have their real-time market transactions under the new market structure settled in a manner similar to the settlement provisions applicable to them under the market structure that existed at the time the CAISO filed the tariff amendment. Under the previous

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<sup>2</sup> *Integration of Variable Energy Resources*, Order No. 764, FERC Stats. & Regs. ¶ 31,331, *order on reh'g and clarification*, Order No. 764-A, 141 ¶ 61,232 (2012), *order on clarification and reh'g*, Order No. 764-B, 144 FERC ¶ 61,222 (2013).

<sup>3</sup> See pages 38-42 of the transmittal letter for the tariff amendment submitted in Docket No. ER14-480-000 on November 26, 2013. The protective measures are set forth in section 4.8.3 of the CAISO tariff.

settlement rules, participants in the CAISO's participating intermittent resource program (PIRP) had the benefit of a monthly settlement of their uninstructed imbalance energy. Under the new market structure, participants in PIRP receiving the protective measures would not be subject to the fifteen- and five-minute real-time market settlements that would otherwise apply to them.<sup>4</sup> The CAISO allocates any uplift associated with the difference between the monthly real-time settlement amount resulting from applying the protective measures to qualified resources and the monthly real-time settlement amount that would have resulted if the protective measures were not in place, to all scheduling coordinators in the market in proportion to their monthly aggregate net negative deviations.<sup>5</sup>

The CAISO proposed to maintain the protective measures for a three-year transition period that would begin when the tariff revisions went into effect. The CAISO believed this transition period would provide sufficient time for variable energy resources, which might otherwise be unduly burdened by the revised real-time market design, to upgrade their technology and negotiate any necessary changes to their power purchase agreements. The transition period would also provide time for qualifying facilities reaching the end of their existing agreements pursuant to the Public Utility Regulatory Policies Act (PURPA) to enter into new bilateral agreements for power purchases to manage their imbalance energy price risk. The CAISO anticipated that the transitional protective measures would apply to a relatively small group of variable energy resources.

In its 2013 motion authorizing the CAISO to include the protective measures in the tariff amendment, the CAISO Governing Board (Board) also directed the CAISO to monitor and report back to the Board semi-annually regarding the effect of the protective measures and to evaluate whether the protective measures should be extended beyond the three-year transition period.<sup>6</sup>

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<sup>4</sup> Specifically, a resource subject to protective measures would be settled as follows: (1) the CAISO would settle an hourly schedule using a 90-minute-in-advance forecast; (2) the CAISO would settle a variable energy resource's hourly schedule based on its 90-minute-in-advance forecast at the simple average of the five-minute locational marginal prices established for the CAISO market; and (3) the CAISO would net deviations between the variable energy resource's actual energy output and the hourly schedule over each month and would settle this amount at the output-weighted average of five-minute locational marginal prices over the month.

<sup>5</sup> This allocation methodology is set forth in CAISO tariff section 11.12.2. The Commission had previously approved the same allocation methodology for use under the PIRP. See page 33 of the answer to comments, protests, and a request for clarification that the CAISO filed in the proceeding on the 2013 tariff amendment on January 2, 2014 (*citing Cal. Indep. Sys. Operator Corp.*, 98 FERC ¶ 61,327, at 62,376-77 (2002)).

<sup>6</sup> Board Motion (Sept. 12, 2013), available on the CAISO website at [http://www.caiso.com/Documents/Decision\\_FERC\\_Order\\_764\\_market\\_changes-Motion-](http://www.caiso.com/Documents/Decision_FERC_Order_764_market_changes-Motion-)

In 2014, the Commission issued an order conditionally accepting the CAISO's proposed tariff revisions, including the revisions to implement the protective measures for variable energy resources, effective May 1, 2014.<sup>7</sup> The Commission found that "[a] three year transition period should provide the time necessary for VERs [variable energy resources] utilizing older technology or having power purchase agreements that explicitly prohibit them from voluntarily responding to real-time price signals to upgrade technology or to negotiate any necessary changes to power purchase agreements and participate in the market."<sup>8</sup> The Commission also stated that "[g]iven that the group of VERs seeking to operate under the Protective Measures will likely be small, there is no evidence that the associated costs of such measures will be unreasonable, and the Protective Measures will only be in place for three years, we find transition measures for VERs with the technological or contractual limitations described by CAISO to be just and reasonable."<sup>9</sup> The Commission also accepted the methodology the CAISO proposed for allocating the costs of the protective measures.<sup>10</sup>

## **B. Experience with the Protective Measures**

Fifteen entities initially requested and were approved for protective measures. Nine resources actually received protective measures from May 2014 through December 2016. Nearly all of these resources still have to either adopt upgrades to their technology and/or changes to their agreements. A subset of those resources, asserted that they are in the final stages of renegotiation of their agreements. However, these entities do not anticipate having final approval of the modified agreements by the California Public Utilities Commission (CPUC), by May 1, 2017. Given these representations, the CAISO is proposing to extend the protective measures for all qualifying resources for an additional year.

Based on information obtained from current settlements data, the protective measures appear to have provided an overall benefit to the nine resources that were settled according to protective measures from May 2014 to December 2016.<sup>11</sup> For example, applying the protective measures during that

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[Sept2013.pdf](#).

<sup>7</sup> *Cal. Indep. Sys. Operator Corp.*, 146 FERC ¶ 61,204 (2014).

<sup>8</sup> *Id.* at P 78.

<sup>9</sup> *Id.* The Commission also accepted the methodology the CAISO proposed for allocating the costs of the protective measures. *See id.* at PP 65-66, 70, 73, 76-77.

<sup>10</sup> *See id.* at P 77.

<sup>11</sup> Although the protective measures have provided an overall benefit, they have not been beneficial to every qualifying resource during every month.

time resulted in a net benefit of approximately \$5.6 million.<sup>12</sup> This benefit results from applying the real-time market settlement specific to the protective measures, instead of the real-time market settlement that the resources would have been subject to absent the protective measures. Pursuant to the allocation methodology approved in the Commission's 2014 order,<sup>13</sup> the CAISO has allocated the cost associated with this benefit as uplift to all scheduling coordinators in the market in proportion to their monthly aggregate net negative uninstructed deviations.

### **C. Stakeholder Process for this Tariff Amendment**

The CAISO held a conference call with stakeholders on February 24, 2017 to discuss potential actions it should take given the pending expiration of the protective measures. The CAISO also provided stakeholders the opportunity to file written comments, and eight stakeholders submitted comments.<sup>14</sup> The CAISO held a follow-up conference call with stakeholders on March 7, 2017.

The Board authorized the CAISO to file this tariff amendment at its March 15, 2017 meeting.<sup>15</sup> Because the proposed tariff changes are limited and straightforward, and because the protective measures are currently scheduled to expire April 30, 2017, the CAISO did not undertake an extended stakeholder process to review the proposed tariff changes. The CAISO issued a market notice regarding the tariff filing and posted the proposed tariff language on March 22, 2017.

## **II. Proposed Tariff Revisions**

The CAISO proposes to revise tariff section 4.8.3.3, which sets forth the three-year transition period for the protective measures for qualifying variable energy resources, to state that the transition period will now expire on April 30,

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<sup>12</sup> See CAISO presentation, Participating Intermittent Resource Program Protective Measures, at slide 9 (Feb. 24, 2017). This presentation is available on the CAISO website at [http://www.aiso.com/Documents/Agenda-Presentation-ParticipatingIntermittentResourcesProgramProtectiveMeasures-Feb24\\_2017.pdf](http://www.aiso.com/Documents/Agenda-Presentation-ParticipatingIntermittentResourcesProgramProtectiveMeasures-Feb24_2017.pdf).

<sup>13</sup> See 146 FERC ¶ 61,204, at PP 76-77.

<sup>14</sup> Materials related to this stakeholder process are available on the CAISO website at <http://www.aiso.com/informed//Pages/MeetingsEvents/MiscellaneousStakeholderMeetings/Default.aspx>. The CAISO's responses to the stakeholders' comments are provided in Section III of this transmittal letter.

<sup>15</sup> Materials related to the CAISO Governing Board meeting are available on the CAISO website at <http://www.aiso.com/informed/Pages/BoardCommittees/Default.aspx>. These materials include a memorandum from Keith Casey, Vice President, Market & Infrastructure Development for the CAISO, to the Board regarding extension of the protective measures. The memorandum is also provided in Attachment C to this filing.

2018, *i.e.*, in four years. In addition, the CAISO proposes revisions to sections 4.8.3.1.1, 4.8.3.1.2.1, and 4.8.3.1.2.2 to delete references to a three-year duration of the transition period.

These revisions are just and reasonable. As explained above, several resources subject to the protective measures still require more time to make the necessary upgrades to their technology and/or change their power purchase agreements so that continuing the protective measures will no longer be necessary. These matters should be resolved by May 1, 2018.

The number of resources subject to the protective measures is small,<sup>16</sup> and the costs associated with the protective measures for those resources have not been significant. As noted above, the CAISO estimates, based on current settlements data, the total net costs allocated to the entire market based on net negative uninstructed deviations were only \$5.6 million from May 2014 through December 2016. The CAISO has no reason to believe that the magnitude of such costs allocated to the market would significantly increase if the Commission grants a one-year extension. Thus, it is just and reasonable to continue the protective measures for an additional year, until April 30, 2018.

### **III. Responses to Stakeholder Comments**

Some stakeholders, including resource owners with existing agreements that limit their ability to respond to CAISO dispatch instructions, supported extending the protective measure transition period by more than the one year. They requested that the CAISO extend the protective measures until their agreements are renegotiated, or expire, whichever is sooner. Extending the transition period by more than one year would fundamentally alter the purpose from a transitional mechanism to a device for fully grandfathering existing contracts. Further, it would be unduly discriminatory and unfair to other resource owners that originally qualified for protective measures and took steps that made them no longer eligible for these measures. Therefore, the CAISO did not accept this proposal.

Other stakeholders opposed any extension. One stakeholder argued that extending the protective measures would interfere with its contract negotiations with owners of resources subject to the protective measures. The CAISO does not believe any such interference will occur. The CAISO understands all the

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<sup>16</sup> The CAISO is retaining the existing provision in tariff section 4.8.3.3 which states that the protective measures will be in effect for a specific resource until the earlier of the end of the transition period or the execution between the participating intermittent resource owner and its counterparty of a new or amended power purchase agreement (or similar contract for services) that addresses their imbalance energy settlement. Pursuant to this existing tariff provision, a resource that executes such an agreement thereby ceases to be subject to the protective measures.



negotiations are nearly complete, and because the protective measures are transitional, resource owners cannot expect that they will continue into the indefinite future. Extending the protective measures by one year should not affect negotiations.

In addition, stakeholders that opposed extending the protective measures argued that the existing methodology for allocating the costs of the protective measures (*i.e.*, allocation to all scheduling coordinators in proportion to their monthly aggregate net negative uninstructed deviations) was inequitable. These stakeholders contended that the counterparties of resources receiving the benefits of the protective measures should be allocated any resulting costs. The extremely limited purpose of this tariff amendment is to extend the existing protective measures by one year. Revisiting the cost allocation methodology the Commission approved in 2014 is far beyond the scope of this tariff amendment.<sup>17</sup> Moreover, these stakeholders fail to recognize that some resources subject to the protective measures do not have contracts with counterparties to whom the costs could be allocated. Given that the CAISO proposes to extend the protective measures for only one year and the cost impacts of the protective measures have been minimal, the CAISO does not see any need for to expend significant time and resources developing a generally applicable alternative cost allocation methodology.

The CAISO's proposal to extend the protective measures by one year represents a just and reasonable middle course between the stakeholders seeking a longer extension and those seeking to eliminate the protective before all resources have had sufficient time to address contractual and physical limitations.

#### **IV. Effective Date and Request for Waiver**

The CAISO requests that the Commission accept the tariff revisions contained in this filing effective May 1, 2017, *i.e.*, 33 days after the date of this filing. Pursuant to section 35.11 of the Commission's regulations,<sup>18</sup> the CAISO respectfully requests that the Commission waive the notice requirement contained in section 35.3(a)(1) of the Commission's regulations<sup>19</sup> to permit this effective date.

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<sup>17</sup> No party sought rehearing of the 2014 order. Thus, any requests made in this proceeding to change the cost allocation methodology accepted in the 2014 order would be collateral attacks on that order, to the extent the requesting parties failed to show that changed circumstances require the cost allocation methodology to be altered.

<sup>18</sup> 18 C.F.R. § 35.11.

<sup>19</sup> 18 C.F.R. § 35.3(a)(1).

Good cause exists for the Commission to grant this waiver. Granting the waiver will prevent the protective measures from expiring on April 30, 2017. As explained above, it is just and reasonable to continue the protective measures for an additional year. No market participant will be prejudiced by granting the waiver. For these reasons, the Commission should find that good cause exists to approve the tariff revisions effective May 1, 2017.

## V. Communications

Pursuant to Rule 203(b)(3) of the Commission's Rules of Practice and Procedure,<sup>20</sup> the CAISO requests that all correspondence, pleadings, and other communications regarding this filing be directed to the following:

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## VI. Service

The CAISO has served copies of this filing on the California Public Utilities Commission, the California Energy Commission, and all parties with scheduling coordinator agreements under the CAISO tariff. In addition, the CAISO has posted a copy of the filing on the CAISO website.

## VII. Contents of Filing

In addition to this transmittal letter, this filing includes the following attachments:

Attachment A	Clean CAISO tariff sheets incorporating this tariff amendment;
Attachment B	Red-lined document showing the revisions contained in this tariff amendment; and

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<sup>20</sup> 18 C.F.R. § 385.203(b)(3).



Attachment C      Memorandum to the Board regarding extension of the protective measures.

**VIII. Conclusion**

For the reasons set forth in this filing, the CAISO respectfully requests that the Commission accept the tariff revisions contained in this filing effective May 1, 2017.

Respectfully submitted,

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**Attachment A – Clean Tariff Records**  
**Tariff Amendment to Extend for One Year**  
**Participating Intermittent Resources Protective Measures**  
**California Independent System Operator Corporation**

### **4.8.3 PIRP Protective Measures**

#### **4.8.3.1 Request for PIRP Protective Measures**

##### **4.8.3.1.1 Timing**

Participating Intermittent Resources or Qualifying Facilities that wish to qualify for PIRP Protective Measures pursuant to Section 4.8.3.2 within the transition period defined in Section 4.8.3.3 must complete their election for PIRP Protective Measures no later than thirty (30) days after the effective date of this Section 4.8.3.

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##### **4.8.3.1.2.1 Physical Limitations**

A Participating Intermittent Resource or Qualifying Facility requesting PIRP Protective Measures because of physical limitations, as specified in Section 4.8.3.2.2.1, must submit a sworn affidavit by a representative of the Participating Intermittent Resource or Qualifying Facility, who is authorized to bind the resource legally and financially. The affidavit must state that the resource meets the criteria specified in Section 4.8.3.2.1 and 4.8.3.2.2.1. The sworn affidavit must also state that the relevant party agrees that during the term of the transition period defined in Section 4.8.3.3, the party will engage in a good faith effort to upgrade the facility in order to address the limitations specified in Section 4.8.3.2.2.1.

##### **4.8.3.1.2.2 Contractual Limitations**

A Participating Intermittent Resource or Qualifying Facility requesting PIRP Protective Measures because of contractual limitations as specified in Section 4.8.3.2.2.2, must submit a sworn affidavit by a representative of the Participating Intermittent Resource or Qualifying Facility, who that is authorized to bind the resource legally and financially. The affidavit must state that the resource is subject to a contract that meets the criteria specified in Sections 4.8.3.2.1 and 4.8.3.2.2.2. The Participating Intermittent Resource or Qualifying Facility must serve their affidavit electronically to the counterparty to the applicable contract on the same day the affidavit is submitted to the CAISO. A representative of the counterparty to the applicable existing bilateral agreement that is authorized to legally and financially bind the counterparty may also submit a sworn affidavit stating that the resource is subject to a contract that meets the criteria specified in Sections 4.8.3.2.1 and 4.8.3.2.2.2. The counterparty must serve the affidavit electronically on the Participating Intermittent Resource or Qualifying Facility on the same day

the affidavit is submitted to the CAISO. Each party's respective affidavit must state that during the term of the transition period defined in Section 4.8.3.3, the party will engage in a good faith effort with the counterparty to address the existing contractual limitation specified in Section 4.8.3.2.2.2. In the event that the counterparty submits no affidavits within the thirty days, the CAISO deems the counterparty to have acquiesced to the request by the representative of the Participating Intermittent Resource, except if the Participating Intermittent Resource fails to serve the counterparty with the required documents within the prescribed time. If the counterparty later successfully demonstrates through a formal complaint filed at the Federal Energy Regulatory Commission that the Participating Intermittent Resource failed to serve the counterparty with the relevant materials as described in this Section, the CAISO will deny, and if appropriate reverse, any PIRP Protective Measures afforded to the requesting party. To the extent that the counterparty instead submits an affidavit by a representative of the company that is fully authorized to legally and financially bind the company stating that the resource's contract does not meet the criteria in Sections 4.8.3.2.1 and 4.8.3.2.2.2, the affidavit must also state that the Participating Intermittent Resource shall not suffer any economic or other repercussions under the contract and because of the terms of the contract were the resource to participate fully in the CAISO Market, including through the submission of Economic Bid for economic curtailment. The representative of the Participating Intermittent Resource may choose to withdraw its request in light of the counterparty's affidavit or pursue resolution of a contractual dispute through a dispute resolution process specified in the relevant contract, or if none is available, through the process specified in Section 13 of the CAISO Tariff, or through any dispute resolution process available through the Federal Energy Regulatory Commission. During the term that the contract is in dispute, the resource will be subject to PIRP Protective Measures provided it meets all the other criteria specified in this Section 4.8.3. Upon resolution of the dispute, if the dispute resolution process yields a conclusion that the contract is not eligible for PIRP Protective Measures, the resource will resume its status as a Participating Intermittent Resource not subject to PIRP Protective Measures. The CAISO will unwind the Protective Measures provided to the affected Scheduling Coordinator and will process such resettlement charges or payments through the existing resettlement procedures specified in Section 11.29.7. The CAISO will take all reasonable and necessary steps to include the resettlement on the next Recalculation Statement. In unwinding the Protective Measures

received, any Scheduling Coordinator that received a payment for the PIRP Protective Measures under the contract in dispute will receive a charge in the amount of the payment previously received plus any interest that may apply under Section 11.29.10.2. Similarly, any Scheduling Coordinator that received a charge due to the provision of the PIRP Protective Measures under the contract in dispute will receive a payment in the amount of the payment previously received plus any interest that may apply under Section 11.29.10.2.

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#### **4.8.3.3 Term of PIRP Protective Measures**

The PIRP Protective Measures for a specific Participating Intermittent Resource shall be in effect until the earlier date of (1) April 30, 2018; or (2) the execution between the Participating Intermittent Resource owner and its counterparty of a new or amended power purchase agreement (or similar contract for services) that addresses their Imbalance Energy settlement.

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**Attachment B – Marked Tariff Records**  
**Tariff Amendment to Extend for One Year**  
**Participating Intermittent Resources Protective Measures**  
**California Independent System Operator Corporation**

### **4.8.3 PIRP Protective Measures**

#### **4.8.3.1 Request for PIRP Protective Measures**

##### **4.8.3.1.1 Timing**

Participating Intermittent Resources or Qualifying Facilities that wish to qualify for PIRP Protective Measures pursuant to Section 4.8.3.2 within the ~~three-year~~ transition period defined in Section 4.8.3.3 must complete their election for PIRP Protective Measures no later than thirty (30) days after the effective date of this Section 4.8.3.

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##### **4.8.3.1.2.1 Physical Limitations**

A Participating Intermittent Resource or Qualifying Facility requesting PIRP Protective Measures because of physical limitations, as specified in Section 4.8.3.2.2.1, must submit a sworn affidavit by a representative of the Participating Intermittent Resource or Qualifying Facility, who is authorized to bind the resource legally and financially. The affidavit must state that the resource meets the criteria specified in Section 4.8.3.2.1 and 4.8.3.2.2.1. The sworn affidavit must also state that the relevant party agrees that during the term of the ~~three-year~~ transition period defined in Section 4.8.3.3, the party will engage in a good faith effort to upgrade the facility in order to address the limitations specified in Section 4.8.3.2.2.1.

##### **4.8.3.1.2.2 Contractual Limitations**

A Participating Intermittent Resource or Qualifying Facility requesting PIRP Protective Measures because of contractual limitations as specified in Section 4.8.3.2.2.2, must submit a sworn affidavit by a representative of the Participating Intermittent Resource or Qualifying Facility, who that is authorized to bind the resource legally and financially. The affidavit must state that the resource is subject to a contract that meets the criteria specified in Sections 4.8.3.2.1 and 4.8.3.2.2.2. The Participating Intermittent Resource or Qualifying Facility must serve their affidavit electronically to the counterparty to the applicable contract on the same day the affidavit is submitted to the CAISO. A representative of the counterparty to the applicable existing bilateral agreement that is authorized to legally and financially bind the counterparty may also submit a sworn affidavit stating that the resource is subject to a contract that meets the criteria specified in Sections 4.8.3.2.1 and 4.8.3.2.2.2. The counterparty must serve the



affidavit electronically on the Participating Intermittent Resource or Qualifying Facility on the same day the affidavit is submitted to the CAISO. Each party's respective affidavit must state that during the term of the ~~three-year~~ transition period defined in Section 4.8.3.3, the party will engage in a good faith effort with the counterparty to address the existing contractual limitation specified in Section 4.8.3.2.2.2. In the event that the counterparty submits no affidavits within the thirty days, the CAISO deems the counterparty to have acquiesced to the request by the representative of the Participating Intermittent Resource, except if the Participating Intermittent Resource fails to serve the counterparty with the required documents within the prescribed time. If the counterparty later successfully demonstrates through a formal complaint filed at the Federal Energy Regulatory Commission that the Participating Intermittent Resource failed to serve the counterparty with the relevant materials as described in this Section, the CAISO will deny, and if appropriate reverse, any PIRP Protective Measures afforded to the requesting party. To the extent that the counterparty instead submits an affidavit by a representative of the company that is fully authorized to legally and financially bind the company stating that the resource's contract does not meet the criteria in Sections 4.8.3.2.1 and 4.8.3.2.2.2, the affidavit must also state that the Participating Intermittent Resource shall not suffer any economic or other repercussions under the contract and because of the terms of the contract were the resource to participate fully in the CAISO Market, including through the submission of Economic Bid for economic curtailment. The representative of the Participating Intermittent Resource may choose to withdraw its request in light of the counterparty's affidavit or pursue resolution of a contractual dispute through a dispute resolution process specified in the relevant contract, or if none is available, through the process specified in Section 13 of the CAISO Tariff, or through any dispute resolution process available through the Federal Energy Regulatory Commission. During the term that the contract is in dispute, the resource will be subject to PIRP Protective Measures provided it meets all the other criteria specified in this Section 4.8.3. Upon resolution of the dispute, if the dispute resolution process yields a conclusion that the contract is not eligible for PIRP Protective Measures, the resource will resume its status as a Participating Intermittent Resource not subject to PIRP Protective Measures. The CAISO will unwind the Protective Measures provided to the affected Scheduling Coordinator and will process such resettlement charges or payments through the existing resettlement procedures specified in Section 11.29.7. The CAISO will take all reasonable and necessary

steps to include the resettlement on the next Recalculation Statement. In unwinding the Protective Measures received, any Scheduling Coordinator that received a payment for the PIRP Protective Measures under the contract in dispute will receive a charge in the amount of the payment previously received plus any interest that may apply under Section 11.29.10.2. Similarly, any Scheduling Coordinator that received a charge due to the provision of the PIRP Protective Measures under the contract in dispute will receive a payment in the amount of the payment previously received plus any interest that may apply under Section 11.29.10.2.

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#### **4.8.3.3 Term of PIRP Protective Measures**

The PIRP Protective Measures for a specific Participating Intermittent Resource shall be in effect until the earlier date of (1) ~~three years after the effective date of this Section~~ April 30, 2018; or (2) the execution between the Participating Intermittent Resource owner and its counterparty of a new or amended power purchase agreement (or similar contract for services) that addresses their Imbalance Energy settlement.

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**Attachment C – CAISO Board of Governors Memorandum**  
**Tariff Amendment to Extend for One Year**  
**Participating Intermittent Resources Protective Measures**  
**California Independent System Operator Corporation**



# Memorandum

**To:** ISO Board of Governors

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

**Date:** March 8, 2017

**Re:** **Decision on extending transitional participating intermittent resource program protective measures**

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***This memorandum requires Board action.***

## EXECUTIVE SUMMARY

In September 2013, the ISO Board of Governors approved transitional protective measures related to the ISO's market settlement for certain resource participating in the participating intermittent resource program (PIRP). The Board had previously approved, in May 2013, Management's proposal for a fifteen-minute market as part of compliance with FERC Order No. 764, which required that all independent system operators offer fifteen-minute scheduling at their interties. The protective measures originally were intended to provide time for owners of resources that would be unduly burdened by the new market structure to negotiate any appropriate changes to their power purchase agreements to reflect the new market design, and to upgrade any technology that limits the resource from responding to ISO dispatch instructions.

The Board also directed Management to evaluate, before the protective measures expire, whether the protective measures should extend beyond the planned three-year transition period, which expires on April 30, 2017. Management recently conducted a stakeholder process to develop a recommendation as to whether the ISO should propose to extend the protective measures beyond April 30, 2017. Based on this stakeholder process, Management proposes that the transitional period be extended for an additional year to allow completion of contract renegotiations currently underway.

Management proposes the following motion:

***Moved, that the ISO Board of Governors approves the proposal to extend the participating intermittent resource program transitional protective measures for an additional year to April 30, 2018, as described in the memorandum dated March 8, 2017; and***

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

## BACKGROUND

In May 2013, the ISO Board of Governors approved the ISO's proposal for a fifteen-minute market as part of the ISO's compliance with FERC Order No. 764 requiring that all ISOs offer fifteen-minute scheduling at their interties. The market design enhancements oriented the ISO real-time market to better support intermittent resources' participation. The new real-time market design provides a superior framework for scheduling intermittent resources and limits their exposure to real-time energy imbalance changes associated with their variability. The new design largely eliminated the need for the protection against exposure to hourly charges for uninstructed imbalance energy offered under the ISO's original participating intermittent resource program.

At the May 2013 Board meeting, some resource owners maintained that they could be disadvantaged under the new market design because of their resources' inability to respond to dispatch instructions. In response, the Board directed Management to investigate whether limited protective measures for intermittent resources are appropriate, and to make a recommendation at the September 2013 Board meeting.

Management proposed a limited protection measure to provide a three-year transition period for older technology renewable resources so that they could operate effectively under the new market structure. The transition period was intended to provide time for resources that may be unduly burdened by the new market structure to negotiate any necessary changes to their power purchase agreements or to upgrade equipment. It was also intended to provide time for qualifying facilities that would be rolling off of their current Public Utility Regulatory Policy Act (PURPA) contract to enter into new power purchase agreements that managed their imbalance energy price risk.

At the September 2013 Board meeting, Management modified the motion to expand the eligibility for protective measures to resources that physically are capable of responding to dispatch instructions, but contractually are limited from doing so. The Board also directed Management to evaluate, before the protective measures expire, whether the protective measures should extend beyond the planned three-year transition period.

At the February 2017 Board meeting, Management provided an update on the protective measures and discussed the stakeholder process that Management would complete to develop a recommendation as to whether the ISO should propose to extend the protective measures beyond April 30, 2017, when the original three-year transition period expires.

Based on this stakeholder process, Management proposes that the protective measures transition period be extended for an additional year to allow completion of contract renegotiations currently underway. Management does not recommend any changes to the eligibility criteria or cost allocation of the uplift charges resulting from the difference between the real-time market settlement of any resource under the protective measures and the settlement that would have occurred without the protective measures.

## **CURRENT TRANSITIONAL PIRP PROTECTIVE MEASURES**

### *Real-time energy settlement*

The transitional protective measures consist of a real-time market settlement that is similar to the settlement under the original participating intermittent resource program. Specifically, the ISO settles real-time energy transactions for a resource under the protective measures as follows:

- An hourly schedule will be set using a 90-minute in-advance forecast.
- The resource's hourly schedule based on its 90-minute in-advance forecast will be settled at the simple average of the 5-minute locational marginal prices.
- The deviations between the resource's actual energy output and the hourly schedule will be netted over each month. This amount will be settled at the output-weighted average of 5-minute locational marginal prices over the month.

As under the PIRP rules, resources under the transitional protective measure settlement are required to provide meteorological data for the independent forecast service provider to develop a resource-specific forecast. Therefore, qualifying facilities that currently do not provide meteorological data are required to complete the PIRP certification process to be settled under the protective measure upon expiration of their contract. Only after the PIRP certification process is completed will the ISO settle a resource in the real-time market under the protective measures.

### *Qualifying criteria*

As described above, the Board expanded the eligibility for protective measures at the September 2013 meeting. The qualifying criteria are as follows.

1. More than 50 percent of the resource is composed of old technology that is unable to curtail output without significant investment, and the resource is responsible for real-time energy settlement under their current power purchase agreement, or the resource does not have a power purchase agreement.
2. The resource is subject to real-time energy settlement under their current power purchase agreement and is contractually prohibited from responding to dispatch instructions even though physically capable to respond.
3. During the term of the transition period, the resource owner agrees to seek modifications to their power purchase agreement or a new power purchase agreement that address their imbalance energy settlement and/or will take steps to upgrade the resource so that it can respond to ISO dispatch instructions.

### *Duration*

Management proposed a three-year transition period from the effective date of the FERC Order No. 764 design changes to the real-time market. The Board also directed Management to evaluate, before the protective measures expire, whether the protective measures should extend beyond the planned three-year transition period. The current protective measure provisions in the tariff expire on April 30, 2017.

### *Allocation of Protective Measure Costs and Revenues*

The ISO allocates the difference between the real-time market settlement of any resource under the protective measure and the settlement that would have occurred without the protective measures in the same manner as the original participating intermittent resource program provisions, which is to net negative deviations. This amount may be a payment or a charge.

## **PROPOSED CHANGES**

After briefing the Board at the February 2017 meeting, Management conducted an accelerated stakeholder process to solicit stakeholder comments in regards to extending the PIRP protective measures or other design changes. As a result, Management recommends that the Board approve the extension of the PIRP protective measures for one additional year to ensure current contract renegotiations, given their advanced stage, result in an effective date of the new contract prior to protective measures ending.

Management does not recommend any changes to the eligibility criteria. Management believes it is equitable to extend the protective measures for all resources currently under the protective measures, whether they have contractual restrictions to responding to dispatch instructions or they are physically incapable of responding to dispatch instructions. The additional time can be used by resources physically unable to respond to dispatch instructions to enter into a new power purchase agreement that protects against imbalance energy exposure or to make technology upgrades.

In addition, Management does not recommend any changes to the allocation of costs and revenues resulting from protective measure settlement. Given Management is proposing to extend the protective measures for only one year, Management does not believe any benefits justify the effort to redesign and implement a different cost allocation methodology.

## **POSITIONS OF THE PARTIES**

California Wind Energy Association and resource owners with current contracts that limit responding to dispatch instructions do not support extending the protective measure transition period by only one year. These parties request that protective measures be provided until their contract is renegotiated or expires, whichever is



sooner. Management does not believe this would be appropriate because this would change the protective measures from a transitional measure into grandfathering existing contracts for their duration. This would be a fundamental change to the original purpose of the transitional protective measures. Furthermore, this would not be equitable to other resource owners who originally, in May 2014, elected not to request protective measures but may have if they had known their contract at the time could have been grandfathered.

Load serving entities do not support the current allocation of the protective measures' costs. They highlight that the counterparty of resources receiving the benefits of the protective measures should be allocated any resulting costs. However, this position does not recognize that there are some resources under the protective measures that do not have a contract with a counterparty that could be allocated the costs. Given the short one-year duration of the protective measures' extension and their limited costs to date, Management does not believe any benefits of a different cost allocation would justify the costs of designing and implementing that different cost allocation.

PG&E opposes extending the protective measures, stating an extension would interfere with their contract negotiations with owners of resources under the protective measures. Public comments made as part of the ISO's recent stakeholder process to consider extending the protective measures indicate these negotiations are nearly complete. Management believes that a one year extension should not impact completing the contract changes given the late stages of the renegotiations.

## **CONCLUSION**

Management respectfully requests that the Board approve extending the duration of the PIRP transitional protective measures as described in this memorandum. The additional year will allow the completion of the contract renegotiations that are nearly completed to become effective before the protective measures expire.