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**

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.