Memorandum

To: ISO Board of Governors

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

Date: February 4, 2015

Re: **Decision on capacity procurement mechanism replacement framework**

This memorandum requires Board action.

EXECUTIVE SUMMARY

The current tariff provisions defining the ISO's authority to procure backstop capacity to meet reliability needs are the result of a settlement agreement filed with FERC in 2012. As part of that agreement, these provisions will sunset on February 16, 2016. In light of this, Management seeks Board approval of new backstop capacity procurement and pricing provisions that include a competitive solicitation process. The proposal will provide a durable solution to replace the current administrative price for backstop capacity with market-based procurement and pricing.

The proposed provisions allow suppliers to offer local, system, and flexible backstop capacity into a competitive solicitation process. This process will solicit offers annually, monthly, and daily and will run whenever the ISO determines there is a need for backstop capacity. The competitive solicitation process provides a mechanism for procuring capacity to meet reliability needs at the lowest total cost. The ISO will pay the designated capacity its resource-specific offer price. The proposal addresses market power concerns through a soft offer cap in which any accepted offer prices above the cap are subject to cost justification to FERC.

Previously, the ISO and stakeholders spent significant resources repeatedly developing, redefining, and litigating backstop procurement processes and compensation. Two prior backstop proposals have gone through a protracted FERC settlement process. To avoid another potentially costly FERC settlement process, Management sought a settlement agreement among stakeholders prior to filing the proposal at FERC. Management and stakeholders were successful in obtaining a settlement agreement on the design proposal. All parties involved in the stakeholder process have indicated that they either support or do not oppose the proposed design.

Management proposes the following motion:

> ***Moved, that the ISO Board of Governors approves the proposed capacity procurement mechanism replacement framework, as described in the memorandum dated February 4, 2015;***
>
> ***Moved, that the ISO Board finds that the proposed backstop capacity framework does not diminish the five state policies specified in the memorandum; 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 tariff change.***

DISCUSSION AND ANALYSIS

Background

The capacity procurement mechanism within the ISO tariff provides the backbone for the ISO's backstop procurement authority. It ensures that the ISO will have sufficient capacity available to maintain reliable grid operations. The capacity procurement mechanism backstop serves three main functions:

- Resolves resource adequacy capacity deficiencies in both the year-ahead and month-ahead timeframes;
- Supplements resource adequacy capacity procurement by load serving entities to address reliability needs caused by significant events, or when the ISO exceptionally dispatches a non-resource adequacy resource; and
- Designates capacity from resources needed to meet operational or reliability needs in the following resource adequacy year that have indicated they will shut down in the current year due to it being uneconomic for them to remain in service.

The ISO's current capacity procurement mechanism tariff authority will expire on February 16, 2016. In a 2011 Order, FERC instructed the ISO to develop enhanced backstop provisions that: 1) procure capacity at a price that accounts for market conditions that change over time; 2) provide a reasonable opportunity for suppliers to recover fixed costs; and 3) support incremental investment by existing resources to perform long-term maintenance or make improvements that are necessary to satisfy environmental requirements or address reliability needs associated with renewable resource integration. In response, Management proposes to replace the current administrative rate with a competitive solicitation process to determine the backstop capacity procurement price under the capacity procurement mechanism.

Objectives

Management's goal with this initiative is to create a durable framework that will procure and price backstop capacity based on market conditions. Market prices for resource capacity vary based on the location, capability, and time of the reliability need. The backstop price should reflect these varying conditions. Furthermore, the backstop price and framework should be sufficiently adaptable to changing market conditions so the ISO does not have to make frequent and significant updates to the capacity procurement mechanism framework. Management's proposal balances the process complexity needed to determine a market price with a desire from stakeholders to maintain simplicity in a procedure that is not invoked very often.

Backstop capacity designated through a competitive solicitation process

Management proposes to replace the single administrative price paid for all backstop capacity designations with a competitive solicitation process framework. This framework will:

- Limit capacity procurement mechanism eligibility to capacity that is not designated as resource adequacy capacity on the designation day;
- Allow suppliers to offer capacity up to a soft offer cap in three separate competitive solicitation processes;
- Allow the ISO to designate capacity under an annual, monthly, and daily competitive solicitation process run; and
- Pay designated capacity based on the resource's offer price into the solicitation process.

In response to stakeholder requests for simple rules for bidding into the competitive solicitation process, Management proposes the following:

- Suppliers will offer in a single $/kW-month price and a MW quantity for system and local capacity and a MW quantity for flexible capacity;
- The ISO may designate system, local, and flexible capacity at this rate; and
- All resource types may participate, including preferred resources and imports.

A soft offer cap price limits supplier offers, and is based on the estimated cost of service rate for advanced combined cycle resources

Several stakeholders raised concerns about the potential exercise of market power in the competitive solicitation process. To address these concerns, Management's proposal includes a soft offer cap to limit supplier offers into the competitive solicitation process. Under the soft offer cap, market participants may bid in any price below the soft offer cap without having to cost-justify the bid. A supplier may offer in a bid above

the soft offer cap, however, if the ISO accepts the bid it would have to be cost-justified to FERC. To satisfy previous FERC guidance that resources should be able to recover additional costs such as environmental upgrades, the proposed soft offer cap is designed to reflect the cost of service rate of the highest cost resource type expected to receive a capacity procurement mechanism designation. The soft offer cap ensures that offers are at or below what the ISO would expect from existing resources in a competitive environment.

In determining the soft offer cap, Management analyzed the costs of non-resource adequacy capacity from 2012 to 2014, as only non-resource adequacy capacity is eligible to receive a backstop designation. In all years, combined-cycle resources made up the highest proportion of non-resource adequacy capacity available to receive a backstop designation. This is particularly true in 2014, when combined-cycle resources made up over half the available backstop-eligible capacity. Combined-cycle units also have the highest going-forward fixed costs of the standard types of gas-fired units. Management therefore proposes to use the going-forward costs of a combined-cycle generation unit as the basis for the soft offer cap limit. Management proposes to use the combined-cycle unit costs included in the California Energy Commission draft staff report, Estimated Cost of New Renewable and Fossil Generation in California, posted in May 2014. In addition, to provide for a portion of capital cost recovery, Management proposes to include a 20 percent adder to the Energy Commission's estimate of going-forward fixed costs. As a result, the proposed soft offer cap that would go into effect on February 17, 2016 is $75.68/kW-year ($6.31/kW-month).

Future updates to the capacity procurement mechanism policy

To ensure that the soft offer cap remains aligned with current costs, Management proposes to update the soft offer cap in a stakeholder process concurrent with the California Energy Commission estimation of going-forward fixed costs for advanced combined-cycle resources. This would occur no less than once every four years.

To address certain stakeholder concerns that some load serving entities could use the new competitive solicitation process as their primary capacity-procurement mechanism, Management will monitor the use of the capacity-procurement mechanism to ensure load-serving entities are not relying on the capacity-procurement mechanism to meet their resource adequacy obligations. If either of the two following conditions occurs, then Management will open a stakeholder initiative to explore the use of the capacity procurement mechanism as a potential primary capacity-procurement method:

1. With the second use of the mechanism by the same load serving entity for either an annual or monthly deficiency within a rolling 24-month period, or;
2. With the first use of the mechanism by a load serving entity for either an annual or monthly deficiency to meet fifty percent of the load serving entity's resource adequacy obligation.

Allow resources that decline the capacity procurement mechanism designation to receive supplemental revenues

Management proposes to retain certain provisions under the current capacity procurement mechanism that provide suppliers with the option of receiving supplemental revenues in the event they elect to decline a capacity-procurement mechanism designation. With this option, capacity would be eligible for supplemental revenues for all subsequent exceptional dispatches over the next 30 days following an exceptional dispatch. Supplemental revenues are calculated as the difference between a resource's energy bid price and its default (cost-based) energy bid. The resource would be eligible for supplemental revenues up to what the resource would have received under a capacity-procurement mechanism designation at the soft offer cap price. The ISO would not designate the exceptionally-dispatched capacity as resource adequacy capacity and, therefore, the exceptionally-dispatched capacity would not be under any must-offer obligation.

Revise exceptional dispatch process to determine capacity procurement mechanism value of non-resource adequacy capacity

Stakeholders identified a gap in the current tariff where the ISO treats non-resource adequacy resources differently than resources that have only sold a portion of their capacity as resource adequacy capacity. To close this gap, Management proposes an enhanced process to determine the capacity procurement mechanism MW-value for all resources that have any non-resource adequacy capacity available for exceptional dispatch. Current rules require a capacity procurement mechanism designation for any non-resource adequacy capacity the ISO relies on when issuing an exceptional dispatch. The proposed enhancement will require the ISO to assess the amount of non-resource adequacy capacity that the ISO is relying on for reliability purposes whenever there is potential for an exceptional dispatch capacity-procurement mechanism designation.

Revisions do not diminish state policies

In a May 22, 2014 letter to California State Senator Steinberg (Attachment 1), the ISO committed, *inter alia*, that it would not file a proposal with the Federal Energy Regulatory Commission for an ISO managed auction or competitive bidding process (or similar mechanism) to procure electric capacity products to replace its existing backstop procurement mechanism unless the ISO Board first makes the formal determination that the following policies of the state of California will not be diminished:

(1) Any state law or policy relating to the promotion of environmentally preferred resources, demand response, energy efficiency, renewable resources, or electric storage;

(2) Any state law or policy relating to reductions of greenhouse gas emissions, including, but not limited to, the Global Warming Solutions Act (AB 32) and Executive Order S-03-05;
(3) State efforts to ensure the timely development of new generating resources needed to ensure local reliability;
(4) The ability of the CPUC to establish any procurement requirements or practices for electrical corporations and other CPUC-jurisdictional retail sellers; and
(5) The ability of the ISO to safely and reliably operate the bulk power system.

The revised capacity procurement mechanism framework will not diminish the aforementioned state policies. The capacity procurement mechanism pertains solely to the ISO's procurement of backstop capacity to meet reliability needs in certain limited circumstances, and the revisions are designed to allow the ISO to procure backstop capacity through a competitive solicitation process rather than pay all backstop capacity a fixed tariff price. The proposed revisions do not affect or modify any state statutes and policies regarding greenhouse gas emissions or the promotion of preferred resources. The CPUC and publically owned utilities remain responsible for (1) overseeing resource procurement by load serving entities, including ensuring the procurement of preferred resources, demand response, energy efficiency, renewable resources and electric storage, and (2) ensuring the development of resources needed to meet local reliability needs and state environmental goals. The ISO's capacity backstop proposal does not affect that effort.

Finally, the revised backstop capacity procurement framework allows the ISO to efficiently and cost-effectively procure capacity necessary to maintain reliability in the event that already-procured resources are insufficient or if a significant event threatens reliable operations. The framework promotes the optimal use of existing preferred resources, local resources, and renewable resources by providing a platform for additional streams of revenue should these resources not initially receive a resource adequacy contract. These resources along with thermal generation are able to participate fully in the competitive solicitation process. Because the competitive solicitation process occurs well after primary procurement by load serving entities, the process will not disrupt or influence prices in primary procurement for environmentally preferred resources, demand response, energy efficiency, renewable resources, or electric storage.

POSITIONS OF THE PARTIES

To avoid a contentious and protracted process at FERC, interested stakeholders engaged in settlement discussions as part of the ISO stakeholder process. All parties either support or do not oppose the proposed capacity procurement mechanism, subject to tariff review. A list of the parties that participated in the settlement process is included as Attachment 2 to this memorandum.

NRG requested the ISO carve one issue out of the settlement: backstop payments for resources committed through the minimum online commitment constraint. NRG argues that non-resource adequacy resources committed in the day-ahead market by the minimum online commitment constraint, which ensures sufficient generation is online in

constrained areas, should receive backstop capacity compensation. Management believes this issue is outside the scope of this initiative, but agreed to identify the issue in the FERC filing.

CONCLUSION

Management requests the Board approve the proposed capacity procurement mechanism design changes, as described in this memorandum. The new competitive solicitation process framework will provide a platform to more efficiently procure and price backstop capacity. The proposed market design also puts in place a durable framework that prices backstop capacity based on current market conditions. The new framework will not require frequent or significant modifications, as has previously been the case, and often the subject of contentious negotiations. Further, the new framework in no way diminishes state policies.