



Memorandum

To: ISO Board of Governors

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

Date: September 7, 2012

Re: **Decision on Flexible Capacity Procurement: Risk of Retirement**

This memorandum requires Board action

EXECUTIVE SUMMARY

Management initiated a stakeholder process earlier this year to develop provisions to fill a current gap in the ISO's backstop procurement authority. The existing ISO tariff limits backstop procurement for resources at risk of retirement based on need in the subsequent year. The proposed backstop procurement mechanism described below provides a financial bridge through a cost-based payment to resources at risk of retirement that have been identified as needed for reliability for up to five years in the future.

ISO studies have shown that the need for flexible capacity resources will increase as large amounts of intermittent renewable resources come online to meet California's 33 percent Renewable Portfolio Standard. In addition, the potential retirement of 12,079 megawatts of once-through cooling generation units and the potential addition of 12,000 megawatts of distributed resources will further increase the need for flexible and local capacity resources.

The primary mechanisms for securing sufficient generation capacity in the ISO balancing area are the California Public Utilities Commission's resource adequacy and long-term procurement planning programs and similar requirements of other local regulatory authorities. In designing this backstop procurement mechanism Management has been mindful that these programs have the primary role in capacity procurement. The ISO has been actively working with the CPUC to incorporate flexible and local capacity needs into its resource adequacy and long-term procurement requirements. While the ISO expects that these efforts will result in resource adequacy program rule changes that address flexible and local capacity needs, Management believes the ISO, as the system operator, must have sufficient backstop procurement authority to ensure system reliability. Therefore, in working with stakeholders to develop the backstop procurement mechanism, Management has strived to develop a mechanism to preserve flexible and local capacity needed to maintain reliable grid operation in the future while not undermining the resource adequacy program as the primary mechanism for capacity procurement.

To help ensure that flexible and local resources needed to meet future reliability needs remain financially viable, Management proposes additional backstop procurement authority for resources at risk of premature retirement.

Management's proposal includes a cost-based payment based on the going-forward costs of the resource. The payment would only be offered if 1) the resource has not received a capacity contract in the bilateral resource adequacy market; 2) the ISO finds that the resource will be needed for its flexible or local characteristics two to five years in the future; and 3) the resource owner has signed an attestation indicating that the resource will be retired without additional revenue. The proposed backstop procurement mechanism consists of six main elements:

1. Payments will be resource-specific cost-based.
2. Resources receiving payments under this backstop procurement mechanism will not have any performance or must-offer requirements in the ISO market.
3. The maximum payments will be based on a resource's going-forward costs.
4. The ISO will reduce the cost-based payment based on net revenues received in the ISO market and through bilateral contracts.
5. There will be no additional obligations for a resource at the end of a year in which it receives payments under the backstop procurement mechanism.
6. The costs of payments issued under the backstop procurement mechanism will be allocated to ISO market participants based on load ratio share.

Management recommends the Board adopt the following motion:

Moved, that the ISO Board of Governors approves the proposal for the ISO to adopt a flexible capacity procurement: risk of retirement backstop mechanism to maintain system flexibility and local reliability for two to five years in the future, as described in the memorandum dated September 7, 2012; 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 proposal.

DISCUSSION AN ANALYSIS

Through this initiative, Management has worked with stakeholders to develop a backstop procurement mechanism for resources at risk of retirement that are needed for system flexibility or local reliability in two to five years. The proposal consists of six major elements that are described in detail below.

1. **Cost-based payments:** One-year, cost-based payments would be made to a resource at risk of retirement that the ISO identifies as needed for system flexibility or local reliability two to five years in the future. One-year contracts minimize costs and avoid long-term capacity obligations based solely on backstop procurement.

The ISO would only offer payments if the resource owner has made attempts to bilaterally contract for capacity under the resource adequacy program, has not been successful in entering into sufficient capacity contracts, and has made a final decision to retire the resource because it is not economically viable without additional revenue. The resource owner will have to attest to these facts in a signed certification and submit supporting financial information.

The resource would have to submit financial information that would be assessed by the ISO's Department of Market Monitoring to confirm that the resource is not financially viable absent additional revenue. Additionally, this financial information will be used by an independent evaluator to estimate the resource's going-forward costs for the upcoming year using an established formula. These costs will be approved by the Federal Energy Regulatory Commission for each resource for each year.

In the event that more than one resource notifies the ISO of an intent to retire in the same year, the ISO will select the resource, or resources, that ensures the ISO has adequate resources to maintain system flexibility or local reliability at the lowest cost.

Management has modeled the formula for determining a resource's going-forward costs after similar provisions in the PJM tariff. These costs include:

- Labor for operations and maintenance
- Administrative expenses for employees at the unit
- Basic maintenance
- Variable expenses excluding variable costs recoverable in the energy market
- Taxes, fees, and insurance (including environmental permitting)
- Short-term carrying charges for maintaining reasonable levels of inventories of fuel and spare parts
- Basic corporate level expenses
- Project investment costs (not to exceed \$2 million per year)

2. **Offer requirements:** As the ISO is providing only a limited financial bridge and not procuring a capacity product, resources will not have any performance or must-offer requirements in the ISO market. However, the resource must submit bids in response to any request for offers for capacity issued under resource adequacy and long-term procurement planning requirements.

The cost-based payment for this backstop procurement mechanism, as opposed to an administratively-set capacity price such as the price paid under the existing capacity procurement mechanism provisions of the ISO tariff, is due to the difference in the

performance and must-offer obligations and time at which the resource is determined to be needed. While resources procured under the tariff's existing capacity procurement mechanism provisions are subject to a must-offer obligation, resources accepting payments under this proposed backstop procurement mechanism will not be subject to any must-offer obligations in the ISO markets.

The objective of this proposed backstop procurement mechanism is to ensure that resources without capacity contracts that are needed in the future remain economically viable. Therefore, Management believes it is appropriate that resources receiving payments under this mechanism be available for as many opportunities to contract for capacity as possible. Consequently, resources receiving payments under this proposed backstop mechanisms must, subject to the structural limitations, submit bids in response to all applicable capacity requests for offers. Failure to submit a bid in response to an eligible request for offer will result in the resource being ineligible for the minimum revenue guarantee for a time period equal to the duration of the potential capacity contract.

3. **Maximum payment:** The maximum payments under the proposed backstop procurement mechanism will be equal to a resource's going-forward costs.

The payments are designed to cover a resource's costs for operating for the upcoming year. Management also considered an option that would cover the costs to place a resource into long-term standby. Ultimately, the ISO believes that including this option would lead to a great deal more complexity with little or no value. Therefore, Management proposes a minimum revenue guarantee that would cover going forward costs.

4. **Payment reduced for market revenues:** The ISO will reduce the payment based on ninety percent of the net revenue received from providing energy and ancillary services in the ISO market. The proposal allows the resource to retain ten percent of the market revenue to provide an incentive for the resource to continue to participate in the market.

Once a resource receives a capacity contract for its full capacity, no additional costs beyond the effective date of the capacity contract will be covered. If a resource signs a capacity contract for a portion of the resource's total capacity, the revenues will be netted against the resource's going-forward cost payment. If the capacity contract revenues exceed the minimum revenue guarantee amount, the resource will receive no additional compensation and the resource will be governed by the terms of the capacity contract.

5. **No obligations at end of year:** Management proposes that no additional obligations be placed on the resource past the year in which the resource is under the backstop procurement mechanism.

In comments, several stakeholders requested the ISO include a clause that requires a resource receiving payments from the ISO be available in the year of need. The ISO

does not propose such a provision. Including such a provision would, in essence, require the ISO to procure the resource through the time when the resource is shown to be needed. This would be a fundamental change to the ISO's role in backstop procurement and could potentially undermine existing resource adequacy and long-term procurement planning programs.

6. **Costs allocated to load:** The costs of payments made under this backstop procurement mechanism will be allocated to market participants based on load ratio share.

Currently, there are no flexibility procurement requirements in the CPUC resource adequacy program. As a result, allocation based on cost causation for the backstop procurement mechanism is challenging. Management proposes allocating the costs of the backstop procurement similar to the existing capacity procurement mechanism in the ISO tariff by allocating the costs based on load ratio share. In the event the backstop procurement authority is exercised for local needs, the costs will be allocated only to the load in the transmission access charge area in which need has been identified.

POSITIONS OF THE PARTIES

The design of the flexible capacity risk of retirement proposal has been somewhat controversial. While many stakeholders support the ISO's need to have the type of backstop procurement authority contemplated in this initiative, there has been considerable disagreement about many of the specific implementation aspects within the proposal. Management's proposal addresses numerous competing interests, as well as those of the Market Surveillance Committee, the ISO Department of Market Monitoring, and Management. The final proposal represents a balanced approach to backstop procurement of flexible capacity at risk of retirement.

A stakeholder matrix is included.

CONCLUSION

Management recommends that the Board approve the backstop procurement mechanism described in this memorandum. Management has worked with stakeholders to develop a backstop procurement mechanism that fairly balances competing interests. This proposal provides the ISO with the backstop procurement authority necessary to ensure system reliability is maintained to meet changing future grid requirements.