

Memorandum

To: ISO Board of Governors

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

Date: May 9, 2012

Re: Decision on Regulatory Must-Take Generation Scheduling Priority

This memorandum requires Board action.

EXECUTIVE SUMMARY

Under the Public Utility Regulatory Policies Act (PURPA) of 1978, certain small generators and combined heat and power generators could obtain treatment as qualifying facilities, which exempted them from parts of the Federal Power Act. PURPA imposed on public utilities a mandatory purchase requirement for energy from qualifying facilities. In 2005, Congress amended PURPA to allow public utilities to seek relief from the mandatory purchase requirement.

Since the inception of the ISO, qualifying facilities under pre-existing contracts entered into pursuant to the PURPA have been treated as “regulatory must-take” resources, and have also been exempt from complying with the tariff. Regulatory must-take resources have a higher scheduling priority than resources with economic bids or self-schedules. As discussed below, many of these resources are no longer under exempt PURPA contracts. By the mid-2015, this will be true of all but certain small qualifying facilities. Facilities that are no longer under the exempt PURPA contracts must comply with the tariff. If the ISO takes no action, these resources will also lose the higher scheduling priority that is used to protect output levels necessary for their host manufacturing needs.

The regulatory must-take scheduling priority provides a higher level of protection from curtailment in the ISO market optimization. In the event of over-generation or congestion, economic bids and self-schedules would be curtailed before regulatory must-take schedules. The purpose of Management’s proposal is to afford a certain class of resources, combined heat and power resources, with the ability to establish a portion of their capacity for continued eligibility for the higher scheduling priority based on the thermal needs of their host industrial requirements.

Regulatory must-take scheduling priority provides continued protection to combined heat and power resources but only for the capacity dedicated to serve their industrial requirements. Capacity of combined heat and power resources that is not eligible for

regulatory must-take scheduling priority will be available to participate in the market through submission of economic bids and self-schedules. The added protection will enable increased participation in the ISO market by combined heat and power resources.

The ISO has identified, through its renewable integration studies, the increased operational need for dispatch flexibility within the existing generation fleet and new resources. By allowing higher scheduling priority to the physical must-take capacity of combined heat and power facilities, the ISO believes that existing and new combined heat and power resources will make existing and new flexibility capacity available to the ISO market.

Management proposes the following motion:

Moved, that the ISO Board of Governors approves the proposed policy change regarding regulatory must-take generation scheduling priority, as described in the memorandum dated May 9, 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 proposed tariff change.

DISCUSSION

Management proposes to provide regulatory must-take scheduling priority to combined heat and power resources up to the amount of capacity that is dedicated for producing thermal energy for an industrial host, regardless of whether the resource is or was a qualifying facility under PURPA. Under the proposal, the scheduling priority protects eligible capacity from curtailment in the ISO market optimization. Currently, in the event of over-generation or congestion, economic bids and self-schedules are curtailed before regulatory must-take schedules. In the event that a regulatory must-take schedule was curtailed, the market optimization would have exhausted all effective economic bids and self-schedules. While the ISO rarely curtails either self-schedules or regulatory must-take schedules, which currently apply to qualifying facilities under pre-existing PURPA contracts and nuclear resources, the potential for curtailment creates risk to the related industrial processes, which could adversely affect the operation of the host industry and potentially increase the costs of products produced by the facilities if the resources are curtailed.

Management recommends revising the tariff definition of regulatory must-take generation that is currently limited to resources under PURPA to make it more generally applicable to combined heat and power resources. Under this proposal, the regulatory must-take scheduling priority is limited to the maximum amount of eligible capacity

needed to produce thermal energy used by a host industrial facility. In addition, Management will require that regulatory must-take schedules reflect the actual hourly physical requirements of the industrial host.

History of regulatory must-take generation for qualifying facilities

In 2007, after many years of proceedings regarding qualifying facilities issues, the CPUC issued a decision that included provisions requiring qualifying facilities whose grandfathered PURPA power purchase agreements had terminated to enter into new standard forms of power purchase agreements that include, among other provisions, requirements to comply with the ISO tariff. In that proceeding, the ISO advocated that qualifying facilities be required to comply with the tariff. In addition, at workshops and hearings, the ISO advanced the concept of continuing to provide the higher scheduling priority to the capacity dedicated to serve industrial hosts to encourage participation in the ISO market of capacity not needed to serve industrial hosts.

Subsequently, representatives of the investor-owned utilities, cogeneration resources, ratepayer advocates, and the CPUC staff entered into settlement negotiations in an effort to develop a “global settlement” of issues outstanding in various CPUC proceedings regarding treatment of qualifying facilities and combined heat and power resources. On December 21, 2010, the CPUC approved a settlement agreement. However, the CPUC subsequently received several applications for rehearing and a petition for modification of the settlement agreement. On July 15, 2011, the CPUC granted the joint petition of California Municipal Utilities Association and the parties to the global settlement for modification of the original CPUC settlement agreement. On November 23, 2011, the conditions outlined in the modified settlement agreement were satisfied and the settlement became effective on that date.

Under the current tariff, qualifying facilities may use the regulatory must-take scheduling priority up to 100% of its capacity provided that the qualifying facility is subject to a “grandfathered” power purchase agreement pursuant to the PURPA. If a grandfathered PURPA power purchase agreement has terminated, no regulatory must-take scheduling priority status applies to the qualify facility.

Establishment of the maximum regulatory must-take scheduling priority amount

Management recommends enforcing, through its market software, a maximum amount of capacity from a combined heat and power facility that is eligible for regulatory must-take scheduling priority.

While the maximum value could be equal to nameplate capacity for some facilities, it is expected to be generally less than the nameplate capacity of most resources. The maximum amount of eligible regulatory must-take capacity would be two values. The two values will allow different maximum eligibility amounts for off-peak and on-peak hours. While the on-peak value will be required, the different off-peak value would be optional and used only if both the combined heat and power resource and its contractual counterparty (or the ISO if there is no contractual counterparty) agree. Regulatory must-take hourly schedules would be limited by these values. However, combined heat and power resources are allowed only to use the scheduling priority up to the actual megawatt quantity necessary to meet the expected host's industrial process requirement in any given hour. In addition, a load serving entity's contract with a combined heat and power resource may contain curtailment provisions that allow the load serving entity as the scheduling coordinator to exercise its rights and schedule, in any given hour, below the maximum amount eligible for the scheduling priority or the actual megawatt quantity necessary to meet the host's industrial process requirement. Capacity above the hourly regulatory must-take scheduling priority amount can be bid as self-schedules or economic bids.

The maximum amount of capacity eligible for regulatory must-take scheduling priority will be agreed upon by the combined heat and power resource owner and the scheduling coordinator if there is a power purchase agreement between the owner and the scheduling coordinator. If the resource and scheduling coordinator cannot agree on a value, the amount will be determined by a mutually agreed upon independent engineer and paid for by the resource owner and scheduling coordinator, who will split such costs evenly unless the parties agree otherwise.

If a combined heat and power resource elects to participate as a merchant generator, the resource owner and the ISO must agree on the maximum amount eligible for regulatory must-take scheduling priority. If they cannot agree, the amount must be determined by an independent engineer agreed to by the ISO and the resource owner and paid for by the resource owner.

The maximum amount eligible for regulatory must-take scheduling priority must be reestablished at least annually but may be changed as often as the resource owner and scheduling coordinator (or ISO) agrees. In addition, on no less than an annual basis, the combined heat and power resource will submit an indicative hourly profile of expected use of the must-take scheduling priority for the year.

Compliance with standard capacity product requirements

On November 30, 2011, FERC conditionally accepted the ISO's tariff filing which exempts scheduling coordinators for certain qualifying facilities that provide resource adequacy capacity from forced outage reporting requirements for the purposes of standard capacity product availability determination. Management recommends permitting resources that have qualified for a standard capacity product exemption, but lose their qualifying facility status, to maintain the exemption for the balance of the term of the existing power purchase agreement, provided all other conditions continue to be met. For example, a combined heat and power resource could lose its qualifying facility status if increased participation in the ISO market resulted in the resource being unable to meet the PURPA efficiency standards required for qualifying facility status.

Eligibility for use-limited resource status

Management anticipates that many combined heat and power resources will qualify for use-limited status under the resource adequacy rules – meaning the resource would be eligible to count for resource adequacy despite having limitations on the number of run hours or amount of energy output it can produce. Unlike conventional generation resources, eligibility as use-limited resource adequacy resources for combined heat and power resources cannot be established based on standard operating limitations, such as energy limits or number of starts. Therefore, Management recommends allowing use-limited resource status based on a demonstration that treatment as a non-use limited resource adequacy resource would unduly interfere with the operation of the thermal host or undermine regulatory policy objectives concerning efficiency or greenhouse gas emissions.

POSITIONS OF THE PARTIES

A lengthy stakeholder process was conducted that has resulted in some evolution toward consensus, compared with the divergent initial positions of the investor-owned utilities and the combined heat and power resource owners. The main point of contention is eligibility for regulatory must-take schedule priority. The final joint position of the utilities is that (in addition to resources that are under PURPA contracts and nuclear plants) only resources that continue to meet the PURPA efficiency standard and have entered into one of the forms of contracts approved in the CPUC global settlement should be eligible for regulatory must-take scheduling priority.

The utilities argue that Management's proposal will result in more resources qualifying for higher scheduling priority than currently exists today. Management agrees that by not restricting the scheduling priority to only resources that meet the PURPA efficiency standard, a larger number of resources could qualify for the higher scheduling priority.

However, the scheduling priority would be based on physical must-take requirements dedicated to the industrial host's requirements. As a result, Management expects much more flexible capacity to be available to the ISO under the proposed approach than had previously been available under the current PURPA contracts which allow for 100 percent of the capacity to use the higher scheduling priority. Management believes this energy should receive a higher scheduling priority in the market optimization due to its non-dispatchable nature, the lower likelihood that the resource would be able to respond to curtailments, and the harm caused to the industrial host as a result of complying with curtailments. In addition, the higher scheduling priority will be limited to the non-dispatchable capacity based upon the host's physical requirements and limitations in a given hour.

The combined heat and power resource representatives generally support Management's proposal, but have indicated some concerns regarding how much flexibility the utility, as scheduling coordinator, would have to determine the amount of physical must-take capacity that would be scheduled. The ISO's position is that the utility, as scheduling coordinator, should schedule the must-take capacity identified by the resource owner subject to any contractual right that might be in issue. The resource representatives have also expressed concerns regarding the requirement to submit an annual indicative profile of expected must-take scheduling. Management believes the requirement is reasonable and that the profile is informational and nonbinding.

A stakeholder matrix is attached for your reference.

MANAGEMENT RECOMMENDATION

Management recommends that the Board approve the proposal to provide regulatory must-take generation scheduling priority to cogeneration facilities as described in this memorandum. The proposal reflects the practical reality that combined heat and power facilities have physical must-take capacity dedicated to an industrial process. At the same time, the proposal provides that capacity not dedicated to a host industrial process is made available to the ISO. The protection provided by the regulatory must-take scheduling priority minimizes the risk of interference with the industrial process of combined heat and power resources caused by participating in the ISO market. The proposed provisions will lead to increased market participation of capacity that is not needed for industrial requirements.