



Memorandum

To: ISO Board of Governors and WEIM Governing Body

From: Anna McKenna, Vice President of Market Policy and Performance

Date: March 9, 2022

Re: Decision on reliability demand response resource bidding enhancements – phase 1

This memorandum requires ISO Board of Governors and WEIM Governing Body action.

EXECUTIVE SUMMARY

Management proposes an enhancement to align reliability demand response resources energy bids with new rules implemented in 2021 that allow bids up to \$2,000/MWh under certain conditions. Reliability demand response resources are intended to be bid near the energy bid cap to ensure they are the last resources used to meet reliability needs to accommodate their use limitations. Management proposes to now require energy bids of at least \$1,900/MWh for reliability demand response resources in the real-time market for hours when the ISO is accepting energy bids priced up to \$2,000/MWh.

Reliability demand response resources represent retail emergency-triggered demand response programs. The ISO limits the dispatch of these resources by only including them in the market during system emergencies. Consistent with a multi-party settlement approved by the California Public Utility Commission, the current ISO tariff specifies that they are required to be bid into the real-time market priced at a high “strike price,” that is at least 95 percent of the ISO’s \$1,000/MWh energy bid cap, *i.e.*, \$950/MWh. Their bid price helps ensure they are only dispatched after the real-time market has exhausted bids from other resources.

In 2021, the ISO implemented rules to comply with FERC Order No. 831 that allows cost-justified bids priced up to \$2,000/MWh. In conjunction with this, the ISO implemented rules that allow import up to \$2,000/MWh under certain conditions without cost justification.

Requiring energy bids of at least \$1,900/MWh for reliability demand response resources when the ISO is accepting bids priced up to \$2,000/MWh will ensure the real-time

market only dispatches reliability demand response resources after exhausting bids for other resources under these conditions.

Moved, that the ISO Board of Governors and WEIM Governing Body approve the reliability demand response resource bidding enhancements proposal as described in the memorandum dated March 9, 2022; and

Moved, that the ISO Board of Governors and the WEIM Governing Body authorize Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposal described in the memorandum, including any filings that implement the overarching initiative policy but contain discrete revisions to incorporate Commission guidance in any initial ruling on the proposed tariff amendment.

BACKGROUND

The ISO implemented the reliability demand response resource product in its market in 2012 as a result of a multi-party settlement approved by the California Public Utility Commission to integrate utility retail emergency-triggered demand response programs into the ISO market. These are programs such as interruptible air-conditioning and agricultural pumping load programs.

The ISO dispatches reliability demand response resources when it has declared an Energy Emergency Alert Level 2 (EEA 2) or higher system emergency, or for a local transmission emergency such as a significant contingency. The utilities must submit energy bids for reliability demand response resources to the ISO's real-time market that are priced at 95 percent of the ISO's \$1,000/MWh energy bid cap, *i.e.*, \$950/MWh, or higher. Allowing bids between \$950/MWh and \$1,000/MWh allows the utilities to use the energy bid price to determine the order in which the real-time market dispatches individual reliability demand response resources. Reliability demand response resources are not required to be offered in the day-ahead market.

This high price ensures reliability demand response resources are one of the last resources the market dispatches. The multi-party settlement that resulted in integrating reliability demand response resources into the ISO's market stated "CAISO dispatch of [reliability demand response resources] will recognize that participating customers have a high 'strike price' that is well above the running cost of conventional supply side resources."

In early 2021, the ISO changed market rules to comply with FERC Order No. 831. Under FERC Order No. 831, the ISO accepts energy bids priced greater than \$1,000/MWh if the bids represent actual or expected costs that the market participant

can document, such as gas costs. Bids up to \$2,000 are eligible to set market prices. The ISO also implemented associated rules that allow import bids up to \$2,000/MWh without cost-justification in hours when either (1) there is a cost-verified bid from a non-import resource greater than \$1,000/MWh submitted to the market, or (2) an ISO-calculated “maximum import bid price” is greater than \$1,000/MWh. Virtual bids up to \$2,000/MWh are also allowed in the day-ahead market in these conditions.

Also in 2021, the ISO made market changes to enhance the real-time market’s dispatch of reliability demand response resources. During the implementation of these enhancements and as part of summer readiness discussions with the utilities, the concern arose that the real-time market could dispatch reliability demand response resources before imports and other resources if energy prices exceeded \$1,000/MWh. This was highlighted by the tight supply conditions of summer 2020 in which bilateral energy prices exceeded \$1,000/MWh. Without additional rule changes, energy bids for reliability demand response resources would be limited to \$1,000/MWh because a utility would not be able to document an actual cost greater than \$1,000/MWh as required under the FERC Order No. 831 rules. This is because the requirement for utilities to bid reliability demand response resources at 95 percent of the energy bid cap is not based on actual costs. Rather it is to ensure the real-time market only dispatches them after it exhausts bids for other supply resources.

PROPOSAL

Management proposes to require energy bids of at least 95 percent of the \$2,000/MWh bid cap, i.e., \$1,900/MWh, in hours for which the ISO is accepting bids priced greater than \$1,000/MWh. As described above, these are hours in which either (1) there is a cost-verified bid greater than \$1,000/MWh from a non-import resource submitted to the market, or (2) the ISO-calculated “maximum import bid price” is greater than \$1,000/MWh.

This will ensure that the real-time market continues to dispatch reliability demand response after other resources when energy prices are greater than \$1,000/MWh. This is consistent with the intent of the existing rules that require energy bids for reliability demand response resources priced near the bid cap. Requiring bids of at least \$1,900/MWh under these conditions is particularly important given that non-resource adequacy imports may bid up to \$2,000/MWh without providing cost-justification to the ISO. It would not be desirable to dispatch reliability demand response resources when there is undischarged import supply available. As described above, reliability demand response resources are intended to be dispatched only after the real-time market exhausts bids for other supply resources.

The ISO would implement reliability demand response resources’ higher minimum bid price based on using existing procedures to notify market participants that it is accepting import bids priced up to \$2,000/MWh. The utilities would then submit energy bids, or

modify previously submitted bids, for reliability demand response resources priced between \$1,900/MWh and \$2,000/MWh. In the event a utility does not revise a bid, the ISO will modify the previously submitted bid by scaling it to the higher bid cap. Because operators only enable reliability demand response resources in an emergency, the ISO also proposes to clarify that a reliability demand response resource bid above \$1,000/MWh will not trigger the conditions to allow import bids up to \$2,000/MWh.

STAKEHOLDER POSITIONS

The utilities and demand response representatives support the proposal to require reliability demand response resources to bid at least \$1,900/MWh when the conditions are satisfied to accept energy bids priced greater than \$2,000/MWh. They state this aligns the reliability demand response resource bidding rules with the FERC Order No. 831 and related ISO rules that allow bids up to \$2,000/MWh under certain conditions.

The Department of Market Monitoring maintains the ISO's proposal may produce inefficient market outcomes because bids of at least \$1,900/MWh may not be representative of a reliability demand response resource's marginal cost. They recommend that utilities be allowed to bid reliability demand response resources at a price up to \$2,000/MWh when the ISO is accepting bids up to \$2,000/MWh, but not be required to bid higher than \$1,900/MWh. They state that they should be allowed to bid lower than \$1,900 if the reliability demand response resource's costs are lower.

Management's proposal to require bids of at least \$1,900/MWh for reliability demand resources maintains the intent of the reliability demand response resource settlement that reliability demand response resources be priced near the maximum allowable bid price to ensure the real-time market only dispatches them after it exhausts bids for other resources. To allow them to bid below 95 percent of the maximum allowable bid price would undermine the intent of CPUC-approved multi-party settlement agreement. This is especially important given that non-resource adequacy imports may bid up to \$2,000/MWh. The real-time market would be more likely to dispatch reliability demand response resources before exhausting resources with verified costs above \$1,000/MWh and import bids if reliability demand response resources bid below \$1,900/MWh when the ISO is accepting import bids priced up to \$2,000/MWh.

CONCLUSION

Management requests the ISO Board of Governors and the WEIM Governing Body approve Management's reliability demand response bidding enhancements proposal described in this memorandum. These enhancements will ensure the real-time market appropriately dispatches reliability demand response resources when the ISO is accepting energy bids priced greater than \$2,000/MWh.