

CDWR Comments

Submitted by	Company	Date Submitted
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Please use this template to provide your comments on the ESDER Phase 2 stakeholder initiative Straw Proposal posted on May 24 and as supplemented by the presentation and discussion during the stakeholder web conference held on May 31.

Submit comments to InitiativeComments@CAISO.com

Comments are due June 9, 2016 by 5:00pm

The Straw Proposal posted on May 24 and the presentation discussed during the May 31 stakeholder web conference may be found on the [ESDER Phase 2](#) webpage.

Please provide your comments on the Straw Proposal topics listed below and any additional comments you wish to provide using this template.

NGR enhancements

The CAISO is proposing to explore two areas of possible NGR enhancement: (1) represent use limitations in the NGR model and (2) represent dynamic ramping in the NGR model.

The CAISO is requesting stakeholders provide comments in each of these two areas.

Comments:

CDWR's pumping facilities are an important source of demand response in the CAISO market.

CDWR operates the State Water Project (SWP), which is the largest state-owned, multi-purpose water project in the country. Its operations are critical to the resources and economy of the state. SWP's system spans nearly the entire state, from Lake Oroville in Northern California to the Pyramid, Castaic, Silverwood, and Perris reservoirs in Southern California. SWP delivers an average of 3.3 million acre-feet of water per year to 29 public agency water contractors throughout California. Approximately 40 percent of the deliveries are used to irrigate some 750,000 acres of farmland. The rest of the deliveries serve the water needs of more than 24 million Californians.

SWP's water conveyance system includes 29 water storage facilities, approximately 675 miles of aqueducts and pipelines, 21 pumping plants, 3 pumping-generating plants, and 5 hydroelectric power plants. SWP's power generating sources have capacity of over 1,900 megawatts, and generate an average of 5 billion kilowatt-hours of energy per year. SWP's pumping facilities have a combined demand of approximately 2,600 megawatts, and consume an average of 9 billion kilowatt-hours of energy per year. SWP manages its power operation through self-generation, load management (including demand response, power exchanges, and purchase and sales transactions with other entities), and participation in the CAISO power markets.

Many of CDWR's pumping facilities participate in CAISO's markets pursuant to the Participating Load Agreement ("PLA"), under which CDWR is able to schedule its Participating Loads in the CAISO markets. The Commission recognized CDWR's need for waivers from standard provisions that would allow it to fulfill its primary water management mission first and participate in CAISO markets second and has done so from the early days of the CAISO.¹ The PLA was last revised in July 2015, when the termination date was extended to November of 2017.²

A year ago, CAISO informed CDWR that the ESDER initiative would explore real-time load increases for participating loads. This was to be accomplished by modelling changes, possibly to incorporate the Multi-stage Generator (MSG) model and

¹ *California Independent System Operator Corporation*, 88 FERC ¶ 61,182 (1999).

² Letter Order accepting Revised Participating Load Agreement (July 29, 2015), Docket No. ER15-1805-000, eLibrary No. 20150629-3010.

to allow additional configurations. Last month, CAISO said that NGR modelling might not be suitable for participating loads. Due to this change of direction, in addition to the years since the beginning of MRTU that CDWR has waited for this type of functionality to be restored, CAISO should now work diligently with CDWR to reduce barriers to wholesale load participation in the CAISO markets, especially with respect to load consumption increases, which could provide needed downward ramping capability during over-generation conditions.

Demand response enhancements

Two stakeholder-led work groups are up and running within ESDER 2 to explore two areas of potential demand response enhancement:

- Baseline Analysis Working Group – Explore additional baselines to assess the performance of PDR when application of the current approved 10-in-10 baseline methodology is sufficiently inaccurate.
- Load Consumption Working Group – Explore the ability for PDR to consume load based on an ISO dispatch, including the ability for PDR to provide regulation service.

The CAISO is requesting stakeholders provide comments in each of these two areas.

Comments:

CDWR's pumping facilities are capable of providing increased load consumption and daily load shift, subject to environmental and water management limitations.

The straw proposal considers three enhancements for demand response arising out of the Load Consumption Working Group: (1) increased load consumption to address excess supply and other issues related to the net supply curve; (2) a wholesale market methodology to incent general load shifting; and (3) PDR frequency regulation. CDWR's pumping facilities are capable of providing both increased load consumption and load shifting, but CAISO's market rules currently prevent CDWR's facilities from doing so.

Currently, DWR's aggregated participating loads are only allowed to provide curtailable demand in the real-time market – effectively through an ancillary service non-

spin bid. If CAISO were to allow participating loads to submit bids to increase demand in the real-time market, it would create a market incentive for CDWR to do so. Similarly, if CAISO were to implement incentives for additional demand during the middle of the day, CDWR's participating loads would be able to respond to those incentives.

Of course, CDWR's water delivery operations must be paramount over financial incentives, and CDWR is able to use its demand-side resources to provide reliability support to the power grid only when water management conditions (including the need to move water to particular locations for delivery or maximize capture of water run-off, compliance with environmental license conditions and flood control, to name a few) so permit. CDWR therefore would bid its participating loads in a way that respects those restrictions. And if CDWR's bids are accepted, CDWR would comply with those dispatch instructions.

CDWR's pumping facilities should be permitted to participate in CAISO markets on equal footing as Proxy Demand Resources.

CDWR is concerned that the straw proposal contemplates making load consumption enhancements available only to PDR. As discussed above, CDWR's participating load already provides a significant source of demand response and could respond to incentives to provide additional services to support grid reliability. There is no reason for CAISO to limit the demand response enhancements to PDR only.

In fact, Participating Load may be better suited than PDRs to provide the reliability services addressed in the straw proposal. As the straw proposal recognizes, there are difficult jurisdictional challenges to designing market incentives for PDRs to increase load or shift load patterns in real-time. In contrast, CDWR's Participating Load is not subject to CPUC's retail ratemaking authority, and participates in CAISO's markets as *wholesale* load, settled and metered at wholesale prices. Therefore, CDWR urges CAISO to consider Load Consumption enhancements to the Participating Load in conjunction with any Load Consumption enhancements for PDR.

Multiple-use applications

The ISO has not yet identified specific MUA issues or topics that require treatment in ESDER 2. The ISO proposes to continue its collaboration with the CPUC in this topic area through CPUC Rulemaking 15-03-011. If an issue is identified that should be addressed within ESDER 2 the ISO can amend the scope and develop a response.

The ISO is requesting stakeholders provide comments on this topic area as well as this proposed approach.

Comments:

At this time CDWR does not have a comment on this subject.

Distinction between charging energy and station power

The ISO proposes to seek Board approval in two ways:

- To revise the ISO tariff definition of station power to exclude explicitly charging energy (and any associated efficiency losses); and
- Permit the ISO to revise its tariff later to be consistent with IOU tariffs, as needed, in the event that they revise their station power rates.

The CAISO is requesting stakeholders provide comments on this proposed approach.

Comments:

At this time CDWR does not have a comment on this subject.

Other comments

Please provide any additional comments not associated with the topics above.

Comments:

CDWR supports CAISO's efforts to allow all types of resources to be eligible to provide energy or ancillary services. Non-exclusion is an important principle of just, reasonable and non-discriminatory service. However, CDWR submits that the same principle should apply to it. Now that other forms of demand response and storage are becoming

available to participate in CAISO markets (even when located on the distribution side of the meter), and as CAISO finds ways to allow those entities to bid increments and decrements to load in the real-time markets where appropriate, the CAISO should not neglect to make the reforms necessary to allow wholesale demand response to do the same.