

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE  
STATE OF CALIFORNIA**

Order Instituting Rulemaking Regarding  
Policies and Protocols for Demand Response,  
Load Impact Estimates, Cost-Effectiveness  
Methodologies, Megawatt Goals and  
Alignment with California Independent System  
Operator Market Design Protocols

Rulemaking 07-01-041  
(January 25, 2007)

**REPLY COMMENTS OF THE  
CALIFORNIA INDEPENDENT SYSTEM OPERATOR ON WORKSHOP  
REPORT FOR DECEMBER 16-18 WORKSHOPS  
RE: DIRECT PARTICIPATION OF RETAIL DEMAND RESPONSE IN ISO  
ELECTRICITY MARKETS**

The California Independent System Operator Corporation (ISO) submits the following reply comments to the Workshop Report<sup>1</sup> for the workshops held December 16 through 18 for the Direct Participation Phase of this Proceeding.

**1. SCE intermixes the separate issues of “double payment” within the CAISO’s settlement operation with “undercollection,” which is an issue between the Load-Serving Entity and the Demand Response Provider**

In its workshop comments, SCE summarized four options that the parties discussed for settling a demand response provider’s participation of a Proxy Demand Resource. The fourth option that SCE summarized was the “market uplift” option. Under this option, the CAISO would pay both the load serving entity and demand response provider: the load serving entity would be paid for uninstructed imbalance energy and the demand response provider would be paid for its bid-in load reduction. A simple example to illustrate this option is as follows:

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<sup>1</sup> Compliance Filing Of Southern California Edison Company (U 338-E)– Report On Direct Participation Phase Workshops, filed January 8, 2010, posted to the CPUC Web site at <http://docs.cpuc.ca.gov/efile/REPORT/112361.pdf>.

LSE's Day-ahead Schedule:	100 MW
DRP's Day-ahead Schedule:	10 MW
Meter Reads Associated with LSE's DA Schedule:	90 MW
ISO Settlement:	
To LSE:	10 MW as Uninstructed Energy
To DRP:	10 MW as Day-ahead Energy
Total MWs paid for by the ISO:	20 MW (for a 10 MW load curtailment)
Retail Settlement:	
From Customer to LSE:	90 MW (LSE procured 100 MW of energy)

In its remarks regarding this fourth option, SCE states that:

As SCE understood from the workshop, CAISO is not in favor of this option. That is, because CAISO *claims* it would result in double payment and that most stakeholders to the CAISO's process agreed that the payment of this undercollection should be resolved between the LSE and DRP. While not necessarily agreeing with the CAISO's claim, SCE does not oppose CAISO's recommendation to not consider uplift as an option. (Reply Comments of SCE at p. 6) (emphasis added).

The fact that, under the example, the ISO pays out on 20 MW versus only 10 MW, which was the actual load reduction amount, clearly demonstrates the fact that there is a double payment that must be acknowledged and addressed. This fact was well understood by the stakeholders engaged in the Proxy Demand Resource working group process, and is the reason why the ISO would adjust the load serving entity's uninstructed energy by 10 MW, in this example, so that the load-serving entity neither benefits from, nor is harmed by, the actions of the demand response provider.

For the ISO to disregard the adjustment to the load-serving entity's uninstructed energy based on the performance of a Proxy Demand Resource affecting that load-serving entity would create a form of "market uplift," as SCE conveys. The monies to support this market uplift would have to come from somewhere. In fact, the monies for this market uplift would largely come through the ISO's Real Time Imbalance Energy Offset charge (CC 6477), which would be paid for by all Scheduling Coordinators that have Measured Demand in the affected Settlement Intervals. These charges would be allocated to load-serving entities such as municipal utilities, IOUs, electric service providers, the State Water Project, etc. Thus, the ISO and its stakeholders understood that the prudent and equitable solution was to *contain settlement impacts amongst the affected parties to that particular settlement*. It was not an acceptable settlement approach to adopt a "market uplift" solution that imposes potentially significant costs on parties not involved in the transaction.

SCE appears to intermix the issues of the "double payment" within the ISO's settlement operation with "undercollection," which is an issue between the load-serving entity and the demand response provider. The ISO and its stakeholders agreed that the prudent course of action was for the ISO to resolve the double payment issue within its settlement, which the ISO is doing as part of the Proxy Demand Resource implementation. It was also determined that the load-serving entity and the demand response provider would address any "undercollection" through contractual arrangements outside the ISO settlement system. In the example above, the undercollection is demonstrated by the fact that the load serving entity procured 100MW, but was paid for only 90 MW by customers through the retail rate. As a priority matter, it is incumbent upon the Commission to address whether and how to handle any reconciliation between its jurisdictional load serving entities and demand response providers.

**2. The ISO clarifies points raised by DRA: The ISO does not adjust the Load Serving Entity’s bid downward under Proxy Demand Response and the Load Serving Entity is not required to modify its demand bid when the Load Serving Entity is also a Demand Response Provider**

The ISO wishes to clarify some technical points contained in DRA’s comments, at Section II.A.4- “Specific Communication and Settlement Concerns Regarding PDR.” DRA remarks that:

Under PDR, the CAISO adjusts LSE’s bid downward by the Demand Reduction bid amount. The CAISO pays LSE based on the adjusted bid megawatts and DRP for Demand Reduction bid megawatts. (Comments of DRA at pp. 3-4)

For clarity and accuracy, the CAISO would simply restate DRA’s point as follows:

Under Proxy Demand Resource, the ISO adds to the metered load quantity of the load serving entity the performance of Proxy Demand Resources to determine the load serving entity’s uninstructed imbalance energy settlement. The demand response provider is paid (or charged) for the performance of its Proxy Demand Resource based on the resource’s performance relative to a baseline.<sup>2</sup>

Further, in this same section (II.A.4.b), DRA makes a point about the “missing money” problem. DRA states that:

DRA was surprised to learn during the workshop that the “missing money” problem would happen even when an IOU is both the LSE and the DRP. In this case, even though the IOU knows in advance how much Demand Response it wants to bid, *it would be still required to bid-in full unadjusted load in PDR*, thus still creating an over-procurement problem for itself. (Comments of DRA at p. 4) (emphasis added.)

DRA raises a point here that must be clarified. First, in the context of the ISO’s Proxy Demand Resource product, the load-serving entity and the demand response provider are considered separate entities, even if they belong to the same corporation.

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<sup>2</sup> CAISO proposed tariff language for PDR in tariff section 11.5.2.4- Adjustments to Load Serving Entities’ Metered Load for Purpose of Settling UIE- states: *For the purpose of settling Uninstructed Imbalance Energy of a Load Serving Entity, the amount of PDR Energy Measurement delivered by a Proxy Demand Resource will be added to the metered load quantity of the Load Serving Entity’s Scheduling Coordinator’s Load Resource ID with which the Proxy Demand Resource is associated.*

Second, there is nothing in the ISO tariff or policy that requires the load-serving entity to “bid-in full unadjusted load” or to bid in adjusted load in anticipation of load reduction by demand response providers. The ISO will adjust the load-serving entity’s meter data, based on the actual performance of the Proxy Demand Resource, to determine the load-serving entity’s uninstructed imbalance energy quantity for settlement purposes. This settlement construct allows the load-serving entity to go about its business and be unaffected by the actions of the demand response providers that are working with the load-serving entity’s customers. The ISO will adjust the load serving entity’s meter data based on the actual performance of the Proxy Demand Resource even when the load serving entity and the demand response provider are the same company or affiliates.

Regardless, if a load-serving entity tries to anticipate the actions of the demand response provider by altering its scheduling and bidding activity, the result will simply be an arbitrage between the day-ahead and real-time market. In other words, if a load-serving entity over- or under-schedules its load based on anticipated actions of a demand response provider, the result will be a positive or negative deviation in real time, which may have beneficial or harmful settlement implications relative to the position the load-serving entity took in the ISO’s Day-ahead Market.

Thus, there is no need, as DRA suggests, for the ISO to link the load-serving entity’s demand and the demand response provider’s bid in the scheduling and bidding process. All actions taken by the load-serving entity and the demand response provider will, ultimately, be resolved in the ISO settlement process.

**3. The Commission should clarify its policy for customers providing demand response in the wholesale market while taking service under dynamic retail rates**

The ISO encourages the Commission to provide greater clarity regarding customer participation under a dynamic retail rate, like Critical Peak Pricing (CPP), while simultaneously participating in a wholesale demand response product, like Proxy Demand Resource. Various parties, including CLECA and the Joint Parties, have raised

the concern that more policy guidance is needed.<sup>3</sup> This concern and the need for policy guidance will only grow as retail rate structures like CPP become commonplace, along with the growth and participation in wholesale demand response products.

The ISO has plainly stated in previous filings that dual participation in wholesale demand response resources is not possible. For example, if a utility, acting as demand response provider, enrolls a customer service account under a Proxy Demand Resource, a third-party demand response provider cannot enroll that same customer service account in a *different* Proxy Demand Resource.<sup>4</sup>

A key issue is whether or not dynamic retail rate tariffs can (or should) be configured into wholesale demand response products. For instance, can tariff based rates be translated into wholesale products which can be dispatched geographically and for a certain quantity of megawatts? If dynamic rate tariffs like CPP can be configured into a wholesale product, then the dynamic rate customer can only participate in the wholesale market through the utility (because, once again, one service account can only participate in one Proxy Demand Resource). The ISO is concerned that, if this were the case, then, as stated above, this would eliminate the ability for third parties to enroll those bundled customers in wholesale demand response products.

On the other hand, if a CPP retail rate is not appropriately configurable as a wholesale demand response resource, then this would eliminate the concern of “wholesale dual participation,” and customer service accounts could be on a CPP rate and also enrolled in a third-party’s wholesale demand response resource, like Proxy Demand Resource. A third-party demand response provider could potentially coordinate the scheduling and bidding of their Proxy Demand Resource even when underlying customer service accounts are on a CPP rate. For instance, assuming timing and communication concerns are addressed, when a CPP event is called, the third-party demand response provider could alter its bidding and scheduling for that day and also log the CPP event as

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<sup>3</sup> See *Comments of EnerNOC, Inc., EnergyConnect, Inc., and CPower, Inc., (1) in Reply to Comments Filed December 4, 2009, and (2) on the Workshop Report Dated January 8, 2010*, (filed January 22, 2010) at pp. 8-9.

<sup>4</sup> See *Comments of the California Independent System Operator on Workshop Report for December 16-18 Workshops Re: Direct Participation of Retail Demand Response in ISO Electricity Market* (filed January 22, 2010), Section 3, pp 3-4. The comments can be accessed on the CPUC’s Web page at <http://docs.cpuc.ca.gov/efile/CM/112822.pdf>

an “event day” in the ISO’s SLIC system so that the utility’s CPP event is not considered in the ISO’s baseline calculation.

Undoubtedly there are a number of technical challenges to overcome, in addition to clear policy guidance needed from the Commission on this issue; however, the ISO believes that as long as there is coordination and adherence to the rule that a customer service account can only be associated with one demand response provider and one Scheduling Coordinator at a time, then this type of “dual participation” should may be surmountable.

Dated: January 29, 2010

Respectfully submitted,

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## CERTIFICATE OF SERVICE

I hereby certify that on January 22, 2010 I served, on the Service List for Proceeding R.07-01-041, by electronic mail and United States mail, a copy of the foregoing

REPLY COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR ON WORKSHOP REPORT FOR DECEMBER 16-18 WORKSHOPS RE: DIRECT PARTICIPATION OF RETAIL DEMAND RESPONSE IN ISO ELECTRICITY MARKETS

Executed on January 29, 2010 at  
Folsom, California

*Anna Pascuzzo*

Anna Pascuzzo,  
An employee of the California  
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