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**PUBLIC UTILITIES COMMISSION**

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**FROM:** California Public Utilities Commission (CPUC)  
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**RE:** Comments on Draft Final Proposal For the Design of Proxy Demand Resource (PDR) and the Draft Opinion of the Market Surveillance Committee on PDR

**DATE:** 8/18/2009

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**Introduction**

The CPUC staff wishes to thank the CAISO for the opportunity to comment on the Draft Final Proposal for the Design of Proxy Demand Resource (Proposal). The Proposal is the result of numerous working group meetings, stakeholder meetings, and revised drafts and comments, and the hard work of the dedicated CAISO staff. The CPUC staff is generally supportive of the Proposal. However, the CAISO must recognize that a great deal of work remains to make Proxy Demand Resource (PDR) operate. While some of this work must appropriately take place at the CAISO (programming, planning, registering resources, etc.), a significant amount of work must be undertaken by other parties. Specifically, there are a number of processes that must take place at the CPUC.

For example, the CPUC has not yet issued a decision regarding CPUC jurisdictional Investor Owned Utilities' (IOU) ability to participate in PDR,<sup>1</sup> or the IOUs' ability to sign settlement agreements with Curtailment Service Providers (CSP) that are participating in PDR. The CPUC staff will continue to work with the CAISO to ensure a smooth process with respect to CPUC jurisdictional IOUs participation in PDR. The CPUC staff believes that PDR is a step towards harnessing price responsive DR, but that PDR is not the last step.

With this understanding, the CPUC staff offers the following comments about the CAISO's Proposal.

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<sup>1</sup> The CPUC staff understands that FERC has taken the position that Load Serving Entities (LSE) that served in excess of 4 million MWh of load last year are permitted to bid DR directly into the ISO unless the Local Regulatory Authority (LRA) explicitly precludes it. However, FERC also acknowledges that the LRA can impose guidelines and or rules that LSE must follow when bidding into the ISO markets (FERC Order 719-A, issued in FERC Docket No. ER07-19 on July 16, 2009 at ¶ 54).

### **Section 3**

The CPUC staff supported the selection of PDR-A over PDR-1 and PDR-2. The CPUC staff understands the pros and cons of the three options, and believes that by placing the burden and benefit of performance of PDR on the CSP, the CAISO creates the financial incentives that will maximize PDR performance.

At this time, the CPUC staff supports limiting the size of PDRs to be no larger than a sub-LAP. Sub-LAPs should contain nodes that have similar characteristics and price trends. If, for a given sub-LAP this is not the case, then DR would likely locate in the low price areas of within the sub-LAP. This effect would be similar to incenting DR to locate in the wrong part of the DLAP.

### **Section 3.3**

While it is desirable to have the PDR bid and settle at the same level of granularity as generating resources to minimize the opportunity for gaming, the capability to schedule demand response at that level of granularity does not yet exist. As scheduling precision increases, CAISO may wish to look into more granular bidding of PDR.<sup>2</sup> Thus, for the initial release of PDR, the CPUC staff supports the use of CLAP PDR bids and settlements.

Given the challenges of communication and performance verification, the CPUC staff supports requiring that a PDR's underlying load must be served by one LSE (i.e. one LSE per PDR). As the development of PDR moves forward and communication and verification improve, CAISO can then consider allowing a PDR resource to be served by multiple LSEs.

As noted above, the CPUC has not heard any discussion of settlement agreements between IOUs and CSPs. The CPUC staff expects to address such agreements in a CPUC proceeding in the near future. The CPUC staff believes that creating these agreements is not within the purview of the CAISO, and supports the CAISO deferring this matter to the Local Regulatory Authorities.

### **Section 4.1**

The CPUC staff is concerned that there may be insufficient tools in place to prevent the type of gaming outlined by LECCG's "money machine." Even though many stakeholders have claimed that operating the "money machine" would be difficult and would not yield large revenues, the CPUC staff believes it prudent to put the tools in place to prevent such opportunities. CPUC staff believes that a minimum bid price would be a sufficient tool to mitigate the potential for the "money machine" at PDR start-up. The Proposal does not have a minimum bid price that ensures that "DR resources will be high priced resources." (Proposal at p. 12). The Proposal only requires that PDR resources bid at a non-zero price (Proposal at p. 23). If the PDRs are in fact high price resources, then placing a reasonably high minimum bid on PDR would have no negative effect on PDR resources. See comments below in Sections 4.6 and 4.7 for additional input regarding the CPUC staff's support for a minimum bid price for at least the first year of PDR.

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<sup>2</sup> Please note, CPUC staff is not advocating for more granular settlement of load at this time. This statement refers explicitly to PDR and not the underlying load.

CPUC staff agrees that the LECG “money machine” is of greatest concern where the LSE is the same entity as the CSP. If this is not the case, then CPUC staff request examples of how a CSP that is not the LSE could take advantage of the “money machine.” CSPs that are not the LSE of the load do not receive any benefit of LAP settlement of load and CLAP settlement of PDR because the PDR is not providing energy: That is the responsibility of the LSE. However, the LSE would have the potential to benefit from the “money machine.” Therefore, CAISO may wish to consider requiring LSEs that bid PDR into the market to remove the associated load from the DLAP bid and bid it in at the corresponding CLAP. Requiring LSEs to schedule the underlying load at the same level as the PDR would remove the ability of LSEs to subsidize their energy use through the use of PDRs and the “money machine.” Alternatively, it may be necessary to require that the LSE not be permitted to bid PDR. For example, it may help to create a functional separation between the LSE and the LSE-operated CSP similar to the separation created between the IOUs load procurement and generation ownership functions.

#### **Section 4.2**

Though the CPUC staff believes that the MSC “buy-your-baseline” proposal is a desirable option, as the proposal notes, it is not logistically possible to implement this option in the same timeframe as PDR. Though the CPUC staff believes there is a great deal of merit to the MSC proposed baseline, it is not clear that such a baseline is consistent with Assembly Bill 1X, which suspended new customers from participating in Direct Access in California. Additionally, the CPUC staff does not see PDR as the end game for DR. Therefore, the CPUC staff believes that the MSC’s proposal should be revisited in the near future as a potential product enhancement.

#### **Section 4.4**

The CPUC staff believes that the CAISO has composed a thorough list of gaming concerns. Furthermore, the CPUC staff believes that the CAISO has attempted to solve most of them. However, there does not seem to be a solution to gaming opportunity 3 (CLAP/DLAP Arbitrage). The CAISO may wish to consider options such as those discussed in Section 4.1 above.

#### **Section 4.6**

The CPUC staff is concerned that the tools and metrics for detecting and mitigating gaming lack detail. The CPUC staff agrees that in principle it is desirable to allow participants in a mature market to act with as few restrictions as possible. However, the first release of PDR will not be a mature market. Without a minimum bid price or a maximum number of events, the CPUC staff is concerned that gaming issues may not be fully resolved, or that the proposal may create ineffective metrics for the future.<sup>3</sup> While many of the CPUC authorized DR programs have limits on the number of events that can be called, this is not true for all the IOU programs, and may not be true for CSPs that operate outside of the CPUC’s purview. Therefore, the CPUC staff supports the use of a minimum bid price for at least the

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<sup>3</sup> Currently, there is no basis to judge what normal or abnormal behavior is for PDR. Historical data will likely provide the ground work for what is normal. If abnormal behavior is the norm at PDR start-up, then it may be difficult to develop accurate metrics for the future because the historical data is flawed.

first year of PDR. After the first year, the CAISO and stakeholders could reevaluate the need for the minimum bid price.

#### **Section 4.7**

The CPUC staff supports the use of good faith language, the morning of adjustment cap of +/-20%, the future consideration of weather adjustments, and registration check (see Section 6.3 for additional comments on registration). However, these tools have shortcomings that will not fully mitigate the gaming potential. Therefore, the CPUC staff believes that the first year should be used to develop automated metrics, and other mitigation tools should be considered while these metrics are being developed.

#### **Section 5**

The CPUC staff supports all of the conditions listed for PDR registration. However, in reference to item 8 (PDR participation must be explicitly precluded by the LRA ...), the CPUC has not decided what, if any rules, restrictions, or conditions it may impose on CPUC jurisdictional IOUs with respect to their participation in PDR. It is likely that CPUC jurisdictional IOUs will seek CPUC approval for PDR activities. This a matter upon which the CPUC staff will coordinate with the CAISO in the future.

#### **Section 6.3**

The CPUC staff understands that it is difficult to forecast all the reasons an IOU or Utility Distribution Company (UDC) may wish to reject a registration. The CPUC staff believes, however, that it may be beneficial to generate a more finite list of reasons an LSE or UDC may reject a PDR application. Additionally, as noted in Section 3.3, the CAISO has deferred the matter of settlement agreements between the LSE and the CSP to the LRA. Therefore, the CPUC staff is confused as to why the IOUs or UDCs could reject at PDR at the CAISO level based on a LRA jurisdictional issue (Item 2 of Section 6.3). It is likely that this issue will require interagency coordination between the LRA and CAISO to create a working agreement about whether an IOU or UDC could reject a PDR because a settlement agreement is not in place.

The CPUC staff requests the CAISO track and report on PDR registrations annually. Such reports should include how many PDR registrations are rejected for each party, how many PDRs a given IOU or UDC rejects, and, if possible, the reasons cited for rejecting PDRs, and the number of customers that are switched between PDR resources. These reports would provide important information regarding trouble areas regarding PDR recruitment and obstacles. For example, if numerous PDR registrations are rejected due the fact that the customer is active in another PDR, then perhaps the 10 day rejection period where silence implies consent is too onerous and should be reevaluated.

#### **Section 7**

The CPUC supports the requirement that CSPs must be a scheduling coordinator or be represented by a scheduling coordinator in order to aid the enforcement of CAISO tariff requirements. Additionally, the CPUC staff supports PDR being eligible for competition in the DAM, HASP, RTM and DA AS markets. However, as noted above, the CPUC staff believes that barring PDRs from self-scheduling is an insufficient mechanism to prevent gaming, and advocates for a minimum bid price for at least the first year.

## **Section 9**

The CPUC staff supports the use of PDR for Ancillary Services (AS). The CPUC staff does not believe that PDR should be subject to different metering and/or telemetry requirements than generating resources at the start of PDR. However, subject to the results of the Participating Load Pilots, the CAISO could consider the use of Proxy Telemetry in the future in order to expand the scope of resources that may provide AS in the future.

The CPUC staff supports the use of meter-before-meter-after measurement for measuring the AS performance of an AS PDR resource that is dispatched to provide energy for short durations. The CPUC staff believes that there should be time limits attached to the no-pay portion of the AS requirement. The CAISO schedule anticipates some load growth from PDR resources that provide energy services. The proposal for AS does not offer the same allowance for load growth. In short time intervals, the meter-before-meter-after method will likely be very accurate measurement of a PDR's performance, and a superior option in comparison to a baseline method. However, this measurement may be troublesome for longer dispatches. For example, if an AS PDR resource is called to dispatch 1 MW of energy for one hour, dropping from 5 MW to 4 MW, then the meter-before-meter-after measurement will provide an accurate way to measure the dispatch in the very short term. However, the resource may have normally increased in load from 5 MW to 6 MW over the next hour. The proposal seems to require the resource to stay at 4 MW for the duration of the hour or be subject to no-pay for the AS capacity. This means that the ISO would receive 2 MW of dispatch for the price of one. The CPUC staff is also confused about how or who would be compensated for this additional MW of deviation. Thus, given the fact that baselines are estimates, it is unlikely that baselines would provide better estimates of load reductions than meter-before-meter-after for short dispatches. However, as the measurement becomes less accurate as more time elapses from the initial dispatch, the CAISO may consider measuring AS performance relative to a baseline. The CPUC staff recommends considering using a baseline for AS dispatches lasting an hour or longer because the current proposal risks underpaying and overburdening PDR resources that provide AS.

## **Section 11**

In the recent CPUC Proposed Decision A.08-06-001 the CPUC proposed the use of a 10-in-10 individual baseline. Though not perfectly coordinated (the CAISO proposes a 10-in-10 aggregate baseline), the CAISO Proposal and the CPUC baseline seem sufficiently coordinated to minimize the potential gaming opportunities between the wholesale and retail markets. Therefore, the CPUC staff supports the CAISO's proposed baseline, contingent on a consistent final CPUC decision in A.08-06-001.

The CPUC staff supports all other baseline recommendations, including the 45 day window, the day-types, minimum days, use of highest event days to reach minimum.