

## Stakeholder Process: Proxy Demand Resource

### Summary of Submitted Comments

Stakeholders submitted five rounds of written comments to the CAISO on the following dates:

- Round One, 11/12/2008
- Round Two, 1/12/2009
- Round Three, 3/20/2009
- Round Four, 4/29/2009
- Round Five, 7/24/2009

Stakeholder comments are posted at: <http://www.caiso.com/23bc/23bc873456980.html>

Other stakeholder efforts include:

- Conference Calls
  - 1/5/2009
  - 2/27/2009
  - 3/20/2009
  - 4/22/2008
- In-person meetings
  - 11/5/2008
  - 1/15/2009
  - 3/12/2009
  - 4/30/2009
  - 7/28/2009
- Other stakeholder efforts
  - Eight in person working group meetings to refine proxy demand resource proposal held January – July 2009
  - Demand response technical design sessions held in July – August of 2008

Management Proposal	Load Serving Entities, CPUC, Curtailment Service Providers	Management Response ( Completed by the ISO)
<p>Proxy demand resource bid and settled at Custom-LAP</p>	<p>SCE – Support Will provide economic incentive to drive DR resource development in regions where they are most needed. Where prices are highest</p> <p>PG&amp;E - Support</p> <p>EnerNOC – No comment</p> <p>CPUC – Support While it is desirable to have the proxy demand resource 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.</p> <p>AReM - Support</p> <p>SDG&amp;E - Support</p> <p>Six Cities – Oppose Believes disparate settlement of demand versus demand response encourages gaming which the ISO does not adequately address</p> <p>CDWR – Oppose Opposes the disparate settlement of demand versus demand response</p> <p>CPower - No comment</p> <p>DMM – No comment</p>	<p>Management originally proposed that proxy demand resource be dispatched at a Custom LAP but be settled at the Default LAP consistent with the load serving entity’s load. A majority of market participants commented that the different bases for dispatching and settling are at odds with motivating proxy demand resource to high-priced areas. Based on stakeholder input Management agreed to dispatch and settle proxy demand resource at the Custom LAP.</p>
<p>Load serving entities’ load bid and settled at Default-LAP</p>	<p>SCE – Support Allowing loads to bid and settle at the DLAP level will allow price-responsive DR programs, which are difficult to forecast at the more granular CLAP level, to participate in wholesale power markets.</p> <p>PG&amp;E – Support</p> <p>EnerNOC – Support</p>	<p>The ISO participating load program requires that all loads within the participating load program be forecasted, bid and settled at a Custom LAP. Market participants commented that this was a barrier to entry for demand response currently participating through investor owned utility retail demand response programs to participate in the ISO wholesale markets due to the complexity of maintaining demand forecasts for scheduling of Custom LAPs and supporting demand response</p>

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	<p>CPUC - No Comment</p> <p>AReM – Support</p> <p>SDG&amp;E - Support</p> <p>Six Cities – Oppose Believes disparate settlement of Demand versus demand response encourages gaming which the ISO does not adequately address</p> <p>CDWR – Oppose Opposes the disparate settlement of Demand versus demand response</p> <p>CPower - No comment</p> <p>DMM – No comment</p>	<p>programs that have changes in customer enrollments from month to month. Based on input from the majority of stakeholders on this topic Management agreed to allow proxy demand resource to be settled and dispatched at the Custom LAP and the load serving entity’s load to continue to be forecasted, bid and settled at the Default LAP.</p>
<p>A proxy demand resource may only contain load served by one load serving entity</p>	<p>PG&amp;E</p> <p>EnerNOC – Oppose Recommends that the CAISO revise its proposal that bids for curtailment at the Sub-LAP be submitted by load serving entity as that proposal significantly undercuts the value of aggregation at the Sub-LAP</p> <p>CPUC - Support Given the challenges of communication and performance verification, the CPUC staff supports requiring that a proxy demand resource’s underlying load must be served by one load serving entity (i.e. one load serving entity per proxy demand resource). As the development of proxy demand resource moves forward and communication and verification improve, CAISO can then consider allowing a proxy demand resource resource to be served by multiple load serving entities</p> <p>AReM – No comment</p> <p>SDG&amp;E – Support Encourages the CAISO to allow multiple load serving entities within a single proxy demand resource aggregation in future releases of proxy demand resource, since it will serve to increase the amount of demand response that will be made</p>	<p>To simplify implementation, Management proposes that initially a proxy demand resource contain load served by one load serving entity. This will simplify registration and settlements. As a future enhancement Management will address allowing a proxy demand resource to contain load served by multiple load serving entities. A proxy demand resource must have a minimum load size of 0.1 MW (100 kW) to participate in the ISO markets. Smaller Loads may be aggregated together to achieve the 0.1 MW threshold. The bid segments may be as low as 0.01 MW (10 kW).</p>

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	<p>available to the CAISO market.</p> <p>Six Cities – No comment</p> <p>CDWR – No comment</p> <p>CPower - oppose</p> <p>DMM – No comment</p>	
<p>A Scheduling Coordinator that represents a proxy demand resource can bid into the following markets:</p> <ul style="list-style-type: none"> <li>• Day-ahead energy market including RUC</li> <li>• Day-ahead and Real-Time Non-Spinning Reserve market</li> <li>• Hour-Ahead Scheduling Process (HASP)</li> <li>• 5- Minute Real-Time Energy market</li> </ul>	<p>SCE – Support</p> <p>PG&amp;E – Conditional Oppose participation in HASP</p> <p>EnerNOC – No comment</p> <p>CPUC – Support</p> <p>AReM – No comment</p> <p>SDG&amp;E – No comment</p> <p>Six Cities – No comment</p> <p>CDWR – No comment</p> <p>CPower - No comment</p> <p>DMM – No comment</p>	<p>The ISO has updated the final proposal to reflect that proxy demand resource can not participate, at least initially, in HASP. Participation in HASP for an internal resource presents some significant implementation challenges for the ISO. In addition Management has concerns that determining the ability for a proxy demand resource to participate in HASP based on metering may create adverse incentives. Management proposes that proxy demand resource be treated the same as other in area resources.</p>
<p>Load serving entity’s Day-Ahead schedule is adjusted post market in settlements based on the performance of the proxy demand resource resource for the purpose of settlement of uninstructed deviation</p>	<p>SCE – Support</p> <p>This mechanism should provide the best mechanism for reconciling load drop with a load serving entity’s forecasted load schedule</p> <p>PG&amp;E - Support</p> <p>EnerNOC – No comment</p> <p>CPUC – No comment</p> <p>AReM – Conditional</p>	<p>The adjustment to the load serving entity’s day-head schedule in settlements for the purposes of calculating uninstructed deviation based on the performance of the proxy demand resource avoids the ISO double paying for the demand response, i.e., paying the curtailment service provider for the demand response and also paying the load serving entity uninstructed deviation for the same demand response. It also ensures that the load serving entity is not harmed due to non-compliance by the proxy demand resource resource. The adjustment to the load serving entity schedule is done post market in settlements so the load serving entity’s full load</p>

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	<p>Disadvantage of the proposal is that load serving entity pays for power in the Day-Ahead market that is not consumed.</p> <p>SDG&amp;E – No comment.</p> <p>Six Cities – No comment</p> <p>CDWR – No comment</p> <p>CPower - No comment</p> <p>DMM – No comment</p>	<p>quantity does clear and settle from the Day-Ahead market</p>
<p>The settlement for the curtailed portion of the load settled by the ISO directly with the retail demand response aggregator (curtailment service provider) at the specified Custom-LAP of the proxy demand resource</p>	<p>SCE – Support Allowing curtailment service providers to settle independent of their corresponding load serving entity would simplify the overall DR settlement process.</p> <p>PG&amp;E - Support</p> <p>EnerNOC – No comment</p> <p>CPUC – Support</p> <p>AReM – Conditional No compensation to load serving entity for load not consumed in the Day-Ahead market</p> <p>SDG&amp;E –Support</p> <p>Six Cities – No comment</p> <p>CDWR – No comment</p> <p>CPower - No comment</p> <p>DMM – No comment</p>	<p>The ISO initially proposed that settlement for proxy demand resource occur only with the load serving entity. This proposal was rejected by a majority of market participants engaged in the stakeholder process. Stakeholders commented that settling with the curtailment service provider directly would support FERC Order 719 requirement that the retail aggregator or curtailment service provider participate in the ISO markets as a separate entity from the load serving entity and appropriately aligns the risk and liabilities with curtailment service providers.</p>

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<p>Settlements between the load serving entity and CSP and End-Use Customer will require commercial agreements outside of the ISO</p>	<p>SCE – Support</p> <p>PG&amp;E – Support</p> <p>EnerNOC – Conditional There is no process in place to facilitate this issue and it needs to be resolved in advance of curtailment service provider participation in proxy demand resource.</p> <p>CPUC – Support 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</p> <p>AReM – Conditional Supports if additional requirements are added as a condition of registration</p> <p>SDG&amp;E - Support Given the current level of Direct Access participation in CAISO markets this is acceptable initially, but should be revisited in conjunction with any further DA policy development.</p> <p>Six Cities – No comment</p> <p>CDWR – No comment</p> <p>CPower - Conditional Should be formally addressed through a properly regulated process that produces a fair and transparent result for all participants</p> <p>DMM – No comment</p>	<p>Management proposed a hybrid option for settlements that would mandate a settlement at an agreed upon price between the load serving entity and the curtailment service provider. This proposal was not supported by a majority of market participants. Therefore it was agreed that any settlements that occur outside of what happens between the ISO and the curtailment service provider will occur outside of the ISO settlement process. The ISO will assume that commercial agreements are in place when the proxy demand resource is submitted for registration with the ISO. If not, the load serving entity has the right not to approve the registration of the proxy demand resource.</p>
<p>The ISO will administer a registration system to manage the registration of new proxy demand resources, the movement of resources in and out of the proxy demand resource and provide a process for load serving entity’s to approve any proxy demand resource that contains their load.</p>	<p>SCE – No comment</p> <p>PG&amp;E – Conditional ISO should clarify that a load serving entity can reject a registration for any reason.</p> <p>EnerNOC – Conditional Object to the language that requires the load serving entity and UDC entities for the resource to “approve” the Registration before it can become active and</p>	<p>The majority of stakeholders agreed that additional settlement transactions beyond what takes place between the ISO and the curtailment service provider will occur outside of the ISO settlement process. The ISO will provide a registration system to ensure that a registered proxy demand resource has the approval of the load serving entity whose load may be part of an aggregate proxy demand resource prior to participating in the wholesale markets. The ISO assumes commercial agreements are in place when the proxy demand resource is</p>

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	<p>participate in the wholesale markets.</p> <p>CPUC – No comment</p> <p>AReM – Conditional ISO should require that commercial agreements be in place for the proxy demand resource to be registered. The ISO should also require that as a condition of registration the curtailment service provider transmit specified customer-specific data to the load serving entity on a timely basis throughout the operation of the proxy demand resource.</p> <p>SDG&amp;E – Support The registration process could be administered by a third party allowing the CAISO systems to remain focused on features that are necessary for operating the wholesale electric market</p> <p>Six Cities –No comment CDWR – No comment CPower - Conditional</p> <p>DMM – No comment</p>	<p>registered and approved by the relevant parties. As such, the ISO will not ensure the existence of a commercial agreement as part of the registration process. Nor will the ISO require data for settlements are exchanged between the curtailment service provider and the load serving entity as a condition of registration. These commercial arrangements are to be addressed by the contracting parties and, appropriately, take place outside of ISO processes. Any rules defined for these commercial agreements should be defined by the local regulatory authority, where applicable, as the ISO has no jurisdiction or authority over this matter. If the local regulatory authority defines specific rules, then ISO may consider adding additional conditions as a precursor to registration of the proxy demand resource.</p> <p>Other stakeholders commented that they do not want the load serving entity to have rejection rights over the proxy demand resource. Since the load is served by the load serving entity and the load serving entity will pay for Day-Ahead power that is not consumed as a result of the dispatch of the proxy demand resource the load serving entity does ultimately have the ability to approve or reject a proxy demand resource registration.</p>
<p>Determination of actual proxy demand response delivery will be derived from measurement of aggregate meter usage using a 10 out of 10 baseline methodology</p>	<p>SCE – No comment</p> <p>PG&amp;E – No comment</p> <p>EnerNOC – Conditional Objects to the CAISO’s declaration that it will use an aggregated baseline for measuring performance. Support applying baseline on an individual customer basis. Concerns about 20% limit up or down on the morning adjustment.</p> <p>CPUC – Support 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</p> <p>AReM – No comment</p> <p>SDG&amp;E – Support While aggregated baseline energy settlement is appropriate as long as the one curtailment service provider to load serving entity</p>	<p>A majority of stakeholders supported in comments the general idea that a baseline methodology be applied to determine the performance of the proxy demand resource. Most stakeholders did not submit detailed comments on the specific 10 out of 10 methodology proposed by Management with the exception of EnerNOC, CPower and SDG&amp;E. The proxy demand resource proposal is a wholesale demand response program. While individual resources may meet the minimum participation requirements, it is also expected that many smaller resources will “pool” together as an aggregate resources. The treatment of such an aggregate resource will be on par with a single participating resource– registration and qualification will be on the aggregate, dispatch will be on the aggregate, and hence performance evaluation should equally be on the aggregate.</p>

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	<p>rule applies, it must be revisited once this requirement is relaxed</p> <p>SDG&amp;E supports the proposed methodology and that it might require Modification as the program expands or is better informed by operational experience. Any modifications to the baseline methodology should be coordinated with CPUC baseline methodology to provide consistency between retail and wholesale settlement</p> <p>Six Cities – No comment</p> <p>CDWR – Oppose Should be more than one baseline option</p> <p>CPower - Conditional Applying baseline on aggregate is an inferior approach and less fair to participants than determining performance on an individual basis, and requires very little additional work since the data is available anyway.</p> <p>DMM – No comment</p>	
<p>The ISO will employ a measurement and verification plan to validate DR performance and address gaming issues</p>	<p>SCE – No comment</p> <p>PG&amp;E – Conditional Supports use of minimum bid price</p> <p>EnerNOC – No comment</p> <p>CPUC – Conditional Supports the use of a minimum bid price in addition to measurement and verification for at least the first year of operation</p> <p>AReM – No comment</p> <p>SDG&amp;E – Support The actual investigation of any apparent gaming activity once proxy demand resource is in place is a more appropriate use of resources rather than imposing design features that may be unwarranted</p> <p>Six Cities – Oppose Support use of minimum bid limit and revenue cap</p>	<p>The ISO will monitor proxy demand resource performance through a series of metrics that will be defined by April 2010. The ISO will request proof of performance from the curtailment service provider if there is concern that the proxy demand resource has been compensated for demand response it did not provide. Regardless of whether or not the ISO imposes additional market design limits on proxy demand resource such as bid limits and revenue caps, a robust monitoring and verification program is required to monitor demand response performance.</p>



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	<p>CDWR – Oppose Gaming concerns not adequately addressed</p> <p>CPower - No comment</p> <p>DMM – Conditional Requires commitment by CAISO management to provide resources</p>	