Comments on the PDR Working Group Process & Recommendation and the ISO's March 5, 2009 Straw Proposal For the Design of Proxy Demand Resource (PDR) and Impacts of Direct Participation of The California Manufacturers & Technology Association (CMTA) The California Hospital Association (CHA) The California Society for Healthcare Engineering (CSHE) and Energy Users Forum (EUF)

General Comments

Development of cost-effective Demand Response (DR) is important to all customers. For those who cannot participate, the participation of others will help reduce cost during times of peak need and if the right programs are developed, reduce the cost of renewable integration. Additionally, the customers able to respond reduce their costs of operation. Furthermore, a menu of programs that allows demand response to provide the same services as generation will send long-term signals to customers to design cost-effective flexibility when making investments. The Proxy Demand Resource (PDR) option is one of the first steps down this path post-MRTU.

Because the success of DR is dependent on the actions of customers and Curtailment Service Providers (CSP), both need to be represented in all discussions. Furthermore, if the CSP is not the Load Serving Entity (LSE), LSEs must be involved because the actions of its customers and their CSPs could have a financial and operational impact on the LSE and at a minimum will require changing the contractual or tariff relationship between the customer and LSE. Any additional DR undertakings by the ISO need to include people with multiple perspectives from these groups if one of the ISO's goals is to develop a product that will create results.

The PDR working group was very effective. A group of stakeholders banded together to further develop a proposal of one of the stakeholders that others thought had promise. Although no one was excluded from participation, the group remained reasonable small, by ISO standards. The group fleshed out the proposal and compared it to the options developed by the ISO. All options were discussed and developed further. The group examined the options to see how they met ISO and DR participants basic needs and looked at the effectiveness of the design and gaming potential. Although the concept was not finished to the point of having a draft tariff for the ISO, there were enough details provided to move on to the next stage in the process. Demand Response has fewer interested parties than most ISO topics and more of the interested parties are not typical ISO meeting participants. Thus, although there was a representation from each type of interested party, the group remained a manageable size. Although the group was started by a handful of interested parties, the ISO and CPUC participated fully.

Although the process was challenging because the issues were not easy, the time was constrained, everyone couldn't make every meeting and people did not originally agree on

some of the key issues, the group accomplished much and ended by coalescing on a single complete proposal. The working group process worked except when the ISO staff "drop bombs" or appeared to accept the near unanimous recommendation of the group, but then retreated to its original position without any warning to the group.

The ISO originally presented Dynamic Demand Resource (DDR) and PDR jointly. However, DDR is much more complex, engenders many more concerns and was opposed by a significant number stakeholders and a majority of the PDR working group as presented. We do not oppose upgrades to the Participating Load tariff meant to eliminate manual workarounds and integrate it with the MRTU platform. However, we oppose changes to the Participating Load tariff meant to increase participation before a thorough review of the design and gaming is conducted by the working group and mitigation for potential gaming is developed. Furthermore, the expected benefits of DDR/Expanded PL must be weighed against the expected amount of structural cost shifting. PL/DDR must provide for direct participation in the future, if PL/DDR is to be allowed. A learning period with PDR is reasonable, but it is discriminatory and does not provide "equal access" if some CSPs are not allowed to provide DDR-based products. If the ISO continues with its plan to implement a revised PL product in 2010, then direct participation should be allowed 18 months after implementation of the revised PL product. If changes to PL are not made until 2011, then direct participation should be allowed 12 month after the PL changes are made.

With respect to PDR, the benefits of the PDR-A proposal are that (1) payments will be based on performance not bids, (2) settlements will be no more complex than necessary for the customer - the party least able to deal with complex settlements processes - because the ISO pays the CSP per the bids without funneling money off for the ESP, (3) payments will be at least as much as the bid - the risk that payments could be lower because locations used were different, markets bid and paid were different or the amount settled was different than the amount produced are not an issue. Furthermore, under PDR-A, the ISO does not insert itself into the contractual relationship between a customer and its CSP and a customer and its LSE. The relationship diagrams are Customer <--> CSP and Customer <--> LSE, but the discussions and diagrams often inserted the relationship of LSE <--> CSP. Of the models developed, PDR-A is the clear winner due to these benefits and the fact that gaming opportunities are minimal under PDR-A.

In continuing to develop the BPMs, it is important that rules for information flow ensure that the LSE know when a customer is enrolled with a CSP and when a bid is dispatched. We approve of a rule that requires that an LSE concur when a CSP enroll a customer so long as approval is not unreasonable withheld by the LSE once the LSE is informed that the customer wishes to sign up with a CSP. PDR will not work if the LSE is not paid for power provided in the Day Ahead schedule that is ultimately "sold" by the customer when it responds to a dispatch. One benefit to the PDR-A design is that it simplifies payment between the parties and does not require ISO intervention. When asked to concur with the enrollment, if not already explained by the CSP, the LSE will have an opportunity to explain that the power dispatched is supplied in the Day Ahead market by the LSE whether or not consumed by the customer and that the

customer's contract usage is the sum of metered use (plus distribution losses) and the total dispatches scheduled in the Day Ahead. Under PDR-A, the ISO pays the CSP, the CSP the customer based on their contract and the customer pays the LSE based on the applicable contract or tariff.

Comments on Straw Proposal

Section 2.1, second paragraph, last line states that "the ISO will allow market participants to designate their DR resources as located in an ISO defined Sub-LAP" instead of using the node related to the DR resource. This creates a "game." It allows resources in high cost areas to be settled at the weighted average of the ISO defined Sub-LAP and low cost resources to be settled at the node. A CSP could set up on DR group in a low cost area and elect nodal settlement and take its clients in higher cost areas and combine them into a DR ground settled at Sub-LAP. The working group did not discuss this option.

Section 2.1, third paragraph, first line implies that DDR structure proposed by the ISO is complete and was developed through the stakeholder process. During part of 2008, the ISO did have a select group working on demand response that did not include customers or ESPs, but various utility people who were part of that group said they had never seen the DDR proposal before it was posted on 10/30/08. It is in accurate to say that the stakeholder process "developed" the DDR proposal.

Section 2.1, third paragraph, last line states that DDR is planned for implementation 12 months after MRTU goes live (on April 1, 2009). This should be removed for two reasons: first, this paper per the title is about PDR and second, we strongly oppose the ISO implementing a full DDR at that time. Almost every stakeholder member of the working group told the ISO staff that there was much left to discuss on DDR design and details, there were a number of issues such as gaming and that the issues needed to mitigated or addressed before the ISO could go forward with implementation. Those people also told the ISO that they did not have the resources to work on DDR while working on PDR.

Most likely due to oversight, many references to DDR are left in the PDR Straw Proposal and need to be removed. Some locations include, but are not limited to: sub sections 5.3.1, 5.3.2, 5.4.1, 5.51, 5.53, 5.6.3, 5.7.1, 5.8.3, 6.1, 6.4, 6.6

Section 3.2, last paragraph states that "the ISO worked with the existing stakeholder group that originally developed the PDR-A proposal..." Only a sub-set of the working group "originally developed the PDR-A proposal" however, everyone in the working group made a significant contribution to its final state whether they originally supported PDR-A or not. A few people in the working group did not consider PDR-A their first choice at the end of the process. The sentence needs to be tweaked to be correct.

Section 3.3, second paragraph. Allowing PDR to bid Spinning Reserve should be listed in the paragraph as a possible future refinement.

Section 3.3, fifth paragraph. An issue emanates from a statement in this paragraph that has not been adequately discussed: is performance versus baseline determined on an aggregate basis or is each participants' performance versus baseline settled individually and then summed. If it is the prior, the settlement will not be accurate if the net performance does not consist of customers contributing the same weight to the net performance as their weight in the CLAP. A CSP could intentionally sign up customers in high cost areas that have little intention of performing in order to create an ill-gotten surplus after paying all the customers in the CLAP based on actual performance. If the aggregate option is used, then results will have to be monitored for this behavior.

Section 5.2.2, after the first year of implementation, customers should not be barred from having more than one CSP. CSP may excel at providing different products or not provide them all. A customer could be selling a Day Ahead product to one and a Real-time to another (base-line issues to work out). One day a customer could be selling energy through one CSP and selling ancillary services through another CSP the next day. It is all math. There is no reason to prevent a customer from providing all the cost-effective DR it can.

Section 5.2.3, second paragraph. Although I wish it were so, the statement that "Executing the agreements to be a Scheduling Coordinator is not onerous or restrictive," it is not true for a smaller entity. Just the ISO's credit requirements can make becoming an SC difficult.

Section 5.2.3, last paragraph and footnote 12. The restriction that a customer have a single CSP should not only be "reconsidered," a specific date should be specified for when a customer can have multiple CSPs. This restriction will limit customer options and reduce total response.

Section 5.2.4, Footnote 14. The discussion in this footnote is confusing. A CURTAILMENT Service Provider (CSP) would not be managing TES unless it was also the LSE. Unless a CSP is the LSE, it won't be managing energy procurement. Similar issue, Footnote 23.

Section 5.3.1. In reading this section it dawned on me that it is not clear what the meaning of the term "DR Resource" Does it relate to the portion of a customer's load that is being bid in, an accumulation of those loads by a CSP, or one of one or more sets of accumulations by a CSP? To this point in the document, there has been no formal definition of "DR Resource." The use between this term and "PDR" was confusing in at least one place.

Section 5.3.1, second list of bullet point, last point 1. What is meant by a "consistent load aggregation?"

Section 5.3.1, last paragraph. Of the options proposed by the ISO, we support option 2. However, rules and audits are needed as are done for meter data submitted by load serving entities. Because meter data is the basis for settlements, the ISO has made sure that MDMA and LSE systems for dealing with meter data were accurate. Similarly registration AND application of baselines are key to the ISO getting settlement data that meets the ISO's quality standards. Section 5.3.2, page 31. It is extremely important that a CSP inform the respective LSEs when customers change their participation status.

Section 5.3.2, page 32, first paragraph. For the record, we agree with AReM. Unlike CDWR-SWP, we saw the partial participation as a way to reduce cost shifting and gaming, not a way to increase it. "AReM views the ISO's proposal to "allow partial" participation in its DDR program as going in the right direction, and would like further discussion including any need to set a 'maximum participation limit...to avoid gaming in settlements' and the rules regarding an SC 'separating the metered demand between the PL and its Default LAP.'"

Section 5.4.3, page 24, last line of table. Measurement and verification of load reduction comes in two parts: baseline and metered load. As is currently done the MDMA will report the metered load. The systems gathering, aggregating and reporting that data are already audited by the ISO. The CPUC will have new rules soon for calculating baselines. The ISO should create a similar process for verifying and auditing that a providers systems for calculating baselines and aggregating data produce consistently accurate results.

Section 5.6.1. In the future, there will need to be rules, protocols, and systems that more than one SC to submit demand curtailment bids. As noted elsewhere, after the initial start-up customers should be allowed to use more than one CSP. If there is more than one CSP, there could be very well more than on SC that submits demand curtailment bids. If we were talking provision of television content or phone services, we wouldn't be talking these limitations. Maximizing cost-effective demand response means allowing many options and tearing down barriers, especially artificial ones.

Section 5.6.2, last paragraph. We agree with SCE's identification of issues and the statement that the "rules need to allow a customer to be served by a non-utility LSE and a CSP."

Section 5.7.1. Fortunately over half of this section, including many of the issues, is not relevant under PDR-A. However, at the end of the first paragraph on page 40, the ISO states that it "will establish methodologies for calculating baseline energy usage..." We recommend that settlements be calculated the baseline methodologies established by the CPUC unless significant benefit can be created by doing otherwise. As customers have commented to me, one CPUC jurisdictional baseline is hard enough to understand and they do not want things complicated by there being more than one baseline calculation applicable to each account.

Section 5.7.2, page 40, last paragraph. Due to how baselines are calculated and the fact that load that doesn't exist won't show up in the baseline, CDWR-SWP's "money machine" concern is not an issue. A customer can't inflate its baseline by pretending it has load that isn't there. The baseline is based on recent activity. Furthermore, until convergence bidding is allowed, the customer's LSE would be paid the real time DLAP price for excess energy scheduled.

Section 5.7.3. I don't understand why "load impact protocols" are being discussed. They were created for alternate purposes. As was discussed in the working group, we need the CPUC-authorized baseline mechanisms, but not the load impact or LI protocols.

Section 6.1, bullet 5. Why can't customers on the utilities' interruptible tariffs participate in PDR when there is no system emergency? Should the ISO tariff be changed to allow interruptible customers to participate in the newer "PL" programs. As with other DR programs, rules can be put in place to prevent double dipping and the dispatches from the emergency programs will take precedent (and change the baseline).

Section 6.2, second to last bullet point. See comments for Section 5.3.1, last paragraph and Section 5.4.3, page 24, last line of table.

Section 6.6, first paragraph. We don't understand why greater precision is needed for the baseline calculations used for PDR than for the CPUC-based demand response.

Section 6.6, last paragraph. We don't understand why a customer in an aggregation is going to get called less frequently than one not in an aggregation.

Other issues

1. As the stakeholder process or working group continue to develop PDR, we would like to see a settlements example that includes all charges, including CAISO fees.

2. Separating PDR performance for a meter into Day Ahead and Real-Time performance remains an issue to be resolved.

3. Identification of what information the CSP and LSE need AND do not need. Unless the information is needed, the information should not be transferred.

4. Tables need to be created the list the CPUC-authorized DR programs and which ones are compatible with PDR.

5. The ISO settlements system must provide the CSP enough information to break apart its bill, identify the applicable pricing and allocate funds between its participating meters.