Southern California Edison's Comments on DR Barriers Webinar Presentation

SCE appreciates the opportunity to provide comment to the CAISO on its April 8, 2009 Webinar Presentation entitled "Demand Response Barriers Study". SCE provides general and specific comments on the CAISO Webinar presentation deck below.

GENERAL COMMENTS

Order 719 imposes an obligation on the CAISO to identify and remove unreasonable barriers to treating demand response resources comparably with other resources, so any barriers identified in the CAISO's report to FERC need to carefully articulate the specific regulatory or institutional constraints that should be overcome to maximize the effective utilization of demand response resources in CAISO markets.

SCE is concerned that the CAISO Webinar Presentation appears to label any issue or concern as a "DR Barrier" implying that the role of the CAISO in compliance with FERC 719 is very extensive and overwhelming. Also, some of the asserted "barriers" include redundant descriptions of the same underlying issue, framed in a somewhat different manner. SCE agrees with CAISO that there are many issues and concerns that must be addressed and serious effort by CAISO and stakeholders is necessary to resolve them. However, SCE recommends that CAISO define its compliance challenges in accordance with FERC Order 719's term "unreasonable barriers" rather than issues. Accordingly, SCE recommends that the CAISO adopt a definition of a "DR Barrier" and separate out barriers from issues and concerns. The CAISO compliance filing should contain all of the content of the Webinar with the content separated under headings such as "DR Barriers", "Critical Issues" and "Other Issues and Concerns".

Accordingly, SCE proposes the following definition of a DR "Barrier":

> A regulatory or institutional constraint that prevents an efficient amount of demand response from participating in CAISO markets.

Based on the proposed definition above, SCE finds that the following items identified in the webinar presentation should be included as DR Barriers in the report to FERC:

- Lack of a forward capacity market that would provide participating DR loads with appropriate longer-term price signals to offer DR as a capacity resource.
- Existing WECC and CAISO rules that preclude participation by DR loads in regulation and spinning reserve markets and limit participation by DR loads in non-spinning reserve markets.
- Complexity of "open" regulatory initiatives (such as resource adequacy, direct access resumption, renewables integration, and retail rate design reform) that make it difficult for stakeholders to actively engage in finding solutions to the problems of integrating DR with CAISO markets.
- The necessity to treat load consumption and demand response as parts of an inseparable system has been a barrier to direct participation. Approval of proxy demand resource (PDR) will address this barrier.

SPECIFIC COMMENTS

Slide 10: This graphic of the "funding" for demand response misses the "avoided cost" nature of demand response programs. While the IOU participation payments are "funded" from ratepayers, what is missing from this graphic is the reduction in resource adequacy costs incurred by IOUs as a result of procuring demand response. Also, the arrow labeled "LSE payments for load" should actually be "LSE reduced payments for energy" with the direction reversed.

Slide 11: This chart is no longer accurate and should be updated, revised or eliminated. Regarding the quantification of 1,850 MW of "emergency-triggered programs", SCE believes that it has resolved the CAISO's concern with reliance on emergency-triggered programs by changing the trigger point of the BIP program to prior to when an emergency is declared. (A similar change to the SCE's other reliability programs (i.e. Agricultural Pumping and Air Conditioning Cycling, a.k.a. Summer Discount Plan, are pending approval.) There is a similar statement on Slide 19 that also requires correction. Also, the reference to a 5% goal as a price-responsive goal has been withdrawn by the CPUC pending reconsideration. In the proceeding considering Applications A.05-06-006, et al, Commissioner Chong issued a proposed decision explaining that revisions to the 5% price responsive goal were necessary. Subsequently, the Commission initiated rulemaking R.07-01-041 to address DR goals, cost effectiveness and other issues. DR goals are to be addressed in a pending decision under Phase II.
Slide 12: The graphic on the slide is misleading and provides no value. It also does not include SCE's entire proposed portfolio (e.g. DBP, CBP Day-of, and DR Contracts). Moreover, the incentives listed do not show any correlation to the MW impacts. In fact, RTP does not have incentives but rather increased prices due to weather conditions. Lastly, the slide does not prove whether or not a program is beneficial and should be adopted by the Commission.

Slide 13: This slide states that CPP for C&I is "undetermined" for SCE. However, SCE in Phase 2 of its 2009 GRC, has proposed for its medium commercial customers (20 to 200 kW) an optional CPP overlay for its GS-2 and GS-2-TOU customers and for its large commercial customers (>200kW), mandatory TOU rates with default TOU/CPP on TOU-GS-3 (Option B) and on TOU-8. In addition, SCE recently filed comments pursuant to an Assigned Commissioner Ruling in A.08-03-002 stating that in Phase 2 of its 2012 GRC, it would propose for medium commercial customers, default TOU/CPP and mandatory TOU for customers with advanced meters, with optional RTP based on post-MRTU experience.

Slides 18 and 19: These are not barriers to DR. Many of SCE's demand response programs have targeted customers willing to be interrupted during scarcity conditions in response for a fixed payment tied to the value of an avoided capacity purchase. SCE

believes that the majority of such customers place significant value on the certainty of the participation payment they receive and have a relatively high "strike price" that is above CAISO bid caps. An attempt to shoehorn such customers into CAISO markets would risk having these customers drop out of SCE's demand response programs and require SCE to procure capacity from more expensive supply resources, in violation of Order 719's direction for equal treatment. SCE also has demand programs that have energy strike prices and have been coordinated with market prices. The CAISO needs to recognize that customers fit into different market niches and accommodate this diversity with a range of different approaches to demand response program integration. Labeling the preference for some customers to participate in capacity markets as a "barrier" simply because the CAISO does not have an organized capacity market is plainly wrong.

Slide 20: SCE agrees that lack of a forward capacity market is a barrier to accommodating some forms of demand response into CAISO markets. Currently, SCE uses a combustion turbine proxy resource as the basis for pricing capacity value when procuring demand response resources. The availability of a forward capacity price provides a market price signal, and may also encourage ESPs or CSPs to participate directly in CAISO markets.

Slide 21: This is not a barrier, but rather a difference of opinion that should not be included in the CAISO's DR Barriers report to FERC.

Slide 22: SCE agrees that WECC and CAISO rules that preclude demand response providers from providing regulation and spinning and limit the opportunity to provide non-spinning reserve are a market barrier. However, SCE believes that provision of ancillary services by demand response providers is a "niche" market that is not likely to be significant in the near term. Few customers have energy management systems with the telemetry and control necessary to provide "shallow DR". SCE has programs in this area of customer response and believes that this could be a more important element of a demand response program as technology develops over time.

Slides 23 and 26: The issue of whether the price of power delivered to load should be nodally and hourly disaggregated is a challenging one. SCE would support a conclusion that the complexity of the existing market structure is a barrier to the timely integration of DR in CAISO markets. The advanced metering on all customers will not be available for many years. Nodal assignment of loads (which will necessarily be dynamic rather than static) presents new challenges for the utilities that will require significant time and expense.

Slide 24: SCE recognizes, but does not share, the CSP's viewpoint that they are both "customers and competitors" of the utilities. SCE views CSPs as business partners who can provide different and innovative demand response approaches and whose efforts help SCE achieve the goals of the "loading order". It is not appropriate to call problems with the CSP business model a DR barrier, however, since CSPs are only one of a number of structural forms in which DR can be provided competitively. (IOU delivery, direct load participation, and LSE participation are other structural forms.) Instead, the CAISO DR

Barriers report should identify the underlying difficulties that CSPs face in making their business work as the barriers. This may include the lack of forward capacity markets and an inability to offer ancillary services.

Slide 25: This is not a DR barrier.

Slide 27: The title of this slide doesn't match the bullet points. Moreover, this is not a DR barrier. The CPUC has been very supportive of IOU efforts to promote enabling technologies; the apprehension that this support may disappear in the future is simply a concern.

Slides 28, 29 and 36: These slides identify complaints, not barriers. The underlying barrier is the complexity of market structure and design, which makes it difficult to integrate DR into CAISO market operations. Ultimately, the implication of this complexity is that it takes substantial time to work through details.

Slides 30, 31 and 32: These are not barriers. If the CAISO uses any of this material in the DR Barriers report (which SCE doesn't support), then these slides need to be better focused to separate the issue of overcoming customer "inertia" (resistance to change) from the issue of customer reasons to not participate in demand response. The former is an issue that can be addressed through educational efforts, word of mouth, etc. SCE strongly disputes the suggestions on Slide 30 that we "underestimate these challenges" and are not competent in marketing DR programs. We very much appreciate the challenges of marketing DR and have one of the largest and most successful DR programs in the world.

Slides 33, 34 and 35: Cost and technological limits (such as telemetry requirements and the lack of smart appliances) are not barriers, but rather realities in which demand response programs must operate. If telemetry requirements are unnecessary, then imposing them on demand response participants could be seen as a barrier even if generation resources are treated comparably. However, reasonable but costly infrastructure and systems costs simply raise the issue of whether specific types of demand response are cost effective.

Slide 36: SCE agrees that issues regarding how to separate demand response from the associated load has been a barrier, or at least an impediment, to the development of a direct participation demand response framework. If the demand response is required to accompany load then participation is limited to Load Serving Entities, and moreover the demand response is limited to the capability of serving one's own load. For example, if the DR and Load are inseparable parts then a LSE can offer a demand response program to customers whose native load is also served by the LSE. A LSE whose existing demand response programs that cross LSE boundaries, specifically retail participants that receive benefits from a CSP and receive their load service from a different entity that is their LSE, is not able to participate in the wholesale market directly. The LSE is able to participate in the wholesale market with retail participants who receive both their CSP and LSE services from them, the same entity. But, where the LSE is serving only the

function of CSP, those retail participants can only be served if the participation can be separated. The separation of DR and Load as modeled CAISO's PDR solves FERC's interest in providing direct participation for demand response in wholesale markets. The PDR model proposed by the CASIO attempts to resolve the principal barrier of a LSE serving DR, as a CSP, that belongs to another LSE. In other words, the PDR allows the CSP to serve DR independently of the LSE and participate directly with CAISO wholesale markets. That barrier between a CSP and DR when the DR belongs to another LSE is significant and makes the separation of demand response capability from the load consumption necessary. The final bullet point on this slide is a concern, not a barrier.

Slide 37: These are concerns about how measurement is performed, not DR barriers.