



August 14, 2009

SDG&E's Comments on the CAISO's August 2009 Draft Final Proposal for the Design of Proxy Demand Resource

On August 5, 2009, as amended on August 12, 2009, the CAISO issued its draft final proposal for the design of Proxy Demand Resource (PDR). In short, PDR will allow demand response (DR) resources to directly participate in the wholesale market, and provides greater flexibility to incorporate existing retail DR programs run by IOUs. Additionally, PDR will allow independent aggregators of DR resources to bid dispatchable DR on behalf of retail customers directly into the day-ahead and real-time markets.

The final PDR proposal represents several months of working-group effort to address gaps and problems identified in the initial PDR design proposal released in April. Significantly, by carving out provisions for DR aggregators to access the market, the final proposal also meets FERC DR market enhancement requirements outlined in Order 719. The final design also meets FERC's general directive to level the playing field for demand response resources in the organized wholesale electricity markets.

SDG&E greatly appreciates the CAISO's ongoing effort to inject clarity and transparency in the demand response enhancement process, and looks forward to participating in future stakeholder proceedings on this topic. The proposal in its current form fairly represents the collective input of the DR stakeholder community, and responds to all of the significant issues vetted in the stakeholder process. On the whole, SDG&E applauds the draft final proposal's scope and depth. Though some issues remain unresolved, the draft final proposal represents a positive next step towards fuller integration of DR resources into the wholesale markets and supplies the necessary flexibility to incorporate current utility DR programs. Because of this, SDG&E recommends the CAISO Board of Governors approve the proposal. Because of this, SDG&E recommends the CAISO Board of Governors approve the proposal.

Going forward, as the PDR process moves from design to implementation, SDG&E believes that more comprehensive discussions of certain topics are necessary, particularly

in the areas of PDR functionality, gaming, and metering and telemetry. With these general concerns in mind, SDG&E is pleased to offer the following specific comments on the draft final proposal for the design of PDR.

PDR Functionality

In section 3.3, the proposal acknowledges that the managing data to establish a custom load aggregation could be difficult—especially for CSPs that aggregate various small end use customers—and that there will be the option to designate DR resources in an ISO defined Sub-LAP. SDG&E supports this option in that simplifies the administration of DR for both the CAISO and participants. In SDG&E’s limited experience establishing and managing a custom load aggregation for the Participating Load Pilot, it has found that modifying the customer base for the CLAP can be constrained by Full Network Model update process, which isn’t fluid enough to accommodate program enrollment changes. Further, establishing a PDR at an existing Sub-LAP is likely to reduce any price differentials between the DLAP and CLAP, possibly mitigating some of the gaming concerns.

Section 3.3 also addresses the complexity of a CSP establishing a PDR that contains loads served by multiple LSEs. To eliminate associated complexities the proposal establishes that bid to curtail load by a CSP can only include load served by one LSE. SDG&E supports the single CSP to LSE relationship for the initial deployment of PDR, since it is not likely to impose any barriers to Demand Response participation. However, SDG&E encourages the CAISO to allow multiple LSEs within a single CSP aggregation in future releases of PDR, since it will serve to increase the amount of Demand Response that will be made available to the CAISO market.

Section 3.3 further states that the CAISO will settle the curtailed portion of load directly with the CSP at the PDR custom LAP, and that any settlement of between the LSE and CSP to true-up financial inequities would be performed between the parties bi-laterally. While not ideal, under MRTU, current IOU DR program’s have adopted a similar practice of removing themselves from any settlement between aggregators and LSE (no more SC trades). 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.

Finally in Section 3.3 the proposal states that the CAISO will determine the energy settlement on the performance of the aggregated baseline of a PDR rather than summing each individual customer’s performance. While aggregated baseline energy settlement is appropriate as long as the one CSP to LSE rule applies, it must be revisited once this requirement is relaxed.

Gaming Issues

In section 4 the CAISO enumerates and addresses gaming concerns that were raised during the stakeholder process. Given the amount of space devoted to these issues, it is clear that considerable thought has gone into exploring a breadth of potential gaming

concerns. While not all gaming opportunities can be known until such time that a program is in place and interacting with a dynamic market, SDG&E is reasonably assured that potential gaming issues have been adequately vetted.

In particular the CAISO addresses a concern raised by the Market Surveillance Committee in Section 4.2 that the proposed baseline methodology presents a gaming opportunity. The MSC opinion is that this particular gaming opportunity could be mitigated if the CSP were required to “buy” the baseline, effectively taking a financial position in the forward market. The CAISO concludes that approach might best be applied to Participating Load, but in order to move PDR forward to integrate current DR programs into PDR without requiring the CSP to purchase the baseline. SDG&E agrees with this pragmatic approach since there is no actual market experience to suggest that baselines will be abused and it would impose an unnecessary barrier to the integration of current DR programs into the wholesale market. The actual investigation of any apparent gaming activity once PDR is in place is a more appropriate use of resources rather than imposing design features that may be unwarranted.

Resource Registration

Section 6 of the proposal is dedicated to describing the registration feature of the program. While this element may not be required from a wholesale market design perspective, it is an important feature that better aligns existing IOU demand programs with the CAISO market. SDG&E supports the feature even with the significant complexity it adds to PDR. While the components and concepts described are necessary, the CAISO isn't the only entity that should be considered to administer it. 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.

Metering and Telemetry Issues

In section 10.3.2, the CAISO indicates that a Customer Baseline Load (CBL) engine will be used in conjunction with meter data and the CAISO settlement system to determine PDR settlement with the Scheduling Coordinator. While there is an obvious need to introduce baselines into the metering and settlement process, SDG&E is not comfortable that the data process flows associated with the CBL engine and the function of the CBL engine are well enough known at this point to accept them as part of the program. SDG&E expects to have an opportunity during the design and development phase of PDR to better understand what functions the CBL engine performs and interacts with legacy systems to determine the PDR settlement.

In section 10.3.3, the CAISO proposal states that when PDR resources participate in products that require 5 minute meter data, that 15 minute interval meter data will be divided by three to establish 5 minute interval meter data. An alternative may need to be considered for disaggregating 15 minute interval data into 5 minute interval data for the purpose of accurately settling ancillary services. Merely dividing the 15 minute interval by three for AS capacity settlement will result in excessive no-pay in instances where a dispatch is received the second or third five minute period of a 15 minute interval. This

issue is being carefully considered by SDG&E during the PLP pilot. The CASIO is encouraged to continue to pursue this matter.

Section 10.3.9 of the proposal is currently blank but it has the heading of “Telemetry Requirements for the Provision of AS” and is followed by Section 10.3.10 which, with little modification, describes the telemetry requirements for Participating Loads. The first sentence of Section 10.3.10 states “A Proxy Demand Resource can offer ancillary services to the CAISO if it can meet the standards and eligibility for that particular ancillary service.” While there are existing requirement for telemetry associated with ancillary service products, the CAISO should reconsider the cost benefit of imposing this requirement for PDR. SDG&E Participating Load Pilot requires telemetry consistent with the CAISO standards for participating load, but the benefits provided to the CAISO for demand participating in the AS market are not completely clear. The cost of telemetry is a definite barrier to participation and provides no assurance of compliance with dispatch instructions. Further telemetry is not used for compliance or settlement although it can provide alternative methods to more accurately measure meter before meter after baselines for capacity settlement. Imposing a requirement for 5 minute interval meters for PDR resources offering ancillary services would be a much more cost effective method of measuring dispatch compliance.

Customer Baselines

Section 11.1 describes at a high level how baselines will be constructed and used for settlement of PDR. SDG&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.