Comments of Pacific Gas & Electric Company

Energy Storage and Distributed Energy Resources (ESDER) Initiative

Demand Response Baselines Working Group

Submitted by	Company	Date Submitted
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PG&E appreciates the opportunity to comment on the CAISO's Energy Storage and Distributed Energy Resources (ESDER) "Demand Response Baselines Working Group" presentation and stakeholder call, both dated August 27, 2015.

Context:
As a part of its Energy Storage and Distributed Energy Resources (ESDER) initiative, the CAISO is planning to allow alternative baselines to enhance their existing Proxy Demand Response (PDR) and Reliability Demand Response Resource (RDRR) products. The baseline issues were part of the CPUC's Supply Integration Working Group (SIWG) efforts earlier this year, which included the CAISO. The CPUC has not authorized the SIWG to continue; instead, the CAISO has included the baseline questions in the ESDER initiative. On August 27, CAISO hosted a call to discuss the latest alternative baselines for the PDR and RDRR products; these updates include expanding allowable DR baselines to include a Metering Generator Output (MGO) performance evaluation methodology.

Summary of PG&E's Position:
CAISO's proposal raises jurisdictional issues that the CPUC and the CAISO need to resolve before the proposal can be considered for implementation. PG&E recommends that these high-level jurisdictional issues, and the effect on retail rates and programs, be addressed in a CPUC proceeding before CAISO pursues consideration for inclusion in the CAISO tariff. PG&E raises several issues in the detailed comments below that would be best addressed once the jurisdictional issues have been resolved.

1. PG&E has concerns regarding the MGO model, particularly with respect to the jurisdictional ramifications and the subtractive metering components of the CAISO's proposal.

As part of the SIWG process at the CPUC, PG&E did agree that the MGO model should be explored. However, this was under a very different set of pre-conditions that kept the implementation

much simpler. The CAISO's current proposal goes far beyond proposals previously presented through the SIWG process. During the August 27 stakeholder call, new questions were raised and existing questions remained unanswered regarding issues surrounding jurisdictional authority, ownership, rights, metering and communication standards, synchronization of the primary and sub-meter, coordination with other retail programs and rates, and other requirements associated with the meter and sub-meter used in the MGO methodology. The jurisdictional questions need to be resolved through a CPUC process before the CAISO proceeds with this proposal.

On June 24, 2015, PG&E provided comments on the CAISO's "Distributed Energy Resources Provider (DERP)" proposal, which PG&E has included as an attachment with the submission of these comments. Pages 2-5 of the June 24 comments address metering and jurisdictional issues, including discussion of a behind-the-meter resource scenario which would utilize a sub-meter to measure its performance. In those comments, PG&E describes several areas which need to be addressed prior to the implementation of the proposal, including the jurisdictional problems from potential conversion of retail load into wholesale load, the jurisdictional authority for this type of arrangement[1], and the potential for conflicts between wholesale and retail jurisdictional regulation behind the meter. Additionally, critical operational issues would need to be addressed and resolved, such as the lack of sub-metering standards. For instance, there are no current standards (e.g. testing, accuracy, maintenance) for sub-meters or communication protocols by which the sub-meter and master meter could communicate or be synchronized. If these matters are not resolved, along with the questions of where the related regulatory authority lies, allocating energy production, energy consumption and/or load reduction occurring behind the retail meter would be extremely difficult when the customer has multiple devices and rate and DR program options.

In brief, PG&E believes that the measurement of a load baseline using MGO meter configurations B and C would, in practice, result in a calculation of "wholesale load" for the CAISO's purpose of establishing a wholesale product (PDR), while at the same time, provide an incentive for the load to reap retail rate reductions through arbitrage. This dual scenario raises issues affecting both the measurement of PDR, which is CAISO's concern, and the effect of retail rate arbitrage on utility rates, which is the CPUC's concern. Since this scenario arises in the context of the CAISO's PDR stakeholder process, PG&E is concerned that the potentially significant effect of the MGO meter configuration B and C baseline methodologies on CPUC regulated utility rates may be overlooked. If the CAISO and CPUC do not coordinate their study of these issues while the ESDER process is underway, it may be too late to evaluate and protect ratepayer interests in revenue recovery after the adoption of a new baseline methodology.

Beyond these significant regulatory issues, PG&E's IT process and systems are not set up to accept sub-metered data for subtractive billing, nor to provide detailed multiple bills (i.e. for a primary meter and sub-meter(s)) for a single location. Changes to PG&E's enterprise systems to accommodate subtractive billing would be very costly and would take time to scope, develop and build – after jurisdictional issues

[1]It would appear that the CPUC's Electric Rule 18, which precludes sub-metering, would need to be modified.

had been resolved, with CPUC approval. PG&E anticipates that other regulatory changes would also need to occur to accommodate sub-metering, particularly if the sub-meter is measuring energy provided by a third party (storage provider) behind the primary customer's meter. For instance, if the storage provider did not pay its charging bill, it is unlikely that service disconnection at the primary meter of the load entity would acceptable, and furthermore, utilities have no control over behind-the-meter applications. Similarly, it is unclear how billing adjustments to the primary meter would be made if the sub-meter were inaccurate.

Finally, in very limited recent experience with sub-metering (Electric Vehicle Submetering Pilot), PG&E has discovered that the complexities identified above increase as sub-metering is applied to different rate and program combinations offered by the utility. For instance, how would the single behind-the-meter resource scenario change if the customer also has a PV unit billed under NEM? These examples, as well as more complex scenarios should be considered when creating the rules and processes behind an MGO method.

2. PG&E is concerned that the subtractive metering proposal does not align with the utility registration process.

In the CAISO's presentation, the newly introduced proposal for subtractive metering, reflected in Meter Configuration B, does not align with the utility registration process. Utility billing uses a single location for registration purposes, regardless of the number of meters and sub-meters; there can be multiple meters behind one customer account. Such registration does not allow the utility to have insight into activity below the Service Agreement ID point.

The CAISO is also considering changing the unit at which DR is registered into the CAISO market. Under the CAISO's current processes, this unit of registration is at the Service Account Number (SAN), which translates to PG&E's Service Agreement ID. All of the CAISO's systems, PG&E systems, and CPUC rules are in sync to use the SAN. It is not clear how the meter of a separately-managed generation unit under Meter Configuration C would be accommodated within the SAN. Without consistency on the SAN, it would be hard for PG&E to track whether a resource was being used in another DR program.

On the call, the CAISO mentioned an expectation that the forthcoming PDR/RDRR procedures would include a requirement that registration be moved to a "revenue quality" meter, which, at this point, is undefined, but apparently could be behind the existing retail utility meter. The CAISO should clarify what it means to have a "revenue quality" meter as it relates to current processes using a Service Account Number for PDR when discussing the MGO alternative baseline.

3. CAISO should clarify its proposal for compensation resulting from the use of the MGO method, in light of the potential for duplicative compensation to be paid.

SDG&E raised concerns that the MGO may be discriminatory and compensate DR at wholesale for taking actions in response to retail realities. On the call, SDG&E specified that depending on which type of baseline is used, compensation could differ (i.e. a resource might get compensation under the MGO method that would not be realized under the other baseline options). SDG&E questioned if this performance evaluation methodology would compensate a load resource for something it would do anyway, in response to retail rates or programs, and whether that was the CAISO's intent, or an unintended outcome.

PG&E shares SDG&E's concern that the CAISO's MGO proposal compels an outcome, via implementation, before the foundational policy question has been answered. PG&E agrees that under the MGO approach it may be difficult to differentiate whether a resource is responding to the CAISO or acting on its own behalf under its applicable retail arrangements. While the NAESB standards were designed for intermittent use, the MGO approach would be used on a regular basis for system operations. This would essentially allow PDRs to be dispatched without checking whether that dispatch deviates from prior interval performance. Under those conditions, it would be difficult to translate a single, unique response from a customer to a wholesale performance baseline that did not also involve the opportunity for the customer to benefit from retail programs or tariffs.