## Demand Response Baseline Working Group

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SDG&E appreciates the opportunity to comment on the Demand Response Baseline Working Group stakeholder call. As expressed on the August 27<sup>th</sup> Working Group call, and in SDG&E's August 18<sup>th</sup> comments on the CAISO's Issue Paper and Straw Proposal outlining proposed phase 1 enhancements to existing rules, products and models to enable increased participation of Energy Storage and Distributed Energy Resources (ESDER), SDG&E has serious concerns about the proposed Metered Generator Output (MGO) option to evaluate performance of Proxy Demand Resources (PDR).

The CAISO's tariff currently provides two methodologies for evaluating the performance of demand response resources. The first uses historical interval meter data to calculate baseline performance. Specifically, the CAISO uses a "10-in-10 non-event day" methodology and examines up to 45 days prior to the trade day to find ten "like" days. The CAISO then calculates a simple hourly average of the collected meter data to create a typical load profile, or baseline. A customer's performance during an "event" or market participation interval is then measured from this baseline. If a PDR's baseline consumption in a given hour is 5 MW, and meter data indicates the load was reduced to 4 MW in that same hour during an "event" or market participation interval, the PDR is paid the locational marginal price for providing 1 MW in that hour. The second available DR evaluation methodology substantially mirrors the first, with the only exception being that the model uses statistical sampling to estimate usage when interval data is not available.

The CAISO proposes in this initiative to add a third baseline measurement option: the metering generator output (MGO) approach. This methodology directly meters generation on the customer's premises, and uses that metered output to determine demand reduction.

SDG&E believes that the currently adopted performance evaluation metrics adequately measure and compensate load reduction from DR resources. Attempts to modify, enhance or supplement the current baseline methodologies must be non-discriminatory, and must not provide varying approaches to compensation for PDR resources based on presence or absence of on-site generation or storage.

Conceptually, the currently approved baseline methodology compensates a customer for altering behavior (consuming less) on the event day. The baseline represents what the customer normally would have done, and the customer is compensated for doing something different -- curtailing consumption in a given interval. Equally important, the existing baseline model does not compensate customers for doing what they normally would have done. For example, if the 10-in-10 non-event day lookback reveals that the customer's baseline load was indistinguishable from its event day load, there is no compensation. This outcome is correctly premised on the fact the customer's actions did nothing to impact pricing conditions at the wholesale level in the event hour.

While SDG&E is open to exploring alternative performance metrics that more accurately represent the customer's response on an event day – in short, metrics that supplement the baseline methodology – SDG&E strenuously opposes a model that circumvents or replaces the baseline construct, and instead compensates the customer at the wholesale level for doing what he or she normally would have done. For example, suppose a behind the meter storage resource discharges 1 MWh each hour from 3-5 p.m. every weekday to manage that customer's retail peak load conditions, and to minimize exposure to retail demand charges. If this storage resource registered as a PDR, and bid load reduction into the CAISO's markets from 3-5 p.m., the 10-in-10 non-event day lookback in the current baseline methodology would reveal that the customer's baseline load was indistinguishable from its event day load, and there would be no wholesale compensation.

On the other hand, an MGO approach that directly meters generation on the customer's premises, and uses that metered output to determine demand reduction, appears to contemplate compensating that resource for providing 2 MWh of load reduction. This outcome incorrectly compensates DR resources at wholesale simply for responding to retail rate realities. In short, the outcome compensates a customer at wholesale not for doing something different on the event day, but for doing exactly as it would have otherwise done. Moreover, this outcome is discriminatory in that it provides varying approaches to compensation for PDR resources based on presence or absence of on-site generation or storage. Any modification or enhancement of the performance evaluation metrics must contain safeguards to ensure that customers with on-site generation or storage are not compensated for providing "services" that would otherwise be non-compensable under the existing baseline methodology, and therefore not available to customers who do not posess on-site generation or storage.