

Alternative Proposal – Energy Storage and Distributed Energy Resources Initiative
Frequent-Use Meter Generator Output (MGO)

In response to the California Independent System Operator’s (CAISO) request at the Monday, October 12, 2015 Energy Storage and Distributed Energy Resources Working Group, Advanced Microgrid Solutions, Solar City & Stem (the Companies) would like to propose an improved G_{adjusted} calculation. The Companies believe that this is the most reasonable approach under today’s rule constraints and time restrictions, however once there are more systems operating and the market has matured, we hope to develop a solution based on that experience.

We propose establishing a “typical-usage level” (G_{TYPICAL}) based on electric output using (G) metered quantities during non-dispatch days, selected by conducting a look back of comparable, non-dispatch days (similar to the CAISO’s existing 10-in-10 in 45 baseline methodology for loads). Based the CAISO’s ESDER proposal, G is the sub-meter that is directly metering the output of the on-site generator and is a negative number under generation (discharge) conditions and positive under charging condition. For non-frequent MGO, the resource is credited with the full amount of the output of generator: Performance (P) = -G.

Scenario A: Similar to the PDR baseline methodology, the first 10 non-event similar day-type days are selected. Per the CAISO rules, a non-event day is a day in which no hour contains a PDR dispatch. Again, consistent with PDR rules, a profile is created by averaging 5-minute data to the hour and then over the 10 days. Performance (P) during each interval (t) during the PDR call is therefore: $P = -(G - G_{\text{TYPICAL}})$.

Scenario B: If 10 non-event days cannot be found within a look-back window, then the resource is deemed to be a full-time market participant and $G_{\text{TYPICAL}} = 0$ and the resource receives credit for the full generation value during the event duration (standard proposed PDR rules for MGO).

Additionally, given the novelty of these resources and the inherent complexity in determining an alternative baseline methodology, the Companies request that the issue of overlap between retail and wholesale functions continue to be discussed as part of Phase II of the CAISO’s Energy Storage and Distributed Energy Resources (ESDER) Stakeholder Initiative. This allows additional time for the Companies to engage with IOUs and also determine if there are additionally viable options that satisfy all parties, while continuing to move forward on this time sensitive matter.