Submitted by	Company	Date Submitted
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NRG Energy, Inc. ("NRG") provides these comments on the Slow Response Local Capacity Resource discussions presented October 3, 2016 at the CAISO-CPUC Joint Workshop.

NRG appreciates this opportunity to contribute to the discussions on how to integrate more effectively demand response ("DR") and behind the meter ("BTM") energy storage resources into the CAISO markets, and how to maximize the value of such resources. For purposes of these comments, NRG focuses on CAISO's efforts to address how "slow response" DR can help the CAISO effectively address NERC, WECC and ISO reliability standards applicable to local areas. In particular, NRG submits that pre-dispatching DR to meet local area reliability needs is an inefficient use of demand response, and ought to be a last resort where approaches adopted in other markets may be better suited to capture the value and reliability benefits that DR can provide to California's electric grid.

Preliminary results of CAISO and IOU analyses conclude that DR in the existing programs could be "pre-dispatched" to meet local area reliability, with the exception of certain local reliability areas or sub-areas (*e.g.*, El Nido, Big Creek/Ventura. Humboldt, Sierra, Stockton, Kern). However, pre-dispatching DR for local reliability presents substantial challenges, as discussed further below.

Southern California Edison ("SCE") correctly pointed out that because some DR programs have call limits and/or a limited number of hours, the opportunity cost of deploying DR would result in sub-optimal use of DR. For example, DR resources with a limited number of calls (not MWh) calculate the opportunity cost on a per call or hour (not per MWh) basis. The result is partial DR dispatch, resulting in inefficient use of DR. Namely, a partial dispatch would recover only a fraction of the opportunity cost, where the resource could have been used at a time of higher system need (value). Moreover, a partial dispatch of DR may nonetheless count in full towards the applicable service limit, further limiting DR participation and eroding its potential contribution to grid reliability.

Pre-dispatching DR presents other challenges. For example, pre-dispatching DR would require calling on DR on a pre-contingency basis, based on forecast load levels. If loads are not accurately forecast, DR may be activated when it is not needed. This risk not only impacts the opportunity cost of DR; pre-dispatching DR could promote program fatigue and could negatively impact program enrollment.

Such inefficient use of DR should not be accepted without fully exploring and vetting market design alternatives. Accordingly, NRG encourages the CAISO to look to experiences in other ISOs (notably, PJM) to identify how those ISOs have dealt with this issue. NRG looks forward to participating in this process to determine the efficient and effective use of DR for local reliability needs.