

## Stakeholder Comments Template

Submitted by	Company	Date Submitted
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Thank you for the opportunity to comment on the Revised Energy Storage and Distributed Energy Resources (ESDER) Phase 3 Straw Proposal.<sup>1</sup>

We appreciate the CAISO's leadership position in enabling retail program participants, particularly those enrolled in net energy metering (NEM), to address current CAISO planning challenges. The proposed PDR-LSR participation model possesses no Multiple Use Application conflicts for NEM retail program participants with clear incrementality in response to market participation.

In order to avoid confusion, we recommend the revised straw proposal specifically reference that PDR-LSR resources do not have any Must Offer Obligations (MOO) and that Resource Adequacy (RA) resources participating in the PDR-LSR program will still need to comply with RA MOO rules.

Sunrun has analyzed and supports the proposed performance evaluation methodology for the PDR-LSR program.

As previously expressed in comments by Sunrun, hybrid DC coupled storage systems utilize an inverter with DC inputs for photovoltaic generation and energy storage, which poses a unique metering challenge during the load consumption period. For these hybrid DC coupled storage systems, the inverter output meter during the load consumption period would typically be measuring photovoltaic electricity exported from the inverter. Then, in response to the CAISO's load consumption dispatch, the previously exported electricity would be diverted to charge the DC battery. This response makes the AC output meter incapable of metering the diverted energy going to the battery for these hybrid dc coupled systems. In order to address this issue for hybrid DC coupled systems, we propose to utilize a hybrid metering methodology. This will include the AC inverter output meter in conjunction with internal DC power flow metering of

<sup>1</sup> <http://www.caiso.com/Pages/documentsbygroup.aspx?GroupID=263724F0-4524-4B2B-9497-1C56AA541F0D>

the battery. The AC inverter output response at the start and stop of the load consumption period will correlate and validate the DC metering data in response to the event.

Sunrun appreciates the opportunity to comment on the Revised Straw Proposal.