

Technology Neutral Enhanced PDR

Load Shift Working Group

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Our Lens Today

- Looking at narrow construct of CAISO load shift PDR
 - Expanded from ESDER 3 battery storage only product
- In the future additional efforts should address:
 - RA value for both sides of load shifting behavior to capture fuller range of services and value being provided
 - Load shifting constructs outside of CAISO market dispatch
 - Additional ways load can provide flexibility services to the grid
- Value for Load Shift is not properly recognized in any process

Tech Neutral Load Shift Product

- Only minimal changes are needed to the CAISO Enhanced PDR Model in ESDER 3 to create a technology neutral load shift product for integration in the CAISO market.
- All other aspects of the PDR-LSR can remain the same
 - Bidding requirements, energy services, RA eligibility and MOO requirements

	ESDER 3	Technology Neutral
Who can participate? Pre Market Registration	PDR-LSR with battery storage, register with both and curtailment and consumption Resource ID	All PDR – register as PDR-LSR with both a curtailment and consumption Resource ID
Performance Methodology	Measure and net out typical use from metered output	Measure and net out typical use from approved baseline calculations to measure both consumption and curtailment

Challenges

- Baselines
 - Potential for undervaluing contributions
 - Corresponds with baselines valuing curtailment only resources
 - Best alternative that exists today
- PDR with Behind the Meter Solar
 - Allow baseline calculations to cross zero to recognize full contribution of load
 - Submeter solar and subtract out of baselines curtailment and consumption baselines

Value Tensions

- E3 Resolve Model
 - Resulted in limited value for load shift
- LBNL – Some additional values/perspectives
- Load Shift value needs to address full value of avoiding curtailed renewables in our environment that needs RPS energy to meet state mandates.
 - Energy only payments during periods with CAISO negative pricing will not incent load shift behavior