



Decision on energy storage and distributed energy resources proposal

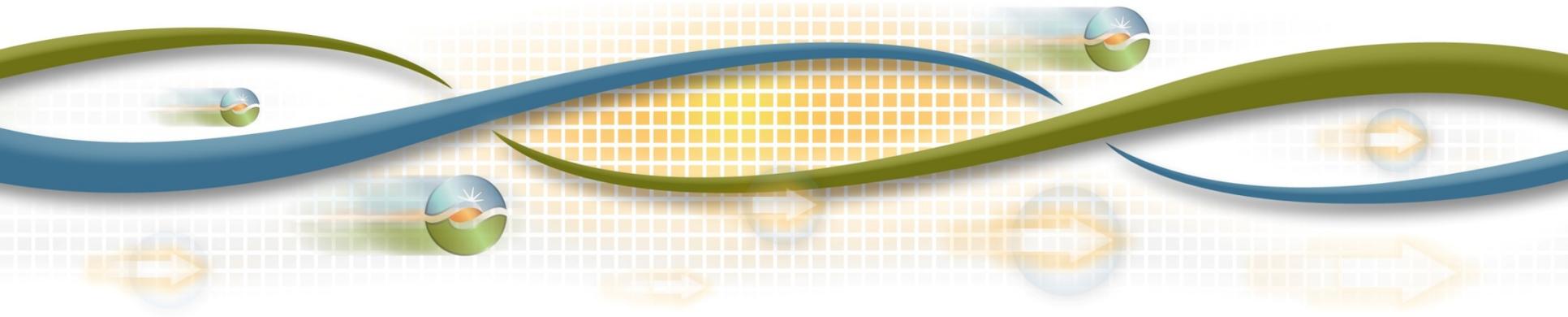
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General Session

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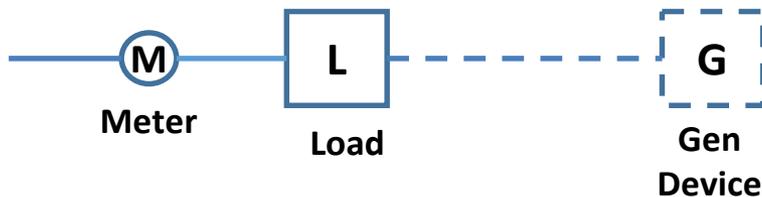


Two enhancements to the market participation model for storage are proposed to provide greater flexibility.

- Allow resource to submit a daily state of charge bidding parameter in the day-ahead market.
 - Under current rules if no day-ahead awards from previous day, the market system assumes initial state of charge is 50%.
- Allow resource to self-manage their energy limits and state of charge.
 - Under current rules, state of charge must be provided through telemetry to ensure feasible dispatch.
 - If a resource is not self-managing within energy limits, then ISO reserves right to require state of charge telemetry.

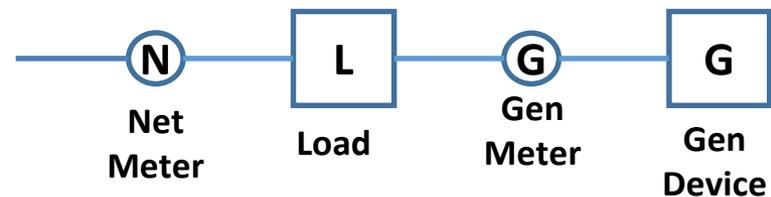
Demand response configurations are evolving to include behind-the-meter generation devices.

Current



- Performance measured by comparing expected and actual consumption.
- Baseline method used to estimate expected consumption.

Proposed Option



- Developers want ability to distinguish demand response provided by generation from load.
- New performance evaluation methodology needed to do this.

Three performance evaluation methods are proposed to support this new demand response configuration.

1. For load only, the actual demand is subtracted from a standard baseline to determine performance.
2. For generation only, the generation output minus an adjustment (see next slide) determines performance.
3. For combined load and generation, the sum of methods 1 and 2 determines performance.

Proposal includes an adjustment to generation output to mitigate wholesale/retail overlap.

- Adjustment amount is the average generation output during a prescribed number of prior non-event hours.
- A non-event hour is when the resource
 - Did not receive an award, dispatch or record an outage; or
 - Received an award or dispatch but the market cleared below the net benefits test price.

Stakeholders support these enhancements.

- All support the greater flexibility offered by the storage model enhancements.
- Most support the new performance evaluation methodology option for demand response.
 - To address outstanding concerns, ISO will commit to periodic review and propose design enhancements as needed.

Management recommends that the Board approve the proposed enhancements.

- Increases flexibility for storage resources and new demand response configurations to participate in the ISO market.
- Broad support from stakeholders.