

Defining future flexibility needs

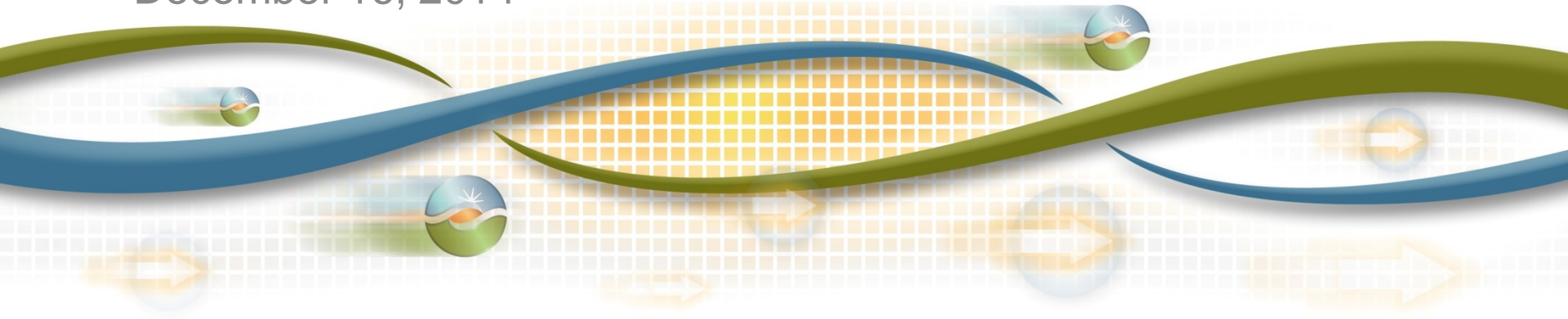
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Upcoming flexible capacity items

- Flexible capacity for intertie resources
- Determining future flexible capacity operational needs

Background on flexible capacity for intertie resources

- The ISO's recently approved FRAC-MOO tariff filing established eligibility criteria and offer obligations for flexible capacity resources.
 - Focused on resources capable of five minute dispatch
- FERC required the ISO to “assess the feasibility of permitting static import resources to provide flexible resource adequacy capacity”
- There are currently no LRAs that have provisions that allow for flex capacity from intertie resources

15 minute intertie resources can address three hour ramps and some intra-hour variability

- ISO must be able to ensure there is adequate flexible capacity to address all inter-hour variability
 - Too many flexible capacity intertie resources may degrade the ISO's ability to manage all variability scenarios
 - May be a need to limit the quantity of intertie resources providing flexible capacity
- The ISO will conduct an assessment to determine if it is possible to allow 15-minute static intertie resources to provide flexible capacity
 - Based on an analysis of 15-minute granularity and 5-minute granularity of net load variations

The ISO's future operational needs for flexible capacity will expand beyond the current 3-hour product

- 1) Continuous ramping needs*
 - Inform the CAISO of how long and at what rate the system would need to be able to maintain
- 2) Load following needs*
- 3) Ramp rate needs*
- 4) Minimum load burden
 - The amount of minimum load online for ramping needs

* Operational need may be for both upward and downward flexibility

The ISO is developing methodologies to assess future operational needs for flexible capacity

- The ISO is initiating study processes to determine the operational needs for flexible capacity in the future:
 - Production simulations (Similar to LTPP)
 - Net load forecasting (Similar to FRAC-MOO)
 - Fleet assessment