



Load shift and load consumption discussion

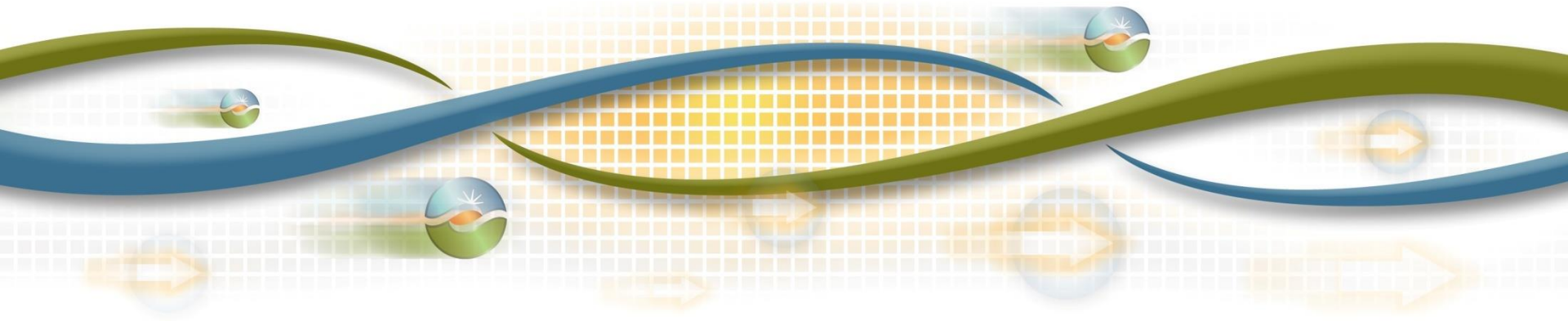
John Goodin

Manager, Infrastructure & Regulatory Policy

Market Surveillance Committee Meeting

General Session

December 1, 2017



Load Shift

load shift vs. load consumption

Load shift from stationary storage devices

- Energy charge and discharge are directly measured
 - No new baseline vetting required
 - “Typical use” addressed by ISO for metered storage devices
- Helps prevent wasting energy simply for monetary gain
 - Storage by nature, requires energy be returned to the system
 - Energy returned to benefit customer or grid; however, grid and customer benefits may not align temporally
- Retail energy and demand charges are still assessed
 - Only economic if dispatched at negative wholesale prices
- No behavior changes required by end-use customer

Load Consumption

load shift vs. load consumption

Load consumption from traditional load management

- Load consumption provides service or service deferral
 - Electricity converted to BTUs, light, force- not returned as electricity; can be difficult to validate productive or typical use
- If targeted load not sub-metered, requires vetting new “load consumption baselines” to assess the counter-factual
- Retail energy and demand charges are still assessed
 - Only economic if dispatched at negative wholesale prices
- Unlike storage, may require behavior changes to consume energy productively when dispatched

Issues we want to explore today

As we consider developing a load shift and load consumption product, what issues and impacts should we consider in the policy development?

- Market efficacy- benefits and burdens
 - Will wholesale payments for load shift favorably change consumer behavior or spawn sufficient market interest?
- Retail rate interactions and impacts
 - How do wholesale consumption payments impact retail rates designed for the same purpose, i.e. consume at low prices?
- Value of load shift and load consumption capability
 - What is the basis for the value of load consumption? Is there a capacity equivalent?
- Market settlement implications- double payments
 - Is there a net benefits equivalent for load consumption?