

RPM as a Seasonal Construct: Possible Approaches, Potential Benefits

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RPM as a Seasonal Construct: Possible Approaches

- This presentation describes how RPM could be modified to be a seasonal construct, identifying a few possible approaches
- The purpose is to indicate a few ways this could be done and the potential benefits, for discussion purposes
- This is not a proposal

RPM Seasonal Capacity Obligations: Possible Approach

- One possible approach, by way of example:
 - “Summer” = June 1 through Sept. 30, “Winter” = Oct. 1 - May 31.
 - [Could also add “shoulder” = Oct-Nov-Mar-Apr; or define four seasons]
- Summer and winter obligations are separate products
 - Annual product (= Summer + Winter) can also be included – discussed later

For purposes of this presentation, assuming a two-season approach.

Seasonal Capacity Requirements: Possible Approach

- Each season has a separate Reliability Requirement (IRM, FPR)
- RTO Winter Reliability Requirement: Could use LOLE = 0.01
- RTO Summer Reliability Requirement: Could use current procedure and criteria (LOLE= 0.1) or could use LOLE = 0.09
- Locational Winter Requirements (CETO): analogous approach

FYI: The RTO Winter extreme (90/10) peak is approximately 26,000 MW less than the Summer extreme (90/10) peak (2020/2021); the difference in Reliability Requirements would be similar.

Possible Auction Approach (assuming two seasons)

- Single auction to acquire Summer and Winter obligations to satisfy the seasonal Reliability Requirements
- All capacity sellers could be permitted to vary their offer quantities and prices seasonally subject to the usual constraints (eligible UCAP, market power mitigation, etc.)
- Could also allow Annual offers, and/or coupling of seasonal offers
- Could use current capacity demand (“VRR”) curve shape, Net CONE

Other RPM Design Elements That Could Be Adapted

- UCAP ratings
- Capacity import limits
- Net CONE
- Penalties
- Cost allocation
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Seasonal RPM Construct: Potential Benefits

- Would allow tailoring capacity acquisition quantity to seasonal needs
 - Current rules call for acquiring winter-ready resources in a quantity that is needed only in summer – approximately 26,000 MW more than necessary.
- Would allow all capacity sellers to tailor their offers seasonally
 - Unforced capacity may vary a little, or a lot, between summer and winter
 - Costs and risks of providing capacity may vary a little or a lot summer, winter
 - Examples: wind; solar; demand response; gas-fired behind LDC; imports; etc.
- Seasonal offers allow meeting seasonal requirements more efficiently, with separate seasonal price signals
- Would be more consistent with seasonal capacity constructs in neighboring regions (NYISO, MISO (proposed), IESO (proposed))