

# Capacity Storage Resource Duration Requirements

Energy Storage Association

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Energy  
Storage  
Association

# ESA Position

Capacity Storage Resources are eligible to offer capacity based on the output they can maintain for four hours.

## Basis

The tariff states that storage, renewables, and energy efficiency may offer capacity based on expected average output during peak hours. There are no more than 4 peak hours in any day. The record makes clear that PJM intended and FERC approved this reading of the rules.

# Scope of Discussion

- This presentation speaks to the status quo rules as the Tariff stands now. It is not our intention to open a debate on alternative capacity market rules.
- The duration requirement sets eligibility to offer into RPM auctions. Storage is subject to non-performance penalties during any PAI, regardless of the event's duration.

# Tariff Language

Governing language is Attachment DD5.6(h):

For the 2018/2019 Delivery Year and subsequent Delivery Years, a Capacity Market Seller that owns or controls one or more Capacity Storage Resources, Intermittent Resources, Demand Resources, or Energy Efficiency Resources may submit a Sell Offer as a Capacity Performance Resource in a MW quantity consistent with their average expected output during peak-hour periods.

# Peak Hours

Type	Summer	Winter	Source
Intermittent	HE15-HE18	n/a	Manual 21, page 18
Energy Efficiency	HE15-HE18	HE8-9, HE19-20	Manual 18B, page 11
Demand Response	PLC	Winter Peak Load	Manual 18, pp77-78

- No peak hour period is longer than four consecutive hours.
- PJM's comments in the CP docket (ER15-623) make clear that storage uses the same method as intermittents.
- Storage is thus able to offer based on expected average output during HE15-18 in summer months, a four hour period.

# Background: Leading up to CP

- The initial Capacity Performance draft allowed Capacity Storage Resources to offer based on output that could be maintained for 16 hours on three consecutive days.
- The October 2014 CP draft reduced this to 10 hours.
- The final CP filing had no explicit duration requirement. PJM's comments indicate that this was intentional:

The proposal has changed substantially since [the initial and October drafts]...the current proposal is far less prescriptive on the performance requirements for Capacity Performance Resources....

Therefore, the tariff changes in this filing are not overly prescriptive on qualification or eligibility requirements of a Capacity Performance Resource. The focus instead is on creating material adverse consequences for poor performance...

- This is consistent with the approach of relying on penalty risk to enforce seller discipline.

# Background:CP Docket

- Comment in the CP docket requested clarification of offer quantity for intermittents.
- PJM's Feb. 2015 answer:
  - PJM confirms the methodology for calculating Intermittent/**Storage**/DR/EE capacity values as expressed in FAQ 122, and PJM commits to incorporating this methodology in its manuals. (Feb. 13, 2015 Answer at 24, emphasis added)
- FAQ 122 sets four and five hour windows, which seem to have changed into the two and four hour windows above by the time the tariff was finalized.
- FAQ 122 also notes that these rules may result in the resource owner "taking on significant non-performance risk" if emergency conditions occur when the resource is unable to perform.

# FERC Orders, PJM Compliance

- FERC found this just and reasonable:  
Capacity Storage Resources...may submit stand-alone Capacity Performance sell offers in a MW quantity consistent with their average expected output during peak-hour periods. (FERC Order, June 9, 2015 at 100)
- FERC also ordered PJM to submit tariff revisions clarifying this. PJM did so:  
PJM is revising Tariff [to] confirm that resources of the listed resource types can submit Capacity Performance Resource offers “in a MW quantity consistent with their average expected output during peak-hour periods” (July 9, 2015 compliance filing at 5)
- This compliance filing introduced the tariff language we cite. FERC accepted it May 10, 2016.



# Summary

- Leading into the formal CP filing, PJM took an approach of relying on penalty risk rather than a prescriptive approach to determine resource offer quantities.
- PJM explained to FERC that storage would be allowed to offer based on 5 hour peak periods.
- FERC agreed, and ordered PJM to put this in the tariff.
- PJM did so, but the manuals ultimately specified 4 hour peak periods.
- That tariff language is in force today.



# Eligibility for CIRs and RPM must match

A comment was made at an earlier Order 841 special session that the language we point to sets RPM offers, but other tariff sections restrict the amount of CIRs storage is eligible for.

- Our review of the tariff found nothing to support this.
- It would be inconsistent for the tariff to specify a Resource's eligibly to offer, but then make it impossible for the Resource to ever make such an offer.
- We welcome clarification regarding existing limits on Capacity Storage Resources' eligibility for CIRs.

# Thank you

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