# **ESA Proposal Updates**

RMISTF September 27, 2016



Energy Storage Association

www.energystorage.org

## **Technical Issues**

#### 1. Communications Latency

- PJM currently calculates accuracy assuming a 10 second delay for communications.
- Resources that respond faster than 10 seconds receive lower accuracy scores.
- PJM claims this is impossible; market participants say it's happening.
- Proposal is to score accuracy as the highest accuracy at delays between 0 and 10 seconds.
- This proposal hurts no one, and corrects what (if it exists) appears to be a simple bug with scoring low-latency communication links.

#### 2. Open Source Performance Scoring

- ESA members report they are unable to duplicate PJM's performance score calculations.
- This leaves them unable to verify settlements.
- We propose simply that PJM simply publish open source reference software that calculates performance scores.

We believe these two improvements simply address technical problems, and ask all package sponsors to consider including them in their packages.



## **Changes to Proposal**



## **Place Signals and MRTS in Tariff**

- The FPA states that all "rates and charges" along with "the classifications, practices and regulations affecting such rates and charges" must be filed with FERC.
- We believe that both the signal definitions and the MRTS curves fall under this provision.
- The tariff currently only says that regulation signals and benefits factors will be set "in accordance with the PJM Manuals."
- This makes it possible for products and rates to be changed without FERC review.
- We propose explicitly defining the regulation signals and the MRTS curves in the tariff.

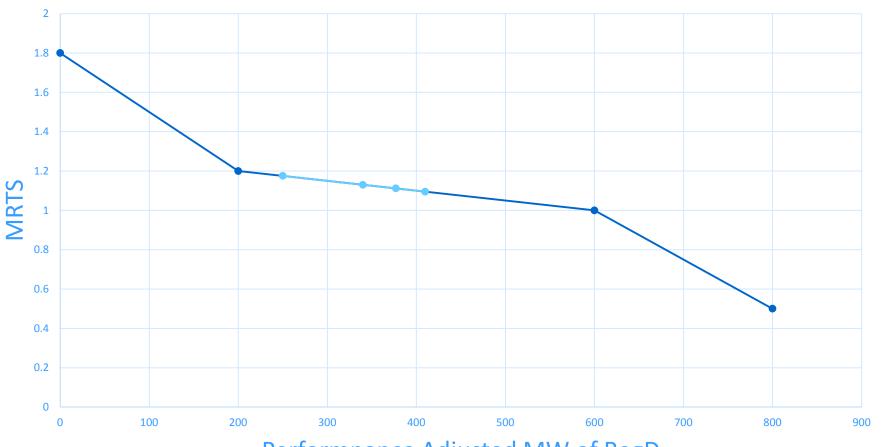


### Issues with PJMs MRTS curve

- PJM proposes that RegD resources be required to deliver unlimited energy, but calculates an MRTS curve as if they are 30-minute resources.
- This in itself is unreasonable. Resources can not be required to perform to one standard but compensated based on another.
- Of the 780MW of qualified RegD resources, only about 295MW are energy-limited. Prior to the caps imposed in late 2015, at least 100MW of energy unlimited resources were regularly clearing as RegD.
- The proposed MRTS does not consider the capabilities of over 60% of the RegD fleet.



### **Proposal for Ramp Hour MRTS Curve**



Performnance Adjusted MW of RegD

