

## Wind Lost Opportunity Cost Eligibility

Markets and Reliability Committee August 1, 2013

www.pjm.com



- Requirements for wind resources to be eligible for Lost Opportunity
  Cost credits are described in various PJM Manuals
- Per Section 5.2.6 of <u>PJM Manual 28</u>, Operating Agreement Accounting:
  - "Pool-scheduled or self-scheduled wind generators are only eligible for the abovereferenced credit if they:
  - Operated the resource according to PJM Manual requirements for wind resources"
- PJM believes that it is necessary to also state <u>in the Tariff</u> those PJM requirements which must be satisfied in order for a wind generator to be eligible for lost opportunity cost credits.



## **Existing Wind Farm Requirements**

- Provide SCADA capability to transmit data and receive instructions from the Transmission Provider to protect system reliability.<sup>1</sup>
- Provide real time aggregate Wind Farm MW output and meteorological data (wind speed and direction).<sup>2</sup>
- Provide a Market Operations Center (single operational contact) for the processing of all real-time dispatch electronic signals.<sup>3</sup>
- Be dispatchable in the real-time market with an Economic Minimum that is no greater than the higher of its physical operating minimum or its Capacity Interconnection Rights.<sup>4</sup>
  - 1. PJM OATT, Schedule H, Interconnection Requirements for a Wind Generation Facility
  - 2. PJM Manual M14D Generator Operational Requirements, Section 8: Wind Farms Requirements
  - 3. PJM Manual M14D Generator Operational Requirements, Attachment L Wind Farm Communications Model
  - 4. PJM OATT, Part IV, Interconnections with the Transmission System, Section 36.1.1, Interconnection Services for Generation



## **Proposed Solution**

- PJM Tariff, Section 3.2.3(f-4) of Schedule 1, Accounting and Billing, Operating Reserves, is proposed to be updated as shown below.
- These proposed changes will also be applied to the PJM Operating Agreement.

## 3.2.3 Operating Reserves.

(f-4) A Market Seller's wind generating unit that is pool-scheduled or self-scheduled, has SCADA capability to transmit and receive instructions from the Office of the Interconnection, has provided data and established processes to follow PJM basepoints pursuant to the requirements for wind generating units as further detailed in this Agreement, the Tariff and the PJM Manuals, and which is operating as requested by the Office of the Interconnection, the output of which is reduced or suspended at the request of the Office of the Interconnection due to a transmission constraint or other reliability issue, and for which the hourly integrated, real-time LMP at the unit's bus is higher than the unit's offer corresponding to the level of output requested by the Office of the Interconnection (as indicated either by the desired MWs of output from the unit determined by PJM's unit dispatch system or as directed by the PJM dispatcher through a manual override), shall be credited hourly in an amount equal to...