Working to Perfect the Flow of Energy

PJM Manual 12:

Balancing Operations

Revision: 3~~5~~

Effective Date: ~~08/25/2016~~02/01/17

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Dispatch

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PJM Manual 12:
Balancing Operations

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Approval

Approval Date: ~~09/08/2016~~
Effective Date: ~~08/25/2016~~

Chris Pilong, Manager Dispatch

Current Revision

Revision 36 (02/01/17-)

- ***Update to Section 4.4.3to update regulation requirement definition***

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Section 4: Providing Ancillary Services

4.4.3 Determining Regulation Assignment

The PJM RTO's Regulating Requirement is 525 effective MW during ~~off-peak hours (0000 to 0459)~~ off-ramp hours and ~~700~~ 800 effective MW during ~~on-ramp hours~~ ~~on-peak hours (0500 – 2359)~~. The on-ramp and off-ramp period will be determined seasonally, based on system conditions, and posted on PJM.com at:

http://www.pjm.com/markets-and-operations/ancillary-services.aspx

PJM dispatch may increase or decrease the regulation requirements as needed to accommodate system conditions.
Each LSE is required to provide a share of the PJM Regulating Requirement. An LSE's actual hourly Regulation obligation is determined for the hour, after-the-fact, based on the LSE's total load in the PJM RTO, as follows:

$$\text{LSEs Regulation Obligation} = \begin{pmatrix} \text{LSEs Load Allocation \%} \times \\ \text{PJM Assigned Regulation} \end{pmatrix}$$

An LSE may satisfy its Regulation obligation by any of the following methods:

- Self-Scheduled Resources — An LSE can satisfy its Regulation obligation by self-scheduling Regulation.
- Bilateral Transaction — An LSE can make contractual arrangements with other PJM Members that are able to provide Regulation service.
- PJM Regulation Market Purchases — An LSE can purchase its Regulation obligation from the PJM Regulation Market, i.e., from the excess Regulation capability provided to PJM by Resource owners.

All Regulation offers reported to PJM must provide Regulation that has a quality standard of 75% or greater, as established by verification testing.

PJM Actions:

- PJM will notify the Transmission Owners and Generation Owners via the PJM ALL-CALL of changes to the regulation requirement and the expected duration of such change.

PJM Members Actions:

- Each LSE determines its estimated Regulation Obligation for the operating day based on its own forecast load and the information received via the PJM ALL-CALL.
- Resource owners view the hourly regulation market results via Markets Gateway (available at least a half an hour before the operating hour) as to those resources to

which regulation has been assigned. Resource owners that have self-scheduled Regulation on any of their resources inform the PJM dispatcher when those resources are on line and able to provide the self-scheduled Regulation.

- Once regulation on a resource is self-scheduled by a resource owner, it is no longer eligible to participate as a pool assigned regulating resource for the current operating day.

- If purchasing Regulation from another entity, the buyer and seller negotiate the transaction and the buyer submits the transaction through the Regulation Bilateral page of Markets Gateway. The seller must then confirm the transaction via Markets Gateway by 4:00pm the day after the operating day. The rules for these transactions are described in more detail later in this section of the manual.