

Energy Storage Resources Station Power Tariff Definitions

Market and Reliability Committee
March 17, 2010

- **1.3.33B Station Power.**

“Station Power” shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Region or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy used to power synchronous condensers, used for pumping at a pumped storage facility, or used in association with restoration or black start service.

- **Revised Section 1.3.33.B:** ““Station Power” shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Region or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy (i) used to power synchronous condensers; (ii) used for pumping at a pumped storage facility; (iii) used for charging an Energy Storage Resource; or (iv) used in association with restoration or black start service.”
- **New Section 1.3.1G:** “Energy Storage Resource” shall mean flywheel or battery storage facility solely used for short term storage and injection of energy at a later time to participate in the PJM Ancillary Services markets as a Market Seller.

- **Energy Storage Recourses excluded from Station Power.**
 - Energy used for station power is consumed and not resold. PJM II ORDER, 94 FERC ¶61, 251 (March 14, 2001). “The third-party supply of station power is a sale for end use.” PJM III, 95 FERC ¶61,333 (June 1, 2001).
 - The Commission historically has viewed pump storage use not as the consumption of energy, but rather as the storing of energy for later delivery. See 25 FERC ¶ 61,084 (1983). This applies to energy used for Energy Storage Resources.
 - The sale of energy to be used at an Energy Storage Resource storage facility is FERC jurisdictional not sales for consumption. See 66 FERC ¶ 61,268.
 - Synchronous condensers (excluded from the definition of Station Power) provide a critical transmission function by providing a source of reactive power. 61 FERC ¶ 63,009 (1992). The services provided by synchronous condensers, like restoration or blackstart services, are “critical to the maintenance of transmission system integrity and stability,” as compared to station power, which “is local in nature.” PJM II Order. This can be applied to Energy Storage Devices.

- **FERC precedent makes it clear that PJM Tariff should not address the purchase of station power at retail from third parties.**
 - “...Thus, the provision of station power under these circumstances involves a sale of energy by a third party that is not appropriately accounted for by netting. ...Therefore it is not a transaction which we can regulate under the FPA. ... (T)he third-party supply of station power generally is a sale for end use not subject to our jurisdiction, ... We therefore will direct PJM to modify its Tariff ... to ensure that they do not accommodate purchases of station power for end users by those generators who must obtain station power through third-party supply (when there is a negative net output).” PJM II Order.
 - “The Commission held that PJM’s proposed amendments, while generally acceptable, were overly broad because they would encompass instances when a generator was in fact purchasing station power at retail from a third party, which is not appropriate for a wholesale rate schedule. ORDER ON RATE CHANGE APPLICATION 95 FERC ¶ 61, 470 (June 28, 2001); Citing PJM II Order.

- **Monthly Netting**

- “We emphasize that a generator may net against its gross output as measured over a specific time period, typically one hour, ... even though there may be occasions during that one hour when gross output is less than station power requirements. As long as net output is positive as measured over the entire one hour, then netting is appropriate.” PJM II Order.
- PJM applied this to monthly netting See ORDER ON RATE CHANGE APPLICATION 95 FERC ¶ 61, 470 (June 28, 2001).

- Consistent with recent NYISO and MISO tariff revisions approved by the FERC.

- Manual 28 will explain that electric vehicles are supplied at retail even if they sell energy or regulation service at wholesale (i.e. will not be energy solely used for storage and injection and, therefore, not included in the definition of “Energy Storage Resources”).

- There are no changes to Station Power billing and settlement Tariff provisions.
- PJM performs monthly netting of hourly generator output and station power consumption to determine if the following billing adjustments are required:
 - Adjustment to Spot Market Energy billing
 - Adjustment to Non-firm Point-to-point Transmission Service billing (for remote self-supply of station power)
- PJM will exclude from the definition of Station Power energy used to charge Energy Storage Resources the same as energy for pumping at pumped storage hydro facilities, system restoration or black start service, and for synchronous condensing.
- Retail service cannot not be addressed in PJM's Tariff.

- Stakeholder endorsement of proposed Tariff revisions
 - MIC: 3/9/2010 (presentation)
 - MRC: 3/17/2010 (presentation)
 - MIC: 4/13/2010 (vote)
 - MRC: 4/21/2010 (vote)
 - TAC: 4/29/2010
 - MC: 5/6/2010 (vote)

 - FERC filing: 5/2010