Variable Energy Resources Final Rule
Order No. 764 Compliance

Intermittent Resources Task Force
January 22, 2014
Summary of Compliance Filing

- PJM submitted its compliance filing November 12, 2013, with a requested an effective date of January 13, 2014.

- PJM proposes revisions to the PJM Open Access Transmission Tariff Sections 13.8 and 14.6 to:
  - add intra-hour transmission (four equal intervals each consisting of 15-minutes) schedules; and
  - require a 20-minute prior notification period for the submission of transmission schedules in conformity with the Final Rule and PJM’s market rules.

- PJM proposes to amend its pro forma Interconnection Service Agreement (“ISA”) to add the specific meteorological data requirements applicable to Variable Energy Resources (“VERs”).
Intra-Hour Scheduling Requirements

• **15 Minute Scheduling Intervals:**
  - The Commission amends the *pro forma* OATT to provide all transmission customers the option of using transmission scheduling intervals within each operating hour, at 15-minute intervals (Paragraphs 2, and 91).

• **20 Minute prior Notification Period:**
  - Sections 13.8 and 14.6 of the *pro forma* OATT, permits scheduling changes up to 20 minutes before the start of the next schedule change (Paragraph 118).

• The 15 minute scheduling requirements only apply to intertie transactions in RTO markets (P 113).
• **PJM Already Allows 15 Minute Schedule Changes:**

  - PJM’s Day-ahead energy markets allows market participants to schedule quantities of energy in the Day-ahead Energy Market that reflect hourly values that will result from intra-hour scheduling because interchange schedule changes are permitted every 15 minutes and ramp in over a 10 minute period.
• **PJM to Amend Notification Period to 20 Minutes**
  - PJM OATT Sections 13.8 and 14.6 will be revised in the compliance filing to: (i) define “intra-hour as “four intervals consisting of fifteen minute schedules”; and (ii) permit scheduling changes up to 20 minutes (currently up to 30 minutes) before the start of the next schedule change.

• **PJM Seeks to Retain 45 Minute Duration of Schedule Given Alternatives Available to Resources**
  - All PJM interchange transactions are required to be at least 45 minutes in duration (PJM OASIS Regional Transmission and Energy Scheduling Practices at page 38).
Application of the “Consistent With or Superior to” Provisions of the Rule:

- Even with a 45 minimum duration, PJM’s current interchange scheduling rules along with the ability use dynamic schedules (PJM Operating Agreement, Schedule 1, Section 1.12), are consistent with or superior to the intra-hour scheduling requirements of the Final Rule (P 107).
- Dynamic scheduling is permitted under the PJM Operating Agreement, Schedule 1, Section 1.12.
- External service using dynamic schedules are treated the same as internal service and will not be subject to imbalance charges or Balancing Operating Reserve (BOR) charges (see Operating Agreement, Schedule 1 Section 3.2.3(d)).
• VER generators must provide meteorological and forced outage data (Paragraphs 3, 18, 171, and 172).
  – The Commission allows flexibility to negotiate the particular data to be reported and the frequency and timing of data submittals (Page 133 Paragraphs 175, 176, and 180).
  – The Final Rule does not create an obligation for VERs to provide meteorological and forced outage data in cases where the public utility transmission provider is not engaging in power production forecasting (Paragraph 174).

• Wind VERs must provide, at a minimum, site-specific meteorological data including: temperature, wind speed, wind direction, and atmospheric pressure (Paragraph 177).
• PJM Manual 14D, Section 8.2 already includes data reporting requirements for Wind Power Forecasting and generator outage reporting which are consistent with or superior to the Final Rule (See, Paragraph 194).
• PJM does not currently have a solar power production forecasting tool and, therefore, will not need to include data reporting obligations for solar VERs.
• PJM proposes to revise the Interconnection Service Agreement, Schedule H to add the following paragraph:
  “iv. Meteorological Data Reporting Requirement
  Subject to specific requirements in Manual 14D, the wind generation facility shall, at a minimum, be required to provide the Transmission Provider with site-specific meteorological data including: temperature, wind speed, wind direction, and atmospheric pressure.”