PJM Transmission Outage Coordination Processes

JCM Meeting
January 29, 2013

On-Time Outage Definitions:

- Transmission Owners shall use reasonable efforts to submit Transmission Planned Outage schedules one year in advance but by no later than the first of the month six months in advance of the requested start date for all outages that are expected to exceed five working days duration, with regular (at least monthly) updates as new information becomes available.
  - An outage scheduled April 7–15, 2014 must be submitted on or before September 30
  - Six-month study process for April 2014 outages begins on October 1, 2013
- Transmission Owners shall submit notice of all Transmission Planned Outages to the Office of the Interconnection by the first day of the month preceding the month the outage will commence, with updates as new information becomes available.
  - An outage scheduled November 2, 2013 must be submitted on or before September 30, 2013
  - One-month study process for November 2013 outages begins on October 1, 2013
- If notice of a Transmission Planned Outage is not provided in accordance with the requirements in subsection above, and if such outage is determined by the Office of the Interconnection to have the potential to cause significant system impacts, including but not limited to reliability impacts and transmission system congestion, then the Office of the Interconnection may require the Transmission Owner to implement an alternative outage schedule to reduce or avoid such impacts.

On-Time Outage Definitions (continued):

- Outages scheduled for the following Planning year (June 1 – May 31) exceeding 30 days in duration are to be submitted via eDART by February 1 for use in the annual FTR auction
  - An outage greater than 30 days scheduled between June 1, 2013 and May 31, 2014 should be submitted by February 1, 2013
  - Estimated start and stop dates are acceptable
  - Note: The most restrictive on-time requirement is applied (i.e. 6-month rule will be applied to a 30+ day outage starting in June. Therefore such outage must be submitted by December 1 rather than by February 1)
- PJM has the right to deny any outage submitted past 8:00 AM three days prior to the outage start date

Transmission Outage Analysis and Coordination

- 6-Month Studies
  - Studies are performed 6-months in advance of outage month (i.e. analysis performed in October for outages starting in April)
    - All on-time outages greater than 5 days in duration expected to result in system impacts have been submitted so that the study engineer can develop a model to determine the reliability impact of all outages and coordinate with T.O.s, G.O.s, and neighbors
  - Coordination between generation and transmission outages
  - Many variables to consider when developing base case and running studies
    - Load, transfers, planned and unplanned outages
- 1-Month Studies
  - Studies are performed 1-month in advance of outage month
    - All on-time outages expected to result in system impacts have been submitted so that the study engineer can develop a model to determine the reliability impact of all outages
  - Coordination between generation and transmission outages
- Coordination with Neighbors
  - PJM shares outage information with neighbors via NERC SDX as well as email notification via eDART (PJM outage database)
    - Weekly call with MISO to discuss pending outages and coordinate as necessary
    - Bi-weekly call with MISO to discuss longer-term outages
    - Monthly call with TVA to discuss outages and coordination

Transmission Outage Analysis and Coordination

- 3-Day Out Study
  - Fewer variables as study horizon draws closer to real-time
  - Coordination between PJM Operations and Markets
- 2 Days Out Study
  - Engineer performs study similar to 3-day study
  - Approval/denial of each outage ticket is made by 2:00 PM
- Day Ahead Studies
  - Engineer performs initial study similar to 2-day study
    - Includes external outages and results are sent to neighboring RCs
    - Outages are submitted to the PJM Markets group by 10:00 AM
  - Engineer performs a second study at 16:00 to include Day-Ahead unit commitment.
- Coordination with generation owners, transmission owners and neighbors occurs for all processes