FERC Docket EL18-34-000
Fast-Start Pricing

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FERC requested PJM to investigate revising its Tariff to:

1) Expand the units eligible for special pricing treatment to all fast-start resources
2) Include a minimum run time and start-up time requirement in the definition of a fast-start resource
3) Allow full economic minimum relaxation for fast-start resources
4) Allow fast-start resource commitment costs to be reflected in prices
5) Consider fast-start resources within dispatch in a way that minimizes production cost

PJM Response: Definition of Fast Start Resources

PJM plans to propose that resources that meet the following criteria be eligible for Fast Start pricing:

- Startup + Notification Time of 2 hours or less & Minimum Run Time of 2 hours or less
  - Aligns with the set of resources that are eligible to be committed in IT SCED
- Online
- Scheduled by PJM
- Block-loaded or non-block loaded

PJM Response: Economic Minimum Relaxation & Inclusion of Commitment Costs

- Use Integer Relaxation to relax the economic minimum of Fast Start resources to 0 and include their commitment costs in prices
  - Apply integer relaxation in DA and RT markets
    - Still discussing treatment of DA committed units in RT market
  - Include No Load costs throughout the entire run time of the unit
  - Include Startup Costs through the end of the unit's min run time

PJM Response: Separate Dispatch and Pricing Runs

- Solve the dispatch run, followed by a separate pricing run using integer relaxation
- Applies in both DA and RT markets
  - In the DA market, there is a choice of where to take virtual transaction cleared MWs from:
    - Dispatch run

      OR
    - Pricing run
    - Under either scenario, cleared MW are settled at pricing run LMPs
  - Filing will outline impacts of each option

Other Topics: Lost Opportunity Cost

Lost opportunity cost will be paid when dispatch MW from the dispatch run are inconsistent with the LMP from the pricing run

- Eligible resources (DA and RT):
  - Online, flexible generators (regardless of fast-start classification)
    - Also includes other resources treated similar to online, flexible generators: economic demand response that is reduced in the dispatch solution, price-sensitive dispatchable interchange
- Ineligible resources (DA and RT):
  - Offline resources (includes DR that has not been dispatched)
  - CTS transactions
  - Virtual transactions (make-whole will be paid if cleared when uneconomic, if cleared MWs comes from dispatch run)

Other Topics

- Market Power Mitigation
  - PJM is discussing the potential need to enhance the TPS test to address market power mitigation for Fast Start pricing with the IMM
- Avoiding false negative and false positive Shortage Pricing
  - If shortage is present in the dispatch run, enforce a shortage in the pricing run
  - If there are ample reserves in the dispatch run, do not allow a reserve deficiency in the pricing run
  - Do not allow resources to provide reserves below their eco min