

Pivotal Supplier (“TPS”) test.³ This argument completely ignores the issue prompting the Commission to request the informational report. The Commission correctly identifies the issue, that fast start pricing may create market power in locations that are not detected by the status quo implementation of the TPS test. If PJM’s argument were true and market power could only exist if the status quo TPS test detected it, then there would be no need for the informational report at all. The September 27th Report’s circular argument does nothing to address the issue.

The September 27th Report reveals that the status quo TPS test implementation does nothing to detect or mitigate market power created by changes to power flow in the fast start pricing run. As the September 27th Report states “the transmission constraint binding pattern between the dispatch and pricing runs will not impact the results of the TPS test or whether a supplier is considered to have market power because the TPS test is designed to occur prior to both the dispatch and pricing runs as it is looking for market power based on the physical system at the time of commitment decisions.”⁴ This means that any market power created by changes to power flow in the pricing run is never evaluated for market power mitigation. PJM recognizes and accepts the failure of its approach to the detection and mitigation of market power under fast start pricing.

The September 27th Report goes on to incorrectly state that “any such difference in binding constraints resulting from application of Integer Relaxation or review of the Composite Energy Offers do not bear on the question of whether there is an opportunity to exercise market power.”⁵ The statement is incorrect because when different constraints bind in the pricing run, they create different local markets with different local market power characteristics. PJM’s proposed assessment of local market power performed prior to

³ September 27th Report at 2, 5, and 6.

⁴ September 27th Report at 5.

⁵ September 27th Report at 5.

resource commitment would be incorrect because it would not consider the local market power conditions in the pricing run. Suppliers would have opportunities to exercise market power based on the local markets created in the pricing run, even though the pricing run occurs after resource commitment, because pricing and congestion patterns generally recur in the PJM market. The September 27th Report's argument relies on the fact that the supplier has limited opportunity to change an offer once a resource is committed. But PJM runs the market every five minutes, and the same market conditions arise over and over and day after day. Suppliers recognize this and will take advantage of it. Suppliers will face the same market power conditions at other times. Suppliers have multiple resources in the same local markets and have the ability to modify the offers of other resources in the same local markets. The transparent failure to define and address market power in the pricing run will create known opportunities for the exercise of market power. PJM recognizes and accepts the failure of its approach to the detection and mitigation of market power under fast start pricing but asserts that the failure will not have an impact on market outcomes.

B. PJM Offer Capping Rules Rely on Dispatch, Not Commitment Reasons.

PJM applies offer caps if the TPS test is failed. The fact that PJM does not use its tools to apply the TPS test at other times than commitment is an implementation choice. Applying the TPS test at the time of commitment is not a philosophy, as claimed by the September 27th Report, nor is it based on any economic logic.⁶ It is an implementation choice.

The PJM Operating Agreement (OA) defines the TPS test philosophy, that offer caps apply when “any generation resource may be dispatched out of economic merit order to maintain system reliability as a result of limits on transmission capability.”⁷ The OA says

⁶ September 27th Report at 8-9.

⁷ OA § 6.4.1(a).

nothing about whether a resource is “being committed out of merit,” contrary to the claims in the September 27th Report.⁸ The OA references dispatch and not commitment as the basis for offer capping. The offer caps apply for the entire commitment period and are determined at the time of commitment, but the commitment reason is not the determining factor for applying offer caps for market power mitigation. The determining factor is whether the supplier is pivotal in providing relief to a constraint. The TPS test determination of whether a supplier is pivotal depends on the supplier’s total constraint relief MW from both committed and uncommitted resources. Total constraint relief MW depend on both commitment and dispatch of the supplier’s resources.

Some resources belonging to pivotal suppliers are committed in merit order regardless of constraints, but transmission constraints require the dispatch of more MW, out of merit order. The dispatch, not the economic commitment, is the reason such resources fail the TPS test. This is especially the case for the day-ahead market, which determines market power based on the dispatch solution of the entire PJM system for the day.

In real time, resources belonging to pivotal suppliers are committed for transmission constraints. After the initial commitment period ends or after an intraday offer update, they are reevaluated by the online TPS test. In some cases, these committed resources do not fail the online TPS test because they have no additional dispatch MW to relieve the constraint. This occurs when the resource is operating at its economic maximum output MW. The commitment reason is relief of the constraint. The need for constraint relief from the resource persists when the resource is reevaluated by the online TPS test. However, the resource is not included in the TPS test because it has no additional MW to dispatch for constraint relief. It is already providing its maximum output. In this situation, the supplier has market power and the resource commitment reason is tied to that market power.

⁸ September 27th Report at 2.

However, contrary to the claims in the September 27th Report, the commitment reason does not determine the TPS test result. The TPS test result is instead determined by the ability of the market to dispatch additional MW from the resource to relieve the constraint.

These cases show that the fact that PJM implements the TPS test primarily at the time of commitment does not mean that the TPS test is tied to the commitment reason for the resource. The PJM Market Rules do not define market power by the commitment reason, as claimed in the September 27th Report.⁹ The TPS test evaluates incremental MW from resources, which resources can provide through commitment or dispatch.

Under fast start pricing, the pricing run relies on a different dispatch of the system than the dispatch run. If PJM dispatches a supplier's resources differently in the pricing run such that the supplier is one of three jointly pivotal suppliers for the relief of a constraint, the supplier can exercise market power and should be subject to offer capping in the same way as a resource that is one of three jointly pivotal suppliers for the relief of a constraint in the dispatch run. The resource commitment reason is not relevant.

C. Current Commitment and Dispatch Tools Attempt to Capture the Same Market Conditions; The Fast Start Pricing Run Does Not.

PJM does not currently evaluate the TPS test using the real-time security constrained economic dispatch ("RT SCED") tool, which is the basis for the dispatch run under fast start pricing. The September 27th Report's argument is that if PJM does not apply the TPS test in the RT SCED dispatch run, it should not apply the TPS test in the pricing run. This argument ignores PJM's ability to implement market power mitigation using PJM's other tools. PJM uses the intermediate term SCED ("IT SCED") for market power mitigation in the real-time market and PowerGEM's PROBE software for market power mitigation in the day-ahead market.¹⁰ PJM provided no software restriction, no operational concern and no

⁹ September 27th Report at 2.

¹⁰ For more information on PROBE, see <https://www.power-gem.com/PROBE_ISO.html>.

other reason for not using its current tools to mitigate market power in the pricing run. Currently these tools evaluate market power under the dispatch run market design because it is the only market solution. There is no fast start pricing run. Under fast start pricing, PJM should be required to mitigate market power using these tools to solve the fast start pricing solution. Both IT SCED and PROBE could apply integer relaxation to evaluate the TPS test results in the pricing run.

The September 27th Report makes a number of arguments about drastic changes to software, computational burden, loss of frequency control, and price volatility that are overstated, inaccurate and irrelevant.¹¹ PJM should have considered all the implications of its fast start pricing proposal prior to filing it, including maintaining effective market power mitigation. Integer relaxation and the decoupling of dispatch directions and price incentives as part of fast start pricing are the actual drastic changes to the fundamental market design that could lead to price volatility and unintended consequences. Under the fast start pricing paradigm, ensuring that market sellers do not have the opportunity to exercise market power is a necessary design element to ensure competitive results in the PJM energy market. Implementation of the TPS test using integer relaxation in IT SCED and PROBE, consistent with PJM's current TPS test implementation, would create little additional burden or operational changes for PJM.

¹¹ September 27th Report at 9–12.

II. CONCLUSION

The Market Monitor respectfully requests that the Commission afford due consideration to these comments as the Commission resolves the issues raised in this proceeding.

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Eagleville, Pennsylvania,
this 15th day of October, 2018.



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