



Market Path/Interface Pricing Point Alignment

Problem Statement

Under PJM's current business rules, transactions can be scheduled to an interface based on a contract transmission path, but pricing points are developed and applied based on the electrical impact of the external power source on PJM tie lines, regardless of contract transmission path. PJM establishes prices for transactions with external balancing authorities by assigning interface pricing points to individual balancing authorities based on the Generation Control Area (source) and Load Control Area (sink) as specified on the NERC Tag.

The current approach will correctly identify the interface pricing point only if the market participant provides the complete path in the NERC Tag. This approach will not correctly identify the interface pricing point if market participants submit external energy schedules in a manner that allows for energy settlements to be inconsistent with the actual power flow. Scheduling energy inconsistent with power flows creates harmful market inefficiencies, regardless of intent. Intentionally scheduling energy inconsistent with power flows can constitute prohibited market manipulation.

Participants can use a number of approaches to exploit this inconsistency, including: i) breaking a single transaction, from generation to load, into artificial segments for the purpose of receiving higher prices than are consistent with the actual complete transaction and inconsistent with the actual power flow; ii) submitting individual simultaneous transactions, each with a separate Tag, that together form a complete path, from generation to load, that results in receiving higher prices than are consistent with the actual complete transaction and inconsistent with the actual power flow; and iii) submitting multiple transactions that are in the opposite direction of a portion of a larger transaction schedule so as to cancel out the physical flow that would otherwise occur, resulting in prices than are consistent with the actual complete transaction and inconsistent with the actual power flow. Use of these approaches leads to incorrect and noncompetitive pricing of transactions.

Issue Source

The contract paths of external energy transactions are not an accurate representation of where power actually flows. PJM's current interface pricing rules permit market participants to schedule on paths which are inconsistent with actual power flows and with efficient and competitive markets. On July 29, 2014, after internal discussions, PJM and the Market Monitor

submitted a “Joint Statement on Interchange Scheduling” to the PJM Stakeholders.¹ This joint statement specifically notes that “the key in these cases would be whether PJM and/or the Market Monitor believes that the schedules together represent a method by which to extract revenues based on interface price differentials without inducing physical energy flow between balancing authorities.” The joint statement has served notice to the PJM market participants that various forms of scheduling behavior may be subject to referral to the FERC Office of Enforcement. The notice has reduced but not eliminated the volume of scheduling practices inconsistent with actual power flows, which in at least some cases represents manipulative conduct. The notice is not a long term solution to the market design issue. Explicit rules are needed that promote market efficiency and clearly prohibit unacceptable behavior.

Key Work Activities

1. Develop business rules to explicitly ban the identified scheduling behavior.
2. Develop settlement rules that result in pricing that is consistent with actual power flows.
3. Review and modify as necessary interface pricing point assignments.

Expected Deliverables

Revised Tariff and Manual language.

Expected Overall Duration of Work

Work to address this problem can be completed within three months.

¹ See joint statement of PJM and the MMU re Interchange Scheduling issued July 29, 2014, which can be accessed at: http://www.monitoringanalytics.com/reports/Market_Messages/Messages/PJM_IMM_Statement_on_Interchange_Scheduling_20140729.pdf.