PJM's Mitigation Program and Compliance with Order No. 719

Jeffrey Mayes Howard Haas Joseph Bowring

February 24, 2009



The current role of the Market Monitoring Unit (MMU) in implementing PJM's mitigation program fully complies with Order No. 719.





- Order No. 719 provides that the 2007 settlement on MMU issues "is in accord with our determinations in this final rule regarding MMU structure and tools." (at P 330)
- This is consistent with PJM's expressed intent to preserve the status quo.





The Preamble of 719 Recognizes 9 Reasons Why the MMU Should Be Involved with Mitigation: Prospective Inputs and Retrospective

- "Greater conflict of interest for the RTO to administer mitigation, as it has a vested interest in keeping its market participants happy"
- 2. "MMU serves as a useful buffer between the RTO and the market participants, performing what is often viewed as a hostile act"
- 3. "Inherent tension between mitigation and RTO goal of promoting new markets"
- 4. "MMU better equipped by training and market access to detect the need for mitigation"
- 5. MMU benefits from insight gained from performing mitigation



The Preamble of 719 Recognizes 9 Reasons Why the MMU Should Be Involved with Mitigation: Prospective Inputs and Retrospective (cont'd):

- 6. "If removed from tariff administration, the MMU would not have access to the mitigation settlement process and thus could not adequately monitor the RTO's mitigation performance."
- 7. Unnecessary duplication of costs because the MMU must maintain capabilities in order to monitor the RTO's conduct of mitigation
- 8. Extensive transition costs and software licensing concerns
- 9. "There is no empirical evidence of an existing problem with the MMUs performing mitigation."



Internal MMU's and Mitigation

- Internal MMUs may administer all aspects of mitigation (P 374)
 - Prospective
 - Retrospective



External MMU's and Mitigation

- May "conduct retrospective mitigation"
- "May provide the inputs required by the RTO... to conduct prospective mitigation"
 - Inputs include "reference levels, identifying system constraints, cost calculations and the like"
 - This outlines, in part, the role the MMU currently has in PJM
 - Does not limit the MMU to providing inputs as "advice" that "may" be taken by the RTO
 - PJM's proposed changes would limit MMU to "advice" that "may" be taken.



External MMU's and Mitigation (cont.)

- Order implies that External MMUs should not otherwise conduct prospective mitigation, but should monitor the RTO's conduct of prospective mitigation
 - MMU does not currently conduct prospective mitigation
 - MMU monitors RTP's conduct of prospective mitigation



What is "Prospective Mitigation"?

 Prospective mitigation "include[s] only mitigation that can affect market outcomes on a going forward basis, such as altering the prices of offers or altering the physical parameters of offers (e.g., ramp rates and start-up times) at or before the time they considered in a market solution" (P 275)



Mitigation in the PJM Energy Markets

- Local market power mitigation
 - Transmission constraints create local markets with structural market power
 - TPS test used to determine whether a participant has market power in the defined market
 - If a participant has market power, participant's offer is mitigated to the lesser of price or cost
 - If a participant does not have market power, participant's offer is unaffected
- Capacity resources have must offer requirement in Day-Ahead Energy Market
- Parameter limited schedules



Mitigation in Other PJM Markets

- RPM
 - Tight markets by design
 - TPS test used in defined market(s)
- Regulation Market
 - Small number of dominant suppliers
 - Inelastic demand
 - TPS test used in defined hourly markets
- FTRs
 - FTR Forfeiture Rule designed to discourage gaming of FTR values in the Day-Ahead Energy Market



MMU Role in Mitigation: Compliant with 719

- Energy market: MMU has chaired the CDTF that develops cost inputs
- RPM: MMU reviews detailed data, discusses and agrees to offer caps used by participants in RPM
- RPM: MMU performs the PMSS (preliminary market structure screen)
- RPM: MMU verifies opportunity cost calculation/verification
- Basis for black start and deactivation avoidance costof-service formula rates

- FTR: MMU administers the FTR forfeiture rule
- The MMU monitors PJM's administration of the automated process that applies the TPS test



The MMU's Role in Developing Inputs: Compliant with 719

- The MMU develops inputs for:
 - RPM avoidable cost rates
 - Operational parameter matrix
- The MMU develops preliminary market structure screens (structural analysis)
- The MMU consults with and verifies documentation from market participants relating to marginal costs and opportunity costs
- The MMU assists the development of and agrees to cost inputs to formula rates



The MMU's Role in Developing Inputs (cont'd)

 Market Participants typically use the inputs that they have agreed to with the MMU

14

• The MMU has successfully engaged in this process for nearly ten years

- The MMU must actively, directly and independently administer the process for advance approval of the inputs for use in prospective mitigation proposed by Market Participants and for developing default values, including those filed at the FERC.
- This role cannot be at the discretion of PJM, and the tariff must require an active and direct role for the MMU in this process, not a merely advisory one.
- PJM should not propose any revisions inconsistent with the foregoing .



- The MMU should conduct the stakeholder process to develop inputs for mitigation in a manner allowing it an equal or enhanced development and oversight role relative to that currently defined in the tariff and market rules:
 - All processes for developing default inputs for use in prospective mitigation must be under the purview of the MMU, (e.g. CDTF), and the tariff should be revised to clearly state the MMU's role.
 - Where appropriate (e.g. ACR) default values developed by the MMU through the above process must be codified by PJM in filings with the Commission.







- Five Critical Areas of current MMU Input to Prospective Mitigation
 - Unit-specific Avoided Cost Rates in RPM
 - Default Avoided Cost Rates in RPM
 - Parameter Limited Schedules Matrix (defaults)
 - Unit-specific exceptions to the Parameter Limited Schedule Matrix

- Seller Offer Caps in Energy Market
- Seller Offer Caps in the Regulation Market



What the MMU Does <u>Not</u> Do: Compliant with 719

- The MMU does not run the TPS test, clear the markets or dispatch units
- Thus, the MMU does not "conduct prospective mitigation"
- The MMU does not tell market participants what to offer
- The MMU does not tell PJM what offers to accept/reject
- Thus, there is no "altering the price of offers or altering the physical parameters of offers" (P 375)
- The MMU does not even "provide the inputs required by the RTO or ISO to conduct prospective mitigation" as authorized by the rule (P 375)



©2009

- Consequently, the tariff should be revised only:
 - to clarify and specify that the Market Monitor performs a function, if its role is not currently expressly stated in the tariff;
 - to relocate all provisions that the MMU administers to Attachment M; and
 - to effect other necessary relatively minor and mostly non-substantive changes.





PJM's proposals would violate the settlement and disrupt the status quo

- PJM's proposed changes would marginalize the MMU in preparing the inputs to prospective mitigation, contrary to the rationales expressed in Order No. 719 and the 2007 MMU settlement by:
 - Denying the MMU an opportunity to develop and agree to the inputs;
 - Assigning PJM the responsibility of developing and approving the inputs;
 - Raising issues about the MMU's access to relevant data; and
 - Resulting in PJM's wasteful duplication of the MMU's efforts.

PJM's proposals would violate the settlement and disrupt the status quo

- PJM proposes to remove the MMU and places PJM in charge of producing the following key inputs:
 - RPM Avoided Cost Rate Calculations, Attachment DD § 6
 - Opportunity Cost Calculation, OA Schedule 1 § 3.2.3(f-3)



PJM's proposals would violate the settlement and disrupt the status quo

- PJM's changes often include the following provision: ..." which [PJM] determination may be based on advice and analysis provided to the **Office of Interconnection by the Market Monitoring Unit**"
- This means PJM
 - Would develop the inputs
 - Does not have to request any advice or analysis
 - Does not have to explain why it ignores any such advice or analysis



PJM's proposals would violate the settlement and disrupt the status quo

- Under PJM's proposal, PJM would not be required to:
 - Include the MMU in communications or negotiations with Market Participants
 - Inform the MMU of requests
 - **o** Share the data that supports their content
 - **o** Inform the MMU that a determination has been made
- Experience has shown that if PJM is not required to take these actions, it will not



Parameter Limited Schedule Determination: PJM approach in practice

- Actual process illustrates the issues identified by the Commission in Order 719
- PJM did not inform the MMU that it intended to disregard the approved rule which required equal participation of the MMU in the process (and originally involved only the MMU)
- PJM did not inform the MMU that it received requests for exceptions
- PJM did not explain its determinations except when requested



PJM Omits Changes Necessary to Preserve the Status Quo and Sustain the Settlement

- PJM fails to revise the tariff to clarify that the MMU performs the following functions, which will allow it to displace the MMU from those functions:
 - Seller Offer Caps, OA Schedule 1 § 6.4.2 (MMU role not specified)
 - Minimum Generator Operating Parameters, OA Schedule 1 § 6.6 (proposed)



Evaluating PJM's Approach to Compliance in Light of the Commission's Expressed Concerns

 None of the Commission's stated rationales support PJM's views about what is necessary for compliance.

Commission Concern—Conflict of Interest:

- "[T]here is an inherent conflict of interest in an MMU conducting mitigation and also opining on the state of the market, the health of which may in part reflect the results of that mitigation" (P 371).
 - This is not a basis for limiting "input" to "advice":
 - MMU does not conduct in prospective mitigation under current arrangements
 - MMU provides inputs, as contemplated under 719
 - FERC recognized a greater conflict of interest by the RTO's trying to appease members
 - FERC recognized between mitigation and RTO goal to promote markets



Commission Concern— Interference with Market Operations

- As FERC points out: "It is only prospective mitigation that creates a potential conflict of interest for an MMU... [W]e consider prospective mitigation to include only mitigation that can affect market outcomes on a forward going basis, ... at or before the time they are considered in a market solution" (P 375)
 - Status quo is in compliance with 719
 - MMU does not engage in prospective mitigation under current arrangements
 - MMU provides inputs, as contemplated under 719



Commission Concern—Independence

- "[B]y supporting RTOs and ISOs in tariff administration, MMUs become subordinate to the RTO or ISO, thus weakening their independence" (P374).
- "This separation of functions will serve to eliminate RTO or ISO influence over the MMUs, and remove the concern that MMU assistance in mitigation makes it subordinate to the RTO or ISO" (P 378)
 - This is no basis for limiting MMU to "input" as "advice"
 - MMU does not engage in prospective mitigation under current arrangements
 - MMU provides inputs, as contemplated under 719





Commission Concern—MMU Expertise

- Allowing MMU to provide the inputs "will enable the RTO or ISO to use the considerable expertise and software capabilities developed by their MMUs" (P 375)
- FERC states plainly that RTO's should rely on MMU for *the* "inputs"
- MMU currently provides the inputs, as contemplated under 719





Commission Concern— Wasteful Duplication

- MMU must provide inputs and this "… will enable the RTO or ISO to … reduce wasteful duplication" (P 375)
- MMU should be *the* determinant of inputs used to perform mitigation.



Defining "Purely Administrative Matters"

- "We also direct that purely administrative matters ... (enforcement of late fees and the untimely submission of outage reports and meter data), should be conducted by the RTO or ISO, rather than the MMU. Such activities are remote from the core duties that this Final Rule assigns to the market monitoring function" (P 377)
- This is no basis for limiting MMU to "input" as "advice"



Commission Concern—Objectivity

- "[W]e direct the RTOs and ISOs to review their mitigation tariff provisions with a view to making them as non-discretionary as possible" (P 379)
- PJM's proposals would move discretion to PJM, not limit it.
 - Greater conflict of interest by the RTO's trying to make members happy
 - Tension between mitigation and RTO goal to promote new markets
 - MMU better equipped by training and data access to determine need for mitigation



Commission Concern—Clarity

- "We ... direct that the tariffs of RTOs and ISOs clearly state which functions are to be performed by MMUs, and which by the RTO or ISO" (P 378)
 - PJM's proposals would confuse rather than clarify the respective roles as contemplated in Order 719 and enumerated in the settlement.
 - Need to clarify and specify that the Market Monitor performs specific functions, if not currently expressly stated in the tariff;
 - Need to relocate all provisions that the MMU administers to Attachment M; and



At Issue: The Future of Mitigation in PJM

- Correctly applied mitigation is crucial to the competitiveness of PJM markets
- Mitigation must include inputs that need to be scrutinized by an entity with the experience, knowledge and incentive to examine them objectively and critically
- Mitigation cannot be effective if it relies on after the fact referrals and other legal/regulatory actions

