PJM and the Market Monitoring Unit (MMU) share the overriding goal to support and enhance the competitiveness of PJM markets. This document is meant to improve cooperative interaction between PJM and the MMU in support of this common goal.

Both PJM and the MMU want to improve the level of understanding concerning actions at FERC and reports to the stakeholders.

PJM and the MMU voluntarily agree to follow this Protocol in a cooperative spirit, recognizing that these guidelines do not infringe upon the independence of the MMU or the independence of PJM.

Protocol for Improved Interaction
I. Cooperation on Significant Proposals to Change Market Design Elements

PJM and the MMU will strive to engage in the meaningful exchange of ideas and information to improve PJM markets.

- For significant market rule or market design changes proposals that are initiated by PJM:
  - PJM will notify the MMU prior to initiating stakeholder process discussions that are expected to result in changes to PJM Market Rules (which includes manuals.)
  - The notification will be in writing (through e-mail) to the MMU’s President (Joe Bowring), General Counsel (Jeffrey Mayes) and Chief Economist (Howard Haas).
  - The notification will briefly outline the reasons for the proposed change, the initial PJM assessment of the changes required to meet the objective and the timeline for resolution of the issue.
  - Within two weeks of such notification, the MMU will provide PJM with a written response on the issue that includes the MMU’s preliminary opinion on the proposed changes.
  - PJM and the MMU will meet to discuss the proposal prior to initiating stakeholder discussions.

- For significant market rule or market design changes that are recommended by the MMU:
  - The MMU will notify PJM prior to public release of recommendations that would require changes in PJM Market Rules (which includes manuals.)
  - The notification will be in writing (through e-mail) to the Senior Vice President, Markets (Andy Ott), Vice President, Market Operations (Stu Bresler) and the CEO’s Liaison (David Withrow).
  - The notification will briefly outline the reasons for the recommendation and the potential improvements or benefits that will result from the recommendation.
  - Within two weeks of such notification, PJM will provide the MMU with a written response to the recommendation that includes PJM’s preliminary opinion on the
recommendation and will indicate PJM’s intended actions, if any, concerning the issue.

- The MMU and PJM will meet to discuss the proposal prior to initiating stakeholder discussions.

- Public presentations, FERC filings or reports are not viewed as satisfying the objectives for direct notification described in this section.
  - However, both PJM and the MMU will attempt to share short excerpts of reports for purposes of fact-checking and receiving input on language.

II. Prior Notification on Significant Documents Related to PJM Markets

PJM and the MMU will strive to provide sufficient notice to each other prior to the public release of significant documents related to the structure of PJM markets.

- Public releases of significant documents about which PJM and the MMU should notify each other in advance include:
  - Significant FERC filings that initiate new proceedings related to Market Rules
  - Market reports or recommendations to PJM stakeholders on market design
  - Presentations to stakeholders on new market issues or new positions on market issues

- Sufficient notice means sharing a written summary describing the substantive issues or recommendations within those documents at least three business days in advance of the material being publicly released, if the information is available.
  - When positions are not final three business days in advance, PJM and the MMU will keep the other informed as to status and the nature of the issues
  - Draft documents should be shared when positions are final, prior to filing significant documents
Should PJM or the MMU develop substantive changes in the drafting of these materials after notification, the other party should be notified in a cooperative manner as soon as practicable.

### III. Change Management

_PJM and the MMU will seek to facilitate smooth software changes or upgrades that may impact each other’s ability to provide or receive data._

- PJM will notify the MMU prior to significant software changes impacting the operation of PJM Markets.
- PJM will notify the MMU when it begins the process of designing and contracting for such software changes and discuss the purpose for such changes. PJM will continue to keep the MMU informed of progress on such changes.
  - PJM will keep the MMU informed of the expected delivery and implementation dates for such software changes.
  - PJM will provide the MMU with a clear explanation of such software changes and the results of any testing, if available.
- All notifications in this section will be in writing (through e-mail) to the MMU’s President (Joe Bowring), Chief Economist (Howard Haas) and Chief Information Officer (Ellen Krawiec).
- If MMU software is used to calculate results that affect PJM bills, the MMU will notify PJM prior to significant changes to that software.
  - The MMU will keep PJM informed of the expected implementation dates for such software changes.
  - The MMU will provide PJM with a clear explanation of the changes and the results of any testing, if available.
- If PJM or the MMU encounters any problems with this change management notification process, each party will notify the other in writing.
  - Within two weeks of such notification, PJM or the MMU will respond to the other’s concerns with a proposed resolution to the issue.
Nothing in this Protocol document overrides the provisions of the Service Level Agreement (SLA) between PJM and the MMU.

IV. Board Competitive Market Committee (CMC) / Regulatory Committees

Both PJM and the MMU seek to help the PJM Board ensure the competitiveness of PJM’s markets.

- PJM’s Senior Vice President, Markets (Andy Ott) and the Market Monitor (Joe Bowring) will jointly report on the on-going implementation of this Protocol and any improvements during the joint closed session of these Board Committees.

- The CMC Secretary (Andy Ott) and the Market Monitor (Joe Bowring) will cooperatively develop discussion items related to PJM Market Rules for their joint closed session with these Board Committees.

V. Information Exchange

- PJM and the MMU agree the current SLA covers the exchange of data and information

- If the MMU requests data, documentation, logic diagrams or other information related to market operations in PJM, PJM will provide such data or information if it is in PJM’s possession.
  - If PJM is not in possession of such data or information, PJM will assist MMU efforts to acquire data, documentation, logic diagrams or other information from its software vendors.

- If PJM requests data, documentation, logic diagrams or other information related to the functions of the Market Monitor, the MMU will provide such data or information if it is in the MMU’s possession and it is not proprietary.
If the MMU is not in possession of such data or information, or if the MMU believes such data or information is proprietary, the MMU’s President (Joe Bowring) will immediately notify the Senior Vice President, Markets (Andy Ott).

If the MMU believes that such data or information is proprietary to a third party, the MMU’s President (Joe Bowring) will immediately notify the Senior Vice President, Markets (Andy Ott).

If the MMU believes that such documentation or logic diagrams are proprietary to the MMU, the MMU and PJM will sign a licensing agreement at zero cost to PJM under which the information will be provided.

- Both parties will make a good-faith effort to resolve each individual situation and to minimize misunderstanding.

VI. FERC Enforcement / Market Behavior Concerns

Market participants’ confidence in the integrity of PJM’s markets is of paramount importance. PJM and the MMU seek to cooperate at all times to identify and deter inappropriate behavior in these markets.

- PJM will notify the MMU (Joe Bowring) in writing (through email) when PJM becomes concerned with specific market participant behavior.
  - Within one business day of the notification, the MMU will update PJM regarding actions the MMU has taken on the issue.

- The MMU will notify PJM (Andy Ott) in writing (through email) when it becomes concerned with specific market participant behavior which creates major issues for the PJM markets.
  - Within one business day, PJM market operations staff will provide the MMU with any information that can be obtained related to the subject behavior.

- PJM will notify the MMU’s President (Joe Bowring). General Counsel (Jeffrey Mayes) and Chief Economist (Howard Haas):
- when PJM contacts FERC concerning behavior of market participants, and provide the MMU with sufficient details about the behavior and PJM’s specific concerns relating to that behavior; or
- prior to submitting a self-report to FERC regarding potential market-related tariff violations.

- The MMU will notify PJM’s Senior Vice President, Markets (Andy Ott), Vice President, Market Operations (Stu Bresler) and the CEO’s Liaison (David Withrow), consistent with the cooperative spirit of this document, if the MMU believes it is consistent with its responsibilities to FERC, when:
  - the MMU makes a formal referral to FERC concerning the behavior of a market participant(s), and provide PJM with the MMU’s specific concerns relating to that behavior.

- The MMU will notify PJM’s Senior Vice President, Markets (Andy Ott), Vice President, Market Operations (Stu Bresler) and the CEO’s Liaison (David Withrow) when:
  - the MMU becomes concerned with actions of PJM related to market operation that could impact the competitive operation of the PJM market; or
  - the MMU is concerned that PJM may be operating in a manner inconsistent with the PJM Agreements.
I. Managing Issues of Continued Concern

In addition to monitoring for actual and potential exercises of market power, the MMU is required under Attachment M to inform stakeholders and regulators about the performance of PJM markets and PJM market design, and to recommend improvements. The MMU will acknowledge prior decisions by regulators and stakeholders when the MMU makes recommendations on these matters.

- On issues related to market rules or market design, the MMU is required under Attachment M to explain any concerns about market outcomes, market rules and market design and to recommend changes when the MMU believes changes are needed, even when the MMU's views conflict with formal decisions by FERC or state regulators.

- For issues on which the MMU has a continuing concern after FERC or state regulators have issued a formal decision, the MMU will recognize and address the relevant FERC order and/or state regulatory decision in explaining the MMU's concerns about market outcomes, market rules and/or market design.

- For issues on which the MMU's position differs from that adopted by the PJM Members Committee, the MMU will recognize the Members Committee decision and summarize the stakeholder process that led to that decision, in explaining the MMU's concerns about market outcomes, market rules and/or market design.