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Seventh-Eighth Revised Sheet No. 446 Superseding Sixth-Seventh Revised Sheet No. 446

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ATTACHMENT M

PJM MARKET MONITORING PLAN

I. **OBJECTIVES**

The objectives of this PJM Market Monitoring Plan are to maintain an independent Market Monitoring Unit that will objectively monitor, investigate, evaluate and report on the PJM Markets, including, but not limited to, structural, design or operational flaws in the PJM Markets or the exercise of market power or manipulation in the PJM Markets. The Market Monitoring Unit shall have exclusive responsibility for administering the Plan. The Market Monitoring Unit shall pursue these objectives in a manner consistent with this Attachment M and all applicable PJM Market Rules, PJM Manuals, and PJM committee procedures. This Plan shall apply to PJM, the Market Monitor, the Market Monitoring Unit, Market Participants and all entities that take service under the PJM Tariff... In the event of any conflict or inconsistency between the a provisions contained in the PlanAttachment M and a provision of provisions found in any other PJM Market Rule, document including the PJM Tariff, PJM Operating Agreement, PJM Reliability Assurance Agreement or the Market Monitoring Services Agreement dated December 19, 2007 entered into by and between PJM and Monitoring Analytics, LLC, and any amendments thereto, the termsprovision of the PlanAttachment M shall control.

II. **DEFINITIONS**

Unless the context otherwise requires, for purposes of this Plan, capitalized terms shall have the meanings given below or in Section I of the PJM Tariff.

- "Authorized Government Agency" means a regulatory body or government agency, with jurisdiction over PJM, the PJM Market, or any entity doing business in the PJM Market, including, but not limited to, the Commission, State Commissions, and state and federal attorneys general.
- (b) "Commission" means the Federal Energy Regulatory Commission.
- (c) "Corrective Action" means an action set forth in section IV.I of this Plan.
- "Cost Development Guidelines" means the manual that includes the detailed method for determining the costs entering into the components of cost for operating capacity in accordance with Schedule 2 of the Operating Agreement.

Issued By: Craig Glazer Effective: August 1, 2008

Vice President, Federal Government Policy

Issued On: July 7, 2008

Fifth Sixth Revised Sheet No. 448 Superseding Fourth-Fifth Revised Sheet No. 448

III. MARKET MONITORING UNIT

- **A.** Establishment: PJM shall establish or retain a Market Monitoring Unit to perform exclusively the functions set forth in this Plan.
- **B.** <u>Composition</u>: The Market Monitoring Unit shall be comprised of personnel having the experience and qualifications necessary to implement this Plan. In carrying out its responsibilities, the Market Monitoring Unit may retain such consultants, attorneys and experts as it deems necessary.
- C. <u>Independence</u>: The Market Monitoring Unit shall be independent from, and not subject to, the direction or supervision of any person or entity, with the exception of the PJM Board as specified in Section III.D, and the Commission. No person or entity shall have the right to preview, screen, alter, delete, or otherwise exercise editorial control over or delay Market Monitoring Unit actions or investigations or the findings, conclusions, and recommendations developed by the Market Monitoring Unit that fall within the scope of market monitoring responsibilities contained in this Plan. Nothing in this section shall be interpreted to exempt the Market Monitoring Unit from any applicable provision of state or federal law.

D. Role of PJM Board:

- The PJM Board, excluding any representatives of PJM management thereon, shall have the authority and responsibility:
 - a. To review the budget of the Market Monitoring Unit, consistent with the budget processes and requirements set forth in Section III.E.
 - b. To propose to terminate, retain by contract renewal or replace the Market Monitoring Unit, consistent with the requirements of Section III.F.
- 2. The PJM Board and the Market Monitor shall meet and confer from time to time on matters relevant to the discharge of the PJM Board's and the Market Monitoring Unit's duties under this Plan.
- 3. Other than the matters set forth in Sections III.D.1 and D.2, the PJM Board shall have no responsibility for, or authority over, the Market Monitoring Unit.

Issued By: Craig Glazer Effective: August 1, 2008

Vice President, Federal Government Policy

Issued On: July 7, 2008

- **B.** <u>Monitored Activities</u>: The Market Monitoring Unit shall be responsible for monitoring the following:
 - 1. Compliance with the PJM Market Rules.
 - 2. Actual or potential design flaws in the PJM Market Rules.
 - 3. Structural problems in the PJM Markets that may inhibit a robust and competitive market.
 - 4. The potential for a Market Participant to exercise market power or violate any of the PJM or FERC Market Rules or the actual exercise of market power or violation of the PJM or FERC Market Rules.
 - PJM's implementation of the PJM Market Rules or operation of the PJM Markets, as further set forth in Section IV.C.
 - Such matters as are necessary to prepare the reports set forth in Section VI.

7. The services provided by independent transmission companies ("ITC"), and the ITC/PJM relationship, to detect any problems that may inhibit a robust and competitive market. Transactions utilizing the ITC transmission Facilities shall be subject to the authority of the Market Monitoring Unit on the same basis as transactions using other portions of the Transmission System.

- C. <u>Monitoring of PJM</u>: The Market Monitoring Unit shall monitor PJM's implementation of the PJM Market Rules and operation of the PJM Markets. If the Market Monitoring Unit disagrees with the implementation of the PJM Market Rules or the operation of the PJM Markets, the Market Monitoring Unit may so advise PJM. Excepting matters governed by Section IV.I, if the disagreement cannot be resolved informally, the Market Monitoring Unit may inform the Commission, Authorized Government Agencies, or the PJM members. The Market Monitoring Unit shall have no authority to direct PJM to modify its operation of the PJM Markets or implementation of the PJM Market Rules.
- **D.** Market Design: PJM is responsible for proposing for approval by the Commission, consistent with tariff procedures and applicable law, changes to the design of the PJM Markets. If the Market Monitoring Unit detects a design flaw or other problem with the PJM Markets, the Market Monitoring Unit may initiate and propose, through the appropriate stakeholder processes, changes to the design of such market. In support of this function, the Market Monitoring Unit may engage in discussions with stakeholders, State Commissions, PJM Issued By: Craig Glazer Effective: August 1, 2008

Vice President, Federal Government Policy

Issued On: July 7, 2008

First Second Revised Sheet No. 448.05 Superseding Original First Revised Sheet No. 448.05

Management, or the PJM Board; participate in PJM stakeholder meetings or working groups regarding market design matters; publish proposals, reports or studies on such market design issues; and make filings with the Commission on market design issues.

E. Mitigation: The Market Monitoring Unit shall have exclusive authority to administer the provisions for retrospective mitigation and the development of inputs for use in prospective mitigation described in the Appendix to Attachment M. The Market Monitoring Unit may, consistent with the PJM Market Rules, recommend to PJM that it take specific mitigation action that PJM is authorized to take under the PJM Market Rules to address market behavior or conditions. The Market Monitoring Unit shall not, however, have authority to require modification of PJM operational decisions, including dispatch instructions. If PJM does not accept the Market Monitoring Unit's

Issued By: Craig Glazer Effective: August 1, 2008

Vice President, Federal Government Policy

Issued On: July 7, 2008

Original Sheet No. 448.07

recommendations regarding mitigation actions, the Market Monitoring Unit may report its mitigation recommendation to the Authorized Government Agencies, Commission staff, State Commissions or the PJM members, as the Market Monitoring Unit deems appropriate. With respect to the application of the three pivotal supplier test, notwithstanding the number of jointly pivotal suppliers in any hour, if the PJM Market Monitoring Unit determines that a reasonable level of competition will not exist based on an evaluation of all facts and circumstances, it may propose to the Commission the removal of offer capping suspensions otherwise authorized by this section. Such proposals shall take effect only upon Commission acceptance or approval pursuant to Section 6.4.1(e) of the Appendix to Attachment K of this Tariff and the parallel provision of Schedule 1 of the Operating Agreement. Nothing in this Plan shall be deemed to supersede any authority the Market Monitoring Unit may have under the PJM Market Rules, nor shall anything in this Plan preclude any person or entity from seeking to modify such authority in a filing with the Commission.

- F. Studies or Reports for State Commissions: Upon request in writing by the OPSI Advisory Committee, the Market Monitoring Unit may, in its discretion, provide such studies or reports on wholesale market issues, including wholesale market transactions occurring under a state-administered auction process, as may affect one or more states within the PJM area. Any such request for such a study or report, as well as any resulting study or report, shall be made simultaneously available to the public, with simultaneous notice to PJM members, subject to the protection of confidential information.
- **G.** <u>Participation in Stakeholder Processes</u>: The Market Monitoring Unit may, as it deems appropriate or necessary to perform its functions under this Plan, participate (consistent with the rules applicable to all PJM stakeholders) in stakeholder working groups, committees or other PJM stakeholder processes.
- **H.** Referrals to State Commissions: If during the ordinary course of its activities the Market Monitoring Unit discovers evidence of wrongdoing (other than minor misconduct) that the Market Monitor reasonably believes to be within a State Commission's jurisdiction, the Market Monitoring Unit shall report such information to the State Commission(s).

I. Corrective Actions

1. Required Notice to Commission: Immediately upon determining that it has identified a significant market problem or a potential violation by a Market Participant or PJM of the PJM Market Rules or any of the FERC Market Rules that may require (a) a change in the PJM Market Rules, (b) further inquiry by the Market Monitoring Unit, (c) referral for investigation by the Commission and/or (d) action by the Commission, the Market Monitoring Unit shall notify the Commission's Office of Enforcement (or any successor), either orally or in writing. Nothing in this Section IV.I.1

Issued By: Craig Glazer Effective: August 1, 2008

Vice President, Federal Government Policy

Issued On: July 7, 2008

Filed to comply with order of the Federal Energy Regulatory Commission, Docket Nos. EL07-56 et al., issued May 30, 2008, 123 FERC ¶ 61,235.

Comment [MA1]: Move to the Appendix to Attachment M

Original Sheet No. 448.07

shall limit the ability of the Market Monitoring Unit to engage in discussions with any such Market Participant as provided in Section IV.J.1.

2. Required Referral to Commission: In addition to the notification provided in section IV.I.1. above, where the Market Monitoring Unit has reason to believe, based on sufficient credible information, that a Market Participant or PJM has either violated (a) a PJM Market Rule, or (b) any of the FERC Market Rules, the Market Monitoring Unit will refer the matter to the Commission's Division of Investigations (or any successor) in the manner described below. If the Market Monitoring Unit determines that one or more capacity market sellers' failure to offer part or all of one or more existing generation resources into an auction would result in an increase of greater than five percent in any Zonal Capacity Price determined through such auction, the Market Monitoring Unit shall apply to the Commission for an order, on an expedited basis, directing such Capacity Market Seller to participate in the auction, or for other appropriate relief, and PJM will postpone clearing the auction pending the Commission's decision on the matter. The foregoing notwithstanding, a clear,

Comment [MA2]: Move to the Appendix to Attachment M.

Issued By: Craig Glazer Effective: August 1, 2008

Vice President, Federal Government Policy

Issued On: July 7, 2008

Fifth Sixth Revised Sheet No. 452 Superseding Fourth-Fifth Revised Sheet No. 452

D. <u>Collection and Availability of Information</u>: The Market Monitoring Unit shall regularly collect and maintain under its sole control the information that it deems necessary for implementing the Plan. A Market Participant shall have sole responsibility to make available any information that the Market Monitoring Unit deems necessary to document, verify or investigate a claim or request by such Market Participant. All load reduction data are subject to audit by the PJM Market Monitoring Unit. The Market Monitoring Unit shall make publicly available a detailed description of the categories of data collected by the Market Monitoring Unit. To the extent it deems appropriate and upon specific request, the Market Monitoring Unit may release other data to the public, consistent with the obligations of the Market Monitoring Unit and PJM to protect confidential, proprietary, or commercially sensitive information as provided in the Appendix to Attachment M.

The Market Monitoring Unit shall provide to the Office of the Interconnection its advice and analysis with respect to all data, cost calculations and any other calculations made by the Market Monitoring Unit for consideration by the Office of the Interconnection in its administration of the PJM Tariff and in conducting prospective mitigation.

- **E.** Access to Personnel and Facilities: The Market Monitoring Unit shall have access to PJM personnel and facilities as necessary to perform the functions set forth in this Plan. If the Market Monitoring Unit seeks data or other information from PJM personnel, it may contact the appropriate personnel that may be in possession of such data or information. If the Market Monitoring Unit seeks a formal opinion or position on a matter from PJM, it shall contact the PJM Liaison or appropriate senior management official to provide such opinion or position.
- F. Market Monitoring Indices: The Market Monitoring Unit shall develop, and shall refine on the basis of experience, indices or other standards to evaluate the information that it collects and maintains. Prior to using any such index or standard, the Market Monitoring Unit shall provide PJM members, Authorized Government Agencies, and other interested parties an opportunity to comment on the appropriateness of such index or standard. Following such opportunity for comments, the decision to use any index or standard shall be solely that of the Market Monitoring Unit.
- **G.** Evaluation of Information: The Market Monitoring Unit shall evaluate, and shall refine on the basis of experience, the information it collects and maintains, or that it receives from other sources, regarding the operation of the PJM Markets or other matters relevant to the Plan. As so evaluated, such information shall provide the basis for reports or other actions of the Market Monitoring Unit under this Plan.

In sufficient time to permit the posting required by Section 6.2(a) of Attachment DD, the Market Monitoring Unit shall apply the Preliminary Market Structure Screen to identify the LDAs in which Capacity Market Sellers must provide the data specified in Section 6.7(b) of Attachment DD, for any auction conducted with respect to such Delivery Year and whether Capacity Market Sellers must provide this data for the entire PJM Region. In applying the market structure screen the Market Monitor, shall consider all incremental supply up to and including all such supply available at an effective cost less than or equal to 150% of the cost based clearing price calculated

Issued By: Craig Glazer Effective: August 1, 2008

Vice President, Federal Government Policy

Issued On: July 7, 2008

Original Sheet No. 452.01

using the incremental megawatts of supply available to solve the constraint and the need for megawatts to solve the constraint giving rise to a Locational Price Adder.

The Market Monitoring Unit may independently verify with the Market Participant the validity of any data that it submits to the Office of the Interconnection.

Auditing: The Market Monitoring Unit shall audit all load reduction meter data submitted to PJM pursuant to PJM's Emergency Load Response Program.

VI. **REPORTS**

The Market Monitoring Unit shall prepare and submit contemporaneously to the Commission, the State Commissions, the PJM Board, PJM Management and to the PJM Members Committee, annual state-of-the-market reports on the state of competition within, and the efficiency of, the PJM Markets, and quarterly reports that update selected portions of the annual report and which may focus on certain topics of particular interest to the Market Monitoring Unit. The quarterly reports shall not be as extensive as the annual reports.- In such-its annual, quarterly and other reports, the Market Monitoring Unit may make recommendations regarding any matter within its purview. These annual reports shall, and the quarterly reports may address, among other things, the extent to which prices in the PJM Markets reflect competitive outcomes, the structural competitiveness of the PJM Markets, the effectiveness of bid mitigation rules, and the effectiveness of the PJM Markets in signaling infrastructure investment. These annual reports shall, and the quarterly reports may, include recommendations as to whether changes to the Market Monitoring Unit or the Plan are required. In addition, the Market Monitoring Unit shall provide to the PJM Board, in a timely manner, copies of any reports submitted to Authorized Government Agencies pursuant to Section VI.B. The Market Monitoring Unit may from time-to-time prepare and submit additional reports to the Commission, the PJM Board and PJM Members Committee as the Market Monitoring Unit may deem appropriate in the discharge of its responsibilities under the Plan.

Issued By: Craig Glazer Effective: August 1, 2008

Vice President, Federal Government Policy

Issued On: July 7, 2008

Filed to comply with order of the Federal Energy Regulatory Commission, Docket Nos. EL07-56

et al., issued May 30, 2008, 123 FERC ¶ 61,235.

Third Fourth Revised Sheet No. 452A Superseding Second Third Revised Sheet No. 452A

- Reports to Authorized Government Agencies: The Market Monitoring Unit shall contemporaneously submit to the Authorized Government Agencies the reports provided to the PJM Board pursuant to Section VI.A. Subject to applicable law and regulation and any other applicable provisions of the PJM Operating Agreement or PJM Tariff, the Market Monitoring Unit shall, to the extent practicable, respond to reasonable requests by Authorized Government Agencies other than the Commission for reports, subject to protection of confidential, proprietary and commercially sensitive information, the protection of the confidentiality of ongoing inquiries and monitoring activities, and the availability of resources.
- C. Public Reports: The Market Monitoring Unit shall prepare a detailed public annual report about the Market Monitoring Unit's activities, subject to protection of confidential, proprietary, and commercially sensitive information and the protection of the confidentiality of ongoing investigations and monitoring activities. The Market Monitoring Unit may, instead of filing a separate report, include the referenced material in a report filed pursuant to Section VI.A hereof.

VII. **AUDIT**

The activities and expenditures of the Market Monitoring Unit for the prior year shall be audited annually by a nationally recognized independent third party auditor selected by the Market Monitor no later than March 15. The audit shall include, but not be limited to, a review of whether MMU expenditures were for purposes consistent with the functions set forth in this Plan and shall include documentation at a level of supporting detail consistent with that required in Section III.E.2 above. The audit report shall be provided to the PJM Board, Market Monitoring Unit, OPSI, OPSI Advisory Committee and PJM members subject to the protection of confidential information. The Market Monitoring Unit further shall provide annually to PJM and the Finance Committee audited financial statements of revenues and expenses related solely to the services provided to PJM.

Comment [MA3]: This replaces and merges the auditing requirement now included as para.(e) of Schedule 9-MMU.

Issued By: Craig Glazer Effective: August 1, 2008

Vice President, Federal Government Policy

July 7, 2008 Issued On:

Filed to comply with order of the Federal Energy Regulatory Commission, Docket Nos. EL07-56

et al., issued May 30, 2008, 123 FERC ¶ 61,235.

VIII. LIMITATION OF LIABILITY

Any liability of PJM arising under or in relation to this Plan shall be subject to this Section VIII. The PJM Entities shall not be liable to any Market Participant, any party to the PJM Operating Agreement, any customer under the PJM Tariff, or any other person subject to this Plan in respect of any matter described in or contemplated by this Plan, as the same may be amended or supplemented from time to time, including but not limited to liability for any financial loss, loss of economic advantage, opportunity cost, or actual or consequential damages of any kind resulting from or attributable to any act or omission of any of the PJM Entities under this Plan. Neither the OPSI Advisory Committee nor any State Commission (including commissioners and staff persons) shall be liable to any person under this Plan for any financial loss, loss of economic advantage, opportunity cost, or actual or consequential damages associated with performing any of its functions or duties under this Plan.

IX. ALTERNATIVE DISPUTE RESOLUTION

Notwithstanding any provision of the PJM Tariff or the PJM Operating Agreement, PJM and the Market Monitoring Unit shall not be required to use the dispute resolution procedures in the PJM Tariff or the PJM Operating Agreement in carrying out its duties and responsibilities under this Plan. However, nothing herein shall prevent PJM or any other person from requesting the use of the dispute resolution procedure set forth in the PJM Tariff or the PJM Operating Agreement, as applicable.

X. EFFECTIVE DATE

This Plan shall be effective as of August 1, 2008.

XI. CODE OF ETHICS

Consistent with the terms and conditions of Section 17 of the Market Monitoring Services Agreement dated December 19, 2007 entered into by and between PJM and Monitoring Analytics, LLC ("MMSA"), the Market Monitoring Unit shall be governed by the Code of Ethics as set forth below. In the event of any conflict or inconsistency between Section 17 of the MMSA and the provisions contained in Attachment M, the terms of Attachment M shall control. The Market Monitoring Unit and its employee, as applicable, shall adhere to the Following Code of Ethics

A. Conflicts of Interest:

The Market Monitoring Unit will use its best efforts to assure that all of its
employees comply with this Code of Ethics and shall take appropriate
disciplinary actions against employees who violate the policy.

Issued By: Craig Glazer Effective: June ___, 2009

Vice President, Federal Government Policy

Issued On: April___, 2009

- 2. The Market Monitoring Unit and its employees assisting on market monitoring matters for PJM, and their spouses and dependent children, may not have a direct equity or other financial interest in a Market Participant or in a parent, subsidiary, or affiliate of a Market Participant. (The term "direct" is meant to exclude investments such as mutual funds in which a person has no direct control, with the exception of sector-specific mutual funds.)
- The Market Monitoring Unit and its employees assisting on market monitoring matters for PJM, may not undertake a matter for a third party where such representation would require disclosure of market-sensitive or proprietary information of PJM.

B. Prohibited Engagements and Conduct by the Market Monitoring Unit:

- 1. Neither the Market Monitoring Unit nor its employees will be engaged to provide advice, or undertake a matter for or on behalf of, any entity on any entity's participation in the PJM Markets, except as otherwise authorized under subparagraphs (iii) and (v).
- 2. Neither the Market Monitoring Unit nor its employees will be engaged by any entity in any litigation, open regulatory docket, alternative dispute resolution procedure, or arbitration with PJM, except as otherwise authorized under subparagraphs (iii) and (v).
- 3. Neither the Market Monitoring Unit nor its employees will be engaged to appear on behalf of or against any entity before a state regulatory commission within the PJM Region in any new engagement in the electricity business (after the date of this Agreement) except as authorized under the PJM Tariff, as requested by a state regulatory commission, or as otherwise required by law.
- 4. Neither the Market Monitoring Unit nor its employees shall accept any engagement by any Mmarket Pparticipant outside of the PJM Region that would require the Market Monitoring Unit to take a position adverse to any PJM Member or inconsistent with any position taken by the Market Monitoring Unit in the PJM Region.
- Neither the Market Monitoring Unit nor its employees will be engaged to appear on behalf of or against any entity before the Commission on any

Issued By: Craig Glazer Effective: June ___, 2009

Vice President, Federal Government Policy

Issued On: April ___, 2009

matter within the PJM Region in any new engagement in the electricity business (after the date of this Agreement) except as authorized under the PJM Tariff, as requested by the Commission, or as otherwise required by law.

- Before the Market Monitoring Unit accepts any engagement on behalf of or against an Interested Party, it must inform the PJM General Counsel and the PJM Board of such potential engagement and provide the PJM Board with an opportunity to state its objection to such representation on the ground the engagement would present a conflict of interest or result in the material appearance of conflict. At the discretion of the Market Monitoring Unit, the Market Monitoring Unit may notify the PJM General Counsel that the proposed engagement is confidential and request that the General Counsel disclose the proposed engagement only to a PJM Board subcommittee in a manner which limits the disclosure of nonpublic information. Within seven (7) business days of being informed of the potential engagement by the Market Monitoring Unit, the PJM Board shall state any objection to such potential engagement. If the Market Monitoring Unit disagrees with the PJM Board's determination regarding the potential engagement by the Market Monitoring Unit, the Parties shall jointly engage the Commission's Dispute Resolution Service to determine whether the engagement would present a conflict of interest or result in the material appearance of a conflict. Unless the Commission's Dispute Resolution Service finds no conflict of interest the Market Monitoring Unit shall be precluded from accepting the challenged engagement. For these purposes, the term "Interested Party" means (x) a Market Participant; (v) a state regulatory commission within the PJM Region; or (z) a person or entity with a significant direct financial interest in the organization, governance or operation of PJM but shall not include PJM itself.
- 7. Employees of the Market Monitoring Unit shall not accept gifts, payments, favors, meals, transportation, entertainment, or services (individually, "Gift," and collectively, "Gifts"), of other than nominal value within a calendar year from PJM, Authorized Government Agencies, any Market Participant, contractor, supplier or vendor to the Market Monitoring Unit, except that "Gifts" shall not include any of the foregoing that is generally provided to the attendees of business meetings(e.g., PJM stakeholder meetings).- Gifts not exceeding One Hundred Fifty Dollars (\$150) shall be deemed to be of "nominal value."

Issued By: Craig Glazer Effective: June ___, 2009

Vice President, Federal Government Policy

Issued On: April ___, 2009

Original Sheet No. 453B

Similarly, neither the Market Monitoring Unit nor any employee of the Market Monitoring Unit shall offer any Gift to any public official or Market Participant unless such Gifts: are legal; not offered for specific gain or reciprocal action; follow generally accepted ethical standards; and are of nominal value.

C. Compliance with All Applicable Laws: The Market Monitoring Unit will use its best efforts to assure the compliance of the Market Monitoring Unit and its employees with all applicable laws, including but not limited to those referenced in the PJM Code of Conduct.

APPENDIX

[TBP]

Issued By: Craig Glazer Effective: June ___, 2009

Vice President, Federal Government Policy

Issued On: April___, 2009