

PJM Interconnection, L.L.C.

First Revised Rate Schedule FERC No. 47

Superseding Original Rate Schedule FERC No. 47

**Service Level Agreement between
PJM Interconnection, L.L.C.
-and-
Monitoring Analytics, LLC**

THIS SERVICE LEVEL AGREEMENT (the “SLA”) is made and entered into as of this 18th day of December, 2007 (the “Effective Date”), by and between PJM Interconnection, L.L.C., with offices at 2750 Monroe Blvd, Audubon, PA 19403 (“PJM”) and Monitoring Analytics, LLC, with offices at 2621 Van Buren Avenue, Eagleville, PA 19403 (“MMU”). Each of PJM and MMU may also be referred to individually hereinafter as a “Party”, and collectively as “the Parties.”

**Service Level Agreement between
PJM Interconnection, L.L.C. -and-Monitoring Analytics, LLC**

Table of Contents

1. Purpose	
2. Scope of Services	
3. Service Period	
4. SLA Review and Amendment	
5. Responsibilities of PJM	
6. Responsibilities of MMU	
7. Technical and Maintenance Support	
8. Support Hours	
9. Availability	
10. Scheduled Maintenance	
11. Production System Access and Access Termination	
12. Development and Test System Access and Access Termination	
13. Incident Management	
14. Problem Management	
15. Change Management; Enhancements and Upgrades	
16. Service Levels	
17. Target Time to Respond, Repair, Resolve (“TTR”)	
18. Resolution Escalation	
19. Performance	
20. Data Transfer and Access	
21. Information Exchange	
22. Capacity Management	
23. Contacts and Notice	
24. Service Measurement Reporting	
25. Configuration Management	
26. Crisis Management	
27. Service Continuity and Security	
28. Confidentiality	
29. Access Rights and Changes	
30. Disaster Situations	
31. Cost for Provision of Data	
32. Access for Independent Auditors	
33. Disputes	
34. [Reserved]	
35. Entire Agreement	
Appendix A: Change Management Process	

1. Purpose

The purpose of this Service Level Agreement (“SLA”) is to support the exchange of information between PJM and the MMU, and the access by MMU to PJM’s production, development and test environments during the term of the Market Monitoring Services Agreement dated December 18, 2007 entered into by and between PJM and MMU, as it may be amended from time to time (“MMSA”).

2. Scope of Services

PJM shall provide the following to MMU:

- a. The information that it is obligated to provide under the MMSA, the PJM Open Access Transmission Tariff (“Tariff”) and applicable laws and regulations.
- b. Real-time access to PJM’s production systems for real-time data monitoring (read-only) via Virtual Private Network (“VPN”) over a dedicated fiber optic connection to MMU’s offices located at 2621 Van Buren Avenue, Eagleville, PA.
- c. Regular and emergency support as outlined herein.
- d. Additional information, as and when requested by MMU, pursuant to the express terms, conditions and limitations of this SLA.

MMU shall provide the following to PJM:

- a. The information that it is obligated to provide under the MMSA.
- b. Regular and emergency support as outlined herein.
- c. Additional data, as and when requested by PJM, to the extent required in section 8.2 of the MMSA.

3. Service Period

This SLA shall commence as of the Commencement Date defined in the MMSA, and shall continue and be coterminous with the MMSA.

4. SLA Review and Amendment

This SLA will be reviewed at the request of either MMU or PJM, in accordance with section 23 of this SLA, to determine whether changes are required or the levels of support provided and the associated hardware and software need to be increased to meet agreed to levels of performance.

No amendment, modification, termination or attempted waiver of any provision of this SLA shall be valid unless it is in writing and signed by an authorized representative of both PJM and MMU. Any disagreements between the Parties with regard to the amendment, modification, termination or waiver of a provision of this SLA shall be determined pursuant to the terms of the dispute resolution provisions of the MMSA.

5. Responsibilities of PJM

PJM will ensure that MMU has access to the information, data and systems, as required by Attachment M and Attachment M – Appendix of the Tariff (“Attachment M”), that MMU needs in order to carry out its functions, duties and responsibilities under the Tariff, and that the data is delivered according to the timeline and methods set forth in this SLA. PJM is not responsible for MMU’s use, calculations or applications of the information and data.

6. Responsibilities of MMU

MMU will ensure the appropriate security and protection of any market sensitive, Critical Energy Infrastructure Information (“CEII”) and confidential data as described in section 28 of this SLA. MMU’s ability to provide such data or any compilation or summary of such data shall be subject to Attachment M. MMU is responsible for any applications and/or uses of the data that reside at MMU’s office location and that of its consultants, contractors and other agents. MMU shall ensure that its consultants, contractors or other agents abide by PJM’s confidentiality and security requirements.

If NERC or a Regional Entity determines that MMU or any of its systems is subject to one or more of the NERC Critical Infrastructure Protection Standards, subject to appeal to the Federal Energy Regulatory Commission, MMU must comply with said standards.

7. Technical and Maintenance Support

PJM will provide technical and maintenance support to MMU related to MMU's use of the Data Exchange System set forth in Section 20 hereof ("Data Exchange System") and access to PJM's systems as set forth in this SLA. A manager level (or above) employee of PJM's IT Department will be identified as the business owner of the Data Exchange System. All support inquiries should be directed to the PJM Support Center at 610-666-4500.

MMU will provide technical support to PJM related to MMU's transfer of data in the event that MMU's feed to the Data Exchange System does not function properly. All support inquiries should be directed to MMU Chief Information Officer.

PJM will provide break-fix technical support, pursuant to Sections 16 and 17 of this SLA, and maintenance support at a threshold level of two thousand (2,000) hours per year, not to exceed 500 hours per calendar quarter, at no cost to MMU.

The cost of providing ad hoc data will be borne by MMU up to 250 person hours after which MMU may charge PJM at rates agreed to by the Parties.

PJM and MMU will meet at the request of the other, consistent with the timing of PJM's and MMU's planning cycles, to review whether the number of hours needs to be increased to support the existing services provided to MMU or PJM. To the extent necessary to meet their obligations to provide support for the existing services to MMU or PJM, PJM and MMU will increase the total number of hours of technical support that each provides under this SLA at no cost to ensure that each is able to perform its obligations. If MMU or PJM requires additional support within a planning year or requires new services not previously agreed to, PJM may charge the MMU or MMU may charge PJM at PJM's current internal project labor rates used in its own project and support accounting or at rates agreed to by the Parties.

Maintenance support shall be defined as processing MMU change requests, testing MMU code, modifying user access, or any other support required to keep the data exchange system functioning as a result of an MMU change. PJM will be responsible, and will not charge MMU, for maintaining the data exchange technical environment including software upgrades and patches. Any break-fix technical support provided to MMU by PJM that is driven by PJM's changing business needs or that is the result of a failure of PJM's systems shall not be billed to MMU.

8. Support Hours

PJM will provide technical support to MMU during PJM's core business hours from 8:00 a.m. to 5:00 p.m., Monday through Friday. After PJM's core business hours, on weekends and holidays, technical support shall be provided through PJM's IT Operations Center only on an on-call basis. MMU will provide technical support to PJM during the working hours of the relevant MMU staff.

Should MMU know in advance that it will require technical support outside of PJM's core business hours for more than one hour, MMU shall make a special request to PJM, giving at least 24 hours' notice thereof. In such case, PJM will extend the technical support hours to meet specific needs of MMU.

9. Availability

The Data Exchange System shall operate on a 24x7 schedule, except for a sixteen (16) hour period of time during which quarterly maintenance is expected to be performed on the system. The Data Exchange System will be available for 95 percent of the total hours in a year, minus the downtime for scheduled maintenance as described in Section 10 of this SLA.

(365 days per year x 24 hours per day = 8760 hours – 16 hours for quarterly maintenance = 8744 hours per year; 8744 hours per year x 0.05 = 437 hours of possible downtime per year.)

10. Scheduled Maintenance

PJM expects that the Data Exchange System will need four (4) hours of downtime per quarter for system upgrades and maintenance. Such downtime will typically be scheduled for Saturdays, and MMU will receive prior notification thereof. PJM shall use reasonable efforts to plan any such outages to minimize the impact on MMU.

If system maintenance is expected to take longer than the four hour window per quarter or takes the system below the 95 percent availability threshold, PJM shall contact MMU to so advise at least two (2) business days in advance for non-emergency maintenance. In such case, the Parties shall make an effort to come to mutual agreement as to the outage time, in advance, and in writing. The representatives of both parties for the purpose of resolving issues of the duration of system maintenance are:

Contact List:

MMU – Chief Information Officer

PJM – Vice President – Chief Information Officer

11. Production System Access and Access Termination

MMU will be granted production access (read only) via VPN over a dedicated fiber optic connection. PJM and MMU will cooperate not to cause negative performance impacts on PJM's production systems resulting from MMU's access to or use of these systems, and to prevent access to such systems by non-MMU employees. In the event that MMU's access or use of these systems cause levels of performance degradation that are unacceptable to PJM, PJM will contact MMU to attempt to resolve the issue. PJM reserves the right to terminate any session that results in a negative impact on the performance of a production system. When possible, PJM will communicate with MMU before terminating sessions and will work with MMU to schedule a time to re-establish sessions. Notwithstanding the foregoing, PJM reserves the right to terminate any session without notice to MMU in an emergency situation or for security reasons. In such a case, PJM will explain in writing to MMU why the session was terminated within one (1) business day from the date the session was terminated.

12. Development and Test System Access and Access Termination

Access by MMU to PJM's development and test systems shall be continued, granted or revoked on a need basis. Due to PJM's active use of development and test environments PJM reserves the right to create a specific MMU development or test environment if the need arises, in its sole discretion. If PJM determines that there is a need for such a MMU specific development and/or test environment, PJM will take reasonable efforts to create an environment that is the functional equivalent of PJM's development and test environment. MMU's read and write access to these MMU specific development and test systems shall be via VPN over a dedicated fiber optic connection. In addition, PJM shall provide MMU with dedicated test and development environments as part of the Data Exchange System, for purposes of developing and testing code used to populate the Data Exchange System.

PJM and MMU will cooperate not to cause any negative performance impacts on PJM's development and test systems resulting from MMU's access to or use of these systems, and to prevent access to such systems by non-MMU employees. In the event that MMU's access or use of these systems cause levels of performance degradation that are unacceptable to PJM, PJM will contact MMU to attempt to resolve the issue. PJM reserves the right to terminate any session that results in a performance impact on the performance of a test or development system. When possible, PJM will communicate with MMU before terminating sessions and will work with MMU to schedule a time to re-establish sessions. Notwithstanding the foregoing, PJM reserves the right to terminate any session without notice to MMU in an emergency situation or for security reasons. In such a case, PJM will explain in writing to MMU why the session was terminated within one (1) business day from the date the session was terminated.

13. Incident Management

If a physical or cyber security issue occurs the Parties agree to comply with the security provisions set forth in section 22 of the MMSA.

14. Problem Management

All tickets, regardless of severity, will be documented and tracked through resolution by PJM's Support Center.

15. Change Management; Enhancements and Upgrades

If MMU determines that it has the need for additional data, additional access or a change to the systems from what is delineated in this SLA, MMU will provide detailed requirements to the PJM Liaison defined in Attachment M or such other representative appointed by PJM (both to be referred to herein as “PJM Liaison”), for the new data or system information that is now needed as part of the data exchange. The MMU will be responsible for providing Statistical Analysis Software (“SAS”) code and Oracle Data Definition Language (“DDL”) that will extract the needed data and load it into the Data Exchange System. PJM will be responsible for implementing changes to the Data Exchange System and placing the MMU code into production pursuant to the change management process set forth in Appendix A hereof. PJM will act as the tester and release coordinator for any change. PJM will be responsible for keeping MMU fully informed of the changes required in order to ensure full access after the implementation of any PJM system changes. MMU shall be responsible for designing and implementing extract and load (ETL) processes.

In the event that the MMU is unable to provide the code to extract and load the data to the Data Exchange System PJM will be available to provide this service. Any such request for the extraction and loading of additional data must be approved by PJM and MMU in writing and be signed by a PJM and MMU representative having authority to approve the request, and must include MMU’s agreement to pay for the associated costs at PJM’s internal project labor rate used in its own project and support accounting as agreed to by the Parties.

For any such approved data ETLs, Table 1 provides the timelines for coordination.

Table 1 - Timelines for Coordination

DATA EFFORT	PROVIDE ACKNOWLEDGEMENT TO MMU/PJM	STATUS UPDATES	COMPLETION TIMEFRAME
Data easily retrieved or available in PJM’s or MMU’s systems	Within 7 business days	Status updates provided daily at close of business	Completion timeframes will be mutually agreed upon by PJM and MMU
Data has to be transformed or does not exist	Within 7 business days	Status updates provided weekly	Completion timeframes will be mutually agreed upon by PJM and MMU

If PJM requests additional data from what is delineated in the Information Exchange Catalog defined in section 21 of this SLA, PJM will provide a detailed description of the data requested. Any request for additional data must be approved by PJM and MMU in writing and be signed by a PJM representative and an MMU representative having authority to approve the request, and must include PJM’s agreement to pay for any costs associated therewith. Except for information that the MMU determines it is required to provide under the MMSA, the MMU may remove information from the list included in the Information Exchange Catalog upon notification to PJM.

If MMU requests an upgrade or enhancement to be made to the Data Exchange System, it shall submit any such request in writing to the PJM Liaison. Within 7 days of receipt of

any such request, PJM shall provide MMU with an estimate of the cost to put the requested upgrade or enhancement into operation. After receipt of the estimate, MMU shall advise PJM in writing whether it wants to implement the enhancement or upgrade. Any such upgrades or enhancements shall be at MMU's expense unless PJM otherwise agrees to bear the expense.

If PJM desires to implement an upgrade or enhancement to the Data Exchange System or to its computer systems that was not requested by MMU, or if PJM's business drives the need for a change to the Data Exchange System, or if such enhancements or upgrades are required in order to provide the level of support required under this agreement, the making of the upgrades or enhancements shall be at PJM's expense.

When revisions of PJM's computer systems are necessary as part of PJM's normal business (for example the addition of the loss component of LMP), PJM will use reasonable efforts to provide MMU notice of a planned system revision at least thirty (30) days prior to any revision to the data exchange format(s). There may be times when PJM determines, in its sole discretion, that a data exchange format needs to be modified in an emergency situation. In such case, PJM will provide notice immediately to MMU and will follow its change management process as set forth in Appendix A.

When revisions of MMU computer systems are necessary as part of the MMU's normal business, MMU will use reasonable efforts to provide PJM notice of a planned system revision that affects the transfer of data to PJM at least (30) days prior to any revision to the data exchange format(s). There may be times when MMU determines, in its sole discretion, that a data exchange format needs to be modified in an emergency situation or on an expedited basis. In such case, MMU will follow its change management process as set forth in Appendix A.

16. Service Levels

All issues reported to PJM by MMU will be ticketed and assigned the appropriate severity level as described below. Such assignment will be as delineated in Section 17 of this SLA.

SEV1 - System or critical function down and not available and no work around.

- Multiple reports of a production system not available without a work around.

SEV2 - System available, non-critical function unavailable and no work around.

- Multiple reports of a non-critical function unavailable with no work around.
- A problem that is degrading the performance and reliability of the system but functions are still operational.
- If the problem is not addressed it could escalate to a SEV1.

SEV3 - System available, some functionality unavailable with a work around.

- A problem reported impacts one or more users but does not result in a stoppage of work.

SEV4 – Inquiry, access request, or other support request.

All issues regarding data transfers from MMU to PJM, reported by PJM to MMU, will be addressed by the MMU as soon as reasonably practical.

17. Target Time to Respond, Repair, Resolve ("TTR")

At the time MMU makes a repair request to PJM, PJM shall determine the severity level of any such repair as set forth in Section 16. If MMU disagrees with the assigned level of severity, MMU shall have the option to request that PJM elevate a repair request to a higher level of severity.

Table 1 - Target Time to Respond, Repair, Resolve by Severity Level

SEVERITY LEVEL	PROVIDE ACKNOWLEDGEMENT TO MMU/PJM	STATUS UPDATES	RESOLUTION
Level 1	Within 30 minutes of reported issue to the PJM Support Center/Chief Information Officer, IT during normal support hours or by 9:00 a.m. the next day.	Every 2 hours while the problem exists, during all hours if reasonably practical. When it spans a day, no later than 9:00 a.m. each morning the problem exists.	Appropriate PJM, MMU and vendor resources committed to meet the critical deadline. Commitment is until problem resolution unless the Parties mutually agree to another timeframe.
Level 2	Within 30 minutes of reported issue to the PJM Support Center/Chief Information Officer, IT during normal support hours or by 9:00 a.m. the next day.	Every 4 hours during normal business hours. When it spans a day, no later than 9:00 a.m. each morning the problem exists.	Appropriate PJM, MMU, and Vendor resources are committed until problem is resolved within defined support hours unless the Parties mutually agree to another timeframe. Target a 24 hour turnaround time.
Level 3	Within 2 hours of the reported issue to the PJM Support Center/Chief Information Officer, IT during normal support hours or by 9:00 a.m. the next day.	Every 4 hours during normal business hours. When it spans a day, no later than 9:00 a.m. each morning the problem exists.	Appropriate PJM, MMU, and Vendor resources are committed until problem is resolved within defined support hours unless the Parties mutually agree to another timeframe. Target a 48 hour turnaround time.
Level 4	Within 8 hours of the reported issue to the PJM Support Center/Chief Information Officer, IT during normal support hours or by 9:00 a.m. the next day.	First report will be delivered within 2 working days. Subsequent reports based on timeframe negotiated during first report, but no less than once a week.	Resources assigned as available with a goal of problem resolution within 5 working days.

18. Resolution Escalation

The TTR will be in accordance with the severity levels. If for some reason PJM cannot meet the severity level turnaround time, then MMU will be notified and the escalation procedure in Table 11 will be utilized:

Table 1 - Escalation Notification

Elapsed Time	Sev1	Sev2	Sev3	Sev4
Immediate	PJM VP, Chief Information Officer; PJM Liaison; MMU Chief Information Officer	PJM VP, Chief Information Officer; PJM Liaison; MMU Chief Information Officer	PJM IT Staff; PJM Liaison; MMU Chief Information Officer	PJM IT Staff; PJM Liaison; MMU Chief Information Officer
2 hours	PJM GM IT Integration; PJM Liaison; MMU Chief Information Officer	PJM GM IT Integration; PJM Liaison; MMU Chief Information Officer	PJM VP, Chief Information Officer; PJM Liaison; MMU Chief Information Officer	PJM VP, Chief Information Officer; PJM Liaison; MMU Chief Information Officer
4 hours	PJM Executive Director of IT; PJM Liaison; MMU Chief Information Officer	PJM GM IT Integration; PJM Liaison; MMU Chief Information Officer	PJM VP, Chief Information Officer; PJM Liaison; MMU Chief Information Officer	PJM VP, Chief Information Officer; PJM Liaison; MMU Chief Information Officer
8 hours	PJM Executive Director of IT; PJM Liaison; MMU Chief Information Officer	PJM Executive Director of IT; PJM Liaison; MMU Chief Information Officer	PJM GM IT Integration; PJM Liaison; MMU Chief Information Officer	PJM GM IT Integration; PJM Liaison; MMU Chief Information Officer
24 hours	PJM Vice President; PJM Liaison; MMU Chief Information Officer	PJM Executive Director of IT; PJM Liaison; MMU Chief Information Officer	PJM Executive Director of IT; PJM Liaison; MMU Chief Information Officer	PJM Executive Director of IT; PJM Liaison; MMU Chief Information Officer

19. Performance

The performance of the Data Exchange System is reliant on the speed of the link between PJM and MMU. A dedicated fiber optic connection and a dedicated back-up fiber optic connection will be provided to MMU, each having a speed of 1 Giga-bit per second. The performance of the dedicated fiber optic connection and dedicated back-up fiber optic connection will be reviewed on an annual basis to ensure that each is adequate for MMU to perform its obligations under Attachment M. PJM and MMU will meet at least annually, consistent with the timing of PJM's planning cycle, to review whether additional bandwidth is necessary in order to continue MMU data access at the performance levels specified in this SLA. PJM will provide increases in bandwidth, consistent with this planning process, at no cost to MMU, to continue performance at the levels specified in this SLA. If MMU desires improved performance or additional transfer capability, MMU will pay all costs for increasing the bandwidth, unless PJM otherwise agrees to bear the cost.

20. Data Transfer and Access

The data exchange contemplated under this SLA will allow for the unattended transfer of any electronic data format between MMU and PJM. PJM maintains processes to exchange files and data with MMU over a dedicated fiber optic connection. These files and data are either transformed and delivered or simply delivered to MMU, depending on the type of data. The data that will be transferred to MMU is documented in the Information Exchange Catalog defined in section 21 of this SLA. MMU shall also maintain processes to transfer data to PJM over the same dedicated fiber optic connection.

Communications connectivity and security are provided for in the data exchange process. PJM supports and maintains secured servers and a database for providing files and data to MMU. The Parties shall perform the transfer of files and data in accordance with specifications set forth herein and as otherwise agreed upon by the Parties and in writing signed by a PJM and MMU representative having authority to approve and agree to an amendment to this SLA.

MMU will provide SAS extraction, transform and load (“ETL”) processes that will run in the PJM environment to transfer the data to the Data Exchange System. MMU will monitor and control the process execution through a control structure in the Data Exchange System. PJM will provide Golden Gate trail files to the Data Exchange System. MMU will be responsible for purging the trail files after ten days of retention.

Each Party must provide application and database servers required to complete the data exchange at their office locations. Each Party shall provide its own application support necessary to complete the data exchange. Each Party shall also be responsible for detecting delivery deficiencies that it encounters during the transfer of data from the other Party’s computer systems and for taking appropriate action, including notifying the other Party.

Upon notification of any problems with file or data transfer, each Party will take steps to resolve any problems with its systems as outlined in this SLA. The Parties are not responsible for the availability and reliability of the systems that will ultimately receive the files. However, each Party will work with the other Party and/or the other Party’s consultants, contractors and other agents to resolve file transfer problems. Each Party will maintain records of the file transfers, including the file name, size, date and time of the transfer, and status of the transfer.

The Data Exchange System is independent of the production system access which is described in the next section. The dedicated fiber optic connection between MMU and PJM is used for both types of access.

21. Information Exchange

PJM and MMU shall maintain an “Information Exchange Catalog” which shall list the information that each party provides to the other. The Information Exchange Catalog shall not itself create any obligation to provide information, nor shall it define, alter, create or remove obligations to provide information including but not limited to obligations arising under the MMSA and the Tariff. Each Party shall be responsible to obtain its own subscriptions for external data, each at its own expense.

Either Party may make ad hoc requests for data from the other Party as defined in the MMSA. Each Party will use its best efforts to provide such data within five business days of the request. If, despite its best efforts, PJM or MMU, as applicable, is unable to provide the requested data within five business days, it shall provide an explanation of the reason it cannot provide the data and inform the other Party when it, using its best efforts, will be able to provide the data. The cost of providing such data will be borne by the Party providing the data up to 250 person hours after which it may charge the requesting party at rates agreed to by the Parties. The Data Exchange System will be utilized to enable the transfer of the requested data between the Parties.

22. Capacity Management

The Data Exchange System will be sized to maintain one year's worth of PJM Markets data on a rolling daily basis. Golden Gate trail files will be maintained by MMU with a retention of ten days. If MMU requests that PJM Markets data older than the one year be provided to MMU, PJM will review the request, the data requirements, determine if the data exists in PJM's system, and within seven (7) days will advise MMU of the number of person hours required to provide the data to MMU and any cost associated with such requests.

23. Contacts and Notice

Each Party will provide to the other Party contact lists containing relevant personnel to whom inquiries or problems relating to this SLA should be addressed.

Notice to any Party hereto shall be in writing and shall be deemed to be delivered on the earlier of: (a) the date of personal delivery, (b) if deposited in a United States Postal Service depository, postage prepaid, registered or certified mail, return receipt requested, the date of receipt or (c) if sent by email, on the date such email is received.

24. Service Measurement Reporting

PJM will provide a monthly report to MMU of the open issues regarding the Data Exchange System, PJM's data requests to MMU, reported problems on MMU's system or MMU's access to PJM's production, test or development systems, the severity level and the TTR. This monthly report will also detail the performance of the dedicated fiber optic connection that provides MMU's direct access to PJM's systems. This report also will include the number of hours of technical and maintenance support set forth in Section 7 of this SLA provided by PJM to MMU.

25. Configuration Management

PJM will provide notice as required herein when outages are required to change, modify or upgrade the Data Exchange System.

26. Crisis Management

In the event of an emergency such as a computer system failure, a potential breach of system security, a computer virus outbreak or another event that might force the services to be shutdown, each Party will notify the other Party as soon as possible. Within 24 hours of the service becoming unavailable due to such an event, the Party having the computer system problem will provide to the other Party an estimated time for service restoration and additional information, if available, regarding the cause of the event. The Party having the computer system problem will, in consultation with the other Party, develop a plan to provide any data that was not provided due to the system failure.

27. Service Continuity and Security

In order to ensure the protection of PJM's and its members' and market participants' market sensitive information, proprietary information, trade secrets and/or other confidential data, PJM requires that MMU implement and retain specific, detailed security controls. MMU must employ these security controls to ensure the physical and cyber security of such information and to restrict access to any such information only to individuals who have been specifically authorized by MMU and/or PJM to have access to such information. MMU shall be required to create and have in place, at a minimum, security policies and measures in place that address:

- Physical security access requirements, policies and procedures that are to be followed by all persons accessing MMU's facilities, including a requirement that visitors be escorted by badged personnel at all times while on MMU's premises.
- Requirement for physical security access control card key and video surveillance systems to control and produce data used to monitor access on MMU's premises.
- Issuance of card key access badges to individuals based on their job responsibility, specifically restricting access to MMU's computer room.
- Requirement that card key access badges must be displayed on all individuals, at all times, while on MMU's premises.
- Badge access to MMU's facilities only being made available on a time sensitive basis depending upon job responsibility.
- Deactivation of all MMU and PJM access badges immediately upon notification that the individual to whom the badge was issued no longer requires access to MMU's and/or PJM's facilities.
- Requirement that system "access denied" attempts, unauthorized access, and attempts to hack into or breach MMU's installed security features, must be recorded by MMU, shall be reviewed by MMU and investigated if deemed suspicious, and if deemed suspicious shall be reported to PJM immediately upon their discovery.

In addition, MMU and its employees, vendors, consultants and agents will be required to comply with PJM's Vendor Review Policy, Vendor Review Process – Vendor Compliance Standard, Cloud Security Policy, the consultant screening process contained in PJM's Employment Screening Policy and Employment Screening Procedure to receive physical or electronic access to PJM information, and the PJM Physical Security – Site Access Procedure when requiring access to the PJM campus. Such policy, procedure and

standard may be amended from time to time and PJM will provide notice and description of such changes, including electronic and paper copies of such initial documents and any modified documents. PJM shall give MMU prior notice of any proposed change to any of the above-referenced security policies, standards and procedures, and shall meet with MMU to discuss how the proposed change will affect MMU should MMU request such a meeting.

MMU will provide access to its offices for any security audits that PJM desires to perform, which security audits shall be conducted to ensure that PJM's security requirements are met. MMU shall cooperate with PJM to assist PJM or its designee in obtaining access to the offices of any of MMU's consultants, contractors or other agents for the purpose of conducting a security audit to ensure that PJM's security requirements are being met. PJM shall provide at least twenty four (24) hours prior notice to MMU of any such security audit. PJM may also require additional security audits to be conducted from time to time to ensure compliance with its minimum security requirements, including but not limited to a situation in which MMU relocates its offices.

PJM is responsible for maintaining data file security only while such files are under PJM's direct control. PJM shall notify MMU of any security issues related to the Data Exchange System or are otherwise relevant to MMU/PJM security issues.

28. Confidentiality

The data provided to MMU by PJM as delineated in this SLA includes market sensitive, CEII, and confidential information. MMU and its employees and contractors shall comply with the confidentiality provisions set forth in section I of Attachment M - Appendix.

Prior to receiving any data considered by PJM to be CEII, the MMU, its employees and contractors having access to such data shall execute PJM's form of CEII Non-Disclosure Agreement.

The data provided to PJM by MMU as delineated in this SLA may be market sensitive and confidential. Upon request, PJM employees obtaining such data will be required to sign both data confidentiality and non-disclosure agreements, provided by MMU to PJM, acknowledging the confidential nature of said information and agreeing to maintain the confidentiality of that information. PJM and its employees and contractors shall comply with the confidentiality provisions set forth in the PJM Operating Agreement.

Geographic Information System latitude/longitude data on generation stations by pnode ("GIS Information") has been identified by PJM transmission owners as CEII. Prior to receiving the GIS Information MMU will execute the PJM CEII Non-Disclosure Agreement.

Individual users from MMU shall be granted access to retrieve PJM's stored GIS Information for temporary use upon approval from the PJM access management process. Each instance of data retrieval must be cleared from the MMU network within 48 hours of retrieval. Audit information including such data deletions from the MMU network will be made available via an automated process. GIS Information may only be used by MMU for purposes consistent with Attachment M. PJM reserves the right to suspend the provision of GIS Information should MMU violate the terms of this section.

29. Access Rights and Changes

MMU shall provide a list of valid users and their contact information to PJM. PJM will follow its internal access authorization process to create accounts for the employees of MMU. MMU is responsible for notifying PJM of any required account changes as outlined in the Technical Support section of this SLA. In the case of account terminations, PJM will act as quickly as possible to terminate user access to its systems after having received notice from MMU.

Changes in MMU employees shall not be considered to be a change in data access under this SLA.

MMU shall also provide to PJM a list of its employees, consultants and contractors who shall need to have access to PJM's campus. PJM shall issue security badges to said employees, consultants and contractors, and shall provide physical access to PJM's campus between 0600 and 1800 hours. If MMU employees need physical access to PJM's campus during other hours, PJM will provide such access on a case by case basis.

30. Disaster Situations

In the event of a significant event affecting the operations of the PJM Control Center (“BCP event”), PJM’s primary focus is to maintain reliability of the electric power system. PJM will restore systems according to the priority assigned in PJM’s Business Continuity Plan(s) (“BCP”). Such BCP may be amended from time to time and PJM will provide notice and description of such changes, including electronic and paper copies of such initial documents and any modified documents. PJM will use reasonable efforts to restore the functionality of the Data Exchange System within sixty (60) days of the BCP event. Should this restoration process be expected to take longer than sixty (60) days, PJM shall give MMU notice thereof, which notice must include an expected timeframe for the completion of the restoration of the Data Exchange System. PJM shall provide MMU with VPN read only access to PJM’s production systems until such time as PJM has restored the Data Exchange System.

31. Cost for Provision of Data

To the extent that MMU is responsible for the payment of PJM's costs and expenses associated with the provision of access to PJM's data, information and systems to MMU, the costs and expenses shall be charged to MMU at PJM's actual cost, which for consultants and contractors shall be as invoiced and for work performed by PJM employees shall be per PJM's internal project labor rates or at rates agreed to by the Parties.

To the extent that PJM is responsible for the payment of MMU's costs and expenses associated with the provision of MMU's data and information to PJM, the costs and expenses shall be charged to PJM at MMU's actual cost, which for consultants and contractors shall be as invoiced and for work performed by MMU employees shall be per PJM's internal project labor rates or at rates agreed to by the Parties.

32. Access for Independent Auditors

MMU shall provide PJM's independent auditor(s) with access to MMU's employees, consultants, contractors and agents, as well as to MMU's relevant data and information pertaining to any work product that MMU provides to PJM in connection with the settlement and billing of PJM Members, for the purpose of the auditor's review and examination of PJM's billing processes for PJM's SAS 70 Type 2 audit, such as the revenue requirement calculation in the black start market and the development of Cost of New Entry (CONE) and the Energy & Ancillary Services Revenue Offset (E&AS) as it relates to the RPM market. MMU shall cooperate with PJM to provide any additional access to PJM's independent auditors should there be a change in the name, number or type of billing processes for which MMU's data and information is needed.

33. Disputes

Any and all disputes under this SLA shall be determined as set forth in the dispute resolution provisions of the MMSA.

34. [Reserved]

35. Entire Agreement

This SLA constitutes the entire agreement of the Parties with regard to the subject matter hereof, and replaces and supersedes all other agreements or understandings, whether written or oral. Notwithstanding the foregoing, it is the express understanding of the Parties that nothing in this SLA is intended to change or amend any terms or conditions of the MMSA. Notwithstanding the foregoing, in the event the Parties mutually agree, or there is a judicial or regulatory finding, that there is a conflict between any provision of this SLA and the terms of the MMSA, the MMSA shall be controlling.

IN WITNESS WHEREOF, the parties have caused this SLA to be executed by their respective authorized officials, as of the Effective Date, first set forth above.

PJM Interconnection, L.L.C.

By: <u>/s/Thomas F. O'Brien</u>	<u>Vice President & CIO</u>	<u>07/27/16</u>
Name	Title	Date

Printed name of signer: Thomas F. O'Brien

Monitoring Analytics, LLC

By: <u>/s/Joseph E. Bowring</u>	<u>President</u>	<u>07/27/16</u>
Name	Title	Date

Printed name of signer: Joseph E. Bowring

Appendix A: Change Management Process

PJM Change Management Process

PJM shall utilize its Non-EMS Change Management Procedure, a copy of which shall be provided to MMU, to ensure that changes to its production systems are applied in a controlled and consistent manner and do not compromise the stability and/or security of any component of its information technology environment. Changes to PJM's production systems must be initiated by MMU by submitting a formal request via PJM's change control system, which request must be authorized by PJM management and implemented following the change management procedures. If the change management procedures are revised, PJM shall provide MMU notice of such revisions along with both a hard and electronic copy of the revised change management procedures.

As part of its change management procedures PJM has established a Change Control Review Board (CCRB) that meets on a weekly basis to review, coordinate and approve system changes. PJM shall provide advance notice of such meetings and afford a representative of MMU the opportunity to attend and participate in CCRB meetings. PJM will communicate the determinations of the CCRB to the MMU on a weekly basis to inform the MMU of pending changes. In addition to regularly scheduled changes, PJM may also make emergency changes to its systems if at least one of the following is at issue: (a) a significant financial impact to PJM; (b) failure of a mission-critical application; (c) inaccurate or incorrect reporting to a regulatory agency; and (d) the inability to meet a critical financial deadline.

In emergency change situations PJM staff will complete emergency change paperwork as soon as feasible after the change. The CCRB will notify MMU of changes that will impact the PJM systems that MMU accesses.

MMU Change Management Process

MMU shall provide PJM with a copy of its change management procedures.