

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

**PJM Interconnection, L.L.C.**

)

**Docket No. ER12-\_\_\_\_-000**

**PETITION OF PJM INTERCONNECTION, L.L.C.  
FOR INSTITUTION OF PROCEEDING  
TO DETERMINE PROPER BILLING ADJUSTMENTS  
AND FOR WAIVER OF TARIFF**

Pursuant to Rule 207(a)(5) of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure, 18 C.F.R. § 385.207(a)(5), PJM Interconnection, L.L.C. ("PJM") hereby petitions the Commission for an order establishing a proceeding to determine the proper billing adjustments to correct errors in PJM's payments to two owners of generation facilities of Balancing Operating Reserve ("BOR") credits for past periods, and, to the extent necessary to implement the Commission's determination, a waiver of certain provisions of PJM's tariff.

**1. Introduction and Background.**

The billing adjustments at issue in this petition are necessary because of PJM's discovery of an error in the software code affecting the calculations performed by its Market Settlement Calculation System ("MSCS"). PJM determined in August 2011 that the MSCS did not calculate certain BOR Lost Opportunity Cost ("LOC") credits in the manner described in Schedule 1 of the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement") and the corresponding provisions of Attachment K-Appendix of the PJM Open Access Tariff ("Tariff"). The MSCS error

has now been corrected, and BOR LOC will be properly calculated in PJM's billings for November 2011 market activity and thereafter.

Sections 3.2.3(f) and (f-1) of Schedule 1 of the Operating Agreement<sup>1</sup> provide that steam-electric, combustion turbine, and combined cycle generating units are entitled to BOR LOC credits when they reduce their output at PJM's direction or are scheduled to produce energy in the Day-ahead Energy Market, but are not called on by PJM in real-time. In such circumstances, under the methodology for calculating BOR LOC credits stated in Sections 3.2.3(f) and (f-1), BOR LOC credits are to be determined by subtracting from the real-time locational marginal price ("LMP") *the higher* of the relevant market participant's price-based offer<sup>2</sup> or the cost-based schedule<sup>3</sup> it has provided to PJM for the applicable generating unit. Due to the described error, however, the MSCS did not use the higher of the generator owner's price-based offer or cost-based schedule, as the Tariff requires, in calculating BOR LOC credits. Instead, even in instances where the generator owner had submitted to PJM a cost-based schedule that

---

<sup>1</sup> The full text of Sections 3.2.3(f) and (f-1) is provided in the attached Appendix 1. All further references in this pleading to these sections will be to the relevant Tariff provisions only, but should be understood to include reference to the parallel terms of the Operating Agreement. Capitalized terms used and not otherwise defined in this document have the meaning set forth in the Operating Agreement, Tariff, and/or Reliability Assurance Agreement Among Load-Serving Entities in the PJM Region.

<sup>2</sup> A "price-based" offer under PJM's rules is a market-based offer to PJM, not limited by a unit's costs.

<sup>3</sup> A "cost-based schedule" under PJM's rules is the means by which generation owners report the "cost-based" offers to be used by PJM when price-based offers are mitigated due to transmission constraints.

was higher than its price-based offer for the relevant generating unit, the software used the price-based offer in the settlement calculations.

The result of the error in the MSCS is that market participants whose generation resources reduced their output at PJM's direction or which were scheduled to produce energy in the Day-ahead Energy Market, but were not called on by PJM in real time, were paid more BOR LOC credits than they should have been paid pursuant to Sections 3.2.3(f) and (f-1) when their price-based bids were less than their cost-based schedules. Simultaneously, when a market participant was overpaid BOR LOC credits, the load-serving entities ("LSEs") which pay BOR charges were assessed and paid greater BOR charges than they should have paid.

The requirement to use the higher of the cost-based schedule or the price-based offer in the calculation of LOC credits has been part of Sections 3.2.3(f) and (f-1) since July 18, 2003, when the provisions first became effective. The MSCS error originated during the design of the software for PJM's market settlement system in 2003. The error then was carried over into the design of the MSCS, implemented on August 1, 2008.

PJM is authorized and obligated under Section 10.4 of the Tariff and Section 15.6 of the Operating Agreement to issue adjusted billing statements to correct errors for a period of up to two years prior to discovery of the error. When PJM discovered the MSCS error in August 2011, it discerned that Dominion Virginia Power ("Dominion") was significantly affected and, therefore, it contacted Dominion to discuss the error and its effects. By letter dated November 2, 2011, PJM notified all other affected generation owners of the billing error caused by the MSCS error, and of PJM's intent to re-bill the

affected generation owners to correct the BOR LOC over-payments. Accordingly, PJM plans to re-bill BOR LOC to Dominion beginning with transactions that cleared in August 2009, and to re-bill all other affected market participants beginning with transactions that cleared in October 2009.

Of the 57 entities for which BOR LOC were incorrectly calculated during the 2009-2011 timeframe, two generation owners, Dominion and Ingenco Wholesale Power LLC (“Ingenco”), have notified PJM that they contest PJM’s billing corrections. Therefore, on November 14, 2011, PJM filed with the Commission in Docket No. ER12-412-000 a petition for a temporary waiver of the re-billing and repayment provisions of the Tariff with respect to the BOR LOC billing adjustments for Dominion and Ingenco. At that time, PJM also informed the Commission that it would submit this filing to seek a ruling by the Commission on issues that may need to be resolved to permit PJM to determine for the two contesting generator owners the appropriate billing adjustments to rectify the over-payments of BOR LOC credits to those owners caused by the MSCS calculation error. PJM asked that the temporary waiver of the Tariff remain in effect pending the Commission’s ruling on the instant petition. The Commission has not yet acted on PJM’s waiver petition.

## **2. PJM’s Proposed Billing Adjustments.**

PJM has determined that, when BOR LOC for the relevant time periods are calculated in accordance with Sections 3.2.3(f) and (f-1), the total over-payments to generation owners that are subject to refund for the two-year periods noted above are approximately \$99.7 million. Applying Sections 3.2.3(f) and (f-1) and utilizing

previously submitted cost-based schedules to calculate the adjustments, the two market participants that object to PJM’s billing adjustments, Dominion and Ingenco, should refund over-payments of such credits to PJM in the following amounts:

<u>Generation Owner</u>	<u>Time Period</u>	<u>Estimated Amount</u>
Dominion	August 2009 – October 2011	██████████
Ingenco	October 2009 – October 2011	██████████

The estimated over-payment amounts stated above for Dominion and Ingenco are included only in a non-public version of this petition because they present information regarding the market activities of individual PJM market participants. Section 18.17 of the Operating Agreement requires PJM to treat such participant-specific information as confidential. Moreover, in PJM’s view, the information is proprietary to the individual market participants and for that reason also should not be released by PJM. Accordingly, PJM is filing both public and non-public versions of this document and requests, pursuant to 18 C.F.R § 388.112, and requests that the Commission treat the estimated over-payment amounts stated above as non-public information. Attached as Appendix 2 to this petition is a form of confidentiality agreement under which PJM will provide access to the over-payment amounts for qualified personnel of entities that become parties to this proceeding.

### **3. Issues Raised Regarding the Billing Adjustments.**

Reversing the effects of the MSCS error with respect to the two market participants that have indicated opposition to PJM's BOR LOC billing adjustments may raise issues that the Commission needs to resolve before PJM issues revised bills to these two participants. PJM calculates that Dominion and Inogen collectively are liable to refund a large portion of the approximately \$99.7 million of total BOR LOC over-payments, based on the cost-based schedules they previously submitted to PJM. Upon recouping the over-payments to Dominion and Inogen, PJM must credit those amounts to the various other market participants that paid the BOR charges that funded the excessive BOR LOC payments. Resolution in this docket of the issues surrounding PJM's billing adjustments for these two companies will enable PJM to rectify the billing errors promptly and conclusively after the Commission's final ruling.

Accordingly, PJM presents here its understanding of the bases for Dominion's and Inogen's opposition to PJM's BOR LOC billing adjustments. PJM anticipates that Dominion and Inogen will further explain their positions in responses to this petition. The issues requiring resolution by the Commission thus will be fully joined for decision.

PJM understands that Dominion asserts that the cost-based schedules Dominion provided to PJM for the units affected by PJM's planned billing adjustments did not correctly reflect Dominion's costs. Dominion contends, therefore, that PJM should not use those schedules, without correction, in calculating the necessary billing corrections for the BOR LOC over-payments. According to Dominion, some or all of the units affected by the MSCS error are dual-fuel facilities which can be fired with either oil or

natural gas. Dominion has indicated to PJM that the cost-based schedules it had on file with PJM during the relevant time period were based on its costs of operating the units on oil, rather than gas. According to Dominion, however, when the units were scheduled to run during the pertinent months, they were to be fueled by gas, which was less costly than oil throughout the period. Further, Dominion contends that if PJM had not erred in its original calculations of LOC credits, Dominion may have put in place more representative cost-based schedules for its units. Therefore, Dominion asserts that any billing adjustments to it to correct the MSCS error should be based on revised, cost-based schedules which reflect the operating costs of Dominion's units when fueled by gas, rather than oil. The Tariff does not address whether PJM may or should allow such retroactive changes to a generator owner's cost-based schedules for this purpose.

Ingenco also has indicated that it believes re-billing based on its cost-based schedules submitted to PJM is not justified based on its circumstances in participating in PJM's markets and PJM's communications regarding Ingenco's activities. Ingenco has not described its contentions to PJM in detail, but PJM understands that Ingenco, like Dominion, may believe that its cost-based schedules on file with PJM also do not properly reflect the costs that Ingenco believes should be used to calculate its BOR LOCs. Ingenco's comments filed November 21, 2011, in Docket No. ER12-412-000 indicate that Ingenco intends to raise other issues as well in response to the instant petition. This petition is not intended to limit the issues that parties may raise in the proceeding PJM asks the Commission to initiate.

PJM believes Dominion's and Ingenco's positions with respect to the use of their previously submitted cost-based schedules may have merit, although exploration of these issues in greater depth will be necessary in this proceeding before reaching any conclusions. The purpose of this petition is to seek the Commission's determination of the appropriate re-billing amounts for Dominion and Ingenco under these circumstances. PJM reserves the right to further address any and all arguments presented in this proceeding in response to this petition.

#### **4. Request for Relief.**

The amounts and the issues involved in the required billing adjustments to Dominion and Ingenco establish a need for the Commission to initiate a proceeding to determine the equitable amount of any such adjustments.<sup>4</sup> Accordingly, PJM requests that the Commission issue an order establishing procedures under which all interested parties can present their arguments and views. Such a proceeding will ensure that all issues will be resolved before PJM makes the necessary billing adjustments to Dominion and Ingenco, including the required reallocation to other market participants of the BOR LOC that Dominion and Ingenco will repay to PJM.

PJM further requests that, to the extent necessary and as the Commission may deem appropriate, the Commission grant a waiver of the applicable provisions of the Operating Agreement and Tariff to enable PJM to implement the Commission's decision. Such a waiver will be necessary, in particular, to the extent that the Commission

---

<sup>4</sup> See, e.g., *Midwest Indep. Transmission Sys. Operator Inc.*, 136 FERC ¶ 61,010 (2011); *USGen New England Inc.*, 118 FERC ¶ 61,172 (2007).

determines that billing adjustments for overpayments of BOR LOC to Dominion and Ingenco should reflect any corrected cost-based schedules for the affected generation units, rather than the cost-based schedules previously submitted to PJM at the time of the relevant BOR LOC payments.

**5. Conclusion.**

For the reasons stated above, PJM seeks an order of the Commission establishing a proceeding to resolve issues regarding the necessary billing adjustments for Dominion and Ingenco; determining the proper billing adjustments PJM must make to rectify the over-payments of BOR LOC to Dominion and Ingenco that occurred during the indicated portions of 2009-2011 because of the MSCS error; and, to the extent necessary, waiving the applicable provisions of the Tariff and Operating Agreement to permit PJM to implement the billing adjustments to Dominion and Ingenco in the manner the Commission prescribes. PJM believes that this matter may be amenable to resolution by

settlement. Accordingly, PJM requests that the Commission consider establishing in its initial order on this petition a reasonable period for settlement discussions among the parties, and perhaps with the assistance of a settlement judge.

Respectfully submitted,



Craig Glazer  
Vice President – Federal Government Policy  
PJM Interconnection, L.L.C.  
1200 G Street, N.W.  
Suite 600  
Washington, D.C. 20005  
(202) 423-4743  
glazec@pjm.com

Vincent Duane  
General Counsel  
Jacquelynn Hugee  
Assistant General Counsel - Markets  
PJM Interconnection, L.L.C.  
955 Jefferson Ave.  
Norristown, PA 19403  
(610) 666-4367  
duanev@pjm.com  
(610) 666-4438  
hugeej@pjm.com

---

Barry S. Spector  
Michael J. Thompson  
Wright & Talisman, P.C.  
1200 G Street, N.W.  
Suite 600  
Washington, D.C. 20005  
(202) 393-1200  
spector@wrightlaw.com  
thompson@wrightlaw.com

**Counsel for  
PJM Interconnection, L.L.C.**

November 22, 2011

**APPENDIX**  
TEXT OF SECTIONS 3.2.3(f) AND (f-1)  
OF  
**OPERATING AGREEMENT, SCHEDULE 1**

(f) A Market Seller's steam-electric generating unit or combined cycle unit operating in combined cycle mode that is pool scheduled (or self-scheduled, if operating according to Section 1.10.3 (c) hereof), the output of which is reduced or suspended at the request of the Office of the Interconnection due to a transmission constraint or other reliability issue, and for which the hourly integrated, real-time LMP at the unit's bus is higher than the unit's offer corresponding to the level of output requested by the Office of the Interconnection (as indicated either by the desired MWs of output from the unit determined by PJM's unit dispatch system or as directed by the PJM dispatcher through a manual override), shall be credited hourly in an amount equal to  $\{(LMP_{DMW} - AG) \times (URTLMP - UB)\}$ , where:

LMP<sub>DMW</sub> equals the level of output for the unit determined according to the point on the scheduled offer curve on which the unit was operating corresponding to the hourly integrated real time LMP;

AG equals the actual hourly integrated output of the unit;

URTLMP equals the real time LMP at the unit's bus;

UB equals the unit offer for that unit for which output is reduced or suspended, determined according to the real-time scheduled offer curve on which the unit was operating, unless such schedule was a price-based schedule and the offer associated with that price schedule is less than the cost-based offer provided for the unit, in which case the offer for the unit will be determined from the cost-based schedule; and

where  $URTLMP - UB$  shall not be negative.

(f-1) A Market Seller's combustion turbine unit or combined cycle unit operating in simple cycle mode that is pool-scheduled (or self-scheduled, if operating according to Section 1.10.3 (c) hereof), operated as requested by the Office of the Interconnection, shall be compensated for lost opportunity cost if either of the following conditions occur:

(i) if the unit output is reduced at the direction of the Office of the Interconnection and the real time LMP at the unit's bus is higher than the unit's offer corresponding to

the level of output requested by the Office of the Interconnection (as directed by the PJM dispatcher), then the Market Seller shall be credited in a manner consistent with that described above for a steam unit or combined cycle unit operating in combined cycle mode.

(ii) if the unit is scheduled to produce energy in the day-ahead market, but the unit is not called on by PJM and does not operate in real time, then the Market Seller shall be credited hourly in an amount equal to the higher of (i)  $\{(URTLMP - UDALMP) \times DAG\}$ , or (ii)  $\{(URTLMP - UB) \times DAG\}$  where:

URTLMP equals the real time LMP at the unit's bus;

UDALMP equals the day-ahead LMP at the unit's bus;

DAG equals the day-ahead scheduled unit output for the hour;

UB equals the offer price for the unit, determined according to the schedule on which the unit was committed day-ahead, unless such schedule was a price-based schedule and the offer associated with that price schedule is less than the cost-based offer provided for the unit, in which case the offer for the unit will be determined from the cost-based schedule; and

where  $URTLMP - UDALMP$  and  $URTLMP - UB$  shall not be negative.

## **APPENDIX 2**

### **FORM OF CONFIDENTIALITY AGREEMENT**

**CONFIDENTIALITY AGREEMENT**  
**FOR DISCLOSURE OF CONFIDENTIAL MATERIAL**  
**IN DOCKET NO. ER12-XXX**

This Confidentiality Agreement (“Agreement”) governs the disclosure by PJM Interconnection L.L.C. (“PJM”) and use by Reviewing Representatives of Confidential Material in Federal Energy Regulatory Commission (“Commission”) Docket No. ER12-XXX, unless and until a Protective Order is issued by the Commission or an Administrative Law Judge (“ALJ”) in such proceeding.

**1. Definitions**

“Competitive Duty Personnel” means any individual(s) directly engaged in Competitive Duties. Counsel or outside consultants that do not provide consulting services in connection with the direct marketing, purchase, or sale of electric power at wholesale in the PJM Region are not Competitive Duty Personnel.

“Competitive Duties” include: (1) the marketing, sale, or purchase of electric power at wholesale in the PJM Region; (2) the direct supervision of any employee with such responsibilities; or (3) the provision of consulting services in connection with the marketing, purchase, or sale of electric power at wholesale in the PJM Region.

“Confidential Material” means any material designated by PJM, its members or its vendors as “confidential”, “proprietary”, or other such designation as indicates protection of the material, and includes any material so designated by PJM, its members or its vendors that was provided to PJM by another party where the other party claims such material to be competitively sensitive, commercial or financial information, or trade secret information. Confidential Material includes, but is not necessarily limited to, documents, data, and information that PJM and its members are obligated to treat as confidential under Section 18.17 of the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., as the same may be amended or superseded from time to time during the effectiveness of this Agreement.

“Employees” include third parties retained for professional advice (including, without limitation, attorneys, accountants, consultants, bankers and financial advisors), temporary administrative, clerical or programming support.

“Market Data” means all data and documents containing or derived from any records of any PJM market participant’s price-based bids or offers or cost-based bids or offers relating to any generating resource in the PJM Region. Market Data includes, but is not limited to, Appendix 2 attached to the “Petition of PJM Interconnection, L.L.C. For Institution Of Proceeding To Determine Proper Billing Adjustments And Waiver of Tariff,” filed by PJM on November XX, 2011, in Docket No. ER12-XXX.

“Notes of Confidential Material” means memoranda, handwritten notes, or any other form of information (including electronic form) which copies or discloses the contents of Confidential Material.

“Participant” means a Participant as defined in 18 CFR § 385.102(b).

“Reviewing Representative” means a person who has executed this Agreement and is:

- (1) an attorney who has made an appearance in this proceeding for a Participant;
- (2) an attorney, paralegal, or other employee associated for purposes of this case with an attorney described in Subparagraph (1);
- (3) an expert or an employee of an expert retained by a Participant for the purpose of advising, preparing for, or testifying in this proceeding; or
- (4) an employee or other representative of Participants in this proceeding with significant responsibility for this docket.

## **2. Protection and Handling of Confidential Material**

**2.1** Confidential Material shall be marked on each page as “PRIVILEGED.”

Alternatively, materials made available via secure website, CD, or DVD electronic files containing Confidential Material may indicate on the secure website, CD, or DVD that the documents contained therein “CONTAINS PRIVILEGED INFORMATION – DO NOT RELEASE” rather than physically marking each document. If the Confidential Material contains information not available to Competitive Duty Personnel, each page containing

such information shall be marked with the words “PROTECTED MATERIALS NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL.” Alternatively, such information made available via secure website, CD, or DVD electronic files containing Confidential Material, including information not available to Competitive Duty Personnel, may indicate on the secure website, CD, or DVD that the documents contained therein include “PROTECTED MATERIALS NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL.”

**2.2** By executing this Agreement, Reviewing Representative is affirming that all information designated by PJM, its members or its vendor(s) as Confidential Material will be maintained in the strictest confidence and will not be disclosed to any person or entity who has not executed a Confidentiality Agreement or who is ineligible to receive the Confidential Material because he or she is Competitive Duty Personnel. Competitive Duty Personnel are prohibited from receiving any Confidential Material that includes Market Data. In no event shall Reviewing Representatives disclose Confidential Material including Market Data to any Competitive Duty Personnel or otherwise permit Competitive Duty Personnel to gain access to any Confidential Material that includes Market Data.

**2.3** When Confidential Material has been marked “NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL,” any materials or information derived from such Confidential Material may not be reviewed by, or disclosed to, Competitive Duty Personnel. If, after executing this Confidentiality Agreement, the Reviewing Representative is assigned to perform any Competitive Duties, or if the designation of previously available Confidential Material is changed to “NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL,” that person shall thereafter have no access to materials marked “NOT AVAILABLE TO COMPETITIVE DUTY PERSONNEL,” shall either destroy or return to PJM any such materials previously made available to him/her, and shall continue to comply with the requirements set forth in this Agreement with respect to any other Confidential Material to which the Reviewing Representative previously had access.

**2.4** Reviewing Representative shall take all necessary precautions to prevent disclosure of the Confidential Material to the public or any third party. Reviewing Representative will keep Confidential Material in a secure place and safeguard the Confidential Material with the same degree of care to avoid unauthorized disclosure as

Reviewing Representative uses to protect its own or Participant's confidential and private information.

**2.5** Protected Materials shall not be used except as necessary for the conduct of the proceeding in Docket No. ER12-XXX, nor shall they be disclosed in any manner to any person except a Reviewing Representative who is engaged in the conduct of this proceeding and who needs to know the information in order to carry out that person's responsibilities in this proceeding. Reviewing Representatives may make copies of Confidential Material, but such copies are also Confidential Material. Reviewing Representatives may make notes of Confidential Material, which shall be treated as Notes of Confidential Material if they disclose the contents of Confidential Material.

**2.6** The obligation with respect to handling and using Confidential Material set forth in this Agreement is not applicable to information which:

- a. Is in the public domain at the time of its disclosure to Reviewing Representative, or thereafter enters the public domain through no breach of this Agreement by Reviewing Representative;
- b. Is known by Reviewing Representative at the time of disclosure by PJM;
- c. Is independently developed by Reviewing Representative or by a person or persons who have not had access to the Confidential Material received by Reviewing Representative from PJM;
- d. Is available to Reviewing Representative or others by inspection or analysis or related products available in the open market place;
- e. Is made available by PJM to anyone without similar restrictions by disclosing of such Confidential Material;
- f. Is known to Reviewing Representative from a source other than PJM;
- g. Is approved for release by written authorization of a representative of PJM;
- h. Is required by law or regulation to be disclosed, but only to the extent and for the purposes of such required disclosure; or

- i. Is disclosed in response to a valid order of a court or other governmental body of the United States or any of its political subdivisions, but only to the extent of and for the purposes of such order; provided, however, that Reviewing Representative will first notify PJM of the order and permit PJM to seek an appropriate protective order.

**2.7** Confidential Material will be deemed the property of PJM, its members or its vendor(s). Reviewing Representative will, within ten (10) days of a written request by PJM, its member(s) or its vendor(s), return all Confidential Material to PJM or, if so directed, destroy all such Confidential Material. Reviewing Representative also will, within ten (10) days of a written request by PJM, its member(s) or its vendor(s), certify in writing that it has satisfied the obligations of such a request.

**2.8** No manufacturing or software license under any patents or copyrights of any party is granted by this Agreement or by any disclosure of Confidential Material.

**2.9** Reviewing Representative agrees that an impending or existing violation of any provision of this Agreement would cause PJM, its member(s), or its vendor(s) irreparable injury for which there would be no adequate remedy at law, and that PJM, its member(s) or its vendor(s) will be entitled to seek immediate injunctive relief prohibiting such violation without the posting of bond or other security, in addition to any other rights and remedies available in law or equity.

**2.10** No patent, copyright, trademark or other proprietary right is licensed, granted or otherwise transferred by this Agreement or any disclosure hereunder, except for the right to use such information in accordance with this Agreement. No warranties of any kind are given for the Confidential Material disclosed under this Agreement.

**2.11** This Agreement may not be assigned by Reviewing Representative. Any assignment in violation of this provision will be void.

**2.12** If any provision of this Agreement is held invalid or unenforceable, such provision will be deemed deleted from this Agreement and replaced by a valid and enforceable provision which so far as possible achieves the intent of PJM and Reviewing Representative in agreeing to this original provision. The remaining provisions of this Agreement will continue in full force and affect.

**2.13** Reviewing Representative warrants that it has the authority to enter into this Agreement and to lawfully receive the disclosures contemplated hereunder.

**ACKNOWLEDGED AND AGREED:**

\_\_\_\_\_

Dated:

Reviewing Representative

\_\_\_\_\_

Printed Name

Title: \_\_\_\_\_

\_\_\_\_\_

Participant Name

Email: \_\_\_\_\_