



955 Jefferson Avenue  
Valley Forge Corporate Center  
Norristown, PA 19403-2497

Jacquelyn Huges  
Assistant General Counsel - Markets  
Telephone 610.666.8208 | Facsimile 610.666.8211  
[hugeej@pjm.com](mailto:hugeej@pjm.com)

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**VIA HAND DELIVERY**

Honorable Kimberly D. Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street, N.E.  
Washington, D.C. 20426-0001

**Re: PJM Interconnection, L.L.C., Docket No. ER10- -000**

Dear Secretary Bose:

Pursuant to Section 205 of the Federal Power Act, 16 U.S.C. § 824d (2000), and the Commission's Regulations, 18 C.F.R. Part 35 (2007), PJM Interconnection, L.L.C. ("PJM") hereby submits for filing the attached revisions to Sections 1.10.1(b) and 5.5 of Schedule 1 of the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement"), as well as the parallel provisions of Attachment K - Appendix to the PJM Open Access Transmission Tariff ("Tariff").<sup>1</sup> The proposed revisions eliminate a possibility for market participants to "game" the allocation of marginal loss surplus revenues by modifying a provision of the Operating Agreement concerning the allocation of the marginal loss revenue surplus and eliminating the requirement to obtain transmission service for Up-To Congestion bids. PJM also submits revisions to correct a non-substantive clerical error in Section 1.10.1 of the Tariff.

Further, because the proposed revisions are intended serve as a temporary solution to prevent market participants from manipulating the PJM Energy Markets in violation of 18 C.F.R. § 1c.2 while PJM and its stakeholders continue to discuss whether there are better solutions to address the issue, PJM respectfully requests that the Commission grant expedited treatment for this filing and issue an order within 30 days accepting the revisions for filing effective September 17, 2010. PJM also requests a shortened comment period of 15 days, and as permitted by Section 35.11, a waiver of the 60-day prior notice filing requirement of Section 35.3(a) of the Commission's regulations, to allow such an effective date. Accordingly, PJM files the proposed revised sheets as Attachment A (clean) and Attachment B (blacklined), and requests that the Commission issue its order by no later than September 17, 2010, with an effective date for the proposed revisions of September 17, 2010.

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<sup>1</sup> All further references in this transmittal letter to Sections 1.10.1 and 5.5 shall only be made to the Operating Agreement provisions, without reference to the parallel Tariff provisions. All capitalized terms that are not otherwise defined herein shall have the same meaning as they are defined in the Operating Agreement, Tariff or the Reliability Assurance Agreement Among Load Serving Entities in the PJM Region.

## **I. The Background**

The revisions proposed by PJM address the allocation of marginal loss revenue to market participants with Up-To Congestion transactions in the Day-ahead Energy Market that are not tied to the physical movement of energy in the Real-time Energy Market. A description of Up-To Congestion transactions and marginal losses may be helpful to understanding PJM's proposed revisions.

### **A. Up-To Congestion Transactions: Role and Regulatory History.**

In a February 11, 1999 order, the Commission required PJM to file new, multi-settlement system procedures to be incorporated into the Operating Agreement.<sup>2</sup> One of the options that the Commission specifically directed PJM to consider “for alleviating price uncertainty” was “allowing a transmission customer to state in advance the maximum congestion charge it is willing to pay, information that PJM would use in determining which transmission customers would be included in the day ahead schedule.”<sup>3</sup> In response to this directive, “PJM, through its stakeholder process, developed a two-settlement system that provides: (1) an option for market participants to ‘lock in’ day-ahead scheduled quantities at day-ahead prices; (2) a means for market participants to obtain increased price certainty; (3) financial incentive for resources and demand to submit day-ahead schedules that match their actual schedules; and (4) financial incentive for generation to follow real-time dispatch.”<sup>4</sup> PJM submitted that this “two-settlement system will ‘assist market participants in hedging financial risk between day ahead conditions and real time dispatch.’”<sup>5</sup> PJM's proposal allowed for several bidding mechanisms in the day-ahead market for the purpose of ensuring price certainty – price-sensitive bids, decrement and increment bids, and “up-to” congestion charge bids.<sup>6</sup>

Thus, Up-To Congestion transactions were originally created as a mechanism to hedge in the Day-ahead Energy Market the exposure to price differentials from the source to the sink of their physical energy deliveries into, out of or through PJM in the Real-time Energy Market, and to allow market participants who want to wheel power through PJM to set the maximum dollar value of congestion they would be willing to pay to wheel that power. With respect thereto, PJM stated in its PJM Two-Settlement System Filing as follows:

“Up-to” congestion bids permit transmission customers to specify how much they are willing to pay for congestion by bidding a certain

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<sup>2</sup> *Atlantic City Electric Company, et al.*, 86 FERC ¶ 61,147 at ¶¶ 61, 523 and 61,530.

<sup>3</sup> *Id.* at ¶ 61,529.

<sup>4</sup> See PJM Compliance Filing, *PJM Interconnection, L.L.C.*, Docket No. ER00-1849-000, at 4 (March 10, 2000) (“PJM Two-Settlement System Filing”).

<sup>5</sup> *Id.* citing *New England Power Pool*, 88 FERC ¶ 61,147 at 61,491 & n. 10 (1999).

<sup>6</sup> *Id.* at 6.

maximum amount for congestion between the transaction source and sink. If the congestion charges are less than the amount specified in the bid, then the transaction will be scheduled in the day-ahead schedule. These “up-to” bids protect transmission customers from paying uncertain congestion charges by guarantying that they will pay no more than the amount reflected in their bids. Transmission customers also may use an increment and decrement bid pair to accomplish the same type of hedging strategy, which further enhances their price certainty options. In the Commission’s words, these types of bids “allow transmission customers to specify the maximum price they are willing to pay for congestion in much the same way that energy market participants place bids for energy.”<sup>7</sup>

Based on the foregoing, in the PJM Two-Settlement System Filing, PJM proposed to revise its Operating Agreement to permit “up-to” congestion bids in the Day-ahead Energy Market,<sup>8</sup> which proposal was accepted by the Commission by letter order issued on May 18, 2000.<sup>9</sup>

## **B. Basis for and Calculation of Marginal Losses.**

Pursuant to Section 5.4 of Schedule 1 of the Operating Agreement, PJM calculates and assesses “Transmission Loss Charges for every Network Service User, the PJM Interchange Energy Market, and each Transmission Customer.”<sup>10</sup> The basis for these charges is “the differences in the Locational Marginal Prices, defined as the Loss Price at a bus, between points of delivery and points of receipt.”<sup>11</sup> Network Service Users are “charged for the increased cost of transmission losses to deliver the output of its firm Capacity Resources.”<sup>12</sup> Market Buyers are “charged for transmission losses resulting from all load . . . scheduled to be served from the . . . Day-ahead Energy Market at the Day-ahead Loss Price applicable to each relevant load bus.”<sup>13</sup> Additionally, Generating Market Buyers are “reimbursed for transmission losses resulting from all energy scheduled to be delivered . . . in the Day-ahead Energy Market

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<sup>7</sup> See PJM Two-Settlement System Filing at 7, citing *Atlantic City Electric Company, et al.*, 86 FERC at ¶ 61,529.

<sup>8</sup> See PJM Two-Settlement System Filing at 11.

<sup>9</sup> *PJM Interconnection, L.L.C.*, 91 FERC ¶ 61,148 (2000).

<sup>10</sup> Section 5.4.1 of Schedule 1 of the Operating Agreement, and the parallel provisions of Attachment K-Appendix of the Tariff.

<sup>11</sup> Section 5.4.2 of Schedule 1 of the Operating Agreement, and the parallel provisions of Attachment K-Appendix of the Tariff.

<sup>12</sup> Section 5.4.3(a) of Schedule 1 of the Operating Agreement, and the parallel provisions of Attachment K-Appendix of the Tariff.

<sup>13</sup> Section 5.4.3(b) of Schedule 1 of the Operating Agreement, and the parallel provisions of Attachment K-Appendix of the Tariff.

at the Day-ahead Loss Price applicable to each relevant generation bus.”<sup>14</sup> Market Sellers are “reimbursed for transmission losses resulting from all energy scheduled to be delivered in the Day-ahead Energy Market at the Day-ahead Loss Prices applicable to each relevant generation bus.”<sup>15</sup> The revenue that PJM receives from these Transmission Loss Charges is referred to as marginal loss revenue.

### **C. Allocation of Marginal Loss Surplus.**

Section 5.5 of Schedule 1 of the Operating Agreement delineates the allocation methodology for the marginal loss revenue surplus. The original intent of Section 5.5 was to allocate the loss surplus to market participants who paid for the transmission system through their transmission access charges. Consistent with the Commission’s Order in *Black Oak Energy v. PJM*, these provisions originally only applied to physical transactions.<sup>16</sup> Thus, purely financial transactions did not receive an allocation of the marginal loss surplus.

Therefore, prior to June 1, 2009, Section 5.5 allocated a portion of the marginal loss surplus to Network Service Users “in proportion to its ratio shares of the total MWhs of energy delivered to load (net of operating Behind The Meter Generation, but not to be less than zero) in the PJM Region and the total exports of MWhs of energy from such region during such month by all Transmission Customers.”

Effective as of June 1, 2009, by virtue of the Commission’s Order in the Black Oak complaint proceeding, the marginal loss revenue surplus is also allocated to Up-To Congestion transactions that paid for transmission service.<sup>17</sup> In that regard, the Commission specifically required that Up-To Congestion transactions that are supported by transmission service be allocated a portion of the revenue from the Transmission Loss Charges because, like physical transactions that require transmission service, Up-To Congestion bids are required to reserve and pay for transmission service which contributes to the fixed, embedded costs of the transmission system.<sup>18</sup> Consequently, PJM revised Section 5.5 to specifically provide that:

The total Transmission Loss Charges accumulated by the Office of Interconnection in any hour shall be distributed pro-rata to each Network Service User and Transmission

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<sup>14</sup> Section 5.4.3(c) of Schedule 1 of the Operating Agreement, and the parallel provisions of Attachment K-Appendix of the Tariff.

<sup>15</sup> Section 5.4.3(d) of Schedule 1 of the Operating Agreement, and the parallel provisions of Attachment K-Appendix of the Tariff.

<sup>16</sup> *Black Oak Energy, L.L.C., et al. v. PJM Interconnection, L.L.C.*, 128 FERC ¶ 61,262 (2009) at P 31.

<sup>17</sup> *Black Oak Energy, L.L.C., et al. v. PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,164 (2009); *Black Oak Energy, L.L.C., et al. v. PJM Interconnection, L.L.C.*, 131 FERC ¶ 61,024 (2010).

<sup>18</sup> *Black Oak Energy, L.L.C., et al. v. PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,164 (2009); *Black Oak Energy, L.L.C., et al. v. PJM Interconnection, L.L.C.*, 131 FERC ¶ 61,024 (2010).

Customer in proportion to its ratio shares of the total MWhs of energy delivered to load (net of operating Behind The Meter Generation, but not to be less than zero) in the PJM Region, or the total exports of MWh of energy from the PJM Region (that paid for transmission service during such hour), or the total MWh of cleared Up-To Congestion transactions (that paid for transmission service during such hour).

(emphasis added). The Commission approved the revisions to Section 5.5 on September 17, 2009, effective as of June 1, 2009.<sup>19</sup>

#### **D. Recent Market Activity.**

In July 2010, two market participants contacted PJM to advise that they noticed unusual activity occurring with respect to transmission service reservations on the PJM Open Access Same-Time Information System (“OASIS”). Immediately after receiving this information, PJM began investigating the specific transmission service reservations at issue. PJM confirmed that several market participants did in fact purchase a large megawatt quantity of transmission service. Further, PJM reviewed the Day-ahead Energy Market transactions of these participants, and confirmed that they submitted large quantities of Up-To Congestion bids tied to the transmission service reservations. PJM also determined that the market participants’ referenced activity in the Day-ahead Energy Market took two forms. The first type of transaction was one involving bids with sources and sinks at the exact same interface. The second type involved Up-To Congestion transactions with sources and sinks at points which were not the same, but ones where equal offsetting transactions were submitted in both directions between the same two points.

The result of the first type of transaction sourcing and sinking at the same interface was that the participant would clear megawatt hours of Up-To Congestion transactions in the Day-ahead Energy Market between pricing points that had little or no price separation. At one of the interface pricing points at which the market participants transacted, for example, the interface pricing point applicable to imports had the exact same definition as the interface pricing point applicable to exports during the time period when this behavior was observed, and therefore by definition the prices at those two points were identical. As a result, the participant was able to clear large volumes of megawatt hours of Up-To Congestion transactions with no risk of any settlement in either the day-ahead or balancing markets. However, because such transactions were eligible for a marginal loss allocation the cleared megawatts on the reserved transmission service resulted in a sizeable allocation of the marginal loss surplus based on the large megawatt hour quantity of cleared transactions. The inappropriate nature of these transactions is made very obvious in some cases because the source and sink chosen for submission of the Up-To Congestion transaction bore no relationship to the

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<sup>19</sup> *Black Oak Energy, L.L.C., et al. v. PJM Interconnection, L.L.C.*, 128 FERC ¶ 61,262 (2009) at P 32.

Point-of-Receipt (“POR”) and/or Point-of-Delivery (“POD”) on the transmission reservation to which it was linked.<sup>20</sup>

The result of the second type of transaction was the same. Participants would clear Up-To Congestion transactions in opposite directions between the same two points, resulting in no risk of any Day-ahead or balancing market settlement (because the settlement of the transactions in the opposite directions would offset each other in both the Day-ahead and balancing markets). The result would be cleared megawatt hours of Up-To Congestion transactions on the large quantities of reserved transmission service, and a resulting sizeable allocation of marginal loss surplus based on the cleared megawatt hours of transactions.

Both types of transactions resulted in net profits for the market participants because the magnitude of the loss surplus allocation exceeded the cost of the Non-Firm Transmission Service used to submit the transactions by almost \$19 million.

It is clear that participants involved in these inappropriate transactions intentionally submitted large volumes of offsetting Up-To Congestion transactions for no other purpose than to inflate the volume of Up-To Congestion transactions in the Day-ahead Energy Market and garner marginal loss revenue allocations, and that these transactions were deliberate and willful due to the specific offsetting actions that needed to be taken in order to submit the bids in question. The evidence shows that the participants accomplished this goal by reserving Non-Firm Transmission service for which they paid \$0.67/MWh, making them eligible to collect a portion of the marginal loss surplus allocation that averaged \$1.85/MWh, and thereby profiting on such transactions in an amount averaging \$1.18/MWh of cleared Up-To Congestion transactions, without having any of the attendant risk in the Real-time Energy Market for which Up-To Congestion transactions were intended to hedge against. Further, the submitted transactions were inappropriate because they were wash trades that cancelled each other out, and therefore provided no economic benefit to the market, and provided no economic benefit or risk to the participants involved beyond improperly inflating these participants’ share of the loss surplus allocation. Further, PJM believes that these offsetting trades were undertaken with the intent of manipulating PJM market rules so as to gain an allocation of marginal loss surplus revenue without any corresponding usage of the transmission system. As a result, PJM believes the Operating Agreement provisions are susceptible to manipulation and therefore need revision to prevent such activity. Therefore, PJM seeks to revise its Tariff and Operating Agreement to eliminate those provisions which are capable of being manipulated in a manner which was not intended when the Commission allowed for a marginal loss allocation for up to congestion transactions.

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<sup>20</sup> Note that market participants have the ability to override the source and/or sink associated with a particular POR/POD on a transmission reservation because in some cases the source/sink is dependent on the physical activity at the interface in real time, and participants need to be able to hedge themselves against this possibility in the Day-ahead Energy Market.

In the opinion of PJM, its Independent Market Monitor (“the IMM”) and the PJM stakeholders, market participants should not be permitted to reap the financial benefit of such intentional manipulation of the PJM markets. For that reason, PJM presented its proposal to eliminate the gaming of the PJM markets to the PJM Markets and Reliability Committee (“MRC”) on August 5, 2010.<sup>21</sup> PJM’s proposed revisions are to (a) eliminate transmission reservations associated with Up-To Congestion transactions, and (b) discount the marginal loss allocation to non-firm transmission service customers consistent with the discounted transmission service rate.<sup>22</sup> The IMM also proposed revisions to limit the distribution of marginal loss revenue for an hour to any Transmission Customer in excess of the total charges for transmission service for such hour.<sup>23</sup>

Thereafter, the proposed Tariff and Operating Agreement revisions recommended by PJM (as well as the alternative proposed by the IMM) were reviewed and discussed extensively at the August 12, 2010 meeting of the PJM Members Committee.<sup>24</sup> Stakeholders voted in favor of the PJM proposal to be submitted to the Commission as a Tariff and Operating Agreement change pursuant to Section 205 of the Federal Power Act. As part of their overall approval the membership adopted a friendly amendment that requires PJM to initiate a stakeholder process to further analyze whether any additional market rule changes should be implemented to prevent the same type of market manipulation that is at issue from occurring in the future.

## **II. The Proposed Revisions**

PJM’s proposal is two-fold. First, PJM proposes to change the method for allocating total Transmission Loss Charges to Transmission Customers prescribed in Section 5.5 of Schedule 1 of the Operating Agreement. Second, PJM proposes to eliminate the requirement to obtain transmission service for Up-To Congestion transactions set forth in Section 1.10.1(b) of Schedule 1 of the Operating Agreement. PJM believes that this two-tiered approach best addresses the market behavior that PJM and its stakeholders are seeking to eradicate from its markets because it

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<sup>21</sup> A copy of the presentations can be viewed at <http://www.pjm.com/~media/committees-groups/committees/mrc/20100805/20100805-item-11-marginal-loss-allocation-issue-monitoring-analytics-presentation.ashx> and <http://www.pjm.com/~media/committees-groups/committees/mrc/20100805/20100805-item-11-marginal-loss-allocation-issue-pjm-presentation.ashx>.

<sup>22</sup> See <http://www.pjm.com/~media/committees-groups/committees/mc/20100812/20100812-item-04-marginal-losses-allocation-draft-oa-and-tariff-revisions.ashx>.

<sup>23</sup> A copy of the IMM’s proposal is located on PJM’s web site at <http://www.pjm.com/~media/committees-groups/committees/mc/20100812/20100812-item-04-mmu-proposal-to-address-allo-losses-surplus-excess-trans-costs.ashx>.

<sup>24</sup> See <http://www.pjm.com/~media/committees-groups/committees/mc/20100812/20100812-item-04-mmu-proposal-to-address-allo-losses-surplus-excess-trans-costs.ashx> and <http://www.pjm.com/~media/committees-groups/committees/mc/20100812/20100812-item-04-marginal-losses-allocation-draft-oa-and-tariff-revisions-with-friendly-amendment.ashx>.

eliminates the fictitious OASIS reservation for the purely financial Up-To Congestion transactions because there is no need for such reservations unless there is a physical transaction in the Real-time Energy Market.

#### **A. Elimination of Transmission Service Requirement for Up-To Congestion Transactions.**

Presently, Section 1.10.1(b) of Schedule 1 of the Operating Agreement requires that transmission service first be reserved in order to support any transactions, including an Up-To Congestion transaction, in the PJM Day-ahead Energy Market, whether they are physical or virtual. Because the original intent of Up-To Congestion transactions was to create a hedge in the Day-ahead Energy Market to physical energy deliveries in the Real-time Energy Market, PJM historically required that all such transactions reserve transmission service. However, the use of Up-To Congestion transactions has markedly changed from their original derivation. By way of example, in 2009 most Real-time Energy Market transactions – 99.8% to be exact – did not have matching Up-To Congestion transactions.<sup>25</sup>

Given that the vast majority of Up-To Congestion transactions do not involve the physical movement of power, this transmission service requirement, which served as the physical link between the Day-ahead Energy Market and the Real-time Energy Market transactions, has become irrelevant for all intents and purposes except with respect to the small minority of the Up-To Congestion transactions that do involve the physical transfer of power. Therefore, requiring Up-To Congestion transactions to reserve Non-Firm Point-to-Point Transmission Service has become unnecessary as a link between Up-To Congestion transactions in the Day-Ahead market and physical energy transactions in the Real-time Energy Market. Worse yet, as recent history has indicated, retaining this requirement allows market participants to game and manipulate the PJM Energy Markets due to their ability to garner an allocation of marginal losses through use of these reservations given the price differential between non-firm service versus the amount of revenue which they can realize through the marginal loss allocation.

Consequently, PJM proposes to revise Section 1.10.1 to eliminate transmission reservations associated with purely financial Up-To Congestion transactions in the Day-ahead Energy Market. PJM will still require the reservation of transmission service for Up-To Congestion transactions involving the physical transfer of power in the Real-time Energy Market, however. In that regard, PJM proposes to revise Section 1.10.1(b) as follows:

(b) The Day-ahead Energy Market shall enable Market Participants to purchase and sell energy through the PJM Interchange

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<sup>25</sup> See 2009 State of the Market Report for PJM, Volume II at p. 236, a copy of which is located on the IMM's web site at [http://www.monitoringanalytics.com/reports/PJM\\_State\\_of\\_the\\_Market/2009/2009-som-pjm-volume2.pdf](http://www.monitoringanalytics.com/reports/PJM_State_of_the_Market/2009/2009-som-pjm-volume2.pdf), wherein it states that with respect to Up-To Congestion transactions in 2009: "Only 0.2 percent of the up-to congestion transactions had Real-Time Market transactions."

Energy Market at Day-ahead Prices and enable Transmission Customers to reserve transmission service with Transmission Congestion Charges and Transmission Loss Charges based on locational differences in Day-ahead Prices. Up-To Congestion transactions submitted in the Day-ahead Energy Market shall not require transmission service and Transmission Customers shall not reserve transmission service for such transactions. Market Participants whose purchases and sales, and Transmission Customers whose transmission uses are scheduled in the Day-ahead Energy Market, shall be obligated to purchase or sell energy, or pay Transmission Congestion Charges and Transmission Loss Charges, at the applicable Day-ahead Prices for the amounts scheduled.

PJM believes that this revision is necessary because as time has passed, Up-To Congestion transactions have become a purely financial transaction for which there is no corresponding physical transaction in the Real-time Energy Market. That being the case, there is no longer a need to require market participants who submit purely financial Up-To Congestion transactions to submit an OASIS reservation in the Day-ahead Energy Market.

Some PJM members and the IMM have expressed some concern with this aspect of PJM's proposal, based on their belief that eliminating the transmission service requirement for purely financial Up-To Congestion Transactions will in effect turn the transactions into "spread bids," which concept the PJM membership has previously rejected. In response to their concerns, PJM advised that it does not believe that the proposal creates spread bidding because PJM will not be changing any of the other parameters associated with submission of such transactions, will not be making any additional points available to and from which Up-To Congestion transactions may be submitted, and will still require that one of the points in a given transaction be an interface pricing point. Therefore, the product will remain exactly as it is today, save for the transmission service requirement that lead to the instant gaming concern. Transforming the Up-To Congestion product into a spread bidding product as previously proposed would at least involve allowing such bids at any combination of available points and likely involve expanding the list of points to and from which such transactions could be submitted. PJM does not propose to do either as part of this change.

The IMM further argued that this aspect of PJM's proposal has a significant impact on market design and is not necessary to solve the problem. As discussed further below, in PJM's opinion, the elimination of the transmission service reservation requirement for purely financial Up-To Congestion transactions is necessary to fully address the gaming activity that PJM has observed as it relates to these transactions.

## **B. Ratio of Cost of Service.**

After all of the marginal loss revenue is collected, it is distributed to Network Service Users and Transmission Customers on a pro-rata basis as specified in Section 5.5 of the PJM Tariff. The intent of Section 5.5 is to allocate the marginal loss surplus in a manner that reflects contributions to the fixed cost of the transmission system but does not undo the purpose of including loss impacts in the LMP by refunding the surplus to the same entities who paid for losses. As discussed earlier herein, prior to June 1, 2009 purely financial transactions did not receive an allocation of the marginal loss surplus. However, since that date Up-To Congestion transactions now receive an allocation of the marginal loss revenue surplus to the extent that they reserve and pay for transmission service to support such transactions due to the fact that they contribute to the embedded cost of the transmission system through their transmission access charge.<sup>26</sup>

By eliminating the unnecessary OASIS reservation for financial Up-To Congestion transactions, PJM is removing the requirement that these financial transactions contribute to the embedded costs of the transmission system. Therefore, since the only reason that purely financial Up-To Congestion transactions receive an allocation of the marginal loss revenue surplus is because they pay for a portion of the embedded costs of the transmission system, and since PJM is proposing to remove the requirement that such transactions pay for transmission service, a corresponding revision to Section 5.5 is necessary to eliminate the allocation of surplus revenue to Network Service Users and Transmission Customers having purely financial Up-To Congestion transactions that paid for transmission service. Notwithstanding the foregoing, Up-To Congestion transactions that do have a physical tie to the Real-time Energy Market and for which Non-Firm Point-to-Point Transmission Service is still required to be reserved and paid for should receive an allocation of the surplus marginal loss revenue.

In PJM, Transmission Service Rates are set forth in Schedule 7 of the Tariff for Firm Point-to-Point Transmission Service and in Schedule 8 of the Tariff for Non-Firm Point-to-Point Transmission Service. The second prong of PJM's proposed revisions is to discount the marginal loss allocation to Non-Firm Transmission Service customers consistent with the discounted Transmission Service Rate as described in Schedules 7 and 8 of the Tariff. In other words, PJM proposes to allocate the marginal loss revenue surplus on the basis of the proportion of the Transmission Service Rate that Transmission Customers contribute to the embedded, fixed costs of the transmission system.

Currently, the discounted Non-Firm Point-to-Point Transmission Service border rate in PJM is \$0.67/MWh. The Firm Point-to-Point Transmission Service border rate is

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<sup>26</sup> *Black Oak Energy, L.L.C., et al. v. PJM Interconnection, L.L.C.*, 126 FERC ¶ 61,164 (2009); *Black Oak Energy, L.L.C., et al. v. PJM Interconnection, L.L.C.*, 131 FERC ¶ 61,024 (2010).

\$18,888/MW-year, which when divided by 52 weeks of the year, 7 days per week and 24 hours per day, translates to \$2.162/MWh. The Non-Firm Point-to-Point Transmission Service border rate is approximately 31%<sup>27</sup> of the Firm Point-to-Point Transmission Service rate border rate. Therefore, the loss surplus allocation to non-firm customers who pay for service would be based on 31% of the MWh scheduled to reflect the proportion to which such customers contribute to the cost of the transmission system. The actual proportion will be calculated on an hourly basis according to the actual ratio of the Non-Firm Point-to-Point Transmission Service rate to the applicable Firm Point-to-Point Transmission Service rate.

Accordingly, PJM proposes to revise Section 5.5 as follows:

### **5.5 Distribution of Total Transmission Loss Charges.**

The total Transmission Loss Charges accumulated by the Office of Interconnection in any hour shall be distributed pro-rata to each Network Service User and Transmission Customer in proportion to its ratio shares of the total MWhs of energy delivered to load (net of operating Behind The Meter Generation, but not to be less than zero) in the PJM Region, or the total exports of MWh of energy from the PJM Region (that paid for transmission service during such hour), ~~or the total MWh of cleared Up-To-Congestion transactions (that paid for transmission service during such hour).~~ Exports of energy for which Non-Firm Point-to-Point Transmission Service was utilized and for which the Non-Firm Point-to-Point Transmission Service rate was paid will receive an allocation of the total Transmission Loss Charges based on a percentage of the MWh of energy exported on such service, determined by the ratio of Non-Firm Point-to-Point Transmission Service rate to Firm Point-to-Point Transmission Service rate.

### **C. IMM's Alternate Proposal.**

The IMM presented an alternate proposal to the PJM proposal. In the IMM's proposal the only revision that would be made is a revision of Section 5.5 to provide that:

### **5.5 Distribution of Total Transmission Loss Charges.**

The total Transmission Loss Charges accumulated by the Office of Interconnection in any hour shall be distributed pro-rata to each Network Service User and Transmission Customer in proportion to its ratio shares of the total MWhs of energy delivered to load (net of operating Behind The Meter Generation, but not to be less than zero) in the PJM Region, or the total exports of MWh of energy from the

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<sup>27</sup>  $\$ .67 \text{ MW-hour Non-Firm} / \$ 2.162 \text{ MW-hour Firm} * 100 = 30.9898 = 31\% \text{ ratio.}$

PJM Region (that paid for transmission service during such hour), or the total MWh of cleared Up-To Congestion transactions (that paid for transmission service during such hour), except that no such distribution to any non-firm Transmission Customer for such hour shall exceed the total charges for transmission service for such hour.<sup>28</sup>

As earlier stated, the IMM opined the elimination of the transmission service reservation requirement for purely financial Up-To Congestion transactions is not necessary to fully address the gaming activity as it relates to purely financial Up-To Congestion transactions. Rather, the IMM stated that if the Operating Agreement is revised to limit the allocation of surplus marginal loss revenue to the value of non-firm transmission service that the market participant paid for will alone resolve the problem because there would be no incentive for entities to schedule the types of transactions that have recently been seen in the market. The IMM further stated that its proposal didn't cap the distribution of surplus marginal loss revenue to Firm Transmission Customers because there is (a) less of an incentive for them to game the market, (b) no evidence of gaming having been conducted by them, and (c) no danger of the contribution to firm service being less than the marginal loss revenue.

When questioned about whether differentiating between firm customers and non-firm customers with respect to capping their allocation of the surplus marginal loss revenue was discriminatory treatment, the IMM advised that it did not believe that its proposal discriminated against non-firm customers to limit their allocations to the amount of their contribution to the fixed costs of the grid. The IMM further stated that it is not factually possible that the same problem could arise with firm transmission customers as has been seen with non-firm transmission customers in the near future.

In PJM's opinion, the IMM's proposal could be deemed to be discriminatory treatment of non-firm transmission customers because it caps their allocation of the marginal loss revenue surplus resulting from their Up-To Congestion transactions, but does not similarly cap the allocation to firm transmission customers for the same. The PJM proposal, on the other hand, proportionately allocates the loss surplus revenue based on the transmission customer's contribution to the cost of the transmission system which is not discriminatory, but reflective of the differing levels of such contributions.

#### **D. Further Stakeholder Process.**

After considerable discussion of the gaming activity, and PJM's and the IMM's proposals for addressing such activity, stakeholders voted in favor of the PJM proposal, subject to the initiation of a stakeholder process to further analyze whether any alternative or additional market rule changes should be implemented to prevent the type

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<sup>28</sup> See <http://www.pjm.com/~media/committees-groups/committees/mc/20100812/20100812-item-04-marginal-losses-allocation-monitoring-analytics-presentation.ashx>.

of market manipulation that is at issue from being perpetuated in the future. In that regard, stakeholders envisioned that the Tariff and Operating Agreement revisions proposed by PJM would serve as a temporary solution to eliminating the manipulative transactions while they and PJM continue to discuss whether there are better solutions to address the issue.

Accordingly, in addition to the revisions to the Tariff and Operating Agreement that were proposed by PJM, the stakeholders voted to require PJM to initiate a stakeholder process to analyze whether better alternatives to PJM's proposed rule changes exist, to assess the impact of the proposed rule changes on Up-To Congestion transactions, and to assess the incentives that may be created by the proposed allocation methodology.<sup>29</sup> Stakeholders further directed PJM to produce a report by no later than December 31, 2010 regarding the effectiveness of the proposed rule changes in addressing the identified transaction issues.<sup>30</sup>

Finally, to the extent that the stakeholder discussions result in a super-majority endorsement or approval of any additional changes to Tariff or Operating Agreement to address the identified transaction issues, stakeholders directed PJM to file such Tariff and Operating Agreement changes reflecting immediately upon the conclusion of their stakeholder process but in any event no later than August 15, 2011. However, absent such super-majority stakeholder endorsement or approval, stakeholders directed that the changes proposed by PJM in this filing shall remain in effect.<sup>31</sup>

#### **E. Correction of Clerical Error.**

Finally, PJM proposes revisions to correct a non-substantive clerical error in Section 1.10.1 of the Tariff – capitalization of the defined term Transmission Customer – for purposes of consistency with the parallel provision of the Operating Agreement. The need for this correction is self-explanatory, and as such it has not been reviewed by PJM's stakeholders.

### **III. Request for Expedited Commission Order and Shortened Comment Period**

Without the relief requested in this filing, the PJM Energy Markets could be exposed to further market manipulation to the detriment of other market participants, particularly given that in mere nine weeks during which certain market participants were able to exploit the loophole in PJM's market rules before being uncovered, they were able to benefit from their manipulative activity to the tune of nearly \$19 million.

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<sup>29</sup> See <http://www.pjm.com/~media/committees-groups/committees/mc/20100812/20100812-item-04-mla-draft-oa-and-tariff-revisions-with-friendly-amendment.ashx>.

<sup>30</sup> *Id.*

<sup>31</sup> *Id.*

Absent the requested waiver, market participants may seek to continue to submit these inappropriate transactions and continue to garner a financial windfall that was not contemplated by the market rules. PJM therefore respectfully requests a Commission order on this filing by September 17, 2010. If the Commission considers it necessary to have a comment period, PJM requests such a comment period be shortened to September 2, 2010 in order to facilitate a Commission order by September 17, 2010.

#### **IV. Stakeholder Support**

The PJM Members Committee endorsed the revisions to the Tariff and approved the parallel revisions to the Operating Agreement, with a sector weighted vote of 3.84 in favor of the proposal, at its meeting on August 12, 2010.

#### **V. Correspondence**

The following individuals are designated for inclusion on the official service list in this proceeding and for receipt of any communications regarding this filing:

Jacquelyn B. Hugee  
Assistant General Counsel  
PJM Interconnection, L.L.C.  
955 Jefferson Avenue  
Norristown, Pennsylvania 19403  
(610) 666-8208  
[hugeej@pjm.com](mailto:hugeej@pjm.com)

Frederick S. Bresler III  
Vice President, Market Operations & Demand Resources  
PJM Interconnection, L.L.C.  
955 Jefferson Avenue  
Norristown, Pennsylvania 19403  
(610) 666-8942  
[bresler@pjm.com](mailto:bresler@pjm.com)

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](mailto:glazec@pjm.com)

#### **VI. Service**

PJM has served a copy of this filing on all PJM Members and on all state utility regulatory commissions in the PJM Region by posting this filing electronically. Electronic service is permitted as of November 3, 2008, under the Commission's regulations<sup>32</sup> pursuant to Order No. 714<sup>33</sup> and the Commission's Notice of Effectiveness of Regulations issued on October 28, 2008, in Docket No. RM01-5-000. In compliance with these regulations, PJM will post a copy of this filing to the FERC filings section of its internet site, located at the following link: <http://www.pjm.com/documents/ferc->

<sup>32</sup> See 18 CFR §§ 35.2, 154.2, 154.208 and 341.2.

<sup>33</sup> Federal Energy Regulatory Commission, Order No. 714, 124 FERC ¶ 61,270.

[manuals/ferc-filings.aspx](#) with a specific link to the newly-filed document, and will send an e-mail on the same date as this filing to all PJM Members and all state utility regulatory commissions in the PJM Region<sup>34</sup> alerting them that this filing has been made by PJM today and is available by following such link. PJM is also serving electronic copies of this filing on all persons listed on the Commission's official service list for these proceedings.

## VII. Conclusion

PJM believes that the revisions to Sections 1.10.1(b) and 5.5 of Schedule 1 of the Operating Agreement as set forth in this filing are necessary to close the loophole that currently exists in its market rules, which certain of its market participants have taken advantage of to the detriment other market participants. Accordingly, PJM respectfully requests that the Commission (a) grant its request for expedited action, (b) grants its request for a waiver of the Section 35.3(a) notice period, (c) establish a shortened comment period deadline of September 2, 2010, and (d) accept the proposed revisions to its Operating Agreement as described herein and as specifically set forth in the attached revised Tariff and Operating Agreement sheets by no later than September 17, 2010.

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](mailto:glazec@pjm.com)

Jacquelyn B. Huges  
Assistant General Counsel - Markets  
PJM Interconnection, L.L.C.  
955 Jefferson Avenue  
Norristown, Pennsylvania 19403  
(610) 666-8208  
[hugeej@pjm.com](mailto:hugeej@pjm.com)

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<sup>34</sup> PJM already maintains, updates and regularly uses e-mail lists for all PJM members and affected commissions.

## **ATTACHMENT A**

**REVISIONS TO PJM OPERATING AGREEMENT**

Allocation of Marginal Loss Revenue

**Clean**

(b) The Day-ahead Energy Market shall enable Market Participants to purchase and sell energy through the PJM Interchange Energy Market at Day-ahead Prices and enable Transmission Customers to reserve transmission service with Transmission Congestion Charges and Transmission Loss Charges based on locational differences in Day-ahead Prices. Up-To Congestion transactions submitted in the Day-ahead Energy Market shall not require transmission service and Transmission Customers shall not reserve transmission service for such transactions. Market Participants whose purchases and sales, and Transmission Customers whose transmission uses are scheduled in the Day-ahead Energy Market, shall be obligated to purchase or sell energy, or pay Transmission Congestion Charges and Transmission Loss Charges, at the applicable Day-ahead Prices for the amounts scheduled.

(c) In the Real-time Energy Market, Market Participants that deviate from the amounts of energy purchases or sales, or Transmission Customers that deviate from the transmission uses, scheduled in the Day-ahead Energy Market shall be obligated to purchase or sell energy, or pay Transmission Congestion Charges and Transmission Loss Charges, for the amount of the deviations at the applicable Real-time Prices or price differences, unless otherwise specified by this Schedule.

(d) The following scheduling procedures and principles shall govern the commitment of resources to the Day-ahead Energy Market and the Real-time Energy Market over a period extending from one week to one hour prior to the real-time dispatch. Scheduling encompasses the day-ahead and hourly scheduling process, through which the Office of the Interconnection determines the Day-ahead Energy Market and determines, based on changing forecasts of conditions and actions by Market Participants and system constraints, a plan to serve the hourly energy and reserve requirements of the Internal Market Buyers and the purchase requests of the External Market Buyers in the least costly manner, subject to maintaining the reliability of the PJM Region. Scheduling shall be conducted as specified below, subject to the following condition. If the Office of the Interconnection's forecast for the next seven days projects a likelihood of Emergency conditions, the Office of the Interconnection may commit, for all or part of such seven day period, to the use of generation resources with notification or start-up times greater than one day as necessary in order to alleviate or mitigate such Emergency, in accordance with the Market Sellers' offers for such units for such periods and the specifications in the PJM Manuals.

#### **1.10.1A Day-ahead Energy Market Scheduling.**

The following actions shall occur not later than 12:00 noon on the day before the Operating Day for which transactions are being scheduled, or such other deadline as may be specified by the Office of the Interconnection in order to comply with the practical requirements and the economic and efficiency objectives of the scheduling process specified in this Schedule.

(a) Each Market Participant may submit to the Office of the Interconnection specifications of the amount and location of its customer loads and/or energy purchases to be included in the Day-ahead Energy Market for each hour of the next Operating Day, such specifications to comply with the requirements set forth in the PJM Manuals. Each Market Buyer shall inform the Office of the Interconnection of the prices, if any, at which it desires not to include its load in the Day-ahead Energy Market rather than pay the Day-ahead Price.

(b) Each Generating Market Buyer shall submit to the Office of the Interconnection:  
(i) hourly schedules for resource increments, including hydropower units, self-scheduled by the Market Buyer to meet its Equivalent Load; and (ii) the Dispatch Rate at which

## **5.5 Distribution of Total Transmission Loss Charges.**

The total Transmission Loss Charges accumulated by the Office of Interconnection in any hour shall be distributed pro-rata to each Network Service User and Transmission Customer in proportion to its ratio shares of the total MWhs of energy delivered to load (net of operating Behind The Meter Generation, but not to be less than zero) in the PJM Region, or the total exports of MWh of energy from the PJM Region (that paid for transmission service during such hour). Exports of energy for which Non-Firm Point-to-Point Transmission Service was utilized and for which the Non-Firm Point-to-Point Transmission Service rate was paid will receive an allocation of the total Transmission Loss Charges based on a percentage of the MWh of energy exported on such service, determined by the ratio of Non-Firm Point-to-Point Transmission Service rate to Firm Point-to-Point Transmission Service rate.

## **6. "MUST-RUN" FOR RELIABILITY GENERATION**

### **6.1 Introduction.**

Except as to the exempt generation resources identified in section 6.5 below, the following procedures shall apply to any generation resource subject to the dispatch of the Office of the Interconnection that, as a result of transmission constraints, the Office of the Interconnection determines, in the exercise of Good Utility Practice, must be run in order to maintain the reliability of service in the PJM Region. The provisions of this Schedule shall otherwise apply to the scheduling, dispatch, operation and accounting treatment of such resources, to the extent not inconsistent with the provisions of this Section 6.

### **6.2 Identification of Facility Outages.**

Not later than one hour prior to the deadline specified in Section 1.10.1 of this Schedule, the Office of the Interconnection shall identify on the PJM Open Access Same-Time Information System any facility outage or other system condition which it has determined may give rise to a transmission constraint that may require, in order to maintain system reliability, the dispatch of one or more generation resources that otherwise would not be dispatched based on the merits of their offers to the PJM Interchange Energy Market.

### **6.3 Dispatch for Local Reliability.**

#### **6.3.1 Request and Dispatch.**

In addition to the dispatch of generation by the Office of the Interconnection to maintain reliability on transmission facilities monitored by it, a Member that owns or leases with rights equivalent to ownership local Transmission Facilities, as defined in this Agreement *and* the *Consolidated* Transmission Owners Agreement and that operates a local control center in accordance with Section 11.3.3 of this Agreement or a Market Operations Center in accordance with Section 1.7.5 of this Schedule may request the Office of the Interconnection to dispatch generation in order to maintain reliability on any such local Transmission Facilities that are not then monitored by the Office of the Interconnection, subject to the rules and procedures in Section 6.3.2 and the PJM Manuals. The Office of the Interconnection shall dispatch generation to maintain reliability on such local Transmission Facilities by incorporating the facilities in the State Estimator program described in Section 2.3 as set forth below, unless the Office of the Interconnection determines that such dispatch would

**REVISIONS TO PJM TARIFF**

Allocation of Marginal Loss Revenue

**Clean**

(f) The Office of the Interconnection shall coordinate with other interconnected Control Area as necessary to manage, alleviate or end an Emergency.

## **1.10 Scheduling.**

### **1.10.1 General.**

(a) The Office of the Interconnection shall administer scheduling processes to implement a Day-ahead Energy Market and a Real-time Energy Market.

(b) The Day-ahead Energy Market shall enable Market Participants to purchase and sell energy through the PJM Interchange Energy Market at Day-ahead Prices and enable Transmission Customers to reserve transmission service with Transmission Congestion Charges and Transmission Loss Charges based on locational differences in Day-ahead Prices. Up-To Congestion transactions submitted in the Day-ahead Energy Market shall not require transmission service and Transmission Customers shall not reserve transmission service for such transactions. Market Participants whose purchases and sales, and Transmission Customers whose transmission uses are scheduled in the Day-ahead Energy Market, shall be obligated to purchase or sell energy, or pay Transmission Congestion Charges and Transmission Loss Charges, at the applicable Day-ahead Prices for the amounts scheduled.

(c) In the Real-time Energy Market, Market Participants that deviate from the amounts of energy purchases or sales, or Transmission Customers that deviate from the transmission uses, scheduled in the Day-ahead Energy Market shall be obligated to purchase or sell energy, or pay Transmission Congestion Charges and Transmission Loss Charges, for the amount of the deviations at the applicable Real-time Prices or price differences, unless otherwise specified by this Schedule.

(d) The following scheduling procedures and principles shall govern the commitment of resources to the Day-ahead Energy Market and the Real-time Energy Market over a period extending from one week to one hour prior to the real-time dispatch. Scheduling encompasses the day-ahead and hourly scheduling process, through which the Office of the Interconnection determines the Day-ahead Energy Market and determines, based on changing forecasts of conditions and actions by Market Participants and system constraints, a plan to serve the hourly energy and reserve requirements of the Internal Market Buyers and the purchase requests of the External Market Buyers in the least costly manner, subject to maintaining the reliability of the PJM Region. Scheduling shall be conducted as specified below, subject to the following condition. If the Office of the Interconnection's forecast for the next seven days projects a likelihood of Emergency conditions, the Office

Point-to-Point Transmission Service. Except as specified in this subsection, a Transmission Loss Charge shall be assessed for transmission use scheduled in the Day-ahead Energy Market, calculated as the amount to be delivered multiplied by the difference between the Day-ahead Loss Price at the delivery point or the delivery interface at the boundary of the PJM Region and the Day-ahead Loss Price at the source point or the source interface at the boundary of the PJM Region.

Transmission Loss Charges shall be assessed for real-time transmission use in excess of the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the excess amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery interface at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source interface at the boundary of the PJM Region. A Transmission Customer shall be paid for Transmission Loss Charges for real-time transmission use falling below the amounts scheduled for each hour in the Day-ahead Energy Market, calculated as the shortfall amount multiplied by the difference between the Real-time Loss Price at the delivery point or the delivery interface at the boundary of the PJM Region, and the Real-time Loss Price at the source point or the source interface at the boundary of the PJM Region. Real-time deviations from the Point-to-Point Transmission Service scheduled in the Day-ahead Energy Market shall be determined by the lesser of the real-time injection or withdrawal associated with such transmission service.

#### **5.4.5 Total Transmission Loss Charges.**

The total Transmission Loss Charges collected by the Office of the Interconnection each hour will be the aggregate net amounts determined as specified in this Schedule.

#### **5.5 Distribution of Total Transmission Loss Charges.**

The total Transmission Loss Charges accumulated by the Office of Interconnection in any hour shall be distributed pro-rata to each Network Service User and Transmission Customer in proportion to its ratio shares of the total MWhs of energy delivered to load (net of operating Behind The Meter Generation, but not to be less than zero) in the PJM Region, or the total exports of MWh of energy from the PJM Region (that paid for transmission service during such hour). Exports of energy for which Non-Firm Point-to-Point Transmission Service was utilized and for which the Non-Firm Point-to-Point Transmission Service rate was paid will receive an allocation of the total Transmission Loss Charges based on a percentage of the MWh of energy exported on such service, determined by the ratio of Non-Firm Point-to-Point Transmission Service rate to Firm Point-to-Point Transmission Service rate.

**ATTACHMENT B**

**REVISIONS TO PJM OPERATING AGREEMENT**

Allocation of Marginal Loss Revenue

**Redline Version**

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**REVISIONS TO PJM TARIFF**

Allocation of Marginal Loss Revenue

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