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Honorable Magalie Roman Salas
Secretary
Federal Energy Regulatory Commission
888 First Street, N.E. Room 1A
Washington, D.C. 20426

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FEDERAL ENERGY REGULATORY COMMISSION

Re: PJM Interconnection, L.L.C., Docket No. ER03-406-000

Dear Secretary Salas:

DESCRIPTION OF FILING

PJM Interconnection, L.L.C. ("PJM") hereby submits for filing amendments to the PJM Open Access Transmission Tariff ("PJM Tariff") and the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. ("Operating Agreement") (1) to create an annual Financial Transmission Rights ("FTR")[1] auction and Auction Revenue Right ("ARR") allocation process to replace PJM's existing annual FTR allocation procedures, (2) to offer FTR Options in addition to FTR Obligations and (3) to enhance the existing monthly FTR auction by including a 24-hour FTR product in addition to on-

[1] The proposed amendments rename "Fixed Transmission Rights" as "Financial Transmission Rights" to better reflect the product's nature. In this transmittal letter, "FTR" may refer either to Fixed Transmission Rights or Financial Transmission Rights.

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peak FTRs, and off-peak FTRs.[2] The new annual FTR auction process will provide PJM market participants with more flexible transmission congestion hedging alternatives and will make FTRs more available to all participants by creating more robust markets for FTRs.

For several reasons, the Commission should accept the proposed amendments. First, the amendments contain innovative products developed through an extensive stakeholder process. Consensus was achieved through compromise by all participants. Second, the new annual FTR auction process and new FTR products are important to the evolution of the maturing energy and transmission markets in the PJM region. Third, the amendments are consistent with the Commission's SMD NOPR.[3]

Background and Overview of PJM's New Annual FTR Auction

FTRs, like the Congestion Revenue Rights proposed in the SMD NOPR, are financial rights that entitle the holders of such rights to receive transmission congestion credits that can be used as a hedge to offset transmission congestion charges in the day-ahead market.[4]

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2 The Appendix to Attachment K of the PJM Tariff and Schedule 1 of the Operating Agreement are identical. Therefore, the same changes are proposed for both documents. For ease, in this transmittal letter, only Schedule 1 of the Operating Agreement may be cited.

3 Remedying Undue Discrimination through Open Access Transmission Service and Standard Electricity Market Design, Notice of Proposed Rulemaking, IV FERC Stats. & Regs. ¶ 32,563 (2002) ("SMD NOPR").

4 See SMD NOPR at P 208 ("A Congestion Revenue Right is a financial tool that allows a customer to protect itself against the costs of congestion.").

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Initially, PJM allocated all FTRs to network and point-to-point transmission service customers, at the customer's request. A monthly FTR auction later was added as a means to facilitate a more robust and liquid market for FTRs. The monthly auctions have allowed market participants (1) to submit bids to purchase residual FTR capability, (2) to submit offers to sell existing FTRs, and (3) to maximize the efficiency of FTR trading by providing an automatic reconfiguration of FTRs. PJM experience has demonstrated that the addition of the monthly FTR auction has created more opportunities for market participants to acquire FTRs.

In the current PJM market, FTRs are allocated to network and firm point-to-point transmission service customers on an annual basis, because these customers pay the revenue requirement for the transmission system. Under PJM's new annual FTR auction proposal, transmission property rights will continue to be allocated to network and firm point-to-point transmission service customers on an annual basis, but in the form of ARRs, not FTRs. ARRs will entitle the holder to receive an allocation of the revenues from the annual FTR auctions.

Importantly, in the annual FTR auction, ARR holders will have the option to convert their ARRs into FTRs by "self-scheduling" the FTRs on the exact same source and sink points as the ARRs that have been allocated to the customer. Alternatively, customers can reconfigure their ARRs by bidding to acquire FTRs on alternative paths. Of course, the holders of ARRs also simply may retain the ARRs that have been allocated and receive the associated allocation of revenues from the auction.

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The evolution to an annual FTR auction was requested by PJM customers and is supported by PJM. The new annual FTR auction process (1) will create a more liquid and deeper market for FTRs, (2) will allocate more efficiently scarce FTRs, (3) will give customers more flexible options for hedging their risk, and (4) will create a more active secondary market for FTRs. Accordingly, PJM proposes to replace the current system of FTR allocations with annual FTR auctions that encompass PJM's entire system capability. PJM also will continue to conduct monthly auctions.

The proposed annual FTR auction will take place in four rounds, in order to allow for price discovery. Price discovery will prevent windfall bids from capturing significant levels of FTRs for an inappropriately low price. In each auction round, 25 percent of feasible FTR capability will be awarded.

A new product, FTR Options, along with existing FTR Obligations (the current product), will be offered for sale simultaneously in the FTR auctions. FTR Options are distinguishable from FTR Obligations in that FTR Options do not entail the downside risk associated with FTR Obligations. FTR Obligations produce a positive credit when the sink LMP is higher than source LMP, but impose a liability when the sink LMP is lower than the source LMP. FTR Options, on the other hand, do not have the liability component. In other words, unlike FTR Obligations, which produce a negative hourly economic value (a liability to the holder) when the designated path is in the direction opposite to the congested flow, the hourly economic value of an FTR Option is zero (neither a benefit nor a liability to the holder) when the designated path is in the direction opposite to the congested flow (i.e. the day-ahead LMP at the point of receipt is higher

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than the day-ahead LMP at the point of delivery). Because FTR Option holders incur no liability when the sink LMP is less than the source LMP, the price of FTR Options on each path likely will be greater than the FTR Obligation price on the path. The higher price of an FTR Option reflects the premium that is created in purchasing the counterflow capability that is necessary to support the FTR Option.

The allocation of ARRs, as proposed in the SMD NOPR,[5] is a fundamental feature of the new FTR framework. As noted, under the new process, the revenues from the annual FTR auction will be allocated to network transmission and firm point-to-point transmission customers in the form of ARRs that are allocated on an annual basis. ARRs will be distributed to network and firm point-to-point transmission service customers in much the same manner as annual FTRs currently are allocated, except for the following two changes:

1. ARR entitlements will be reassigned on a pro-rata basis within a transmission zone as load shifts between suppliers in that zone. This change will allow all customers that are paying for transmission to receive the benefit of congestion hedges and should facilitate retail market entry. Specifically, as load changes from one load serving entity ("LSE") to another within a transmission zone, a proportional share of the ARRs defined to sink in the zone would be reassigned automatically to the new LSE. This change is consistent with the Commission directive in Occidental Chemical Corp. v. PJM

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5 SMD NOPR at P 379.

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Interconnection, L.L.C. and Delmarva Power & Light Co., 101 FERC ¶ 61,005 (2002), at P 17 that PJM modify its procedures to allow rights to follow load.

2. There will be a one-year transition period during which requested ARR source points must be unit-specific capacity resources. This is the same as the current requirement for requesting FTRs. After the one-year transition period, the unit-specific capacity resource requirement will be eliminated. This transition mechanism is a compromise between the PJM stakeholders desiring that the current allocation method remain unchanged and those desiring that it be eliminated immediately.

As noted, to give customers additional hedging flexibility, the ARR holder can convert the ARR to an FTR in the annual auction by notifying PJM that it desires to "self-schedule" its ARR path into the annual FTR auction. To self-schedule, the customer must notify PJM of its intention by the end of the first auction round. Twenty-five percent of the customer's ARRs then will be self-scheduled in each round of the auction. The self-scheduler will be a price-taker for these ARRs (in other words it would be guaranteed to get back in credit for an ARR whatever it had paid for the FTR in the auction). At the time the ARRs are granted, PJM already will have determined whether the ARRs are simultaneously feasible. The customer therefore will be able to convert all of its ARRs to FTRs, with no risk to the customer of not receiving an ARR credit equivalent to what it paid in the FTR auction.

This "self-scheduling" provides a customer (*e.g.*, an LSE) with a right of first refusal to convert its ARRs into FTRs. It thereby enables customers to protect their load

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with FTRs without the risk of participating in the competitive auction process to obtain them.

In addition to the features described above, to provide customers even more hedging flexibility, the proposed amendments establish a 24-hour FTR product in addition to the existing on-peak and off-peak products. Further, the proposed amendments continue to allow interconnecting generators that pay for system upgrades to have flexibility in the way they select the ARRs (instead of FTRs) associated with the upgrades.

PJM's New Annual FTR Auction Process is Consistent with the SMD NOPR

PJM's proposed new annual FTR auction process is consistent with the SMD NOPR.[6] First, consistent with the SMD NOPR, the amendments create an annual FTR auction for the entire system capability. SMD NOPR at P 238 ("The Independent Transmission Provider would be required to offer Congestion Revenue Rights for all transmission capability on the grid.").

Second, the new framework will include periodic (annual and monthly) FTR auctions, as proposed in the SMD NOPR. Id. at P 252 ("[W]e propose to require that the Independent Transmission Providers conduct periodic auctions of Congestion Revenue Rights."). This aspect of the proposal will facilitate an active secondary market, which the SMD NOPR stresses is an important element in a revenue right based congestion management system. Id. ("We believe it is important that there be a secondary market for

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6 See also New England Power Pool, 100 FERC ¶ 61,287, at P 83 (Commission accepted ISO-NE's proposal for FTRs and associated ARRs as "consistent with our SMD NOPR"), order on reh'g, 101 FERC ¶ 61,344 (2002).

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Congestion Revenue Rights."). As the Commission noted in the SMD NOPR, "experience to date has been that there is a more vibrant secondary market where Congestion Revenue Rights [*i.e.* FTRs] are auctioned rather than directly assigned." Id. at P 381. An auction methodology will make holders of FTRs on congested paths less reluctant to offer them into the secondary market than if the holders acquired such rights through direct assignment. Id. A strong secondary market will allow customers to resell their FTRs in an organized market, permit customers to acquire new FTRs and sell existing ones they no longer need, and enable customers without FTRs to acquire them. Id. at 252.

Third, as prescribed by the SMD NOPR, PJM's new FTR auction process will provide price transparency for FTRs; it will provide the ability to reconfigure FTRs; and it will allow the sale of FTRs associated with other transmission capacity that becomes available. Id.

Fourth, as suggested in the SMD NOPR, PJM's new FTR auction process now will include FTR Options as well as FTR Obligations. Id. at P 245.

Fifth, also as suggested in the SMD NOPR, PJM will continue to offer property rights in the form of ARRs to interconnection customers with respect to system upgrades and facilities paid for by the customers. SMD NOPR at P 238; see also New England Power Pool, 100 FERC at PP 78, 83.

Sixth, as required by the SMD NOPR, under the new FTR auction process, PJM will ensure that FTRs offered for sale will be reconfigured in a manner that maintains the simultaneous feasibility of the FTRs. Id. at P 253 ("[T]he Independent Transmission

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Provider must reconfigure Congestion Revenue Rights offered for sale in a way that maintains the simultaneous feasibility of the Congestion Revenue Rights.").

Finally, consistent with the SMD NOPR and the Commission's direction to PJM in Occidental Chemical Corp., 101 FERC ¶ 61,005, the new PJM FTR auction process ensures that ARRs follow load as it switches suppliers in states with retail competition. See SMD NOPR at P 378 n. 186 ("In states that have retail competition, provisions would also be needed to ensure that Congestion Revenue Rights stay with load.").

As enumerated above, PJM's proposed FTR auction process meets the criteria set forth in the SMD NOPR. As such, PJM's proposal will be a significant step towards implementing SMD in the PJM region and should be accepted. See PJM Interconnection, L.L.C., 101 FERC ¶ 61,115, at P 2 (2002) (Commission approval of Spinning Reserve market "as a step toward PJM's implementation of Standard Market Design."). Allowing PJM to implement an auction now is consistent with the stage of PJM's market evolution.[7]

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[7] Establishing FTR auctions for PJM's system capability in place of FTR allocations will not facilitate the exercise of market power, either generally or in load pockets. The PJM Market Monitoring Unit reviewed the proposed FTR auctions and reported that they should not result in the ability to exercise additional market power. In any event, auctions merely are mechanisms to make FTRs more available in an open and transparent manner. An entity improperly seeking to achieve a dominant market position could acquire financial rights bilaterally as readily as it can acquire them through auctions. No special considerations or rules are needed for the allocation of ARRs to entities inside load pockets. PJM's market monitor will continue to monitor for all abuses of market power in load pockets, whether through FTRs/ARRs or otherwise.

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Transition Mechanism for New Areas of the PJM region

The market in the initial PJM control area has evolved to a point where allocation of ARRs and an annual FTR auction are appropriate and beneficial. However, PJM also is expanding into new regions. In these new regions, PJM recognized that a direct assignment of financial rights (*e.g.* FTRs) may be warranted for a period of time because of the lack of transmission congestion pricing history in these new regions. Such a transition period will enable market participants in these regions to gain experience with the LMP-based congestion management system before having to participate in financial rights auction. This incremental implementation approach is consistent with the evolutionary approach to market implementation which has proven successful in the PJM market. Therefore, the proposed amendments provide that, in the areas where market expansions are currently underway in PJM, initially there will be an assignment of FTRs, followed later by a switch to auctions alone.

Specifically, the proposed amendments provide that, in new PJM zones, network transmission service customers shall be assigned FTRs for each network resource in a number of megawatts equal to or less than the installed capacity summer megawatt rating of each designated network resource. Operating Agreement Sch. 1 proposed § 5.2.2(e)(i). Similarly, firm point-to-point transmission customers will be assigned FTRs, at the customer's election. Id. proposed § 5.2.2(e)(iii). These FTR assignments will be effective until the first annual allocation of ARRs after the integration of a new PJM zone into the PJM market. Id. proposed § 5.2.2(e).

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Like customers in the current PJM area which have experienced PJM's evolution to FTR annual auctions, these transitional provisions should provide customers in new regions with the appropriate experience using FTRs as a congestion management system before moving to the next stage -- auctions for the entire system capability.

Stakeholder Process

The proposed FTR auction and ARR process are the result of an extensive stakeholder process. The Market Implementation Working Group (MIWG) diligently worked over the past year to develop the proposal. Throughout this period, the MIWG periodically updated the PJM Energy Market Committee ("EMC") about its progress. The PJM Tariff Advisory Committee reviewed the proposal at its December 2, 2002 meeting. The EMC endorsed the FTR proposal at its December 11, 2002 meeting. The PJM Members Committee endorsed the proposal and approved the Operating Agreement changes by the requisite vote at its December 12, 2002 meeting.[8]

DETAILED DESCRIPTION OF PJM TARIFF AND OPERATING AGREEMENT CHANGES

Modifications to the PJM Tariff

To reflect the new terminology, several sections throughout the PJM Tariff are modified to replace references to "Fixed Transmission Right(s)" with references to "Financial Transmission Right(s)" and references to "Incremental Fixed Transmission Right(s)" with references to "Incremental Auction Revenue Right(s)."

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8 Where necessary PJM has made conforming changes to the PJM Tariff consistent with the FTR proposal.

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Definitions

Section 1.14(A) (Incremental Auction Revenue Right): This section formerly "Incremental Fixed Transmission Right" is renamed "Incremental Auction Revenue Right" and revised to define "Incremental Auction Revenue Right" instead of "Incremental Fixed Transmission Right."

Part IV of the Tariff

Section 42.4: In addition to changing the references to "Incremental Fixed Transmission Rights to "Incremental Auction Revenue Rights," this section is modified to provide an alternative to the effective period of an interconnection customer's ARR of thirty years or life of the facility or upgrade for the interconnection customer's ARRs. Section 42.4 provides the interconnection customer a one-time choice to either take the ARR for a thirty year period (or the life of the facility or upgrade whichever is less) or have the right, on an annual basis, to request an ARR during the annual ARR allocation process, between the same source and sink provided the ARR is simultaneously feasible.

The change to allocation of incremental ARRs rather than FTRs is consistent with the concept of auctioning the entire system FTR capability and allocating the auction revenue to ARR holders in order to facilitate a robust FTR market. The ARR allocation provides the interconnection customer with much more flexibility to enhance the value of its transmission property right by either selling its incremental ARR entitlement or directly converting it to an FTR as explained above.

Attachment F-l Form of Umbrella Service Agreement for Network Integration Transmission Service Under State Retail Access Programs - Specifications of Network

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Integration Transmission Service Pursuant to State Required Retail Access Programs: Section 6.0 (Assignment of Fixed Transmission Rights) is deleted in its entirety as it is no longer applicable. The remaining sections of the Specifications are renumbered accordingly.

Modifications to the Appendix to Attachment K of the PJM Tariff and Schedule 1 of the Operating Agreement

The proposed modifications to the Appendix to Attachment K of the PJM Tariff and to Schedule 1 of the Operating Agreement are identical. The section number references in the descriptions below refer to the identical sections in both documents. Throughout both documents, the references in several section to "Fixed Transmission Rights" have been changed to "Financial Transmission Rights" to reflect the name change. Additionally, certain sections have been renumbered to accommodate the addition of new sections or deletions of existing sections.

Definitions

Section 1.3 (Definitions): The following definitions have been added to the Definitions section: "Auction Revenue Rights" (Section 1.3.1), "Auction Revenue Rights Credits" (Section 1.3.1A), "Financial Transmission Right Obligation" (Section 1.3.5A), "Financial Transmission Right Option" (Section 1.3.5B), and "Target Allocation" (Section 1.3.33C). Additionally, Section 1.3.5 is modified to rename the definition of "Fixed Transmission Right" to "Financial Transmission Right" to reflect the new terminology and to include "FTR" as an alternative reference for Financial Transmission Right.

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Transmission Congestion Credit Calculation

Section 5.2.2 (Financial Transmission Rights): Subsection (a) of section 5.2.2 is modified to provide that FTRs shall be auctioned as set forth in section 7. Section 5.2.2(b) and (c) are replaced in their entirety to eliminate the current FTR assignment process and instead to specify the valuation methodology for FTR Obligations and FTR Options, respectively.

The new section 5.2.2(b) provides that the hourly economic value of an FTR Obligation is based on the FTR megawatt reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the FTR. Such hourly economic value will be positive when the day-ahead price at the point of delivery is higher than the day-ahead price at the point of receipt. Such hourly economic value will be negative (a liability to the holder) when the opposite situation occurs (Day-ahead Price at point of delivery is lower than at the point of receipt).

The new section 5.2.2(c) provides that the hourly economic value of an FTR Option is based on the FTR megawatt reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the FTR. Like FTR Obligations, the hourly economic value of a FTR Option is positive when the Day-ahead Price at the point of delivery is higher than the Day-ahead Price at the point of receipt. Unlike the FTR Obligation however, when the Day-ahead Price at the point of receipt is higher than the Day-ahead price at the point of delivery, the hourly economic value of a FTR Option is zero, resulting in neither a benefit nor a liability to the holder.

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Section 5.2.2(e) is added to provide a transition from the allocation to auction of FTRs in new PJM zones. Subsection (i) provides that, for the transition period, as is currently the case, each network transmission customer in such a new zone is to designate a subset of its network resources for which FTRs will be assigned. The FTRs will be assigned for each network resource in a number of megawatts equal to or less than the installed capacity summer megawatt rating of each designated network resource, determined at the new PJM zone transmission bus at which the designated network resource is connected. Each FTR will be to the aggregate load buses of the network transmission customer in such a zone. The sum of a network transmission customer's assigned FTRs for a zone must equal or be less than that customer's peak load for that zone as determined under section 34.2 of the PJM Tariff. Similarly, the sum of each network transmission customer's FTRs for Non-Zone Network Load must be equal to or less than its transmission responsibility for Non-Zone Network Load as determined under section 34.2 of the PJM Tariff. FTR assignments pursuant to this section will remain in effect until the first annual allocation of ARRs occurs after the integration of such zones into the PJM interchange energy market.

Subsection (ii) provides that, during the transition period, each point-to-point transmission customer receiving firm transmission service in a new zone shall be assigned FTRs. It allows such customers to elect not to receive FTRs or to elect FTRs for only certain points of delivery or receipt. Such customers may obtain FTRs up to the number of megawatts of firm service they receive between the receipt and delivery points for the firm point-to-point transmission service. Subsection (iii) provides that all FTRs

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must be feasible and that if the amount of FTRs allocated for a new zone are not feasible they will be prorated in inverse proportion to the effect on binding constraints.

Section 5.2.3 *(Target Allocation of Transmission Credits):* This section formerly entitled "Target Allocation for Network Service Users" is modified to provide the Target Allocation of Transmission Congestion Credits for each entity holding FTRs rather than the Target Allocation solely for network transmission customers. The Target Allocation of Transmission Congestion Credits shall be determined for each FTR by multiplying the FTR by the Day-ahead Price differences for the receipt and delivery points associated with the FTR, calculated as the LMP at the delivery point(s) minus the LMP at the receipt point(s). The Target Allocation can be positive or negative. If the Target Allocation is positive, it is a credit to the FTR holder. If it is negative, it is a debit to the holder of an FTR Obligation, and it will be set to zero for a holder of an FTR Option. This section also sets forth the calculation of Transmission Congestion Credits, which are determined by multiplying the sum of the Day-ahead Price of the buses that comprise the zone by the percent of annual peak load assigned to each node. Finally, this section specifies that the total Target Allocation for network transmission customers and point-to-point customers for each hour shall be the sum of the Target Allocations associated with all of the network transmission customers' or point-to-point transmission customers' FTRs.

Section 5.2.4 *(Target Allocation/or Other Holders):* This section is deleted in its entirety and is reserved for future use.

Section 5.2.5 *(Calculation of Transmission Congestion Credits):* Subsection (a) of this section is modified to recognize that Transmission Congestion Credits now will be

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calculated for each "entity holding an FTR," rather than for network transmission customers and point-to-point transmission customers. Subsection (b) is modified to clarify that when the total Target Allocations are greater than the total Transmission Congestion Credits for the hour resulting from both the day-ahead and real-time energy markets, each holder of an FTR shall be assigned a share of the Total Transmission Congestion Charges in proportion to its target allocations for FTRs which have a positive Target Allocation value. If the FTRs have a negative Target Allocation value, then the FTRs are assigned the full Target Allocation value as a negative Transmission Congestion Credit.

Section 5.2.6 *(Distribution of Excess Charges):* Subsection (c) of this section is modified to clarify that any excess Transmission Congestion charges remaining at the end of a calendar year first will be distributed to ARR holders in proportion to, but not more than, any ARR deficiencies for that calendar year, then to network transmission customers and point-to-point transmission customers.

Financial Transmission Rights Auctions

Section 7.1.1 *(Auction Period and Scope of Auction):* Section 7.1.1 is modified to include both monthly and annual auctions. It also now specifies that all FTR capability, except as allocated pursuant to section 5.2.2(e) (FTRs in new zones), will be offered for sale in the annual auction in four rounds with 25 percent of the capability offered in each round. Any remaining FTR capability will be offered for sale in the monthly auction. The annual and monthly auctions will be for on-peak, off-peak, and 24-hour FTRs, and the FTRs will be offered as FTR Obligations and FTR Options. This section also now

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provides that an ARR holder may self-schedule an FTR on the same path in the annual FTR Auction according to the rules described in the PJM Manuals.

Section 7.1.2 (Frequency and Time of Auctions): This section is modified to provide the timing of the four rounds of the annual auction and to modify the timing of the monthly auctions to facilitate the timing of the annual auction.

Section 7.1.3 (Duration of Financial Transmission Rights): This section is modified to specify that credits associated with FTRs obtained in the auctions shall be for the time period specified in the auction in which the FTRs were obtained (*i.e.*, annual or monthly).

Section 7.2.2 (Specified Receipt and Delivery Points): This section, formerly entitled "Specified Buses," is modified to expand the available receipt and delivery points that may be specified in bids for FTR Obligations and FTR Options in the annual FTR auctions. Receipt and delivery points in the annual auctions may be any combination of hubs, zones, aggregates, generators, and interface buses. The text specifying the receipt and delivery points that may be specified in bids for monthly FTRs does not change.

Section 7.3.3 (Pending Applications for Firm Service): Subsection (a) of this section is deleted in its entirety and reserved for future use.

Section 7.3.4 (On-Peak, Off-Peak and 24 Hour Periods): This section is modified to provide that on-peak, off-peak, and 24 hour FTRs will be offered in the annual and monthly auctions (rather than simultaneous separate auctions for on-peak and off-peak periods). A new description of the 24-hour time period also is included.

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Section 7.3.5 (Offers and Bids): Subsection (b) of this section is modified to apply the reasonable standards of verification of the rights of an entity providing an offer to sell FTRs to all entities holding rights to FTRs. Subsection (c) is modified to provide that bids may specify receipt and delivery points in accordance with Section 7.2.2.

Section 7.3.7 *(Announcement of Winners and Prices):* This section is modified to apply to both the annual and monthly FTR auctions.

Section 7.4 (Allocation of Auction Revenues): This section formerly was numbered 7.3.9. It is modified to contain four separate sections (7.4.1 through 7.4.4). These new sections provide for the allocation of auction revenues.

Section 7.4.1 (Eligibility): Subsection (a) of section 7.4.1 modifies the text in the prior 7.3.9 to provide that the annual and monthly auction revenues, after payment to the entities selling FTRs into the auctions, will be allocated among ARR holders in proportion to the Target Allocation of the Auction Revenue Rights Credits for the holder. Subsection (b) provides that the Auction Revenue Rights Credits will be calculated based on the clearing prices results of the applicable annual FTR auction.

Section 7.4.2 (Auction Revenue Rights): This new section provides the ARR allocation procedures. Subsection (a) provides the procedures for the year 2003/2004 planning period. For this planning period, ARRs will be allocated for each network resource, as requested by the network transmission customer, in a number of megawatts equal to or less than the installed capacity summer megawatt rating of the designated network resource. Each ARR will be to the aggregate load buses of the network transmission customer in a zone, or to the border of the PJM region for non-zone network

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load. The sum of each network transmission customer's allocated ARRs for a zone must be equal to or less than the network transmission customer's peak load for that zone as determined under section 34.1 of the P JM Tariff. The sum of each network transmission customer's ARRs for non-zone network load must be equal to or less than the network transmission customer's transmission responsibility for non-zone network load as determined under section 34.1 of the PJM Tariff.

Subsection (b) of section 7.4.2 provides the procedures for the planning periods after the 2003/2004 planning period. For the 2004/2005 planning period and thereafter, on an annual basis, the network transmission customer need no longer designate a network resource, but instead will source ARRs from a subset of designated buses, which will consist of a combination of zones, generators, hubs, and external interface buses. The Network Service User will request an amount of ARRs from each source bus. Each ARR will sink into the aggregate load buses of the network transmission customer in a zone, or to the border of the PlM region for non-zone network load. The sum of each network transmission customer's allocated ARRs for a zone must be equal to or less than the network transmission customer's peak load for that zone as determined under section 34.1 of the PlM Tariff. The sum of each network transmission customer's ARRs for non-zone network load must be equal to or less than the network transmission customer's transmission responsibility for non-zone network load as determined under section 34.1 of the PJM Tariff. The ARRs will be allocated in four stages, with 25 percent of the system ARRs capability allocated in each stage.

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Subsection (c) of section 7.4.2 provides that, during the annual FTR auction period, ARRs will be reallocated as network load changes from one network transmission customer to another within a zone.

Subsection (d) provides that each firm point-to-point transmission customer shall specify whether it wants to receive ARRs. This section also provides that ARRs for each instance of point-to-point transmission service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the firm point-to-point transmission customer has firm point-to-point transmission service.

Finally, subsection (e) of section 7.4.2 provides that all ARRs must be simultaneously feasible. If the ARRs requested during the annual auction period are not simultaneously feasible, then the ARRs will be prorated in inverse proportion to the effect on binding constraints.

Section 7.4.3 (Target Allocation of Auction Revenue Right Credits): This new section provides the target allocation of Auction Revenue Right Credits for each ARR. After each annual FTR auction, such target allocation is determined by dividing each ARR by four and multiplying by the price difference for the receipt and delivery points associated with the ARR, calculated using Locational Marginal Prices. Each entity holding ARRs shall have a daily total target allocation which shall be the sum of the daily target allocations associated with all of the entity's ARRs.

Section 7.4.4 (Calculation of Auction Revenue Right Credits): The new section provides for the calculation of Auction Revenue Rights Credits. Subsection (a) provides

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that the daily target allocations, as determined in 7.4.3, plus any additional ARR target allocations applicable for a particular day, are compared to the daily total revenues of the monthly FTR auction (divided by the number of days in the month) and the annual FTR auction (divided by the number of days in the planning period). If the total of the target allocations is less than the total auction revenues, then the Auction Revenue Right Credit for each ARR holder will be equal to its target allocation. All remaining funds will distributed as Excess Congestion Charges pursuant to section 5.2.5.

Subsection (b) provides that, if the total of the target allocations is more than the total auction revenues, then each ARR holder will receive an amount of the auction revenues proportional to its positive Target Allocation value. If an entity's Target Allocation is negative, then the full value will be assigned as a negative Auction Revenue Right Credit.

Section 7.5 (Simultaneous Feasibility): This section (formerly section 7.4) is modified to specify that a goal of simultaneous feasibility is to ensure that there are sufficient revenues from the annual FTR auction to satisfy ARR obligations.[9]

Effective Date

PJM requests an effective date of March 11, 2003. This date is sixty days after the date of this filing. The proposed effective date will permit the four-round annual FTR

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[9] PJM also is submitting revised tables of contents for both the PJM Tariff and the Operating Agreement to reflect pagination changes and new or revised section headings in those documents.

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auction to commence in March for the award of FTRs for the PJM 2003/2004 planning period (June 1, 2003 through May 31, 2004).

Documents Enclosed

PJM encloses the original and six copies of the following:

1. Transmittal letter.
2. Revised pages of the PJM Tariff and Operating Agreement and redlined versions of same.[10]
3. Federal Register Notice. (Also enclosed on diskette.)

Correspondence And Communications

Correspondence and communications with respect to this filing should be sent to, and PJM requests the Secretary to include on the official service list, the following:

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10 The revised pages filed herein include the changes to the PJM Tariff and Operating Agreement filed in PJM Interconnection, L.L.C. Docket No. ER03-262; however, only the changes being filed herein are reflected in the redline versions of the documents. The Commission has not yet acted in Docket No. ER03-262.

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Service and Federal Register Notice

PJM has served a copy of this filing on all PJM members and each state electric utility regulatory commission in the PJM region. A form of notice suitable for publication in the Federal Register is attached and enclosed on diskette.

Respectfully submitted,

Barry S. Spector
Carrie L. Bumgarner
Counsel for
PJM Interconnection, L.L.C.

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Tariff Revisions

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provided pursuant to a state requirement that the Transmission Provider or Transmission Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner. (ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider or a Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner, is an Eligible Customer under the Tariff.

1.11A Energy Resource: A generating facility that is not a Capacity Resource or Available Capacity Resource.

1.12 Facilities Study: An engineering study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) to determine the required modifications to the Transmission Provider's Transmission System, including the cost and scheduled completion date for such modifications, that will be required to provide the requested transmission service or to accommodate an Interconnection Request.

1.12A Feasibility Study: A study conducted by the Transmission Provider in accordance with Section 36.2 of this Tariff.

1.13 Firm Point-To-Point Transmission Service: Transmission Service under this Tariff that is reserved and/or scheduled between specified Points of Receipt and Delivery pursuant to Part II of this Tariff.

1.14 Good Utility Practice: Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

1.14A Incremental Auction Revenue Right: The additional Auction Revenue Rights (as defined in Section 1.3.1 of the Appendix to Attachment K to the Tariff) not previously feasible, created by the addition of Merchant Transmission Facilities, or a new transmission facility or upgrade resulting from the accommodation of an Interconnection Request pursuant to Part IV of the Tariff.

1.14B [Reserved].

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36.6.3 Incremental Auction Revenue Rights: The Interconnection Customer may request Transmission Provider to provide a non-binding estimate in the Facilities Study of the Incremental Auction Revenue Rights associated with the facilities or upgrades for which the Interconnection Customer has cost responsibility on up to three (3) pairs of point-to-point combinations. The ultimate assignment of Incremental Auction Revenue Rights will be made pursuant to the allocation process set forth in Section 42 of the PJM Tariff and may depend upon the point-to-point combination requests and cost responsibilities of other Interconnection Customers.

36.7 Facilities Study Procedures: The Transmission Provider will conduct Facilities Studies relating to the Interconnection Requests that were evaluated in the corresponding System Impact Studies, to the extent such Interconnection Requests have not been terminated and withdrawn. When completed, the Facilities Studies will include good faith estimates of the cost, determined in accordance with Section 37 of the Tariff, to be charged to each affected Interconnection Customer for the Attachment Facilities, Local Upgrades, and Network Upgrades that are necessary to accommodate each Interconnection Request evaluated in the study and the time required to complete construction of the facilities and upgrades.

36.8 Interconnection Service Agreement: Upon completion of the Facilities Study, the Transmission Provider shall tender to each Interconnection Customer an Interconnection Service Agreement to be executed by the Interconnection Customer and the Transmission Provider.

36.8.1 Cost Reimbursement: Pursuant to the Interconnection Service Agreement, an Interconnection Customer shall agree to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) for the costs, determined in accordance with Section 37 of the Tariff, of constructing the necessary facilities and upgrades to accommodate its Interconnection Request. If the Interconnection Customer and the affected Transmission Owner(s) agree and so inform the Transmission Provider, the Interconnection Service Agreement shall specify an appropriate rate that will directly assign and enable the affected Transmission Owner(s) to recover the costs of the facilities and upgrades. In the absence of such an agreement, the Interconnection Service Agreement shall obligate the Interconnection Customer to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) as the expenditures for design, engineering, and construction are made. The Transmission Provider shall distribute the revenues received under this Section 36.8.1 to the affected Transmission Owner(s).

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41.3.3 **Replacement of Generation:** The holder of the Capacity Interconnection Rights may retain its Capacity Interconnection Rights after the expiration of the three-year period described in Section 41.3.2 of the Tariff if it can demonstrate that it is actively engaged in the construction of replacement generation to be connected at the bus associated with the Capacity Interconnection Rights. The holder of the Capacity Interconnection Rights will retain only such rights that are commensurate with the size in megawatts of the replacement generation, not to exceed the amount of the holder's Capacity Interconnection Rights. Any desired increase in Capacity Interconnection Rights shall require an Interconnection Request and adherence to the procedures in this Part IV.

41.4 **Transfer of Capacity Interconnection Rights:** Capacity Interconnection Rights may be sold or otherwise transferred subject to compliance with such procedures as may be established by the Transmission Provider regarding such transfer and notice to the Transmission Provider of any generation facilities that will use the Capacity Interconnection Rights after the transfer. The transfer of Capacity Interconnection Rights shall not itself extend the periods set forth in Section 41.3 regarding loss of Capacity Interconnection Rights.

42 Auction Revenue Rights

42.1 **Right of Interconnection Customer to Incremental Auction Revenue Rights:** An Interconnection Customer that, pursuant to section 36.8.1, reimburses the Transmission Provider for the costs of constructing facilities and upgrades to accommodate its Interconnection Request shall be entitled to receive the Incremental Auction Revenue Rights associated with such facilities and upgrades as determined in accordance with this section.

42.2 **Procedures for Assigning Incremental Auction Revenue Rights:** No less than forty-five (45) days prior to the in-service date of a transmission facility or upgrade, as determined by the Office of the Interconnection, the Office of the Interconnection shall notify the Interconnection Customer(s), which have responsibility to reimburse the costs of constructing the facility or upgrade, that initial requests for Incremental Auction Revenue Rights associated with the facility or upgrade must be submitted to the Office of the Interconnection within a time period specified by the Office of the Interconnection in the notification. The Office of the Interconnection then shall commence a three-round allocation process. In round one, one-third of the Incremental Auction Revenue Rights available for each point-to-point combination requested in that round will be assigned to the requesters of the specific combinations in accordance with Section 42.3 of the Tariff. In round

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two, two-thirds of the Incremental Auction Revenue Rights available for each requested point-to-point combination in

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that round will be assigned in accordance with Section 42.3 of the Tariff. In round three, all available Incremental Auction Revenue Rights will be assigned for the requested point-to-point combinations in that round in accordance with Section 42.3 of the Tariff. In each round, a requester may request the same point-to-point combination as in the previous rounds or submit a different combination. In rounds one and two, requesters may accept the assignment of Incremental Auction Revenue Rights or refuse them. Acceptance of the assignment in rounds one and two will remove the assigned Incremental Auction Revenue Rights from availability in the next rounds. Refusal of an Incremental Auction Revenue Rights assignment in rounds one and two will result in the Incremental Auction Revenue Rights being available for the next round. The Incremental Auction Revenue Rights assignments made in round three will be final and binding. For each round, a request for Incremental Auction Revenue Rights shall specify a single point-to-point combination for which the Interconnection Customer desires Incremental Auction Revenue Rights and shall be in a form specified by the Office of the Interconnection and in accordance with procedures set forth in the PJM Manuals. The Office of the Interconnection shall specify the deadlines for submission of requests in each round of the allocation process and shall complete the allocation process before the in-service date of the facility or upgrade.

42.3 **Determination of Incremental Auction Revenue Rights to be Provided to Interconnection Customer:** The Office of the Interconnection shall determine the Incremental Auction Revenue Rights to be provided to Interconnection Customers associated with a particular transmission facility or upgrade pursuant to Section 42.2 using the tools described in Attachment K to the Tariff, including an assessment of the simultaneous feasibility of any Incremental Auction Revenue Rights and all other outstanding Auction Revenue Rights. For each requested point-to-point combination, the Office of the Interconnection shall determine, simultaneously with all other requested point-to-point combinations, the base system Auction Revenue Right capability, excluding the impact of any new transmission facilities or upgrades necessary to accommodate Interconnection Requests. The Office of the Interconnection then shall similarly determine, for each requested point-to-point combination, the Auction Revenue Rights capability including the impact of any new facilities and upgrades. For each point-to-point combination, the Incremental Auction Revenue Right capability shall be the difference between the Auction Revenue Right capability in the base system analysis and the Auction Revenue Right capability in the analysis including the impact of the new facilities and upgrades. When multiple Interconnection Customers have cost responsibility for the same new transmission facility or upgrade, Incremental Auction Revenue Rights shall be assigned to each Interconnection Customer in proportion to the Interconnection Customers' relative cost responsibilities for the facility and in inverse proportion to the relative flow impact on constrained facilities or interfaces of the point-to-point combinations selected by the Interconnection Customers.

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42.3A Reallocation of Incremental Auction Revenue Rights: (1) This section shall apply in the event that

(a) the Office of the Interconnection determines that accommodating an Interconnection Customer's Interconnection Request would require, in whole or in part, any Local Upgrade and/or Network Upgrade that the Office of the Interconnection determined to be required to accommodate an Interconnection Request that was part of an earlier Interconnection Queue, provided that such previously-constructed facility or upgrade was placed in service no more than five years prior to the Interconnection Queue Closing Date applicable to such Interconnection Customer, and

(b) such Interconnection Customer (hereafter in this section, the "Current Interconnection Customer") executes an Interconnection Service Agreement.

Upon determining that this section applies, the Office of the Interconnection

(c) shall notify each Interconnection Customer that paid or incurred a portion of the costs of a pertinent, previously-constructed facility or upgrade (hereafter in this section, a "Preceding Interconnection Customer") of the portion of the costs of such facility or upgrade for which the Current Interconnection Customer is determined to be responsible pursuant to Section 37.6, and

(d) shall afford each such Preceding Interconnection Customer, subject to the terms of this Section 42.3A, an opportunity to obtain, in exchange for a proportional share (as determined in accordance with Section 42.3) of the Incremental Auction Revenue Rights associated with such facility or upgrade that the Preceding Interconnection Customer holds, reimbursement for a share of the cost of the facility or upgrade that the Preceding Interconnection Customer paid or incurred that is proportional to the cost responsibility of the Current Interconnection Customer for such facility or upgrade.

(2) A Preceding Interconnection Customer shall have no obligation to exchange Incremental Auction Revenue Rights for cost reimbursement pursuant to this section, provided, however, that in the event that a Preceding Interconnection Customer chooses not to relinquish Incremental Auction Revenue Rights associated with a previously-constructed facility or upgrade, the Current Interconnection Customer shall have no cost responsibility with respect to the portion of such facility or upgrade for which that Preceding Interconnection Customer bore cost responsibility.

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(3) In the event that a Preceding Interconnection Customer elects to exchange Incremental Auction Revenue Rights for cost reimbursement pursuant to this section, (a) the Preceding Interconnection Customer shall relinquish the Incremental Auction Revenue Rights that it elects to exchange in writing, in a form and at a time reasonably satisfactory to the Office of the Interconnection; (b) the Current Interconnection Customer shall pay Transmission Provider, upon presentation of Transmission Provider's invoice therefor, an amount equal to the portion of such customer's cost responsibility for the relevant, previously-constructed facility or upgrade that is proportional to the Incremental Auction Revenue Rights that the Preceding Interconnection Customer agreed to exchange; and (c) the Office of the Interconnection shall assign Incremental Auction Revenue Rights associated with the previously-constructed facility or upgrade to the Current Interconnection Customer in accordance with the following:

(i) in the event that more than one Current Interconnection Customer is contemporaneously eligible for a reallocation of Incremental Auction Revenue Rights associated with a facility or upgrade, the Office of the Interconnection shall use the procedures of Section 42.2 to reallocate the Incremental Auction Revenue Rights made feasible by retirement of the Incremental Auction Revenue Rights relinquished by the Preceding Interconnection Customer;

(ii) in all other instances, the Current Interconnection Customer shall be entitled to assignment of either (A) the Incremental Auction Revenue Rights associated with the pertinent facility or upgrade that the Preceding Interconnection Customer relinquished pursuant to this section, or (B) any new Incremental Auction Revenue Rights that are made feasible by retirement of the Incremental Auction Revenue Rights relinquished by the Preceding Interconnection Customer, provided, however,

(iii) that if it is not feasible to assign Incremental Auction Revenue Rights associated with the pertinent facility or upgrade to the Current Interconnection Customer in proportion to such customer's cost responsibility for that facility or upgrade, then (A) the Current Interconnection Customer's cost responsibility for the pertinent facility or upgrade shall be reduced to an amount proportional to the Incremental Auction Revenue Rights that can be feasibly assigned to it, and (B) the Preceding Interconnection Customer's Incremental Auction Revenue Rights associated with the pertinent facility or upgrade shall be reduced only by a quantity proportional to the Current Interconnection Customer's final cost responsibility. In the event of a reduction in the Current Interconnection Customer's cost responsibility for a previously-constructed facility or

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upgrade pursuant to this subparagraph (3)(c)(iii), Transmission Provider shall refund to the Current Interconnection Customer the difference between the amount such customer paid pursuant to subsection (3)(b) of this Section 42.3A and the amount of its final cost responsibility for the pertinent facility or upgrade.

Upon completion of the reallocation process, Transmission Provider shall pay to the Preceding Interconnection Customer an amount that is proportional to the Current Interconnection Customer's final cost responsibility for the pertinent facility or upgrade and to the Incremental Auction Revenue Rights relinquished by the Preceding Interconnection Customer.

(4) The Office of the Interconnection shall specify deadlines for the procedural steps in reallocating Incremental Auction Revenue Rights pursuant to this section and shall complete the reallocation process before the date of commencement of interconnection service for the Current Interconnection Customer.

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42.4 Length of Incremental Auction Revenue Rights: Incremental Auction Revenue Rights received by an Interconnection Customer pursuant to this section shall be effective for thirty (30) years or the life of the facility or upgrade, whichever is less, subject to any subsequent pro-rata reductions of all Auction Revenue Rights (including Incremental Auction Revenue Rights) in accordance with Attachment K. At any time during this thirty-year period (or the life of the facility or upgrade, whichever is less), in lieu of continuing this thirty-year Auction Revenue Right, the Interconnection Customer shall have a one-time choice to switch to an optional mechanism, whereby, on an annual basis, the customer has the choice to request an Auction Revenue Right during the annual Auction Revenue Rights allocation process (pursuant to Section 7.4.2 of the Appendix to Attachment K of the Tariff) between the same source and sink, provided the Auction Revenue Right is simultaneously feasible, pursuant to Section 7.5 of the Appendix to Attachment K of the Tariff. An Interconnection Customer may return Incremental Auction Revenue Rights that it no longer desires at any time, provided that the Office of the Interconnection determines that it can simultaneously accommodate all remaining outstanding Auction Revenue Rights following the return of such Auction Revenue Rights. In the event an Interconnection Customer returns Incremental Auction Revenue Rights, the Interconnection Customer shall have no further rights regarding such Incremental Auction Revenue Rights.

42.5 Rate-based Facilities: No Incremental Auction Revenue Rights shall be received by an Interconnection Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

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contractor orders and agreements entered into by the Interconnected Transmission Owner to design, construct, install, operate, maintain and own the TO Interconnection Facilities, provided, however, that Interconnection Customer shall have the right to choose to take delivery of any equipment ordered by the Interconnected Transmission Owner for which Transmission Provider otherwise would authorize cancellation of the purchase order; or (b) remove any TO Interconnection Facilities built by the Interconnected Transmission Owner or any TO Interconnection Facilities built by the Interconnection Customer (but only after title to the subject facilities has been transferred to the Interconnected Transmission Owner); or (c) partially or entirely complete the TO Interconnection Facilities as necessary to preserve the integrity or reliability of the Transmission System, provided that Interconnection Customer shall be entitled to receive any Incremental Auction Revenue Rights associated with such facilities and upgrades as determined in accordance with Section 42 of the Tariff; or (d) undo any of the changes to the Transmission System that were made pursuant to this Subpart C and the Construction Service Agreement. To the extent that the Interconnection Customer has fully paid for equipment that is unused upon cancellation or which is removed pursuant to subsection (b) above, the Interconnection Customer shall have the right to take back title to such equipment; alternatively, in the event that the Interconnection Customer does not wish to take back title, the Interconnected Transmission Owner may elect to pay the Interconnection Customer a mutually agreed amount to acquire and own such equipment.

94.3.2 Termination Upon Default: In the event that Interconnection Customer exercises its right to terminate under Section 94.1.2, and notwithstanding any other provision of this Subpart C, the Interconnection Customer shall be liable for payment of the Interconnected Transmission Owner's Costs incurred up to the date of Interconnection Customer's notice of termination pursuant to Section 94.1.2 and the costs of completion of some or all of the TO Interconnection Facilities or specific unfinished portions thereof, and/or removal of any or all of such facilities which have been installed, to the extent that Transmission Provider determines such completion or removal to be required for the Transmission Provider and/or Interconnected Transmission Owner to perform their respective obligations under Part IV of the Tariff, provided, however, that Interconnection Customer's payment of such costs shall be without prejudice to any remedies that otherwise may be available to it under this Subpart C for the Default of the Interconnected Transmission Owner.

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SCHEDULE 9

PJM Interconnection, L.L.C. Administrative Services

a) PJM Interconnection, L.L.C. is the Transmission Provider under this Tariff. It also operates the PJM Interchange Energy Market as described in the Appendix to Attachment K of this Tariff and provides various other services to market participants. The cost of operating the PJM Interconnection, L.L.C., including principal and/or depreciation expense, interest expense and financing costs, shall be recovered from users of the various PJM services under this Schedule 9 and its subsidiary Schedules which correspond to categories of services ("Service Categories") provided by PJM. The charge in any month to any user of PJM's services under this Schedule 9 is the sum of the charges under the following subsidiary Schedules of this Schedule 9 to the extent determined to be applicable by the Transmission Provider to such user in such month:

Schedule 9-1:	"Control Area Administration Service"
Schedule 9-2:	"Financial Transmission Rights Administration Service"
Schedule 9-3:	"Market Support Service"
Schedule 9-4:	"Regulation and Frequency Response Administration Service"
Schedule 9-5:	"Capacity Resource and Obligation Management Service"

b) The rates, terms, conditions, and applicability of these subsidiary services of this Schedule 9 are set forth on the subsidiary Schedules of this Schedule 9.

c) This Schedule 9 also includes a subsidiary Schedule 9-6, "Management Services Cost," which shall govern the determination and allocation of certain overhead and administrative costs among subsidiary Schedules 9-1 through 9-5.

d) Each of the subsidiary Schedules 9-1 through 9-5 of this Schedule 9 contains a formula for determination of the rate or charge thereunder. The rates and charges for Schedule 9-1 shall be determined monthly based on the costs incurred in such month, pursuant to the formulas set forth in such schedule. The rates and charges for Schedules 9-2 through 9-5 shall be determined annually pursuant to the formulas in such schedules, effective January 1 of each calendar year, based on PJM's Approved Budget applicable to such calendar year (subject to the rate moderation plan prescribed by paragraph (i) below) and on projected billing determinants forecasted in connection with such budget. The variance each month between the actual costs incurred to provide the services under Schedules 9-2 through 9-5 in such month and the actual revenues from Schedules 9-2 through 9-5 in such month shall be added to, or subtracted from, the total amount to be recovered under Schedule 9-1 in the month immediately following the month in which such variance occurred, pursuant to the formula set forth in Schedule 9-1; provided, however, that this reconciliation of variances between actual costs and revenues shall take into account the rate moderation plan prescribed by paragraph (i) below.

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SCHEDULE 9-2

Financial Transmission Rights Administration Service

a) Financial Transmission Rights Administration Service comprises all of the activities of PJM associated with administering the Financial Transmission Rights ("FTRs") provided for under Attachment K to this Tariff, including, but not limited to, coordination of FTR bilateral trading, administration of FTR auctions, support of PJM's on-line, Internet-based eFTR tool, and analyses to determine what total combination of FTRs can be outstanding and accommodated by the PJM system at a given time. PJM provides this service to entities that hold FTRs.

b) PJM will charge each user of Financial Transmission Rights Administration Service each month a charge equal to the Financial Transmission Rights Administration Service Rate defined below times the quantity in megawatts of all FTRs held by such user in each hour of such month, summed for each hour that such user holds FTRs during such month during the time period such FTR is in effect.

c) The Financial Transmission Rights Administration Service Rate shall be recalculated annually, effective January 1 each year, in accordance with the formula:

$$\text{FTR Service Rate} = \frac{\text{Annual FTR Cost}}{\text{Annual FTR Determinants}}$$

where:

"Annual FTR Cost" equals the sum of the FTR Cost Components A.1 + A.2 + A.3, defined as follows:

"A.1" equals the sum of the products of: (i) the assignment percentage for each of the Divisions associated with Financial Transmission Rights Administration Service as shown on the PJM Assignment Matrix in this Schedule 9, times (ii) the dollar amount for each such Division shown on the Approved Budget for the calendar year during which the Financial Transmission Rights Administration Service Rate shall be effective.

"A.2" equals the Overhead Allocation to Financial Transmission Rights Administration Service determined pursuant to Schedule 9-6.

"A.3" equals the assignment of Non-Divisional Costs to Financial Transmission Rights Administration Service based on the Approved Budget for the calendar year for which the Annual FTR Cost is being determined.

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and where

"Annual FTR Determinants" equals the projected total amount of Financial Transmission Rights, in MWs, expected to be in effect each hour for all holders of Financial Transmission Rights during the calendar year that the Financial Transmission Rights Administration Service Rate shall be effective, summed for each hour of such calendar year.

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5.0 Reconciliation Billing: For Network Load within the PJM Region, to the extent required, the Transmission Provider will reconcile the Network Customer's hourly energy responsibilities as initially reported to Transmission Provider and its hourly energy consumption based on, or estimated from, metered usage, and provide corresponding charges and credits to Network Customer. Such reconciliation, if required, shall be made at the same rates as Energy Imbalance Service.

6.0 Designation of party subject to reciprocal service obligation: The Network Customer shall comply with Section 6 of the Tariff.

7.0 Name(s) of any Intervening Systems providing transmission service: To the extent any Network Resources are located outside the PJM Region, the list of Network Resources maintained by the Transmission Provider referenced in Section 3.2 of these specifications, shall identify any intervening systems needed to deliver those Network Resources to the Network Customer's retail load.

8.0 Charges: Service under this Service Agreement may be subject to some combination of the charges detailed below. (The appropriate charges for individual transactions will be determined in accordance with the terms and conditions of the Tariff.)

8.1 Embedded Cost Transmission Charge: The embedded cost transmission charge shall be determined in accordance with the formula set forth in Section 34 of the Tariff.

8.2 System Impact and Facilities Study Charges: To the extent Network Resources are located outside, or a new resource is added to, the PJM Region, a System Impact Study and/or Facilities Study Agreement and related charges may be required pursuant to Section 32 of the Tariff.

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8.3 Direct Assignment Facilities Charge: To the extent that facilities or portions of facilities must be constructed by a Transmission Owner for the sole use or benefit of the Network Customer to accommodate the service requested by the Network Customer, the Network Customer shall be responsible for the cost of such Direct Assignment Facilities, and the charges for such facilities shall be specified at the time that the Transmission Provider determines the facilities that are needed to provide the requested service.

8.4 Ancillary Services Charge: In addition to Energy Imbalance Service, Transmission Provider shall bill the Network Customer for ancillary services in accordance with Schedules 1, 1-A, 2, 3, 5, 6, and 9 of the Tariff. To the extent required, the ancillary services charges shall also be reconciled based on any differences between the Network Customer's hourly energy responsibilities as initially reported to Transmission Provider and its hourly energy consumption based on, or estimated from, metered usage.

8.5 Other Supporting Facilities Charge: None.

8.6 Losses: For Non-Zone Network Load, losses of 3 percent for on-peak hours and 2.5 percent for off-peak hours shall be supplied as set forth in the Appendix to Attachment K of the Tariff.

8.7 Other Charges: Transmission Provider shall charge Network Customer any and all other charges set forth in the Tariff applicable to providing Network Integration Service.

9.0 Designated Agent: To the extent that a Designated Agent for one or more Network Customers provides to the Transmission Provider any of the information required by these Specifications, it shall provide the information separately for each Network Customer.

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ATTACHMENT K -- APPENDIX

Preface. The provisions of the Appendix incorporate into the Tariff for ease of reference the provisions of Schedule 1 of the Operating Agreement. As a result, this Appendix will be modified, subject to the approval of the Federal Energy Regulatory Commission, so that the terms and conditions set forth herein remain consistent with the corresponding terms and conditions of Schedule 1 of the Operating Agreement. All references in this Appendix to "Agreement" or "Schedules" are references to the Operating Agreement and the schedules thereto unless otherwise noted. References to Schedule 1 are references to this Appendix.

1. MARKET OPERATIONS

1.1 Introduction.

This Schedule sets forth the scheduling, other procedures, and certain general provisions applicable to the operation of the PJM Interchange Energy Market within the PJM Region. This Schedule addresses each of the three time-frames pertinent to the daily operation of the PJM Interchange Energy Market: Prescheduling, Scheduling, and Dispatch.

1.2 Cost-based Offers.

Unless and until the FERC shall authorize the use of market-based prices in the PJM Interchange Energy Market, all offers for energy or other services to be sold on the PJM Interchange Energy Market from generating resources located within the PJM Region shall not exceed the variable cost of producing such energy or other service, as determined in accordance with Schedule 2 to this Agreement and applicable regulatory standards, requirements and determinations; provided that, a Market Seller may offer to the PJM Interchange Energy Market the right to call on energy from a resource the output of which has been sold on a bilateral basis, with the rate for such energy if called equal to the curtailment rate specified in the bilateral contract.

1.3 Definitions.

1.3.1 Auction Revenue Rights.

"Auction Revenue Rights" shall mean the right to receive the revenue from the Financial Transmission Right auction, as further described in Section 7.4 of this Schedule.

1.3.1A Auction Revenue Rights Credits.

"Auction Revenue Rights Credits" shall mean the allocated share of total FTR auction revenues or costs credited to each holder of Auction Revenue Rights, calculated and allocated as specified in Section 7.4.3 of this Schedule.

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1.3.1B Day-ahead Energy Market.

"Day-ahead Energy Market" shall mean the schedule of commitments for the purchase or sale of energy and payment of Transmission Congestion Charges developed by the Office of the Interconnection as a result of the offers and specifications submitted in accordance with Section 1.10 of this Schedule.

1.3.1C Day-ahead Prices.

"Day-ahead Prices" shall mean the Locational Marginal Prices resulting from the Day-ahead Energy Market.

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1.3.1D Decrement Bid.

"Decrement Bid" shall mean a bid to purchase energy at a specified location in the Day-ahead Energy Market. An accepted Decrement Bid results in scheduled load at the specified location in the Day-ahead Energy Market.

1.3.1E Dispatch Rate.

"Dispatch Rate" shall mean the control signal, expressed in dollars per megawatt-hour, calculated and transmitted continuously and dynamically to direct the output level of all generation resources dispatched by the Office of the Interconnection in accordance with the Offer Data.

1.3.2 Equivalent Load.

"Equivalent Load" shall mean the sum of a Market Participant's net system requirements to serve its customer load in the PJM Region, if any, plus its net bilateral transactions.

1.3.3 External Market Buyer.

"External Market Buyer" shall mean a Market Buyer making purchases of energy from the PJM Interchange Energy Market for consumption by end-users outside the PJM Region, or for load in the PJM Region that is not served by Network Transmission Service.

1.3.4 External Resource.

"External Resource" shall mean a generation resource located outside the metered boundaries of the PJM Control Area and PJM West Region.

1.3.5 Financial Transmission Right.

"Financial Transmission Right" or "FTR" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2 of this Schedule.

1.3.5A Financial Transmission Right Obligation.

"Financial Transmission Right Obligation" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2(c) of this Schedule.

1.3.5B Financial Transmission Right Option.

"Financial Transmission Right Option" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2(d) of this Schedule.

1.3.6 Generating Market Buyer.

"Generating Market Buyer" shall mean an Internal Market Buyer that is a Load Serving Entity that owns or has contractual rights to the output of generation resources capable of serving the Market Buyer's load in the PJM Control Area or PJM West Region, or of selling energy or related services in the PJM Interchange Energy Market or elsewhere.

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1.3.7 Generator Forced Outage.

"Generator Forced Outage" shall mean an immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the relevant portions of the PJM Manuals. A reduction in output or removal from service of a generating unit in response to changes in market conditions shall not constitute a Generator Forced Outage.

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1.3.33 Spot Market Energy.

"Spot Market Energy" shall mean energy bought or sold by Market Participants through the PJM Interchange Energy Market at Locational Marginal Prices determined as specified in Section 2 of this Schedule.

1.3.33A State Estimator.

"State Estimator" shall mean the computer model of power flows specified in Section 2.3 of this Schedule.

1.3.33B Station Power.

"Station Power" shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Control Area or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy used to power synchronous condensers, used for pumping at a pumped storage facility, or used in association with restoration or black start service.

1.3.33C Target Allocation.

Shall mean the allocation of Transmission Congestion Credits as set forth in Section 5.2.3 of this Schedule or the allocation of Auction Revenue Rights Credits as set forth in Section 7.4.3 of this Schedule.

1.3.34 Transmission Congestion Charge.

"Transmission Congestion Charge" shall mean a charge attributable to the increased cost of energy delivered at a given load bus when the transmission system serving that load bus is operating under constrained conditions, which shall be calculated and allocated as specified in Section 5.1 of this Schedule.

1.3.35 Transmission Congestion Credit.

"Transmission Congestion Credit" shall mean the allocated share of total Transmission Congestion Charges credited to each holder of Financial Transmission Rights, calculated and allocated as specified in Section 5.2 of this Schedule.

1.3.36 Transmission Customer.

"Transmission Customer" shall mean an entity using Point-to-Point Transmission Service.

1.3.37 Transmission Forced Outage.

"Transmission Forced Outage" shall mean an immediate removal from service of a transmission facility by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the transmission facility, as specified in the relevant portions of the PJM Manuals. A removal from service of a transmission facility at the request of the Office of the Interconnection to improve transmission capability shall not constitute a Forced Transmission Outage.

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1.3.37A Transmission Loading Relief.

"Transmission Loading Relief" shall mean NERC's procedures for preventing operating security limit violations, as implemented by PJM as the security coordinator responsible for maintaining transmission security for the PJM Region.

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(b) During the Operating Day, the calculation set forth in (a) shall be performed every five minutes, using the Office of the Interconnection's Locational Marginal Price program, producing a set of Real-time Prices based on system conditions during the preceding interval. The prices produced at five-minute intervals during an hour will be integrated to determine the Real-time Prices for that hour.

2.6 Calculation of Day-ahead Prices.

For the Day-ahead Energy Market, day-ahead Locational Marginal Prices shall be determined on the basis of the least-cost, security-constrained dispatch, model flows and system conditions resulting from the load specifications, offers for generation, dispatchable load, Increment Bids, Decrement Bids, and bilateral transactions submitted to the Office of the Interconnection and scheduled in the Day-ahead Energy Market. Such prices shall be determined in accordance with the provisions of this Section applicable to the Day-ahead Energy Market and shall be the basis for purchases and sales of energy and Transmission Congestion Charges resulting from the Day-ahead Energy Market. This calculation shall be made for each hour in the Day-ahead Energy Market by applying a linear optimization method to minimize energy costs, given scheduled system conditions, scheduled transmission outages, and any transmission limitations that may exist. In performing this calculation, the Office of the Interconnection shall calculate the cost of serving an increment of load at each bus from each resource associated with an eligible energy offer as the sum of: (1) the price at which the Market Seller has offered to supply an additional increment of energy from the resource, and (2) the effect on transmission congestion costs (whether positive or negative) associated with increasing the output of the resource, based on the effect of increased generation from that resource on transmission line loadings. The energy offer or offers that can serve an increment of load at a bus at the lowest cost, calculated in this manner, shall determine the Day-ahead Price at that bus.

2.7 Performance Evaluation.

The Office of the Interconnection shall undertake an evaluation of the foregoing procedures for the determination of Locational Marginal Prices, as well as the procedures for determining and allocating Financial Transmission Rights and associated Transmission Congestion Charges and Credits, not less often than every two years, in accordance with the PJM Manuals. To the extent practical, the Office of the Interconnection shall retain all data needed to perform comparisons and other analyses of locational marginal pricing. The Office of the Interconnection shall report the results of its evaluation to the Market Participants, along with its recommendations, if any, for changes in the procedures.

3. ACCOUNTING AND BILLING

3.1 Introduction.

This schedule sets forth the accounting and billing principles and procedures for the purchase and sale of services on the PJM Interchange Energy Market and for the operation of the PJM Region.

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(b) The Transmission Congestion Charge shall be the total amount of energy specified in such energy schedules multiplied by the difference between a Locational Marginal Price calculated by the Office of the Interconnection for the energy schedule source location specified in the NERC Interchange Distribution Calculator and a Locational Marginal Price calculated by the Office of the Interconnection for the energy schedule sink location specified in the NERC Interchange Distribution Calculator. Transmission Congestion Charges that are less than zero shall be set equal to zero for Transmission Loading Relief Customers.

(c) The Office of the Interconnection will determine the Locational Marginal Prices at the energy schedule source and sink locations external to PJM with reference to and based solely on the prices of energy in the PJM Region and at the interface buses between adjacent Control Areas and the PJM Region and the system conditions and actual power flow distributions as described by the PJM State Estimator program. The Office of the Interconnection will determine the Locational Marginal Prices at the external energy schedule source and sink locations and the resulting Congestion Charge based on the portion of the energy schedule that flows through the PJM Region as reflected by the flow distributions from the PJM State Estimator Program.

5.1.7 Total Transmission Congestion Charges.

The total Transmission Congestion Charges collected by the Office of the Interconnection each hour will be the aggregate net amounts determined as specified in this Schedule. The Office of the Interconnection shall collect Transmission Congestion Charges for each hour the transmission system operates under constrained conditions.

5.2 Transmission Congestion Credit Calculation.

5.2.1 Eligibility.

(a) Except as provided in Section 5.2.1(b), each holder of a Financial Transmission Right shall receive as a Transmission Congestion Credit a proportional share of the total Transmission Congestion Charges collected for each constrained hour.

(b) If a holder of a Financial Transmission Right between specified delivery and receipt buses acquired the Financial Transmission Right in a Financial Transmission Rights Auction (the procedures for which are set forth in Part 7 of this Schedule 1) and (i) had an Increment Bid and/or Decrement Bid that was accepted by the Office of the Interconnection for an applicable hour in the Day-ahead Energy Market for delivery or receipt at or near delivery or receipt buses of the Financial Transmission Right; and (ii) the result of the acceptance of such Increment Bid or Decrement Bid is that the difference in locational marginal prices in the Day-ahead Energy Market between such delivery and receipt buses is greater than the difference in locational marginal prices between such delivery and receipt buses in the Real-time Energy Market, then the Market Participant shall not receive any Transmission Congestion Credit, associated with such Financial Transmission Right in such hour, in excess of one divided by the number of hours in the applicable month multiplied by the amount that the Market Participant paid for the Financial Transmission Right in the Financial Transmission Rights Auction.

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(c) For purposes of Section 5.2.1(b) a bus shall be considered at or near the Financial Transmission Right delivery or receipt bus if seventy-five percent or more of the energy injected or withdrawn at that bus and which is withdrawn or injected at any other bus is reflected in the constrained path between the subject Financial Transmission Right delivery and receipt buses that were acquired in the Financial Transmission Rights Auction.

5.2.2 Financial Transmission Rights

(a) Transmission Congestion Credits will be calculated based upon the Financial Transmission Rights held at the time of the constrained hour. Except as provided in paragraph (e) below, Financial Transmission Rights shall be auctioned as set forth in Section 7.

(b) The hourly economic value of a Financial Transmission Right Obligation is based on the Financial Transmission Right MW reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the Financial Transmission Right. The hourly economic value of a Financial Transmission Right Obligation is positive (a benefit to the Financial Transmission Right holder) when the Day-ahead Price at the point of delivery is higher than the Day-ahead Price at the point of receipt. The hourly economic value of a Financial Transmission Right Obligation is negative (a liability to the holder) when the Day-ahead Price at the point of receipt is higher than the Day-ahead Price at the point of delivery.

(c) The hourly economic value of a Financial Transmission Right Option is based on the Financial Transmission Right MW reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the Financial Transmission Right when that difference is positive. The hourly economic value of a Financial Transmission Right Option is positive (a benefit to the Financial Transmission Right holder) when the Day-ahead Price at the point of delivery is higher than the Day-ahead Price at the point of receipt. The hourly economic value of a Financial Transmission Right Option is zero (neither a benefit nor a liability to the holder) when the Day-ahead Price at the point of receipt is higher than the Day-ahead Price at the point of delivery.

(d) A Financial Transmission Right, or the right to Transmission Congestion Credits attributable to a Financial Transmission Right, may be sold or otherwise transferred by agreement, subject to compliance with such procedures as may be established by the Office of the Interconnection for verification of the rights of the purchaser or transferee.

(e) Financial Transmission Rights shall be allocated to each Firm Transmission Customer and Network Service User in a new PJM zone in the manner specified below. Such Financial Transmission Rights shall remain in effect until the first annual allocation of auction revenue rights to occur after the integration of such new PJM zone into the PJM interchange energy market.

(i) Subject to the provisions of Section B of Attachment K of the PJM Tariff, by such deadline established by the Office of the Interconnection, each Network Service User in a new PJM zone shall designate a subset of its Network Resources for which Financial Transmission Rights will be assigned, Financial Transmission Rights shall be assigned for each Network Resource in a number of megawatts equal to or less than the installed

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capacity summer megawatt rating of each designated Network Resource, determined at the new PJM zone transmission bus at which the designated Network Resource is connected. Each Financial Transmission Right shall be to the aggregate load busses of the Network Service User in a new PJM zone. The sum of each Network Service User's assigned Financial Transmission Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.2 of the Tariff. The sum of each Network Service User's Financial Transmission Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.2 of the Tariff.

(ii) Each Transmission Customer receiving firm Transmission Service shall be assigned Financial Transmission Rights; provided, however, that a Transmission Customer may notify the Office of Interconnection that it does not wish to receive any FTRs or wishes to receive FTRs only for certain Point or Points of Receipt and Point or Points of Delivery, in which event no FTRs or such reduced amount of FTRs shall be issued to the Transmission Customer. The Financial Transmission Right for each instance of Point-to-Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point-to-Point Transmission Service.

(iii) All Financial Transmission Rights must be simultaneously feasible. If all Financial Transmission Right requests made when Financial Transmission Rights are allocated for the new zone are not feasible Financial Transmission Rights are prorated and allocated in proportion to the MW level requested and in inverse proportion to the effect on the binding constraints.

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5.2.3 Target Allocation of Transmission Congestion Credits.

A target allocation of Transmission Congestion Credits for each entity holding a Financial Transmission Right shall be determined for each Financial Transmission Rights. Each Financial Transmission Right shall be multiplied by the Day-ahead Price differences for the receipt and delivery points associated with the Financial Transmission Right, calculated as the Locational Marginal Price at the delivery point(s) minus the Locational Marginal Price at the receipt point(s). For the purposes of calculating Transmission Congestion Credits, the Day-ahead Price of a Zone is calculated as the sum of the Day-ahead Price of the buses that comprise the Zone multiplied by the percent of annual peak load assigned to each node. When the FTR Target Allocation is positive, the FTR Target Allocation is a credit to the FTR holder. When the FTR Target Allocation is negative, the FTR Target Allocation is a debit to the FTR holder if the FTR is a Financial Transmission Right Obligation. When the FTR Target Allocation is negative, the FTR Target Allocation is set to zero if the FTR is a Financial Transmission Right Option. The total target allocation for Network Service Users and Transmission Customers for each hour shall be the sum of the target allocations associated with all of the Network Service Users' or Transmission Customers' Financial Transmission Rights.

5.2.4 [Reserved]

5.2.5 Calculation of Transmission Congestion Credits.

(a) The total of all the target allocations determined as specified above shall be compared to the total Transmission Congestion Charges in each hour resulting from both the Day-ahead Energy Market and the Real-time Energy Market. If the total of the target allocations is less than the total of the Transmission Congestion Charges, the Transmission Congestion Credit for each entity holding an FTR shall be equal to its target allocation. All remaining Transmission Congestion Charges shall be distributed as described below in Section 5.2.6 "Distribution of Excess Congestion Charges."

(b) If the total of the target allocations is greater than the total Transmission Congestion Charges for the hour resulting from both the Day-ahead Energy Market and the Real-time Energy Market, each holder of Financial Transmission Rights shall be assigned a share of the total Transmission Congestion Charges in proportion to its target allocations for Financial Transmission Rights which have a positive Target Allocation value. Financial Transmission Rights which have a negative Target Allocation value are assigned the full Target Allocation value as a negative Transmission Congestion Credit.

5.2.6 Distribution of Excess Congestion Charges.

(a) Excess Transmission Congestion Charges accumulated in a month shall be distributed to each holder of Financial Transmission Rights in proportion to, but not more than, any deficiency in the share of Transmission Congestion Charges received by the holder during that month as compared to its total target allocations for the month.

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(b) After the excess Transmission Congestion Charge distribution described in Section 5.2.6(a) is performed, any excess Transmission Congestion Charges remaining at the end of a month shall be distributed to each holder of Financial Transmission Charges received by the holder during the current calendar year, including previously distributed excess Transmission Congestion Charges, as compared to its total target allocation for the calendar year.

(c) Any excess Transmission Congestion Charges remaining at the end of a calendar year shall be distributed to each holder of Auction Revenue Rights in proportion to, but not more than, any Auction Revenue Right deficiencies for that calendar year. After Auction Revenue Right deficiencies are satisfied, any remaining excess Transmission Congestion Charges shall be distributed to Network Service Users and Transmission Customers purchasing Firm Point-to-Point Transmission Service in proportion to their Demand Charges for Network Service and their charges for Reserved Capacity for Firm Point-to-Point Transmission Service.

5.3 Unscheduled Transmission Service (Loop Flow).

(a) When there are agreements between the Members (or the Office of the Interconnection on behalf of the Members) and others for compensation to be paid or received for unscheduled transmission service (loop flow) into or out of the PJM Region, the net compensation received shall be included in the total Transmission Congestion Charges that are distributed in accordance with Section 5.2.

(b) With respect to payments by the Office of Interconnection to the New York Power Pool for the installation and operation of phase angle regulating facilities at Ramapo to control or limit unscheduled transmission service (loop flow), each East Transmission Owner with revenue requirements under the PJM Tariff shall pay a share of the charges on a transmission revenue requirements ratio share basis.

6. "MUST-RUN" FOR RELIABILITY GENERATION

6.1 Introduction.

The following procedures shall apply to any generation resource subject to the dispatch of the Office of the Interconnection that (a) is a generation resource for which construction commenced before July 9, 1996, and (b) 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.

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7. FINANCIAL TRANSMISSION RIGHTS AUCTIONS

7.1 Auctions of Financial Transmission Rights.

Annual and periodic auctions to allow Market Participants to acquire or sell Financial Transmission Rights shall be conducted by the Office of the Interconnection in accordance with the provisions of this Section.

7.1.1 Auction Period and Scope of Auctions.

The periods covered by auctions shall be: (1) the one-year period beginning the month after the final round of the annual auction and (2) the one-month period following the date that the monthly auction is conducted. With the exception of FTRs allocated pursuant to section 5.2.2 (e) of this Schedule, in the annual auction, the Office of the Interconnection shall offer for sale the entire Financial Transmission Rights capability for the year in four rounds with 25 percent of the capability offered in each round. In the monthly auction, the Office of the Interconnection shall offer for sale any remaining Financial Transmission Rights capability for the month after taking into account all of the Financial Transmission Rights already outstanding at the time of the auction. In addition, any holder of a Financial Transmission Right for the period covered by an auction may offer such Financial Transmission Right for sale in such auction. On-Peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auctions. FTRs will be offered as Financial Transmission Right Obligations and Financial Transmission Right Options. Market Participants may bid for and acquire any number of Financial Transmission Rights, provided that all Financial Transmission Rights awarded are simultaneously feasible with each other and with all Financial Transmission Rights outstanding at the time of the auction and not sold into the auction. An ARR holder may self-schedule an FTR on the same path in the Annual FTR Auction according to the rules described in the PJM Manuals.

7.1.2 Frequency and Time of Auctions.

Annual Financial Transmission Rights auctions shall offer the entire FTR capability of the PJM system in four rounds with 25 percent of the capability offered in each round. Each round shall be conducted over five business days by such timeline established by the Office of the Interconnection. Each round shall begin with the bid and offer period opening the first day at 12:00 midnight (Eastern Prevailing Time) and closing the third day at 5:00 p.m. (Eastern Prevailing Time). Monthly, Financial Transmission Rights auctions shall be held. The bid and offer period shall open at 12:00 midnight (Eastern Prevailing Time) on the thirteenth (13th) business day preceeding the month for which Financial Transmission Rights are being auctioned and shall close at 5:00 PM (Eastern Prevailing Time) on the tenth (10th) business day preceding the month for which Financial Transmission Rights are being auctioned.

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7.1.3 Duration of Financial Transmission Rights.

Each Financial Transmission Right acquired in a Financial Transmission Rights auction shall entitle the holder to credits of Transmission Congestion Charges for the period that was specified in the corresponding auction.

7.2 Financial Transmission Rights Characteristics.

7.2.1 Reconfiguration of Financial Transmission Rights.

Through an appropriate linear programming model, the Office of the Interconnection shall reconfigure the Financial Transmission Rights offered or otherwise available for sale in any auction to maximize the value to the bidders of the Financial Transmission Rights sold, provided that any Financial Transmission Rights acquired at auction shall be simultaneously feasible in combination with those Financial Transmission Rights outstanding at the time of the auction and not sold in the auction. The linear programming model shall, while respecting transmission constraints and the maximum MW quantities of the bids and offers, select the set of simultaneously feasible Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers.

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7.2.2 Specified Receipt and Delivery Points.

Auction bids for annual Financial Transmission Rights Obligations may specify as receipt and delivery points any combination of hubs, Zones, aggregates, generators, and interface buses. Auction bids for annual Financial Transmission Rights Options may specify as receipt and delivery points such combination of hubs, Zones, aggregates, generators, and interface buses as the Office of the Interconnection shall allow from time to time as set forth in its FTR business manual. Auction bids for monthly Financial Transmission Rights may specify any combination of receipt and delivery buses represented in the State Estimator model for which the Office of the Interconnection calculates and posts Locational Marginal Prices. Auction bids may specify receipt and delivery points from locations outside of the PJM Region to locations inside such area, from locations within the PJM Region to locations outside such area, or to and from locations within the area comprised of the PJM Region.

7.2.3 Transmission Congestion Charges.

Financial Transmission Rights shall entitle holders thereof to credits only for Transmission Congestion Charges, and shall not confer a right to credits for payments arising from or relating to transmission congestion made to any entity other than the Office of the Interconnection.

7.3 Auction Procedures.

7.3.1 Role of the Office of the Interconnection.

Financial Transmission Rights auctions shall be conducted by the Office of the Interconnection in accordance with standards and procedures set forth in the PJM Manuals, such standards and procedures to be consistent with the requirements of this Schedule.

7.3.2 Notice of Offer.

A holder of a Financial Transmission Right wishing to offer the Financial Transmission Right for sale shall notify the Office of the Interconnection of any Financial Transmission Rights to be offered. Each Financial Transmission Rights sold in an auction shall, at the end of the period for which the Financial Transmission Rights were auctioned, revert to the offering holder or the entity to which the offering holder has transferred such Financial Transmission Right, subject to the term of the Financial Transmission Right itself and to the right of such holder or transferee to offer the Financial Transmission Right in the next or any subsequent auction during the term of the Financial Transmission Right.

7.3.3 Pending Applications for Firm Service.

(a) **[Reserved]**

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(b) Financial Transmission Rights may be assigned to entities requesting Network Transmission Service or Firm Point-to-Point Transmission Service pursuant to Section 5.2.2 (e), only if such Financial Transmission Rights are simultaneously feasible with all outstanding Financial Transmission Rights, including Financial Transmission Rights effective for the then-current auction period. If an assignment of Financial Transmission Rights pursuant to a pending application for Network Transmission Service or Firm Point-to-Point Transmission Service cannot be completed prior to an auction, Financial Transmission Rights attributable to such transmission service shall not be assigned for the then-current auction period. If a Financial Transmission Right cannot be assigned for this reason, the applicant may withdraw its application, or request that the Financial Transmission Right be assigned effective with the start of the next auction period.

7.3.4 On-Peak, Off-Peak and 24-Hour Periods.

On-peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auction. . On-Peak Financial Transmission Rights shall cover the periods from 7:00 a.m. up to the hour ending at 11:00 p.m. on Mondays through Fridays, except holidays as defined in the PJM Manuals. Off-Peak Financial Transmission Rights shall cover the periods from 11:00 p.m. up to the hour ending 7:00 a.m. on Mondays through Fridays and all hours on Saturdays, Sundays, and holidays as defined in the PJM Manuals. The 24-hour period shall cover the period from hour ending 1:00 a.m. to the hour ending 12:00 midnight on all days. Each bid shall specify whether it is for an on-peak, off-peak, or 24-hour period.

7.3.5 Offers and Bids.

(a) Offers to sell and bids to purchase Financial Transmission Rights shall be submitted during the period set forth in Section 7.1.2, and shall be in the form specified by the Office of the Interconnection in accordance with the requirements set forth below.

(b) Offers to sell shall identify the specific Financial Transmission Right, by megawatt quantity and receipt and delivery points, offered for sale. An offer to sell a specified megawatt quantity of Financial Transmission Rights shall constitute an offer to sell a quantity of Financial Transmission Rights equal to or less than the specified quantity. An offer to sell may not specify a minimum quantity being offered. Each offer may specify a reservation price, below which the offeror does not wish to sell the Financial Transmission Right. Offers submitted by entities holding rights to Financial Transmission Rights shall be subject to such reasonable standards for the verification of the rights of the offeror as may be established by the Office of the Interconnection. Offers shall be subject to such reasonable standards for the creditworthiness of the offeror or for the posting of security for performance as the Office of the Interconnection shall establish.

(c) Bids to purchase shall specify the megawatt quantity, price per megawatt, and receipt and delivery points of the Financial Transmission Right that the bidder wishes to purchase. A bid to purchase a specified megawatt quantity of Financial Transmission Rights shall constitute a bid to purchase a quantity of Financial Transmission Rights equal to or less than the specified quantity. A bid to purchase may not specify a minimum quantity that the bidder

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wishes to purchase. A bid may specify receipt and delivery points in accordance with Section 7.2.2 and may include Financial Transmission Rights for which the associated Transmission Congestion Credits may have negative values. Bids shall be subject to such reasonable standards for the creditworthiness of the bidder or for the posting of security for performance as the Office of the Interconnection shall establish.

(d) Bids and offers shall be specified to the nearest tenth of a megawatt and shall be greater than zero.

7.3.6 Determination of Winning Bids and Clearing Price.

(a) At the close of each bidding period, the Office of the Interconnection will create a base Financial Transmission Rights power flow model that includes all outstanding Financial Transmission Rights that have been approved and confirmed for any portion of the month for which the auction was conducted and that were not offered for sale in the auction. The base Financial Transmission Rights model also will include estimated uncompensated parallel flows into each interface point of the PJM Control Area and estimated scheduled transmission outages.

(b) In accordance with the requirements of Section 7.4.5 of this Schedule and subject to all applicable transmission constraints and reliability requirements, the Office of the Interconnection shall determine the simultaneous feasibility of all outstanding Financial Transmission Rights not offered for sale in the auction and of all Financial Transmission Rights that could be awarded in the auction for which bids were submitted. The winning bids shall be determined from an appropriate linear programming model that, while respecting transmission constraints and the maximum MW quantities of the bids and offers, selects the set of simultaneously feasible Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers. In the event that there are two or more identical bids for the selected Financial Transmission Rights and there are insufficient Financial Transmission Rights to accommodate all of the identical bids, then each such bidder will receive a pro rata share of the Financial Transmission Rights that can be awarded.

(c) Financial Transmission Rights shall be sold at the market-clearing price for Financial Transmission Rights between specified pairs of receipt and delivery points, as determined by the bid value of the marginal Financial Transmission Right that could not be awarded because it would not be simultaneously feasible. The linear programming model shall determine the clearing prices of all Financial Transmission Rights paths based on the bid value of the marginal Financial Transmission Rights, which are those Financial Transmission Rights with the highest bid values that could not be awarded fully because they were not simultaneously feasible, and based on the flow sensitivities of each Financial Transmission Rights path relative to the marginal Financial Transmission Rights paths flow sensitivities on the binding transmission constraints.

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7.3.7 Announcement of Winners and Prices.

Within two (2) business days after the close of a monthly auction or annual auction round, the Office of the Interconnection shall post the winning bidders, the megawatt quantity, and the receipt and delivery points for each Financial Transmission Right awarded in the auction and the price at which each Financial Transmission Right was awarded. The Office of the Interconnection shall not disclose the price specified in any bid to purchase or the reservation price specified in any offer to sell.

7.3.8 Auction Settlements.

All buyers and sellers of Financial Transmission Rights between the same points of receipt and delivery shall pay or be paid the market-clearing price, as determined in the auction, for such Financial Transmission Rights.

7.4 Allocation of Auction Revenues.

7.4.1 Eligibility

(a) annual and monthly auction revenues, net of payments to entities selling Financial Transmission Rights into the auction, shall be allocated among holders of Auction Revenue Rights in proportion to, but not more than, the Target Allocation of Auction Revenue Rights Credits for the holder.

(b) Auction Revenue Rights Credits will be calculated based upon the clearing price results of the applicable Annual Financial Transmission Rights auction.

7.4.2 Auction Revenue Rights

(a) For the year 2003/2004 planning period, the following Auction Revenue Rights allocation procedure shall apply. Each Network Service User may request a subset of its Network Resources for which available Auction Revenue Rights shall be allocated. Auction Revenue Rights shall be allocated for each Network Resource in a number of megawatts equal to or less than installed capacity summer megawatt rating of each designated Network Resource, determined at the PJM Control Area or PJM West Region transmission bus at which the designated Network Resource is connected. Each Auction Revenue Right shall be to the aggregate load busses of the Network Service User in a Zone or, with respect to Non-Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's allocated Auction Revenue Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Auction Revenue Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.1 of the Tariff.

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(b) Subsequent to the 2003/2004 planning period the following Auction Revenue Rights allocation procedure shall apply. On an annual basis by such deadline established by the Office of the Interconnection, each Network Service User shall designate a subset of buses from which Auction Revenue Rights will be sourced. Valid Auction Revenue Rights source buses include only zones, generators, hubs and external interface buses. The Network Service User shall specify the amount of Auction Revenue Rights requested from each source bus. Each Auction Revenue Right shall be sinked to the aggregate load busses of the Network Service User in a Zone or, with respect to Non-Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's allocated Auction Revenue Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Auction Revenue Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.1 of the Tariff. The allocation of Auction Revenue Rights shall be performed in four stages, with 25 percent of the system Auction Revenue Rights capability allocated in each stage.

(c) On a daily basis within the annual Financial Transmission Rights auction period, a proportionate share of Network Service User's Auction Revenue Rights for each Zone are allocated as Network Load changes from one Network Service User to another within that Zone.

(d) Each Transmission Customer receiving firm Point-to-Point Transmission Service shall specify whether it wishes to receive Auction Revenue Rights. The Auction Revenue Right for each instance of Point-to-Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point-to-Point Transmission Service.

(e) All Auction Revenue Rights must be simultaneously feasible. If all Auction Revenue Right requests made during the annual allocation process are not feasible then Auction Revenue Rights are prorated and allocated in proportion to the MW level requested and in inverse proportion to the effect on the binding constraints.

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7.4.3 Target Allocation of Auction Revenue Right Credits

A target allocation of Auction Revenue Right Credits for each entity holding an Auction Revenue Right shall be determined for each Auction Revenue Right. After each round of the annual Financial Transmission Right Auction, each Auction Revenue Right shall be divided by four and multiplied by the price differences for the receipt and delivery points associated with the Auction Revenue Right, calculated as the Locational Marginal Price at the delivery points(s) minus the Locational Marginal Price at the receipt point(s), where the price for the receipt and delivery point is determined by the clearing prices of each round of the annual Financial Transmission Right auction. The daily total target allocation for an entity holding the Auction Revenue Rights shall be the sum of the daily target allocations associated with all of the entity's Auction Revenue Rights.

7.4.4 Calculation of Auction Revenue Right Credits

(a) Each day, the total of all the daily target allocations determined as specified above in section 7.4.3 plus any additional Auction Revenue Rights target allocations applicable for that day shall be compared to the total revenues of the monthly Financial Transmission Rights auction (divided by the number of days in the month) plus the total revenues of the annual Financial Transmission Rights auction (divided by the number of days in the planning period). If the total of the target allocations is less than the total auction revenues, the Auction Revenue Right Credit for each entity holding an Auction Revenue Right shall be equal to its target allocation. All remaining funds shall be distributed as Excess Congestion Charges pursuant to Section 5.2.5.

(b) If the total of the target allocations is greater than the total auction revenues, each holder of Auction Revenue Rights shall be assigned a share of the total auction revenues in proportion to its Auction Revenue Rights target allocations for Auction Revenue Rights which have a positive Target Allocation value. Auction Revenue Rights which have a negative Target Allocation value are assigned the full Target Allocation value as a negative Auction Revenue Right Credit.

7.5 Simultaneous Feasibility

The Office of the Interconnection shall make the simultaneous feasibility determinations specified herein using appropriate powerflow models of contingency-constrained dispatch. Such determinations shall take into account outages of both individual generation units and transmission facilities and shall be based on reasonable assumptions about the configuration and availability of transmission capability during the period covered by the auction that are not inconsistent with the determination of the deliverability of Capacity Resources under the Reliability Assurance Agreement or the deliverability of Available Capacity Resources under the Reliability Assurance Agreement-West. The goal of the simultaneous feasibility determination shall be to ensure that there are sufficient revenues from Transmission Congestion Charges to satisfy all Financial Transmission Rights obligations for the auction period under expected conditions and to ensure that there are sufficient revenues from the annual Financial Transmission Right Auction to satisfy all Auction Revenue Rights obligations.

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provided pursuant to a state requirement that the Transmission Provider or Transmission Owner offer the unbundled transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner. (ii) Any retail customer taking unbundled transmission service pursuant to a state requirement that the Transmission Provider or a Transmission Owner offer the transmission service, or pursuant to a voluntary offer of such service by a Transmission Owner, is an Eligible Customer under the Tariff.

1.11A Energy Resource: A generating facility that is not a Capacity Resource or Available Capacity Resource.

1.12 Facilities Study: An engineering study conducted by the Transmission Provider (in coordination with the affected Transmission Owner(s)) to determine the required modifications to the Transmission Provider's Transmission System, including the cost and scheduled completion date for such modifications, that will be required to provide the requested transmission service or to accommodate an Interconnection Request.

1.12A Feasibility Study: A study conducted by the Transmission Provider in accordance with Section 36.2 of this Tariff.

1.13 Firm Point-To-Point Transmission Service: Transmission Service under this Tariff that is reserved and/or scheduled between specified Points of Receipt and Delivery pursuant to Part II of this Tariff.

1.14 Good Utility Practice: Any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region.

1.14A Incremental ~~Fixed Transmission~~Auction Revenue Right: The additional ~~Fixed Transmission~~ Auction Revenue Rights~~.~~ (as defined in Section 1.3.1 of the Appendix to Attachment K to the Tariff) not previously feasible, created by the addition of Merchant Transmission Facilities, or a new transmission facility or upgrade resulting from the accommodation of an Interconnection Request~~(s)~~ pursuant to Part IV of the Tariff.

1.14B [Reserved].

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36.6.3 Incremental ~~Fixed Transmission~~ Auction Revenue Rights: The Interconnection Customer may request Transmission Provider to provide a non-binding estimate in the Facilities Study of the Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with the facilities or upgrades for which the Interconnection Customer has cost responsibility on up to three (3) pairs of point-to-point combinations. The ultimate assignment of Incremental ~~Fixed Transmission~~ Auction Revenue Rights will be made pursuant to the allocation process set forth in Section 42 of the PJM Tariff and may depend upon the point-to-point combination requests and cost responsibilities of other Interconnection Customers.

36.7 Facilities Study Procedures: The Transmission Provider will conduct Facilities Studies relating to the Interconnection Requests that were evaluated in the corresponding System Impact Studies, to the extent such Interconnection Requests have not been terminated and withdrawn. When completed, the Facilities Studies will include good faith estimates of the cost, determined in accordance with Section 37 of the Tariff, to be charged to each affected Interconnection Customer for the Attachment Facilities, Local Upgrades, and Network Upgrades that are necessary to accommodate each Interconnection Request evaluated in the study and the time required to complete construction of the facilities and upgrades.

36.8 Interconnection Service Agreement: Upon completion of the Facilities Study, the Transmission Provider shall tender to each Interconnection Customer an Interconnection Service Agreement to be executed by the Interconnection Customer and the Transmission Provider.

36.8.1 Cost Reimbursement: Pursuant to the Interconnection Service Agreement, an Interconnection Customer shall agree to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) for the costs, determined in accordance with Section 37 of the Tariff, of constructing the necessary facilities and upgrades to accommodate its Interconnection Request. If the Interconnection Customer and the affected Transmission Owner(s) agree and so inform the Transmission Provider, the Interconnection Service Agreement shall specify an appropriate rate that will directly assign and enable the affected Transmission Owner(s) to recover the costs of the facilities and upgrades. In the absence of such an agreement, the Interconnection Service Agreement shall obligate the Interconnection Customer to reimburse the Transmission Provider (for the benefit of the affected Transmission Owner(s)) as the expenditures for design, engineering, and construction are made. The Transmission Provider shall distribute the revenues received under this Section 36.8.1 to the affected Transmission Owner(s).

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41.3.3 Replacement of Generation: The holder of the Capacity Interconnection Rights may retain its Capacity Interconnection Rights after the expiration of the three-year period described in Section 41.3.2 of the Tariff if it can demonstrate that it is actively engaged in the construction of replacement generation to be connected at the bus associated with the Capacity Interconnection Rights. The holder of the Capacity Interconnection Rights will retain only such rights that are commensurate with the size in megawatts of the replacement generation, not to exceed the amount of the holder's Capacity Interconnection Rights. Any desired increase in Capacity Interconnection Rights shall require an Interconnection Request and adherence to the procedures in this Part IV-.

41.4 Transfer of Capacity Interconnection Rights: Capacity Interconnection Rights may be sold or otherwise transferred subject to compliance with such procedures as may be established by the Transmission Provider regarding such transfer and notice to the Transmission Provider of any generation facilities that will use the Capacity Interconnection Rights after the transfer. The transfer of Capacity Interconnection Rights shall not itself extend the periods set forth in Section 41.3 regarding loss of Capacity Interconnection Rights.

42 ~~Fixed Transmission~~ Auction Revenue Rights

42.1 Right of Interconnection Customer to Incremental ~~Fixed Transmission~~Auction Revenue Rights: An Interconnection Customer that, pursuant to section 36.8.1, reimburses the Transmission Provider for the costs of constructing facilities and upgrades to accommodate its Interconnection Request shall be entitled to receive the Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with such facilities and upgrades as determined in accordance with this section.

42.2 Procedures for Assigning Incremental ~~Fixed Transmission~~ Auction Revenue Rights: No less than forty-five (45) days prior to the in-service date of a transmission facility or upgrade, as determined by the Office of the Interconnection, the Office of the Interconnection shall notify the Interconnection Customer(s), which have responsibility to reimburse the costs of constructing the facility or upgrade, that initial requests for Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with the facility or upgrade must be submitted to the Office of the Interconnection within a time period specified by the Office of the Interconnection in the notification. The Office of the Interconnection then shall commence a three-round allocation process. In round one, one-third of the Incremental ~~Fixed Transmission~~ Auction Revenue Rights available for each point-to-point combination requested in that round will be assigned to the requesters of the specific combinations in accordance with Section 42.3 of the Tariff. In round

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two, two-thirds of the Incremental ~~Fixed Transmission~~ Auction Revenue Rights available for each requested point-to-point combination in

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that round will be assigned in accordance with Section 42.3 of the Tariff. In round three, all available Incremental ~~Fixed Transmission~~ Auction Revenue Rights will be assigned for the requested point-to-point combinations in that round in accordance with Section 42.3 of the Tariff. In each round, a requester may request the same point-to-point combination as in the previous rounds or submit a different combination. In rounds one and two, requesters may accept the assignment of Incremental ~~Fixed Transmission~~Auction Revenue Rights or refuse them. Acceptance of the assignment in rounds one and two will remove the assigned Incremental ~~Fixed Transmission~~Auction Revenue Rights from availability in the next rounds. Refusal of an Incremental ~~Fixed Transmission~~Auction Revenue Rights assignment in rounds one and two will result in the Incremental ~~Fixed Transmission~~Auction Revenue Rights being available for the next round. The Incremental ~~Fixed Transmission~~Auction Revenue Rights assignments made in round three will be final and binding. For each round, a request for Incremental ~~Fixed Transmission~~Auction Revenue Rights shall specify a single point-to-point combination for which the Interconnection Customer desires Incremental ~~Fixed Transmission~~Auction Revenue Rights and shall be in a form specified by the Office of the Interconnection and in accordance with procedures set forth in the PJM Manuals. The Office of the Interconnection shall specify the deadlines for submission of requests in each round of the allocation process and shall complete the allocation process before the in-service date of the facility or upgrade.

42.3 **Determination of Incremental ~~Fixed Transmission~~Auction Revenue Rights to be Provided to Interconnection Customer:** The Office of the Interconnection shall determine the Incremental ~~Fixed Transmission~~Auction Revenue Rights to be provided to Interconnection Customers associated with a particular transmission facility or upgrade pursuant to Section 42.2 using the tools described in Attachment K to the Tariff, including an assessment of the simultaneous feasibility of any Incremental ~~Fixed Transmission~~Auction Revenue Rights and all other outstanding ~~Fixed Transmission~~Auction Revenue Rights. For each requested point-to-point combination, the Office of the Interconnection shall determine, simultaneously with all other requested point-to-point combinations, the base system ~~Fixed Transmission~~ Auction Revenue Right capability, excluding the impact of any new transmission facilities or upgrades necessary to accommodate Interconnection Requests. The Office of the Interconnection then shall similarly determine, for each requested point-to-point combination, the ~~Fixed Transmission~~ Auction Revenue Rights capability including the impact of any new facilities and upgrades. For each point-to-point combination, the Incremental ~~Fixed Transmission~~Auction Revenue Right capability shall be the difference between the~~Fixed Transmission~~ Auction Revenue Right capability in the base system analysis and the ~~Fixed Transmission~~Auction Revenue Right capability in the analysis including the impact of the new facilities and upgrades. When multiple Interconnection Customers have cost responsibility for the same new transmission facility or upgrade, Incremental ~~Fixed Transmission~~Auction

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Revenue Rights shall be assigned to each Interconnection Customer in proportion to the Interconnection Customers' relative cost responsibilities for the facility and in inverse proportion to the relative flow impact on constrained facilities or interfaces of the point-to-point combinations selected by the Interconnection Customers.

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42.3A Reallocation of Incremental ~~Fixed Transmission~~ Auction Revenue Rights: (1) This section shall apply in the event that

(a) the Office of the Interconnection determines that accommodating an Interconnection Customer's Interconnection Request would require, in whole or in part, any Local Upgrade and/or Network Upgrade that the Office of the Interconnection determined to be required to accommodate an Interconnection Request that was part of an earlier Interconnection Queue, provided that such previously-constructed facility or upgrade was placed in service no more than five years prior to the Interconnection Queue Closing Date applicable to such Interconnection Customer, and

(b) such Interconnection Customer (hereafter in this section, the "Current Interconnection Customer") executes an Interconnection Service Agreement.

Upon determining that this section applies, the Office of the Interconnection

(c) shall notify each Interconnection Customer that paid or incurred a portion of the costs of a pertinent, previously-constructed facility or upgrade (hereafter in this section, a "Preceding Interconnection Customer") of the portion of the costs of such facility or upgrade for which the Current Interconnection Customer is determined to be responsible pursuant to Section 37.6, and

(d) shall afford each such Preceding Interconnection Customer, subject to the terms of this Section 42.3A, an opportunity to obtain, in exchange for a proportional share (as determined in accordance with Section 42.3) of the Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with such facility or upgrade that the Preceding Interconnection Customer holds, reimbursement for a share of the cost of the facility or upgrade that the Preceding Interconnection Customer paid or incurred that is proportional to the cost responsibility of the Current Interconnection Customer for such facility or upgrade.

(2) A Preceding Interconnection Customer shall have no obligation to exchange Incremental ~~Fixed Transmission~~ Auction Revenue Rights for cost reimbursement pursuant to this section, provided, however, that in the event that a Preceding Interconnection Customer chooses not to relinquish Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with a previously-constructed facility or upgrade, the Current Interconnection Customer shall have no cost responsibility with respect to the portion of such facility or upgrade for which that Preceding Interconnection Customer bore cost responsibility.

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(3) In the event that a Preceding Interconnection Customer elects to exchange Incremental ~~Fixed Transmission~~ Auction Revenue Rights for cost reimbursement pursuant to this section, (a) the Preceding Interconnection Customer shall relinquish the Incremental ~~Fixed Transmission~~ Auction Revenue Rights that it elects to exchange in writing, in a form and at a time reasonably satisfactory to the Office of the Interconnection; (b) the Current Interconnection Customer shall pay Transmission Provider, upon presentation of Transmission Provider's invoice therefor, an amount equal to the portion of such customer's cost responsibility for the relevant, previously-constructed facility or upgrade that is proportional to the Incremental ~~Fixed Transmission~~ Auction Revenue Rights that the Preceding Interconnection Customer agreed to exchange; and (c) the Office of the Interconnection shall assign Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with the previously-constructed facility or upgrade to the Current Interconnection Customer in accordance with the following:

(i) in the event that more than one Current Interconnection Customer is contemporaneously eligible for a reallocation of Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with a facility or upgrade, the Office of the Interconnection shall use the procedures of Section 42.2 to reallocate the Incremental ~~Fixed Transmission~~ Auction Revenue Rights made feasible by retirement of the Incremental ~~Fixed Transmission~~ Auction Revenue Rights relinquished by the Preceding Interconnection Customer;

(ii) in all other instances, the Current Interconnection Customer shall be entitled to assignment of either (A) the Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with the pertinent facility or upgrade that the Preceding Interconnection Customer relinquished pursuant to this section, or (B) any new Incremental ~~Fixed Transmission~~ Auction Revenue Rights that are made feasible by retirement of the Incremental ~~Fixed Transmission~~ Auction Revenue Rights relinquished by the Preceding Interconnection Customer, provided, however,

(iii) that if it is not feasible to assign Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with the pertinent facility or upgrade to the Current Interconnection Customer in proportion to such customer's cost responsibility for that facility or upgrade, then (A) the Current Interconnection Customer's cost responsibility for the pertinent facility or upgrade shall be reduced to an amount proportional to the Incremental ~~Fixed Transmission~~ Auction Revenue Rights that can be feasibly assigned to it, and (B) the Preceding Interconnection Customer's Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with the pertinent facility or upgrade shall be reduced only by a quantity proportional to the Current Interconnection Customer's final cost responsibility. In the event of a

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reduction in the Current Interconnection Customer's cost responsibility for a previously-constructed facility or

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upgrade pursuant to this subparagraph (3)(c)(iii), Transmission Provider shall refund to the Current Interconnection Customer the difference between the amount such customer paid pursuant to subsection (3)(b) of this Section 42.3A and the amount of its final cost responsibility for the pertinent facility or upgrade.

Upon completion of the reallocation process, Transmission Provider shall pay to the Preceding Interconnection Customer an amount that is proportional to the Current Interconnection Customer's final cost responsibility for the pertinent facility or upgrade and to the Incremental ~~Fixed Transmission~~ Auction Revenue Rights relinquished by the Preceding Interconnection Customer.

(4) The Office of the Interconnection shall specify deadlines for the procedural steps in reallocating Incremental ~~Fixed Transmission~~ Auction Revenue Rights pursuant to this section and shall complete the reallocation process before the date of commencement of interconnection service for the Current Interconnection Customer.

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42.4 Length of Incremental ~~Fixed Tranmission~~ Auction Revenue Rights: Incremental ~~Fixed Transmission~~Auction Revenue Rights received by an Interconnection Customer pursuant to this section shall be effective for thirty (30) years or the life of the facility or upgrade, whichever is less, subject to any subsequent pro-rata reductions of all~~Fixed Transmission~~ Auction Revenue -Rights (including Incremental~~Fixed Transmission~~ Auction Revenue Rights) in accordance with Attachment K. At any time during this thirty-year period (or the life of the facility or upgrade, whichever is less), in lieu of continuing this thirty-year Auction Revenue Right, the Interconnection Customer shall have a one-time choice to switch to an optional mechanism, whereby, on an annual basis, the customer has the choice to request an Auction Revenue Right during the annual Auction Revenue Rights allocation process (pursuant to Section 7.4.2 of the Appendix to Attachment K of the Tariff) between the same source and sink, provided the Auction Revenue Right is simultaneously feasible, pursuant to Section 7.5 of the Appendix to Attachment K of the Tariff. An Interconnection Customer may return Incremental ~~Fixed Transmission~~ Auction Revenue Rights that it no longer desires at any time, provided that the Office of the Interconnection determines that it can simultaneously accommodate all remaining outstanding ~~Fixed Transmission~~Auction Revenue Rights following the return of such~~Fixed Transmission~~ Auction Revenue Rights. In the event an Interconnection Customer returns Incremental ~~Fixed Transmission~~Auction Revenue Rights, the Interconnection Customer shall have no further rights regarding such Incremental ~~Fixed Transmission~~ Auction Revenue Rights.

42.5 Rate-based Facilities: No Incremental ~~Fixed Transmission~~Auction Revenue Rights shall be received by an Interconnection Customer with respect to transmission investment that is included in the rate base of a public utility and on which a regulated return is earned.

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contractor orders and agreements entered into by the Interconnected Transmission Owner to design, construct, install, operate, maintain and own the TO Interconnection Facilities, provided, however, that Interconnection Customer shall have the right to choose to take delivery of any equipment ordered by the Interconnected Transmission Owner for which Transmission Provider otherwise would authorize cancellation of the purchase order; or (b) remove any TO Interconnection Facilities built by the Interconnected Transmission Owner or any TO Interconnection Facilities built by the Interconnection Customer (but only after title to the subject facilities has been transferred to the Interconnected Transmission Owner); or (c) partially or entirely complete the TO Interconnection Facilities as necessary to preserve the integrity or reliability of the Transmission System, provided that Interconnection Customer shall be entitled to receive any Incremental ~~Fixed Transmission~~ Auction Revenue Rights associated with such facilities and upgrades as determined in accordance with Section 42 of the Tariff; or (d) undo any of the changes to the Transmission System that were made pursuant to this Subpart C and the Construction Service Agreement. To the extent that the Interconnection Customer has fully paid for equipment that is unused upon cancellation or which is removed pursuant to subsection (b) above, the Interconnection Customer shall have the right to take back title to such equipment; alternatively, in the event that the Interconnection Customer does not wish to take back title, the Interconnected Transmission Owner may elect to pay the Interconnection Customer a mutually agreed amount to acquire and own such equipment.

94.3.2 Termination Upon Default: In the event that Interconnection Customer exercises its right to terminate under Section 94.1.2, and notwithstanding any other provision of this Subpart C, the Interconnection Customer shall be liable for payment of the Interconnected Transmission Owner's Costs incurred up to the date of Interconnection Customer's notice of termination pursuant to Section 94.1.2 and the costs of completion of some or all of the TO Interconnection Facilities or specific unfinished portions thereof, and/or removal of any or all of such facilities which have been installed, to the extent that Transmission Provider determines such completion or removal to be required for the Transmission Provider and/or Interconnected Transmission Owner to perform their respective obligations under Part IV of the Tariff, provided, however, that Interconnection Customer's payment of such costs shall be without prejudice to any remedies that otherwise may be available to it under this Subpart C for the Default of the Interconnected Transmission Owner.

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SCHEDULE 9

PJM Interconnection, L.L.C. Administrative Services

a) PJM Interconnection, L.L.C. is the Transmission Provider under this Tariff. It also operates the PJM Interchange Energy Market as described in the Appendix to Attachment K of this Tariff and provides various other services to market participants. The cost of operating the PJM Interconnection, L.L.C., including principal and/or depreciation expense, interest expense and financing costs, shall be recovered from users of the various PJM services under this Schedule 9 and its subsidiary Schedules which correspond to categories of services ("Service Categories") provided by PJM. The charge in any month to any user of PJM's services under this Schedule 9 is the sum of the charges under the following subsidiary Schedules of this Schedule 9 to the extent determined to be applicable by the Transmission Provider to such user in such month:

Schedule 9-1:	"Control Area Administration Service"
Schedule 9-2:	"~~Fixed~~ Financial Transmission Rights Administration Service"
Schedule 9-3:	"Market Support Service"
Schedule 9-4:	"Regulation and Frequency Response Administration Service"
Schedule 9-5:	"Capacity Resource and Obligation Management Service"

b) The rates, terms, conditions, and applicability of these subsidiary services of this Schedule 9 are set forth on the subsidiary Schedules of this Schedule 9.

c) This Schedule 9 also includes a subsidiary Schedule 9-6, "Management Services Cost," which shall govern the determination and allocation of certain overhead and administrative costs among subsidiary Schedules 9-1 through 9-5.

d) Each of the subsidiary Schedules 9-1 through 9-5 of this Schedule 9 contains a formula for determination of the rate or charge thereunder. The rates and charges for Schedule 9-1 shall be determined monthly based on the costs incurred in such month, pursuant to the formulas set forth in such schedule. The rates and charges for Schedules 9-2 through 9-5 shall be determined annually pursuant to the formulas in such schedules, effective January 1 of each calendar year, based on PJM's Approved Budget applicable to such calendar year (subject to the rate moderation plan prescribed by paragraph (i) below) and on projected billing determinants forecasted in connection with such budget. The variance each month between the actual costs incurred to provide the services under Schedules 9-2 through 9-5 in such month and the actual revenues from Schedules 9-2 through 9-5 in such month shall be added to, or subtracted from, the total amount to be recovered under Schedule 9-1 in the month immediately following the month in which such variance occurred, pursuant to the formula set forth in Schedule 9-1; provided, however, that this reconciliation of variances between actual costs and revenues shall take into account the rate moderation plan prescribed by paragraph (i) below.

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SCHEDULE 9-2

~~Fixed~~ Financial Transmission Rights Administration Service

a) ~~Fixed~~ Financial Transmission Rights Administration Service comprises all of the activities of PJM associated with administering the ~~Fixed~~ Financial Transmission Rights ("FTRs") provided for under Attachment K to this Tariff, including, but not limited to, coordination of FTR bilateral trading, administration of FTR auctions, support of PJM's on-line, Internet-based eFTR tool, and analyses to determine what total combination of FTRs can be outstanding and accommodated by the PJM system at a given time. PJM provides this service to entities that hold FTRs.

b) PJM will charge each user of ~~Fixed~~ Financial Transmission Rights Administration Service each month a charge equal to the ~~Fixed~~ Financial Transmission Rights Administration Service Rate defined below times the quantity in megawatts of all FTRs held by such user in each hour of such month, summed for each hour that such user holds FTRs during such month during the time period such FTR is in effect.

c) The ~~Fixed~~ Financial Transmission Rights Administration Service Rate shall be recalculated annually, effective January 1 each year, in accordance with the formula:

$$\text{FTR Service Rate} = \frac{\text{Annual FTR Cost}}{\text{Annual FTR Determinants}}$$

where:

"Annual FTR Cost" equals the sum of the FTR Cost Components A.1 + A.2 + A.3, defined as follows:

"A.1" equals the sum of the products of: (i) the assignment percentage for each of the Divisions associated with ~~Fixed~~ Financial Transmission Rights Administration Service as shown on the PJM Assignment Matrix in this Schedule 9, times (ii) the dollar amount for each such Division shown on the Approved Budget for the calendar year during which the ~~Fixed~~ Financial Transmission Rights Administration Service Rate shall be effective.

"A.2" equals the Overhead Allocation to ~~Fixed~~ Financial Transmission Rights Administration Service determined pursuant to Schedule 9-6.

"A.3" equals the assignment of Non-Divisional Costs to ~~Fixed~~ Financial Transmission Rights Administration Service based on the Approved Budget for the calendar year for which the Annual FTR Cost is being determined.

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and where

"Annual FTR Determinants" equals the projected total amount of ~~Fixed~~ Financial Transmission Rights, in MWs, expected to be in effect each hour for all holders of ~~Fixed~~ Financial Transmission Rights during the calendar year that the ~~Fixed~~ Financial Transmission Rights Administration Service Rate shall be effective, summed for each hour of such calendar year.

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5.0 Reconciliation Billing: For Network Load within the PJM Region, to the extent required, the Transmission Provider will reconcile the Network Customer's hourly energy responsibilities as initially reported to Transmission Provider and its hourly energy consumption based on, or estimated from, metered usage, and provide corresponding charges and credits to Network Customer. Such reconciliation, if required, shall be made at the same rates as Energy Imbalance Service.

~~6.0 Assignment of Fixed Transmission Rights: Annual assignment of Fixed Transmission Rights shall be made in accordance with Attachment K Section B.2(b) of the Tariff. Requests under Attachment K to the Tariff for changes to existing assignments of, or for additional, Fixed Transmission Rights may be submitted at any time; however, the Network Customer's bus distribution submitted pursuant to Section 3.1 as of ten (10) days prior to the first day of a month shall be used for all assignments of Fixed Transmission Rights during the month~~

~~7~~6.0 Designation of party subject to reciprocal service obligation: The Network Customer shall comply with Section 6 of the Tariff.

~~7~~8.0 Name(s) of any Intervening Systems providing transmission service: To the extent any Network Resources are located outside the PJM Region, the list of Network Resources maintained by the Transmission Provider referenced in Section 3.2 of these specifications, shall identify any intervening systems needed to deliver those Network Resources to the Network Customer's retail load.

~~8~~9.0 Charges: Service under this Service Agreement may be subject to some combination of the charges detailed below. (The appropriate charges for individual transactions will be determined in accordance with the terms and conditions of the Tariff.)

~~9~~8.1 Embedded Cost Transmission Charge: The embedded cost transmission charge shall be determined in accordance with the formula set forth in Section 34 of the Tariff.

~~8~~9.2 System Impact and Facilities Study Charges: To the extent Network Resources are located outside, or a new resource is added to, the PJM Region, a System Impact Study and/or Facilities Study Agreement and related charges may be required pursuant to Section 32 of the Tariff.

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~~9~~8.3 Direct Assignment Facilities Charge: To the extent that facilities or portions of facilities must be constructed by a Transmission Owner for the sole use or benefit of the Network Customer to accommodate the service requested by the Network Customer, the Network Customer shall be responsible for the cost of such Direct Assignment Facilities, and the charges for such facilities shall be specified at the time that the Transmission Provider determines the facilities that are needed to provide the requested service.

~~8~~9.4 Ancillary Services Charge: In addition to Energy Imbalance Service, Transmission Provider shall bill the Network Customer for ancillary services in accordance with Schedules 1, 1-A, 2, 3, 5, 6, and 9 of the Tariff. To the extent required, the ancillary services charges shall also be reconciled based on any differences between the Network Customer's hourly energy responsibilities as initially reported to Transmission Provider and its hourly energy consumption based on, or estimated from, metered usage.

~~8~~9.5 Other Supporting Facilities Charge: None.

~~8~~9.6 Losses: For Non-Zone Network Load, losses of 3 percent for on-peak hours and 2.5 percent for off-peak hours shall be supplied as set forth in the Appendix to Attachment K of the Tariff.

~~8~~9.7 Other Charges: Transmission Provider shall charge Network Customer any and all other charges set forth in the Tariff applicable to providing Network Integration Service.

~~10~~9.0 Designated Agent: To the extent that a Designated Agent for one or more Network Customers provides to the Transmission Provider any of the information required by these Specifications, it shall provide the information separately for each Network Customer.

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ATTACHMENT K -- APPENDIX

Preface. The provisions of the Appendix incorporate into the Tariff for ease of reference the provisions of Schedule 1 of the Operating Agreement. As a result, this Appendix will be modified, subject to the approval of the Federal Energy Regulatory Commission, so that the terms and conditions set forth herein remain consistent with the corresponding terms and conditions of Schedule 1 of the Operating Agreement. All references in this Appendix to "Agreement" or "Schedules" are references to the Operating Agreement and the schedules thereto unless otherwise noted. References to Schedule 1 are references to this Appendix.

1. MARKET OPERATIONS

1.1 Introduction.

This Schedule sets forth the scheduling, other procedures, and certain general provisions applicable to the operation of the PJM Interchange Energy Market within the PJM Region. This Schedule addresses each of the three time-frames pertinent to the daily operation of the PJM Interchange Energy Market: Prescheduling, Scheduling, and Dispatch.

1.2 Cost-based Offers.

Unless and until the FERC shall authorize the use of market-based prices in the PJM Interchange Energy Market, all offers for energy or other services to be sold on the PJM Interchange Energy Market from generating resources located within the PJM Region shall not exceed the variable cost of producing such energy or other service, as determined in accordance with Schedule 2 to this Agreement and applicable regulatory standards, requirements and determinations; provided that, a Market Seller may offer to the PJM Interchange Energy Market the right to call on energy from a resource the output of which has been sold on a bilateral basis, with the rate for such energy if called equal to the curtailment rate specified in the bilateral contract.

1.3 Definitions.

1.3.1 Auction Revenue Rights.

"Auction Revenue Rights" shall mean the right to receive the revenue from the Financial Transmission Right auction, as further described in Section 7.4 of this Schedule.

1.3.1A Auction Revenue Rights Credits.

"Auction Revenue Rights Credits" shall mean the allocated share of total FTR auction revenues or costs credited to each holder of Auction Revenue Rights, calculated and allocated as specified in Section 7.4.3 of this Schedule.

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1.3.1B Day-ahead Energy Market.

"Day-ahead Energy Market" shall mean the schedule of commitments for the purchase or sale of energy and payment of Transmission Congestion Charges developed by the Office of the Interconnection as a result of the offers and specifications submitted in accordance with Section 1.10 of this Schedule.

1.3.1CA Day-ahead Prices.

"Day-ahead Prices" shall mean the Locational Marginal Prices resulting from the Day-ahead Energy Market.

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1.3.1~~B~~D Decrement Bid.

"Decrement Bid" shall mean a bid to purchase energy at a specified location in the Day-ahead Energy Market. An accepted Decrement Bid results in scheduled load at the specified location in the Day-ahead Energy Market.

1.3.1~~C~~E Dispatch Rate.

"Dispatch Rate" shall mean the control signal, expressed in dollars per megawatt-hour, calculated and transmitted continuously and dynamically to direct the output level of all generation resources dispatched by the Office of the Interconnection in accordance with the Offer Data.

1.3.2 Equivalent Load.

"Equivalent Load" shall mean the sum of a Market Participant's net system requirements to serve its customer load in the PJM Region, if any, plus its net bilateral transactions.

1.3.3 External Market Buyer.

"External Market Buyer" shall mean a Market Buyer making purchases of energy from the PJM Interchange Energy Market for consumption by end-users outside the PJM Region, or for load in the PJM Region that is not served by Network Transmission Service.

1.3.4 External Resource.

"External Resource" shall mean a generation resource located outside the metered boundaries of the PJM Control Area and PJM West Region.

1.3.5 ~~Fixed~~ Financial Transmission Right.

"~~Fixed~~ Financial Transmission Right" or "FTR" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2 of this Schedule.

1.3.5A Financial Transmission Right Obligation.

"Financial Transmission Right Obligation" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2(c) of this Schedule.

1.3.5B Financial Transmission Right Option.

"Financial Transmission Right Option" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2(d) of this Schedule.

1.3.6 Generating Market Buyer.

"Generating Market Buyer" shall mean an Internal Market Buyer that is a Load Serving Entity that owns or has contractual rights to the output of generation resources capable of serving the Market Buyer's load in the PJM Control Area or PJM West Region, or of selling energy or related services in the PJM Interchange Energy Market or elsewhere.

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1.3.7 Generator Forced Outage.

"Generator Forced Outage" shall mean an immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the relevant portions of the PJM Manuals. A reduction in output or removal from service of a generating unit in response to changes in market conditions shall not constitute a Generator Forced Outage.

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1.3.33 Spot Market Energy.

"Spot Market Energy" shall mean energy bought or sold by Market Participants through the PJM Interchange Energy Market at Locational Marginal Prices determined as specified in Section 2 of this Schedule.

1.3.33A State Estimator.

"State Estimator" shall mean the computer model of power flows specified in Section 2.3 of this Schedule.

1.3.33B Station Power.

"Station Power" shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Control Area or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy used to power synchronous condensers, used for pumping at a pumped storage facility, or used in association with restoration or black start service.

1.3.33C Target Allocation.

Shall mean the allocation of Transmission Congestion Credits as set forth in Section 5.2.3 of this Schedule or the allocation of Auction Revenue Rights Credits as set forth in Section 7.4.3 of this Schedule.

1.3.34 Transmission Congestion Charge.

"Transmission Congestion Charge" shall mean a charge attributable to the increased cost of energy delivered at a given load bus when the transmission system serving that load bus is operating under constrained conditions, which shall be calculated and allocated as specified in Section 5.1 of this Schedule.

1.3.35 Transmission Congestion Credit.

"Transmission Congestion Credit" shall mean the allocated share of total Transmission Congestion Charges credited to each holder of ~~Fixed~~ Financial Transmission Rights, calculated and allocated as specified in Section 5.2 of this Schedule.

1.3.36 Transmission Customer.

"Transmission Customer" shall mean an entity using Point-to-Point Transmission Service.

1.3.37 Transmission Forced Outage.

"Transmission Forced Outage" shall mean an immediate removal from service of a transmission facility by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the transmission facility, as specified in the relevant portions of the PJM Manuals. A removal from service of a transmission facility at the request of the Office of the Interconnection to improve transmission capability shall not constitute a Forced Transmission Outage.

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1.3.37A Transmission Loading Relief.

"Transmission Loading Relief" shall mean NERC's procedures for preventing operating security limit violations, as implemented by PJM as the security coordinator responsible for maintaining transmission security for the PJM Region.

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(b) During the Operating Day, the calculation set forth in (a) shall be performed every five minutes, using the Office of the Interconnection's Locational Marginal Price program, producing a set of Real-time Prices based on system conditions during the preceding interval. The prices produced at five-minute intervals during an hour will be integrated to determine the Real-time Prices for that hour.

2.6 Calculation of Day-ahead Prices.

For the Day-ahead Energy Market, day-ahead Locational Marginal Prices shall be determined on the basis of the least-cost, security-constrained dispatch, model flows and system conditions resulting from the load specifications, offers for generation, dispatchable load, Increment Bids, Decrement Bids, and bilateral transactions submitted to the Office of the Interconnection and scheduled in the Day-ahead Energy Market. Such prices shall be determined in accordance with the provisions of this Section applicable to the Day-ahead Energy Market and shall be the basis for purchases and sales of energy and Transmission Congestion Charges resulting from the Day-ahead Energy Market. This calculation shall be made for each hour in the Day-ahead Energy Market by applying a linear optimization method to minimize energy costs, given scheduled system conditions, scheduled transmission outages, and any transmission limitations that may exist. In performing this calculation, the Office of the Interconnection shall calculate the cost of serving an increment of load at each bus from each resource associated with an eligible energy offer as the sum of: (1) the price at which the Market Seller has offered to supply an additional increment of energy from the resource, and (2) the effect on transmission congestion costs (whether positive or negative) associated with increasing the output of the resource, based on the effect of increased generation from that resource on transmission line loadings. The energy offer or offers that can serve an increment of load at a bus at the lowest cost, calculated in this manner, shall determine the Day-ahead Price at that bus.

2.7 Performance Evaluation.

The Office of the Interconnection shall undertake an evaluation of the foregoing procedures for the determination of Locational Marginal Prices, as well as the procedures for determining and allocating ~~Fixed~~ Financial Transmission Rights and associated Transmission Congestion Charges and Credits, not less often than every two years, in accordance with the PJM Manuals. To the extent practical, the Office of the Interconnection shall retain all data needed to perform comparisons and other analyses of locational marginal pricing. The Office of the Interconnection shall report the results of its evaluation to the Market Participants, along with its recommendations, if any, for changes in the procedures.

3. ACCOUNTING AND BILLING

3.1 Introduction.

This schedule sets forth the accounting and billing principles and procedures for the purchase and sale of services on the PJM Interchange Energy Market and for the operation of the PJM Region.

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(b) The Transmission Congestion Charge shall be the total amount of energy specified in such energy schedules multiplied by the difference between a Locational Marginal Price calculated by the Office of the Interconnection for the energy schedule source location specified in the NERC Interchange Distribution Calculator and a Locational Marginal Price calculated by the Office of the Interconnection for the energy schedule sink location specified in the NERC Interchange Distribution Calculator. Transmission Congestion Charges that are less than zero shall be set equal to zero for Transmission Loading Relief Customers.

(c) The Office of the Interconnection will determine the Locational Marginal Prices at the energy schedule source and sink locations external to PJM with reference to and based solely on the prices of energy in the PJM Region and at the interface buses between adjacent Control Areas and the PJM Region and the system conditions and actual power flow distributions as described by the PJM State Estimator program. The Office of the Interconnection will determine the Locational Marginal Prices at the external energy schedule source and sink locations and the resulting Congestion Charge based on the portion of the energy schedule that flows through the PJM Region as reflected by the flow distributions from the PJM State Estimator Program.

5.1.7 Total Transmission Congestion Charges.

The total Transmission Congestion Charges collected by the Office of the Interconnection each hour will be the aggregate net amounts determined as specified in this Schedule. The Office of the Interconnection shall collect Transmission Congestion Charges for each hour the transmission system operates under constrained conditions.

5.2 Transmission Congestion Credit Calculation.

5.2.1 Eligibility.

(a) Except as provided in Section 5.2.1(b), each holder of a ~~Fixed~~ Financial Transmission Right shall receive as a Transmission Congestion Credit a proportional share of the total Transmission Congestion Charges collected for each constrained hour.

(b) If a holder of a ~~Fixed~~ Financial Transmission Right between specified delivery and receipt buses acquired the ~~Fixed~~ Financial Transmission Right in a ~~Fixed~~ Financial Transmission Rights Auction (the procedures for which are set forth in Part 7 of this Schedule 1) and (i) had an Increment Bid and/or Decrement Bid that was accepted by the Office of the Interconnection for an applicable hour in the Day-ahead Energy Market for delivery or receipt at or near delivery or receipt buses of the ~~Fixed~~ Financial Transmission Right; and (ii) the result of the acceptance of such Increment Bid or Decrement Bid is that the difference in locational marginal prices in the Day-ahead Energy Market between such delivery and receipt buses is greater than the difference in locational marginal prices between such delivery and receipt buses in the Real-time Energy Market, then the Market Participant shall not receive any Transmission Congestion Credit, associated with such ~~Fixed~~ Financial Transmission Right in such hour, in excess of one divided by the number of hours in the applicable month multiplied by the amount that the Market Participant paid for the ~~Fixed~~ Financial Transmission Right in the ~~Fixed~~ Financial Transmission Rights Auction.

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(c) For purposes of Section 5.2.1(b) a bus shall be considered at or near the ~~Fixed~~ Financial Transmission Right delivery or receipt bus if seventy-five percent or more of the energy injected or withdrawn at that bus and which is withdrawn or injected at any other bus is reflected in the constrained path between the subject ~~Fixed~~ Financial Transmission Right delivery and receipt buses that were acquired in the ~~Fixed~~ Financial Transmission Rights Auction.

5.2.2 ~~Fixed~~ Financial Transmission Rights

(a) Transmission Congestion Credits will be calculated based upon the ~~Fixed~~ Financial Transmission Rights held at the time of the constrained hour. Except as provided in paragraph (e) below, ~~Fixed~~ Financial Transmission Rights ~~shall be made to each Network Service User and Transmission Customer, determined as specified below~~shall be auctioned as set forth in Section 7.

(b) ~~Subject to the provisions of Section B of Attachment K of the PJM Tariff, on an annual basis by such deadline established by the Office of the Interconnection, each Network Service User shall designate a subset of its Network Resources for which Fixed Transmission Rights will be assigned, except that for the 2002/2003 planning period, Network Service Users that have or will have a shift in load as a result of the competitive statewide basic generation service procurement process approved by the New Jersey Board of Public Utilities in accordance with N.J.S.A. 48:3-57(e) shall designate Network Resources associated with such shifted load for which Fixed Transmission Rights will be assigned separately for the periods June 1, 2002 to July 31, 2002, and August 1, 2002 to May 31, 2003. Fixed Transmission Rights shall be assigned for each Network Resource in a number of megawatts equal to or less than the installed capacity summer megawatt rating of each designated Network Resource, determined at the PJM Control Area or PJM West Region transmission bus at which the designated Network Resource is connected. Each Fixed Transmission Right shall be to the aggregate load busses of the Network Service User in a Zone or, with respect to Non-Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's assigned Fixed Transmission Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Fixed Transmission Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.1 of the Tariff.~~The hourly economic value of a Financial Transmission Right Obligation is based on the Financial Transmission Right MW reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the Financial Transmission Right. The hourly economic value of a Financial Transmission Right Obligation is positive (a benefit to the Financial Transmission Right holder) when the Day-ahead Price at the point of delivery is higher than the Day-ahead Price at the point of receipt. The hourly economic value of a Financial Transmission Right Obligation is negative (a liability to the holder) when the Day-ahead Price at the point of receipt is higher than the Day-ahead Price at the point of delivery.

(c) The hourly economic value of a Financial Transmission Right Option is based on the Financial Transmission Right MW reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the Financial Transmission Right

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when that difference is positive. The hourly economic value of a Financial Transmission Right Option is positive (a benefit to the Financial Transmission Right holder) when the Day-ahead Price at the point of delivery is higher than the Day-ahead Price at the point of receipt. The hourly economic value of a Financial Transmission Right Option is zero (neither a benefit nor a liability to the holder) when the Day-ahead Price at the point of receipt is higher than the Day-ahead Price at the point of delivery.~~Each Transmission Customer receiving firm Point-to-Point Transmission Service shall be assigned Fixed Transmission Rights; provided, however, that a Transmission Customer may notify the Office of Interconnection that it does not wish to receive any FTRs or wishes to receive FTRs only for certain Point or Points of Receipt and Point or Points of Delivery, in which event no FTRs or such reduced amount of FTRs shall be issued to the Transmission Customer. The Fixed Transmission Right for each instance of Point-to-Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point-to-Point Transmission Service.~~

(d) A ~~Fixed~~ Financial Transmission Right, or the right to Transmission Congestion Credits attributable to a ~~Fixed~~ Financial Transmission Right, may be sold or otherwise transferred by agreement, subject to compliance with such procedures as may be established by the Office of the Interconnection for verification of the rights of the purchaser or transferee.

(e) Financial Transmission Rights shall be allocated to each Firm Transmission Customer and Network Service User in a new PJM zone in the manner specified below. Such Financial Transmission Rights shall remain in effect until the first annual allocation of auction revenue rights to occur after the integration of such new PJM zone into the PJM interchange energy market.

(i) Subject to the provisions of Section B of Attachment K of the PJM Tariff, by such deadline established by the Office of the Interconnection, each Network Service User in a new PJM zone shall designate a subset of its Network Resources for which Financial Transmission Rights will be assigned. Financial Transmission Rights shall be assigned for each Network Resource in a number of megawatts equal to or less than the installed

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capacity summer megawatt rating of each designated Network Resource, determined at the new PJM zone transmission bus at which the designated Network Resource is connected. Each Financial Transmission Right shall be to the aggregate load busses of the Network Service User in a new PJM zone. The sum of each Network Service User's assigned Financial Transmission Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.2 of the Tariff. The sum of each Network Service User's Financial Transmission Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.2 of the Tariff.

(ii) Each Transmission Customer receiving firm Transmission Service shall be assigned Financial Transmission Rights; provided, however, that a Transmission Customer may notify the Office of Interconnection that it does not wish to receive any FTRs or wishes to receive FTRs only for certain Point or Points of Receipt and Point or Points of Delivery, in which event no FTRs or such reduced amount of FTRs shall be issued to the Transmission Customer. The Financial Transmission Right for each instance of Point-to-Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point-to-Point Transmission Service.

(iii) All Financial Transmission Rights must be simultaneously feasible. If all Financial Transmission Right requests made when Financial Transmission Rights are allocated for the new zone are not feasible Financial Transmission Rights are prorated and allocated in proportion to the MW level requested and in inverse proportion to the effect on the binding constraints.

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5.2.3 Target Allocation ~~for Network Service Users~~of Transmission Congestion Credits.

A target allocation of Transmission Congestion Credits for each ~~Network Service User~~ entity holding a Financial Transmission Right shall be determined for each ~~of its~~ Financial ~~Fixed~~ Transmission Rights. Each ~~Fixed~~ Financial Transmission Right shall be multiplied by the ~~percent of the Network Service User's annual peak load assigned to each load bus multiplied by the difference calculated as the Network Service User's load bus Day-ahead Price minus the generation bus Day-ahead Price of the Network Resource associated with the Fixed Transmission Right. The total target allocation for each Fixed Transmission Right is the sum of the target allocations for each load bus.~~ Day-ahead Price differences for the receipt and delivery points associated with the Financial Transmission Right, calculated as the Locational Marginal Price at the delivery point(s) minus the Locational Marginal Price at the receipt point(s). For the purposes of calculating Transmission Congestion Credits, the Day-ahead Price of a Zone is calculated as the sum of the Day-ahead Price of the buses that comprise the Zone multiplied by the percent of annual peak load assigned to each node. When the FTR Target Allocation is positive, the FTR Target Allocation is a credit to the FTR holder. When the FTR Target Allocation is negative, the FTR Target Allocation is a debit to the FTR holder if the FTR is a Financial Transmission Right Obligation. When the FTR Target Allocation is negative, the FTR Target Allocation is set to zero if the FTR is a Financial Transmission Right Option. The total target allocation for ~~each~~ Network Service Users and Transmission Customers for each hour ~~is~~ shall be the sum of the ~~total~~ target allocations ~~for each~~ associated with all of the Network Service User's' or Transmission Customers' Financial ~~Fixed~~ Transmission Rights.

5.2.4 ~~Target Allocation for other Holders.~~[Reserved]

~~A target allocation of Transmission Congestion Credits for each Transmission Customer or entity holding an FTR acquired by other means shall be determined for each Fixed Transmission Right. Each Fixed Transmission Right shall be multiplied by the Day-ahead Price differences for the receipt and delivery points associated with the Fixed Transmission Right, calculated as the Day-ahead Price at the delivery point(s) minus the Locational Marginal Price at the receipt point(s). . The total target allocation for the Transmission Customer for each hour shall be the sum of the target allocations associated with all of the Transmission Customer's Fixed Transmission Rights.~~

5.2.5 Calculation of Transmission Congestion Credits.

(a) The total of all the target allocations determined as specified above shall be compared to the total Transmission Congestion Charges in each hour resulting from both the Day-ahead Energy Market and the Real-time Energy Market. If the total of the target allocations is less than the total of the Transmission Congestion Charges, the Transmission Congestion Credit for each ~~Network Service User and Transmission Customer~~ entity holding an FTR shall be equal to its target allocation. All remaining Transmission Congestion Charges shall be distributed as described below in Section 5.2.6 "Distribution of Excess Congestion Charges."

(b) If the total of the target allocations is greater than the total Transmission Congestion Charges for the hour resulting from both the Day-ahead Energy Market and the Real-time Energy Market, each holder of ~~Fixed~~ Financial Transmission Rights shall be assigned a

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share of the total Transmission Congestion Charges in proportion to its target allocations for Financial Transmission Rights which have a positive Target Allocation value. Financial Transmission Rights which have a negative Target Allocation value are assigned the full Target Allocation value as a negative Transmission Congestion Credit.

5.2.6 Distribution of Excess Congestion Charges.

(a) Excess Transmission Congestion Charges accumulated in a month shall be distributed to each holder of ~~Fixed~~ Financial Transmission Rights in proportion to, but not more than, any deficiency in the share of Transmission Congestion Charges received by the holder during that month as compared to its total target allocations for the month.

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(b) After the excess Transmission Congestion Charge distribution described in Section 5.2.6(a) is performed, any excess Transmission Congestion Charges remaining at the end of a month shall be distributed to each holder of ~~Fixed~~ Financial Transmission Charges received by the holder during the current calendar year, including previously distributed excess Transmission Congestion Charges, as compared to its total target allocation for the calendar year.

(c) Any excess Transmission Congestion Charges remaining at the end of a calendar year shall be distributed to each holder of Auction Revenue Rights in proportion to, but not more than, any Auction Revenue Right deficiencies for that calendar year. After Auction Revenue Right deficiencies are satisfied, any remaining excess Transmission Congestion Charges shall be distributed to Network Service Users and Transmission Customers purchasing Firm Point-to-Point Transmission Service in proportion to their Demand Charges for Network Service and their charges for Reserved Capacity for Firm Point-to-Point Transmission Service.

5.3 Unscheduled Transmission Service (Loop Flow).

(a) When there are agreements between the Members (or the Office of the Interconnection on behalf of the Members) and others for compensation to be paid or received for unscheduled transmission service (loop flow) into or out of the PJM Region, the net compensation received shall be included in the total Transmission Congestion Charges that are distributed in accordance with Section 5.2.

(b) With respect to payments by the Office of Interconnection to the New York Power Pool for the installation and operation of phase angle regulating facilities at Ramapo to control or limit unscheduled transmission service (loop flow), each East Transmission Owner with revenue requirements under the PJM Tariff shall pay a share of the charges on a transmission revenue requirements ratio share basis.

6. "MUST-RUN" FOR RELIABILITY GENERATION

6.1 Introduction.

The following procedures shall apply to any generation resource subject to the dispatch of the Office of the Interconnection that (a) is a generation resource for which construction commenced before July 9, 1996, and (b) 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.

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7. ~~FIXED~~ FINANCIAL TRANSMISSION RIGHTS AUCTIONS

7.1 Auctions of ~~Fixed~~ Financial Transmission Rights.

Annual and ~~P~~periodic auctions to allow Market Participants to acquire or sell ~~Fixed~~ Financial Transmission Rights shall be conducted by the Office of the Interconnection in accordance with the provisions of this Section.

7.1.1 Auction Period and Scope of Auctions.

The periods covered by ~~an~~ auctions shall be; (1) the one-year period beginning the month after the final round of the annual auction and (2) the one-month period ~~next~~ following the date that the monthly auction is conducted. With the exception of FTRs allocated pursuant to section 5.2.2 (e) of this Schedule, in the annual auction, the Office of the Interconnection shall offer for sale the entire Financial Transmission Rights capability for the year in four rounds with 25 percent of the capability offered in each round. In the monthly auction, ~~T~~the Office of the Interconnection shall offer for sale ~~in the auction~~ any remaining ~~Fixed~~ Financial Transmission Rights capability for the month after taking into account all of the ~~Fixed~~ Financial Transmission Rights already outstanding at the time of the auction. In addition, any holder of a ~~Fixed~~ Financial Transmission Right for the period covered by an auction may offer such ~~Fixed~~ Financial Transmission Right for sale in such auction. On-Peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auctions. FTRs will be offered as Financial Transmission Right Obligations and Financial Transmission Right Options. ~~Each monthly auction will consist of a separate auction for on-peak Fixed Transmission Rights and a separate auction for off-peak Fixed Transmission Rights.~~ Market Participants may bid for and acquire any number of ~~Fixed~~ Financial Transmission Rights, provided that all ~~Fixed~~ Financial Transmission Rights awarded are simultaneously feasible with each other and with all ~~Fixed~~ Financial Transmission Rights outstanding at the time of the auction and not sold into the auction. An ARR holder may self-schedule an FTR on the same path in the Annual FTR Auction- according to the rules described in the PJM Manuals.

7.1.2 Frequency and Time of Auctions.

Annual Financial Transmission Rights auctions shall offer the entire FTR capability of the PJM system in four rounds with 25 percent of the capability offered in each round. Each round shall be conducted over five business days by such timeline established by the Office of the Interconnection. Each round shall begin with the bid and offer period opening the first day at -12:00 midnight (Eastern Prevailing Time) and closing the third day at 5:00 p.m. (Eastern Prevailing Time). Monthly, ~~Fixed~~ Financial Transmission Rights auctions shall be held ~~monthly~~. The bid and offer period shall open at 12:00 midnight (Eastern Prevailing Time) on the ~~fifteenth (15th)~~ thirteenth (13th) business day preceeding the month for which ~~Fixed~~ Financial Transmission Rights are being auctioned and shall close at ~~12:00 midnight~~ 5:00 PM (Eastern Prevailing Time) on the tenth (10th) business day preceding the month for which ~~Fixed~~ Financial Transmission Rights are being auctioned.

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7.1.3 Duration of ~~Fixed~~ Financial Transmission Rights.

Each ~~Fixed~~ Financial Transmission Right acquired in a ~~Fixed~~ Financial Transmission Rights auction shall entitle the holder to credits of Transmission Congestion Charges for the ~~one-month~~ period that was specified in the corresponding auction~~for which the Fixed Transmission Rights were auctioned~~.

7.2 ~~Fixed~~ Financial Transmission Rights Characteristics.

7.2.1 Reconfiguration of ~~Fixed~~ Financial Transmission Rights.

Through an appropriate linear programming model, the Office of the Interconnection shall reconfigure the ~~Fixed~~ Financial Transmission Rights offered or otherwise available for sale in any auction to maximize the value to the bidders of the ~~Fixed~~ Financial Transmission Rights sold, provided that any ~~Fixed~~ Financial Transmission Rights acquired at auction shall be simultaneously feasible in combination with those ~~Fixed~~ Financial Transmission Rights outstanding at the time of the auction and not sold in the auction. The linear programming model shall, while respecting transmission constraints and the maximum MW quantities of the bids and offers, select the set of simultaneously feasible ~~Fixed~~ Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers.

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7.2.2 Specified ~~Buses~~ Receipt and Delivery Points.

Auction bids for annual Financial Transmission Rights Obligations may specify as receipt and delivery points any combination of hubs, Zones, aggregates, generators, and interface buses. Auction bids for annual Financial Transmission Rights Options may specify as receipt and delivery points such combination of hubs, Zones, aggregates, generators, and interface buses as the Office of the Interconnection shall allow from time to time as set forth in its FTR business manual. Auction bids for monthly ~~Fixed~~ Financial Transmission Rights may specify any combination of receipt and delivery buses represented in the State Estimator model for which the Office of the Interconnection calculates and posts Locational Marginal Prices. Auction bids may specify receipt and delivery points from locations outside of the PJM Region to locations inside such area, from locations within the PJM Region to locations outside such area, or to and from locations within the area comprised of the PJM Region.

7.2.3 Transmission Congestion Charges.

~~Fixed~~ Financial Transmission Rights~~, whether acquired at auction or otherwise,~~ shall entitle holders thereof to credits only for Transmission Congestion Charges, and shall not confer a right to credits for payments arising from or relating to transmission congestion made to any entity other than the Office of the Interconnection.

7.3 Auction Procedures.

7.3.1 Role of the Office of the Interconnection.

~~Fixed~~ Financial Transmission Rights auctions shall be conducted by the Office of the Interconnection in accordance with standards and procedures set forth in the PJM Manuals, such standards and procedures to be consistent with the requirements of this Schedule.

7.3.2 Notice of Offer.

A holder of a ~~Fixed~~ Financial Transmission Right wishing to offer the ~~Fixed~~ Financial Transmission Right for sale shall notify the Office of the Interconnection of any ~~Fixed~~ Financial Transmission Rights to be offered. Each ~~Fixed~~ Financial Transmission Rights sold in an auction shall, at the end of the period for which the ~~Fixed~~ Financial Transmission Rights were auctioned, revert to the offering holder or the entity to which the offering holder has transferred such ~~Fixed~~ Financial Transmission Right, subject to the term of the ~~Fixed~~ Financial Transmission Right itself and to the right of such holder or transferee to offer the ~~Fixed~~ Financial Transmission Right in the next or any subsequent auction during the term of the ~~Fixed~~ Financial Transmission Right.

7.3.3 Pending Applications for Firm Service.

(a) ~~Prior to the start of each auction bidding period, the Office of the Interconnection shall exert reasonable effort to complete its review of pending applications for Network Transmission Service and Firm Point-to-Point Transmission Service and to ascertain the corresponding Fixed Transmission Rights to be assigned to the entities receiving such service, subject to compliance with all applicable deadlines and other procedures by the applicant. Fixed Transmission Rights so assigned shall be included in the simultaneous feasibility test performed by the Office of the Interconnection for the auction.~~ **[Reserved]**

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(b) ~~Fixed~~ Financial Transmission Rights may be assigned to entities requesting Network Transmission Service or Firm Point-to-Point Transmission Service pursuant to Section 5.2.2 (e), only if such ~~Fixed~~ Financial Transmission Rights are simultaneously feasible with all outstanding ~~Fixed~~ Financial Transmission Rights, including ~~Fixed~~ Financial Transmission Rights effective for the then-current auction period. If an assignment of ~~Fixed~~ Financial Transmission Rights pursuant to a pending application for Network Transmission Service or Firm Point-to-Point Transmission Service cannot be completed prior to an auction, ~~Fixed~~ Financial Transmission Rights attributable to such transmission service shall not be assigned for the then-current auction period. If a ~~Fixed~~ Financial Transmission Right cannot be assigned for this reason, the applicant may withdraw its application, or request that the ~~Fixed~~ Financial Transmission Right be assigned effective with the start of the next auction period.

7.3.4 On-Peak, ~~and Off-Peak~~ and 24-Hour Periods.

On-peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auction. ~~The Office of the Interconnection will conduct separate auctions simultaneously for on-peak, and off-peak, and 24-hour periods~~. On-Peak ~~Fixed~~ Financial Transmission Rights shall cover the periods from 7:00 a.m. up to the hour ending at 11:00 p.m. on Mondays through Fridays, except holidays as defined in the PJM Manuals. Off-Peak ~~Fixed~~ Financial Transmission Rights shall cover the periods from 11:00 p.m. up to the hour ending 7:00 a.m. on Mondays through Fridays and all hours on Saturdays, Sundays, and holidays as defined in the PJM Manuals. The 24-hour period shall cover the period from hour ending 1:00 a.m. to the hour ending 12:00 midnight on all days. Each bid shall specify whether it is for an on-peak ~~or~~, off-peak, or 24-hour period.

7.3.5 Offers and Bids.

(a) Offers to sell and bids to purchase ~~Fixed~~ Financial Transmission Rights shall be submitted during the period set forth in Section 7.1.2, and shall be in the form specified by the Office of the Interconnection in accordance with the requirements set forth below.

(b) Offers to sell shall identify the specific ~~Fixed~~ Financial Transmission Right, by megawatt quantity and receipt and delivery points, offered for sale. An offer to sell a specified megawatt quantity of ~~Fixed~~ Financial Transmission Rights shall constitute an offer to sell a quantity of ~~Fixed~~ Financial Transmission Rights equal to or less than the specified quantity. An offer to sell may not specify a minimum quantity being offered. Each offer may specify a reservation price, below which the offeror does not wish to sell the ~~Fixed~~ Financial Transmission Right. Offers submitted by entities holding rights to ~~Fixed~~ Financial Transmission Rights ~~acquired other than by assignment in connection with reservations of Network Transmission Service or Firm Point-to-Point Transmission Service~~ shall be subject to such reasonable standards for the verification of the rights of the offeror as may be established by the Office of the Interconnection. Offers shall be subject to such reasonable standards for the creditworthiness of the offeror or for the posting of security for performance as the Office of the Interconnection shall establish.

(c) Bids to purchase shall specify the megawatt quantity, price per megawatt, and receipt and delivery points of the ~~Fixed~~ Financial Transmission Right that the bidder wishes to purchase. A bid to purchase a specified megawatt quantity of ~~Fixed~~ Financial Transmission

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Rights shall constitute a bid to purchase a quantity of ~~Fixed~~ Financial Transmission Rights equal to or less than the specified quantity. A bid to purchase may not specify a minimum quantity that the bidder

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wishes to purchase. A bid may specify ~~as~~ receipt ~~or~~ and delivery points ~~any bus~~ in accordance with Section 7.2.2 ~~for which the Office of the Interconnection calculates and posts Locational Marginal Prices in accordance with Section 2 of this Schedule~~ and may include ~~Fixed~~ Financial Transmission Rights for which the associated Transmission Congestion Credits may have negative values. Bids shall be subject to such reasonable standards for the creditworthiness of the bidder or for the posting of security for performance as the Office of the Interconnection shall establish.

(d) Bids and offers shall be specified to the nearest tenth of a megawatt and shall be greater than zero.

7.3.6 Determination of Winning Bids and Clearing Price.

(a) At the close of ~~the~~ each bidding period ~~each month~~, the Office of the Interconnection will create a base ~~Fixed~~ Financial Transmission Rights power flow model that includes all outstanding ~~Fixed~~ Financial Transmission Rights that have been approved and confirmed for any portion of the month for which the auction was conducted and that were not offered for sale in the auction. The base ~~Fixed~~ Financial Transmission Rights model also will include estimated uncompensated parallel flows into each interface point of the PJM Control Area and estimated scheduled transmission outages.

(b) In accordance with the requirements of Section 7.4.5 of this Schedule and subject to all applicable transmission constraints and reliability requirements, the Office of the Interconnection shall determine the simultaneous feasibility of all outstanding ~~Fixed~~ Financial Transmission Rights not offered for sale in the auction and of all ~~Fixed~~ Financial Transmission Rights that could be awarded in the auction for which bids were submitted. The winning bids shall be determined from an appropriate linear programming model that, while respecting transmission constraints and the maximum MW quantities of the bids and offers, selects the set of simultaneously feasible ~~Fixed~~ Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers. In the event that there are two or more identical bids for the selected ~~Fixed~~ Financial Transmission Rights and there are insufficient ~~Fixed~~ Financial Transmission Rights to accommodate all of the identical bids, then each such bidder will receive a pro rata share of the ~~Fixed~~ Financial Transmission Rights that can be awarded.

(c) ~~Fixed~~ Financial Transmission Rights shall be sold at the market-clearing price for ~~Fixed~~ Financial Transmission Rights between specified pairs of receipt and delivery points, as determined by the bid value of the marginal ~~Fixed~~ Financial Transmission Right that could not be awarded because it would not be simultaneously feasible. The linear programming model shall determine the clearing prices of all ~~Fixed~~ Financial Transmission Rights paths based on the bid value of the marginal ~~Fixed~~ Financial Transmission Rights, which are those ~~Fixed~~ Financial Transmission Rights with the highest bid values that could not be awarded fully because they were not simultaneously feasible, and based on the flow sensitivities of each ~~Fixed~~ Financial Transmission Rights path relative to the marginal ~~Fixed~~ Financial Transmission Rights paths flow sensitivities on the binding transmission constraints.

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7.3.7 Announcement of Winners and Prices.

Within two (2) business days after the close of ~~an~~ monthly auction~~.~~ or annual auction round, the Office of the Interconnection shall post the winning bidders, the megawatt quantity, and the receipt and delivery points for each ~~Fixed~~ Financial Transmission Right awarded in the auction and the price at which each ~~Fixed~~ Financial Transmission Right was awarded. ~~Results of the on-peak auction and off-peak auction will be posted separately.~~ The Office of the Interconnection shall not disclose the price specified in any bid to purchase or the reservation price specified in any offer to sell.

7.3.8 Auction Settlements.

All buyers and sellers of ~~Fixed~~ Financial Transmission Rights between the same points of receipt and delivery shall pay or be paid the market-clearing price, as determined in the auction, for such ~~Fixed~~ Financial Transmission Rights.

7.~~4~~3.~~9~~ Allocation of Auction Revenues.

7.4.1 Eligibility

(a) ~~All~~ annual and monthly auction revenues, net of payments to entities selling ~~Fixed~~ Financial Transmission Rights into the auction, shall be allocated among holders of Auction Revenue Rights ~~the East Transmission Owners and West Transmission Owners~~ in proportion to, but not more than, the Target Allocation of Auction Revenue Rights Credits for the holder. ~~their respective transmission revenue requirements.~~

(b) Auction Revenue Rights Credits will be calculated based upon the clearing price results of the applicable Annual Financial Transmission Rights auction.

7.4.2 Auction Revenue Rights

(a) For the year 2003/2004 planning period, the following Auction Revenue Rights allocation procedure shall apply. Each Network Service User may request a subset of its Network Resources for which available Auction Revenue Rights shall be allocated. Auction Revenue Rights shall be allocated for each Network Resource in a number of megawatts equal to or less than installed capacity summer megawatt rating of each designated Network Resource, determined at the PJM Control Area or PJM West Region transmission bus at which the designated Network Resource is connected. Each Auction Revenue Right shall be to the aggregate load busses of the Network Service User in a Zone or, with respect to Non-Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's allocated Auction Revenue Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Auction Revenue Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.1 of the Tariff.

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(b) Subsequent to the 2003/2004 planning period the following Auction Revenue Rights allocation procedure shall apply. On an annual basis by such deadline established by the Office of the Interconnection, each Network Service User shall designate a subset of buses from which Auction Revenue Rights will be sourced. Valid Auction Revenue Rights source buses include only zones, generators, hubs and external interface buses. The Network Service User shall specify the amount of Auction Revenue Rights requested from each source bus. Each Auction Revenue Right shall be sinked to the aggregate load busses of the Network Service User in a Zone or-, with respect to Non-Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's allocated Auction Revenue Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Auction Revenue Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.1 of the Tariff. The allocation of Auction Revenue Rights shall be performed in four stages, with 25 percent of the system Auction Revenue Rights capability allocated in each stage.

(c) On a daily basis within the annual Financial Transmission Rights auction period, a proportionate share of Network Service User's Auction Revenue Rights for each Zone are allocated as Network Load changes from one Network Service User to another within that Zone.

(d) Each Transmission Customer receiving firm Point-to-Point Transmission Service shall specify whether it wishes to receive Auction Revenue Rights. The Auction Revenue Right for each instance of Point-to-Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point-to-Point Transmission Service.

(e) All Auction Revenue Rights must be simultaneously feasible. If all Auction Revenue Right requests made during the annual allocation process are not feasible then Auction Revenue Rights are prorated and allocated in proportion to the MW level requested and in inverse proportion to the effect on the binding constraints.

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7.4.3 Target Allocation of Auction Revenue Right Credits

A target allocation of Auction Revenue Right Credits for each entity holding an Auction Revenue Right shall be determined for each Auction Revenue Right. After each round of the annual Financial Transmission Right Auction, each Auction Revenue Right shall be divided by four and multiplied by the price differences for the receipt and delivery points associated with the Auction Revenue Right, calculated as the Locational Marginal Price at the delivery points(s) minus the Locational Marginal Price at the receipt point(s), where the price for the receipt and delivery point is determined by the clearing prices of each round of the annual Financial Transmission Right auction. The daily total target allocation for an entity holding the Auction Revenue Rights shall be the sum of the daily target allocations associated with all of the entity's Auction Revenue Rights.

7.4.4 Calculation of Auction Revenue Right Credits

(a) Each day, the total of all the daily target allocations determined as specified above in section 7.4.3 plus any additional Auction Revenue Rights target allocations applicable for that day shall be compared to the total revenues of the monthly Financial Transmission Rights auction (divided by the number of days in the month) plus the total revenues of the annual Financial Transmission Rights auction (divided by the number of days in the planning period). If the total of the target allocations is less than the total auction revenues, the Auction Revenue Right Credit for each entity holding an Auction Revenue Right shall be equal to its target allocation. All remaining funds shall be distributed as Excess Congestion Charges pursuant to Section 5.2.5.

(b) If the total of the target allocations is greater than the total auction revenues, each holder of Auction Revenue Rights shall be assigned a share of the total auction revenues in proportion to its Auction Revenue Rights target allocations for Auction Revenue Rights which have a positive Target Allocation value. Auction Revenue Rights which have a negative Target Allocation value are assigned the full Target Allocation value as a negative Auction Revenue Right Credit.

7.4~~5~~ Simultaneous Feasibility.

The Office of the Interconnection shall make the simultaneous feasibility determinations specified herein using appropriate powerflow models of contingency-constrained dispatch. Such determinations shall take into account outages of both individual generation units and transmission facilities and shall be based on reasonable assumptions about the configuration and availability of transmission capability during the period covered by the auction that are not inconsistent with the determination of the deliverability of Capacity Resources under the Reliability Assurance Agreement or the deliverability of Available Capacity Resources under the Reliability Assurance Agreement-West. The goal of the simultaneous feasibility determination shall be to ensure that there are sufficient revenues from Transmission Congestion Charges to satisfy all ~~Fixed~~ Financial Transmission Rights obligations for the auction period under expected conditions and to ensure that there are sufficient revenues from the annual Financial Transmission Right Auction to satisfy all Auction Revenue Rights obligations.

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Operating Agreement Revisions

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RESOLUTION TO AMEND THE PROCEDURES REQUIRING THE RETENTION OF AN INDEPENDENT CONSULTANT TO PROPOSE A LIST OF CANDIDATES FOR THE BOARD OF MANAGERS ELECTION FOR 2001 177

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SCHEDULE 1

PJM INTERCHANGE ENERGY MARKET

1. MARKET OPERATIONS

1.1 Introduction.

This Schedule sets forth the scheduling, other procedures, and certain general provisions applicable to the operation of the PJM Interchange Energy Market within the PJM Region. This Schedule addresses each of the three time-frames pertinent to the daily operation of the PJM Interchange Energy Market: Prescheduling, Scheduling, and Dispatch.

1.2 Cost-based Offers.

Unless and until the FERC shall authorize the use of market-based prices in the PJM Interchange Energy Market, all offers for energy or other services to be sold on the PJM Interchange Energy Market from generating resources located within the PJM Region shall not exceed the variable cost of producing such energy or other service, as determined in accordance with Schedule 2 to this Agreement and applicable regulatory standards, requirements and determinations; provided that, a Market Seller may offer to the PJM Interchange Energy Market the right to call on energy from a resource the output of which has been sold on a bilateral basis, with the rate for such energy if called equal to the curtailment rate specified in the bilateral contract.

1.3 Definitions.

1.3.1 Auction Revenue Rights.

"Auction Revenue Rights" shall mean the right to receive the revenue from the Financial Transmission Right auction, as further described in Section 7.4 of this Schedule.

1.3.1A Auction Revenue Rights Credits.

"Auction Revenue Rights Credits" shall mean the allocated share of total FTR auction revenues or costs credited to each holder of Auction Revenue Rights, calculated and allocated as specified in Section 7.4.3 of this Schedule.

1.3.1B Day-ahead Energy Market.

"Day-ahead Energy Market" shall mean the schedule of commitments for the purchase or sale of energy and payment of Transmission Congestion Charges developed by the Office of the Interconnection as a result of the offers and specifications submitted in accordance with Section 1.10 of this Schedule.

1.3.1C Day-ahead Prices.

"Day-ahead Prices" shall mean the Locational Marginal Prices resulting from the Day-ahead Energy Market.

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1.3.1D Decrement Bid.

"Decrement Bid" shall mean a bid to purchase energy at a specified location in the Day-ahead Energy Market. An accepted Decrement Bid results in scheduled load at the specified location in the Day-ahead Energy Market.

1.3.1E Dispatch Rate.

"Dispatch Rate" shall mean the control signal, expressed in dollars per megawatt-hour, calculated and transmitted continuously and dynamically to direct the output level of all generation resources dispatched by the Office of the Interconnection in accordance with the Offer Data.

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1.3.2 Equivalent Load.

"Equivalent Load" shall mean the sum of a Market Participant's net system requirements to serve its customer load in the PJM Region, if any, plus its net bilateral transactions.

1.3.3 External Market Buyer.

"External Market Buyer" shall mean a Market Buyer making purchases of energy from the PJM Interchange Energy Market for consumption by end-users outside the PJM Region, or for load in the PJM Region that is not served by Network Transmission Service.

1.3.4 External Resource.

"External Resource" shall mean a generation resource located outside the metered boundaries of the PJM Region.

1.3.5 Financial Transmission Right.

"Financial Transmission Right" or "FTR" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2 of this Schedule.

1.3.5A Financial Transmission Right Obligation.

"Financial Transmission Right Obligation" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2(b) of this Schedule.

1.3.5B Financial Transmission Right Option.

"Financial Transmission Right Option" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2(c) of this Schedule.

1.3.6 Generating Market Buyer.

"Generating Market Buyer" shall mean an Internal Market Buyer that is a Load Serving Entity that owns or has contractual rights to the output of generation resources capable of serving the Market Buyer's load in the PJM Region, or of selling energy or related services in the PJM Interchange Energy Market or elsewhere.

1.3.7 Generator Forced Outage.

"Generator Forced Outage" shall mean an immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the relevant portions of the PJM Manuals. A reduction in output or removal from service of a generating unit in response to changes in market conditions shall not constitute a Generator Forced Outage.

1.3.8 Generator Maintenance Outage.

"Generator Maintenance Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit in order to perform necessary repairs on specific components of the facility, if removal of the facility meets the guidelines specified in the PJM Manuals.

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1.3.9 Generator Planned Outage.

"Generator Planned Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit for inspection, maintenance or repair with the approval of the Office of the Interconnection in accordance with the PJM Manuals.

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1.3.30 Ramping Capability.

"Ramping Capability" shall mean the sustained rate of change of generator output, in megawatts per minute.

1.3.30A Real-time Prices.

"Real-time Prices" shall mean the Locational Marginal Prices resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

1.3.30B Real-time Energy Market.

"Real-time Energy Market" shall mean the purchase or sale of energy and payment of Transmission Congestion Charges for quantity deviations from the Day-ahead Energy Market in the Operating Day.

1.3.31 Regulation.

"Regulation" shall mean the capability of a specific generating unit with appropriate telecommunications, control and response capability to increase or decrease its output in response to a regulating control signal, in accordance with the specifications in the PJM Manuals.

1.3.32 Spot Market Backup.

"Spot Market Backup" shall mean the purchase of energy from, or the delivery of energy to, the PJM Interchange Energy Market in quantities sufficient to complete the delivery or receipt obligations of a bilateral contract that has been curtailed or interrupted for any reason.

1.3.33 Spot Market Energy.

"Spot Market Energy" shall mean energy bought or sold by Market Participants through the PJM Interchange Energy Market at Locational Marginal Prices determined as specified in Section 2 of this Schedule.

1.3.33A State Estimator.

"State Estimator" shall mean the computer model of power flows specified in Section 2.3 of this Schedule.

1.3.33B Station Power.

"Station Power" shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Control Area or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy used to power synchronous condensers, used for pumping at a pumped storage facility, or used in association with restoration or black start service.

1.3.33C Target Allocation.

Shall mean the allocation of Transmission Congestion Credits as set forth in Section 5.2.3 of this Schedule or the allocation of Auction Revenue Rights Credits as set forth in Section 7.4.3 of this Schedule.

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1.3.34 Transmission Congestion Charge.

"Transmission Congestion Charge" shall mean a charge attributable to the increased cost of energy delivered at a given load bus when the transmission system serving that load bus is operating under constrained conditions, which shall be calculated and allocated as specified in Section 5.1 of this Schedule.

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1.3.35 Transmission Congestion Credit.

"Transmission Congestion Credit" shall mean the allocated share of total Transmission Congestion Charges credited to each holder of Financial Transmission Rights, calculated and allocated as specified in Section 5.2 of this Schedule.

1.3.36 Transmission Customer.

"Transmission Customer" shall mean an entity using Point-to-Point Transmission Service.

1.3.37 Transmission Forced Outage.

"Transmission Forced Outage" shall mean an immediate removal from service of a transmission facility by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the transmission facility, as specified in the relevant portions of the PJM Manuals. A removal from service of a transmission facility at the request of the Office of the Interconnection to improve transmission capability shall not constitute a Forced Transmission Outage.

1.3.37A Transmission Loading Relief.

"Transmission Loading Relief" shall mean NERC's procedures for preventing operating security limit violations, as implemented by PJM as the security coordinator responsible for maintaining transmission security for the PJM Region.

1.3.37B Transmission Loading Relief Customer.

"Transmission Loading Relief Customer" shall mean an entity that, in accordance with Section 1.10.6A, has elected to pay Transmission Congestion Charges during Transmission Loading Relief in order to continue energy schedules over contract paths outside the PJM Region that are increasing the cost of energy in the PJM Region.

1.3.38 Transmission Planned Outage.

"Transmission Planned Outage" shall mean any transmission outage scheduled in advance for a pre-determined duration and which meets the notification requirements for such outages specified in this Agreement or the PJM Manuals.

1.4 Market Buyers.

1.4.1 Qualification.

(a) To become a Market Buyer, an entity shall submit an application to the Office of the Interconnection, in such form as shall be established by the Office of the Interconnection.

(b) An applicant that is a Load Serving Entity or that will purchase on behalf of or for ultimate delivery to a Load Serving Entity shall establish to the satisfaction of the Office of the Interconnection that the end-users that will be served through energy and related services purchased in the PJM Interchange Energy Market, are located electrically within the PJM Region, or will be brought within the PJM Region prior to any purchases from the PJM Interchange Energy Market. Such applicant shall further demonstrate that:

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(b) During the Operating Day, the calculation set forth in (a) shall be performed every five minutes, using the Office of the Interconnection's Locational Marginal Price program, producing a set of Real-time Prices based on system conditions during the preceding interval. The prices produced at five-minute intervals during an hour will be integrated to determine the Real-time Prices for that hour.

2.6 Calculation of Day-ahead Prices.

For the Day-ahead Energy Market, day-ahead Locational Marginal Prices shall be determined on the basis of the least-cost, security-constrained dispatch, model flows and system conditions resulting from the load specifications, offers for generation, dispatchable load, Increment Bids, Decrement Bids, and bilateral transactions submitted to the Office of the Interconnection and scheduled in the Day-ahead Energy Market. Such prices shall be determined in accordance with the provisions of this Section applicable to the Day-ahead Energy Market and shall be the basis for purchases and sales of energy and Transmission Congestion Charges resulting from the Day-ahead Energy Market. This calculation shall be made for each hour in the Day-ahead Energy Market by applying a linear optimization method to minimize energy costs, given scheduled system conditions, scheduled transmission outages, and any transmission limitations that may exist. In performing this calculation, the Office of the Interconnection shall calculate the cost of serving an increment of load at each bus from each resource associated with an eligible energy offer as the sum of: (1) the price at which the Market Seller has offered to supply an additional increment of energy from the resource, and (2) the effect on transmission congestion costs (whether positive or negative) associated with increasing the output of the resource, based on the effect of increased generation from that resource on transmission line loadings. The energy offer or offers that can serve an increment of load at a bus at the lowest cost, calculated in this manner, shall determine the Day-ahead Price at that bus.

2.7 Performance Evaluation.

The Office of the Interconnection shall undertake an evaluation of the foregoing procedures for the determination of Locational Marginal Prices, as well as the procedures for determining and allocating Financial Transmission Rights and associated Transmission Congestion Charges and Credits, not less often than every two years, in accordance with the PJM Manuals. To the extent practical, the Office of the Interconnection shall retain all data needed to perform comparisons and other analyses of locational marginal pricing. The Office of the Interconnection shall report the results of its evaluation to the Market Participants, along with its recommendations, if any, for changes in the procedures.

3. ACCOUNTING AND BILLING

3.1 Introduction.

This schedule sets forth the accounting and billing principles and procedures for the purchase and sale of services on the PJM Interchange Energy Market and for the operation of the PJM Control Area and PJM West Region.

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(b) The Transmission Congestion Charge shall be the total amount of energy specified in such energy schedules multiplied by the difference between a Locational Marginal Price calculated by the Office of the Interconnection for the energy schedule source location specified in the NERC Interchange Distribution Calculator and a Locational Marginal Price calculated by the Office of the Interconnection for the energy schedule sink location specified in the NERC Interchange Distribution Calculator. Transmission Congestion Charges that are less than zero shall be set equal to zero for Transmission Loading Relief Customers.

(c) The Office of the Interconnection will determine the Locational Marginal Prices at the energy schedule source and sink locations external to PJM with reference to and based solely on the prices of energy in the PJM Region and at the interface buses between adjacent Control Areas and the area comprised of the PJM Region and the system conditions and actual power flow distributions as described by the PJM State Estimator program. The Office of the Interconnection will determine the Locational Marginal Prices at the external energy schedule source and sink locations and the resulting Congestion Charge based on the portion of the energy schedule that flows through the PJM Region as reflected by the flow distributions from the PJM State Estimator program.

5.1.7 Total Transmission Congestion Charges.

The total Transmission Congestion Charges collected by the Office of the Interconnection each hour will be the aggregate net amounts determined as specified in this Schedule. The Office of the Interconnection shall collect Transmission Congestion Charges for each hour the transmission system operates under constrained conditions.

5.2 Transmission Congestion Credit Calculation.

5.2.1 Eligibility.

(a) Except as provided in Section 5.2.1(b), each holder of a Financial Transmission Right shall receive as a Transmission Congestion Credit a proportional share of the total Transmission Congestion Charges collected for each constrained hour.

(b) If a holder of a Financial Transmission Right between specified delivery and receipt buses acquired the Financial Transmission Right in a Financial Transmission Rights Auction (the procedures for which are set forth in Part 7 of this Schedule 1) and (i) had an Increment Bid and/or Decrement Bid that was accepted by the Office of the Interconnection for an applicable hour in the Day-ahead Energy Market for delivery or receipt at or near delivery or receipt buses of the Financial Transmission Right; and (ii) the result of the acceptance of such Increment Bid or Decrement Bid is that the difference in locational marginal prices in the Day-ahead Energy Market between such delivery and receipt buses is greater than the difference in locational marginal prices between such delivery and receipt buses in the Real-time Energy Market, then the Market Participant shall not receive any Transmission Congestion Credit, associated with such Financial Transmission Right in such hour, in excess of one divided by the number of hours in the applicable month multiplied by the amount that the Market Participant paid for the Financial Transmission Right in the Financial Transmission Rights Auction.

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(c) For purposes of Section 5.2.1(b) a bus shall be considered at or near the Financial Transmission Right delivery or receipt bus if seventy-five percent or more of the energy injected or withdrawn at that bus and which is withdrawn or injected at any other bus is reflected in the constrained path between the subject Financial Transmission Right delivery and receipt buses that were acquired in the Financial Transmission Rights Auction.

5.2.2 Financial Transmission Rights.

(a) Transmission Congestion Credits will be calculated based upon the Financial Transmission Rights held at the time of the constrained hour. Except as provided in paragraph (e) below, Financial Transmission Rights shall be auctioned as set forth in Section 7.

(b) The hourly economic value of a Financial Transmission Right Obligation is based on the Financial Transmission Right MW reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the Financial Transmission Right. The hourly economic value of a Financial Transmission Right Obligation is positive (a benefit to the Financial Transmission Right holder) when the Day-ahead Price at the point of delivery is higher than the Day-ahead Price at the point of receipt. The hourly economic value of a Financial Transmission Right Obligation is negative (a liability to the holder) when the Day-ahead Price at the point of receipt is higher than the Day-ahead Price at the point of delivery.

(c) The hourly economic value of a Financial Transmission Right Option is based on the Financial Transmission Right MW reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the Financial Transmission Right when that difference is positive. The hourly economic value of a Financial Transmission Right Option is positive (a benefit to the Financial Transmission Right holder) when the Day-ahead Price at the point of delivery is higher than the Day-ahead Price at the point of receipt. The hourly economic value of a Financial Transmission Right Option is zero (neither a benefit nor a liability to the holder) when the Day-ahead Price at the point of receipt is higher than the Day-ahead Price at the point of delivery.

(d) A Financial Transmission Right, or the right to Transmission Congestion Credits attributable to a Financial Transmission Right, may be sold or otherwise transferred by agreement, subject to compliance with such procedures as may be established by the Office of the Interconnection for verification of the rights of the purchaser or transferee.

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(e) Financial Transmission Rights shall be allocated to each Firm Transmission Customer and Network Service User in a new PJM zone in the manner specified below. Such Financial Transmission Rights shall remain in effect until the [first] annual allocation of auction revenue rights to occur after the integration of such new PJM zone into the PJM interchange energy market.

(i) Subject to the provisions of Section B of Attachment K of the PJM Tariff, by such deadline established by the Office of the Interconnection, each Network Service User in a new PJM zone shall designate a subset of its Network Resources for which Financial Transmission Rights will be assigned, Financial Transmission Rights shall be assigned for each Network Resource in a number of megawatts equal to or less than the installed capacity summer megawatt rating of each designated Network Resource, determined at the new PJM zone transmission bus at which the designated Network Resource is connected. Each Financial Transmission Right shall be to the aggregate load busses of the Network Service User in a new PJM zone. The sum of each Network Service User's assigned Financial Transmission Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.2 of the Tariff. The sum of each Network Service User's Financial Transmission Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.2 of the Tariff.

(ii) Each Transmission Customer receiving firm Transmission Service shall be assigned Financial Transmission Rights; provided, however, that a Transmission Customer may notify the Office of Interconnection that it does not wish to receive any FTRs or wishes to receive FTRs only for certain Point or Points of Receipt and Point or Points of Delivery, in which event no FTRs or such reduced amount of FTRs shall be issued to the Transmission Customer. The Financial Transmission Right for each instance of Point-to-Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point-to-Point Transmission Service.

(iii) All Financial Transmission Rights must be simultaneously feasible. If all Financial Transmission Right requests made when Financial Transmission Rights are allocated for the new zone are not feasible then Financial Transmission Rights are prorated and allocated in proportion to the MW level requested and in inverse proportion to the effect on the binding constraints.

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5.2.3 Target Allocation of Transmission Congestion Credits.

A target allocation of Transmission Congestion Credits for each entity holding a Financial Transmission Right shall be determined for each Financial Transmission Rights. Each Financial Transmission Right shall be multiplied by the Day-ahead Price differences for the receipt and delivery points associated with the Financial Transmission Right, calculated as the Locational Marginal Price at the delivery point(s) minus the Locational Marginal Price at the receipt point(s). For the purposes of calculating Transmission Congestion Credits, the Day-ahead Price of a Zone is calculated as the sum of the Day-ahead Price of the buses that comprise the Zone multiplied by the percent of annual peak load assigned to each node. When the FTR Target Allocation is positive, the FTR Target Allocation is a credit to the FTR holder. When the FTR Target Allocation is negative, the FTR Target Allocation is a debit to the FTR holder if the FTR is a Financial Transmission Right Obligation. When the FTR Target Allocation is negative, the FTR Target Allocation is set to zero if the FTR is a Financial Transmission Right Option. The total target allocation for Network Service Users and Transmission Customers for each hour shall be the sum of the target allocations associated with all of the Network Service Users' or Transmission Customers' Financial Transmission Rights.

5.2.4 [Reserved]

5.2.5 Calculation of Transmission Congestion Credits.

(a) The total of all the target allocations determined as specified above shall be compared to the total Transmission Congestion Charges in each hour resulting from both the Day-ahead Energy Market and the Real-time Energy Market. If the total of the target allocations is less than the total of the Transmission Congestion Charges, the Transmission Congestion Credit for each entity holding an FTR shall be equal to its target allocation. All remaining Transmission Congestion Charges shall be distributed as described below in Section 5.2.6 "Distribution of Excess Congestion Charges."

(b) If the total of the target allocations is greater than the total Transmission Congestion Charges for the hour resulting from both the Day-ahead Energy Market and the Real-time Energy Market, each holder of Financial Transmission Rights shall be assigned a share of the total Transmission Congestion Charges in proportion to its target allocations for Financial

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Transmission Rights which have a positive Target Allocation value. Financial Transmission Rights which have a negative Target Allocation value are assigned the full Target Allocation value as a negative Transmission Congestion Credit.

5.2.6 Distribution of Excess Congestion Charges.

(a) Excess Transmission Congestion Charges accumulated in a month shall be distributed to each holder of Financial Transmission Rights in proportion to, but not more than, any deficiency in the share of Transmission Congestion Charges received by the holder during that month as compared to its total target allocations for the month.

(b) After the excess Transmission Congestion Charge distribution described in Section 5.2.6(a) is performed, any excess Transmission Congestion Charges remaining at the end of a month shall be distributed to each holder of Financial Transmission Rights in proportion to, but not more than, any deficiency in the share of Transmission Congestion Charges received by the holder during the current calendar year, including previously distributed excess Transmission Congestion Charges, as compared to its total target allocation for the calendar year.

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(c) Any excess Transmission Congestion Charges remaining at the end of a calendar year shall be distributed to each holder of Auction Revenue Rights in proportion to, but not more than, any Auction Revenue Right deficiencies for that calendar year. After Auction Revenue Right deficiencies are satisfied, any remaining excess Transmission Congestion Charges shall be distributed to Network Service Users and Transmission Customers purchasing Firm Point-to-Point Transmission Service in proportion to their Demand Charges for Network Service and their charges for Reserved Capacity for Firm Point-to-Point Transmission Service.

5.3 Unscheduled Transmission Service (Loop Flow).

(a) When there are agreements between the Members (or the Office of the Interconnection on behalf of the Members) and others for compensation to be paid or received for unscheduled transmission service (loop flow) into or out of the area comprised of the PJM Region, the net compensation received shall be included in the total Transmission Congestion Charges that are distributed in accordance with Section 5.2.

(b) With respect to payments by the Office of the Interconnection to the New York Power Pool for the installation and operation of phase angle regulating facilities at Ramapo to control or limit unscheduled transmission service (loop flow), each East Transmission Owner with revenue requirements under the PJM Tariff shall pay a share of the charges on a transmission revenue requirements ratio share basis.

6. "MUST-RUN" FOR RELIABILITY GENERATION

6.1 Introduction.

The following procedures shall apply to any generation resource subject to the dispatch of the Office of the Interconnection that (a) is a generation resource for which construction commenced before July 9, 1996, and (b) 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, the West Transmission Owners Agreement, or the East Transmission Owners

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shall be capped at the levels specified below. If the Office of the Interconnection is able to do so, such prices shall be capped only during each hour when the transmission limit affects the schedule of the affected resource, and otherwise shall be capped for the entire Operating Day. The energy prices as capped shall be used to determine any Locational Marginal Price affected by the price of such resource.

(b) The energy bid price offered by any generation resource requested to be dispatched in accordance with Section 6.3 of this Schedule shall be capped at the levels specified below. If the Office of the Interconnection is able to do so, such prices shall be capped only during each hour when the affected resource is so scheduled, and otherwise shall be capped for the entire Operating Day. The energy prices as capped shall be used to determine any Locational Marginal Price affected by the price of such resource.

(c) Generation resources subject to a price cap shall be paid for energy at the applicable Locational Marginal Price.

(d) Price caps shall not be applicable to generation resources used to relieve the Western, Central and Eastern reactive limits in the PJM Control Area. In addition, price caps shall not be applicable to generation resources used to relieve any other transmission limit as to which the FERC has authorized the use of market based rates.

6.4.2 Level.

The price cap shall be one of the amounts specified below, as specified in advance by the market Seller for the affected unit:

(i) The weighted average Locational Marginal Price at the generation bus at which energy from the capped resource was delivered during a specified number of hours during which the resource was dispatched for energy in economic merit order, the specified number of hours to be determined by the Office of the Interconnection and to be a number of hours sufficient to result in a price cap that reflects reasonably contemporaneous competitive market conditions for that unit;

(ii) The incremental operating cost of the generation resource as determined in accordance with Schedule 2 of this Agreement and the PJM Manuals, plus 10% of such costs; or

(iii) An amount determined by agreement between the Office of the Interconnection and the Market Seller.

7. FINANCIAL TRANSMISSION RIGHTS AUCTIONS

7.1 Auctions of Financial Transmission Rights.

Annual and periodic auctions to allow Market Participants to acquire or sell Financial Transmission Rights shall be conducted by the Office of the Interconnection in accordance with the provisions of this Section.

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7.1.1 Auction Period and Scope of Auctions.

The periods covered by auctions shall be: (1) the one-year period beginning the month after the final round of the annual auction and (2) the one-month period following the date that the monthly auction is conducted. With the exception of FTRs allocated pursuant to section 5.2.2 (e) of this Schedule, in the annual auction, the Office of the Interconnection shall offer for sale the entire Financial Transmission Rights capability for the year in four rounds with 25 percent of the capability offered in each round. In the monthly auction, the Office of the Interconnection shall offer for sale in the auction any remaining Financial Transmission Rights capability for the month after taking into account all of the Financial Transmission Rights already outstanding at the time of the auction. In addition, any holder of a Financial Transmission Right for the period covered by an auction may offer such Financial Transmission Right for sale in such auction. On-Peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auctions. FTRs will be offered as Financial Transmission Right Obligations and Financial Transmission Right Options. Market Participants may bid for and acquire any number of Financial Transmission Rights, provided that all Financial Transmission Rights awarded are simultaneously feasible with each other and with all Financial Transmission Rights outstanding at the time of the auction and not sold into the auction. An ARR holder may self-schedule an FTR on the same path in the Annual FTR Auction according to the rules described in the PJM Manuals.

7.1.2 Frequency and Time of Auctions.

Annual Financial Transmission Rights auctions shall offer the entire FTR capability of the PJM system in four rounds with 25 percent of the capability offered in each round. Each round shall be conducted over five business days by such timeline established by the Office of the Interconnection. Each round shall begin with the bid and offer period opening the first day at 12:00 midnight (Eastern Prevailing Time) and closing the third day at 5:00 p.m. (Eastern Prevailing Time). Monthly Financial Transmission Rights auctions shall be held. The bid and offer period shall open at 12:00 midnight (Eastern Prevailing Time) on the thirteenth (13th) business day preceding the month for which Financial Transmission Rights are being auctioned and shall close at 5:00 PM (Eastern Prevailing Time) on the tenth (10th) business day preceding the month for which Financial Transmission Rights are being auctioned.

7.1.3 Duration of Financial Transmission Rights.

Each Financial Transmission Right acquired in a Financial Transmission Rights auction shall entitle the holder to credits of Transmission Congestion Charges for the period that was specified in the corresponding auction.

7.2 Financial Transmission Rights Characteristics.

7.2.1 Reconfiguration of Financial Transmission Rights.

Through an appropriate linear programming model, the Office of the Interconnection shall reconfigure the Financial Transmission Rights offered or otherwise available

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for sale in any auction to maximize the value to the bidders of the Financial Transmission Rights sold, provided that any Financial Transmission Rights acquired at auction shall be simultaneously feasible in combination with those Financial Transmission Rights outstanding at the time of the auction and not sold in the auction. The linear programming model shall, while respecting transmission constraints and the maximum MW quantities of the bids and offers, select the set of simultaneously feasible Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers.

7.2.2 Specified Receipt and Delivery Points.

Auction bids for annual Financial Transmission Rights Obligations may specify as receipt and delivery points any combination of hubs, Zones, aggregates, generators, and interface buses. Auction bids for annual Financial Transmission Rights Options may specify as receipt and delivery points such combination of hubs, Zones, aggregates, generators, and interface buses as the Office of the Interconnection shall allow from time to time as set forth in its FTR business manual. Auction bids for monthly Financial Transmission Rights may specify any combination of receipt and delivery buses represented in the State Estimator model for which the Office of the Interconnection calculates and posts Locational Marginal Prices. Auction bids may specify receipt and delivery points from locations outside of the PJM Region to locations inside such region, from locations within the PJM Region to locations outside such region, or to and from locations within the PJM Region.

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7.2.3 Transmission Congestion Charges.

Financial Transmission Rights shall entitle holders thereof to credits only for Transmission Congestion Charges, and shall not confer a right to credits for payments arising from or relating to transmission congestion made to any entity other than the Office of the Interconnection.

7.3 Auction Procedures.

7.3.1 Role of the Office of the Interconnection.

Financial Transmission Rights auctions shall be conducted by the Office of the Interconnection in accordance with standards and procedures set forth in the PJM Manuals, such standards and procedures to be consistent with the requirements of this Schedule.

7.3.2 Notice of Offer.

A holder of a Financial Transmission Right wishing to offer the Financial Transmission Right for sale shall notify the Office of the Interconnection of any Financial Transmission Rights to be offered. Each Financial Transmission Right sold in an auction shall, at the end of the period for which the Financial Transmission Rights were auctioned, revert to the offering holder or the entity to which the offering holder has transferred such Financial Transmission Right, subject to the term of the Financial Transmission Right itself and to the right of such holder or transferee to offer the Financial Transmission Right in the next or any subsequent auction during the term of the Financial Transmission Right.

7.3.3 Pending Applications for Firm Service.

(a) **[Reserved.]**

(b) Financial Transmission Rights may be assigned to entities requesting Network Transmission Service or Firm Point-to-Point Transmission Service pursuant to Section 5.2.2 (e), only if such Financial Transmission Rights are simultaneously feasible with all outstanding Financial Transmission Rights, including Financial Transmission Rights effective for the then-current auction period. If an assignment of Financial Transmission Rights pursuant to a pending application for Network Transmission Service or Firm Point-to-Point Transmission Service cannot be completed prior to an auction, Financial Transmission Rights attributable to such transmission service shall not be assigned for the then-current auction period. If a Financial Transmission Right cannot be assigned for this reason, the applicant may withdraw its application, or request that the Financial Transmission Right be assigned effective with the start of the next auction period.

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7.3.4 On-Peak and Off-Peak Periods.

On-peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auction. On-Peak Financial Transmission Rights shall cover the periods from 7:00 a.m. up to the hour ending at 11:00 p.m. on Mondays through Fridays, except holidays as defined in the PJM Manuals. Off-Peak Financial Transmission Rights shall cover the periods from 11:00 p.m. up to the hour ending 7:00 a.m. on Mondays through Fridays and all hours on Saturdays, Sundays, and holidays as defined in the PJM Manuals. The 24-hour period shall cover the period from hour ending 1:00 a.m. to the hour ending 12:00 midnight on all days. Each bid shall specify whether it is for an on-peak, off-peak, or 24-hour period.

7.3.5 Offers and Bids.

(a) Offers to sell and bids to purchase Financial Transmission Rights shall be submitted during the period set forth in Section 7.1.2, and shall be in the form specified by the Office of the Interconnection in accordance with the requirements set forth below.

(b) Offers to sell shall identify the specific Financial Transmission Right, by megawatt quantity and receipt and delivery points, offered for sale. An offer to sell a specified megawatt quantity of Financial Transmission Rights shall constitute an offer to sell a quantity of Financial Transmission Rights equal to or less than the specified quantity. An offer to sell may not specify a minimum quantity being offered. Each offer may specify a reservation price, below which the offeror does not wish to sell the Financial Transmission Right. Offers submitted by entities holding rights to Financial Transmission Rights shall be subject to such reasonable standards for the verification of the rights of the offeror as may be established by the Office of the Interconnection. Offers shall be subject to such reasonable standards for the creditworthiness of the offer or for the posting of security for performance as the Office of the Interconnection shall establish.

(c) Bids to purchase shall specify the megawatt quantity, price per megawatt, and receipt and delivery points of the Financial Transmission Right that the bidder wishes to purchase. A bid to purchase a specified megawatt quantity of Financial Transmission Rights shall constitute a bid to purchase a quantity of Financial Transmission Rights equal to or less than the specified quantity. A bid to purchase may not specify a minimum quantity that the bidder wishes to purchase. A bid may specify receipt and delivery points in accordance with Section 7.2.2 and may include Financial Transmission Rights for which the associated Transmission Congestion Credits may have negative values. Bids shall be subject to such reasonable standards for the creditworthiness of the bidder or for the posting of security for performance as the Office of the Interconnection shall establish.

(d) Bids and offers shall be specified to the nearest tenth of a megawatt and shall be greater than zero.

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7.3.6 Determination of Winning Bids and Clearing Price.

(a) At the close of each bidding period, the Office of the Interconnection will create a base Financial Transmission Rights power flow model that includes all outstanding Financial Transmission Rights that have been approved and confirmed for any portion of the month for which the auction was conducted and that were not offered for sale in the auction. The base Financial Transmission Rights model also will include estimated uncompensated parallel flows into each interface point of the PJM Control Area and estimated scheduled transmission outages.

(b) In accordance with the requirements of Section 7.4.5 of this Schedule and subject to all applicable transmission constraints and reliability requirements, the Office of the Interconnection shall determine the simultaneous feasibility of all outstanding Financial Transmission Rights not offered for sale in the auction and of all Financial Transmission Rights that could be awarded in the auction for which bids were submitted. The winning bids shall be determined from an appropriate linear programming model that, while respecting transmission constraints and the maximum MW quantities of the bids and offers, selects the set of simultaneously feasible Financial Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers. In the event that there are two or more identical bids for the selected Financial Transmission Rights and there are insufficient Financial Transmission Rights to accommodate all of the identical bids, then each such bidder will receive a pro rata share of the Financial Transmission Rights that can be awarded.

(c) Financial Transmission Rights shall be sold at the market-clearing price for Financial Transmission Rights between specified pairs of receipt and delivery points, as determined by the bid value of the marginal Financial Transmission Right that could not be awarded because it would not be simultaneously feasible. The linear programming model shall determine the clearing prices of all Financial Transmission Rights paths based on the bid value of the marginal Financial Transmission Rights, which are those Financial Transmission Rights with the highest bid values that could not be awarded fully because they were not simultaneously feasible, and based on the flow sensitivities of each Financial Transmission Rights path relative to the marginal Financial Transmission Rights paths flow sensitivities on the binding transmission constraints.

7.3.7 Announcement of Winners and Prices.

Within two (2) business days after the close of a monthly auction or annual auction round, the Office of the Interconnection shall post the winning bidders, the megawatt quantity, and the receipt and delivery points for each Financial Transmission Right awarded in the auction and the price at which each Financial Transmission Right was awarded. The Office of the Interconnection shall not disclose the price specified in any bid to purchase or the reservation price specified in any offer to sell.

7.3.8 Auction Settlements.

All buyers and sellers of Financial Transmission Rights between the same points of receipt and delivery shall pay or be paid the market-clearing price, as determined in the auction, for such Financial Transmission Rights.

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7.4 Allocation of Auction Revenues.

7.4.1 Eligibility.

(a) Annual and monthly auction revenues, net of payments to entities selling Financial Transmission Rights into the auction, shall be allocated among holders of Auction Revenue Rights in proportion to, but not more than, the Target Allocation of Auction Revenue Rights Credits for the holder.

(b) Auction Revenue Rights Credits will be calculated based upon the clearing price results of the applicable Annual Financial Transmission Rights auction.

7.4.2 Auction Revenue Rights.

(a) For the year 2003/2004 planning period, the following Auction Revenue Rights allocation procedure shall apply. Each Network Service User may request a subset of its Network Resources for which available Auction Revenue Rights shall be allocated. Auction Revenue Rights shall be allocated for each Network Resource in a number of megawatts equal to or less than installed capacity summer megawatt rating of each designated Network Resource, determined at the PJM Control Area or PJM West Region transmission bus at which the designated Network Resource is connected. Each Auction Revenue Right shall be to the aggregate load busses of the Network Service User in a Zone or, with respect to Non-Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's allocated Auction Revenue Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Auction Revenue Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.1 of the Tariff.

(b) Subsequent to the 2003/2004 planning period the following Auction Revenue Rights allocation procedure shall apply. On an annual basis by such deadline established by the Office of the Interconnection, each Network Service User shall designate a subset of buses from which Auction Revenue Rights will be sourced. Valid Auction Revenue Rights source buses include only zones, generators, hubs and external interface buses. The Network Service User shall specify the amount of Auction Revenue Rights requested from each source bus. Each Auction Revenue Right shall be sinked to the aggregate load busses of the Network Service User in a Zone or, with respect to Non-Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's allocated Auction Revenue Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Auction Revenue Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.1 of the Tariff. The allocation of Auction Revenue Rights shall be performed in four stages, with 25 percent of the system Auction Revenue Rights capability allocated in each stage.

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(c) On a daily basis within the annual Financial Transmission Rights auction period, a proportionate share of Network Service User's Auction Revenue Rights for each Zone are reallocated as Network Load changes from one Network Service User to another within that Zone.

(d) Each Transmission Customer receiving firm Point-to-Point Transmission Service shall specify whether it wishes to receive Auction Revenue Rights. The Auction Revenue Right for each instance of Point-to-Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point-to-Point Transmission Service.

(e) All Auction Revenue Rights must be simultaneously feasible. If all Auction Revenue Right requests made during the annual allocation process are not feasible then Auction Revenue Rights are prorated and allocated in proportion to the MW level requested and in inverse proportion to the effect on the binding constraints.

7.4.3 Target Allocation of Auction Revenue Right Credits.

A target allocation of Auction Revenue Right Credits for each entity holding an Auction Revenue Right shall be determined for each Auction Revenue Right. After each round of the annual Financial Transmission Right Auction, each Auction Revenue Right shall be divided by four and multiplied by the price differences for the receipt and delivery points associated with the Auction Revenue Right, calculated as the Locational Marginal Price at the delivery points(s) minus the Locational Marginal Price at the receipt point(s), where the price for the receipt and delivery point is determined by the clearing prices of each round of the annual Financial Transmission Right auction. The daily total target allocation for an entity holding the Auction Revenue Rights shall be the sum of the daily target allocations associated with all of the entity's Auction Revenue Rights.

7.4.4 Calculation of Auction Revenue Right Credits.

(a) Each day, the total of all the daily target allocations determined as specified above in section 7.4.3 plus any additional Auction Revenue Rights target allocations applicable for that day shall be compared to the total revenues of the monthly Financial Transmission Rights auction (divided by the number of days in the month) plus the total revenues of the annual Financial Transmission Rights auction (divided by the number of days in the planning period). If the total of the target allocations is less than the total auction revenues, the Auction Revenue Right Credit for each entity holding an Auction Revenue Right shall be equal to its target allocation. All remaining funds shall be distributed as Excess Congestion Charges pursuant to Section 5.2.5.

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(b) If the total of the target allocations is greater than the total auction revenues, each holder of Auction Revenue Rights shall be assigned a share of the total auction revenues in proportion to its Auction Revenue Rights target allocations for Auction Revenue Rights which have a positive Target Allocation value. Auction Revenue Rights which have a negative Target Allocation value are assigned the full Target Allocation value as a negative Auction Revenue Right Credit.

7.5 Simultaneous Feasibility.

The Office of the Interconnection shall make the simultaneous feasibility determinations specified herein using appropriate powerflow models of contingency-constrained dispatch. Such determinations shall take into account outages of both individual generation units and transmission facilities and shall be based on reasonable assumptions about the configuration and availability of transmission capability during the period covered by the auction that are not inconsistent with the determination of the deliverability of Capacity Resources under the Reliability Assurance Agreement or the deliverability of Available Capacity Resources under the Reliability Assurance Agreement-West. The goal of the simultaneous feasibility determination shall be to ensure that there are sufficient revenues from Transmission Congestion Charges to satisfy all Financial Transmission Rights obligations for the auction period under expected conditions and to ensure that there are sufficient revenues from the annual Financial Transmission Right Auction to satisfy all Auction Revenue Rights obligations.

8. INTERREGIONAL TRANSMISSION CONGESTION MANAGEMENT PILOT PROGRAM

8.1 Introduction.

The following procedures shall govern the redispatch of generation to alleviate transmission congestion on selected pathways on the transmission systems operated by the Office of the Interconnection and the New York ISO ("NYISO"). The procedures shall be used solely when, in the exercise of Good Utility Practice, the Office of the Interconnection or NYISO determines that the redispatch of generation units on the other's transmission system would reduce or eliminate the need to resort to Transmission Loading Relief or other transmission-related emergency procedures.

8.2 Identification of Transmission Constraints.

(a) On a periodic basis determined by the Office of the Interconnection and NYISO, the Office of the Interconnection and NYISO shall identify potential transmission operating constraints that could result in the need to use Transmission Loading Relief or other emergency procedures in order to alleviate the transmission constraints, the need for which could be reduced or eliminated by the redispatch of generation on the other's system.

(b) In addition to the identification of such potential transmission operating constraints, the Office of the Interconnection and NYISO shall identify generation units on the other's system, the redispatch of which would alleviate the identified transmission constraints.

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5.5 Relationship of Capacity Credits to Capacity Obligations Imposed under the Reliability Assurance Agreement.

A megawatt of Capacity Credit shall satisfy a megawatt of capacity obligation imposed under the Reliability Assurance Agreement. Capacity Credits purchased from a PJM Capacity Credit Market shall not be adjusted for forced outages or other reasons. Because Capacity Credits are based on Capacity Resources, no further capability or deliverability demonstrations beyond those for the related Capacity Resource shall be required.

5.6 Deficiency Charges.

If the Office of the Interconnection determines that the first Market Seller in a PJM Capacity Credit Market of a Capacity Credit did not have sufficient Unforced Capacity to support the Capacity Credit transaction at the time for which the Capacity Credit was applicable, any such deficiency shall be satisfied through payment of deficiency charges by such first Market Seller calculated as specified in the Reliability Assurance Agreement. Any amounts collected from such deficiency charges shall be distributed in accordance with the Reliability Assurance Agreement.

5.7 Financial Transmission Rights.

Acquisition of a Capacity Credit shall not entitle the holder to a Financial Transmission Right.

5.8 Confidentiality.

The following information submitted to the Office of the Interconnection in connection with any PJM Capacity Credit Market shall be deemed confidential information for purposes of Section 18.17 of the Agreement: (i) the terms and conditions of all Sell Offers and Buy Bids; and (ii) the terms and conditions of any bilateral transactions for capacity or Capacity Credits.

6. OPERATION OF THE PJM CAPACITY CREDIT MARKETS

6.1 Content of Sell Offers.

6.1.1 Specifications.

Sell Offers shall specify:

i) The quantity of Capacity Credits offered, in increments of 0.1 megawatt;

ii) The minimum price, in dollars and cents per megawatt per day, that will be accepted by the seller;

iii) For a PJM Daily Capacity Credit Market , the dates on which the offered Capacity Credits may be used; and

iv) For a PJM Monthly Capacity Credit Market, the month or months for which the offered Capacity Credits may be used.

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5.7 Financial Transmission Rights.

Acquisition of an Available Capacity Credit shall not entitle the holder to a Financial Transmission Right.

5.8 Confidentiality.

The following information submitted to the Office of the Interconnection in connection with any PJM West Available Capacity Credit Market shall be deemed confidential information for purposes of Section 18.17 of the Agreement: (i) the terms and conditions of all Sell Offers and Buy Bids; and (ii) the terms and conditions of any bilateral transactions for capacity or Available Capacity Credits.

6. OPERATION OF THE PJM WEST AVAILABLE CAPACITY CREDIT MARKETS

6.1 Content of Sell Offers.

6.1.1 Specifications.

Sell Offers shall specify:

i) The quantity of Available Capacity Credits offered, in increments of 0.1 megawatt;

ii) The minimum price, in dollars and cents per megawatt per day, that will be accepted by the seller;

iii) For a PJM West Monthly Available Capacity Credit Market, the month or months for which the offered Available Capacity Credits may be used.

6.1.2 Market-based Offers.

A Market Seller that is authorized by FERC to sell electric generating capacity at market-based prices, or that is not required to have such authorization, may submit Sell Offers to PJM West Available Capacity Credit Markets that specify market-based prices.

6.1.3 Availability of Available Capacity Credits for Sale.

i) The Office of the Interconnection shall determine the maximum megawatts of Available Capacity Credits each Market Seller may offer in a PJM West Available Capacity Credit Market, through verification of the availability of megawatts of capacity from: (a) Available Capacity Resources owned by or under contract to the Market Seller; (b) rights obtained in bilateral transactions; (c) the results of prior PJM West Available Capacity Credit Markets; and (d) such other information as may be available to the Office of the Interconnection. The Office of the Interconnection may reject Sell Offers or portions of Sell Offers for Available Capacity Credits determined by it not to be available for sale.

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Operating Agreement Revisions
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SCHEDULE 1

PJM INTERCHANGE ENERGY MARKET

1. MARKET OPERATIONS

1.1 Introduction.

This Schedule sets forth the scheduling, other procedures, and certain general provisions applicable to the operation of the PJM Interchange Energy Market within the PJM Region. This Schedule addresses each of the three time-frames pertinent to the daily operation of the PJM Interchange Energy Market: Prescheduling, Scheduling, and Dispatch.

1.2 Cost-based Offers.

Unless and until the FERC shall authorize the use of market-based prices in the PJM Interchange Energy Market, all offers for energy or other services to be sold on the PJM Interchange Energy Market from generating resources located within the PJM Region shall not exceed the variable cost of producing such energy or other service, as determined in accordance with Schedule 2 to this Agreement and applicable regulatory standards, requirements and determinations; provided that, a Market Seller may offer to the PJM Interchange Energy Market the right to call on energy from a resource the output of which has been sold on a bilateral basis, with the rate for such energy if called equal to the curtailment rate specified in the bilateral contract.

1.3 Definitions.

1.3.1 Auction Revenue Rights.

"Auction Revenue Rights" shall mean the right to receive the revenue from the Financial Transmission Right auction, as further described in Section 7.4 of this Schedule.

1.3.1A Auction Revenue Rights Credits.

"Auction Revenue Rights Credits" shall mean the allocated share of total FTR auction revenues or costs credited to each holder of Auction Revenue Rights, calculated and allocated as specified in Section 7.4.3 of this Schedule.

1.3.1B Day-ahead Energy Market.

"Day-ahead Energy Market" shall mean the schedule of commitments for the purchase or sale of energy and payment of Transmission Congestion Charges developed by the Office of the Interconnection as a result of the offers and specifications submitted in accordance with Section 1.10 of this Schedule.

1.3.1A~~C~~ Day-ahead Prices.

"Day-ahead Prices" shall mean the Locational Marginal Prices resulting from the Day-ahead Energy Market.

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1.3.1~~B~~D Decrement Bid.

"Decrement Bid" shall mean a bid to purchase energy at a specified location in the Day-ahead Energy Market. An accepted Decrement Bid results in scheduled load at the specified location in the Day-ahead Energy Market.

1.3.1~~C~~E Dispatch Rate.

"Dispatch Rate" shall mean the control signal, expressed in dollars per megawatt-hour, calculated and transmitted continuously and dynamically to direct the output level of all generation resources dispatched by the Office of the Interconnection in accordance with the Offer Data.

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1.3.2 Equivalent Load.

"Equivalent Load" shall mean the sum of a Market Participant's net system requirements to serve its customer load in the PJM Region, if any, plus its net bilateral transactions.

1.3.3 External Market Buyer.

"External Market Buyer" shall mean a Market Buyer making purchases of energy from the PJM Interchange Energy Market for consumption by end-users outside the PJM Region, or for load in the PJM Region that is not served by Network Transmission Service.

1.3.4 External Resource.

"External Resource" shall mean a generation resource located outside the metered boundaries of the PJM Region.

1.3.5 ~~Fixed~~ Financial Transmission Right.

"~~Fixed~~ Financial Transmission Right" or "FTR" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2 of this Schedule.

1.3.5A Financial Transmission Right Obligation.

"Financial Transmission Right Obligation" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2(b) of this Schedule.

1.3.5B Financial Transmission Right Option.

"Financial Transmission Right Option" shall mean a right to receive Transmission Congestion Credits as specified in Section 5.2.2(c) of this Schedule.

1.3.6 Generating Market Buyer.

"Generating Market Buyer" shall mean an Internal Market Buyer that is a Load Serving Entity that owns or has contractual rights to the output of generation resources capable of serving the Market Buyer's load in the PJM Region, or of selling energy or related services in the PJM Interchange Energy Market or elsewhere.

1.3.7 Generator Forced Outage.

"Generator Forced Outage" shall mean an immediate reduction in output or capacity or removal from service, in whole or in part, of a generating unit by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the facility, as specified in the relevant portions of the PJM Manuals. A reduction in output or removal from service of a generating unit in response to changes in market conditions shall not constitute a Generator Forced Outage.

1.3.8 Generator Maintenance Outage.

"Generator Maintenance Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit in order to perform necessary repairs on specific components of the facility, if removal of the facility meets the guidelines specified in the PJM Manuals.

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1.3.9 Generator Planned Outage.

"Generator Planned Outage" shall mean the scheduled removal from service, in whole or in part, of a generating unit for inspection, maintenance or repair with the approval of the Office of the Interconnection in accordance with the PJM Manuals.

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1.3.30 Ramping Capability.

"Ramping Capability" shall mean the sustained rate of change of generator output, in megawatts per minute.

1.3.30A Real-time Prices.

"Real-time Prices" shall mean the Locational Marginal Prices resulting from the Office of the Interconnection's dispatch of the PJM Interchange Energy Market in the Operating Day.

1.3.30B Real-time Energy Market.

"Real-time Energy Market" shall mean the purchase or sale of energy and payment of Transmission Congestion Charges for quantity deviations from the Day-ahead Energy Market in the Operating Day.

1.3.31 Regulation.

"Regulation" shall mean the capability of a specific generating unit with appropriate telecommunications, control and response capability to increase or decrease its output in response to a regulating control signal, in accordance with the specifications in the PJM Manuals.

1.3.32 Spot Market Backup.

"Spot Market Backup" shall mean the purchase of energy from, or the delivery of energy to, the PJM Interchange Energy Market in quantities sufficient to complete the delivery or receipt obligations of a bilateral contract that has been curtailed or interrupted for any reason.

1.3.33 Spot Market Energy.

"Spot Market Energy" shall mean energy bought or sold by Market Participants through the PJM Interchange Energy Market at Locational Marginal Prices determined as specified in Section 2 of this Schedule.

1.3.33A State Estimator.

"State Estimator" shall mean the computer model of power flows specified in Section 2.3 of this Schedule.

1.3.33B Station Power.

"Station Power" shall mean energy used for operating the electric equipment on the site of a generation facility located in the PJM Control Area or for the heating, lighting, air-conditioning and office equipment needs of buildings on the site of such a generation facility that are used in the operation, maintenance, or repair of the facility. Station Power does not include any energy used to power synchronous condensers, used for pumping at a pumped storage facility, or used in association with restoration or black start service.

1.3.33C Target Allocation.

Shall mean the allocation of Transmission Congestion Credits as set forth in Section 5.2.3 of this Schedule or the allocation of Auction Revenue Rights Credits as set forth in Section 7.4.3 of this Schedule.

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1.3.34 Transmission Congestion Charge.

"Transmission Congestion Charge" shall mean a charge attributable to the increased cost of energy delivered at a given load bus when the transmission system serving that load bus is operating under constrained conditions, which shall be calculated and allocated as specified in Section 5.1 of this Schedule.

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1.3.35 Transmission Congestion Credit.

"Transmission Congestion Credit" shall mean the allocated share of total Transmission Congestion Charges credited to each holder of ~~Fixed~~ Financial Transmission Rights, calculated and allocated as specified in Section 5.2 of this Schedule.

1.3.36 Transmission Customer.

"Transmission Customer" shall mean an entity using Point-to-Point Transmission Service.

1.3.37 Transmission Forced Outage.

"Transmission Forced Outage" shall mean an immediate removal from service of a transmission facility by reason of an Emergency or threatened Emergency, unanticipated failure, or other cause beyond the control of the owner or operator of the transmission facility, as specified in the relevant portions of the PJM Manuals. A removal from service of a transmission facility at the request of the Office of the Interconnection to improve transmission capability shall not constitute a Forced Transmission Outage.

1.3.37A Transmission Loading Relief.

"Transmission Loading Relief" shall mean NERC's procedures for preventing operating security limit violations, as implemented by PJM as the security coordinator responsible for maintaining transmission security for the PJM Region.

1.3.37B Transmission Loading Relief Customer.

"Transmission Loading Relief Customer" shall mean an entity that, in accordance with Section 1.10.6A, has elected to pay Transmission Congestion Charges during Transmission Loading Relief in order to continue energy schedules over contract paths outside the PJM Region that are increasing the cost of energy in the PJM Region.

1.3.38 Transmission Planned Outage.

"Transmission Planned Outage" shall mean any transmission outage scheduled in advance for a pre-determined duration and which meets the notification requirements for such outages specified in this Agreement or the PJM Manuals.

1.4 Market Buyers.

1.4.1 Qualification.

(a) To become a Market Buyer, an entity shall submit an application to the Office of the Interconnection, in such form as shall be established by the Office of the Interconnection.

(b) An applicant that is a Load Serving Entity or that will purchase on behalf of or for ultimate delivery to a Load Serving Entity shall establish to the satisfaction of the Office of the Interconnection that the end-users that will be served through energy and related services purchased in the PJM Interchange Energy Market, are located electrically within the PJM Region, or will be brought within the PJM Region prior to any purchases from the PJM Interchange Energy Market. Such applicant shall further demonstrate that:

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(b) During the Operating Day, the calculation set forth in (a) shall be performed every five minutes, using the Office of the Interconnection's Locational Marginal Price program, producing a set of Real-time Prices based on system conditions during the preceding interval. The prices produced at five-minute intervals during an hour will be integrated to determine the Real-time Prices for that hour.

2.6 Calculation of Day-ahead Prices.

For the Day-ahead Energy Market, day-ahead Locational Marginal Prices shall be determined on the basis of the least-cost, security-constrained dispatch, model flows and system conditions resulting from the load specifications, offers for generation, dispatchable load, Increment Bids, Decrement Bids, and bilateral transactions submitted to the Office of the Interconnection and scheduled in the Day-ahead Energy Market. Such prices shall be determined in accordance with the provisions of this Section applicable to the Day-ahead Energy Market and shall be the basis for purchases and sales of energy and Transmission Congestion Charges resulting from the Day-ahead Energy Market. This calculation shall be made for each hour in the Day-ahead Energy Market by applying a linear optimization method to minimize energy costs, given scheduled system conditions, scheduled transmission outages, and any transmission limitations that may exist. In performing this calculation, the Office of the Interconnection shall calculate the cost of serving an increment of load at each bus from each resource associated with an eligible energy offer as the sum of: (1) the price at which the Market Seller has offered to supply an additional increment of energy from the resource, and (2) the effect on transmission congestion costs (whether positive or negative) associated with increasing the output of the resource, based on the effect of increased generation from that resource on transmission line loadings. The energy offer or offers that can serve an increment of load at a bus at the lowest cost, calculated in this manner, shall determine the Day-ahead Price at that bus.

2.7 Performance Evaluation.

The Office of the Interconnection shall undertake an evaluation of the foregoing procedures for the determination of Locational Marginal Prices, as well as the procedures for determining and allocating ~~Fixed~~ Financial Transmission Rights and associated Transmission Congestion Charges and Credits, not less often than every two years, in accordance with the PJM Manuals. To the extent practical, the Office of the Interconnection shall retain all data needed to perform comparisons and other analyses of locational marginal pricing. The Office of the Interconnection shall report the results of its evaluation to the Market Participants, along with its recommendations, if any, for changes in the procedures.

3. ACCOUNTING AND BILLING

3.1 Introduction.

This schedule sets forth the accounting and billing principles and procedures for the purchase and sale of services on the PJM Interchange Energy Market and for the operation of the PJM Control Area and PJM West Region.

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(b) The Transmission Congestion Charge shall be the total amount of energy specified in such energy schedules multiplied by the difference between a Locational Marginal Price calculated by the Office of the Interconnection for the energy schedule source location specified in the NERC Interchange Distribution Calculator and a Locational Marginal Price calculated by the Office of the Interconnection for the energy schedule sink location specified in the NERC Interchange Distribution Calculator. Transmission Congestion Charges that are less than zero shall be set equal to zero for Transmission Loading Relief Customers.

(c) The Office of the Interconnection will determine the Locational Marginal Prices at the energy schedule source and sink locations external to PJM with reference to and based solely on the prices of energy in the PJM Region and at the interface buses between adjacent Control Areas and the area comprised of the PJM Region and the system conditions and actual power flow distributions as described by the PJM State Estimator program. The Office of the Interconnection will determine the Locational Marginal Prices at the external energy schedule source and sink locations and the resulting Congestion Charge based on the portion of the energy schedule that flows through the PJM Region as reflected by the flow distributions from the PJM State Estimator program.

5.1.7 Total Transmission Congestion Charges.

The total Transmission Congestion Charges collected by the Office of the Interconnection each hour will be the aggregate net amounts determined as specified in this Schedule. The Office of the Interconnection shall collect Transmission Congestion Charges for each hour the transmission system operates under constrained conditions.

5.2 Transmission Congestion Credit Calculation.

5.2.1 Eligibility.

(a) Except as provided in Section 5.2.1(b), each holder of a ~~Fixed~~ Financial Transmission Right shall receive as a Transmission Congestion Credit a proportional share of the total Transmission Congestion Charges collected for each constrained hour.

(b) If a holder of a Financial ~~Fixed~~ Transmission Right between specified delivery and receipt buses acquired the Financial ~~Fixed~~ Transmission Right in a Financial ~~Fixed~~ Transmission Rights Auction (the procedures for which are set forth in Part 7 of this Schedule 1) and (i) had an Increment Bid and/or Decrement Bid that was accepted by the Office of the Interconnection for an applicable hour in the Day-ahead Energy Market for delivery or receipt at or near delivery or receipt buses of the Financial ~~Fixed~~ Transmission Right; and (ii) the result of the acceptance of such Increment Bid or Decrement Bid is that the difference in locational marginal prices in the Day-ahead Energy Market between such delivery and receipt buses is greater than the difference in locational marginal prices between such delivery and receipt buses in the Real-time Energy Market, then the Market Participant shall not receive any Transmission Congestion Credit, associated with such Financial ~~Fixed~~ Transmission Right in such hour, in excess of one divided by the number of hours in the applicable month multiplied by the amount that the Market Participant paid for the Financial ~~Fixed~~ Transmission Right in the Financial ~~Fixed~~ Transmission Rights Auction.

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(c) For purposes of Section 5.2.1(b) a bus shall be considered at or near the Financial ~~Fixed~~ Transmission Right delivery or receipt bus if seventy-five percent or more of the energy injected or withdrawn at that bus and which is withdrawn or injected at any other bus is reflected in the constrained path between the subject Financial ~~Fixed~~ Transmission Right delivery and receipt buses that were acquired in the Financial ~~Fixed~~ Transmission Rights Auction.

5.2.2 Financial ~~Fixed~~ Transmission Rights.

(a) Transmission Congestion Credits will be calculated based upon the ~~Fixed~~ Financial Transmission Rights held at the time of the constrained hour. Except as provided in paragraph (e) below, Financial Transmission Rights shall be auctioned as set forth in Section 7. ~~Allocations of Fixed Transmission Rights shall be made to each Network Service User and Transmission Customer, determined as specified below.~~

(b) ~~Subject to the provisions of Section B of Attachment K of the PJM Tariff, on an annual basis by such deadline established by the Office of the Interconnection, each Network Service User shall designate a subset of its Network Resources for which Fixed Transmission Rights will be assigned, except that for the 2002/2003 planning period, Network Service Users that have or will have a shift in load as a result of the competitive statewide basic generation service procurement process approved by the New Jersey Board of Public Utilities in accordance with N.J.S.A. 48:3-57(e) shall designate Network Resources associated with such shifted load for which Fixed Transmission Rights will be assigned separately for the periods June 1, 2002 to July 31, 2002, and August 1, 2002 to May 31, 2003. Fixed Transmission Rights shall be assigned for each Network Resource in a number of megawatts equal to or less than the installed capacity summer megawatt rating of each designated Network Resource, determined at the PJM Control Area or PJM West Region transmission bus at which the designated Network Resource is connected. Each Fixed Transmission Right shall be to the aggregate load busses of the Network Service User in a Zone or, with respect to Non Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's assigned Fixed Transmission Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Fixed Transmission Rights for Non Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non Zone Network Load as determined under Section 34.1 of the Tariff.~~ The hourly economic value of a Financial Transmission Right Obligation is based on the Financial Transmission Right MW reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the Financial Transmission Right. The hourly economic value of a Financial Transmission Right Obligation is positive (a benefit to the Financial Transmission Right holder) when the Day-ahead Price at the point of delivery is higher than the Day-ahead Price at the point of receipt. The hourly economic value of a Financial Transmission Right Obligation is negative (a liability to the holder) when the Day-ahead Price at the point of receipt is higher than the Day-ahead Price at the point of delivery.

(c) The hourly economic value of a Financial Transmission Right Option is based on the Financial Transmission Right MW reservation and the difference between the Day-ahead Price at the point of delivery and the point of receipt of the Financial Transmission Right when that difference is positive. The hourly economic value of a Financial Transmission Right

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Option is positive (a benefit to the Financial Transmission Right holder) when the Day-ahead Price at the point of delivery is higher than the Day-ahead Price at the point of receipt. The hourly economic value of a Financial Transmission Right Option is zero (neither a benefit nor a liability to the holder) when the Day-ahead Price at the point of receipt is higher than the Day-ahead Price at the point of delivery. ~~Each Transmission Customer receiving firm Point to Point Transmission Service shall be assigned Fixed Transmission Rights; provided, however, that a Transmission Customer may notify the Office of Interconnection that it does not wish to receive any FTRs or wishes to receive FTRs only for certain Point or Points of Receipt and Point or Points of Delivery, in which event no FTRs or such reduced amount of FTRs shall be issued to the Transmission Customer. The Fixed Transmission Right for each instance of Point to Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point to Point Transmission Service.~~

(d) A Financial ~~Fixed~~ Transmission Right, or the right to Transmission Congestion Credits attributable to a Financial ~~Fixed~~ Transmission Right, may be sold or otherwise transferred by agreement, subject to compliance with such procedures as may be established by the Office of the Interconnection for verification of the rights of the purchaser or transferee.

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(e) Financial Transmission Rights shall be allocated to each Firm Transmission Customer and Network Service User in a new PJM zone in the manner specified below. Such Financial Transmission Rights shall remain in effect until the [first] annual allocation of auction revenue rights to occur after the integration of such new PJM zone into the PJM interchange energy market.

(i) Subject to the provisions of Section B of Attachment K of the PJM Tariff, by such deadline established by the Office of the Interconnection, each Network Service User in a new PJM zone shall designate a subset of its Network Resources for which Financial Transmission Rights will be assigned. Financial Transmission Rights shall be assigned for each Network Resource in a number of megawatts equal to or less than the installed capacity summer megawatt rating of each designated Network Resource, determined at the new PJM zone transmission bus at which the designated Network Resource is connected. Each Financial Transmission Right shall be to the aggregate load busses of the Network Service User in a new PJM zone. The sum of each Network Service User's assigned Financial Transmission Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.2 of the Tariff. The sum of each Network Service User's Financial Transmission Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.2 of the Tariff.

(ii) Each Transmission Customer receiving firm Transmission Service shall be assigned Financial Transmission Rights; provided, however, that a Transmission Customer may notify the Office of Interconnection that it does not wish to receive any FTRs or wishes to receive FTRs only for certain Point or Points of Receipt and Point or Points of Delivery, in which event no FTRs or such reduced amount of FTRs shall be issued to the Transmission Customer. The Financial Transmission Right for each instance of Point-to-Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point-to-Point Transmission Service.

(iii) All Financial Transmission Rights must be simultaneously feasible. If all Financial Transmission Right requests made when Financial Transmission Rights are allocated for the new zone are not feasible then Financial Transmission Rights are prorated and allocated in proportion to the MW level requested and in inverse proportion to the effect on the binding constraints.

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5.2.3 Target Allocation ~~for Network Service Users~~of Transmission Congestion Credits.

A target allocation of Transmission Congestion Credits for each ~~Network Service User~~ entity holding a Financial Transmission Right shall be determined for each ~~of its~~ Financial ~~Fixed~~ Transmission Rights. Each Financial ~~Fixed~~ Transmission Right shall be multiplied by the ~~percent of the Network Service User's annual peak load assigned to each load bus multiplied by the difference calculated as the Network Service User's load bus Day-ahead Price minus the generation bus Day-ahead Price of the Network Resource associated with the Fixed Transmission Right. The total target allocation for each Fixed Transmission Right is the sum of the target allocations for each load bus.~~ Day-ahead Price differences for the receipt and delivery points associated with the Financial Transmission Right, calculated as the Locational Marginal Price at the delivery point(s) minus the Locational Marginal Price at the receipt point(s). For the purposes of calculating Transmission Congestion Credits, the Day-ahead Price of a Zone is calculated as the sum of the Day-ahead Price of the buses that comprise the Zone multiplied by the percent of annual peak load assigned to each node. When the FTR Target Allocation is positive, the FTR Target Allocation is a credit to the FTR holder. When the FTR Target Allocation is negative, the FTR Target Allocation is a debit to the FTR holder if the FTR is a Financial Transmission Right Obligation. When the FTR Target Allocation is negative, the FTR Target Allocation is set to zero if the FTR is a Financial Transmission Right Option. The total target allocation for ~~each~~ Network Service Users and Transmission Customers for each hour ~~is~~ shall be the sum of the ~~total~~ target allocations ~~for each~~ associated with all of the Network Service User's' or Transmission Customers' Financial ~~Fixed~~ Transmission Rights.

5.2.4 ~~Target Allocation for Other Holders.~~ [Reserved]

~~A target allocation of Transmission Congestion Credits for each Transmission Customer or entity holding an FTR acquired by other means shall be determined for each Fixed Transmission Right. Each Fixed Transmission Right shall be multiplied by the Day-ahead Price differences for the receipt and delivery points associated with the Fixed Transmission Right, calculated as the Day-ahead Price at the delivery point(s) minus the Locational Marginal Price at the receipt point(s). The total target allocation for the Transmission Customer for each hour shall be the sum of the target allocations associated with all of the Transmission Customer's Fixed Transmission Rights.~~

5.2.5 Calculation of Transmission Congestion Credits.

(a) The total of all the target allocations determined as specified above shall be compared to the total Transmission Congestion Charges in each hour resulting from both the Day-ahead Energy Market and the Real-time Energy Market. If the total of the target allocations is less than the total of the Transmission Congestion Charges, the Transmission Congestion Credit for each ~~Network Service User and Transmission Customer~~ entity holding an FTR shall be equal to its target allocation. All remaining Transmission Congestion Charges shall be distributed as described below in Section 5.2.6 "Distribution of Excess Congestion Charges."

(b) If the total of the target allocations is greater than the total Transmission Congestion Charges for the hour resulting from both the Day-ahead Energy Market and the Real-time Energy Market, each holder of Financial ~~Fixed~~ Transmission Rights shall be assigned a share of the total Transmission Congestion Charges in proportion to its target allocations for Financial

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Transmission Rights which have a positive Target Allocation value. Financial Transmission Rights which have a negative Target Allocation value are assigned the full Target Allocation value as a negative Transmission Congestion Credit.

5.2.6 Distribution of Excess Congestion Charges.

(a) Excess Transmission Congestion Charges accumulated in a month shall be distributed to each holder of Financial ~~Fixed~~ Transmission Rights in proportion to, but not more than, any deficiency in the share of Transmission Congestion Charges received by the holder during that month as compared to its total target allocations for the month.

(b) After the excess Transmission Congestion Charge distribution described in Section 5.2.6(a) is performed, any excess Transmission Congestion Charges remaining at the end of a month shall be distributed to each holder of Financial ~~Fixed~~ Transmission Rights in proportion to, but not more than, any deficiency in the share of Transmission Congestion Charges received by the holder during the current calendar year, including previously distributed excess Transmission Congestion Charges, as compared to its total target allocation for the calendar year.

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(c) Any excess Transmission Congestion Charges remaining at the end of a calendar year shall be distributed to each holder of Auction Revenue Rights in proportion to, but not more than, any Auction Revenue Right deficiencies for that calendar year. After Auction Revenue Right deficiencies are satisfied, any remaining excess Transmission Congestion Charges shall be distributed to Network Service Users and Transmission Customers purchasing Firm Point-to-Point Transmission Service in proportion to their Demand Charges for Network Service and their charges for Reserved Capacity for Firm Point-to-Point Transmission Service.

5.3 Unscheduled Transmission Service (Loop Flow).

(a) When there are agreements between the Members (or the Office of the Interconnection on behalf of the Members) and others for compensation to be paid or received for unscheduled transmission service (loop flow) into or out of the area comprised of the PJM Region, the net compensation received shall be included in the total Transmission Congestion Charges that are distributed in accordance with Section 5.2.

(b) With respect to payments by the Office of the Interconnection to the New York Power Pool for the installation and operation of phase angle regulating facilities at Ramapo to control or limit unscheduled transmission service (loop flow), each East Transmission Owner with revenue requirements under the PJM Tariff shall pay a share of the charges on a transmission revenue requirements ratio share basis.

6. "MUST-RUN" FOR RELIABILITY GENERATION

6.1 Introduction.

The following procedures shall apply to any generation resource subject to the dispatch of the Office of the Interconnection that (a) is a generation resource for which construction commenced before July 9, 1996, and (b) 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, the West Transmission Owners Agreement, or the East Transmission Owners

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shall be capped at the levels specified below. If the Office of the Interconnection is able to do so, such prices shall be capped only during each hour when the transmission limit affects the schedule of the affected resource, and otherwise shall be capped for the entire Operating Day. The energy prices as capped shall be used to determine any Locational Marginal Price affected by the price of such resource.

(b) The energy bid price offered by any generation resource requested to be dispatched in accordance with Section 6.3 of this Schedule shall be capped at the levels specified below. If the Office of the Interconnection is able to do so, such prices shall be capped only during each hour when the affected resource is so scheduled, and otherwise shall be capped for the entire Operating Day. The energy prices as capped shall be used to determine any Locational Marginal Price affected by the price of such resource.

(c) Generation resources subject to a price cap shall be paid for energy at the applicable Locational Marginal Price.

(d) Price caps shall not be applicable to generation resources used to relieve the Western, Central and Eastern reactive limits in the PJM Control Area. In addition, price caps shall not be applicable to generation resources used to relieve any other transmission limit as to which the FERC has authorized the use of market based rates.

6.4.2 Level.

The price cap shall be one of the amounts specified below, as specified in advance by the market Seller for the affected unit:

(i) The weighted average Locational Marginal Price at the generation bus at which energy from the capped resource was delivered during a specified number of hours during which the resource was dispatched for energy in economic merit order, the specified number of hours to be determined by the Office of the Interconnection and to be a number of hours sufficient to result in a price cap that reflects reasonably contemporaneous competitive market conditions for that unit;

(ii) The incremental operating cost of the generation resource as determined in accordance with Schedule 2 of this Agreement and the PJM Manuals, plus 10% of such costs; or

(iii) An amount determined by agreement between the Office of the Interconnection and the Market Seller.

7. FINANCIAL ~~FIXED~~ TRANSMISSION RIGHTS AUCTIONS

7.1 Auctions of Financial ~~Fixed~~ Transmission Rights.

Annual and ~~P~~periodic auctions to allow Market Participants to acquire or sell Financial ~~Fixed~~ Transmission Rights shall be conducted by the Office of the Interconnection in accordance with the provisions of this Section.

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7.1.1 Auction Period and Scope of Auctions.

The periods covered by ~~an~~ auctions shall be: (1) the one-year period beginning the month after the final round of the annual auction and (2) the one-month period ~~next~~ following the date that the monthly auction is conducted. With the exception of FTRs allocated pursuant to section 5.2.2 (e) of this Schedule, in the annual auction, the Office of the Interconnection shall offer for sale the entire Financial Transmission Rights capability for the year in four rounds with 25 percent of the capability offered in each round. In the monthly auction, ~~T~~the Office of the Interconnection shall offer for sale in the auction any remaining Financial ~~Fixed~~ Transmission Rights capability for the month after taking into account all of the Financial ~~Fixed~~ Transmission Rights already outstanding at the time of the auction. In addition, any holder of a Financial ~~Fixed~~ Transmission Right for the period covered by an auction may offer such Financial ~~Fixed~~ Transmission Right for sale in such auction. On-Peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auctions. FTRs will be offered as Financial Transmission Right Obligations and Financial Transmission Right Options. ~~Each monthly auction will consist of a separate auction for on-peak Fixed Transmission Rights and a separate auction for off-peak Fixed Transmission Rights.~~ Market Participants may bid for and acquire any number of Financial ~~Fixed~~ Transmission Rights, provided that all Financial ~~Fixed~~ Transmission Rights awarded are simultaneously feasible with each other and with all Financial ~~Fixed~~ Transmission Rights outstanding at the time of the auction and not sold into the auction. An ARR holder may self-schedule an FTR on the same path in the Annual FTR Auction according to the rules described in the PJM Manuals.

7.1.2 Frequency and Time of Auctions.

Annual Financial Transmission Rights auctions shall offer the entire FTR capability of the PJM system in four rounds with 25 percent of the capability offered in each round. Each round shall be conducted over five business days by such timeline established by the Office of the Interconnection. Each round shall begin with the bid and offer period opening the first day at 12:00 midnight (Eastern Prevailing Time) and closing the third day at 5:00 p.m. (Eastern Prevailing Time). Monthly Financial ~~Fixed~~ Transmission Rights auctions shall be held ~~monthly~~. The bid and offer period shall open at 12:00 midnight (Eastern Prevailing Time) on the thirteenth (13th) ~~fifteenth (15th)~~ business day preceding the month for which Financial ~~Fixed~~ Transmission Rights are being auctioned and shall close at 5:00 PM ~~12:00 midnight~~ (Eastern Prevailing Time) on the tenth (10th) business day preceding the month for which Financial ~~Fixed~~ Transmission Rights are being auctioned.

7.1.3 Duration of Financial ~~Fixed~~ Transmission Rights.

Each Financial ~~Fixed~~ Transmission Right acquired in a Financial ~~Fixed~~ Transmission Rights auction shall entitle the holder to credits of Transmission Congestion Charges for the ~~one-month~~ period that was specified in the corresponding auction. ~~for which the Fixed Transmission Rights were auctioned.~~

7.2 Financial ~~Fixed~~ Transmission Rights Characteristics.

7.2.1 Reconfiguration of Financial ~~Fixed~~ Transmission Rights.

Through an appropriate linear programming model, the Office of the Interconnection shall reconfigure the Financial ~~Fixed~~ Transmission Rights offered or otherwise available

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for sale in any auction to maximize the value to the bidders of the Financial ~~Fixed~~ Transmission Rights sold, provided that any Financial ~~Fixed~~ Transmission Rights acquired at auction shall be simultaneously feasible in combination with those Financial ~~Fixed~~ Transmission Rights outstanding at the time of the auction and not sold in the auction. The linear programming model shall, while respecting transmission constraints and the maximum MW quantities of the bids and offers, select the set of simultaneously feasible Financial ~~Fixed~~ Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers.

7.2.2 Specified ~~Buses~~Receipt and Delivery Points.

Auction bids for annual Financial Transmission Rights Obligations may specify as receipt and delivery points any combination of hubs, Zones, aggregates, generators, and interface buses. Auction bids for annual Financial Transmission Rights Options may specify as receipt and delivery points such combination of hubs, Zones, aggregates, generators, and interface buses as the Office of the Interconnection shall allow from time to time as set forth in its FTR business manual. Auction bids for monthly Financial ~~Fixed~~ Transmission Rights may specify any combination of receipt and delivery buses represented in the State Estimator model for which the Office of the Interconnection calculates and posts Locational Marginal Prices. Auction bids may specify receipt and delivery points from locations outside of the PJM Region to locations inside such region, from locations within the PJM Region to locations outside such region, or to and from locations within the PJM Region.

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7.2.3 Transmission Congestion Charges.

Financial ~~Fixed~~ Transmission Rights~~, whether acquired at auction or otherwise,~~ shall entitle holders thereof to credits only for Transmission Congestion Charges, and shall not confer a right to credits for payments arising from or relating to transmission congestion made to any entity other than the Office of the Interconnection.

7.3 Auction Procedures.

7.3.1 Role of the Office of the Interconnection.

Financial ~~Fixed~~ Transmission Rights auctions shall be conducted by the Office of the Interconnection in accordance with standards and procedures set forth in the PJM Manuals, such standards and procedures to be consistent with the requirements of this Schedule.

7.3.2 Notice of Offer.

A holder of a Financial ~~Fixed~~ Transmission Right wishing to offer the Financial ~~Fixed~~ Transmission Right for sale shall notify the Office of the Interconnection of any Financial ~~Fixed~~ Transmission Rights to be offered. Each Financial ~~Fixed~~ Transmission Right sold in an auction shall, at the end of the period for which the Financial ~~Fixed~~ Transmission Rights were auctioned, revert to the offering holder or the entity to which the offering holder has transferred such Financial ~~Fixed~~ Transmission Right, subject to the term of the Financial ~~Fixed~~ Transmission Right itself and to the right of such holder or transferee to offer the Financial ~~Fixed~~ Transmission Right in the next or any subsequent auction during the term of the Financial ~~Fixed~~ Transmission Right.

7.3.3 Pending Applications for Firm Service.

(a) ~~Prior to the start of each auction bidding period, the Office of the Interconnection shall exert reasonable effort to complete its review of pending applications for Network Transmission Service and Firm Point-to-Point Transmission Service and to ascertain the corresponding Fixed Transmission Rights to be assigned to the entities receiving such service, subject to compliance with all applicable deadlines and other procedures by the applicant. Fixed Transmission Rights so assigned shall be included in the simultaneous feasibility test performed by the Office of the Interconnection for the auction.~~ **[Reserved.]**

(b) Financial ~~Fixed~~ Transmission Rights may be assigned to entities requesting Network Transmission Service or Firm Point-to-Point Transmission Service pursuant to Section 5.2.2 (e), only if such Financial ~~Fixed~~ Transmission Rights are simultaneously feasible with all outstanding Financial ~~Fixed~~ Transmission Rights, including Financial ~~Fixed~~ Transmission Rights effective for the then-current auction period. If an assignment of Financial ~~Fixed~~ Transmission Rights pursuant to a pending application for Network Transmission Service or Firm Point-to-Point Transmission Service cannot be completed prior to an auction, Financial ~~Fixed~~ Transmission Rights attributable to such transmission service shall not be assigned for the then-current auction period. If a Financial ~~Fixed~~ Transmission Right cannot be assigned for this reason, the applicant may withdraw its application, or request that the Financial ~~Fixed~~ Transmission Right be assigned effective with the start of the next auction period.

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7.3.4 On-Peak and Off-Peak Periods.

On-peak, off-peak and 24-hour FTRs will be offered in the annual and monthly auction. ~~The Office of the Interconnection will conduct separate auctions simultaneously for on-peak and off-peak periods.~~ On-Peak Financial ~~Fixed~~ Transmission Rights shall cover the periods from 7:00 a.m. up to the hour ending at 11:00 p.m. on Mondays through Fridays, except holidays as defined in the PJM Manuals. Off-Peak Financial ~~Fixed~~ Transmission Rights shall cover the periods from 11:00 p.m. up to the hour ending 7:00 a.m. on Mondays through Fridays and all hours on Saturdays, Sundays, and holidays as defined in the PJM Manuals. The 24-hour period shall cover the period from hour ending 1:00 a.m. to the hour ending 12:00 midnight on all days. Each bid shall specify whether it is for an on-peak, ~~or~~ off-peak, or 24-hour period.

7.3.5 Offers and Bids.

(a) Offers to sell and bids to purchase Financial ~~Fixed~~ Transmission Rights shall be submitted during the period set forth in Section 7.1.2, and shall be in the form specified by the Office of the Interconnection in accordance with the requirements set forth below.

(b) Offers to sell shall identify the specific Financial ~~Fixed~~ Transmission Right, by megawatt quantity and receipt and delivery points, offered for sale. An offer to sell a specified megawatt quantity of Financial ~~Fixed~~ Transmission Rights shall constitute an offer to sell a quantity of Financial ~~Fixed~~ Transmission Rights equal to or less than the specified quantity. An offer to sell may not specify a minimum quantity being offered. Each offer may specify a reservation price, below which the offeror does not wish to sell the Financial ~~Fixed~~ Transmission Right. Offers submitted by entities holding rights to Financial ~~Fixed~~ Transmission Rights ~~acquired other than by assignment in connection with reservations of Network Transmission Service or Firm Point-to-Point Transmission Service~~ shall be subject to such reasonable standards for the verification of the rights of the offeror as may be established by the Office of the Interconnection. Offers shall be subject to such reasonable standards for the creditworthiness of the offer or for the posting of security for performance as the Office of the Interconnection shall establish.

(c) Bids to purchase shall specify the megawatt quantity, price per megawatt, and receipt and delivery points of the Financial ~~Fixed~~ Transmission Right that the bidder wishes to purchase. A bid to purchase a specified megawatt quantity of Financial ~~Fixed~~ Transmission Rights shall constitute a bid to purchase a quantity of Financial ~~Fixed~~ Transmission Rights equal to or less than the specified quantity. A bid to purchase may not specify a minimum quantity that the bidder wishes to purchase. A bid may specify ~~as~~ receipt ~~or~~ and delivery points in accordance with Section 7.2.2 ~~any bus for which the Office of the Interconnection calculates and posts Locational Marginal Prices in accordance with Section 2 of this Schedule~~ and may include Financial ~~Fixed~~ Transmission Rights for which the associated Transmission Congestion Credits may have negative values. Bids shall be subject to such reasonable standards for the creditworthiness of the bidder or for the posting of security for performance as the Office of the Interconnection shall establish.

(d) Bids and offers shall be specified to the nearest tenth of a megawatt and shall be greater than zero.

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7.3.6 Determination of Winning Bids and Clearing Price.

(a) At the close of ~~the~~ each bidding period ~~each month~~, the Office of the Interconnection will create a base Financial ~~Fixed~~ Transmission Rights power flow model that includes all outstanding Financial ~~Fixed~~ Transmission Rights that have been approved and confirmed for any portion of the month for which the auction was conducted and that were not offered for sale in the auction. The base Financial ~~Fixed~~ Transmission Rights model also will include estimated uncompensated parallel flows into each interface point of the PJM Control Area and estimated scheduled transmission outages.

(b) In accordance with the requirements of Section 7.4.5 of this Schedule and subject to all applicable transmission constraints and reliability requirements, the Office of the Interconnection shall determine the simultaneous feasibility of all outstanding Financial ~~Fixed~~ Transmission Rights not offered for sale in the auction and of all Financial ~~Fixed~~ Transmission Rights that could be awarded in the auction for which bids were submitted. The winning bids shall be determined from an appropriate linear programming model that, while respecting transmission constraints and the maximum MW quantities of the bids and offers, selects the set of simultaneously feasible Financial ~~Fixed~~ Transmission Rights with the highest net total auction value as determined by the bids of buyers and taking into account the reservation prices of the sellers. In the event that there are two or more identical bids for the selected Financial ~~Fixed~~ Transmission Rights and there are insufficient Financial ~~Fixed~~ Transmission Rights to accommodate all of the identical bids, then each such bidder will receive a pro rata share of the Financial ~~Fixed~~ Transmission Rights that can be awarded.

(c) Financial ~~Fixed~~ Transmission Rights shall be sold at the market-clearing price for Financial ~~Fixed~~ Transmission Rights between specified pairs of receipt and delivery points, as determined by the bid value of the marginal Financial ~~Fixed~~ Transmission Right that could not be awarded because it would not be simultaneously feasible. The linear programming model shall determine the clearing prices of all Financial ~~Fixed~~ Transmission Rights paths based on the bid value of the marginal Financial ~~Fixed~~ Transmission Rights, which are those Financial ~~Fixed~~ Transmission Rights with the highest bid values that could not be awarded fully because they were not simultaneously feasible, and based on the flow sensitivities of each Financial ~~Fixed~~ Transmission Rights path relative to the marginal Financial ~~Fixed~~ Transmission Rights paths flow sensitivities on the binding transmission constraints.

7.3.7 Announcement of Winners and Prices.

Within two (2) business days after the close of ~~an~~ monthly auction~~,~~ or annual auction round, the Office of the Interconnection shall post the winning bidders, the megawatt quantity, and the receipt and delivery points for each Financial ~~Fixed~~ Transmission Right awarded in the auction and the price at which each Financial ~~Fixed~~ Transmission Right was awarded. ~~Results of the on-peak auction and off-peak auction will be posted separately.~~ The Office of the Interconnection shall not disclose the price specified in any bid to purchase or the reservation price specified in any offer to sell.

7.3.8 Auction Settlements.

All buyers and sellers of Financial ~~Fixed~~ Transmission Rights between the same points of receipt and delivery shall pay or be paid the market-clearing price, as determined in the auction, for such Financial ~~Fixed~~ Transmission Rights.

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7.~~4~~3.9 Allocation of Auction Revenues.

7.4.1 Eligibility.

(a) ~~All~~ Annual and monthly auction revenues, net of payments to entities selling Financial ~~Fixed~~ Transmission Rights into the auction, shall be allocated among holders of Auction Revenue Rights ~~the East Transmission Owners and West Transmission Owners~~ in proportion to, but not more than, the Target Allocation of Auction Revenue Rights Credits for the holder. ~~their respective transmission revenue requirements.~~

(b) Auction Revenue Rights Credits will be calculated based upon the clearing price results of the applicable Annual Financial Transmission Rights auction.

7.4.2 Auction Revenue Rights.

(a) For the year 2003/2004 planning period, the following Auction Revenue Rights allocation procedure shall apply. Each Network Service User may request a subset of its Network Resources for which available Auction Revenue Rights shall be allocated. Auction Revenue Rights shall be allocated for each Network Resource in a number of megawatts equal to or less than installed capacity summer megawatt rating of each designated Network Resource, determined at the PJM Control Area or PJM West Region transmission bus at which the designated Network Resource is connected. Each Auction Revenue Right shall be to the aggregate load busses of the Network Service User in a Zone or, with respect to Non-Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's allocated Auction Revenue Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Auction Revenue Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.1 of the Tariff.

(b) Subsequent to the 2003/2004 planning period the following Auction Revenue Rights allocation procedure shall apply. On an annual basis by such deadline established by the Office of the Interconnection, each Network Service User shall designate a subset of buses from which Auction Revenue Rights will be sourced. Valid Auction Revenue Rights source buses include only zones, generators, hubs and external interface buses. The Network Service User shall specify the amount of Auction Revenue Rights requested from each source bus. Each Auction Revenue Right shall be sinked to the aggregate load busses of the Network Service User in a Zone or, with respect to Non-Zone Network Load, to the border of the area comprised of the PJM West Region and PJM Control Area. The sum of each Network Service User's allocated Auction Revenue Rights for a Zone must be equal to or less than the Network Service User's peak load for that Zone as determined under Section 34.1 of the Tariff. The sum of each Network Service User's Auction Revenue Rights for Non-Zone Network Load must be equal to or less than the Network Service User's transmission responsibility for Non-Zone Network Load as determined under Section 34.1 of the Tariff. The allocation of Auction Revenue Rights shall be performed in four stages, with 25 percent of the system Auction Revenue Rights capability allocated in each stage.

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(c) On a daily basis within the annual Financial Transmission Rights auction period, a proportionate share of Network Service User's Auction Revenue Rights for each Zone are reallocated as Network Load changes from one Network Service User to another within that Zone.

(d) Each Transmission Customer receiving firm Point-to-Point Transmission Service shall specify whether it wishes to receive Auction Revenue Rights. The Auction Revenue Right for each instance of Point-to-Point Transmission Service shall be a number of megawatts equal to the megawatts of firm service being provided between the receipt and delivery points as to which the Transmission Customer has firm Point-to-Point Transmission Service.

(e) All Auction Revenue Rights must be simultaneously feasible. If all Auction Revenue Right requests made during the annual allocation process are not feasible then Auction Revenue Rights are prorated and allocated in proportion to the MW level requested and in inverse proportion to the effect on the binding constraints.

7.4.3 Target Allocation of Auction Revenue Right Credits.

A target allocation of Auction Revenue Right Credits for each entity holding an Auction Revenue Right shall be determined for each Auction Revenue Right. After each round of the annual Financial Transmission Right Auction, each Auction Revenue Right shall be divided by four and multiplied by the price differences for the receipt and delivery points associated with the Auction Revenue Right, calculated as the Locational Marginal Price at the delivery points(s) minus the Locational Marginal Price at the receipt point(s), where the price for the receipt and delivery point is determined by the clearing prices of each round of the annual Financial Transmission Right auction. The daily total target allocation for an entity holding the Auction Revenue Rights shall be the sum of the daily target allocations associated with all of the entity's Auction Revenue Rights.

7.4.4 Calculation of Auction Revenue Right Credits.

(a) Each day, the total of all the daily target allocations determined as specified above in section 7.4.3 plus any additional Auction Revenue Rights target allocations applicable for that day shall be compared to the total revenues of the monthly Financial Transmission Rights auction (divided by the number of days in the month) plus the total revenues of the annual Financial Transmission Rights auction (divided by the number of days in the planning period). If the total of the target allocations is less than the total auction revenues, the Auction Revenue Right Credit for each entity holding an Auction Revenue Right shall be equal to its target allocation. All remaining funds shall be distributed as Excess Congestion Charges pursuant to Section 5.2.5.

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(b) If the total of the target allocations is greater than the total auction revenues, each holder of Auction Revenue Rights shall be assigned a share of the total auction revenues in proportion to its Auction Revenue Rights target allocations for Auction Revenue Rights which have a positive Target Allocation value. Auction Revenue Rights which have a negative Target Allocation value are assigned the full Target Allocation value as a negative Auction Revenue Right Credit.

7.4~~5~~ Simultaneous Feasibility.

The Office of the Interconnection shall make the simultaneous feasibility determinations specified herein using appropriate powerflow models of contingency-constrained dispatch. Such determinations shall take into account outages of both individual generation units and transmission facilities and shall be based on reasonable assumptions about the configuration and availability of transmission capability during the period covered by the auction that are not inconsistent with the determination of the deliverability of Capacity Resources under the Reliability Assurance Agreement or the deliverability of Available Capacity Resources under the Reliability Assurance Agreement-West. The goal of the simultaneous feasibility determination shall be to ensure that there are sufficient revenues from Transmission Congestion Charges to satisfy all Financial ~~Fixed~~ Transmission Rights obligations for the auction period under expected conditions and to ensure that there are sufficient revenues from the annual Financial Transmission Right Auction to satisfy all Auction Revenue Rights obligations.

8. INTERREGIONAL TRANSMISSION CONGESTION MANAGEMENT PILOT PROGRAM

8.1 Introduction.

The following procedures shall govern the redispatch of generation to alleviate transmission congestion on selected pathways on the transmission systems operated by the Office of the Interconnection and the New York ISO ("NYISO"). The procedures shall be used solely when, in the exercise of Good Utility Practice, the Office of the Interconnection or NYISO determines that the redispatch of generation units on the other's transmission system would reduce or eliminate the need to resort to Transmission Loading Relief or other transmission-related emergency procedures.

8.2 Identification of Transmission Constraints.

(a) On a periodic basis determined by the Office of the Interconnection and NYISO, the Office of the Interconnection and NYISO shall identify potential transmission operating constraints that could result in the need to use Transmission Loading Relief or other emergency procedures in order to alleviate the transmission constraints, the need for which could be reduced or eliminated by the redispatch of generation on the other's system.

(b) In addition to the identification of such potential transmission operating constraints, the Office of the Interconnection and NYISO shall identify generation units on the other's system, the redispatch of which would alleviate the identified transmission constraints.

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5.5 Relationship of Capacity Credits to Capacity Obligations Imposed under the Reliability Assurance Agreement.

A megawatt of Capacity Credit shall satisfy a megawatt of capacity obligation imposed under the Reliability Assurance Agreement. Capacity Credits purchased from a PJM Capacity Credit Market shall not be adjusted for forced outages or other reasons. Because Capacity Credits are based on Capacity Resources, no further capability or deliverability demonstrations beyond those for the related Capacity Resource shall be required.

5.6 Deficiency Charges.

If the Office of the Interconnection determines that the first Market Seller in a PJM Capacity Credit Market of a Capacity Credit did not have sufficient Unforced Capacity to support the Capacity Credit transaction at the time for which the Capacity Credit was applicable, any such deficiency shall be satisfied through payment of deficiency charges by such first Market Seller calculated as specified in the Reliability Assurance Agreement. Any amounts collected from such deficiency charges shall be distributed in accordance with the Reliability Assurance Agreement.

5.7 ~~Fixed~~ Financial Transmission Rights.

Acquisition of a Capacity Credit shall not entitle the holder to a ~~Fixed~~ Financial Transmission Right.

5.8 Confidentiality.

The following information submitted to the Office of the Interconnection in connection with any PJM Capacity Credit Market shall be deemed confidential information for purposes of Section 18.17 of the Agreement: (i) the terms and conditions of all Sell Offers and Buy Bids; and (ii) the terms and conditions of any bilateral transactions for capacity or Capacity Credits.

6. OPERATION OF THE PJM CAPACITY CREDIT MARKETS

6.1 Content of Sell Offers.

6.1.1 Specifications.

Sell Offers shall specify:

i) The quantity of Capacity Credits offered, in increments of 0.1 megawatt;

ii) The minimum price, in dollars and cents per megawatt per day, that will be accepted by the seller;

iii) For a PJM Daily Capacity Credit Market , the dates on which the offered Capacity Credits may be used; and

iv) For a PJM Monthly Capacity Credit Market, the month or months for which the offered Capacity Credits may be used.

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5.7 ~~Fixed~~ Financial Transmission Rights.

Acquisition of an Available Capacity Credit shall not entitle the holder to a ~~Fixed~~ Financial Transmission Right.

5.8 Confidentiality.

The following information submitted to the Office of the Interconnection in connection with any PJM West Available Capacity Credit Market shall be deemed confidential information for purposes of Section 18.17 of the Agreement: (i) the terms and conditions of all Sell Offers and Buy Bids; and (ii) the terms and conditions of any bilateral transactions for capacity or Available Capacity Credits.

6. OPERATION OF THE PJM WEST AVAILABLE CAPACITY CREDIT MARKETS

6.1 Content of Sell Offers.

6.1.1 Specifications.

Sell Offers shall specify:

i) The quantity of Available Capacity Credits offered, in increments of 0.1 megawatt;

ii) The minimum price, in dollars and cents per megawatt per day, that will be accepted by the seller;

iii) For a PJM West Monthly Available Capacity Credit Market, the month or months for which the offered Available Capacity Credits may be used.

6.1.2 Market-based Offers.

A Market Seller that is authorized by FERC to sell electric generating capacity at market-based prices, or that is not required to have such authorization, may submit Sell Offers to PJM West Available Capacity Credit Markets that specify market-based prices.

6.1.3 Availability of Available Capacity Credits for Sale.

i) The Office of the Interconnection shall determine the maximum megawatts of Available Capacity Credits each Market Seller may offer in a PJM West Available Capacity Credit Market, through verification of the availability of megawatts of capacity from: (a) Available Capacity Resources owned by or under contract to the Market Seller; (b) rights obtained in bilateral transactions; (c) the results of prior PJM West Available Capacity Credit Markets; and (d) such other information as may be available to the Office of the Interconnection. The Office of the Interconnection may reject Sell Offers or portions of Sell Offers for Available Capacity Credits determined by it not to be available for sale.

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UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C.) **Docket No. ER03-____**

NOTICE OF FILING

Take notice that on January 10, 2003, PJM Interconnection, L.L.C. ("PJM"), submitted for filing amendments to the PJM Open Access Transmission Tariff and the Amended and Restated Operating Agreement of PJM Interconnection, L.L.C. to establish a new annual auction process for Financial Transmission Rights (formerly Fixed Transmission Rights) and an allocation mechanism for the auction revenues.

PJM requests an effective date of March 12, 2003 for the amendments.

Copies of this filing were served upon all PJM members and each state electric utility regulatory commission in the PJM control area and PJM West region.

Any person desiring to intervene or to protest this filing should file with the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 C.F.R. 385.211 and 385.214). Protests will be considered by the Commission in determining the appropriate action to be taken, but will not serve to make protestants parties to the proceeding. Any person wishing to become a party must file a motion to intervene. All such motions or protests should be filed on or before the comment date, and, to the extent applicable, must be served on the applicant and on any other person designated on the official service list. This filing is available for review at the Commission or may be viewed on the Commission's web site at http://www.ferc.gov, using the "FERRIS" link. Enter the docket number excluding the last three digits in the docket number filed to access the document. For assistance, contact FERC Online Support at FERCOnlineSupport@ferc.gov or toll-free at (866) 208-3676, or for TTY, contact (202) 502-8659. Protests and interventions may be filed electronically via the Internet in lieu of paper; see 18 C.F.R. 385.2001(a)(1)(iii) and the instructions on the Commission's web site under the "e-Filing" link. The Commission strongly encourages electronic filings.

Comment Date: