124 FERC ¶ 63,022
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

PJM Interconnection, L.L.C. Docket Nos. ER06-456-006
ER06-954-002
ER06-1271-001
ER07-424-000
EL07-57-000

INITIAL DECISION

(Issued September 18, 2008)

**APPEARANCES**

*Barry S. Spector, Esq.*, *Craig Glazer, Esq.* and *Carrie L. Bumgarner, Esq.* on behalf of PJM Interconnection, LLC.

*Randall Griffin, Esq*. on behalf of Dayton Power & Light Company.

*Joseph B. Nelson, Esq., Donald J. Light, Esq., Roni F. Epstein, Esq., David P. Yaffe, Esq*. and Emily Pitlick, Esq. on behalf of Long Island Power Authority.

*William R. Hollaway, Esq., James N. Broder, Esq.* and *Natara G. Feller, Esq.* on behalf of Neptune Regional Transmission System, LLC and Hudson Transmission Partners, LLC.

*David E. Goroff, Esq. and Amy L. Blauman, Esq.* on behalf of Pepco Holdings, Inc., and its affiliates, Potomac Electric Power Company, Delmarva Power & Light & Atlantic City Electric Company.

*Deborah Royster, Esq.* and *Helen Hight, Esq.* on behalf of Pepco Holdings, Inc.

*Donald A. Kaplan, Esq., William M. Keyser, Esq.* and *Paul E. Russell* on behalf of PPL Electric Utilities Corp.

*Jon R. Mostel, Esq.* on behalf of East Coast Power, LLC.

*Richard P. Sparling, Esq., Morgan E. Park, Esq., Kenneth G. Jaffe, Esq.* and *Petra Holden, Esq.* on behalf of Jersey Central Power & Light, Metropolitan Edison Company

and Pennsylvania Electric Company.

*John K. Shumate, Jr., Esq.* on behalf of Virginia State Corporation Commission.

*Paul A. Savage, Esq.* on behalf of Rockland Electric Company.

*James D. Pembroke, Esq.* on behalf of Indiana Michigan Municipal Distributors Association.

*Seth T. Lucia, Esq.* and *Thomas L. Rudebusch, Esq.* on behalf of Delaware Municipal Electric Corporation.

*Miles H. Mitchell, Esq., Sandra Hall, Esq.* and *Mercia E. Arnold, Esq.* on behalf of Maryland Public Service Commission.

*John Michael Adragna, Esq.* and *Sean Beeny, Esq.* on behalf of Chambersburg, Pennsylvania; North Carolina Electric Membership Corporation.

*Allen O'Neil, Esq.* and *John Conway, Esq.* on behalf of Illinois Municipal Electric Agency and Blue Ridge Power Agency.

*Kevin F. Duffy, Esq.* and *Margaret E. McNaul, Esq.* on behalf of American Municipal Power-Ohio, Inc.

*John A. Levin, Esq.* on behalf of Commonwealth of Pennsylvania Public Utility Commission.

*Richard P. Bonnifield, Esq., Tamara L. Linde, Esq., Gregory Eisenstark, Esq.* and *Sheree Kelly, Esq.* on behalf of PSEG Companies and PSEG Power, LLC and PSEG Energy Resources and Trade, LLC and Public Service Electric and Gas Company.

*William S. Scherman, Esq., Gerard A. Clark, Esq., Eugene H. Bernstein, Esq., A. Karen Hill, Esq., Joseph Watson, Jr., Esq., Kent D. Murphy, Esq., Verdina Y. Showell, Esq.,* and *Adrain Newall, Esq.* on behalf of Exelon Corporation.

*Gary E. Guy, Esq.* on behalf of Baltimore Gas & Electric Company.

*John E. McCaffrey, Esq.* on behalf of Old Dominion Electric Cooperative.

*Randall B. Palmer, Esq.* and *Jared W. Johnson, Esq.* on behalf of Allegheny Power.

*Michael C. Regulinski, Esq., John R. Lilyestrom, Esq., David M. Connelly, Esq.* and *Robert T. Stroh, Esq.* on behalf of Dominion Resource Services.

*Tatjana M. Shonkwiler, Esq*. on behalf of Maryland Municipalities of Hagerstown, Williamsport, and Thurmont.

*Ted J. Murphy, Esq.* on behalf of New York Independent System Operator

*Lopa B. Parikh, Esq.* on behalf of District of Columbia Office of People's Counsel.

*Margaret Comes, Esq.* on behalf of New Jersey Board of Public Utility.

*Kenneth M. Simon, Esq., Gary D. Levenson, Esq., Thomas Kelly, Esq.* and *Bethany Bryant Dukes, Esq.* on behalf of New York Power Authority.

*Henry M. Ogden, Esq.* on behalf of State of New Jersey Division of Rate Counsel.

*Matthew Loftus, Esq., Mary Hain, Esq., Janet Kay Jones, Esq.* and *Aaron B. Kahn, Esq.* on behalf of the Federal Energy Regulatory Commission.

**DAVID H. COFFMAN**, Presiding Administrative Law Judge

## TABLE OF CONTENTS

## BACKGROUND

### I. The PJM Transmission System

1. PJM Interconnection, L.L.C. (PJM) is a Regional Transmission Organization (RTO) as defined in Order No. 2000.[1] As such, PJM directs and coordinates the reliable and efficient operation of transmission systems within its region. The PJM Open Access Transmission Tariff (OATT), which is on file at the Commission, governs PJM's actions in this regard. *See* PJM Interconnection, LLC, FERC Electric Tariff, Sixth Revised Volume No. 1.

2. Each entity that owns, leases or holds some other possessory interest in facilities subject to the OATT is defined in that tariff as a "transmission owner." OATT § 1.45F. The facilities of each transmission owner (TO) are contained in a separate zone within the PJM region. There are 19 such zones within the PJM system. *See* OATT Attachments H-1 through H-19.

3. PJM's OATT offers two basic types of transmission service. The first, network integration transmission service (NITS), allows customers to use the network to service load (*i.e.*, end-users) at designated locations within the PJM region. *See generally* OATT Part III. All NITS offered by PJM is "firm," and, thus, has the highest curtailment priority. *Id.* § 28.3. For economic reasons, all transmission customers serving load within the PJM region (referred to herein as "LSEs," an acronym for "load-serving entities") use NITS. *In the Matter of PJM Interconnection, L.L.C.*, Hearing Transcript (Tr.) at 738-39.

4. The second transmission service offered by PJM is point-to-point transmission service (PTPTS), which allows customers to move electricity from a designated receipt point to a designated delivery point. *See generally* OATT §§ 13-27A. PJM offers firm PTPTS and "non-firm" PTPTS, the latter of which, by definition, is of lower priority. *See id.* §§ 13-14. A customer requesting firm PTPTS must pay for all PJM network expansions and enhancements required to accommodate that request—specifically, for all the expansions and enhancements that would not have been required "but for" the need to make the accommodation—prior to receiving such transmission. *Id.* §§ 200, 217.3. *See* Tr. at 290:20-24.

---

[1] *Regional Transmission Orgs.*, Order 2000, FERC Stats. & Regs. ¶ 31,089 at 30,993 (1999)**,** *Order on Reh'g*, Order No. 2000-A, FERC Stats. & Regs. ¶ 30,092 (2000), *aff'd sub nom. Public Util. Dist. No. 1 v. FERC*, 272 F.3d 607 (D.C. Cir 2001).

5. In Opinion No. 494, 119 FERC ¶ 61,063, at P 42 (2007), *order on reh'g*, 122 FERC ¶ 61,082 (2008) (Opinion No. 494-A),[2] the Commission addressed PJM's method of recovering its investment in its transmission facilities. The Commission approved PJM's recovery of costs for new facilities through its Regional Transmission Expansion Plan, discussed *infra*. With respect to existing facilities, the Commission reversed the presiding administrative law judge's ruling requiring PJM to adopt a postage-stamp rate design,[3] and permitted PJM to retain its license-plate rate design, under which each such customer pays a rate based on the costs of only those facilities in that customer's zone.[4] The Commission reasoned that the PJM should continue to collect the costs of investment in those facilities from the customers for whom those costs originally were incurred:

> The existing facilities of these transmission systems were not developed under common ownership and planning, and were not designed to benefit the entire footprint of PJM. These transmission facilities were developed by the individual companies to benefit their own systems and their own customers. It is therefore consistent with principles of cost causation to continue to allocate the costs of these facilities to the customers for whom they were constructed and whom they continue to serve to date.

119 FERC ¶ 61,063 at P 42. The Commission was also concerned that implementation of a postage-stamp rate design for existing facilities would result in unacceptable cost shifts among the TOs. Opinion No. 494-A , 122 FERC ¶ 61,082 at P 35.

6. The license-plate rate varies, based on the type of service provided and the zone of delivery.[5] PJM recovers the full revenue requirements of its existing facilities

---

[2] All citations to the *FERC Reports* contained herein are captioned *PJM Interconnection, L.L.C.* unless otherwise indicated.

[3] Under a postage-stamp rate design, all regional transmission customers would have paid the same per-unit rate based on the aggregate cost of all regional facilities.

[4] Under a license-plate rate design, a transmission customer does not pay for transmission facilities outside its zone even if the customer engages in transactions that rely on those outside facilities.

[5] PJM's charges for NITS are based on the amount of megawatts (MW) delivered in a given zone per year. For example, the NITS rate for energy delivered in the transmission zone of Public Service Electric & Gas Company (PSEG) is $17,631 per MW per year, whereas the NITS rate for Alleghany Power is $17,895 per MW per year. *See* OATT Attachments H-10 & H-11. PJM's charges for PTPTS are based on the amount of kilowatts (kW) delivered in a given month. For example, the firm PTPTS rate for energy

(sometimes referred to as "embedded costs") on behalf of its TOs through its firm transmission rates. *See* Ex. MTF-1 at 31:15-32:4. *See also* Ex. PTO-9 at 10:9-13 (the rate for firm transmission service includes an allocated share of embedded costs). PJM's non-firm transmission rates are "discounted well below the embedded cost" of the transmission system. Ex. PTO-9 at 16:13-15; Ex. PTO-11 at 8:3-6. *See also* OATT Schedule 8 § 1 (permitting PJM to charge up to the firm PTPTS rate for non-firm PTPTS).

## II. Merchant Transmission Facilities

7. "Merchant transmission facilities" (MTFs) are transmission facilities that are added to or interconnected with the PJM system. OATT § 1.18E. MTFs and their transmission customers seek to purchase energy in one region and resell it at a profit in another region where generation costs are higher. *See* Ex. PTO-3 at 12:8-10; Tr. at 654:4-13.

### A. Treatment in the PJM Open Access Transmission Tariff

8. MTFs may apply to interconnect with PJM and to receive (1) "firm transmission withdrawal rights" (FTWRs), the right to schedule withdrawals of electric energy and capacity at the point of interconnection, and/or (2) injection rights, the right to import power into the PJM system. OATT §§ 1.3E, 1.13A, 232.2.

9. Parts IV and VI of PJM's OATT govern the interconnection of MTFs to the PJM system. Prior to granting a request for FTWRs, PJM undertakes a series of studies to project what, if any, network enhancements and expansions (upgrades) will have to be constructed to serve the FTWRs by the time the MTF goes into service. *See* Ex. MTF-4 at 8-10. Like prospective PTPTS customers, the MTF must pay for any network transmission upgrades necessary to assure that the transmission system will continue to operate reliably during the MTF's first year of service, or put another way, for any network upgrades that would not be required "but for" the MTF's utilization of its FTWRs during that first year ("but-for" upgrades). OATT §§ 200, 217.3. The Commission allows PJM to require interconnection customers to pay for upgrades on a "but-for" basis, because such requirements encourage prospective interconnection customers to make efficient siting decisions, *i.e.*, to interconnect at locations on the system that have a maximum amount of available transmission capacity. *See Old Dominion Elec. Coop. v. PJM Interconnection, L.L.C.*, 119 FERC ¶ 61,052, at P 10 (2007) (*ODEC*) (addressing generator interconnection).

---

delivered in PSEG's transmission zone is $1.975 per kW per month, whereas the PTPTS rate for Alleghany Power is $1.737 per kW per month. *See* OATT Schedule 7.

10. If the parties decide to proceed, they will execute an Interconnection Service Agreement (ISA). The ISA specifies, among other things, the amount of FTWRs the MTF has a conditional right to receive and the conditions the MTF must satisfy to receive those rights; the ISA also projects the date the MTF is to commence service and thereby receive the FTWRs. OATT, Attachment O, Appendix 2 § 1; Ex. PTO-3 at 19:3-6; Ex. PJM-1 at 32:19-22; Ex. PJM-3 at 25:14-16.

11. Though the MTF must pay for all "but-for" upgrades, the TOs in the zones designated to house the upgrades typically construct them. Ex. HTP-1 at 6:13-19. However, to the extent the "but-for" upgrades create new transmission capacity, the MTF paying for the upgrades obtains Auction Review Rights and Incremental Capacity Transfer Rights in that capacity. *See* Ex. PJM-3 at 21:20-22:1; Ex. NYP-1 at 14:14-15:1.

12. Once the contingencies identified in the ISA have been satisfied, and the MTF has received its FTWRs, it still must schedule transmission service in order to withdraw power from the PJM system. *See* PJM Manual 14E: *Merchant Transmission Specific Requirements* at 28 (July 5, 2005); Tr. at 315:3-7. An FTWR holder has the expectation that it will be able to secure firm PTPTS "with no additional required network transmission upgrades." Tr. at 316:5-9.

### B. Current and Prospective PJM Merchant Transmission Facilities

13. Currently, PJM has approved FTWR requests from two such facilities: Neptune Regional Transmission System, LLC (Neptune); and East Coast Power (ECP). Neptune owns an MTF that received 685 megawatts (MW) of FTWRs and went into service on June 29, 2007. Ex. MTF-4 at 6:20-22. The Neptune line interconnects with the PJM transmission system at a 230 kilovolt (kV) substation in Sayreville, New Jersey, and terminates at a 138 kV substation on Newbridge Road in Long Island, New York. *Id.* at 5:16-18. PJM has billed Neptune approximately $13 million for "but-for" upgrades. *Id.* at 13:2-4.

14. Neptune has executed a Firm Transmission Capacity Purchase Agreement with LIPA, a subsidiary of the Long Island Power Authority, assigning LIPA the full transmission capacity of the Neptune line, including Neptune's FTWRs. Ex. MTF-4 at 6:5-7. To date, LIPA has taken only non-firm transmission from PJM. *Id.* at 15:16-16:2; Tr. at 494:5-22. Nonetheless, during the summer of 2007, LIPA was able to deliver sufficient low-cost energy from PJM to New York save its New York customers approximately $20 million. Ex. PTO-1 at 5:13-20; Ex. PTO-2.

15. The ECP MTF will interconnect with an existing 230 kV transmission line between two 230 kV substations, and will be located on the property of Tosco Refinery in Linden, New Jersey. Ex. MTF-4 at 6:14-17. ECP has applied for 330 MW of FTWRs, *id.* at 7:6-7, and PJM estimates that approximately $1.55 million in "but-for" upgrades will be

necessary to accommodate this request. *Id.* at 13:8-11. The ECP MTF is not yet in service, but ECP has executed an ISA with PJM under which ECP will receive the FTWRs upon fulfilling the other prerequisites to taking FTWR service. *See* 115 FERC ¶ 61,052 (2006).

16. Two additional MTFs have made yet-to-be-approved requests to interconnect with PJM. Hudson Transmission Partners, LLC (HTP) is developing a project designated in PJM's interconnection queue as Queue O66, which would connect to the PJM transmission system at the "Bergen station" in New Jersey, and would terminate at Consolidated Edison's substation, located at West 49th Street in New York City, New York (Con Ed W 49th Street Substation). Ex. HTP-1 at 1:20-22. HTP has requested 670 MW of FTWRs, and PJM initially estimated that approximately $457 million in upgrades would be necessary to accommodate these FTWRs. Ex. S-5 at 22:13-16.[6] The projected in-service date for the Queue O66 project is June 2009. *Id.* at 22:14-15.

17. Cavallo Power, LP proposes to use the second MTF project, designated as Queue Q75, to connect PSEG Bergen 2, an existing generating unit in New Jersey currently serving PJM zonal load, directly to the New York Independent System Operator's grid at the Con Ed W 49th Street Substation. Ex. S-5 at 23:8-16. The Q75 project will have capacity of 2,300 MW, and has requested 1,200 MW of FTWRs from PJM. *Id.* at 21:17-18, 22:17-18. PJM has estimated that over $1 billion in upgrades will be necessary to accommodate Cavallo's FTWR request. *Id.* at 23:2-4. Cavallo plans to construct the Q75 project in two phases, and projects an in-service date for phase 1 of June 1, 2009, and an in-service date for phase 2 of June 1, 2010. *Id.* at 22:21-23:2.

## III. PJM's Regional Transmission Expansion Plan

18. One of PJM's duties as RTO is to implement its Regional Transmission Expansion Plan (RTEP). *See* Amended and Restated Operating Agreement of PJM Interconnection, L.L.C., Third Revised Rate Schedule FERC No. 24 (Operating Agreement), Schedule 6. Three phases of the RTEP process warrant discussion here: (1) planning; (2) cost allocation; and (3) construction and cost recovery.

[6] Mr. Herling testified that PJM has since lowered this estimate, but did not say by how much. Tr. at 303:18-22. Dr. David DeRamus, testifying on behalf of the New York Power Authority, testified that current estimates range between $300 million and $500 million. *Id.* at 504:4-7.

### A. Planning

19. In the planning stage, PJM, with input from the TOs in the region, conducts periodic assessments to determine where it is necessary to construct transmission upgrades, and makes recommendations to the PJM Board of Managers (PJM Board). *See* Operating Agreement, Schedule 6 §§ 1.5-1.6.

20. One reason—perhaps the principal reason—for implementing such upgrades is to prevent violations of applicable reliability criteria. *See* Operating Agreement, Schedule 6 § 1.5.1(a)(iii). To assess the need for these "reliability upgrades," PJM uses power-flow software to simulate the flow of energy through a computer model of its system under various scenarios. PJM projects conditions on its system, such as generator retirements and internal load growth for up to 15 years into the future. Ex. PTO-3 at 21:20-22; Tr. at 670:8-11. Once PJM discovers that a reliability violation would occur under a given scenario, it determines the size and location of the upgrade required to prevent the violation.

21. PJM plans its system to meet projected firm demand in the form of firm transmission service and FTWRs. Ex. PTO-3 at 10:18-21. Thus, PJM plans its system to serve projected internal load only if that load is served by firm transmission service, *i.e.*, by NITS or long-term PTPTS. Ex. PTO-9 at 8:6-7, 10:9-13. PJM also plans its transmission system to serve each MTF's full allotment of FTWRs, because to do otherwise would jeopardize the system's reliability. Ex. PTO-3 at 19:3-20:2; Ex. PTO-7 at 8:6-10. An MTF has an absolute right to exercise FTWRs, once it receives them. Ex. PTO-7 at 8:6-10.

22. In the planning stage, PJM must sometimes project withdrawals from the system by an MTF that has not yet commenced service. Here, PJM relies on its ISA with the MTF, assuming that during the in-service year specified in the ISA, the MTF will receive and fully exercise the full complement of FTWRs described in that agreement. *See* Ex. PTO-3 at 19:3-20:2; Ex. PTO-14 at 9:10-12. Thus, if the ISA specifies that the MTF is to commence service in 2013, PJM will not plan its system to serve the MTF's FTWRs prior to that year. In deciding what upgrades will be needed to prevent reliability violations in 2013 and the years following, PJM will plan the system to serve the full complement of FTWRs specified in the MTF's ISA even though PJM will not actually have awarded them to the MTF at the time the studies are conducted. The parties refer to FTWRs that the MTF has not received at the time that PJM makes its planning or allocation decisions as "planned" FTWRs, and to FTWRs that the MTF has received as "existing" FTWRs.

23. PJM's RTEP upgrades inevitably create what the Commission refers to as "available transmission capacity" or "ATC," transmission system capacity that is not required, over the relevant planning period, to meet commitments to native load, network load, and

PTPTS customers.[7] The parties also have referred to this excess capacity as "headroom." This Initial Decision uses the terms "ATC" and "headroom" interchangeably. PJM's flow studies will sometimes identify the necessity of constructing an upgrade to prevent a violation expected to occur in the near future, and of later constructing a larger upgrade in the same location to prevent a similar violation in the more distant future. In that situation, PJM may find it less expensive to direct the immediate construction of the larger upgrade immediately. *See* Tr. at 670:14-25. The construction of such upgrades creates excess capacity that PJM does not expect its internal load to use in the near term. *Id.*

24. The use of ATC by PJM LSEs and by interconnecting customers, including MTFs, is a principal cause of the projected reliability violations that create the need for upgrades. Ex. MTF-4 at 25:1-4; Ex. PTO-3 at 23:16-18; Ex. PTO-6 at 6:8-10; Ex. PJM-3 at 14:12-19, 15:1-5, 18:4-9. The other principal causes are generator retirements and reconfigurations of the transmission system. Ex. MTF-4 at 25:1-4.

25. PJM also recommends upgrades to remove transmission constraints that do not violate reliability criteria, but nonetheless impede efficient transmission on its system. Operating Agreement, Schedule 6 § 1.5.7. These "economic upgrades" serve to remove "economic constraints" on transmission, such as significant historical or forecasted congestion, *see id.*, Schedule 6 § 1.5.7(b), and to reduce the average price paid for generation at different locations within a region, known as the Locational Marginal Price (LMP). The planning horizon for economic upgrades is appreciably shorter than that for reliability upgrades. Tr. at 748:16-749:25.

### B. Allocation

26. In the allocation stage, PJM determines what percentage of the cost of each reliability and economic upgrade to assign to each transmission zone. *See* Ex. PJM-1 at 7:12-12:11. PJM expresses these cost assignments as percentages, because it does not calculate the actual charge used to recover the cost of the upgrade. *Id*. at 10:13-11:4. In Opinion No. 494, the Commission expressed "support" for "PJM's 'beneficiary pays' approach" for allocating the costs of RTEP reliability upgrades, which the Commission described as a methodology in which "direct beneficiaries of a particular transmission upgrade are identified and directly allocated the costs of that upgrade." 119 FERC ¶ 61,063 at P 69.

---

[7] *See Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Servs. by Pub. Utils.; Recovery of Stranded Costs by Pub. Utils. & Transmitting Utils.*, Notice of Proposed Rulemaking, FERC Stats. & Regs. ¶ 32,514 at 33,089 (1995).

27. Opinion No. 494 approved PJM's proposal for allocating the costs of RTEP upgrades of 500 kV and above (500 kV upgrades) to all PJM firm transmission customers "on a region-wide basis," reasoning that these projects provide "broad regional benefits." 119 FERC ¶ 61,063 at PP 76-77. Subsequently, Opinion No. 494-A approved PJM's compliance filing, which allocates costs of each 500 kV upgrade annually on a load-share basis, *i.e.*, by allocating the costs of the upgrade proportionally to each PJM zone based on its share of the aggregate PJM load, using the actual peak demand of each zone for the previous 12 months ending October 31. 122 FERC ¶ 61,082 at PP 74, 88. The Commission stated that PJM also was to allocate the costs of 500 kV economic upgrades to zones in the same manner. *Id.* P 58.

28. Opinion No. 494 concluded that PJM's OATT did not "provide the details of how" the "'beneficiary pays' analysis was to be performed" when PJM allocated the costs of reliability and economic upgrades below-500kV (below-500 kV upgrades). 119 FERC ¶ 61,063 at PP 72, 73. The Commission announced that it would expand the scope of the hearing in the instant proceeding to require the parties to provide detailed methodologies for such allocations for inclusion in PJM's OATT. *Id.* PP 72, 75. The Commission believed such detail was required to provide certainty and minimize future litigation in PJM's cost-allocation process. *Id.* The order on rehearing in this proceeding, discussed *infra*, provided this directive. 119 FERC ¶ 61,067 (April 19, 2007) (Rehearing Order).

29. The parties have since provided a substantial part of that specificity. On September 14, 2007, the parties reached a partial settlement agreement ("Partial Settlement" or "Settlement"), resolving all issues set for hearing regarding assignment of cost responsibility for below-500kV RTEP upgrades to PJM transmission zones. *See* Ex. PJM-2. On July 29, 2008, the Commission approved the Settlement in all relevant respects. 124 FERC ¶ 61,112 (2008).

30. The Partial Settlement implements its revisions by replacing OATT Schedule 12(b) (ii) and (iii) with OATT Schedule 12(b) (ii) – (vii). Ex. PJM-2 at 118-127. The Settlement equates the zonal benefit from a planned reliability upgrade to the extent of the zone's contribution to the reliability violation that the upgrade is needed to prevent, and equates that contribution with the zone's share of the amount of energy that flows over the "constrained facility" when the reliability violation occurs. *See* Tr. at 267:19-21. PJM determines that zonal share by conducting a power-flow study that models a transfer from all the projected generation in the PJM system (the "source") to the projected peak load in the zone (the "sink") to determine the percentage of the energy flows to the zone that will traverse the constrained facility. PJM then multiplies that percentage, which is the zone's "distribution factor" or DFAX, by the projected zonal peak load to determine the zone's total impact on the constrained facility, the total impact being a function of the size of the load and the percentage of the load traversing the facility. PJM next compares that total impact to those of other zones having a positive DFAX to determine each load's proportional contribution to the violation. *See* Ex. PJM-2 at 72-78 (§§ 16-23). In

calculating each zone's energy flows across the constrained facility, PJM uses the same projections for peak load that it uses in determining whether a reliability violation will occur.

31. The Partial Settlement also provides that cost responsibility for reliability upgrades that were not estimated to cost more than $5 million ($5 million reliability upgrades) will be borne by the TO constructing and owning the upgrade. Ex. PJM-2 at 70-71 (§ 14). The Partial Settlement also resolved all issues in Docket Nos. ER06-880 and ER07-632 and all related sub-dockets. As discussed in the next section, the Settlement ratifies TO revisions to PJM's OATT making the MTF owner responsible for payment of all TECs allocated to its MTF. *See id.* at 62-63 (§ 6); 115 FERC ¶ 61,345 at P 5.[8]

### C. Construction and Cost Recovery

32. Once the PJM Board has approved construction of an RTEP upgrade, *see, e.g.*, Operating Agreement § 7.7(iv), PJM designates the TO that owns the facilities in the zone where the upgrade is required as being responsible for constructing and/or financing that required upgrade. *Id*., Schedule 6 § 1.5.6(f). In accordance with OATT Schedule 12, that TO files a revenue requirement with the Commission under Section 205 of the Federal Power Act (FPA), 16 U.S.C. § 824d (2006), to recover the cost of construction. Ex. S-3 at 6:16-7:4. PJM collects the allocated costs from each zone on the behalf of the TO through "Transmission Enhancement Charges" (TECs) to the zone's firm transmission customers. *See id.* at 7:4-11; Ex. PJM-2 at 131.

## PROCEDURAL HISTORY

33. This proceeding began on January 6, 2006 when PJM filed a report assigning cost responsibility for upgrades approved by PJM's Board as part of PJM's RTEP. Three similar reports followed, the last filed on January 11, 2007. Attached to each report were revisions to OATT Schedule 12 that identified and set out the approved cost allocation for each upgrade. PJM filed these reports in Docket Nos. ER06-456-000, ER06-954-000, ER06-1271-000, and ER07-424-000.

34. In four Orders, the Commission accepted and suspended PJM's proposed OATT revisions subject to refund, consolidated the dockets, and established hearing and settlement judge procedures.[9] In each of the four Orders, the Commission set for hearing

---

[8] A subsequent section of this Initial Decision discusses the Partial Settlement's allocation of costs for economic upgrades.

[9] 115 FERC ¶ 61,261, at PP 51, 56, 57 (2006) (May 2006 Order); 116 FERC ¶ 61,118, at PP 30, 35, 38, 39 (2006) (August 2006 Order); 117 FERC ¶ 61,058, at PP 40, 48-50

determinations of whether PJM's cost allocations for specific projects were unjust, unreasonable, unduly discriminatory or otherwise unlawful.[10] The first three Orders also set for hearing determinations of whether PJM's proposed method for allocating RTEP costs to the two MTF projects, Neptune and ECP, was unduly discriminatory or preferential, and whether the proposed allocation of costs to those two projects "directly correlate[d] to their contribution to the need for such reliability upgrades."[11]

35. On April 21, 2006, in Docket No. ER06-880-000, the TOs filed modifications to OATT Schedule 12 to clarify provisions addressing (1) the assignment of cost responsibility to MTFs and (2) the calculation of costs assigned to PTPTS customers. *PJM Transmission Owners*, 115 FERC ¶ 61,345, at P 1 (2006) (June 2006 Order). The filing designated the MTF owner as the entity responsible for paying TECs allocated to an MTF, and directed calculation of each such TEC as a monthly charge. *Id.* P 5. On May 12, 2006, Neptune filed the only protest to the TOs' filing. *Id.* PP 12-16.[12] The Commission accepted the proposed modifications, subject to refund, and consolidated the proceeding with the four dockets listed *supra*. *Id.* PP 20, 25.

36. On April 4, 2007, PJM filed: (1) revisions to OATT Schedule 14 (previously filed on March 16, 2007 in Docket No. ER07-632-000); (2) a Settlement of Disputed Matters between Neptune and the TOs signed by Neptune, the TOs and PJM; and (3) a conditional withdrawal of Neptune's protest in Docket No. ER06-880-000. Neptune conditioned that withdrawal on the TOs' agreeing not to protest the revised Schedule 14. Essentially, Neptune agreed not to oppose the TOs' proposal to make the MTF owner responsible for paying the TEC in return for the TOs' not opposing the MTF's right to pass this charge on to the FTWR holder, a right conferred in revised Schedule 14. By Letter Order dated May 3, 2007, the Director of the Division of Tariffs & Market Development – East, acting under authority delegated by 18 C.F.R. § 375.307, accepted

---

(2006) (October 2006 Order); 119 FERC ¶ 61,033, at PP 37, 38 (2007) (April 2007 Order).

[10] May 2006 Order, 115 FERC ¶ 61,261 at P 56; August 2006 Order, 116 FERC ¶ 61,118 at P 38; October 2006 Order, 117 FERC ¶ 61,058 at P 49; April 2007 Order, 119 FERC ¶ 61,033 at P 37.

[11] May 2006 Order, 115 FERC ¶ 61,261 at P 51; August 2006 Order, 116 FERC ¶ 61,118 at P 35; October 2006 Order, 117 FERC ¶ 61,058 at P 48.

[12] Wisconsin Electric Power Company filed a motion to intervene and comments asking for clarification as to the impact of the TOs' proposed addition of Schedule 12(c)(5). *See* June 2006 Order, 115 FERC ¶ 61,345 at P 11. In an Answer filed on May 20, 2006, the TOs explained that Schedule 12 does not apply to Wisconsin Electric. *Id.* PP 17, 20.

the filing, but noted that its impact on Docket No. ER06-880-000 would be determined in this proceeding.

37. In the meantime, on February 27, 2007, the Commission held the proceeding in these consolidated dockets in abeyance, pending its decision on related issues in Docket No. EL05-121-000. 118 FERC ¶ 61,154 (2007). The Commission issued the decision addressing that docket, Opinion 494, discussed *supra*, on April 19, 2007.

38. That same day, the Commission issued the Rehearing Order, which ordered resumption of this proceeding, and directed the parties to develop for inclusion in PJM's tariff a "beneficiary pays" cost-allocation methodology for below-500 kV reliability upgrades. 119 FERC ¶ 61,067 at PP 16-18. The Commission instituted an investigation under FPA § 206, 16 U.S.C. § 824e, in Docket No. EL07-57-000, to develop a methodology for allocating costs to economic upgrades, and made the investigation a part of this consolidated proceeding. *Id.* PP 21-23. Echoing Opinion No. 494 (*see* 119 FERC ¶ 61,063 at PP 72, 75), the Commission ordered the development and filing of the foregoing methodologies to provide greater certainty in PJM's cost-allocation process and to prevent continued litigation over individual cost allocations. Rehearing Order, 119 FERC ¶ 61,067 at PP 17, 23.

39. On April 25, 2007, at the request of Commission Trial Staff (Staff), the Chief Administrative Law Judge (Chief Judge) suspended the procedural schedule and established settlement judge procedures. Docket No. ER06-456, *et al.* (April 25, 2007) ("Order Appointing Settlement Judge, Holding Prehearing Conference and Procedural Schedule in Abeyance, and Scheduling Settlement Conference").

40. As discussed, on September 14, 2007, the parties filed the Partial Settlement, which resolved all issues set for hearing regarding assignment of cost responsibility for below-500kV RTEP upgrades to PJM transmission zones. *See* Ex. PJM-2. All active parties in this proceeding signed the Settlement. *Id.* at 96-104.

41. The Partial Settlement also resolved all issues in Docket Nos. ER06-880 and ER07-632 and all related sub-dockets. The Settlement ratified the TOs' filing in ER06-880, which, *inter alia*, designates the MTF owner as the entity responsible for paying RTEP charges allocated to an MTF. *See* Ex. PJM-2 at 62-63 (§ 6); 115 FERC ¶ 61,345 at P 5.

42. The Partial Settlement expressly states that the "use of a DFAX-based methodology … as described in[] paragraphs 16 through 27" is "finally resolved in this Settlement and shall not be the subject of litigation at the hearing regarding assignments of cost responsibility to merchant transmission facilities." Ex. PJM-2 at 66 (§ 10(a)(i)). However, as discussed, *infra*, the Settlement reserves the issues of whether and how to revise the methodology to accommodate MTFs.

43. Specifically, the Partial Settlement reserves the following issues regarding cost allocations for below-500 kV RTEP upgrades to MTFs:

a. whether MTFs should be assigned any cost responsibility for such upgrades;

b. if it is determined that MTFs should be assigned such cost responsibility, how MTFs should be included in the DFAX analysis;

c. whether any assignment of cost responsibility to MTFs for reliability upgrades should be based on planned (as distinguished from existing) FTWRs;

d. whether any assignment of cost responsibility to MTFs for economic upgrades should be based on FTWRs or other values and, if based on FTWRs, whether such assignment should be based on planned (as distinguished from existing) FTWRs; and

e. whether MTFs should be assigned cost responsibility for $5 million reliability upgrades.

*Id.* at 67-68 (§ 10(b)). Subsequently, Opinion No. 494-A also reserved the issue of how PJM is to allocate RTEP costs for 500 kV upgrades to MTFs for this proceeding. 122 FERC ¶ 61,082 at P 92.

44. By Orders dated September 20, 2007 and September 21, 2007, respectively, the Chief Judge: (1) terminated settlement judge procedures; and (2) re-established the Initial Decision deadline and returned the proceeding to the Presiding Judge. On October 10, 2007, the Presiding Judge held a pre-hearing conference and issued an Order adopting a procedural schedule.

45. PJM filed prepared direct testimony on November 30, 2007. Intervenors and Staff each filed prepared direct and answering testimony on January 23, 2008 and March 14, 2008, respectively. Intervenors filed prepared cross-answering testimony on March 26, 2008. Intervenors and PJM filed rebuttal testimony on April 16, 2008 and April 28, 2008, respectively. On April 30, 2008, the parties filed Pre-Trial Briefs (PBs) and an Updated Narrative Statement of Issues (Statement of Issues).[13] Discovery closed on May 8, 2008.

[13] The Statement of Issues presents the issues in outline form. This Initial Decision does not follow that outline, but includes footnotes to the headings of the various sections identifying each issue in the Statement of issues that the section discusses.

46. An evidentiary hearing commenced on May 12, 2008 and concluded on May 15, 2008. On June 16, 2008, the following parties filed individual Initial Briefs (IBs): Exelon Corporation (Exelon); Staff; HTP; PJM; New Jersey Division of Rate Counsel (NJRC); and New York Power Authority (NYPA). On that same date, the following parties filed joint IBs: ECP, Long Island Power Authority and LIPA (MTF Parties); and PSEG, Jersey Central Power & Light Company, Metropolitan Edison Company, Pennsylvania Electric Company, Baltimore Gas and Electric Company and Allegheny Power[14] (PTO Group). On July 7, 2008, all of the foregoing parties except Exelon filed individual or joint Reply briefs (RBs).

## DISCUSSION

### I. Overview

47. With one exception (the proposed allocations for $5 million reliability upgrades), this Initial Decision upholds PJM's proposal when it allocates RTEP costs to MTFs and zones in a comparable manner. The decision directs PJM to modify the parts of its proposal that do not allocate RTEP costs to MTFs and zones in a comparable manner.

### II. Cost Allocations for Upgrades below 500 Kilovolts

#### A. PJM's Proposed Allocation Methodology

48. PJM proposes to use virtually the same methodology to allocate the costs of below-500kV reliability upgrades to MTFs that PJM uses to allocate such costs to zones. As with zones, PJM proposes to base its calculation of an MTF's DFAX on the proportion of energy that flows over the constrained facility to the MTF's node in the violation year. Where PJM uses a zone's projected load in the violation year to calculate the zone's DFAX and allocation percentage, PJM proposes to use an MTF's planned or existing FTWRs to calculate the MTF's DFAX for that year. *See* PJM IB at 20; Ex. PJM-1 at 31:6-17.

[14] Allegheny Power is the trade name for Monongahela Power Company, the Potomac Edison Company and West Penn Power Company.

### B. Whether Merchant Transmission Facilities Should Pay for Such Upgrades[15]

#### 1. Asserted Grounds for Rejection of PJM's Proposal

49. FPA § 205(e), 16 U.S.C. § 824d(e) (2006), states that "[a]t any hearing involving a rate or charge sought to be increased, the burden of proof to show that the increased rate or charge is just and reasonable shall be upon the public utility". In addition, the Commission has sustained an administrative law judge's ruling that proponents of rate changes must also meet a "threshold burden to demonstrate its proposal is … not unduly discriminatory." *California Indep. Sys. Operator Corp.*, 113 FERC ¶ 63,017, at P 33 (2005) (*California ISO*), *sustained*, 117 FERC ¶ 61,348, at PP 14, 18 (2006), *order on reh'g*, 121 FERC ¶ 61,193 (2007)). No participant in this proceeding disputes that PJM has the burden of proving that its proposed application of the foregoing OATT sections to MTFs is just, reasonable, and not unduly discriminatory.

50. NYPA asserts that PJM has failed to satisfy this burden. NYPA, therefore, seeks rejection of PJM's proposal, and argues that MTFs should not have to pay any RTEP costs "at this time." NYPA RB at 3. Specifically, NYPA asserts that the proposal:

> (i) does not meet the standard set for this proceeding, because its proposed method of cost allocation ('Revised DFAX') does not correlate to MT's contribution to the need for RTEP projects and is unduly discriminatory and preferential;
>
> (ii) double-charges MT for the 'but for' costs of the upgrades for which it is directly responsible and the "beneficiary pays" costs of RTEP upgrades, and so violates the Commission's 'higher of' transmission pricing policy; and
>
> (iii) does not treat MT comparably to other transmission customers in the measurement and timing of the cost allocation.

*Id.* at 2.

---

[15] This Section II.B addresses the following issues in the Statement of Issues: Should PJM assign MTFs cost responsibility for any below-500 kV upgrades (Issue # 1)? Should PJM assign MTFs cost responsibility for any below-500 kV reliability upgrades (Issue # 2.a)? Should PJM assign MTFs cost responsibility for any below-500 kV economic upgrades (Issue # 2.d)?

51. NYPA is the only participant that asserts that MTFs should not pay the costs of any below-500 kV RTEP upgrades. PJM, the PTO Group, Staff and NJRC all oppose NYPA's position.

52. Some of NYPA's assertions relate to specific remedies proposed by NYPA or another party; this Initial Decision discusses these assertions in later sections, and discusses NYPA's remaining objections to PJM's proposal, some of which other parties have also raised, immediately below.

### 2. Failure to Meet the Standard Articulated in the Hearing Orders

#### a. Lack of Direct Correlation between Assignment of Cost Responsibility and Contribution to Need for the Upgrade

##### (i) Failure to Measure Causation

53. The MTF Parties join NYPA in arguing that PJM has failed to meet the standard set forth by the Commission in the Orders initially setting this matter for hearing. Both parties point out that the Commission's initial orders in this proceeding set for hearing the issue of whether PJM's "proposed allocation" to MTFs "directly correlates to their contribution to the need for such reliability upgrades."[16] Both parties argue that PJM's proposed methodology allocates costs based on the MTF's usage of the constrained facility—in the form of energy flowing across the facility to the MTF—whereas the proper measure of the MTF's direct contribution to the need for the upgrade is the MTF's contribution to the system changes that necessitate the upgrade. MTF Parties IB at 13, 22. *See* NYPA IB at 26-27. Because PJM's proposal does not measure this latter contribution, NYPA argues, the proposal fails to meet the standard articulated by the Commission. MTF Parties IB at 23, RB at 6.

54. NYPA seeks rejection of the DFAX methodology as a means to allocate costs of below-500 kV upgrades to MTFs. The Partial Settlement bars invocation of this argument as a basis for rejecting PJM's proposal, because the Settlement provides that use of the DFAX methodology to allocate costs to MTFs shall not be an issue in this litigation. Ex. PJM-2 at 66 (§10(a)(i)). To be sure, the Settlement permits the parties to litigate whether PJM should *supplement* DFAX for purposes of allocating costs to MTFs. *See id.* at 67-68 (§ 10(b)(ii)). However, this language does not permit parties in this proceeding to seek outright rejection of the methodology for any purpose.

---

[16] *See* NYPA IB at 3 (quoting May 2006 Order, 115 FERC ¶ 61,261 at P 51, and citing August 2006 Order, 116 FERC ¶ 61,118 at P 35, and October 2006 Order, 117 FERC ¶ 61,058 at P 48 (internal quotations omitted)); MTF Parties IB at 2, 22 (citing May 2006 Order, 115 FERC ¶ 61,261 at P 51).

55. The argument also fails on the merits. A review of the pertinent Orders demonstrates that when the Commission issued the initial Orders in this proceeding, it intended the phrase "contribution to the need for such reliability upgrades" to direct PJM to develop a methodology for allocating RTEP costs to MTFs similar that which PJM had developed for allocating such costs to zones.

56. By directing PJM to develop a cost-allocation methodology for MTFs that directly correlated to their contribution to the need for reliability upgrades (in the May, August and October 2006 Orders), the Commission was simply ordering PJM to develop a methodology for MTFs comparable to PJM's proposed methodology for zones. In the May 2006 Order, PJM explained that "it allocated cost responsibility for each of the reliability-based upgrades based on the extent to which load in each zone contributes to the violation of reliability criteria." 115 FERC ¶ 61,261 at P 7. In other words, PJM stated that it allocated costs to each zone based on its contribution to the reliability violation that created the need for the upgrade—*i.e.*, on the zone's contribution to the need for the upgrade. In the August and October 2006 Orders, PJM made this point even more explicitly, explaining that it "allocated cost responsibility for each of the upgrades based on the extent to which load in each zone contributes to the violation of reliability criteria that the upgrade is designed to remedy." 116 FERC ¶ 61,118 at P 7; 117 FERC ¶ 61,058 at P 8. Accordingly, those three Orders directed PJM to develop a cost-allocation methodology for MTFs that paralleled the methodology that PJM had developed to allocate such costs to zones, *i.e.*, a methodology that directly correlated an MTF's cost allocations to the MTF's contribution to the reliability violation that gave rise to the need for the upgrade.

57. There is no indication that the Commission knew what PJM meant by the phrase "contribution to the need for the upgrade" in the initial Hearing Orders. However, by the time the Commission issued Opinion No. 494 it had learned what PJM meant when it used that phrase. The Commission explained that PJM measured a zone's contribution to the reliability violation creating the need for the upgrade by the amount of energy flowing over the facility on which the violation occurred to the zone, and that PJM equated that contribution to the zone's benefit from the upgrade:

> To determine cost responsibility for a particular new facility, PJM conducts studies to determine which loads contribute to the reliability violation that caused the upgrade by examining power flows on the constrained facilities at the time of a reliability violation. The zones that are using the constrained facilities at the time of the violation are allocated the costs of the reliability upgrades because they are considered to be the ones that 'cause' the violation and 'benefit from' the addition of upgrades that eliminate the violation.

119 FERC ¶ 61,063 at P 2 n.3.

58. The Commission did not endorse or otherwise comment on PJM's view of causation. Instead, the Commission endorsed PJM's basic methodology on the ground that it allocated costs to the upgrades' beneficiaries:

> We continue to support PJM's 'beneficiary pays' approach of allocating the costs of new, PJM-planned transmission facilities. Under this 'beneficiary pays' approach, direct beneficiaries of a particular transmission upgrade are identified and directly allocated the costs of that upgrade. We find that, by allocating costs according to these benefits —benefits that flow from these investment decisions —we promote the development of optimal electricity infrastructure.

119 FERC ¶ 61,063 at P 69.

59. Thus, having learned what PJM meant by "contribution to the need for the upgrade," the Commission endorsed PJM's methodology not because it identified the entities causing the system changes that necessitated the upgrades, but because it identified the beneficiaries of those upgrades. Such action was well within the bounds of past Commission precedent. *See California ISO*, 113 FERC ¶ 63,017 at P 39, *sustained*, 117 FERC ¶ 61,348 at PP 15, 18 ("[t]he overwhelming weight of Commission authority" deems an entity "to have caused costs *either* if it is directly responsible for imposing the cost burden at issue *or* if the entity benefits from the cost incurrence") (emphasis in original). *See also California Power Exchange Corp.*, 106 FERC ¶ 61,196, at P 17 (2004) ("[t]he well-established principle of cost causation" requires allocation of costs, "where possible, to customers based on customer benefits and cost incurrence"); *California Indep. Sys. Operator Corp.*, 106 FERC ¶ 61,032, at P 10 (2004) ("while the fundamental idea of matching costs with customers is often referred to in terms of cost causation, it has also been described in terms of the costs which should be borne by those who benefit from them") (internal quotations omitted). *See also Midwest ISO Transmission Owners v. FERC*, 373 F.3d 1361, 1368 (D.C. Cir. 2004) (the court determines compliance with the principle of cost causation "by comparing the costs assessed against a party to the burdens imposed *or* benefits drawn by that party") (emphasis added).

60. From this point on, the Commission's measure of the justness and reasonableness of PJM's allocation methodology was not whether it allocated costs based on contribution to the need for the upgrade, but whether it allocated costs based on benefits flowing from the upgrade. The Commission's principal concern was that PJM's OATT did "not provide the details of how the 'beneficiary pays' analysis [was] to be performed, leading to disputes over methodological issues." Opinion No. 494, 119 FERC ¶ 61,063 at P 72. The DFAX analysis was set out in PJM's manuals instead of its OATT, and some elements of that analysis were not in the manuals. *See id.* n.99. This lack of detail led to disputes over the application of various components of the methodology, such as the consideration of "net counterflows within a transmission zone, known as 'zonal netting,'

the snapshot nature of hypothetical energy flows … the impact of Phase Angle Regulators … adjustments in its zonal cost allocation, and other factors." *Id.* P 71. However, the Commission made clear that while the "companion order" to be issued in this proceeding would "expand the scope of the hearing", that expansion would focus on "the methodology for determining the beneficiaries of reliability projects", *id.* P 72, and economic projects. *Id.* P 75.

61. Accordingly, the Rehearing Order effectively directed the parties to develop a "beneficiary pays" methodology for below-500 kV reliability upgrades for inclusion in PJM's OATT:

> In this order, we grant rehearing to allow the parties to address the appropriate cost allocation methodology to be added to the PJM OATT to implement 'beneficiary pays,' including the DFAX methodology and the components of that methodology….

119 FERC ¶ 61,067 at P 16. There is no suggestion in any of the foregoing Orders that the Commission expected PJM to develop separate cost-allocation methodologies for zones and MTFs, and it is unlikely the Commission would have issued such a directive without a full discussion of its reasons.[17]

62. To summarize, the initial hearing Orders in this proceeding, which stated that a cost-allocation methodology for MTFs should directly correlate to the MTF's contribution to the need for the upgrade simply reiterated the description PJM used to describe the allocation methodology it had developed for zones.[18] In Opinion No. 494, the Commission made clear that it understood that from PJM's perspective, the zone drawing energy across the constrained facility contributed to the need for the upgrade and benefited from it to the same degree. 119 FERC ¶ 61,063 at P 2 n.3. The Commission endorsed the use of this approach to allocate costs of below-500 kV upgrades because it allocated costs to beneficiaries, and directed the parties to develop a methodology for implementing it in this proceeding. *Id.* PP 69, 72, 75; Rehearing Order, 119 FERC ¶

---

[17] On the contrary, the Commission has allowed PJM flexibility in developing its cost-allocation methodologies. Whereas the Commission had previously determined a "beneficiary pays" methodology to be a just and reasonable means of allocating the costs of economic upgrades, both Opinion No. 494 and the Rehearing Order expressly declined to require PJM to use this approach in developing a more detailed cost-allocation methodology for such upgrades. *Compare* Opinion No. 494, 119 FERC ¶ 61,063 at P 73 (quoting 117 FERC ¶ 61,218, at P 31 (2006)), *with id.* P 75, Rehearing Order, 119 FERC ¶ 61,067 at P 23.

[18] *See* May 2006 Order, 115 FERC ¶ 61,261 at PP 7, 51; August 2006 Order, 116 FERC ¶ 61,118 at PP 7, 35; October 2006 Order, 117 FERC ¶ 61,058 at PP 8, 48.

61,067 at PP 16-18, 21-23. At no time did the Commission suggest that PJM should develop an entirely separate allocation methodology for MTFs.

63. Thus, the issue is not whether PJM's methodology properly measures an MTF's contributions to system changes that necessitate new upgrades, as NYPA and the MTF Parties contend. Rather, the issue is whether that methodology reasonably measures the benefit an MTF receives from an upgrade, and allocates that MTF costs that are commensurate with that benefit. *See* Opinion No. 494, 119 FERC ¶ 61,063 at P 69 (the "beneficiary pays" methodology is one in which "direct beneficiaries of a particular transmission upgrade are identified and directly allocated the costs of that upgrade").

64. PJM makes a compelling case that the DFAX methodology accurately measures an MTF's benefits and allocates it costs that are properly proportionate to those benefits. We start with an irrebuttable presumption that the DFAX methodology allocates RTEP costs to zones in a just, reasonable manner and not unduly discriminatory. The presumption exists because the Commission's approval of the Partial Settlement makes the portion of the DFAX methodology applicable to zones a part of PJM's OATT and, therefore, presumptively just, reasonable and not unduly discriminatory. *See Maine Pub. Utils. Comm'n v. FERC*, 454 F.3d 278, 283 (D.C. Cir. 2006) (complainant seeking to change a tariff provision must show it to be unjust, unreasonable or unduly discriminatory). The presumption is irrebuttable, because the Settlement specifies "use of a DFAX-based methodology" as one of the issues that is "finally resolved" and "shall not be the subject of litigation at the hearing regarding assignments of cost responsibility to merchant transmission facilities". Ex. PJM-2 at 66 (§ 10(a)). Though the Settlement reserves the issue of how MTFs "should be included in the DFAX analysis", *see id.* at 67-68 (§ 10(b)), this reservation does not permit challenges to the justness and reasonableness of DFAX as a means of allocating costs to zones. Thus, the parties to this litigation may not challenge that the DFAX methodology accurately measures the benefits that zones derive from upgrades, and allocates costs to those zones commensurate with their benefits.[19]

[19] Even NYPA concedes that "the parties to the Partial Settlement agreed … with respect to non-MT transmission customers … that Revised DFAX correlates to the benefits of reliability (and certain economic) upgrades." NYPA IB at 19. Though NYPA contends that this agreement was "for purposes of the Partial Settlement and expressly without setting a precedent for any other purpose", *id.*, the Settlement expressly states that use of a DFAX-based methodology for below-500 kV reliability upgrades is "finally resolved" and "shall not be the subject of litigation at the hearing regarding assignment of cost responsibility to [MTFs]". *See* Ex. PJM-2 at 66 (§ 10(a)). Thus, the Partial Settlement precludes any challenge to the justness and reasonableness of the DFAX methodology as a means of allocating costs to zones in this proceeding.

65. PJM proposes to measure the benefits that an MTF derives from an upgrade in the same way that it measures those that a zone derives from an upgrade with one exception: PJM proposes to use an MTF's planned or existing FTWRs as a proxy for projected zonal load. Steven Herling, Vice President of Planning for PJM, explains that using comparable methodologies to allocate costs to MTFs and zones is justified because MTFs connected to the PJM system act like load in that they withdraw energy from the PJM system just as any customer's load withdraws energy from the PJM system:

> Just as a load withdraws its megawatt consumption at a point within the zone, so does a merchant D.C. transmission terminal. Thus, when a region in question needs reliability upgrades, which are equally caused by all loads in the zone, merchant transmission loads at merchant D.C. terminals are part of the cause for the upgrade.

Ex. PJM-1 at 30:16-20.

66. Mr. Herling further explains that an MTF's projected FTWRs are an appropriate equivalent to projected zonal load, because FTWRs "create a ... long-term right to withdraw capacity and energy at a specific point on the system. That is equivalent to the impact at that same point as network load." Tr. at 280:24-281:3. Of critical importance is the fact that PJM models an MTF's projected FTWRs in the planning stage as well as the allocation stage. Mr. Herling testified:

> In all cases, withdrawals using [FTWRs] must be modeled at the full level of rights identified in the interconnection service agreement that provides for those rights. In this way, the transmission system is designed to support both the peak network load and the firm withdrawals, and the [FTWRs] are preserved for the holder's use. The preservation of the rights is critical because the RTEP baseline, including the peak network load and the firm withdrawals, serves as the starting point for the evaluation of subsequent requests for service, which are entitled to utilize any fallow transmission system capability.

Ex. PJM-3 at 7:4-23. Thus, PJM makes the same projection regarding the MTF's use of the system in both the planning and allocation stages. No party questions the accuracy of these projections for planning purposes, and there is no reason to question their accuracy for allocation purposes.

67. In summary, the evidence presented by PJM shows the following. PJM's DFAX methodology matches zonal benefits with zonal cost allocations in a way that is just and reasonable. Ex. PJM-2 at 66 (§ 10(a)). PJM proposes to apply the same methodology to MTFs, using the MTF's projected FTWRs as a proxy for projected load. FTWRs are a reasonable proxy for projected load because they create a long-term right to withdraw

capacity and energy from the system, *see* Tr. at 280:24-281:3, and PJM uses them to project MTFs' withdrawals from the system in the planning stage. Ex. PJM-3 at 7:4-23. Moreover, MTF load and zonal load withdraw power from the PJM system in the same way. Ex. PJM-1 at 30:16-20. Accordingly, PJM's proposal should produce the same matching of benefits and costs for MTFs that it produces for zones. The foregoing satisfies PJM's burden under FPA § 205(e), and shifts the burden to those parties continuing to challenge the justness and reasonableness of PJM's proposal.

**(ii) Failure to Measure Benefits**

68. NYPA argues that even if one accepts an entity's use of a facility as an accurate measurement of the entity's contribution to the need for that facility, PJM's proposed DFAX methodology does not accurately measure that use. First, the methodology models hypothetical flows over a pre-existing facility, rather than "*actual* uses of a facility or group of facilities". NYPA IB at 28 (emphasis in original). Second, it fails to capture all transfers because it "'nets" out certain uses of the transmission system, which means that" certain "flows" or "uses" of the system are not reflected in the final DFAX share of a zone or MTF. *Id.* at 29. Third, it models only preexisting facilities while excluding any new facilities built in response to the violation. *Id.*

69. As discussed, the Partial Settlement, at the very least, bars challenges to DFAX's accuracy in measuring zonal benefits. *See* Ex. PJM-2 at 66-68 (§§ 10(a)-(b)(i)). All three of the deficiencies alleged by NYPA bear on the accuracy of the methodology's measurement of zonal benefits to the same degree that they bear on the accuracy of its measurements of MTF benefits. Indeed, the alleged inaccuracies resulting from netting—a failure to measure all flows—relate solely to zones. Accordingly, the Settlement prohibits NYPA from making any of the three foregoing arguments.

70. In addition, NYPA's first and third arguments, which challenge the methodology's alleged failure to measure actual energy flows across an upgraded facility, address a straw man. PJM does not equate an entity's contribution to an upgrade to the entity's eventual use of that upgrade; rather, PJM equates such contribution to the entity's contribution to the reliability violation necessitating the upgrade, which PJM measures by simulating energy flows across the constrained facility where the violation occurs. As Mr. Herling put it, "[t]he manner in which we define benefits with respect to reliability upgrades is based on the contribution to the flow on a constrained facility." Tr. at 267:19-21. In the planning stage, it is necessary to measure *hypothetical* energy flows across *existing* facilities to determine the magnitude of the reliability violation (*e.g.*, whether 20 kV or 30 kV are projected to flow across a 10 kV line). In the allocation stage, it is necessary to make the same kind of measurement to determine the extent to which a zone or MTF contributes to the reliability violation. The hypothetical flows measure "the relative impacts that result from the load that is connected to the system", *id.* at 270:9-12, and the modeling of existing facilities permit measurement of "the effect

of the load of each transmission zone or [MTF] on the transmission constraint that required the new facility to be added to the RTEP". Ex. PJM-1 at 17:21-23.

71. The practice of "netting" allows PJM to measure more accurately the zonal contribution to a reliability violation. The Partial Settlement directs PJM to implement netting by modeling "the transfer to the transmission zone as a whole (not on a bus-by-bus basis)." Ex. PJM-2 at 75 (§ 20). The effect of such modeling will be "to net the energy flows associated with an individual transmission zone that are contributing positive flow to the circuit being studied with the energy flows associated with the same transmission zone that are contributing negative flow to that circuit." *Id.* at 75-76 (§ 20). Contrary to NYPA's claim that netting produces zonal DFAXs that do not reflect all zonal flows, the practice, by definition, takes all flows into account in calculating the zone's net impact on the reliability violation.

### b. Undue Discrimination

72. FPA § 205(b) prohibits public utilities from granting undue preferences to any persons, subjecting any persons to undue disadvantages or maintaining unreasonable differences in charges between classes of service. 16 U.S.C. § 824d(b). Order No. 890 applies those prohibitions to transmission system planning by simply requiring providers to plan their systems to treat similarly situated customers on a comparable basis.[20] In cases involving the charging of disparate rates to different classes of customers, the complainant must establish that, for purposes of the rates, the classes of customers are similarly situated. *Washington Water Power Co. v. FERC*, 201 F.3d 497, 504 (D.C. Cir. 2000) (*WWP*). Because there is no qualitative difference between preferential rates and other preferential treatment, this requirement appears applicable to all allegations of undue preference.

73. NYPA seeks rejection of PJM's proposal on the ground that PJM has failed to demonstrate that its proposal is not unduly discriminatory. NYPA IB at 31. While NYPA alleges PJM's proposal is unduly discriminatory in a number of respects, all of these arguments suffer from a failure to explain how, with respect to the allegedly discriminatory activity, MTFs and LSEs are similarly situated.

74. This Initial Decision discusses an allegation by NYPA and the MTF Parties that PJM has failed to account for an MTF's "static load" in a subsequent section that addresses an adjustment to the DFAX methodology that the MTF Parties propose to eliminate this alleged defect. The sections immediately below discuss NYPA's remaining assertions regarding undue discrimination.

---

[20] *Preventing Undue Discrimination and Preference in Transmission Serv.*, Order No. 890, FERC Stats & Regs ¶ 31,241 at P 494 (2007), *order on reh'g*, Order No. 890-A, FERC Stats & Regs ¶ 31,261 (2008).

### (i) Threshold Burden

75. At the outset, it is important to be clear just what entities we are comparing. PJM allocates RTEP costs, as percentages, to MTFs and zones. Thus, comparison of MTFs and zones is appropriate in some cases. However, whereas the Partial Settlement makes the MTF owner responsible for payment of all TECs allocated to its MTF (*see* Ex. PJM-2 at 62-63 (§ 6); 115 FERC ¶ 61,345 at P 5), PJM collects the RTEP costs allocated to a zone from the zone's LSEs. Accordingly, in some situations, the proper comparison appears to be between MTFs and LSEs. The comparison between MTFs and zonal load made by some of the parties on brief is not correct, because PJM does not allocate costs to or collect costs from that load.

76. PJM has satisfied its threshold burden of demonstrating that its proposal is not unduly discriminatory. PJM has shown that it proposes to treat MTFs comparably to zones by applying the same DFAX methodology to allocate costs to both. *See* Ex. PJM-2 at 72-78 (§§ 16-23). The only difference in application is that PJM uses projected zonal load to calculate allocations to zones and uses planned or existing FTWRs to calculate allocations to MTFs. *Id.* However, PJM and others have produced evidence showing that in the planning stage, PJM uses projected zonal loads to project zonal withdrawals from the system and planned or existing FTWRs to forecast MTFs' system withdrawals. Ex. PJM-1 at 30:16-20, 32:13-33:6. This evidence shows that just as PJM's projections for zonal load in the planning process parallel PJM's projections for such load in the allocation process, so PJM's projections for MTF withdrawals in the planning process parallel PJM's projections for such withdrawals in the allocation process.

77. PJM and others have also produced evidence showing that this comparable treatment is appropriate, because, for purposes of the RTEP process, MTFs and zones are similarly situated. This evidence shows that in planning its system to serve its zones and MTFs, PJM focuses almost exclusively on one variable for both classes—the extent to which each zone and MTF is projected to withdraw power from the system. *See* Ex. PJM-1 at 30:14-31:2, 32:13-33:6; Tr. at 280:24-281:3; 670:8-11. The evidence further shows that with respect to this variable, MTFs and zones are virtually identical, because each group withdraws power from the system in exactly the same way. *See* Ex. PJM-1 at 30:14-31:2.

78. Accordingly, PJM has met its "threshold burden" of showing that it meets the general standard set out in Order No. 890. The evidence shows that PJM's RTEP proposal treats MTFs and zones comparably by applying the same methodology to both. *See* Ex. PJM-2 at 72-78 (§§ 16-23). The evidence further shows that such comparable treatment is appropriate, because MTFs and zones withdraw power from PJM's system in the same way, and, therefore, for purposes of the RTEP process, the two classes of customers are similarly situated. Ex. PJM-1 at 30:16-20. This showing does not foreclose the issue, but it does shift the burden of proof to those parties attempting to demonstrate that PJM's proposal is unduly discriminatory.

**(ii) Use of "Netting" to Measure Zonal Withdrawals of Power**

79. NYPA alleges that PJM's use of "netting" to measure a zone's contribution to a reliability violation lowers the zone's DFAX and shifts costs to MTFs. As discussed, the Partial Settlement directs the parties "to net the energy flows associated with an individual transmission zone that are contributing positive flow to the circuit being studied with the energy flows associated with the same transmission zone that are contributing negative flow to that circuit". *See* Ex. PJM-2 at 75-76 (§ 20). NYPA contends that zones benefit from netting, because by offsetting the flows that pull energy across the constrained facility into the zone (thereby increasing the zone's DFAX) against flows that weaken that pull (thereby decreasing the zone's DFAX), the zones lower their DFAXs, and, therefore, their shares of RTEP costs. In contrast, the MTFs in this proceeding cannot benefit from such offsets, because unlike zones, which have multiple busses and energy flows, MTFs have only one node, which necessarily receives only one energy flow. An MTF gets no benefit if that flow is negative, because PJM treats a negative DFAX value as a zero. NYPA IB at 36. Thus, NYPA contends, netting is unduly discriminatory because it reduces zonal DFAXs, but does not correspondingly benefit MTFs, and, consequently, shifts costs from zones to MTFs. *Id*. at 36-37, RB at 21-22.

80. PJM treats zones and MTFs the same with respect to negative DFAXs: In each case, PJM assigns the negative DFAX a value of zero. Tr. at 274:3-16. Thus, neither entity receives a reduction of its allocation if its net flow (in the case of zones) or its single flow (in the case of MTFs) is negative. *Id.*

81. With that clarification, it appears that NYPA's concern is that zones benefit from netting because of their physical configurations, whereas MTFs do not. Accordingly, what NYPA is asserting is the "unusual case" in which undue discrimination occurs because the regulated company treats two dissimilar entities as similar. *See Consolidated Edison of N.Y., Inc.*, 165 F.3d 992, 1013 (D.C. Cir. 1999) (*Con Ed*). Such cases turn on whether the dissimilarities between the two entities are of such a nature as to make their uniform treatment "unreasonable or undue." *Id.*

82. The dissimilarities between zones and MTFs do not render PJM's netting of zonal flows unreasonable or undue. A zone houses multiple flows, whereas an MTF receives a single flow. Netting more accurately measures flows to a zone across a constrained facility, because the methodology reflects the zone's aggregate pull of energy. In contrast, netting is not required to accurately measure flows to an MTF across such a facility, because each MTF in this proceeding receives only one power flow. Thus, NYPA is correct that netting lowers zonal DFAXs, but wrong to assert that this reduction creates a discriminatory result. Rather, netting assures that PJM's simulation of the impact on a constrained facility generated by the multiple flows to the various busses

within a zone will be as accurate as PJM's simulation of the impact on that facility generated by the single flow to the MTF's node.

### (iii) Unequal Allocation of Rights to New Transmission Capacity

83. The MTF Parties and NYPA complain that PJM's allocation of rights to new transmission capacity created by RTEP upgrades favors LSEs over MTFs. MTF Parties IB at 28-29; NYPA IB at 37. PJM presently allocates Auction Review Rights (ARRs) and Incremental Capacity Transfer Rights (CTRs) in such capacity to network load, but has no mechanism to award such rights to MTFs. MTF Parties IB at 28. MTFs and their customers may participate in the ARR and CTR allocation process only if the customers take firm transmission service, and even then may participate only in the "inferior 'Phase 2' allocation stage". *Id.*. NYPA claims that this inequity makes PJM's entire proposal unduly discriminatory. NYPA RB at 18-19.

84. In the Rehearing Order, the Commission expressly declined to "set the allocation of [Financial Transmission Rights]/ARRs for hearing in this proceeding". 119 FERC ¶ 61,067 at P 19.[21] Accordingly, whether PJM's allocation of these rights to new RTEP capacity is unduly discriminatory or entirely justified will be determined in another venue, and any argument concerning such allocations is outside the scope of this proceeding.[22]

### (iv) Failure to Allocate Costs to Non-Merchant Exporters of Power

85. Finally, NYPA and HTP claim that PJM's proposal unduly discriminates against MTFs because PJM does not allocate costs to other projected exports of power from its system. NYPA IB at 37-39, RB at 19-20. Specifically, NYPA relies on Exhibit MTF-28, introduced (but not briefed) by the MTF Parties during the cross-examination of Mr. Herling. Page 3 of that exhibit lists a series of exports of power from the PJM system totaling 8,652 MW (together with one import of power) projected for 2013. Mr. Herling acknowledged that PJM modeled these exports of in its planning for 2013, but did not allocate costs associated with these withdrawals to any entity that would be making such exports. Tr. at 320:21-321:2, 325:15-330:25.

---

[21] No participant disputes that the Commission's reference to "Financial Transmission Rights" encompasses CTRs.

[22] PJM currently is addressing this matter in its stakeholder process. *See* Ex. PJM-3 at 12:1-10.

86. Mr. Herling explained that the transactions listed in Exhibit MTF-28 "are not necessarily … specific services that [will] go forward"; rather, "the party may continue to take that service moving forward or [it] may not." Tr. at 328:21-24. He further explained that the list does not represent commitments by PJM to provide specific, long-term service, but instead sets out a "level of use of the system"—by the current users or by other users—that PJM assumes will continue into the future:

> [T]hese transactions five years in the future are not transactions with specific parties represented. They are simply magnitudes of transactions. These particular transactions may or may not be in place five years in the future. We plan for this level of use of the system. So there are no direct allocations to any parties, because there are not necessarily any parties associated with these magnitudes of transactions.

*Id.* at 327:18-25. By modeling these transactions during the planning stage, PJM is "not preserving these rights for anyone," but rather is merely "including this level of interchange in [its] assessment of the reliability of the system." *Id.* at 326:5-9.

87. The power exporters listed in Exhibit MTF-28 and the MTFs covered by PJM's proposal are not similarly situated for purposes of the RTEP process. The Exhibit MTF-28 exporters have no contractual right to long-term service from PJM. Thus, PJM cannot allocate costs to these exporters because it does not know if it will be providing them service five years hence. In contrast, MTFs that are parties to ISAs with PJM have a contractual right to FTWRs upon satisfaction of specified conditions, and holders of FTWRs possess long-term rights to withdraw capacity and energy at a specific point on the system. Tr. at 280:25-281:2; OATT § 232.2. Accordingly, allocating RTEP costs to MTFs, but not to these exporters does not amount to undue discrimination. *See Entergy Servs. Inc.*, 93 FERC ¶ 61,156, at n.8 (2000) (*Entergy*) ("[i]t is not undue discrimination to treat categories of customers with dissimilar characteristics differently").[23]

### (v) Disparity in Number of Rates Charged

88. Making the first of several arguments based on MTFs' payments for "but-for" upgrades, NYPA argues that PJM's "discrimination should be transparent from simple math." NYPA IB at 31. NYPA contends that PJM proposes to impose four charges on

[23] HTP suggests that PJM also does not allocate RTEP costs to certain "grandfathered" exports, citing responses by Mr. Herling to hypothetical questions in which Mr. Herling testified that PJM would not allocate RTEP costs to a "grandfathered transmission request." HTP IB at 23-24 (citing Tr. at 331:24-332:6, 332:8-17). However, the record does not show that any such grandfathered exports exist on PJM's system. Prior to the exchanges that HTP cites, Mr. Herling, clearly stated that he did "not know whether the grandfathered transactions are imports or exports." Tr. at 329:21-25.

MTFs—"'but-for' interconnection costs, 'but-for' costs for increases in FTWRs, the PJM OATT border rate for use of existing transmission facilities and RTEP costs for new facilities"—while imposing only two of those charges on PJM LSEs—"the OATT transmission rate and RTEP charges." *Id.* This argument is unpersuasive for several reasons.

89. The math—whether simple or not—is wrong. MTFs do not have to take and pay for transmission for PJM to plan its system to serve their FTWRs. Ex. PTO-9 at 8:12-9:13. To be sure, MTFs must purchase transmission to withdraw power from PJM's system. However, the MTF Parties can provide benefits to their New York customers by simply requesting External Unforced Capacity Delivery Rights (UDRs), and not taking and paying for any transmission whatsoever. *Id.* at 12:12-16:11. Moreover, even if MTFs pay a transmission rate, that rate is not necessarily comparable to the rate that LSEs must pay. LIPA currently is taking non-firm PTPTS from PJM, and yet still managed to export sufficient energy to save its customers $20 million during the summer of 2007. Ex. MTF-4 at 15:16-16:2; Tr. at 494:7-22; Ex. PTO-1 at 5:13-20; Ex. PTO-2. PJM's non-firm transmission rates are "discounted well below the embedded cost" of the transmission system. Ex. PTO-9 at 16:13-15; Ex. PTO-11 at 8:3-6. In contrast, LSEs must purchase firm transportation for PJM to plan its system to serve their loads. Ex. PTO-9 at 8:6-7, 10:9-13. NYPA's mathematical comparison also suffers from the fact that the two types of "but-for" charges that it lists—those necessitated by the award and increase of the MTF's FTWRs—actually comprise a single type of charge—that necessitated by the MTF's addition of load to the system.[24]

90. Thus, PJM's pricing scheme does not clearly favor either of the two classes of customers. MTFs and LSEs each must pay two charges to PJM: MTFs must pay "but-for" charges to interconnect with PJM's transmission system, and RTEP charges to have the system planned for them; LSEs must pay the firm transmission rate and RTEP charges to have the system planned for them. If MTFs wish to withdraw power from the PJM system, they must also pay a transmission rate; however, they may be able to achieve this result by paying the significantly less expensive non-firm rate, as LIPA has done.

91. NYPA's chief complaint here appears to be that MTFs must pay for "but-for" upgrades, whereas LSEs do not. To show that this disparity constitutes undue discrimination, NYPA must show that, for purposes of such upgrades, MTFs and LSEs are similarly situated. *See WWP*, 201 F.3d at 504. NYPA does not attempt to make such a showing, and in fact, Part VI of PJM's OATT, which is not at issue here, treats them as separate classes of customers. Part VI requires all new transmission customers to pay for "but-for" upgrades. OATT § 217.3. The OATT classifies MTFs seeking to obtain

[24] Elsewhere in its Initial Brief, NYPA suggests that increases in FTWRs may not be feasible for MTFs. *See* NYPA IB at 61.

FTWRs as new customers, but does not include LSEs, which simply serve internal PJM load, in this category.

92. Even if we accept NYPA's comparison as accurate and then remove all RTEP charges from the equation, the same differential in charges remains. According to NYPA, MTFs would then be subject to three charges—the two "but-for" charges and the transmission rate—whereas LSEs would be subject to one charge, the transmission rate. However, PJM collects all of these charges under parts of its OATT that the Commission has approved and that are outside the scope of this litigation. PJM would make the three charges to the MTFs under Parts II (governing PTPTS) and VI (governing "but-for" charges), and would make the charges to LSEs under OATT Part III (governing NITS).

### 3. Failure to Comply with Commission Pricing Policies[25]

93. NYPA contends that PJM's proposal to allocate RTEP costs to MTFs violates the Commission's prohibition against "and" pricing. NYPA explains that the Commission has stated "that transmission providers may charge 'the greater of the network's average cost (with the expansion cost rolled in) or the incremental cost of the expansion (known as "or" pricing),' but may not charge 'a combination of average and incremental cost of the expansion (known as "and" pricing)." NYPA IB at 46 (quoting *Energy Hinds, LLC*, 102 FERC ¶ 61,068, at P 22 (2003)). NYPA contends that PJM imposes incremental charges on an MTF by requiring it to pay "but-for" costs when it interconnects with PJM's transmission system; therefore, NYPA contends, PJM may not impose what NYPA characterizes as average-cost charges on the same MTF by requiring it to pay for RTEP upgrades. *Id.* at 46-47, 56.

94. *Energy Hinds* and all of the other cases cited by NYPA in support of its explanation of "and" pricing address the interaction of interconnection costs and transmission rates. *See* NYPA IB at 46-47, 50, RB at 29, 32, and cases cited therein. None of those cases addresses the interaction of interconnection costs and costs akin to the RTEP costs at issue here. If the prohibition against "and" pricing discussed in those cases applies to allocation of RTEP costs, it applies by extension. Thus, for NYPA to establish that the policy exempts an MTF that has paid for "but-for" upgrades from having to pay RTEP costs, NYPA would first have to establish that such payments exempt MTFs from having to pay an additional rate for transmission. This is not the Commission's policy.

---

[25] In addition to the other issues addressed in Section II.B, this Subsection 2.c addresses the following issues: Are the services giving rise to RTEP costs distinguishable from the services giving rise to interconnection costs (Issue # 1.a)? Is an MTF's payment for "but-for" upgrades an appropriate consideration in determining whether the MTF should pay RTEP costs (Issue # 1.b)?

95. The Commission discussed its pricing policy for customers interconnecting with transmission providers in Orders involving generators. In Order No. 2003,[26] the Commission determined that an interconnection customer that pays for upgrades in advance of service is entitled to credits against future transmission charges from non-independent transmission providers or to rights in the incremental capacity created by the upgrade if the transmission provider is independent. *See* Order No. 2003-A at PP 612-22.[27] However, "[i]nterconnection by itself conveys no right to delivery service." *Tennessee Power Co.*, 90 FERC ¶ 61,238, at 61,761 (2000) (*Tennessee*). Rather, "interconnection is a separate component of transmission service". Order No. 2003 at P 744. None of the cases cited by NYPA that involve payment of "but-for" costs in advance of service hold otherwise. *See* NYPA IB at 46-47, 51, RB at 29, 32, and cases cited therein.

96. The principles set forth in the foregoing generator cases are equally applicable to MTFs. Indeed, all of the cases cited by NYPA that involve payment of "but-for" costs in advance of service involve interconnecting generators. *See* NYPA IB at 46-47, 51, RB at 29, 32, and cases cited therein.

97. PJM OATT provisions not at issue in this proceeding are consistent with the foregoing rules. Those provisions require new customers to pay for "but-for" upgrades necessitated by their interconnection or use of the system, *see* OATT §§ 200, 217.3, but no provisions of the OATT exempt such customers from having to pay a transmission rate for delivery of their power. Even NYPA does not assert that an MTF's "but-for" payments should preclude it from having to pay for transmission should the MTF wish to withdraw power from PJM's region.[28]

---

[26] *Standardization of Generator Interconnection Agreements and Procedures*, Order No. 2003, FERC Stats. & Regs., Regs. Preambles 2001-2005 ¶ 31,146 (2003), *order on reh'g*, Order No. 2003-A, FERC Stats. & Regs., Regs. Preambles 2001-2005 ¶ 31,160, *order on reh'g*, Order No. 2003-B, FERC Stats. & Regs., Regs. Preambles 2001-2005 ¶ 31,171 (2004), *order on reh'g*, Order No. 2003-C, FERC Stats. & Regs., Regs. Preambles 2001-2005 ¶ 31,190 (2005), *aff'd sub nom. National Ass'n of Regulatory Util. Comm'rs v. FERC*, 475 F.3d 1277 (D.C. Cir. 2007).

[27] The next section discusses which of these two types of benefits MTFs on PJM's system are entitled to receive.

[28] NYPA appears to be confusing the situation in which the transmission provider collects the cost of the "but-for" upgrades through an incremental transmission rate with that in which the provider requires payment for the upgrade in advance of service. In the former situation, the provider recovers the upgrade costs from the customer through a "rate associated with the costs of the Network Upgrades divided by the Interconnection

98. If the policy against "and" pricing, which applies to transmission rates, does not exempt MTFs that have paid for "but-for" upgrades from having to pay such rates, it logically follows that the policy does not excuse such MTFs from having to pay RTEP charges. In addition, the record shows that an MTF that pays "but-for" charges and RTEP charges is not paying twice for the same service.

99. An MTF incurs interconnection costs when upgrades are required to ensure the reliable interconnection of its facility to the transmission grid.[29] Paul Napoli, Director of Transmission Business Strategy for PSEG explained, "[A]n interconnection is simply the ability to connect and be able to withdrawal from the PJM system". The costs incurred for an interconnection "are not upgrade costs to the system to provide reliability on an ongoing basis"; rather "[t]hey are minimally there to restore minimum reliability necessary to allow transfer of the appropriate requested load." *See* Tr. at 587:10-16.

100. In contrast, MTFs incur RTEP costs to pay for upgrades needed to ensure the *continued* reliability of the entire transmission system. As Mr. Herling explained, "upgrades may be needed" not only "to reliably interconnect the [MTF]" but "also to facilitate the reliability of the transmission system during its future operation." Dr. Harvey J. Reed, President of Ruxton Consulting, LLC, testified that RTEP costs are "incurred to maintain the FTWRs over the life of the facility, requiring PJM to plan for a load at the bus of the MTF similar to the manner in which PJM plans for the customers taking [NITS] and … firm PTPTS" Ex. PTO-9 at 7:19 – 8:1.

101. "Recovery of both types of costs" is required to guarantee "the reliability of the system." Ex. PJM-3 at 9:21-22. Accordingly, paying the costs of upgrades necessitated by the interconnection with PJM's system does not end the obligation to pay for upgrades necessary for the continued reliability of that system.

---

Customer's units of service". Order No. 2003-A at P 586. The Commission permits a transmission provider to charge such a rate if "rolling in the cost of Network Upgrades would cause the embedded cost rate paid by existing customers to increase". *Id.* In this situation, payment of the incremental rate excuses the customer from having to pay the rolled-in rate, because the customer already "is paying for Transmission Service over the entire Transmission system." *Id.* This was the situation addressed in *Public Serv. of Colo.*, 62 FERC ¶ 61,013, at 61,061 (1993), cited by NYPA.

[29] *See* Tr. at 294:25-295:3 ("[T]he interconnection process is based on the fact that we have a system that is planned to be reliable, and if an interconnection customer changes that, we have to return the system to a reliable state."). *See also* Ex. S-1 at 13:11-13 ("Interconnection costs are … imposed on an interconnecting party to recover the transmission system upgrades necessary for PJM to allow the interconnection.").

102. NYPA argues that MTFs pay "but-for" charges and RTEP charges "for the same service, namely FTWRs." NYPA RB at 29. *See also* NYPA IB at 47-48. However, the two types of charges are for services that affect the MTF's use of FTWRs in different ways. The MTF pays "but-for" charges so that the system can accommodate the FTWRs upon interconnection and pays RTEP charges so that the system can serve the FTWRs reliably and economically over the life of the MTF. As with interconnection and transmission, interconnection and assurance of reliable service over the life of the facility are, if not separate services, at least separate components of the same service. Like interconnection and transmission, payment for the first component does not exempt the customer from having to pay for the second. *See Tennessee*, 90 FERC ¶ 61,238 at 61,761.

103. Commission precedent treats "but-for" charges and RTEP charges as distinctly separate. In *Neptune Reg'l Transmission Sys., L.L.C. v. PJM Interconnection, L.L.C.*, 110 FERC ¶ 61,098, *reh'g denied*, 111 FERC ¶ 61,455 (2005) (collectively, "*Neptune*"), which addressed Neptune's interconnection with PJM, the Commission recognized a distinction between "but-for" upgrades and RTEP upgrades, and indicated that paying for the first category of upgrade did not exempt MTFs from having to pay the second category. The Order on Complaint held, as relevant here, that Neptune would not be allocated "but-for" costs necessitated by generation retirements that occurred after Neptune's queue date. *Neptune*, 110 FERC ¶ 61,098 at P 24. The Order on rehearing clarified that such costs are "solely reliability upgrade costs" – *i.e.*, not "interconnection" costs – that should be allocated under PJM's RTEP, first to TOs, and then to transmission customers through TECs. *Neptune*, 111 FERC ¶ 61,455 at PP 24, 25. Although the Commission determined "it would be premature … to determine how those reliability costs … should be allocated among the zone affected," the Commission noted that the prospective payees within the zone included "the Neptune project or the load using Neptune's transmission line to buy power in PJM", *see id.* P 26, and cited provisions in PJM's OATT authorizing PJM to collect TECs from persons holding FTWRs. *See id.* n.19 (citing OATT § 1.13A; Attachment K, Appendix § 1.4).

104. A subsequent Order, issued September 15, 2005, not only reiterated that PJM's OATT permitted PJM to collect TECs from "a merchant transmission provider with [FTWRs] or the load that is using the [MTF]", 112 FERC ¶ 61,276, at P 13 & n.16 (2005), but also directed PJM to revise its OATT to make this authority more explicit. The Commission observed, "PJM's current tariff provisions recognize that merchant transmission providers with [FTWRs] and their customers would be responsible for a reasonable allocation of reliability upgrade costs incurred after queue date of the interconnection customer," but that "these provisions" were "dispersed throughout the tariff." *Id.* The Commission, therefore directed PJM "to file revisions to its tariff" to ensure the OATT was clear. *Id.*

105. On July 10, 2007, PJM filed revised tariff sheets adding the following language to OATT § 232.2, which expressly permitted allocation of RTEP costs to MTFs:

> A Transmission Interconnection Customer that is granted [FTWRs] … may be responsible for a reasonable allocation of transmission upgrade costs added to the [RTEP] after such Transmission Interconnection Customer's Queue Position is established….

"Amendment to Compliance Filing" Attachment B (Docket No. EL05-60-003 July 10, 2007). By Letter Order dated October 10, 2007, the Commission approved that revision. Letter Order (Docket No. EL05-60-001, *et al.*, October 10, 2007).

106. The hearing Orders in this proceeding are consistent with the foregoing approach. The first three Orders stated, "[M]erchant transmission providers and their customers should be allocated an appropriate share of network upgrades" and limited the inquiry as to whether PJM's methodology allocated the costs in a fair manner.[30]

107. NYPA argues that "appropriate share" could mean no share at all. NYPA RB at 7. However, the applicable dictionary definition of "share" is "a portion … contributed by an individual". *Webster's Third New International Dictionary* at 2087 (Merriam-Webster, Inc. 1986). Thus, the word "share" means something more than a nullity. Had the Commission wished to keep open the option of excusing MTFs from paying RTEP costs, it could easily have added words such as "if any" after the word "share." That the Commission did not do so indicates that it fully intended for MTFs to pay such costs.

108. NYPA also contends that the parties' reservation of the issue of whether PJM may allocate any RTEP costs to MTFs in the Partial Settlement represented an acknowledgment that the Commission had left that question open. NYPA RB at 7-8. However, in reserving the issue, the parties agreed only that the *Settlement* would not foreclose further litigation of the issue. The parties did not agree to waive invocation of Commission precedent in the course of that litigation.

---

[30] May 2006 Order, 115 FERC ¶ 61,261 at P 51; August 2006 Order, 116 FERC ¶ 61,118 at P 35; and October 2006 Order, 117 FERC ¶ 61,058 at P 48.

### C. Whether PJM's Proposal for Allocating the Costs of Such Upgrades to Merchant Transmission Should be Modified

#### 1. Crediting Merchant Transmission's Interconnection Upgrade Costs against RTEP Upgrade Costs[31]

109. NYPA argues that if PJM's alleged "and" pricing does not exempt an MTF from having to pay RTEP charges, the MTF should at least be able to credit part of its "but-for" payments against its RTEP costs. NYPA IB at 56-58. Under this proposal, presented by Dr. David W. DeRamus, a partner in the economic consulting firm of Bates White, LLC, MTFs would continue to pay "but-for" costs prior to interconnection and RTEP costs subsequently. However, but during interconnection, PJM would perform a DFAX analysis to determine the extent to which individual zones benefited from the "but-for" upgrades. *Id.* at 56. PJM would then assign the MTF a credit equal to the value of any benefit that the MTF's "but-for" upgrades provided to PJM zones, and the MTF could use the credit to offset RTEP costs allocated to it. *Id.* The "but-for" credits would also earn interest, be freely transferable, and have a "cash-out" option at a point in the future. *Id.* PJM, the PTO Group and Staff all oppose implementation of this remedy.

110. The proposed remedy is outside the scope of this litigation. First, it would require revisions to parts of PJM's OATT that govern interconnection, and are not at issue in this proceeding, such as insertion of DFAX studies to determine zonal benefits from "but-for" upgrades, and to quantify that benefit to determine the size of the credit. Second, it could undermine Commission interconnection policies that are also outside the scope of this proceeding. Specifically, awarding MTFs "but-for" credits could dilute the incentives the Commission has created to encourage interconnection customers to site their facilities efficiently. *See ODEC*, 119 FERC ¶ 61,052 at P 11.

111. In addition, the "and" pricing that the remedy purports to address does not exist, because PJM's proposal to allocate RTEP upgrade costs to MTFs while continuing to require them to pay for "but-for" upgrades does not constitute such pricing. PJM awards each MTF rights to incremental transmission capacity created by the network upgrades that the MTF provides as a part of the interconnection process. Ex. PJM-3 at 21:20-21:1; Tr. at 442:21-443:13; *see, e.g.*, OATT § 231. As discussed below, an independent transmission provider may charge an interconnection customer the full costs of "but-for" network upgrades and the full transmission rate without violating the policy against "and"

---

**31** This Section II.C.1 addresses the following issues listed in the Statement of Issues: Are the services giving rise to RTEP costs distinguishable from the services giving rise to interconnection costs (Issue # 1.a)? Is an MTF's payment for "but-for" upgrades an appropriate consideration in determining whether the MTF should pay RTEP costs (Issue # 1.b)? Should an MTFs receive RTEP cost credits for its "but-for" payments (Issue # 5)?

pricing, so long as the provider grants the customer ARRs and CTRs to the incremental capacity created by those upgrades. It follows that PJM also can charge MTFs for "but-for" upgrades and RTEP upgrades as long as it continues to grant MTFs ARRs and CTRs to the capacity created by the former.

112. The Commission addressed when a transmission provider must provide an interconnection customer transmission credits in Order No. 2003. The Order noted that the Commission had previously allowed a generator to credit the costs of their "but-for" network upgrades against the transmission rate charged to deliver its energy. The Commission deemed this crediting policy to be "consistent with the Commission's long-held policy of prohibiting 'and' pricing for transmission service," because the credits assured "that the Interconnection Customer [would] not be charged twice for the use of the Transmission System." Order No. 2003 at P 694. Specifically, providing "transmission service credits for the cost of Network Upgrades" assured "that the Interconnection Customer [would] not ultimately have to pay both incremental costs and an average embedded cost rate for the use of the Transmission System." *Id.*

113. However, the Commission realized that the foregoing approach was problematical: "[P]roviding transmission service credits to an Interconnection Customer for the cost of Network Upgrades that would not be needed but for the interconnection of the new Generating Facility mutes somewhat the Interconnection Customer's incentive to make an efficient siting decision that takes new transmission costs into account". Order No. 2003 at P 695. Moreover, the crediting policy "provide[d] the Interconnection Customer with what many view[ed] as an improper subsidy, particularly when the Interconnection Customer [chose] to sell its output off-system." *Id.*

114. Accordingly, the Commission concluded that "under the right circumstances, a well-designed and independently administered participant funding policy for Network Upgrades" would offer "the potential to provide more efficient price signals and a more equitable allocation of costs than the crediting approach." Order No. 2003 at P 695. For example, "the transmission pricing policies" permitted by the Commission "for an RTO … with locational pricing, in which the Interconnection Customer bears the cost of all facilities and upgrades that would not be needed but for the interconnection of the new Generating Facility and receives valuable transmission rights in return," would constitute "acceptable forms of participant funding." *Id.* "For a Transmission Provider, such as an RTO … that is an independent entity," the Commission would "allow flexibility regarding the interconnection pricing policy that each independent entity [chose] to adopt, subject to Commission approval." *Id.* at P 698. Moreover, the Commission would permit approved RTOs to charge generators for "but-for" network upgrades without crediting the generator's transmission rate "for a period of transition to the start of RTO … operations, not to exceed a year". *Id.* at P 699.

115. The Commission emphasized that independent transmission providers, such as RTOs, could implement a pricing arrangement that did not allow crediting in a way that did not constitute "and" pricing. Such transmission providers could provide interconnection customers "certain well-defined capacity rights" that would be "created by the upgrades." Order No. 2003 at P 700. Such rights might include "Firm Transmission Rights (FTRs) and Capacity Interconnection Rights (CIRs)" provided "to the Interconnection Customer in exchange for a 'but for' cost payment" because "such rights "are created by the Network Upgrades for which the Interconnection Customer pays, and … are well-defined, long-term and tradeable." *Id.* Where the independent transmission provider grants such rights, there is no "and" pricing "even if the Interconnection Customer … is also required to pay an embedded cost-based charge for transmission service". *Id.* Rather, the Commission reasoned:

> [T]he Interconnection Customer pays separate charges for separate services. It pays an access charge for transmission service that may involve an obligation to pay congestion charges, and in exchange for its 'but for' payment, it receives these well-defined capacity rights, which provide some protection from having to actually pay the congestion charges.

*Id.*

116. The Commission has found the provisions of PJM's OATT governing PJM's interconnection charges to generators to be consistent with Order No. 2003. In approving these provisions, which include but-for charges, rights to the incremental capacity created, but no transmission credits, the Commission cited (1) the lower likelihood that an RTO such as PJM would discriminate against interconnecting generators and (2) the incentives PJM's charges provided these customers to site their projects efficiently. 110 FERC ¶ 61,099, at P 8 (2005). The Commission has further held that PJM's charges to a generator for "but-for" upgrades, without corresponding transmission credits, do not constitute "and" pricing if the upgrades do not create any new capacity. *ODEC*, 119 FERC ¶ 61,052 at P 18. The Commission re-affirmed that where interconnection upgrades create additional capacity, PJM may require the generator to pay for "but-for basis" upgrades (without providing the generator transmission credits) as long as PJM granted the generator sufficient rights in the newly created capacity. *Id.*

117. The Commission has stated that because PJM applies "the same procedures, terms and conditions for merchant generation interconnection that it applies to interconnection of generation facilities, the principles of Order No. 2003" can "provide useful guidance" in applying the MTF provisions. *Neptune*, 110 FERC ¶ 61,098 at P 27. Those principles preclude a finding that PJM engages in "and" pricing by requiring MTFs to pay for "but-for" upgrades and RTEP upgrades. Just as the receipt of rights to incremental capacity compensates generators for their "but-for" payments, so receipt of ARRs and CTRs compensates MTFs for such payments. Just as the generators, which have been

compensated for their "but-for" payments, are not entitled to a credit against their cost-based, embedded transmission rate, so MTFs, having also been compensated for such payments, do not require a credit against their RTEP charges. Similarly, as discussed, permitting a crediting mechanism in the instant case may also diminish the MTF's incentive to site its facilities efficiently, and may force an "improper subsidy" of its interconnection costs, given its function as an exporter of power.

118. NYPA argues that in *ODEC*, the "Commission approved a limited exception to its 'higher of' policy for generator interconnection costs and OATT transmission rates because it found (i) PJM would be even-handed in its treatment of *all* generators, and (ii) the pricing 'applied in a non-discriminatory manner' to all interconnection customers." NYPA IB at 53 (quoting *ODEC*, 119 FERC ¶ 61,052 at P 12) (emphasis in brief). However, the Commission "has not approved an exception to its 'higher of' pricing in any other context." *Id.* NYPA contends that the Commission has not found that PJM "is sufficiently neutral" with respect to MTFs, and that "the unduly discriminatory and preferential proposal that PJM has sponsored in this proceeding … shows that PJM would treat non-PJM loads much less favorably than PJM's own loads." *Id.* at 53-54.

119. In fact, the Commission applied this so-called exception to MTFs when it approved PJM's Order No. 2003 compliance filing (*see* 108 FERC ¶ 61,025 (2004), *order on reh'g*, 110 FERC ¶ 61,099 (2005)), which included provisions governing MTF interconnections that differed from PJM's generation interconnection provisions in only minor ways. *See Neptune*, 110 FERC ¶ 61,098 at PP 26-27. The Orders approving the compliance filing do not reflect any opposition to those MTF provisions.

120. Moreover, NYPA has not shown how PJM fails to meet the test of independence that the Commission applied in *ODEC*. NYPA acknowledges that *ODEC* turned on a determination that PJM would treat interconnection customers the same. NYPA IB at 53. NYPA makes no claim that PJM will fail to do so here. Moreover, NYPA fails to back up its claim that PJM will prefer its internal load over MTF load. Indeed, NYPA's sole basis for this contention, that PJM has submitted an unduly discriminatory proposal in this case, barely warrants a response. As this Initial Decision has established, and will establish, PJM's proposal is discriminatory only at the margins. Indeed, of the clearest instances of discrimination—involving PJM's proposed application of the $5 million cost threshold for below-500 kV reliability upgrades—unduly favors MTFs. In any event, Order No. 2003 stated that an example of a non-independent transmission provider is "a Transmission Provider that owns generators or has Affiliates that own generators". Order No. 2003 at P 822. The Commission expressly distinguished such providers from RTOs—such as PJM—which do "not raise the same level of concern regarding undue discrimination." *Id.*

121. NYPA argues that even if PJM meets the requisite standard of independence, PJM's proposal fails to treat MTFs and other transmission customers comparably, and, thus, fails to satisfy "another prerequisite to the generator interconnection exception." NYPA IB at 54. According to NYPA, PJM's proposal fails the test of comparability, because "MT is the only category of customer required to both 'but for' FTWR costs and 'beneficiary pays' RTEP costs." *Id.* *See* RB at 32-33.

122. The foregoing argument appears more an assertion of undue discrimination than of "and" pricing. Indeed, the argument is reminiscent of NYPA's earlier argument based on "simple math"—although this time NYPA gets the math right, treating the "but-for" charges as a single type of charge and not claiming that MTFs must pay a transmission rate.

123. In any event, the argument fails. First, the argument is inaccurate, because firm PTPTS customers not only must pay "but-for" and RTEP charges, but, unlike MTFs, also must pay a firm transmission rate.[32] Second, NYPA once again fails to establish that MTFs and the alleged recipients of preferential treatment are similarly situated for purposes of the activity at issue. Generators do not pay RTEP costs because they do not withdraw power from the PJM region. LSEs do not pay for "but-for" upgrades because they do not interconnect with PJM. Moreover, LSEs must pay a firm transmission rate to have the transmission system planned for them, whereas MTFs do not. Ex. PTO-9 at 8:6-10:13. The exporters described in Ex. MTF-28 do not pay RTEP charges because they have no long-term right to withdraw power from the PJM region. Tr. at 326:5-9, 327:18-25, 328:21-329:1.

[32] NYPA claims that "in practice, as Dr. DeRamus points out, only generators and MT are likely to pay 'but for' interconnection costs." NYPA IB at 54 (citing Tr. at 515:3-24). What Dr. DeRamus actually said was, "[A]s a practical reality, I think the two types of entities that ["but-for" charges] would most likely be applied to would be merchant transmission and generation." Tr. at 515:22-24. In fact, PJM has required at least one applicant for PTPTS to fund "but-for" upgrades. *See* 116 FERC ¶ 61,228, at P 1 (2006).

### 2. Adjustments to DFAX that Account for Merchant Transmission's "Static Load"[33]

#### a. Preliminary Allegations of Undue Discrimination

124. The MTF Parties also assert that PJM has failed to meet its threshold burden to demonstrate that its proposal is not unduly discriminatory. MTF Parties IB at 17-18. The MTF Parties do not assert that PJM treats MTFs differently than other similarly situated entities, but that PJM treats MTFs the same as other entities that are not similarly situated.

125. The MTF Parties argue that MTFs differ from network load in a number of ways. First, the MTF Parties cite various operating differences between MTFs and network load, such as operating characteristics, the ability to inject energy, controllability and provision of voltage support. MTF Parties IB at 20, 34. The MTF Parties also note that PJM's OATT treats MTFs and network load as separate classes of customers and that the award of FTWRs does not provide MTFs with either the right of transmission service or equal priority with network load as to interruption or curtailment. *Id.*

126. The MTF Parties cite two cases in support of their theory that comparable treatment of dissimilar entities constitutes undue discrimination, *Alabama Elec. Coop. v. FERC*, 684 F.2d 20 (D.C. Cir. 1982) (*Alabama Electric*), and *Con Ed*. Though both cases acknowledged that in the "unusual case" charging the same rate to two differently situated customers could constitute discrimination (684 F.2d at 21; 165 F.3d at 1013), neither case stands for the proposition that *any* situational disparity will suffice. In *Con Ed*, the court noted that in *Alabama Electric*, "the critical question" upon which a finding of discrimination turned "was whether the difference" between the classes of customers made the uniform treatment of them "unreasonable or undue." 165 F.3d at 1013 (citing *Alabama Electric*, 684 F.2d at 28). In *Alabama Electric*, the court found that the uniform treatment appeared discriminatory because the pipeline was charging the same rate to two groups despite a disparity in the costs of serving each, and a corresponding disparity in the rates of return collected from each. 684 F.2d at 27-28. Accordingly, the court remanded the case to give the pipeline an opportunity to attempt to justify the disparity. *Id.* at 29-30. In *Con Ed*, the court held that the petitioner had failed to establish that the cited disparities between the two customers that paid the same rate warranted a reduction in the rate paid by one of them. 165 F.3d 1013-14.

---

[33] This Section C.1 addresses the following issues in the Statement of Issues: Should "headroom" be a factor in determining whether to allocate RTEP costs to MTFs (Issue # 1.c)? Should PJM adjust the allocation of RTEP costs to an MTF to reflect the nature of MTF load (Issue # 4)? Is MTF load properly characterized as network load, "static load," or something else (Issue # 4.a)? How, if at all, should PJM adjust the allocation of such costs (Issue # 4.b)?

127. PJM and others have also produced evidence showing that, for purposes of the RTEP process, MTFs and zones are similarly situated: MTF load and LSE load withdraw power from the system in exactly the same way, and PJM must plan its system to serve both kinds of load. *See* Ex. PJM-1 at 30:14-31:2. The foregoing disparities between MTFs and their counterparts cited by the MTF Parties do not negate PJM's showing. In fact, the MTF Parties do not attempt to explain why these disparities make the two groups so dissimilar as to warrant different treatment.

### b. Allegations Regarding Static Load

128. The MTF Parties and NYPA point out that an MTF's load is "static," and, therefore, different from network load. An MTF may not obtain or increase its FTWRs without first paying the entire cost of the necessary "but-for" upgrades. MTF Parties IB at 24-25; NYPA IB at 33. In contrast, PJM network load (the comparison drawn by the MTF Parties) and LSEs (the comparison drawn by NYPA) only pay for network upgrades allocated to their zones during the RTEP process. Nonetheless, PJM's proposal allocates costs to MTFs and network load/LSEs in the same manner. MTF Parties IB at 18, 24. Accordingly, under PJM's proposal, an MTF will pay not only for all upgrades necessitated by its additions of load to the system (in the form of FTWRs), but also for upgrades or portions thereof necessitated solely by the growth of network load. *Id*. at 24-25; NYPA IB at 32. In contrast, network load/LSEs will continue not to pay for any upgrades caused by MTFs. The MTF Parties argue that the foregoing disparities demonstrate that MTFs and network load comprise two separate sets of customers that PJM's proposal is unduly discriminatory because it treats these two different classes of customers the same. MTF Parties IB at 24 (citing *Alabama Electric* and *Con Ed*). NYPA's approach appears to be that PJM does not treat LSEs and MTFs comparably, because an MTF must pay for the "but-for" upgrades caused by its addition of load to the system as well as for RTEP upgrades attributable to the growth of loads served by LSEs. *See* NYPA IB at 32, 35-36.

### c. The Proposed Remedies

129. Whereas NYPA invokes the "static-load" issue as another ground for rejection of PJM's proposal, *see* NYPA IB at 32-36, the MTF Parties have put forward two remedies designed to address the alleged discrimination. The "with-without" analysis, described by Dr. Roy J. Shanker, an independent consultant, would allocate costs to MTFs for only those upgrades necessary to correct reliability violations revealed by supplemental power-flow tests projecting no load growth for the relevant time horizons. MTF Parties IB at 26 (quoting Ex. MTF-10 at 14:1-12). If these supplemental tests proved too cumbersome, PJM could run with-without tests on representative projects, calculate the ratio of "without" costs to "with" costs and use that ratio to reduce MTFs' remaining RTEP costs. *See* Ex. No. MTF-10 at 14:13-15:5.

130. Kenneth C. Lotterhos, a Director in the Energy Practice Group of Navigant Consulting, Inc., introduced the "static load" method. That approach would: (1) identify all RTEP projects allocating costs to each MTF; (2) undertake a supplemental analysis to determine the percentage of each applicable reliability violation that was due to system load growth; and (3) reduce the allocation to the MTF by that percentage. Ex. MTF-4 at 29:17-20, 30:9-15. Mr. Lotterhos describes one method of implementing this method in Exhibit MTF-6, and illustrates the implementation of the method in Exhibit MTF-9, which adjusts the allocations for 10 specific PJM RTEP upgrades. *See* Ex. MTF-4 at 30:1-6, 30:17-19, 32:7-33:8, Ex. MTF-6, Ex. MTF-9. PJM, the PTO Group and Staff oppose implementation of both of these remedies.

**d. Disposition**

131. For reasons discussed *supra*, NYPA is correct in comparing MTFs to LSEs, and the MTF Parties are wrong to compare MTFs to network load. Otherwise, of the basic theories of undue discrimination set forth by NYPA and the MTF Parties, it is the theory set forth by the latter that warrants the more serious consideration. The basis of NYPA's argument that PJM does not treat similarly situated entities comparably is that PJM forces MTFs to pay for "but-for" upgrades as well as RTEP upgrades, but requires LSEs to pay for only the latter upgrades. However, NYPA does not explain why, for purposes of the "but-for" upgrades, MTFs and LSEs are similarly situated, and in fact they are not. MTFs must interconnect with PJM, whereas LSEs do not. The MTF Parties' theory is more nuanced, and more problematic for PJM. The MTF Parties assert that prior to the RTEP process, an MTF must make payments for the upgrades necessitated by its addition to system load whereas an LSE does not. Therefore, for purposes of RTEP allocations, the two classes of customers are *not* similarly situated. It follows, argue the MTF Parties, PJM's RTEP proposal unduly discriminates against MTFs, because it treats them as if, like LSEs, they did not have to pay for the upgrades necessitated by their additions to system load prior to the RTEP process.

132. The arguments set forth by NYPA and the MTF Parties' fail for several reasons. First, the record supports neither the allegations of dissimilarity (set forth by the MTF Parties) nor the assertions of lack of comparability (set forth by NYPA): Prior to the RTEP process, MTFs do not pay for all the upgrades caused by their receipt of FTWRs.

133. To address projected reliability issues occurring as far as 15 years in the future PJM's RTEP upgrades create "ATC" or headroom, capacity that is not required to serve firm transmission customers or existing FTWRs in the near term. Tr. at 670:14-25. When MTFs interconnect with the PJM system, they use this headroom in the sense that PJM must reserve this capacity to serve their FTWRs during the in-service year. *See* Ex. PTO-1 at 13:19-14:3; Ex. PTO-3 at 23:12-21. Construction of "but-for" upgrades only becomes necessary to the extent that PJM requires capacity in addition to ATC—*i.e.*, capacity that is already committed—to serve the FTWRs during that year. *See* Ex. PJM-3

at 13:12-19. The MTF must pay for the "but-for" upgrades but not for its use of ATC. *See* Tr. at 380:12-24. Indeed, MTFs may "interconnect, to the PJM system, for free to the extent that the existing capability of the transmission system, or headroom, allows." Ex. PJM-3 at 13:16-19.

134. The PJM headroom is there for a reason, and an MTF's cost-free use of that headroom inevitably will accelerate the need for RTEP upgrades after the MTF's in-service year to restore the excess capacity. Ex. PTO-6 at 6:8-10. As Mr. Herling explained, interconnecting MTFs "utilize substantial amounts of existing transmission capability that has been placed in service with the expectation of its availability for network load." Ex. PJM-3 at 18:4-6. "As a result" of this use of headroom, PJM must direct construction of additional RTEP upgrades "in order to replace the headroom that previously existed." *Id*. at 18:6-9. Put another way, MTFs' use "of existing headroom accelerates the identification of future transmission upgrades to satisfy the aggregate of system needs, including load growth. Some of these upgrades would not have been needed for some number of years, had the headroom still been available." *Id.* at 15:1-5. Thus, MTFs contribute to the need for RTEP upgrades in the same way as the growth of network load: Both use headroom. Like LSEs that serve zonal load, MTFs do not pay for those upgrades prior to the RTEP process.[34]

135. NYPA and the MTF Parties point out that PJM has not quantified the extent to which MTFs' use of existing headroom creates a need for RTEP upgrades. NYPA IB at 43-44, RB at 26; MTF Parties RB at 7. However, the record shows the impact of Neptune's use of headroom in this case to have been significant. Mr. Herling testified:

> The concept of the utilization of headroom is illustrated clearly when comparing the Neptune project to [HTP's] (Queue No. O66) interconnection project, which is a similar merchant transmission project in the same vicinity. Neptune's network upgrade costs were estimated at approximately $9 million. The interconnection costs for the HTP project were initially estimated at approximately $450 million. The difference in upgrade costs for these similar projects is largely a result of the substantially greater amount of headroom available to, and used by, the earlier Neptune project.

[34] To be sure, the "but-for" network upgrades that MTFs must pay for in order to receive their FTWRs may also create ATC. However, because MTFs are only required to pay for upgrades necessary to accommodate their FTWRs during the in-service year (*see* Ex. PTO-7 at 5:4-11; Ex. S-5 at 17:11-18:2; Tr. at 587:10-16), the headroom created by such upgrades is likely to be substantially less than that created by RTEP upgrades, which anticipate system needs up to 15 years in the future. *See* Tr. at 670:8-11.

Ex. PJM-3 at 14:12-19. As discussed, Neptune has received 685 MW of FTWRs, whereas HTP has requested 670 MW of FTWRs. MTF-4 at 6:20-22; Ex. S-5 at 22:13-16. The fact that the proposed HTP MTF is slightly smaller than the Neptune facility provides powerful corroboration for Mr. Herling's conclusion that this disparity was largely due to the Neptune MTF's use of headroom. Thus, for PJM to restore the excess capacity it deems necessary for the long-term reliability of its system, it may have to accelerate RTEP upgrades costing hundreds of millions of dollars.[35]

136. Nor is PJM's experience with Neptune likely to be an isolated incident. As discussed, Commission interconnection policies encourage interconnection customers to site their projects efficiently, *i.e.*, interconnect their facilities at a point on the transmission system where plenty of headroom exists. *See, e.g.*, *ODEC*, 119 FERC ¶ 61,052 at P 11. Accordingly, MTFs are likely to continue to make appreciable contributions to the need for network upgrades for which they will not pay prior to the RTEP process.

137. NYPA claims that MTFs pay for the headroom they use. NYPA IB at 44, RB at 22-24. *See also* MTF Parties RB at 7. NYPA contends that an MTF makes such payments when it pays for use of the entire PJM transmission system, which necessarily includes the excess transmission capacity that is headroom. This occurs when the MTF pays: (1) but-for upgrade costs, which, being akin to an incremental transmission rate, constitute a payment for use of the entire transmission system; and (2) the OATT border, which also constitutes a payment for use of the entire system. NYPA IB at 44.

138. NYPA's claim is inaccurate. First, MTFs do not pay for the use of headroom when they interconnect with the PJM system or when they increase their FTWRs. *See* Ex. PTO-3 at 23:10-21. The MTF pays only for such "but-for" upgrades that be necessary after it has absorbed the system's ATC. *See* Ex. PJM-3 at 13:16-19. Moreover, the Commission has rejected NYPA's claim that payment for such "but-for" upgrades is the equivalent to paying for use of the entire transmission system through an incremental rate. In Order No. 2003, the Commission referred to an independent transmission provider's requirement that the generator pay for "but-for" upgrades as a "direct assignment" of such costs. *See* Order No. 2003-A at P 587. Moreover, the Commission stated, "We emphasize … that an incremental rate is not the same as direct assignment; the Interconnection Customer that pays an incremental rate is paying for Transmission Service over the entire Transmission System." *Id.* P 586. The clear implication is that

[35] NYPA claims that HTP's projected costs merely show that *HTP* rather than the PJM TOs will pay for any MTF use of headroom in this case. NYPA IB at 43-44. This argument ignores that even if the HTP project goes forward, HTP will not be recreating PJM's lost headroom but instead paying for upgrades necessary to serve its FTWRs. PJM will still have to recreate that headroom that it deems necessary to serve its load over a 15-year time horizon.

the interconnection customer that pays by direct assignment (*i.e.*, pays for "but-for" upgrades) is *not* paying for transmission service over the entire system. The Commission further rejected the contention NYPA now makes by ruling that an independent transmission provider can charge an interconnection customer (1) the full costs of "but-for" upgrades and (2) a rolled-in transmission rate. *See id.* PP 691-92; Order No. 2003 at P 700. *Accord, ODEC*, 119 FERC ¶ 61,052 at P 18. If payment for "but-for" upgrades was equivalent to payment of an incremental rate, the transmission provider's imposition of both charges would have violated the Commission's prohibition against "and" pricing.

139. The record also contradicts NYPA's claim that MTFs pay for use of headroom through the OATT rate. LIPA has so far used non-firm transmission (Ex. MTF-4 at 15:16-16:2; Tr. at 437:22-438:9, 494:5-22), which recovers "only a small portion" of the embedded costs of the transmission system, *see* Ex. PTO-11 at 8:3-6, to withdraw energy from PJM, yet was able to save its customers $20 million in the summer of 2007. Ex. PTO-1 at 5:13-20; Ex. PTO-2. Moreover, the record shows that the MTFs that are parties in this case can provide benefits to their New York customers by simply requesting UDRs, and not using (or paying for) any transmission whatsoever. Ex. PTO-9 at 12:12-16:11. In contrast, LSEs must pay a firm transmission rate that includes their allocated share of the system's embedded costs. *Id.* at 8:6-7, 10:9-13.

140. NYPA's claim that it pays for use of headroom is also irrelevant. The issue is not the extent to which the parties pay for use of headroom but when the parties pay for RTEP upgrades necessitated by the use of headroom to serve their loads. MTFs, like LSEs, do not pay for the upgrades that such use of headroom eventually necessitates except through the RTEP process. For this reason, it is inaccurate to claim that PJM's proposal forces MTFs to pay for RTEP upgrades caused solely by network load growth. Rather, both LSEs and MTFs pay for RTEP upgrades necessitated by the use of headroom to serve each group's load. The fact LSEs pay for use of headroom through their NITS rate has not prevented NYPA and the MTF Parties from claiming that PJM treats them in a preferential manner by allocating MTFs RTEP costs attributable solely to network load growth. Similarly, the claim that MTFs pay for headroom, even if true, would not invalidate the response that PJM does not treat LSEs preferentially, because MTFs' use of headroom also necessitates RTEP upgrades for which MTFs do not pay prior to the RTEP process.

141. NYPA further argues that the Commission requires transmission providers to permit new transmission customers to use available ATC. NYPA IB at 41-42, RB at 24. However, the point here is not that an MTF's use of existing ATC is improper, but that such use, like network load growth, causes the need for future RTEP upgrades.

142. Finally, NYPA argues that "charging the same customer multiple times for ATC suppresses use of the transmission system" and discourages "transmission investment" in violation of various Commission and congressional policies. NYPA IB at 45. The

argument lacks a factual basis, because PJM's proposal does not overcharge MTFs for use of headroom. PJM proposes to charge MTFs and LSEs equally for the new headroom created by RTEP upgrades. Moreover, whereas PJM charges LSEs for their use of headroom through PJM's NITS rate (*see* Ex. PTO-9 at 10:9-13), PJM does not charge MTFs for headroom reserved on their behalf. *See* Tr. at 380:12-24; Ex. PJM-3 at 13:16-19).[36]

143. Even if one puts headroom aside, LSEs and MTFs still are similarly situated for purposes of RTEP costs, and PJM's proposal treats the two classes of customers comparably. As discussed, the MTF Parties and NYPA claim that PJM's proposal compels MTFs to pay for upgrades caused by other zones' load growth. However, the DFAX methodology approved under the Partial Settlement will necessarily result in some zones paying RTEP upgrade costs that other zones' load growth causes. There is substantial disparity between the growth rates of different zones in PJM's system. For example, PJM's 2006 projected growth for each zone's peak summer load over the next 10 years ranged from 0.7% to 2.4%. Tr. at 443:24-444:6. When given these projections in a hypothetical question that assumed Duquesne Lighting Company to be the company with the projected 0.7% load growth, Dr. Shanker testified that with 0.7% load growth, Duquesne would be "disproportionately penalized" under the Settlement in comparison to a zone with 2.4% load growth. *See id.* at 439:25-440:11. Put another way, Dr. Shanker acknowledged that if the foregoing projections proved accurate, the Settlement would require Duquesne to pay for load-growth related upgrades that it did not cause, just as PJM's proposal would require an MTF to pay for load-growth related upgrades that it did not cause. The fact that PJM assigns some of its zones responsibility for upgrade costs caused solely by load growth in other zones refutes NYPA's claim that PJM's proposal prefers LSEs over MTFs by allocating the latter upgrade costs caused solely by zonal load growth. Moreover, an MTF's static load inevitably will cause its share of PJM load to decrease, and as that share decreases, the MTF's share of RTEP allocations will also decrease. *See* Ex. PTO-9 at 23:6-18. Indeed, it would be inequitable to make a load-growth adjustment for MTFs but not for zones with low projected load growth.

144. In addition, as explained in Paragraph 64 *supra*, an irrebuttable presumption exists, for purposes of this proceeding, that the DFAX methodology described in the Partial Settlement allocates RTEP costs to zones in a just, reasonable and not unduly discriminatory manner. Accordingly, if it is not unduly discriminatory for PJM to assign Zone A RTEP costs caused solely by the by growth of load in Zone B, then it is not

---

[36] NYPA also argues that the headroom arguments advanced by PJM and the PTO Group suggest, at most, that PJM may want to take absorption of headroom into account in pricing its interconnection charges to MTFs. NYPA RB at 27-28. Such a remedy is outside the scope of this proceeding and ignores the central point—that an MTF's FTWRs, like an LSE's load, absorbs headroom and creates an eventual need for RTEP upgrades.

unduly discriminatory to allocate RTEP costs caused solely by zonal load growth to an MTF.

145. NYPA claims that PJM's allocation of upgrade costs to zones in a manner allegedly disproportionate to their load growth does not warrant consideration. First, NYPA argues that the allocation is a "product of the Partial Settlement" and that the Settlement, in turn, is a result of compromises and trade-offs and, by its terms, cannot be used as a precedent for any purpose. NYPA IB at 33.

146. This argument fails for two reasons. First, PJM is proposing a methodology for allocating RTEP costs to MTFs that is comparable to the methodology upon which the parties have agreed to use in allocating such costs to zones. Even if we assume that the proposed methodology requires an MTF to pay for upgrades caused solely by network load growth, the fact remains that the agreed-upon methodology also requires a zone with low load growth to pay for upgrades caused solely by the load growth of other zones. Thus, how the parties arrived at their agreed-upon methodology for allocating costs to zones is not relevant; what is relevant is that that agreed-upon methodology is comparable to the methodology proposed for MTFs. Put another way (and using the MTF Parties' analytical framework), MTFs and low load-growth zones are similarly situated for purposes of RTEP allocations, so treating them comparably is appropriate.

147. Moreover, whatever NYPA may say about the Partial Settlement's precedential effect, the Commission's approval of the Settlement provides an irrebuttable presumption in this proceeding that the DFAX procedures described therein are just, reasonable and not unduly discriminatory, for allocating RTEP costs to zones. *See* P 64 *supra*.[37]

148. A third, separate ground for rejecting the adjustments proposed by the MTF Parties is that even if LSE load growth does create a need for RTEP upgrades that MTF load does not, that dissimilarity is not of sufficient importance to make PJM's uniform treatment of the two entities "unreasonable or undue." *See Con Ed*, 165 F.3d at 1013. The Commission did not require PJM to allocate costs of RTEP upgrades to the entities directly responsible for RTEP costs, but rather to those entities benefiting from the upgrades. This action was entirely consistent with Commission precedent. *See supra* P 59, and cases cited therein.

149. Whereas, the MTF Parties and NYPA contend that PJM's proposal fails to measure (in the words of *California ISO*, *supra* Paragraph 59) an MTF's direct responsibility for imposition of the cost burden, Opinion No. 494 and the Rehearing Order made it clear that PJM was to measure the extent to which zones and MTF benefitted from the cost

[37] NYPA claims that it is unfair "to apply a settlement term to a party that did not agree to the settlement", NYPA RB at 18, apparently overlooking that it signed the Settlement. *See* Ex. PJM-2 at 101.

incurrence. Opinion No. 494, 119 FERC ¶ 61,063 at PP 72, 75; 119 FERC ¶ 61,067 at PP 16-18, 21-23. As long as PJM's proposal reasonably allocates upgrade costs to upgrade beneficiaries, PJM's failure to allocate such costs to those causing the system changes necessitating the upgrade does not make the proposal unjust, unreasonable or unduly discriminatory.

150. Accordingly, both proposed adjustments are rejected on the ground that the alleged inequity that they are designed to redress—PJM's failure to make special accommodations for MTFs' static load—is not unjust, unreasonable or unduly discriminatory.

151. The record also shows that both remedies would place appreciable burdens on PJM. Mr. Herling admitted that it theoretically would be possible to perform a "with-without" analysis for an individual upgrade, but added that such an analysis would involve a "huge amount of work", which PJM currently lacks the resources to undertake. Tr. at 324:16-325:1. Mr. Herling's filed rebuttal testimony further describes the impracticality of attempting to perform the analysis:

> [I]mplementing Dr. Shanker's with/without proposal would be no simple matter. … The evaluation of reliability criteria and the identification of required network upgrades take[] months. [Dr.] Shanker would have PJM do this work twice and identify an entire set of network upgrades that are, in fact, not required, solely to quantify the effect of load growth. The amount of effort this proposal would entail for a handful of [MTFs] substantially could increase the workload of the PJM planning staff and transmission owners….
>
> [In addition], it is not at all clear how the proposed analyses would be performed. Presumably, once there are a number of merchant transmission projects connected to the system, all of different vintages, multiple "without" scenarios would have to be studied with associated network upgrades identified in order to extract the load growth during the tenure of each merchant project. If a merchant were to later increase its withdrawal rights, potentially utilizing new headroom for which it had not paid, the simulations would get yet more complex.

Ex. PJM-3 at 20:11-21:5.

152. Dr. Shanker's alternative suggestion of extrapolating MTFs' shares of RTEP costs through an analysis of "representative" upgrades appears no more workable. Mr. Herling testified that this approach "would not be any less cumbersome" than applying the "with-without" analysis across the board. Ex. PJM-3 at 21:5-7. It also seems clear on its face that the process of identifying "representative" upgrades would be at best an endless headache and at worst an invitation to litigation. Given the availability of the "static

load" approach, discussed *infra*, the "with-without" method is rejected on the additional ground that it would be unduly burdensome.

153. Having rejected the "static load" adjustment on the ground that the undue discrimination that the adjustment purports to remedy does not exist, this Initial Decision does not find the adjustment to be unworkable or unduly burdensome. The methodology described by Mr. Lotterhos accurately culls out RTEP upgrade costs attributable to zonal load growth. Indeed, Mr. Lotterhos' rebuttal testimony thoroughly refuted Staff's attempt—the only attempt made in this regard—to discredit the accuracy and validity of his calculations, and no party, including Staff, further challenged the validity of Mr. Lotterhos' calculations on cross-examination. *Compare* Ex. S-8 at 11:2-19:5 *with* Ex. MTF-12 at 8:11-15:9. *See* Tr. at 461:16-495:18.

154. However, though the burden of implementing the "static load" adjustments would be less than that of implementing the "with-without" calculations, it would still be considerable. Mr. Herling plausibly estimated that such implementation would "add at least three or four more weeks of workload for PJM and the transmission owners. Ex. PJM-3 at 19:8-11. Therefore, any implementation of the "static load" method should include additional procedures providing for pass-through to MTFs of all costs associated with the implementation of that method.

### 3. Crediting Zonal Load Growth against Merchant Transmission's Interconnection Expansion Costs[38]

155. Staff witness Dr. David Savitski would require PJM to provide each MTF a "load-growth credit," measured in MW, against the "but-for" charges that the MTF would otherwise pay for increasing the FTWRs at the site of its facility. The load-growth credit would correlate with network load growth on PJM's system, or perhaps in the MTF's area. Ex. No. S-1 at 18. The MTF could expand the FTWRs at its existing location to the extent of its MW credits without having to pay for "but-for" upgrades necessitated by such expansion. *Id*. at 18-19. PJM LSEs would absorb the credited amount. *See* Tr. at 711:9-712:6. Staff proposes this remedy because "there should be some recognition" of the fact that "a merchant cannot increase its load without paying interconnection costs for the increment of increased load, yet must also pay for the load-growth portions of RTEP costs". Staff IB at 62. PJM and the PTO Group oppose implementation of this remedy, and NYPA supports it solely as a supplement to, rather than a replacement of, Dr. DeRamus' crediting remedy.

---

**38** This Section II.C.2 addresses Issue # 6 (whether MTFs should get a future interconnection cost credit for RTEP costs paid) in the Statement of Issues.

156. The proposed remedy fails for two reasons. First, like NYPA's proposed crediting remedy, Staff's remedy would require revisions to provisions of PJM's OATT, and would affect Commission policies, that are not at issue in this proceeding. Specifically, adoption of the proposal would require incorporation of the interconnection-credit into OATT Sections IV and/or VI, and could undermine Commission interconnection policies by encouraging MTFs to pick inefficient sites for small projects, and then expand their projects at minimal cost. *See ODEC*, 119 FERC ¶ 61,052 at PP 10-11. Second, the proposed remedy is unnecessary, because the flaw in PJM's proposal that the remedy purports to correct—PJM's alleged failure to account for MTFs' static loads—does not render PJM's proposal unjust, unreasonable or unduly discriminatory.

### 4. Exclusion of "Planned" Firm Transmission Withdrawal Rights from Calculations of Merchant Transmission Cost Responsibility[39]

#### a. PJM's Use of "Planned" Firm Transmission Withdrawal Rights

157. As discussed, the ISA specifies the year the MTF is to commence service, and the amount of FTWRs the MTF is to receive when service begins. PJM does not propose to allocate costs to an MTF for upgrades constructed to prevent reliability violations projected for years prior to the ISA in-service year. For upgrades constructed to prevent reliability violations projected to occur during the in-service year and subsequent years, PJM proposes to allocate costs to an MTF based on its planned FTWRs, or, if the MTF has received FTWRs, on its "existing" FTWRs. PJM IB at 20.

#### b. Hudson Transmission Partners' Objection

158. HTP contends that PJM should be required to base its RTEP allocations to MTFs exclusively on their existing FTWRs. HTP IB at 18. This proposal would preclude any RTEP allocations to MTFs until they went into service and received their FTWRs.

159. HTP asserts, through its witness Dr. Edward N. Krapels, Director of Financial Energy Services for Energy Security Analysis, Inc., that PJM's proposal to allocate RTEP costs to MTFs based on planned FTWRs is unjust, unreasonable and unduly discriminatory. MTFs do not receive FTWRs until certain preconditions are met; they do not have control over when one of these preconditions—completion of the necessary

---

[39] This Section II.C.4 addresses the following issues: What measure of projected system use should PJM utilize to allocate the MTF's share of below-500 kV reliability upgrades (Issue # 3.a)? Should PJM allocate RTEP costs to MTFs before they commence service (Issue # 7.a)? Should MTFs pay for RTEP costs before they commence service (Issue #7.b)? How should TOs treat any such deferred costs (Issue # 7.c)?

"but-for" upgrades—will be met; and they have no right to use—and benefit from—PJM's system prior to receipt of the FTWRs. HTP IB at 4-16 (citing Ex. HTP-1 at 3:9-5:14, 6:11-13; Ex. HTP-2 at 4:16-18, 11:10-11; 12:3-8). HTP contends that PJM's proposal to allocate RTEP costs to MTFs before they can use the system is: (1) unjust and unreasonable, because at the time of allocation they cannot benefit from the system; and (2) unduly discriminatory, because at the time of allocation, all LSEs that are allocated RTEP costs are using the system. *Id.* at 17. HTP also points out that requiring an MTF to pay RTEP costs prior to going into service could threaten its financial viability and discourage potential investors. *Id.* at 24-25 (citing Ex. HTP-1 at 9:8-10:10). In addition to PJM, the PTO Group and Staff oppose HTP's approach.

### c. Staff's Proposed Adjustment

160. Staff witness Jonathan Siems proposes an adjustment to PJM's proposal. Under Mr. Siems' proposal, PJM would continue to allocate RTEP costs to MTFs based on their planned or existing FTWRs, but would not begin to collect payments of the allocated costs until the MTF actually received FTWRs. Prior to such receipt, the TO constructing the RTEP upgrade would enter the MTF's allocated charges in the TO's Allowance for Funds Used during Construction (AFUDC) account. Only when the MTF received FTWRs, would the TO began recovering costs from that entity. *See* Ex. S-3 at 11:9-12:12.

### d. Disposition

161. HTP's arguments focus on the wrong year. HTP complains that an MTF not yet in service cannot benefit from upgrades for which it is assigned cost responsibility during the year in which the assignment takes place (allocation year). PJM projects that the MTF will benefit from the upgrade during the year of the projected reliability violation necessitating the upgrades, *i.e.*, the violation year. It is irrelevant that the MTF cannot benefit from the upgrade during the allocation year; no system user benefits from the upgrade at that time, because the upgrade does not exist.

162. PJM allocates costs to MTFs based on their planned FTWRs for those violation years that coincide with or follow the in-service year specified in the MTF's ISA. Thus, whether PJM's proposal is just and reasonable depends on whether an MTF's planned FTWRs constitute a reasonable projection of its use of the system during its in-service year and thereafter. Similarly, whether the proposal is unduly discriminatory turns on whether the proposed use of planned FTWRs to project an MTF's use of the PJM system during the in-service year and thereafter is comparable to the use of projected network load to forecast LSEs' use of the system in those years.

163. In answering these questions, it is critical that in the planning stage, PJM uses an MTF's planned FTWRs to project its use of the system during the in-service year and thereafter, just as PJM proposes to do in the allocation stage.[40] No party questions the validity of these projections for planning purposes. There is no reason that the projection would be accurate for planning purposes, but inaccurate for allocation purposes. Accordingly, PJM's assumption that an MTF will use the full complement of FTWRs specified in its ISA during the in-service year and thereafter is just and reasonable.

164. Similarly, PJM's proposed use of planned FTWRs to allocate costs to MTFs parallels PJM's use of projected load to allocate costs to zones. PJM uses a zone's projected load to project the zone's use of the system in both the planning and allocation stages. Thus, in allocating costs to zones, PJM uses the same projections of zonal load that it uses in the planning process, and in allocating costs to MTFs, PJM uses the same planned FTWRs that it uses in the planning process. For this reason, PJM's use of planned FTWRs is not unduly discriminatory.

165. Because the DFAX methodology at issue here allocates below-500 kV reliability costs on a one-time basis, excluding pre-operational MTFs from the allocation process would permanently exempt those MTFs from paying for upgrades that would not have been built but-for the need to serve the MTF's planned FTWRs and that will benefit the MTFs and their load. *See* Ex. S-3 at 10-15. For example, assume that in 2009, after PJM has amended its proposal in accordance with HTP's wishes, an MTF signs an ISA providing for the award of FTWRs totaling 650 MW, and projecting 2014 as its in-service date. The MTF pays for the "but-for" upgrades deemed necessary for the system to accommodate the MTF's FTWRs by 2014, and PJM includes the FTWRs in its RTEP planning for 2014 and thereafter. Then, still during 2009, PJM detects that a major reliability violation will occur during 2016 that would not have occurred but-for inclusion of the MTF's FTWRs in the planning process. To prevent the violation, PJM will have to construct a 345 kV upgrade that PJM's DFAX studies show will primarily benefit the MTF. Because PJM will allocate costs for this upgrade during 2009, prior to the year the

[40] Ex. PJM-1 at 32:19-22 (if an MTF "has an executed [ISA] with PJM that specifies a certain level of planned [FTWRs] for the year under study, then PJM must plan the transmission system to accommodate those withdrawal rights"). *See* Ex. S-3 at 10:14-17 ("PJM must include the FTWRs of an MTF in its planning for the requested and agreed upon in-service year. These FTWRs are an integral part of the planning process and will contribute to total modeled loads on facilities throughout the PJM system as that system is evaluated for any reliability criteria violations."). *See also* Ex. PTO-3 at 19:11-14 ("The transmission system must be planned, designed, constructed, operated and maintained to accommodate all of the firm withdrawal rights held by that merchant transmission entity.").

MTF goes into service and receives its FTWRs, the MTF will never have to pay the TEC for this upgrade and other users will be required to make up the difference.[41]

166. NYPA argues that PJM should allocate RTEP costs to MTFs based on their actual projected load, rather than their FTWRs, because PJM allocates costs to zones based on projected load. NYPA IB at 67-68, RB at 39. However, as discussed, PJM uses MTFs' FTWRs for planning purposes, just as it uses zones' projected loads for such purposes. NYPA does not assert that PJM should use some other measure of MTF load during the planning stage. Accordingly, given that PJM plans its system to serve an MTF's FTWRs, just as it plans its system to serve a zone's projected load, PJM properly allocates costs to MTFs based on their FTWRs, just as it properly allocates costs to zones based on their projected loads.

167. Though it is necessary for PJM to allocate costs to MTFs based on planned FTWRs, the fact remains that if an MTF is late going into service, the MTF may have to pay for upgrades before it begins to benefit from them. Moreover, as HTP points out, the MTF will not have control over when it commences service, because PJM TOs will construct any necessary interconnection upgrades.

168. Accordingly, PJM shall develop the following mechanism for both reliability upgrades and economic upgrades. If PJM allocates the costs of an upgrade to an MTF based on its planned FTWRs, the constructing TO shall enter RTEP charges allocated to the MTF in the TO's AFUDC account, and PJM shall not collect revenues for the upgrade from the MTF until it goes into service. PJM may collect TECs from the MTF prior to its going into service only if PJM (or the constructing TO) can demonstrate that the MTF is at fault for the delayed in-service date. If the MTF receives fewer FTWRs than the number specified in the ISA, PJM shall base its collections on the actual number of FTWRs awarded. PJM may collect TECs from the MTF based on more than its actual FTWRs only to the extent that PJM or the TO can demonstrate that the MTF is responsible for receiving fewer FTWRs than are specified in the ISA.

### 5. Use of Actual Merchant Transmission Load to Allocate Costs of Economic Upgrades[42]

169. The Partial Settlement addresses assignment of cost responsibility for two types of economic upgrades to zones: (1) modifications of previously scheduled reliability

---

[41] Because the violation will occur well after the in-service year, the costs of the upgrade would not comprise part of the MTF's "but-for" charges at interconnection. *See* Ex. PTO-7 at 5:4-11; Ex. S-5 at 17:11-18:2; Tr. at 506:14-23, 587:10-16, 670:8-11, 671:2-12.

[42] This Section C.5 addresses the following issue: What measure of system use should PJM use to allocate MTFs economic upgrade costs (Issue # 3.c)?

upgrades; and (2) accelerations of the in-service date of such upgrades. Ex. PJM-2 at 83-86 (§§ 31, 32). PJM's proposal seeks to assign cost responsibility for the same two types of economic upgrades to MTFs. Each type of upgrade raises distinctly different issues.

**a. Modification Upgrades**

170. The Partial Settlement prescribes use of the same DFAX methodology to allocate costs of "modification" upgrades to zones that it prescribes for allocating costs of reliability upgrades to zones. Ex. PJM-2 at 86 (§ 32). Similarly, PJM proposes to use the same DFAX methodology to allocate costs of "modification" upgrades to MTFs that it uses to allocate costs of reliability upgrades to MTFs. *Id. See also id.* at 72-82 (§§ 16-27) (setting out the cost allocations in § IV.D. of the Settlement).

171. For modification projects, Staff would "remove the estimated cost of the originally planned facility from the total project and allocate that cost using the same DFAX methodology it would use to allocate a reliability project of the comparable voltage." Staff IB at 45 (footnote omitted). Staff would then allocate the remaining costs of the upgrade—those costs attributable to the planned modification of the facility—among the zones and MTFs with positive DFAX values based on an annual calculation that basically replaced the FTWRs and projected loads with actual energy usage for a previous 12-month period. *Id.* at 47-48.[43]

172. Staff argues that once the DFAX methodology has identified the zones and MTFs that will benefit from an economic upgrade, the best measurement of the degree to which each beneficiary will actually benefit from that upgrade is an annual calculation that replaces projections with actual energy flows. Staff IB at 48. The MTF Parties essentially concur. MTF Parties IB at 32.

173. The Partial Settlement precludes adoption of Staff's proposal with respect to zones. The Settlement requires use of the DFAX method to allocate costs of modification projects to zones. Ex. PJM-2 at 86 (§ 32). Staff proposes to apply its methodology to both zones and MTFs; Staff has not attempted to justify applying its method solely to MTFs. *See* Staff IB at 47-48.

174. Applying Staff's proposed methodology solely to MTFs would not be fair to LSEs. Any prudent system planner will err on the side of over-projecting the demands on the system; thus, PJM's projection of future zonal load growth is probably going to be higher than actual zonal load growth, just as PJM's assumption that an MTF will fully use its FTWRs may overstate the MTF's actual use of the system. To adjust these necessarily

[43] Staff would multiply the actual energy usage of the zone or MTF by its DFAX to calculate the energy that flowed to the zone or MTF across the constrained facility. Staff IB at 48.

overstated projections for MTFs, but not for zones inevitably will result in a DFAX calculation that understates the percentage of the constrained facility used by the MTF.

175. Staff's proposal also appears to impose burdens that outweigh its benefits. To require PJM and the TOs to conduct annual recalculations to reallocate costs of only a portion—the modified portion—of an upgrade would be to impose a significant and unjustifiable administrative burden. *See* Ex. PJM-3 at 28:20-29:15. Under such circumstances, PJM might reasonably conclude that the truly "economic" course of action would have been not to modify the upgrade in the first place.

176. Because PJM relies on the DFAX method to allocate costs of modification upgrades to zones, its use of that method to allocate such costs to MTFs is just, reasonable and not unduly discriminatory.

**b. Acceleration Upgrades**

177. The Partial Settlement directs implementation of two different analyses prior to allocating "acceleration" upgrade costs to PJM zones. The first is the same DFAX analysis used to assign cost responsibility for modification and reliability upgrades. The second projects "expected economic benefits from reduced Locational Marginal Prices ('LMP Benefits Methodology') over the period that the reliability-based upgrade is to be accelerated." Ex. PJM-2 at 84. "The LMP Benefit to a transmission zone" is "deemed to be equal to the reduction in [LMP] payments made by [LSEs] as a result of the Acceleration Project" and "LMP Benefits so calculated" are "converted into percentage cost responsibility assignments for the expected transmission zones." *Id.* If the DFAX analysis and LMP Benefits Methodology produce a cost-responsibility differential of 10% or more for any zone, PJM will use the LMP method to allocate the upgrade costs among zones during the "acceleration period"—the period between the accelerated service date and the originally scheduled in-service date. For all other periods, the Settlement allocates costs based on the DFAX analysis.

178. PJM proposes to allocate the costs of acceleration upgrades to MTFs using the same DFAX methodology that PJM proposes to allocate them costs of reliability and modification upgrades. PJM does not propose to apply the LMP Benefits Methodology to MTFs. Rather, if that methodology is applied to the zones, their allocations will be "proportionately adjusted" to "ensure that the total allocation for any facility equals … 100%[]." Ex. PJM-2 at 85. To the extent PJM uses the DFAX methodology to allocate acceleration upgrade costs to zones, its use of that methodology also to allocate costs to MTFs is appropriate for the same reasons that PJM's use of the methodology to allocate costs of modification upgrades to MTFs is appropriate.

179. NYPA argues that when PJM uses the LMP Benefits Methodology to allocate costs to zones, it should base its allocations to MTFs on their "load factor". NYPA IB at 75. NYPA argues that such an adjustment is necessary to put PJM's allocations to LSEs and MTFs on the same basis. *Id.*, NYPA RB at 40.[44]

180. No party has justified PJM's proposal to utilize a DFAX methodology to allocate costs to MTFs when PJM uses an LMP Benefits Methodology to allocate costs to zones. Accordingly, when PJM's comparison of zonal DFAX and LMP Benefits percentages for zones dictates use of the latter methodology to allocate costs to zones, PJM must also use that methodology to allocate costs to its MTFs.[45]

### 6. Assignment of Cost Responsibility for Reliability Upgrades Estimated to Cost $5 Million or Less[46]

181. As discussed, the Partial Settlement allocates the costs of $5 million reliability upgrades to the zone in which the upgrade is to be located. Ex. PJM-2 at 70-71 (§ 14). PJM proposes to apply this rule to MTFs, PJM IB at 18, thereby exempting them from paying such costs. PJM argues that its approach avoids the time and expense of running DFAX studies for numerous small projects, the costs of which PJM would usually allocate to the constructing TO in any event. PJM IB at 18-19.

---

[44] It is not clear that the LMP Benefits Methodology contemplates use of an MTF's load factor, as NYPA contends. The Partial Settlement says the methodology "is intended to act as a proxy for *expected* economic benefits" from reduced LMP payments "over the period that the reliability-based upgrade *is to be accelerated*" thereby suggesting that the methodology is a forward-looking analysis that projects LMP savings during the acceleration period. Ex. PJM-2 at 84 (emphasis added). However, the Settlement does not specify how PJM is to make that projection, much less whether, and if so to what extent, PJM is to base it on past energy usage.

[45] Under the Partial Settlement, a 10% difference between the DFAX and LMP Benefits values for any zone, triggers use of the LMP Benefits Methodology to determine cost allocations. Ex. PJM-2 at 83-86 (§ 31). No party has asserted that a similar difference for an MTF should trigger use of that method. Accordingly, PJM shall only look at differences between the two sets of values for each zone in determining which methodology to use.

[46] This Section II.C.6 addresses the following issues: Should PJM assign MTFs cost responsibility for constructing $5 million reliability upgrades (Issue # 2.c)? What measure of system use should PJM use to allocate the costs such upgrades to MTFs (Issue # 3.d)?

182. The Partial Settlement's treatment of $5 million reliability upgrades creates a rough equity among PJM zones. Under the Settlement, the LSEs in the zone where such an upgrade is constructed may pay a larger share of the upgrade's cost than they would pay without the $5 million threshold; however, the threshold will allow them to avoid paying costs that they would otherwise have to pay for similarly sized upgrades in other zones.

183. In contrast, PJM's proposal allows MTFs to escape cost responsibility for *any* $5 million reliability upgrades. This is unfair, because MTFs benefit from some of these upgrades. *See* Ex. PTO-3 at 16-20. The proposal is particularly unfair to LSEs that operate in an MTF's host zone, because they are likely to bear the bulk of the upgrade costs that the MTF would avoid. *See* Ex. S-8 at 9:5-15, Table 1.

184. A separate DFAX analysis for each $5 million reliability upgrade would provide the most accurate match between cost responsibility and benefits received. However, requiring such calculations would put an undue burden on PJM. Mr. Herling has testified that the filings that comprise this proceeding include 229 such upgrades, over 70 of which are in the two MTF host zones, and that calculating MTF responsibility will require approximately one hour per upgrade. Ex. PJM-3 at 27:24-28:5. Thus, even if PJM were permitted to limit its calculations to host-zone upgrades, it would still have to expend almost two additional weeks of labor (assuming a 40-hour week) to sort out MTF cost responsibility. Mr. Herling further explains that this burden will increase as more MTFs interconnect with PJM's transmission system and that "it is reasonable to anticipate" annual construction of "scores of additional upgrades" in the future. *Id.* at 28:8-11.

185. Imposition of such a burden is unwarranted, because a better alternative is available. The NJRC proposes, through its witness, Robert M. Fagan, a Senior Associate with Synapse Energy Economics, Inc., that PJM require MTFs to pay for a portion of the costs of $5 million reliability upgrades constructed in an MTF's host zone, based on the MTF's share of load in that zone. NJRC IB at 6-9, RB at 5. *See* Tr. at 456:15-457:1. PJM indicates that implementation of such a requirement would be an acceptable alternative to running additional DFAX analyses. PJM IB at 23. Accordingly, requiring an MTF to pay for $5 million reliability projects in its host zone on a load-share basis strikes the best compromise between the various competing considerations.

186. The MTF Parties object to the NJRC's proposal. They argue that the proposal treats MTFs as part of a zone for one purpose and as a separate zone for another purpose, whereas no other class of customer on PJM's system receives such treatment. MTF Parties RB at 7. However, MTFs *are* unique with respect to $5 million reliability upgrades, because MTFs are the only entity that the cost threshold would exempt from ever having to pay for such upgrades. Therefore, it is appropriate to treat MTFs differently. *See Entergy*, 93 FERC ¶ 61,156, at n.8 ("[i]t is not undue discrimination to treat categories of customers with dissimilar characteristics differently"). PJM shall

revise its proposal to permit TOs that construct $5 million reliability upgrades in zones containing MTFs to allocate the costs of such upgrades to those MTFs on a load-share basis.

## III. Cost Allocations for Upgrades of 500 Kilovolts and Above[47]

187. As discussed, PJM allocates costs of 500 kV upgrades to zones based on each zone's peak load for the prior year. PJM also proposes to allocate costs of 500 kV upgrades to MTFs on a load-share basis, but to use an MTF's planned or existing FTWRs as a proxy for peak load. PJM IB at 21. OATT Schedule 12(b)(i)(B), which was part of PJM's compliance filing in response to Opinion No. 494 prescribes this methodology. *See* "Compliance Filing" (Docket No. EL05-121-004, May 21, 2007).[48] If the FTWRs at issue were planned rather than existing, PJM would agree to reduce those FTWRs by a percentage "reflecting expected load growth between the prior year and the planning year." PJM IB at 22. PJM argues that it is proper to base an MTF's allocations for 500 kV projects on the MTF's planned or existing FTWRs because PJM must preserve those FTWRs in the planning process. *Id.* The PTO Group and Exelon concur. PTO Group IB at 51-52; Exelon Brief at 7.

188. Several participants, principally Staff and HTP, assail PJM's proposal as unduly discriminatory. They note that whereas PJM allocates costs to each zone based on its actual peak demand, PJM would allocate costs to MTFs before they begin operation under a methodology that assumes they are making full use of their FTWRs. Staff IB at 51; HTP IB at 21-23. Staff, which has provided the most detailed alternative plan, would require PJM to allocate costs of 500 kV projects on an annual, load-share basis based on "the MTF's actual peak load (up to the FTWR) in any given hour of the applicable prior year." Ex. S-4 at 6:13-14. The "applicable prior year" would be the "same twelve month period used for non-MTF customers", Staff IB at 51 (citing Ex. S-4 at 4-5), *i.e.*, the previous 12 months ending October 31. For the MTF's first year of operation, for which no "applicable prior year" of usage will be available, Staff proposes to use the amount of FTWRs actually awarded to the MTF by PJM. Tr. at 757:13-759:13; Staff IB at 55. This methodology would apply to both reliability and economic upgrades.

---

[47] This Section III addresses the following issues: Should PJM assign MTFs cost responsibility for 500 kV reliability upgrades (Issue # 2.b)? Should PJM assign MTFs cost responsibility for economic upgrades (Issue # 2.d)? What measure of system use should PJM use to allocate costs of 500 kV reliability upgrades (Issue # 3.b)? What measure of system use should PJM use to allocate costs of economic upgrades (Issue # 3.d)?

[48] As discussed, Opinion No. 494-A reserved the issue of how PJM is to allocate RTEP costs for 500 kV upgrades to MTFs for this proceeding. 122 FERC ¶ 61,082 at P 92.

189. PJM's proposal is unduly discriminatory. It allocates RTEP costs to PJM zones based on their actual peak demand over the previous 12 months, but allocates costs to MTFs based on a measurement that is likely to exceed their peak demand over that period. An MTF's planned FTWRs, even if adjusted, obviously will exceed its (non-existent) demand in the prior year. An MTF's existing FTWRs would represent the MTF's highest possible demand in the prior year. Thus, PJM's proposed methodology will require MTFs to pay a greater share of 500 kV upgrade costs than MTFs would pay if PJM used the same methodology to allocate such costs to them that PJM uses to allocate such costs to zones.

190. No party has justified this disparity. The parties' argument that PJM must preserve planned or existing FTWRs in the planning process ignores the fact that PJM must also preserve projected zonal loads in that process, but still bases allocations to zones on their actual peak demand in the prior year.

191. Staff has demonstrated that its alternative proposal to allocate costs to MTFs based on their actual peak demand over the previous 12 months is just and reasonable. The Commission has found that 500 kV upgrades provide region-wide benefits. Opinion No. 494, 119 FERC ¶ 61,063 at P 77. If an upgrade provides regional benefits, each system user's past use of the system properly determines the degree of benefit that user derives from the upgrade, and the user's peak demand is an appropriate measure of such use. *Id.* P 76-77. Accordingly, PJM shall revise its OATT to implement the allocation methodology proposed by Staff and described in Paragraph 188 *supra*.

## IV. Miscellaneous Issues

192. This Initial Decision has addressed all of the issues in the Statement of Issues raised in the briefs except the following:

8. To what zone should PJM allocate the MTF's portion of RTEP costs and what rate mechanism should recover these costs?

    a. Should RTEP costs be allocated to the MTF as a point zone or to the transmission owner's zone where the MTF interconnects?

    b. Should RTEP costs that are allocated to MTFs be recovered from the MTF or from the MTF customers via inclusion in the Point-to-Point or border rates of PJM's Transmission Owners?

    c. Should MTF customers pay a transmission rate that includes RTEP costs?

Statement of Issues at 12-13.

193. The Partial Settlement did not reserve these issues. Rather, they appear to have arisen in response to concerns expressed by Staff. A Staff witness testified that if the PJM border rate included RTEP charges to MTFs, MTF customers would be doubled-charged for RTEP upgrades. First, such customers would have to pay an RTEP component as part of the PJM border rate that they paid to withdraw power from the PJM system. Second, the customers would have to pay the RTEP component again as part of the rate that they paid the MTF to deliver their power to New York. *See* Ex. S-1 at 26:3-

194. To prevent these customers for paying this RTEP component twice, Staff contended, the TOs would have to develop different border rates for each MTF's group of customers and a separate border rate for non-merchant exporters, all of which would lead to a multiplicity of rates. *Id.* at 27:1-31:9. Staff reasoned that PJM could avoid this multiplicity of rates by simply collecting RTEP costs allocated to MTFs from the MTFs' customers through its border rate rather than directly from the MTFs. *Id.* at 31:10-15.

195. Mr. Napoli testified that issue is moot because PJM transmission rates do not contain any RTEP charges to MTFs, and the PJM border rate does not include any RTEP charges whatsoever. Ex. PTO-6 at 5; Ex. PTO-11 at 4:5-22. No participant has disputed this testimony. Nonetheless, these parties included these issues in the Statement of Issues.

### A. Whether PJM Should Allocate RTEP Costs to a Merchant Transmission Facility as a Point Zone or to the Facility's Host Zone

196. PJM proposes allocating the costs all RTEP upgrades, except for $5 million reliability upgrades, to each MTF as if it were a separate zone. PJM IB at 34. The MTF Parties do not object to PJM's proposal. MTF Parties' PB at 32. The PTO Group asserts that PJM should treat each MTF as a separate zone for purposes of all RTEP allocations. PTO Group IB at 62. NYPA takes the position that if RTEP costs are to be allocated to MTFs, each MTF should be treated as a separate zone, unless the MTF agrees to become included in a TO's zone. NYPA IB at 74. Staff takes no position on the issue, but notes that one of its witnesses would avoid "the rate complexity" inherent in "treating MTFs as a point zone" by "allocating the MTF-related RTEP costs" to the MTF's host zone and requiring the MTF "to share in such costs as part of that zone." Staff IB at 64 (citing Ex. S-1 at Part V).

197. This portion of PJM's proposal is just and reasonable. Staff assumes that PJM must exclude RTEP charges from the border rate charged to MTF customers to prevent them from paying the same RTEP component twice. *See* Ex. S-1 at 27:1-31:15. However, PJM will not have to go through these gyrations, because its border rate contains no such charges. *See* Ex. PTO-6 at 5:4-14; Ex. PTO-11 at 4:5-22. Accordingly, PJM shall allocate all RTEP upgrades, except for $5 million reliability upgrades, to each MTF as if it were a separate zone.

198. PJM proposes an exception if the Commission assigns cost responsibility to MTFs for $5 million reliability upgrades. In that case, PJM advocates assigning the MTF costs of all such upgrades in the MTF's host zone on a load-share basis. PJM IB at 23. As discussed, the MTF Parties objection to the proposal that PJM treat an MTF as part of its host zone for purposes of $5 million reliability upgrades. MTF Parties RB at 7. For reasons discussed in Section II.B.6 *supra*, PJM's proposed exception is just, reasonable and not unduly discriminatory: PJM shall assign each MTF the costs of all $5 million reliability upgrades in the MTF's host zone on a load-share basis.

### B. Whether PJM Should Recover RTEP Costs Allocated to Merchant Transmission from the Merchant Transmission Facility or from the Facility's Customers through PJM's Border Rate

199. PJM states that if PJM's border rate contains no RTEP costs, direct allocation of such costs to MTFs, is appropriate; conversely, if such costs are included in a border rate charged to an MTF's customers, direct allocation of such costs to MTFs is not appropriate. PJM takes no position regarding the appropriateness of including RTEP costs in its border rate. PJM IB at 34. The PTO Group argues that the issue is outside the scope of this proceeding, but that if the issue is decided here, recovery from the MTF is the preferred course. PTO Group IB at 62-64. Staff takes no position on the issue. Staff IB at 64. NYPA and the MTF Paries assert that PJM should allocate such costs directly to MTFs as long as MTFs should have the right to reallocate the costs to others. NYPA IB at 74; MTF Parties PB at 32.

200. The Partial Settlement forecloses this matter. The Settlement resolves all issues in Docket Nos. ER06-880-000 and ER07-632-000 and all related subdockets. Ex. PJM-2 at 62-63 (§ 6). The Settlement ratifies the TOs' filing in Docket No. ER06-880, which, *inter alia*, amends OATT Schedule 12 to make an MTF owner responsible for payment of all TECs allocated to his MTF, *see* OATT Schedule 12(b), and effectively ratifies PJM's filing in Docket No. ER07-632. That filing amends OATT Schedule 14 to allow Neptune to pass on TECs to its FTWR holder. *See* OATT Schedule 14 § 9. Accordingly, the Settlement requires PJM to make the MTF owner responsible for payment of RTEP costs allocated to its MTF.

201. The Partial Settlement aside, recovery of RTEP costs from the MTF is the best course of action. If PJM attempted to recover TECs by incorporating them in the transmission rates charged to the MTFs' customers, those customers could avoid paying those charges by taking non-firm transmission, which recovers "only a small portion" of the transmission system's embedded costs. Ex. PTO-11 at 8:3-6; Ex. PTO-9 at 16:14-15. As discussed, LIPA is currently taking such service. Ex. MTF-4 at 15:16-16:2; Tr. at 494:5-22.

202. Further, the MTF has a straightforward means of recovering the RTEP costs allocated to it from its customers. Neptune has demonstrated an approach to pass through such costs directly to its customers through OATT Schedule 14 § 9, discussed *supra*. Accordingly, PJM should recover all RTEP upgrade costs allocated to MT from the MTF owners.

### C. Whether Merchant Transmission Customers Should Pay PJM a Transmission Rate that includes RTEP Costs

203. Standing alone, Sub-issue c is vague: It is not clear whether "transmission rate" refers to the border rate that the MTF's customers would pay PJM for delivery of power to the MTF's PJM interconnection, or to the transmission rate that the customers would pay the MTF or FTWR holder for delivery of power to the New York ISO. If read in conjunction with the introductory language in issue 8, sub-issue c clearly refers to the former, the border rate that the MTF's customers would pay PJM.

204. The briefs indicate that not all of the participants referred back to the introductory language. PJM properly interprets sub-issue c as referring to the rate the MTF customers should pay PJM, and reiterates the position it took in the preceding section. PJM IB at 35. The PTO Group covers both interpretations, reiterating that there are no RTEP costs in the PJM border rate and that OATT Schedule 12 does not address how MTFs are to recover their costs from their customers. PTO Group IB at 64-66. Staff and NYPA incorrectly interpret sub-issue c as referring to the rate that the MTF should charge its customers, and assert that an MTF should be allowed to include its RTEP costs in that rate. Staff IB at 64-65; NYPA IB at 74.

205. The issue of what components PJM must include in its transmission rates is outside the scope of this proceeding. The issue to be resolved here is how PJM is to allocate RTEP costs to MTFs. If transmission rate design is relevant to this general issue at all, it bears on the recovery of the allocated RTEP costs, not the allocation itself.

## V. Matters not Discussed

206. This Initial Decision has considered all arguments and other matters raised by the parties, including any matters not discussed herein. Any such matter(s) or portion(s) of the record has/have been determined to be irrelevant, immaterial or without merit. This Initial Decision has accorded no weight to arguments not supported by record evidence or legal precedent.

**ORDER**

207. Within thirty days of the issuance of the final Commission order in this proceeding, PJM shall: (1) modify its OATT as prescribed in Paragraphs 168, 180, 186, 191, 198 and 202, *supra*; and (2) recalculate the allocations in this proceeding in accordance with the foregoing OATT revisions and collect and/or refund the appropriate amounts, with interest. Otherwise, this Initial Decision finds PJM's proposed OATT revisions and assignments of cost responsibility to MTFs to be just, reasonable and not unduly discriminatory.

208. This Initial Decision is subject to review by the Commission on exceptions or on its own motion, as provided by Commission rules of Practice and Procedure, and PJM shall comply with the findings and conclusions reflected in this Initial Decision, as adopted or modified by the Commission.

David H. Coffman
Presiding Administrative Law Judge

Document Content(s)