

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: James J. Hoecker, Chairman;
Vicky A. Bailey, and William L. Massey.

Pennsylvania-New Jersey-Maryland Interconnection	)	Docket Nos. OA97-261-
	)	000 and -001 and
	)	ER97-1082-000 and
	)	-001
Atlantic City Electric Company)	
Baltimore Gas and Electric Company)	
Delmarva Power & Light Company)	
Jersey Central Power & Light Company)	
Metropolitan Edison Company	)	Docket No. ER97-3189-000
Pennsylvania Electric Company)	
Pennsylvania Power & Light Company)	
Potomac Electric Power Company)	
Public Service Electric and Gas Company)	
Atlantic City Electric Company)	
Baltimore Gas and Electric Company)	
Delmarva Power & Light Company)	
Jersey Central Power & Light Company)	
Metropolitan Edison Company	)	Docket No. EC97-38-000
Pennsylvania Electric Company)	
Pennsylvania Power & Light Company)	
Potomac Electric Power Company)	
Public Service Electric and Gas Company)	
Pennsylvania-New Jersey-Maryland Interconnection Restructuring	)	Docket No. ER97-3273-000
Pennsylvania-New Jersey-Maryland Interconnection Restructuring	)	Docket No. EL97-44-000
PJM Interconnection, L.L.C.	)	Docket No. OA97-678-000
Atlantic City Electric Company,)	
Baltimore Gas and Electric)	
Company, Delmarva Power & Light)	
Company, Jersey Central Power &)	
Light Company, Metropolitan)	
Edison Company, Pennsylvania	)	Docket Nos. ER96-2516-002,
Electric Company, Pennsylvania	)	EC96-28-002, and
Power & Light Company, Potomac)	EL96-69-002
Electric Power Company and)	
Public Service Electric and Gas)	

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Company)
PECO Energy Company) Docket Nos. ER96-2668-002
) And EC96-29-002

(Not Consolidated)

ORDER CONDITIONALLY ACCEPTING OPEN ACCESS TRANSMISSION TARIFF AND
POWER POOL AGREEMENTS, CONDITIONALLY AUTHORIZING ESTABLISHMENT OF
AN INDEPENDENT SYSTEM OPERATOR AND DISPOSITION OF CONTROL OVER
JURISDICTIONAL FACILITIES, AND DENYING REHEARINGS

(Issued November 25, 1997)

In this order, the Commission addresses proposals to comprehensively restructure the Pennsylvania-New Jersey-Maryland Interconnection (PJM or PJM pool). 1/ We find that, subject to certain modifications, the PJM Supporting Companies' 2/ proposal to restructure the PJM Pool is consistent with the requirements of the Commission's Order No. 888 Open Access Rule 3/ and

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- 1/ The PJM Pool is operated by an independent staff referred to as the PJM Office of Interconnection (PJM-OI). The PJM Interconnection was established as the PJM Interconnection Association as of July 1, 1993, and was converted into a limited liability corporation as of March 31, 1997, and renamed the PJM Interconnection, L.L.C. See Pennsylvania-New Jersey-Maryland Interconnection, L.L.C., Docket No. ER97-2519-000 (Unpublished Letter Order issued June 12, 1997).
- 2/ Supporting Companies consist of the following: Atlantic City Electric Company (Atlantic City Electric), Baltimore Gas and Electric Company (BG&E), Delmarva Power & Light Company (Delmarva), Pennsylvania Power & Light Company (PP&L), Potomac Electric Power Company (PEPCO), Public Service Electric and Gas Company (PSE&G), and GPU, Inc. (GPU) (GPU consists of Jersey Central Power & Light Company (JCP&L), Metropolitan Edison Company (Met Ed) and Pennsylvania Electric Company (Penelec)). Supporting Companies and PECO are referred to herein collectively as the PJM Companies.
- 3/ See Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, 61 Fed. Reg. 21,540 (May 10, 1996), FERC Stats. & Regs. ¶ 31,036 (1996), order on reh'g, Order No. 888-A, 62 Fed. Reg. 12,274 (1997), FERC Stats. & Regs. ¶ 31,048 (1997), order on reh'g, Order No. 888-B, ___ Fed. Reg. _____ (1997), FERC Stats. & Regs.

(continued...)

satisfies the principles enunciated in the Open Access Rule pertaining to the establishment of an Independent System Operator (ISO).

I. Background

On November 13, 1996, the Commission issued an order addressing proposals submitted by PECO Energy Company (PECO) and Supporting Companies to restructure PJM through the creation of an ISO and the implementation of related agreements. ^{4/} In that order, the Commission found that it was unable to accept either of the restructuring proposals because: (1) the proposed ISOs did not comport with the Commission's ISO principles specified in the Open Access Rule; (2) the proposed open access transmission tariffs failed to meet the non-discriminatory open access requirements of the Open Access Rule; and (3) the agreements filed under section 205 of the Federal Power Act (FPA) ^{5/} did not reform the PJM pool in a way that was consistent with the requirements for tight power pools under the Open Access Rule. ^{6/} Accordingly, the Commission provided guidance to the parties, directed the parties to file a joint pool-wide open access transmission tariff by December 31, 1996, in accordance with the Open Access Rule, and encouraged the PJM Companies and all stakeholders to work together to craft a single, new ISO proposal.

On December 31, 1996, PJM-OI submitted a filing to comply with the requirements of Order No. 888 (Order No. 888 Compliance Filing). ^{7/} The Order No. 888 Compliance Filing was intended to serve as an interim solution to restructure the PJM Pool while parties continued to meet to prepare a final restructuring filing. ^{8/} The Order No. 888 Compliance Filing included the following: (1) a joint pool-wide open access transmission

^{3/} (...continued)
¹ _____ (1997) (Open Access Rule).

^{4/} Atlantic City Electric Company, et al., 77 FERC ¶ 61,148 (1996) (PJM Guidance Order).

^{5/} 16 U.S.C. § 824d (1994).

^{6/} 77 FERC at 61,573 (footnotes omitted).

^{7/} The Order No. 888 Compliance Filing was assigned Docket Nos. OA97-261-000 and ER97-1082-000.

^{8/} The amended PJM Interconnection Agreement contained a new Schedule 9.04 that committed the PJM members to submit a filing with the Commission of a final restructuring of PJM by May 31, 1997.

tariff; (2) a Transmission Owners Agreement; 9/ (3) an amended PJM Interconnection Agreement; 10/ and (4) modifications to, or termination of, the Extra High Voltage Transmission Agreement, Lower Delaware Valley Transmission System Agreement, and Susquehanna-Eastern 500 kV Transmission System Agreement. 11/ In addition, because Supporting Companies and PECO submitted alternative approaches with regard to certain issues, the Order No. 888 Compliance Filing included supplemental materials sponsored by Supporting Companies and PECO in support of their respective positions. 12/

On February 28, 1997, the Commission issued an order that, inter alia, accepted the Order No. 888 Compliance Filing, to become effective March 1, 1997, after a nominal suspension. 13/ In the February 28 Order, the Commission directed PJM to implement, subject to refund, PECO's transmission congestion pricing proposal, and to implement Supporting Companies' proposal

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- 9/ The Transmission Owners Agreement was an agreement among the PJM Regional Transmission Owners that authorized the submission of the Order No. 888 Compliance Filing and memorialized the willingness of the PJM Companies to provide service under a pool-wide transmission tariff.
- 10/ The amended PJM Interconnection Agreement contemplated that PJM-OI would continue to perform its historical role with respect to maintaining control over pool operations and preserving system reliability, as well as undertake the added responsibility of maintaining an Open Access Same Time Information System (OASIS) for the pool. The amended Interconnection Agreement did not seek to establish an ISO, but did purport to enhance the independence of PJM-OI by providing that PJM-OI would report to an independent Board of Directors.
- 11/ Supporting Companies proposed modifications to these agreements, while PECO proposed termination of the agreements.
- 12/ Supporting Companies and PECO had three primary areas of disagreement with respect to the open access transmission tariff: (1) transmission rate design; (2) the appropriate method for calculating and recovering transmission congestion costs; and (3) jurisdiction over transmission services to retail native load customers.
- 13/ MidContinent Area Power Pool, et al., 78 FERC ¶ 61,203 (1997) (February 28 Order).

with respect to options dealing with all other issues. 14/ The Commission also expressed its intention to convene a technical conference to facilitate the resolution of issues not fully addressed in Supporting Companies' congestion pricing proposal. 15/ The Commission went on to explain that it would address the merits of the Order No. 888 Compliance Filing and responsive submissions of intervenors in further orders. 16/

On June 2, 1997, Supporting Companies submitted a comprehensive filing to restructure the PJM Pool (June 2 Filing). 17/ The June 2 Filing included an Amended and Restated Operating Agreement (PJM Operating Agreement), 18/ a Transmission Owners Agreement (Owners Agreement), the PJM Open Access Transmission Tariff (PJM Transmission Tariff), and a Reliability Assurance Agreement Among Load Serving Entities in the PJM Control Area (Reliability Agreement).

Supporting Companies state that the June 2 Filing builds on its prior PJM restructuring filing and the Order No. 888 Compliance Filing. Supporting Companies explain that the primary objectives of the filing are as follows: (1) establish an ISO that meets the Commission's ISO principles; (2) preserve reliability compatible with retail choice; (3) clarify and

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- 14/ The February 28 Order also addressed compliance filings submitted by members of other power pools and holding companies.
- 15/ 78 FERC ¶ 61,204 at 61,883. The technical conference was held on May 9, 1997.
- 16/ Subsequently, the Commission issued orders clarifying and modifying the proper treatment of non-firm transmission service under the interim open access transmission tariff accepted in the February 28 Order. See Pennsylvania-New Jersey-Maryland Interconnection, 79 FERC ¶ 61,272 (1997) (clarifying that PJM should have implemented the PECO approach for pricing non-firm, point-to-point transmission services); Pennsylvania-New Jersey-Maryland Interconnection, 80 FERC ¶ 61,069 (1997) (granting PJM's request to eliminate provisions that allowed redispatch of generating resources for non-firm transmission service customers willing to pay transmission congestion costs).
- 17/ The June 2 Filing was assigned Docket Nos. ER97-3189-000 and EC97-38-000.
- 18/ The filing accepted by letter order in Docket No. ER97-2519-000 (see note 1 supra) converted the PJM Interconnection Agreement into an Operating Agreement for a limited liability corporation.

improve the implementation of the locational marginal pricing proposal for pricing transmission congestion; and (4) make changes to the non-firm transmission rates in the PJM open access transmission tariff.

The PJM Operating Agreement establishes PJM-OI as an independent body to operate the ISO, administer the PJM Transmission Tariff, operate the pool spot energy market, referred to as the Power Exchange (PX), approve a regional transmission expansion plan, and administer certain aspects of the Owners Agreement and Reliability Agreement. The PJM Operating Agreement provides that an independent Board of Managers (PJM Board) would be responsible for supervision and oversight of the day-to-day operations of the PJM Pool through PJM-OI, with the PJM Board's primary responsibilities being to ensure that the ISO's functions are accomplished in a manner consistent with: (1) the safe and reliable operation of the PJM Pool; (2) the creation and operation of a robust, competitive, and non-discriminatory electric market in the PJM Control Area; and (3) the principle that a member or group of members shall not have undue influence over the operation of the PJM Pool. The PJM Operating Agreement also calls for the formation of a Members Committee, in which all PJM members will vote on the basis of the following sectors: Generation Owners, Other Suppliers, Transmission Owners, Electric Distributors, and End-Use Customers. The rights reserved to members are to elect the PJM Board, amend or terminate the PJM Operating Agreement, and provide advice and recommendations to the PJM Board and PJM-OI. The PJM Operating Agreement also creates User Groups, which allow members sharing a common interest to bring matters before the Members Committee and, if necessary, the PJM Board.

The Owners Agreement provides that owners of transmission facilities in the PJM Control Area have agreed to offer regional transmission service under non-pancaked rates, and to transfer to the ISO the responsibility for administration of the PJM Transmission Tariff and regional transmission planning and operations. The Owners Agreement also creates an Administrative Committee of transmission owners that may make recommendations to the ISO, but that committee is expressly denied the ability to exercise any control over the functions and responsibilities transferred to the ISO.

Under the PJM Transmission Tariff, PJM-OI will offer pool-wide open access transmission service throughout the PJM Pool via the facilities of the eight PJM Companies. All transmission services will be subject to a single, non-pancaked rate based on the costs of the individual utility's transmission system where the point of delivery is located. Supporting Companies propose the locational marginal pricing approach for calculating and recovering the costs of transmission congestion. In general, under locational marginal pricing, transmission congestion costs

are calculated based on differences in the marginal price of generation at each location on the transmission grid.

The Reliability Agreement is intended to govern installed capacity reserve sharing obligations in the PJM Pool. The Reliability Agreement modifies traditional reserve sharing within PJM for purposes of accommodating the introduction of retail choice in portions of the PJM Control Area. Only Load Serving Entities, defined as any utility that sells power at retail to loads within the PJM Control Area, will be parties to the Reliability Agreement. The Reliability Agreement will be administered by a committee containing representatives of each party, with all day-to-day functions delegated to PJM-OI.

In Docket No. ER97-3273-000, PECO, Coalition For A Competitive Electric Market (CEEM), Schuylkill Energy Resources (Schuylkill), and NJPIRG Citizens Lobby (NJPIRG) (collectively, PECO-Group) submitted "A Plan For The Restructuring Of The PJM Interconnection" (The Plan). The Plan would restructure the PJM Pool through the following steps: (1) modify the PJM governance structure to include public interest and end-use consumer representatives and implement a transition to the so-called "End State Vision;" (2) require PJM-OI to unbundle transmission provider and energy market functions over a six-month period; (3) upon full separation, convert PJM into a for-profit ISO; and (4) concurrent with the conversion to a for-profit ISO, have the ISO assume full operational control over the transmission assets in the PJM Control Area. The ISO would have an open access transmission tariff on file with the Commission that would phase-out zonal rates over a three-year period, after which time the entire PJM Control Area would be subject to a single, system-wide rate.

CEEM also filed a Capacity Rights Open Access Tariff (Capacity Rights Tariff) as an alternative to the proposals sponsored by Supporting Companies and PECO for pricing transmission services and transmission congestion. 19/ CEEM said that it continues to support the PECO proposal for transmission pricing, but that its proposal should be approved if the Commission is inclined to approve a form of congestion pricing that is more explicit than the PECO method. 20/

19/ CEEM's Capacity Rights Tariff filing was assigned Docket No. EL97-44-000.

20/ CEEM also states that there are many common factual issues between the CEEM and Supporting Companies' proposals. Consequently, CEEM requests that the Commission set the Capacity Rights Tariff for a joint evidentiary hearing with Supporting Companies' locational marginal pricing proposal. (continued...)

Finally, in Docket No. OA97-678-000, PJM-OI submitted additional revisions to its open access transmission tariff for purposes of complying with the requirements of Order No. 888-A.

II. Notice of Filing, Interventions, and Procedural Matters

Notice of PJM-OI's filing in Docket Nos. OA97-261-000 and ER97-1082-000 was published in the Federal Register, 21/ with protests and motions to intervene due on or before February 20, 1997. Notice of Supporting Companies' filing in Docket Nos. ER97-3189-000 and EC97-38-000 was published in the Federal Register, 22/ with protests and motions to intervene due on or before July 3, 1997. Notice of PECO's filing in Docket No. ER97-3273-000 was published in the Federal Register, 23/ with protests and motions to intervene due on or before July 7, 1997. Notice of CCEM's filing in Docket No. EL97-44-000 was published in the Federal Register, 24/ with protests and motions to intervene due on or before July 23, 1997. Notice of PJM-OI's filing in Docket No. OA97-678-000 was published in the Federal Register, 25/ with protests and motions to intervene due on or before August 15, 1997. Motions to intervene and notices of intervention in the respective dockets were filed by the parties listed in Appendix A.

Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (1997), the notices of intervention and timely, unopposed motions to intervene serve to make the intervenors listed in Appendix A parties to this proceeding. Given the stage of the proceeding, and the absence of undue delay or prejudice, we find good cause to grant the untimely, unopposed motions to intervene, as listed in Appendix A.

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- 20/ (...continued)
CCEM states that, in the interim, it would be appropriate to leave the PECO approach in place.
- 21/ CSW Operating Companies, et al., 62 Fed. Reg. 4039 (1997).
- 22/ 62 Fed. Reg. 33,067-68 (1997).
- 23/ 62 Fed. Reg. 35,171 (1997).
- 24/ 62 Fed. Reg. 37,581 (1997).
- 25/ 62 Fed. Reg. 42,546 (1997).

Certain parties also filed Answers to various requests for relief and protests. 26/ Although the Commission's Rules of Practice and Procedure do not permit answers to protests, 27/ given the complex nature of this proceeding, and that the Answers help in clarifying certain issues, we will accept the Answers to protests filed in these proceedings. 28/

On August 25, 1997, PJM Market Participants 29/ filed a motion to consolidate and set for evidentiary hearing the filings submitted in Docket Nos. ER97-3189-000, ER97-3273-000, and EL97-44-000. PJM Market Participants claim that a comparative evidentiary hearing is appropriate because the transmission pricing proposals proffered in these dockets raise common issues of material fact. For example, PJM Market Participants maintain that the issue of whether congestion is likely to become a significant economic problem in PJM should be addressed via a formal evidentiary hearing process. The New York Mercantile Exchange (NYMEX) filed an Answer in support of PJM Market Participants' motion. Supporting Companies filed an Answer in opposition. Other parties have also requested consolidation of the dockets, initiation of an evidentiary hearing, and/or that we convene additional technical conferences concerning PJM restructuring. 30/

We do not believe that the parties have demonstrated the need to convene an evidentiary hearing or any further technical

26/ See, e.g., PECO (Filed in Docket No. ER97-3273); CCEM (Filed in Docket No. EL97-44); and Supporting Companies (Filed in Docket Nos. EC97-38-000 and ER97-3189-000). After filing their Answer, Supporting Companies filed an Amended Answer and a motion for leave to file their Amended Answer. We treat the Amended Answer as Supporting Companies' Answer to the various pleadings.

27/ See 18 C.F.R. § 385.213(a)(2) (1997).

28/ See Tennessee Gas Pipeline Company, 47 FERC ¶ 61,227 at 61,795 n.16 (1989).

29/ PJM Market Participants include CCEM, Easton Utilities Commission of Easton, Maryland (Easton), NJPIRG, North Jersey Energy Associates (NJEA), the Pennsylvania-New Jersey-Maryland Industrial Customer Coalition (Industrial Coalition), and Schuylkill.

30/ See, e.g., Easton at 34-35, Delaware Municipal Electric Corporation, Inc. (DEMEC) at 41, NJEA at 1-2, and the Maryland Office of People's Counsel and the Delaware Office of the Public Advocate at 11 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

conferences on transmission congestion pricing or on any of the fundamental elements of PJM restructuring. ^{31/} An extensive record has been compiled in these proceedings concerning the restructuring of PJM, enabling us to make a reasoned decision on the merits of the proposals submitted in these proceedings and to address the arguments of intervenors without convening a trial-type evidentiary hearing. ^{32/} Parties have had opportunities to file multiple rounds of interventions, comments, and protests. In addition, we held a technical conference that addressed the transmission congestion pricing proposals proffered by parties to these proceedings. Moreover, since there is no need to convene a trial-type evidentiary hearing or further technical conferences, we deny the requests to consolidate these proceedings.

III. Requests For Rehearing And Clarification

A. The PJM Guidance Order

Supporting Companies filed a request for rehearing of the PJM Guidance Order, claiming that the Commission erred in: (1) not accepting their proposal to restructure PJM; (2) refusing to accept their filing because it did not comply with the ISO principles; (3) concluding that the proposed open access transmission tariff failed to meet the requirements of the Open Access Rule; and (4) concluding that the agreements filed for purposes of restructuring PJM did not comply with the requirements of the Open Access Rule.

Commission Response

Given that Supporting Companies have submitted subsequent restructuring filings that supersede the filing addressed in the PJM Guidance Order, and in light of the fact that we are accepting Supporting Companies' restructuring proposal for PJM, subject to certain modifications, we will dismiss as moot Supporting Companies' request for rehearing of the PJM Guidance Order.

B. The February 28 Order

In the February 28 Order, the Commission stated the following with respect to implementation of the Order No. 888

^{31/} As we discuss below, we are directing that evidentiary hearings be convened to address specific issues raised by the individual rate filings submitted by the PJM Companies.

^{32/} For example, as is reflected in our discussion below, the record evidence allows us to respond to CCEM's arguments regarding the extent of transmission congestion without convening a trial-type hearing.

Compliance Filing and its views on the congestion pricing proposals:

We hereby inform PJM that it should implement, subject to refund and further order as noted above, the PECO Energy congestion pricing proposal. With respect to options dealing with all other issues, PJM should implement the Supporting Companies Group's proposal.

However, we are selecting the PECO Energy congestion pricing proposal for interim implementation only because there are unresolved questions on how to implement the Supporting Companies Group's proposal and what modifications can make it workable. We believe that, ultimately, the Supporting Companies Group's proposal will promote more efficient trading and will be more compatible with the type of competitive market mechanisms we are encouraging. In order to facilitate the resolution of issues not fully addressed in the Supporting Companies Group's proposal, we intend to convene a technical conference as soon as possible to explore these issues. It is our expectation that tariff amendments implementing the Supporting Companies Group's proposal will be implemented soon thereafter.

33/

PECO, NYMEX, CCEM, DEMEC, Allegheny Electric Cooperative, Inc. (Allegheny), and Electric Clearinghouse, Inc. (Clearinghouse) filed requests for rehearing or clarification of the February 28 Order. Easton filed an Answer in support of the requests for clarification of PECO and NYMEX. Some of the parties claimed that the Commission erred in accepting PJM's Order No. 888 Compliance Filing without addressing the merits of the alternative proposals or the protests and comments filed by intervenors. 34/ Parties also requested that the Commission clarify that it did not prejudge or summarily reject any proposal and that the technical conference on congestion pricing would address alternatives to Supporting Companies' proposal. 35/ CCEM argued that we should have suspended the PJM Compliance Filing for the full five-month statutory suspension period so that an

33/ 78 FERC ¶ 61,203 at 61,833 (footnote omitted).

34/ See, e.g., DEMEC at 4 and Clearinghouse at 3-4.

35/ See, e.g., CCEM at 3-4 and PECO at 5-7. PECO sought rehearing if the February 28 Order was intended to represent a substantive adverse ruling with regard to any issues sponsored by PECO. Given that the February 28 Order did not address the merits of the Order No. 888 Compliance Filing, we will dismiss PECO's request for rehearing as moot.

evidentiary hearing could have been held, and that we erred by not explaining our rationale for imposing a nominal suspension period.

Commission Response

Because the Commission Staff has already conducted the technical conference on transmission congestion pricing, and given that parties had a full opportunity to air their views on the various proposals at the technical conference, the arguments raised on rehearing with respect to the technical conference are dismissed as moot. Additionally, the February 28 Order accepted the Order No. 888 Compliance Filing subject to refund and the issuance of further orders. The arguments made on rehearing with respect to the merits of the proposals were premature, therefore, because the order was not a final order on the Order No. 888 Compliance Filing. 36/

Further, there was no legal error in the Commission stating its views on the competing congestion pricing proposals. The Commission did not prejudge any of the proposals, 37/ but rather expressed its preference for a congestion pricing proposal that would enhance efficiency and competition in bulk power markets. 38/ As is reflected in this order, the Commission has now had a further opportunity to review in detail the parties' proposals for restructuring PJM and the many protests and comments of intervenors. An extensive record has been compiled that has enabled us to gain a more thorough understanding of the competing congestion pricing proposals, and thereby address herein the merits of the arguments raised by intervenors.

Finally, we reject CCEM's argument that we should have suspended the Order No. 888 Compliance Filing for the full statutory period to allow for a trial-type evidentiary hearing. As explained above, a comprehensive record has been compiled in this proceeding that will enable the Commission to make a reasoned decision on the merits without the need for a trial-type evidentiary hearing on the congestion pricing issues raised by CCEM. Further, the Commission has broad discretion over the

36/ See 78 FERC ¶ 61,203 at 61,881 (explaining that the Commission would be deferring action on the merits of the filings).

37/ See Great Lakes Transmission Company, 34 FERC ¶ 61,369 (1986).

38/ See Union Pacific Fuels, Inc. v. FERC, No. 93-1463, slip op. at 9 (D.C. Cir. November 7, 1997) (recognizing that promoting market efficiency can serve as a reasoned basis to justify Commission policy).

length of the suspension period imposed for a section 205 filing. In this instance, we determined that, consistent with our suspension policy, it was appropriate to impose a nominal suspension period. ^{39/} By requiring a nominal suspension of the Order No. 888 Compliance Filing, we allowed customers to benefit as soon as possible from the open access services under PJM Transmission Tariff.

IV. Preliminary Matters

As is discussed above, a series of proposals have been filed concerning restructuring of the PJM Pool. PJM-OI submitted a filing on December 31, 1996, on behalf of the PJM Companies (i.e., Supporting Companies and PECO), to comply with our Order No. 888 Open Access Rule, and later submitted a filing to comply with Order No. 888-A. In addition, Supporting Companies, the PECO-Group, and CCEM filed subsequent restructuring proposals in June 1997. ^{40/} We will not provide a separate analysis of Supporting Companies' and PECO's restructuring proposals incorporated in the Order No. 888 Compliance Filing. PECO no longer sponsors its restructuring option contained in the Order No. 888 Compliance Filing, and Supporting Companies' June 2 Filing has overtaken its prior proposal. Instead, we will consider the proposals of Supporting Companies, the PECO-Group, and CCEM, filed in Docket Nos. ER97-3189-000 and EC97-38-000, ER97-3273-000, and EL97-44-000, respectively, as representing the parties' final PJM restructuring proposals in these proceedings.

We note that the proposals submitted by Supporting Companies, the PECO-Group and CCEM, have much in common. In particular, Supporting Companies, the PECO-Group and CCEM all favor establishing an ISO that implements a regional transmission tariff, modeled closely on the pro forma tariff, and which adopts a single-system rate. The three proposals differ primarily in their approach to transmission pricing, governance, and some generation aspects of the restructured pool. Our discussion herein does not address the three proposals independently, but rather reflects the Commission's evaluation of Supporting Companies' proposal and the positions of parties contained in responsive pleadings.

In this order, we will accept Supporting Companies' proposal, modified in some respects to address the concerns of the PECO-Group, CCEM and others. We are directing PJM-OI to

^{39/} See West Texas Utilities Company, 18 FERC ¶ 61,189 (1982).

^{40/} In addition to the docketed proposals, some of the parties submitted substantive proposals in comments and/or protests. See, e.g., Old Dominion Electric Cooperative at 10-24 (Filed in Docket Nos. EC97-38-000 and ER97-3273-000).

implement Supporting Companies' proposal prospectively, effective January 1, 1998, subject to further modification in accordance with our findings herein. We do not find that the PECO-Group and CCEM proposals are not just and reasonable. We adopt Supporting Companies' proposal (as modified), because it is sponsored by seven of the eight PJM Companies, and it is just, reasonable, and consistent with the requirements of the Open Access Rule. Our action does not preclude the filing of subsequent revisions to the PJM Transmission Tariff and the related PJM restructuring agreements, like those proposed by the PECO-Group and CCEM; indeed, we are approving a governance process that would provide a vehicle for proposing such revisions.

V. The PJM Transmission Tariff

As stated above, the PJM Transmission Tariff is intended to offer pool-wide open access transmission service on a comparable basis throughout and across the PJM Pool. PJM-OI, as the administrator of the PJM Transmission Tariff, will provide open access transmission services via the facilities of the eight historical PJM Companies, referred to as Regional Transmission Owners (RTOs). All firm transmission users, including RTOs, will pay a single, non-pancaked transmission service rate that will be based on the costs of the transmission system where the point of delivery is located (there are eight such transmission systems within PJM). ^{41/} Firm transmission service customers, including network customers and RTOs (on behalf of native load), will reserve specific firm points of receipt and delivery. Customers needing transmission over other facilities not defined as part of the PJM grid (e.g., lower voltage facilities) will be assessed an additional charge to be developed if and when such a service is requested. Non-firm transmission service customers will also pay a single, non-pancaked transmission service rate.

Supporting Companies propose the locational marginal pricing approach for calculating and recovering the costs of transmission congestion. As a means of protecting against the incurrence of congestion costs, Supporting Companies propose that all firm transmission customers be awarded fixed transmission rights (FTRs) for their specific receipt and delivery point reservations. Users with firm reservations are protected from congestion charges if they schedule energy consistent with the points of receipt and delivery specified for their reservations. Network customers and RTOs are required to nominate a portion of

^{41/} RTOs do not actually "pay" the network service tariff rate, but are allocated costs on a basis that reflects the same cost responsibility as the PJM Transmission Tariff rate. In all other respects, including the payment of congestion charges, the RTOs' use of the transmission system is identical to that of a network customer.

their network resources equal to their load for which they receive FTRs, in order to be protected from congestion charges. Any other use of the transmission system by a firm customer will be subject to congestion charges during a period of constrained transmission capacity, i.e., when a firm point-to-point customer uses secondary receipt and delivery points, when a network customer or RTO schedules energy from a non-network resource, and when a network customer or RTO schedules energy from a network resource for which it did not nominate FTRs. 42/

Supporting Companies have also filed changes to the PJM Transmission Tariff that are intended to facilitate use of the Tariff in a retail choice environment. 43/ In this regard, the PJM Transmission Tariff contains modifications to accommodate a change to the demand charge calculation for network service from a twelve-month rolling average load ratio share calculation to a stated rate per MW-year applied to the actual loads of the network customer in a month; this change is designed to be more responsive to changes in load responsibility. 44/

A. Pro Forma Tariff Changes To Reflect Regional Service

The PJM Transmission Tariff contains changes to the pro forma tariff in order to apply the provisions to a regional transmission service that allows network resources and loads to be integrated over eight utility systems. As such, Supporting Companies propose that a single transmission service rate will be assessed for each firm reservation, no matter how many of the eight utility transmission systems are involved in providing the transmission service.

42/ For example, if a network customer with a 1000 MW load had twelve 100 MW generating units, it would select the 10 network resources which it expects would be most vulnerable to congestion. The corresponding FTRs would shelter the customer from congestion charges provided it uses those units for sales to its reserved points of delivery. If the network customer used the other two generating units or relied on a resource other than its network resources, it would be subject to congestion charges in a constrained situation.

43/ See Attachment K to the PJM Transmission Tariff.

44/ The stated rate for network service is intended to provide greater rate certainty to suppliers and customers than exists under the load ratio share approach, because the ultimate transmission rate for a supplier under the load ratio share method will change depending not only on variations in the loads served by a particular supplier but on the loads served by others.

The PJM Transmission Tariff also contains changes to the point-to-point rate design in Schedules 7 and 8. Supporting Companies are proposing one point-to-point rate for delivery points at the border of the control area and separate point-to-point rates for delivery points in each zone. Supporting Companies state that this change does not affect the availability of pool-wide transmission service at a single, non-pancaked rate. They state further that, by making this change, all suppliers competing for the same loads within a zone would have the same transmission rate, whether they take point-to-point or network service.

Certain protestors argue that the proposed changes violate Order No. 888 by eliminating network integration service or by changing the terms and conditions for that service. ^{45/} These protestors focus on one aspect of Supporting Companies' changes to the nature of the service -- the fact that network resources equal to network load are selected and assigned corresponding receipt and delivery point MW reservations called FTRs.

Commission Response

Supporting Companies' proposed changes to the pro forma tariff are reasonable in the context of the new transmission services that will be provided by PJM. Notwithstanding the arguments of certain protestors, the PJM Transmission Tariff does not eliminate network service. The PJM Transmission Tariff adopts the terms and conditions of network service directly from the pro forma tariff. Consistent with the pro forma tariff, a network customer will pay a firm transmission rate based on its portion of the total system loads and may schedule energy from any network resource to serve those loads.

The fact that FTRs are assigned to all firm service customers based on specific receipt and delivery point reservations does not change the nature of network services under the PJM Transmission Tariff. FTRs serve a limited function of allowing a transmission service customer to protect against incurring transmission congestion costs, and do not transform network service into point-to-point service. It is important to note that the pro forma tariff was designed to replicate the network integration service each utility had historically provided itself within the confines of its individual service area. By allowing transmission service customers to integrate resources across eight utility systems, the PJM Transmission Tariff will permit customers to obtain a transmission service

^{45/} See, e.g., DEMEC at 19 (Filed in Docket Nos. ER97-3189-000 and EC97-38-000).

that goes beyond the requirements of the Open Access Rule. ^{46/} Moreover, as a result of these changes, firm transmission service across multiple transmission systems will be available at a lower price because the PJM Transmission Tariff eliminates multiple charges for multi-system transactions. We believe that Supporting Companies' proposal for a single transmission service charge for multi-system use, in conjunction with its congestion pricing proposal, will foster the creation of more competitive bulk power markets, help to ration constrained capacity among competing transactions on the basis of price, and simplify the reassignment of transmission capacity. This is consistent with our policy goals in the Open Access Rule.

B. Specific Terms and Conditions

Revisions To Comply With Order No. 888-A

Because Supporting Companies' June 2 Filing was tendered before the issuance of Order No. 888-A, the PJM Transmission Tariff included in the June 2 Filing does not reflect changes to the pro forma tariff that the Commission ordered in Order No. 888-A. Further, PJM-OI has not filed standards of conduct as required by Order Nos. 889 and 889-A. ^{47/}

Commission Response

We direct PJM-OI to file a revised Order No. 888-A compliance filing that incorporates the rates, terms and conditions of Supporting Companies' PJM Transmission Tariff, consistent with the findings in this order, and that reflects the

^{46/} Order No. 888 required the PJM pool to adopt the pro forma tariff for the transmission services pool members provided each other under the then-current pooling arrangement. See FERC Stats. & Regs. ¶ 31,036 at 31,727. In the past, PJM Pool members did not provide each other with network integration service as embodied in the pro forma tariff or as proposed herein. They simply provided reciprocal transmission service for non-firm economy energy sales that were effected through the pool's central dispatch procedures.

^{47/} Open Access Same-Time Information System and Standards of Conduct, Final Rule, Order No. 889, 61 Fed. Reg. 21,737 (1996), FERC Stats. & Regs. ¶ 31,035 (1996), order on reh'g, Order No. 889-A, 62 Fed. Reg. 12,484 (1997), FERC Stats. & Regs. ¶ 31,049 (1997), order on reh'g, Order No. 889-B, ___ Fed. Reg. _____ (1997), FERC Stats. & Regs. ¶ _____ (1997).

requirements of Order No. 888-A. 48/ Also, we direct PJM-OI to file its Standards of Conduct as required under Order Nos. 889 and 889-A.

References to the PJM Manuals

A number of provisions of the PJM Transmission Tariff and other agreements discussed later in this order define rates, terms and conditions by reference to the PJM Manuals. Certain intervenors argue that the PJM Manuals should be filed with the Commission and that any revisions to the PJM Manuals should be subject to Commission review. 49/

Commission Response

We will not require PJM-OI to file the PJM Manuals or any subsequent changes to the PJM Manuals. The PJM Transmission Tariff and rate schedules define the rates, terms, and conditions of jurisdictional services provided by PJM, not the PJM Manuals. However, certain essential provisions of the PJM Transmission Tariff, the PJM Operating Agreement, the Reliability Agreement and the Owners Agreement inappropriately define rates, terms and conditions by reference to the PJM Manuals. Therefore, we direct PJM-OI to revise provisions of the PJM Transmission Tariff, the PJM Operating Agreement, the Reliability Agreement and the Owners Agreement in order to eliminate the definition of rates, terms and conditions by reference to the PJM Manuals. Instead, any reference to the specific rates, terms and conditions that are found in the PJM Manuals should be set forth in the tariff or rate schedule as well. 50/

48/ Supporting Companies have already recognized the need to file tariff revisions to comply with Order No. 888-A. See Supporting Companies transmittal letter at 37 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

49/ See, e.g., DEMEC at 24 and NJEA at 19-20 (Filed in Docket Nos. EC97-38-000 and EC97-38-000).

50/ We note that not all references to the PJM Manuals are inappropriate. There are many areas where a tariff can deal with general matters and leave the specifics for the application process, the service agreement, or the operating procedures. For example, the pro forma tariff establishes a general standard for creditworthiness with the expectation that the transmission provider will maintain a list of its specific requirements in its standard service application. Thus, not every reference to the PJM Manuals need be codified in the PJM Transmission Tariff. In the revised filing, PJM-OI should explain its reasons for continuing to
(continued...)

Section 1.11 - Eligible Customer

Supporting Companies altered the definition of "Eligible Customer" by inserting initial capital letters for the words "transmission service," as follows: "any retail customer taking unbundled Transmission Service pursuant to a state retail access program or pursuant to a voluntary offer of unbundled retail transmission service by an RTO." Industrial Coalition notes that, by capitalizing the term "Transmission Service," the definition could be interpreted to effectively limit retail customers to point-to-point service, *i.e.*, the definition of "Transmission Service" under the pro forma tariff. 51/

Commission Response

Supporting Companies do not explain this change to the pro forma tariff. Accordingly, we direct that the definition of "Eligible Customer" be revised to reflect the term "transmission service," as used in the pro forma tariff, and not the term "Transmission Service," as proposed by Supporting Companies.

Section 1.22 - Network Load

Supporting Companies have adopted the definition of "Network Load" verbatim from the pro forma tariff. Section 1.22 of the pro forma tariff specifically provides that "[a] Network Customer may elect to designate less than its total load as Network Load but may not designate only part of the load at a discrete Point of Delivery." DEMEC maintains that this is unfair, especially to smaller utilities that could achieve significant savings by serving part of their load with their own resources, part with non-firm point-to-point service, and part with network service. 52/

Commission Response

We reject DEMEC's argument. The definition of "Network Load" is consistent with the pro forma tariff and DEMEC's arguments have been fully addressed in Order Nos. 888 and 888-A and that discussion will not be repeated here. The fundamental terms of the pro forma tariffs are not subject to reopening or relitigation in cases like this.

50/ (...continued)
define any provisions by reference to the PJM Manuals.

51/ Industrial Coalition at 16-17 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

52/ DEMEC at 30 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

Section 1.38a - Regional Transmission Owner or RTO

Supporting Companies add the following definition of Regional Transmission Owner or RTO to the pro forma tariff:

Each entity (a) that owns, leases or otherwise has a possessory interest in facilities used for the transmission of electric energy in interstate commerce, (b) that provides transmission service under the Tariff and (c) that is a party to the PJM Interconnection Agreement. The RTOs are listed in Attachment L.

Certain intervenors maintain that the last sentence of the proposed definition has the effect of precluding other parties from becoming RTOs. 53/

Commission Response

We accept Supporting Companies' proposed definition of an RTO. Attachment L merely lists the current RTOs. Nothing in the PJM Transmission Tariff precludes the revision of Attachment L to add new RTOs meeting the definition set forth in section 1.38a of the PJM Transmission Tariff. It is the first sentence of the definition that controls who is or will be an RTO, not Attachment L.

Section 1.44 - Third-Party Sale

Section 1.44 of the PJM Transmission Tariff defines a third-party sale as follows:

Any sale for resale in interstate commerce to a Power Purchaser that is not designated as part of Network Load under the Network Integration Transmission Service but not including a sale of energy through the interchange energy market established under the PJM Interconnection Agreement. [underlined language added]

Old Dominion maintains that section 1.44 violates the Order No. 888 requirements that any transmission provider obtain transmission service for off-system sales under its open access tariff and that transmission for all pool transactions be obtained under the pool open access tariff. 54/ Old Dominion states that an RTO's use of firm point-to-point service is limited to third-party sales, and that section 13.3 of the PJM

53/ See, e.g., Easton at 10 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

54/ Old Dominion at 13-14 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

Transmission Tariff, which requires RTOs to make third-party sales subject to the rates, terms and conditions of the PJM Transmission Tariff, does not apply to interchange sales (*i.e.*, sales through the Power Exchange). Old Dominion also states that an RTO is not covered by the network service provisions of the PJM Transmission Tariff.

Commission Response

We accept section 1.44 of the PJM Transmission Tariff. Contrary to Old Dominion's contention, an RTO is required to obtain network transmission service under the PJM Transmission Tariff in order to make sales through the Power Exchange. 55/

Section 1.46 - Transmission Provider

Supporting Companies define the Transmission Provider as follows:

Collectively, the RTOs or the Designated Agent of the RTOs, which shall be the Office of the Interconnection for the following purposes under this Tariff: operating the PJM Control Area, maintaining an OASIS, receiving and acting on applications for transmission service, conducting system impact and facilities studies, scheduling transactions, directing redispatch, curtailment and interruption, billing and accounting, and disbursement of transmission revenues.

Certain intervenors assert that PJM-OI should be the exclusive Transmission Provider. They state that PJM-OI has taken the position that its responsibilities under the PJM Transmission Tariff are limited to those that are enumerated. They add that PJM-OI has explained that, once it determines that an eligible customer has filed a completed application, there will be a three-way negotiation (PJM-OI, the RTO, and the customer) to cover issues reserved for PJM-OI or the RTO, as applicable. These intervenors ask that the Commission, as a condition of approving the proposal, specify that PJM-OI shall have sole and exclusive responsibility over administration of the PJM Transmission Tariff.

55/ See Schedule 1, section 1.4 of the PJM Operating Agreement. As discussed *infra*, we are directing PJM-OI to modify Schedule 1 in order to permit RTOs and other Load Serving Entities to use either network or point-to-point service when making sales through the Power Exchange.

Commission Response

We direct PJM-OI to revise this definition. We agree with the intervenors that PJM-OI will have sole and exclusive responsibility over administration of the PJM Transmission Tariff. If there is a need to demarcate the responsibilities of PJM-OI and the RTOs as the Transmission Provider, section 1.46 should include a list of what has not been delegated to PJM-OI and PJM-OI should explain its reasoning for such demarcation, rather than leaving customers (and the Commission) speculating as to what was not listed.

Section 4 - OASIS

Section 4 of the PJM Transmission Tariff provides, in relevant part, that "[f]or purposes of the Standards of Conduct, a marketing affiliate of any party to the PJM Interconnection Agreement is deemed to be a marketing affiliate of the Transmission Provider." Allegheny argues that only the marketing staff and marketing affiliates of the public utility members should be considered as affiliates of PJM-OI because Order No. 889 applies only to public utilities. 56/

Commission Response

We accept section 4 of the proposed PJM Transmission Tariff. The relevant provision only establishes the requirements for the Transmission Provider (e.g., PJM-OI). It appears that Allegheny has misinterpreted section 4 to mean that the requirements of Order No. 889 will apply to all parties to the PJM Interconnection Agreement, not just Transmission Providers under the PJM Transmission Tariff. Section 4 only affects the dealings of Transmission Providers with PJM members and the marketing affiliates of PJM members; it does not impose any additional Order No. 889 requirements on any PJM member that is not also a Transmission Provider under the PJM Transmission Tariff.

Section 12.4 - Dispute Resolution Procedures - Costs of Arbitrator

Section 12.4 of the pro forma tariff provides that, for a three member panel, the transmission provider and transmission customer will each pay the cost of one arbitrator and one half of the cost of the third arbitrator. For a single arbitrator, the pro forma tariff provides that each party will pay one half the cost. In contrast, the PJM Transmission Tariff provides that,

56/ Allegheny at 35-36 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

for both situations, each party will pay on a proportional basis. Allegheny states that the apportionment is not specified. 57/

Commission Response

We accept the proposed section 12.4. It is clear that section 12.4 of the pro forma tariff assumed only two parties would be involved in an arbitration proceeding. We believe that Supporting Companies revised section 12.4 merely to reflect the fact that more than two parties may be involved in an arbitration proceeding and will accept the use of the term "proportional" in section 12.4 as meaning the number of parties involved in a particular dispute.

Section 13.6 - Curtailment of Firm Transmission Service

Section 13.6 of the proposed tariff adds the following phrase: "Curtailements will be proportionally allocated among the Transmission Provider's Native Load Customers, Network Customers, and Transmission Customers taking Firm Point-To-Point Transmission Service."

Allegheny asserts that section 1.19 of the proposed tariff indicates that only RTOs have Native Load Customers and, accordingly, argues that the term "Transmission Provider's," as used in section 13.6, should be replaced by "RTO's." 58/

Commission Response

We accept section 13.6 as proposed by Supporting Companies. As noted above, the definition of "Transmission Provider" in the proposed tariff specifically includes RTOs.

Section 16.1 - Condition Required of Point-to-Point Transmission Customers

Supporting Companies add the following condition (for a customer to receive point-to-point transmission service) to section 16.1 of the pro forma tariff:

(f.) The Transmission Customer complies with the standards for operating and planning reliable bulk electric systems, including any requirement for adequate generating reserves, of NERC and their regional reliability council for the Control Area in which the capacity and energy transmitted by the Transmission Provider will be delivered to a load.

57/ Id. at 36.

58/ Id. at 36.

Certain intervenors contend that this additional condition is discriminatory because it does not apply to network customers and may preclude non-generating customers from qualifying for service under the tariff. 59/

Commission Response

Supporting Companies have not provided any rationale for including this additional condition for a customer to receive point-to-point transmission service. Supporting Companies have not explained why this change to the pro forma tariff is reasonable. Accordingly, we reject this proposed condition as unsupported and inconsistent with the pro forma tariff, which does not contain any reserve requirements.

Section 17.1 - Application for Firm Point-to-Point Transmission Service

Supporting Companies have adopted section 17.1 without change from the pro forma tariff. This section requires at least sixty days' advance notice for requests for firm point-to-point transmission service of one year or longer (but permits such requests on shorter notice when feasible) and requires expedited procedures for requests for service of less than one year.

PPANJ interprets section 17.1 as requiring one-year advance notice. Old Dominion argues that the deadlines for shorter transactions should not be left to negotiation, but should be specified in the tariff. 60/

Commission Response

Old Dominion's argument has been fully addressed in Order Nos. 888 and 888-A and will not be repeated here. The fundamental terms of the pro forma tariff are not subject to reopening or relitigation in cases like this. We note, however, that the PJM OASIS establishes specific deadlines for short-term transactions. 61/ In addition, we believe that PPANJ has misread

59/ See, e.g., PPANJ at 17 (Filed in Docket Nos. EC97-38-000 and ER97-3189); DEMEC at 26 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

60/ Old Dominion at 48-49 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

61/ As reported on the PJM OASIS in October, requests for monthly, weekly, and daily service must be submitted, respectively, at least 14 days, 7 days, and 2 days prior to the date service is to commence.

section 17.1, as the plain language of section 17.1 demonstrates there is no one-year advance notice requirement.

Section 23 - Sale or Assignment of Transmission Service

Supporting Companies have adopted section 23 from the pro forma tariff without change. Cogen Technologies NJ Venture and U.S. Generating Company (jointly, Cogen and USGen) state that this section is obsolete because FTRs will now be used for reassignment.

Commission Response

We accept Supporting Companies' proposed section 23. Contrary to Cogen and USGen's assertion, Supporting Companies' FTR proposal affects only the allocation of congestion revenues and does not provide for the reassignment of transmission service rights. 62/

Section 29.1 -Condition Precedent for Receiving [Network] Service

Section 29.1 is adopted from the pro forma tariff with the exception of the following underlined phrase added to the last condition: "the Eligible Customer executes a Network Operating Agreement with the Transmission Provider pursuant to Attachment G and the MAAC [Mid-Atlantic Area Council] Agreement." Industrial Coalition states that, while it is willing to satisfy MAAC requirements, it objects to a requirement to join a reliability council.

Commission Response

We reject Supporting Companies' proposal to the extent that it is intended to require network transmission customers to execute the MAAC Agreement as a condition precedent to receiving network service. While network service must be provided consistent with the reliability requirements of the pro forma tariff, 63/ Supporting Companies have not demonstrated that there

62/ Although we are not ordering any modifications to section 23, PJM-OI is directed to revise Attachment K to the PJM Transmission Tariff to state that PJM-OI will post information on the OASIS regarding FTR transfers, including which FTRs have been transferred, the amount of the transfer (MW), the duration of the transfer, and the identity of the buyer and seller. Also, PJM-OI shall expand the reassignment want-ads sections of the OASIS to include FTRs.

63/ We also note that the ISO will be tasked with the responsibility of ensuring short-term reliability of the

(continued...)

is a need to add the phrase "and the MAAC Agreement" to the last condition of section 29.1.

Section 30.9 - Network Customer Owned Transmission Facilities

Section 30.9, which Supporting Companies adopted verbatim from the pro forma tariff, provides, in relevant part, as follows:

The Network Customer that owns existing transmission facilities that are integrated with the Transmission Provider's Transmission System may be eligible to receive consideration either through a billing credit or some other mechanism. In order to receive such consideration the Network Customer must demonstrate that its transmission facilities are integrated into the planning and operations of the Transmission Provider to serve all of its power and transmission customers....

While this language is adopted directly from the pro forma tariff, certain intervenors are concerned that, because the Transmission Provider is now the RTOs collectively, customers will be required to demonstrate that their facilities are integrated with each of the eight RTO systems. 64/

Commission Response

We accept Supporting Companies' proposed section 30.9. Customers will not have to demonstrate that their facilities are integrated with each and every one of the eight RTO systems. As proposed by Supporting Companies, the PJM grid will now be planned and operated as a single integrated network, not eight separate RTO networks. Thus, any customer-owned transmission facilities integrated with one RTO are, by definition, integrated with each of the eight RTOs.

Section 31.3 - Network Load Not Physically Interconnected with the Transmission Provider

Supporting Companies have generally adopted section 31.3 of the pro forma tariff. However, they have revised the section to require the customer to "incorporat[e] [the load] into the PJM

63/ (...continued)
transmission grid.

64/ See, e.g., PPANJ at 14-15 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

Control Area." Certain intervenors find the proposed language to be unnecessary and undefined. 65/

Commission Response

We reject this proposed change to section 31.3 of the pro forma tariff. Supporting Companies have not explained or supported the need for this additional language.

Schedules 7 and 8 - Point-to-Point Transmission Rates

Schedules 7 and 8, as proposed by Supporting Companies, directly follow the Schedules 7 and 8 included in the pro forma tariff. Allegheny maintains that the discounting rules shown on Schedules 7 and 8 apply different standards when the discount is made to an unaffiliated customer (not unduly discriminatory) or to the RTO or its affiliate (offer the same discount). 66/

Commission Response

We find that the proposed terms and conditions set forth in Schedules 7 and 8 conform to those included in the Order No. 888 pro forma tariff. However, we note that because we are requiring PJM-OI to submit a revised tariff to comply with Order No. 888-A, the revised tariff should reflect the different approach to discounting taken by the Commission in Order No. 888-A. In this regard, the Commission explained in Order No. 888-A that

the same policy should apply regardless of whether the discount is for the transmission provider's own wholesale use (i.e., wholesale merchant function), for the transmission provider's affiliate, or for a non-affiliate. [67/]

The Commission further explained that, for any discount offered on a particular path, the transmission provider must offer to all eligible customers the same discount for the same time period on all unconstrained paths that go to the same point(s) of delivery on the transmission provider's system. 68/ Accordingly, Allegheny's concern is moot.

65/ See, e.g., DEMEC at 27 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

66/ Allegheny at 38 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

67/ FERC Stats. & Regs. ¶ 31,048 at 30,274.

68/ Id. at 30,275.

Attachment C - Methodology to Assess Available Transmission Capability

In accordance with the pro forma tariff, Supporting Companies filed an Attachment C (Methodology To Assess Available Transmission Capability). Certain intervenors are concerned that available transmission capability (ATC) will be determined using guidelines set forth in the PJM Manuals and principles in the North American Electric Reliability Council (NERC) document "Available Transfer Capability Definitions and Determination." They ask that only the NERC guidelines apply because they are determined more independently. They also argue that ATC will be improperly reduced to reflect the PJM Companies' historical practice of withholding intertie capacity from use for firm transmission in order to reduce their generating reserve requirements, a practice called Capacity Benefit Margin.

Commission Response

We reject Supporting Companies' proposed Attachment in part. As we explained above, references to the PJM Manuals may be used in certain circumstances, but if they are used, their usage must be explained. Moreover, the Commission is concerned with the references to the Capacity Benefit Margin. While this term is defined in the Reliability Agreement, which is discussed in more detail later in this order, it must be revised to be more specific about the treatment of Capacity Benefit Margin.

Attachment F - Network Service Agreement

In accord with the pro forma tariff, Supporting Companies submitted an Attachment F, which is a proposed Service Agreement for Network Integration Transmission Service. The proposed network service agreement is short and requires fairly limited data: term, network resources, network load, contract demand, reciprocity designation, intervening system, and rates.

Allegheny maintains that the service agreement should require more information, but fails to specify the additional information that it believes is necessary. ^{69/} Certain other intervenors complain that the term "Contract Demand," which is defined in the proposed network service agreement as the "Maximum amount of capacity and/or energy to be transmitted," is inapplicable for network service because that service is

^{69/} Allegheny at 39 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

available to meet a customer's total load and is not subject to a maximum. 70/

Commission Response

We accept Supporting Companies' proposed network service agreement, except for the requirement that a contract demand be specified. A contract demand, as defined by Supporting Companies, is inconsistent with the nature of network service, as defined in the pro forma tariff.

Attachment G - Network Operating Agreement

In accord with the pro forma tariff, Supporting Companies submitted a network operating agreement (NOA). It provides that the PJM Operating Agreement will constitute the network operating agreement for network customers serving load in the PJM Control Area. For other network customers (non-members), Attachment G lists the elements that would be included in a negotiated network operating agreement. Allegheny asserts that the actual network operating agreement that will apply to non-members should be codified in the PJM Transmission Tariff.

Commission Response

We accept Supporting Companies' proposed NOA. In addressing compliance tariffs filed by individual utilities, the Commission explained that an NOA is customer-specific and that it would be difficult for a utility to develop a generic agreement that would be appropriate for every customer. 71/ Instead, we found that a listing of elements, as submitted by Supporting Companies, is sufficient for Attachment G.

C. Ancillary Services

Schedule 2 - Reactive Supply and Voltage Control from Generation Sources Service

Certain intervenors request that the Commission revise Schedule 2 (Reactive Supply and Voltage Control from Generation Sources Service) to note that customers may be entitled to reduce

70/ See, e.g., Easton at 20-21 (Filed in Docket No. ER97-3189-000).

71/ See Atlantic City Electric Company, et al., 77 FERC ¶ 61,144 at 61,534-35 (1996).

the amount of reactive power they purchase if they help meet the reactive power requirements of the control area. 72/

Commission Response

We reject the request to revise Schedule 2. Supporting Companies' proposed language conforms with the requirements of the pro forma tariff. Moreover, we note that the Commission has rejected this same request in proceedings involving individual open access tariffs. 73/

Reactive Supply Service Charges

As with the transmission revenue requirement, the reactive supply service charge is based on the costs of the local service area. While some of the RTOs have adopted the reactive power charge from their individual open access tariffs, others have not. Accordingly, we set the reactive supply service charges for hearing. We will establish eight separate proceedings to consider the proposals of each RTO. 74/ To the extent that the RTO has adopted the reactive power charge from its individual tariff, parties may not relitigate that charge.

Rates, Terms and Conditions for All Other Ancillary Services

The rates, terms and conditions for all other ancillary services found in the PJM Transmission Tariff lack specificity. Moreover, the terms included in the PJM Transmission Tariff deviate from the requirements of Order Nos. 888 and 888-A in many respects, and Supporting Companies have provided no explanation or justification.

72/ See, e.g., Easton at 27-28 (Filed in Docket No. ER97-3189-000).

73/ See Atlantic City Electric Company, et al., 77 FERC at 61,537 n.22 (noting that the Commission explained in Order No. 888 that the amount taken from the transmission provider would be net of any amount furnished by the customer and that this would be reflected in the service agreement which addresses the amount of ancillary services the customer is purchasing from the transmission provider).

74/ The docket designations will be as follows: Docket No. ER97-3189-001 (Atlantic City Electric), -002 (BG&E), -003 (Delmarva), -004 (GPU), -005 (PECO), -006 (PEPCO), -007 (Penelec), and -008 (PSE&G). As explained infra, we are directing that cost of service issues pertaining to the rates proposed by individual RTOs also be addressed in these hearings.

For example, the ancillary service provisions of the PJM Transmission Tariff lack specificity and deviate from the requirements set forth in Order Nos. 888 and 888-A as follows:

- (1) There is no charge for scheduling, system control and dispatch service (scheduling service). Instead, costs incurred by the RTOs for their control centers are included in the transmission rates, and PJM-OI is authorized to allocate its "monthly charges for operation" to all transmission customers in proportion to their energy schedules (kWh) during the month.
- (2) There is no regulation service charge specified. Instead there is a vague description of a process under which every transmission user is required to provide regulation service from its own resources or through contract with another member, but if the requirement is not met, PJM-OI will purchase regulation service and pass through the costs.
- (3) For energy imbalance service, there is no deviation band requirement for network customers and RTOs and their imbalance charges will be "at the hourly PJM interchange rate." The energy imbalance charges for point-to-point service are modeled on the pro forma tariff, i.e., return of energy in kind for deviations within a 1.5% deviation band and penalties of 100 mills/kWh for deviations above the band. However, a cash settlement option is added if the customer would prefer not to return energy in kind. If the transmission customer underschedules energy, it will pay 120% of the Transmission Provider's "billing rate" and if the transmission customer overschedules energy, it will be paid 80% of the "billing rate". The term "billing rate" is not defined. Also, this service schedule describes a procedure for the distribution of revenues received for energy imbalance service on the basis that suppliers provided energy to the "residual market place" and this term is not defined. Finally, if the point of delivery serves more than one customer or RTO, PJM-OI will determine the energy imbalances for the delivery point as a whole and the "meter operator" will be responsible for further allocating them among the parties served at that delivery point.
- (4) Contrary to the requirements of Order Nos. 888 and 888-A, operating (spinning and supplemental) reserves must be purchased from the Transmission Provider. Also, there are no charges specified in these schedules, although there is a reference to Attachment K. Attachment K consists of 60 pages and is entitled Transmission Congestion Charges and Credits. The

ancillary service schedules reference no specific page or article number in Attachment K. For references to Operating Reserves that the Commission located, Attachment K simply references the PJM Manuals, which have not been filed.

The information provided by Supporting Companies is insufficient to understand what is being done, let alone if it is reasonable. Accordingly, we direct PJM-OI to revise the ancillary service schedules to clearly and specifically set forth the rates, terms and conditions, and PJM-OI and Supporting Companies to explain and justify any departures from the ancillary service requirements of Order Nos. 888 and 888-A. Also, because PJM-OI plays a key role in arranging ancillary services and has apparently been implementing these procedures since March 1997, the Commission directs PJM-OI to file a report with the Commission explaining its understanding of the requirements and the processes it has adopted in implementing these requirements. These ancillary service supplemental filings should be submitted no later than 30 days from the issuance of this order and should be submitted separately from any other filings that may be directed by the Commission or made by Supporting Companies and PJM-OI. This will ensure that, when these supplemental filings are noticed, the comments will be focused on the ancillary service issues alone. 75/

D. Transmission Service Rates

1. Firm Transmission Service Rate

System-Wide Rate

Supporting Companies propose that PJM-OI charge a single, non-pancaked rate for firm transmission service throughout PJM. The single system rate proposed by Supporting Companies is not a uniform rate, but rather is based on the costs of the RTO's local service area in which the point of delivery is located. 76/

75/ The ancillary services filings should reference Docket No. ER97-3189-009.

76/ Supporting Companies refer to the proposed rates as "zonal" rates. The zones correspond to the service areas of the RTOs, with the exception that UGI Utilities, Inc. is included as part of the PP&L zone. A network transmission service customer would pay a load ratio share of the costs of the transmission facilities comprising the zone where its load is located. The one exception to the "zone" rate approach is the rate of \$1.865/kW/month for point-to-point service for deliveries to the border of the PJM Control Area

(continued...)

Supporting Companies contend that their proposal is reasonable because it avoids cost shifting among the RTOs and ensures that transmission services used to deliver to loads in the same service area are based on the same costs. Supporting Companies committed to propose a uniform, system-wide rate methodology within five years, although they stated that the type of uniform methodology to be proposed would be subject to future negotiation.

PECO proposed that the PJM Pool implement a uniform, pool-wide rate, subject to a three-year transition period during which transmission users would either pay or receive debits or credits for purposes of phasing-in the change from zonal rates to a system-wide rate. PECO states that a uniform charge would eliminate subsidies among RTOs arising out of the reciprocal in-kind use of each others' transmission system.

NJEA states that Order No. 888 required tight power pools to file a pool-wide tariff providing non-discriminatory, open access transmission service over pool transmission facilities in order to eliminate preferential rates and treatment between pool members. 77/ NJEA argues that Supporting Companies' zonal rate proposal is inconsistent with service comparability and that it appears to be unduly discriminatory and is unjust and unreasonable. NJEA states that the proposed zones -- defined solely by existing franchise service territory boundaries -- do not reflect the fact that usage of the transmission grid will be regional rather than local. NJEA maintains that customers should not be treated differently simply on the basis of their location within PJM and the location of generating stations for the power they purchase. 78/

Industrial Coalition states that zonal transmission rates may need to exist for a limited period of time to mitigate cost-shifting, but that the proposed five-year period is excessive. Industrial Coalition maintains that the transition period should coincide with the implementation of retail direct access (stating that in Pennsylvania the transition for retail access will commence in January 1, 1999). Industrial Coalition requests that the Commission direct Supporting Companies to adopt the

76/ (...continued)
(export and through service). This rate is based on the composite costs of all RTOs.

77/ NJEA at 6 (Filed in Docket Nos. EC97-38-000 and EL97-3189-000).

78/ Id.; see also Old Dominion at 20-29 and PJM Stakeholders Coalition at 22-25 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

January 1, 1999, date as the defined deadline for the transition from zonal rates to postage-stamp rates. Industrial Coalition states that this would establish a transition period that comports with the PJM Guidance Order in which the Commission indicated that "ultimately the Supporting Companies should provide for a transition over a reasonable time to more appropriate pricing, e.g., rates based on electrical characteristics and power flows instead of corporate boundaries."
79/

Public Power Association of New Jersey (PPANJ), Easton, and DEMEC state that the PJM Transmission Tariff excludes existing and future transmission-owning municipal and rural electric cooperative systems from establishing their own zones and becoming RTOs. 80/ They request that they be allowed to define their own transmission facilities as a local service area and not be required to pay the local service area rate of the RTO with whom they are interconnected.

Commission Response

We will accept Supporting Companies' proposal, subject to modification with respect to the rate treatment proposed for GPU, and to clarification of Supporting Companies' commitment to propose a uniform, system-wide rate methodology within five years. Supporting Companies' proposal is reasonable during this period of transition in the PJM region because it effectively allows each power customer to "buy into" the local service area by placing it in the same position as the RTO that had historically been the power supplier in the service area. In addition, each power supplier will pay a rate that is no higher than the rate it would have paid had the PJM Companies elected to continue offering transmission services under their individual pro forma tariffs. This approach is consistent with our guidance in the Open Access Rule. 81/ Finally, Supporting Companies' proposal also provides assurance against abrupt shifting of costs

79/ 77 FERC ¶ 61,148 at 61,577. See also DEMEC at 17 and NJEA at 6 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

80/ PPANJ at 5-10 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000); see also Easton at 18-20 and DEMEC at 17 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

81/ See Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,727-28, order on reh'g, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048 at 30,238-40.

among RTOs which, as we recognized in the PJM Guidance Order, may be necessary to ensure broad participation in the ISO. 82/

We will also deny intervenors' request that the transition to a uniform charge take place sooner than the five-year period proposed by Supporting Companies. Supporting Companies have proposed a timetable that will permit industry-wide participation in the design of the superseding rate. We clarify, however, that the uniform, system-wide rate proposal must be filed with the Commission on or before July 1, 2002, so that implementation of the proposal would be possible at the end of the five-year transition period (i.e., January 1, 2003). 83/

Further, we deny the request that municipal customers be permitted to create their own local service area. We find that the current arrangement, which is based on the historical configuration of the transmission providers within PJM, is appropriate.

We will, however, require that GPU file a revised proposal with respect to the rate treatment proposed for the GPU local service area. GPU consists of three operating companies: (1) JCP&L, (2) Met Ed and (3) Penelec. Instead of adopting a single-system rate, GPU proposes three different rates based on the costs of the three operating companies. No explanation is provided for this departure from the Commission's requirement, reiterated in Order No. 888, that affiliated systems charging postage-stamp rates develop a single rate for the affiliated systems. 84/ As such, we direct that a single-system rate be submitted for GPU.

Transmission Service For RTOs

Supporting Companies propose that each RTO sign an agreement under the PJM Transmission Tariff that will commit the RTO to adhere to the non-rate terms and conditions of the tariff, pay congestion costs, receive congestion charge revenues, and pay the scheduling and dispatch charges that will recover the costs of PJM-OI. Supporting Companies propose, however, that RTOs not be required to pay for the embedded cost of its own transmission facilities under the PJM Transmission Tariff. Supporting Companies state that, to do otherwise, would require RTOs to pay

82/ See 77 FERC at 61,577.

83/ The filing should be developed by the Members Committee and filed by PJM-OI.

84/ See Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,728-29, order on reh'g, Order No. 888-A, FERC Stats. & Regs. ¶ 31,048 at 30,242-45.

for the transmission component of bundled retail service, and thereby infringe on state jurisdiction. They add that any RTO providing unbundled retail service through a state-approved program would provide that service through the PJM Transmission Tariff.

PECO proposes that the PJM Transmission Tariff treat retail native load and network load in the same manner. According to PECO, all transmission providers in the PJM Control Area should take service under the rates, terms, and conditions of the PJM Transmission Tariff for all services, including bundled retail services. PECO maintains that its proposal is consistent with Order No. 888, which requires that transmission service for pool transactions be obtained under a pool-wide tariff, and that Supporting Companies' proposal is at odds with Supporting Companies' claim that PJM-OI will henceforth be the transmission provider through the ISO. 85/

Commission Response

We will accept Supporting Companies' proposal, subject to modifications to address the concerns raised by PECO that the Commission shares. We agree with Supporting Companies that it is appropriate for RTOs to file a form of service agreement that does not require the RTO to effectively pay itself for transmission service over its own transmission system. However, we find that the service agreement that will apply to the RTOs' transmission service must clearly express that, as a customer under the PJM Transmission Tariff, each RTO will be obtaining transmission services from the other RTOs and from its own transmission system in accordance with the rates, terms and conditions of the PJM Transmission Tariff. In addition, we direct PJM-OI to adopt billing procedures for RTOs that show the development of the charges under the PJM Transmission Tariff, even though the RTOs will not be formally paying for such transmission service, in order to clearly identify each RTO's cost responsibility.

Cost of Service Issues

Certain intervenors 86/ have raised various cost of service issues concerning the revenue requirements of the RTOs set forth

85/ See also PJM Stakeholders Coalition at 37-42 and Old Dominion at 13-16 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

86/ See, e.g., Allegheny at 29, DEMEC at 36, Old Dominion at 27-29 and PPA NJ at 18 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

in the June 2 Filing, and request that more complete cost support be provided.

Commission Response

We direct that issues pertaining to the rates proposed by the individual RTOs (see Schedules 7 and 8 and Attachments H-1 through H-10 of the June 2 Filing) be addressed in the hearings established in the individual company proceedings to consider the reactive supply service charges. To the extent that an RTO has adopted the revenue requirement from its individual company tariff, parties may not relitigate issues raised in the individual tariff proceeding.

Average of 12 Monthly Coincident Peaks vs. Annuals Peaks

Supporting Companies have developed the unit charges for firm transmission service by dividing each RTO's revenue requirement by the average of that RTO's 12 monthly system peaks for the test year. This charge is applied to the contract demand for point-to-point reservations and to the monthly coincident peak load for network service. DEMEC and PPAJ contend that the RTO's rates should be based on an annual peak rather than the average of the 12 monthly peaks. 87/

Commission Response

We will accept Supporting Companies proposed method of developing the unit charges based on the average of the 12 monthly peaks. This approach is consistent with the pro forma tariff requirements. Further, the historical planning basis for the individual company transmission tariffs would not necessarily be representative of the new regional network service created here. At least during the five-year transition period, it is reasonable to assume that regional planning will be based on the average of the RTOs' 12 monthly loads. Indeed, until experience is gained under the restructured PJM system, the RTOs have little choice but to include all monthly peaks as relevant for planning. 88/

87/ DEMEC at 34-35 and PPAJ at 17 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

88/ Issues other than the number of months reflected in the divisor for developing the rates (e.g., the figure used as a divisor to develop the unit charges shown on Attachments H-1 through H-10), however, can be considered in the hearings established to consider the reactive supply service charge and RTO cost of service issues.

Rates For Transmission Services Using Low Voltage Facilities

The PJM Transmission Tariff defines regional transmission facilities as those classified as transmission plant by the RTOs under the Uniform System of Accounts. The PJM Transmission Tariff requires a separate charge to be developed and filed with the service agreement if the transmission service involves use of lower voltage transmission facilities.

Certain intervenors maintain that the definitions used by RTOs to define what constitutes low voltage transmission facilities should be consistent with each other and with any jurisdictional findings with respect to the transmission/distribution split ultimately made by state commissions. They also contend that any additional charges for service at lower voltages should be specified in the tariff. 89/

Commission Response

Given that the PJM Transmission Tariff does not purport to impose a charge for services over low voltage transmission facilities, we find that the contentions concerning the low voltage charge are premature. Transmission service utilizing facilities at voltages below those listed on the applicable Attachment H of the PJM Transmission Tariff for each local service will be provided under the Tariff. It is only the additional charge for service utilizing such facilities that is not yet codified in the PJM Transmission Tariff because it will be determined on a case-by-case basis and inserted in the service agreement filed by PJM-OI as a Supporting Facilities Charge (see, e.g., Schedule 7, paragraph 5). This customer-specific treatment is consistent with our findings in other open access tariff proceedings. 90/ We note that, under the PJM Transmission Tariff procedures, customers may request that an unexecuted service agreement be filed placing issues in dispute before the Commission, including any disputes about customer-specific charges for the use of lower voltage facilities.

Credit For Customer-Owned Facilities

Easton and PPA NJ state that section 30.9 of the PJM Transmission Tariff, which tracks the language of the pro forma

89/ See, e.g., DEMEC at 22-24 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000), Washington Gas Energy Services, Inc. (Washington Gas) at 16 (Filed in Docket No. ER97-3189-000), and Old Dominion at 32-33 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

90/ See Allegheny Power System, et al., 80 FERC ¶ 61,143 at 61,551 (1997) (Allegheny Power).

tariff with respect to credits for customer-owned facilities, should allow Easton and the City of Vineland, New Jersey (Vineland) to qualify for a credit from the RTO with whom they are interconnected, Delmarva and Atlantic City Electric, respectively. 91/ They claim that they should not be denied the credit simply because their facilities are not considered to be integrated with the entire PJM network. Easton states that it is pursuing the issue with the RTOs, but requests a hearing now because it is uncertain whether the matter will be resolved.

Commission Response

An evidentiary hearing to determine whether facilities would qualify for a credit is premature. The Commission will address any such concerns on a case-by-case basis.

Penalties For Firm Point-To-Point Transmission Service

The PJM Transmission Tariff contains a penalty for using firm point-to-point transmission service in excess of the reservation equal to the firm transmission rate applicable to the transaction period (e.g., for 1 kW of excess usage in one hour during a 1 year transaction, the penalty charge would be \$22, the annual rate for point-to-point service).

Commission Response

As we have found previously, 92/ the penalty must be limited to twice the charge for the period of excess (e.g., 10.76 mills/kWh for excess of 1 kWh). The PJM Transmission Tariff must be revised accordingly.

Phase-In of Rate Increase

PPANJ maintains that Vineland will experience a massive rate increase under the PJM Transmission Tariff. 93/ PPANJ estimates that network service for Vineland under the PJM Transmission Tariff will cost \$2 million per year, and that Atlantic City Electric, the RTO with which Vineland is interconnected, will charge an additional \$1 million per year for the use of lower voltage facilities. PPANJ states that Vineland currently pays less than \$1 million per year for the transmission services it

91/ Easton at 22-26 and PPANJ at 14-15 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

92/ See Allegheny Power, 80 FERC ¶ 61,143 at 61,545-46.

93/ PPANJ at 10-12 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

receives. PPAJ asks that the rate increase be phased in over five years.

Commission Response

We will deny PPAJ's request for a phase-in of the purported rate increase. The regional services to be provided under the PJM Transmission Tariff were not available previously. To the extent Vineland pays more for transmission service, it is because it seeks to utilize the higher quality regional service. As noted above, Vineland can continue to take more limited services should it find network service too expensive for its needs.

Treatment of Losses

The PJM Transmission Tariff proposes a power loss factor of 3% on-peak and 2.5% off-peak, and proposes to charge for losses based on the average energy price of the Power Exchange. Certain intervenors maintain that the loss factors are unsupported or excessive and that a charge based on the Power Exchange energy price is unsupported. ^{94/} The PJM Transmission Tariff will be revised to adopt marginal losses as soon as the methodology and implementation procedures have been developed.

Commission Response

We find that the proposed power loss factors are acceptable. A loss factor in the range of 3% is representative of the loss factors common in the industry, and pricing losses on the basis of the cost of economy energy is also a standard industry approach that we find acceptable. Tariff revisions to adopt marginal losses will be tendered in a future filing under section 205, noticed for comment and addressed in a separate order.

2. Non-Firm Transmission Service Rate

Supporting Companies propose that non-firm transmission service customers pay a single, non-pancaked transmission service rate based on the firm point-to-point rate using peak usage pricing. Supporting Companies propose that the single-system rate be discountable, and to charge the higher of congestion costs or the embedded cost rate if a non-firm point-to-point customer chooses to wheel through congestion instead of being interrupted. Supporting Companies also propose that PJM-OI distribute revenues associated with non-firm point-to-point

^{94/} See, e.g., DEMEC at 31 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000) and Old Dominion at 47-48 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

transactions to RTOs in proportion to their relative revenue requirement. 95/

PPANJ claims that the proposed non-firm transmission service rate is excessive and that a cost-correlated charge should be stated. PPANJ also states that discounts should be offered fairly and even-handedly. 96/ Clearinghouse and DEMEC argue that the revenues collected from non-firm transmission service rates should be credited to firm transmission customers or that costs be allocated to non-firm service. They contend that, otherwise, RTOs would be receiving a windfall between rate cases. 97/

Commission Response

We find that Supporting Companies' proposed non-firm transmission rate is acceptable, subject to the revenue crediting modification discussed below. The proposed charge is consistent with that permitted for non-firm service under the pro forma tariff. In addition, charging the higher of the applicable congestion charge or the embedded cost rate to a non-firm customer that chooses to wheel through congestion will properly ration constrained capacity among competing non-firm transactions on the basis of price. With respect to PPANJ's discounting concerns, the FPA requires that PJM-OI offer discounts of non-firm transmission service on a not unduly discriminatory basis.

We direct PJM-OI to modify the proposal, however, to require that revenues collected from non-firm transmission rates be credited directly to firm transmission customers on a monthly basis, at least on an interim basis during the five-year transition to a uniform, system-wide rate. We recognize that in Order Nos. 888 and 888-A we rejected requests for an automatic

95/ The non-firm transmission service revenues subject to this distribution would be non-congestion revenues, i.e., the basic charge that applies in the absence of transmission constraints. When the non-firm transmission service rate during a period of congestion is based on the higher embedded cost rate, therefore, the portion of the rate that equals the congestion charge will be distributed to holders of firm transmission rights (as discussed herein), while the remainder would be distributed according to this procedure. If congestion charges are higher than the embedded cost rate, all of the revenues would be related to congestion charges and distributed to firm transmission right holders.

96/ PPANJ at 19 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

97/ DEMEC at 34 and Clearinghouse at 38 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

pass-through of non-firm revenues in the context of individual transmission tariffs. However, we believe that, under the new regional PJM Transmission Tariff, monthly revenue crediting is appropriate, at least on an interim basis. Under the restructured PJM system, PJM-OI will provide non-firm transmission services throughout the PJM Control Area, so RTOs will provide little, if any, non-firm transmission services directly. In addition, there will be different non-firm transmission service rates for each of the eight RTO service areas. Under Supporting Companies' proposal, non-firm transmission service revenues would be reflected in rates whenever an individual RTO makes a rate filing; therefore, the revenues would be reflected at different intervals for different customers even though all customers would be receiving the same pool-wide service. We believe this would be unreasonable, particularly because the change in the nature of the service is likely to impact the volume of non-firm services and the magnitude of revenues significantly.

Moreover, we believe that monthly crediting of non-firm revenues is consistent with Supporting Companies' proposal (addressed below) to reflect transmission congestion charges and congestion revenue credits in monthly billings. In this regard, under Supporting Companies' proposal, when the use of constrained transmission capacity differs from firm transmission reservations (e.g., when a non-firm customer pays congestion charges in order to wheel through congestion), congestion charge revenue credits to firm customers will be included in monthly bills.

Upon PJM-OI's filing of a proposal to implement a uniform, system-wide transmission service rate, parties may revisit the non-firm revenue crediting issue.

To the extent that an RTO has included any revenues from non-firm transmission service in the test-year underlying the development of its firm transmission rates, however, it may revise its rates to exclude those non-firm revenues. The specific adjustment to an RTO's firm transmission service rate, if any, should be addressed in the hearings that we are requiring in this order.

Finally, we direct the RTOs to refund any non-firm charges to the customer for the period during which the customer's service is interrupted. 98/

E. Transmission Congestion Charges

We find that Supporting Companies' proposed locational marginal pricing (LMP) model, in conjunction with the use of

98/ See Allegheny Power, 80 FERC at 61,549-50.

FTRs, is just and reasonable and should be implemented on a prospective basis, subject to the modifications discussed herein. 99/ We believe that the LMP model will promote efficient trading and be compatible with competitive market mechanisms. In this regard, we find that the LMP approach will reflect the opportunity costs of using congested transmission paths, encourage efficient use of the transmission system, and facilitate the development of competitive electricity markets. By pricing the use of constrained transmission capacity on the basis of opportunity costs, the proposal will also send price signals that are likely to encourage efficient location of new generating resources, dispatch of new and existing generating resources, and expansion of the transmission system.

1. Introduction

a. Locational Marginal Pricing

Supporting Companies and PECO submitted competing proposals for the calculation and recovery of transmission congestion costs. Under the LMP model, sponsored by Supporting Companies, transmission congestion costs are calculated based on differences in the marginal price of generation at each location on the transmission grid. 100/ Each generator supplying energy to the bid-based energy interchange market would be paid the marginal price of energy at its location. If transmission constraints limit PJM's ability to call upon generation offered at one location to serve load at another location, PJM will have to call upon generation with a higher bid price to serve that load, which will cause locational marginal prices to differ on opposite sides of constrained transmission interfaces. The differences between the locational marginal prices represent congestion costs. 101/

99/ Given that we will approve the LMP model for congestion pricing, subject to certain modifications, we reject the motions for summary rejection of LMP filed by Easton, Vineland and NJEA (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

100/ The location will be the bus where the generator is located or the tie between the transmission facilities within PJM and other transmission systems. Brief of Supporting Companies at 6 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

101/ Transmission congestion costs are opportunity costs consisting of the following: (1) redispatch costs, i.e., the increase in operating costs associated with dispatching generating sources out of merit order as a result of transmission constraints; and (2) foregone savings or

(continued...)

Supporting Companies claim that the LMP model is intended to generally replicate the same congestion charges that would result from a series of bilateral transactions under the Commission's current pricing models. The LMP model is based on several simplifying assumptions:

- With open access transmission, the interaction between buyers and sellers acting in their own economic interests will ultimately result in the operation of the least cost generation resources.
- In the absence of transmission constraints, there would be a single market clearing price for hourly energy equal to the marginal cost of meeting the last increment of demand.
- When there are transmission constraints:
 - The cost of power will vary by location because available low cost suppliers cannot reach buyers. If a more expensive unit is operated because insufficient transmission is available to accommodate all economic generation (redispatch costs), the redispatch costs will be reflected in the locational price as a matter of course and all buyers at that location will share in those costs in proportion to their load.
 - Power suppliers with firm transmission rights will be able to transmit power across the constraint, but will surrender their transmission entitlements to lower cost suppliers if made whole for their foregone power sale profits.
 - In the end, energy will be supplied consistent with the desire to minimize generating costs given available transmission. The power revenues (the amount paid by the buyer) will be apportioned between the transmission entitlement holder (foregone power sale profits) and the actual power supplier (generation price).

b. Fixed Transmission Rights

Every firm point-to-point and network service under the PJM Transmission Tariff will be awarded fixed transmission rights (FTRs) for their specific receipt and delivery point

101/ (...continued)

profits, i.e., the economy purchase savings or power sale profits that are foregone when a transmission customer transfers its right to use constrained transmission to another transmission customer.

reservations. 102/ FTRs entitle the holder to receive rebates of congestion revenues and may be sold to another transmission customer without reassigning the transmission capacity reservation itself.

For a point-to-point service, an FTR is the MW reservation associated with each point of receipt and each point of delivery. For a network service, an amount of FTR is also associated with each point of receipt and delivery, subject to the network customer's MW reservation not exceeding its annual peak load. The choice of which network resources to use for purposes of allocating FTRs is solely at the discretion of the network user. 103/

Energy schedules that have receipt or delivery points that do not correspond to the customer's FTRs will pay congestion charges, if any, associated with use of these receipt and delivery points. Congestion charge revenues will be distributed to the holders of FTRs whose receipt and delivery points were used by others. Thus, if a firm transmission customer schedules energy between its points of receipt and delivery for which it holds FTRs, it will pay no congestion charges, *i.e.*, its congestion charges will be exactly offset by its congestion revenues. If the firm transmission customer does not schedule energy consistent with its points of receipt and delivery for which it holds FTRs, it will pay congestion charges to the extent it uses other points that are constrained, and receive congestion

102/ Whenever PJM-OI receives a new request for firm service, it will model all existing uses based on the assumption that: (1) existing firm point-to-point users are scheduling energy consistent with their reservation; and (2) existing network users are scheduling energy from those network resources which have been assigned FTRs, *i.e.*, PJM-OI will assume that all firm users have scheduled energy consistent with their FTRs. If the new service can be added to this baseline without impairing reliability, the application will be granted and additional FTRs will be assigned equal to the new reservation. With respect to network service, existing network users may request a change in their choice of network resource reservations, and PJM-OI will use the same process to determine the feasibility of the modified service request.

103/ For example, if a network customer had an annual peak load of 1000 MW and had 12 network resources of 100 MW each, it must designate 10 of the 12 resources as its network reservations, and would be assigned 1000 MW of FTRs with points of receipt corresponding to those 10 network resources and points of delivery corresponding to its loads.

revenues to the extent other transmission customers use its points for which it holds FTRs when they are constrained.

The June 2 Filing modifies Supporting Companies' previously proposed method of allocating any excess congestion charges that may be collected. In particular, each month any congestion charges collected in an hour in excess of those needed to completely offset congestion charges for each holder of FTRs will first be used to make up any deficiencies incurred in any prior hour (i.e., the amount by which the congestion charges collected were not sufficient to completely offset congestion charges incurred); any congestion charge revenues remaining at the end of a month after this allocation will be credited to all network and firm point-to-point transmission customers during the month.

c. Alternative Proposals

PECO, CCEM, and others have proffered alternative proposals for the treatment of congestion costs. PECO would calculate congestion costs based on the difference between the bid price of generators operated for transmission control and the price at which the market would have cleared without congestion. Under the PECO proposal, such congestion costs would be spread across all users of the transmission system on a load ratio basis by including congestion costs in the regional transmission cost of service. PECO claims that this method of averaging congestion costs among all transmission users is appropriate for pricing transmission constraints on an integrated system and reflects the true economic value of constraints. PECO states that the PJM transmission system requires a relatively small amount of constraint control to operate reliably. 104/

CCEM filed a Capacity Rights Open Access Tariff (Capacity Rights Tariff) as an alternative to the proposals sponsored by Supporting Companies and PECO for pricing transmission services and transmission congestion. CCEM said that it continues to support the PECO proposal for transmission pricing, but that its proposal should be approved in the event that the Commission is inclined to approve a form of congestion pricing that is more explicit than the PECO method. The Capacity Rights Tariff includes a zonal approach to congestion pricing 105/ and would eliminate point-to-point transmission; consequently, all

104/ PECO states that, for the last several years, the amount of off-cost generation experienced by PJM has run in the range of \$2-5 million per year. PECO Explanatory Statement at page 5 n.5 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

105/ CCEM states that the PJM Control Area divides into five zones separated by five congested interfaces.

transmission would be offered as network service. 106/ Network service would be subject to an embedded cost-based rate determined on the basis of load ratio share. In addition, the Capacity Rights Tariff provides for a periodic simultaneous, multi-round auction for purposes of auctioning capacity rights across constrained interfaces. The capacity rights would be fully fungible property interests that could be traded in secondary markets at prices up to the opportunity costs of the holder of the capacity rights.

2. Discussion

Many intervenors raise objections to the Supporting Companies LMP proposal. For example, a number the parties favor the PECO approach of limiting congestion costs included in transmission rates to the increased generating costs caused when a low cost supplier cannot reach the market (redispatch costs), and spreading the costs on an average, system-wide basis. Parties have also claimed, among other things, that LMP is too complex, it will not allow price certainty for market participants, the proposal increases the amount of congestion costs to be recovered by RTOs, and that the proposal violates the Commission's policy against "and" pricing. A number of parties also protest the proposed treatment of FTRs. Our discussion below will address the issues raised with respect to Supporting Companies transmission congestion charge proposal.

Complexity of the LMP Proposal

A number of intervenors maintain that Supporting Companies' proposal is an overly complex answer to a relatively modest problem. 107/ Certain intervenors argue, in this regard, that the proposal is so intricate that it cannot be relied upon to produce verifiable rates. The intervenors also maintain that calculations of congestion charges will not be auditable because the data is too voluminous to be conveniently stored and analyzed. 108/

Many parties opposing the proposal also claim that the transmission congestion problem is overstated under the LMP

106/ All entities serving load within the PJM Control Area would be required to purchase network service.

107/ See, e.g., DEMEC at 18-19, PECO and Schuylkill at 15-19 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000); PJM Stakeholders Coalition at 27-31 and Industrial Coalition at 15-17 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

108/ See, e.g., North Jersey at 11-12 (Filed in Docket No. OA97-261-000).

model. They claim that the PJM system experiences constraints less than 10% of the time for a total annual cost of approximately \$4 million, a relatively insignificant amount when compared to the total PJM transmission revenue requirement of more than \$850 million. The intervenors contend that the congestion charges resulting from the PJM proposal are substantially higher than the congestion costs experienced by PJM in the past (\$150 million versus \$4 million for a representative annual period). 109/ They contend that the PJM proposal intentionally inflates congestion charges for the purpose of transferring monies from power suppliers to RTOs. Certain intervenors add that the LMP approach is not necessary because significant changes in congestion charges should not arise as a result of the changing competitive environment, given that the location of resources and loads will not change or will change slowly, in predictable ways.

Duke Energy Trading and Marketing, L. L. C. (Duke Marketing) states that, since LMP is complex and untested, it would be appropriate for the Commission to establish a formal review process that would permit all market participants and the Commission to evaluate the effectiveness of LMP based on actual data. 110/ Duke Marketing suggests that the Commission require PJM-OI to retain all market data that forms the basis for LMP, as well as information on FTR allocations and congestion charge revenue distributions, and that the Commission convene technical conferences to address this approach to congestion management.

Commission Response

We recognize that, in light of the sheer volume and complexity of transactions that will take place in the PJM Control Area, at least initially LMP will add a measure of complexity to transmission pricing in the PJM Pool. However, those opposing the LMP approach overstate the problem. With the availability of modern computer technology, we disagree that congestion charge data will be too voluminous and complicated to be stored, analyzed and audited. As revised in the June 2 filing, the LMP model is clearly defined, each customer will be able to verify the accuracy of its bill by reference to information that can be made readily available, PJM-OI is fully

109/ See, e.g., Industrial Coalition at 15-16 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

110/ Duke Marketing at 6-7 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

capable of implementing LMP, and LMP computations can be audited and independently verified. 111/

Notwithstanding the intervenors' arguments, in these circumstances, in light of the rapidly changing marketplace that we anticipate in the PJM region, past experience cannot be relied upon to gauge the magnitude or significance of congestion costs or the likely location of constraints in the restructured PJM markets. Historical congestion costs reflect a system operated for the benefit of the PJM Companies in electricity markets that were subject to far less competition than will be taking place in the future. Future congestion costs are likely to reflect a system operated in response to economic decisions made by numerous market participants in highly competitive electricity markets. Therefore, we cannot conclude at this time whether the frequency and magnitude of constraints will be consistent with historical experience.

Moreover, the historical PJM pool dispatch figure of \$4 million referenced by the intervenors relates only to costs that are incurred when a generator is operated out of economic order due to transmission constraints, i.e., redispatch costs. In comparison, the LMP approach also encompasses foregone savings (savings foregone when a transmission entitlement holder foregoes an economy energy purchase and surrenders its transmission entitlement to another transmission user) and foregone profits (profits foregone when a transmission entitlement holder foregoes a power sale and surrenders its entitlement to another transmission user). Redispatch costs are the only congestion costs that are currently accounted for through the pool dispatch. These foregone savings and profits have previously been recovered through bilateral transaction rates rather than via the PJM central dispatch. 112/

As the intervenors correctly point out, basing a transmission charge on foregone savings and profits has the effect of apportioning the monies paid by the power customer between the power supplier and the transmission provider. We

111/ See Statement of Phillip G. Harris, President and CEO of PJM-OI, at page 14; Statement of Michael J. Hamilton, Partner, Price Waterhouse LLP, at page 7 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000 on April 28, 1997).

112/ A significant portion of the \$150 million includes congestion charges based on foregone savings and revenues previously included in bilateral transaction rates. Moreover, the \$150 million congestion cost figure is misleading because it does not subtract rebates to holders of FTRs that will use their own reservations to schedule energy.

believe this apportionment will foster efficient electricity markets. ^{113/} If a transmission entitlement holder were not compensated for its foregone savings and profits, however, the market would be less efficient because the entitlement holder would have no incentive to release the capacity to the market.

We deny Duke Marketing's request that we oversee a formal review process to evaluate how LMP is working in practice. We recognize, however, that implementation of LMP may raise certain questions requiring an exchange of information and exploring of issues among PJM-OI and interested parties. We direct PJM-OI, therefore, to provide PJM market participants with the LMP and FTR information referenced by Duke Marketing and to convene conferences to discuss issues of concern to the market participants.

Lack of Price Certainty

Under Supporting Companies' proposal, PJM-OI will operate an hourly economy interchange energy market that will establish locational energy prices and will be used to compute the congestion charges under the LMP Model (the interchange energy market is referred to as the Power Exchange). The transmission preschedules, generating resource availability, purchase offers and sales offers will be known the day before and will be used by PJM-OI to post estimates of likely congestion costs. Also, as each trading hour in the day progresses, actual congestion costs for prior hours will be posted. Because energy schedules can be changed up to the hour of service, however, the actual congestion costs for any particular hour will not be determined until after the hour has begun.

CCEM, Schuylkill, NJPIRG and other parties argue that congestion costs must be known before energy schedules are committed if they are to provide a price signal and influence economic scheduling decisions. ^{114/} The intervenors maintain that pre-commitment information provides no certainty because the actual congestion costs will be influenced by numerous factors. The intervenors also maintain that this uncertainty does not apply to transactions consummated through the PX, because PX buyers can specify the maximum price at which they will buy (a price that combines the wholesale generation price and the transmission congestion charge into one). The intervenors assert that placing this uncertainty only on PJM Transmission Tariff

^{113/} See Southern Company Services, Inc., 37 FERC ¶ 61,190 at 61,451-52 (1986).

^{114/} CCEM, Schuylkill and NJPIRG at 16; see also Clearinghouse at 13-15, and PECO and Schuylkill at 17-18 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

customers that engage in bilateral transactions establishes a preference for PX transactions. The intervenors state that this uncertainty should be resolved by spreading congestion costs among all transmission service customers through a surcharge on transmission service rates.

Supporting Companies claim that their proposal provides customers with all the price certainty that is possible given the dynamics of a free flowing grid. They contend that, because congestion costs do not become certain until all last hour changes in demand and generation levels are determined, congestion costs are unknowable until the dispatch hour. Supporting Companies also explain that FTRs will provide an effective method of protecting against the incurrence of congestion costs, and that market participants will have access to all relevant information needed to make scheduling decisions based on their own estimates of market dynamics.

Commission Response

We agree that the lack of price certainty is a limitation in Supporting Companies' proposal that must be addressed expeditiously. Nevertheless, we believe that, even with this limitation, Supporting Companies' LMP proposal is beneficial. This is particularly true in the absence of any evidence that the actual congestion charge will vary significantly from PJM-OI estimates.

Although the use of FTRs will provide an effective method of protecting against incurrence of congestion costs when suppliers engage in transactions that use their firm reservations, the allocation of FTRs will not remedy the lack of price certainty when suppliers use points of receipt or delivery for which they do not hold FTRs. As a result, we direct PJM-OI to initiate within 30 days a process for resolution of this issue, and that PJM-OI file a revised congestion pricing proposal that provides greater price certainty within 120 days from the date of issuance of this order.

We will provide guidance on alternative approaches that the PJM-ISO and interested parties may consider to resolve this issue. For example, one option the parties may consider is to commit to energy schedules earlier, rather than allowing changes up to the hour. While this is a departure from historical practice, the competitive regional market envisioned in the PJM Pool will be much more complex than in the past and providing up front price certainty may outweigh any losses in efficiencies. Another option to consider is allowing market participants to specify the maximum congestion charge that they are willing to pay in advance of scheduling the transaction.

Finally, Supporting Companies have committed to amend their proposal by December 31, 1997, to include a multi-settlement system. ^{115/} A multi-settlement system could provide another possible vehicle for addressing the risks of uncertain congestion charges. Such a system would allow market participants to commit and obtain commitments to energy prices and transmission congestion charges at specified times in advance of real-time dispatch, such as a day-ahead of real time. To address the issue of uncertain congestion charges, a multi-settlement system proposal could be developed to permit each transmission customer to inform the ISO of the maximum congestion charge it is willing to pay for various amounts of transmission between identified points. ^{116/} In developing the day-ahead schedule, the ISO would schedule only those transmission customers that are willing to pay the applicable market clearing congestion charge. In this way, each transmission customer would be assured of being included in the day-ahead schedule only if the congestion charge did not exceed the charge it was willing to pay. The transmission customer would then know the amount of its scheduled transmission and the associated congestion charges a day in advance. There may also be other types of multi-settlement systems that could address the issue of uncertainty.

Computing Congestion Charges Based On Power Exchange Prices

Certain intervenors maintain that, while the difference in prices for hourly PX transactions may be an appropriate measure of the congestion costs related to transmission services provided for PX transactions, PX prices should not be used to compute congestion costs for other transmission services (network customers self-scheduling energy from their resources, firm transmission customers using alternate receipt and delivery points to schedule bilateral power sales, and non-firm transmission customers engaging in bilateral power sales).

^{115/} PJM Transmission Tariff, Attachment K, Section 1.7.21, Original Sheet No. 142.

^{116/} This procedure is similar to Supporting Companies' proposal for developing the PX energy schedule, and thus would provide greater comparability between PX energy transactions and bilateral transactions requiring transmission service. In developing the PX energy schedule, energy suppliers and purchasers are allowed to inform the PX (through their bids) of the price at which they are willing to transact for energy. The PX then schedules all suppliers whose bids are less than or equal to the applicable energy price and all purchasers whose bids are greater than or equal to the applicable energy price. In this way, every bidder is assured that it will not be forced to transact through the PX at prices that it deems are unfavorable.

Clearinghouse contends that to have a "proper" price signal transmission prices should reflect all transactions in the market, e.g., hourly, weekly, monthly, seasonal. 117/

Commission Response

We will accept Supporting Companies' proposal to use the PX hourly energy price for purposes of calculating congestion costs. The PX prices, as a matter of course, will be representative of the market clearing price in the PJM region. The PX will be only one of the available mechanisms to facilitate trade and discipline prices in the PJM market. Bilateral markets and other trading mechanisms will develop in response to market needs and thereby influence prices in the PX. For example, if the price for power in bilateral markets or in other trading mechanisms is lower than the PX, buyers will move away from the PX, forcing PX prices down. It should also be recognized that congestion cost responsibility would not change if the calculation was based on transmission services of more than one hour. Congestion charges for a monthly transaction are simply the sum of the congestion charges for each hour in the month. Supporting Companies' proposal already addresses the one course of action that could distort PX energy prices and attendant congestion cost calculations (i.e., the potential for RTOs, who control the majority of generation in this market, to withhold capacity from the market) by requiring RTOs to commit all capacity to the PX, to the extent not committed to serve native load or to make bilateral power sales, in the day-ahead market.

Consistency With Transmission Expansion Requirements

Old Dominion distinguishes between congestion costs occasioned by the pursuit of short-term production cost economies and those occasioned by the redispatch of the system to accommodate a new, long-term firm transmission service. 118/ Old Dominion maintains that congestion cost recovery is appropriate only for short-term transactions, and that the costs should be recovered only from those customers who are using the congested facilities. For new firm transmission requests, Old Dominion contends that all transmission users should share in the redispatch cost if cheaper than expansion.

Clearinghouse, NJEA and other intervenors argue that Supporting Companies' congestion pricing proposal will not provide appropriate price signals to elicit transmission

117/ Clearinghouse at 14-15 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

118/ Old Dominion at 10-14 (Filed in Docket EC97-38-000 and ER97-3273-000).

expansion. 119/ Clearinghouse maintains that once new generation or transmission is added, the locational price differential will be eliminated, so there will be no revenue stream to support expansion. In comparison, NJEA maintains that parties may not be able to determine if expansion will relieve a constraint.

Commission Response

Supporting Companies' congestion pricing proposal is consistent with the Commission's requirements that the transmission grid be expanded to meet firm transmission requests, that customers pay redispatch costs in lieu of expansion costs when it is the less costly alternative, and that RTOs file any proposal to price firm transmission on any basis other than the postage-stamp transmission rate in the tariff. Although Supporting Companies' LMP proposal is designed primarily to enhance short-term economies by allowing market participants to respond to economic price signals, we expect that these same price signals will help to elicit appropriate expansions of the transmission system. For example, even when participants engage primarily in short-term transactions, high levels of congestion costs will give participants an incentive to expand capacity in cases where participants plan, over time, to engage in many such transactions and congestion costs are expected to persist at levels above expansion costs. Conversely, if congestion costs are expected to be small or to occur infrequently, participants will recognize that expansion is not economically justified.

In response to the concern of Clearinghouse that, after new capacity is added, there will be no revenue stream to support the expansion, we note that the prospect of paying zero or reduced congestion costs should, in many cases, be sufficient to encourage one or more participants to support an expansion. Moreover, having borne the costs of an expansion, participants will receive additional FTRs that will protect them from having to pay future congestion charges due to changes or increases in demand.

Prohibition Against "And" Pricing

The Commission's Transmission Pricing Policy Statement stated that a customer may not be charged both an embedded cost rate and an incremental cost rate for the same service over the

119/ Clearinghouse at 16 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000) and North Jersey at 12-13 (Filed in Docket No. OA97-261-000).

same facilities. 120/ This is referred to as our prohibition against "and" pricing.

Some of the parties opposing the LMP model maintain that it violates the prohibition against "and" pricing. They claim that firm transmission service customers who pay transmission congestion charges will be forced to pay both an embedded cost rate and an incremental cost rate (i.e., the transmission congestion charge) for the same service over the same facilities. In this regard, DEMEC states that by requiring transmission customers to pay for transmission both on the basis of an embedded cost rate and on the basis of an added congestion charge assigned to those customers allegedly causing the constraint, the proposed congestion pricing mechanism violates the Commission's prohibition against "and" pricing. 121/ Easton, Vineland, and City of Dover, Delaware (Dover) state that they are each subject to "and" pricing. They argue that, because their generating facilities are located on the load side of the interconnection with their respective surrounding utility, their FTRs would have no value in offsetting congestion costs, resulting in the payment of both embedded and opportunity costs. 122/

Commission Response

We find that Supporting Companies' proposal does not violate the prohibition against "and" pricing. Under Supporting Companies' LMP model, a firm customer will pay only an embedded cost rate when it schedules energy consistent with its firm reservation (i.e., while it may pay congestion charges, it will receive congestion revenues corresponding to its FTRs, so its net congestion charge will be zero). If that customer elects to schedule energy inconsistently with its firm reservations, it has requested a new transmission service (i.e., transmission service relying on an alternate receipt and/or delivery point). Any payment of transmission congestion charges for that new service will not violate the prohibition against "and" pricing. In other

120/ See Inquiry Concerning the Commission's Pricing Policy for Transmission Services Provided by Public Utilities Under the Federal Power Act, Policy Statement, FERC Statutes and Regulations, Regulations Preambles, January 1991 - June 1996 ¶ 31,005 (1994), order on reconsideration, 71 FERC ¶ 61,195 (1995).

121/ DEMEC at 15 (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

122/ Easton, Vineland and Dover Joint Motion For Summary Disposition (Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

words, for each service the customer will pay either an embedded cost rate or the incremental rate, not both.

In a like manner, we find that the arguments of Easton, Vineland and Dover are without merit. All network transmission customers, including RTOs, that have network resources on the load side of a transmission constraint are treated equally with respect to the value of the FTRs associated with those resources. Any such FTRs will not entitle the customer to transmission congestion revenue credits because the associated resources would not adversely affect any relevant constraint, i.e., there are no congestion revenue credits or congestion charges when there is no associated congestion. Therefore, a customer that uses network resources on the load side of a constraint will not pay an "and" price. 123/

We also point out that Supporting Companies' proposal is entirely consistent with the pro forma tariff. Under Supporting Companies' proposal, as under the pro forma tariff, if a firm point-to-point or network customer elects to use alternate receipt points during an unconstrained period, it may do so at no charge. If a firm point-to-point customer takes transmission service while the system is constrained, however, it must pay another user to surrender its reservation. Under the pro forma tariff, the additional charge would be the higher of the opportunity costs or the maximum embedded cost rate, while Supporting Companies' proposal would require the customer to pay only the opportunity cost (i.e., the congestion cost). Finally, the pro forma tariff provides that a network customer cannot use alternate receipt points in a constrained situation (alternate points may be requested only on an as-available basis), while under Supporting Companies' proposal, if the network customer elects to use alternate receipt points over a constrained corridor, it may do so by paying the congestion cost.

Initial Allocation of FTRs

123/ These parties also maintain that Supporting Companies' proposal allocated FTRs unfairly because their FTRs have no value. We disagree. Supporting Companies' proposal assigns FTRs to network users based on the size and location of their resources. These customers have chosen to designate uneconomic generating units as their network resources and to rely on economy purchases to meet virtually all of their energy requirements. In this respect, their exposure to congestion charges will be no different than in the past (i.e., in the past, they could not reach their purchased power resources during a constrained period unless another transmission user, with a right to use the constrained facilities, surrendered that right).

As stated above, Supporting Companies' propose that every firm point-to-point and network service under the PJM Transmission Tariff be awarded FTRs based on their specific receipt and delivery point MW reservations. Clearinghouse states that the initial allocation of FTRs amounts to a "give-away" to the transmission-owning utilities and, therefore, is discriminatory. 124/ Clearinghouse states further that uncertainty exists regarding Supporting Companies' commitment to file an FTR auction mechanism with the Commission, and that this uncertainty exacerbates the discriminatory nature of the initial allocation of FTRs. Cogen and USGen state that a more acceptable method of initially allocating FTRs would be to conduct an auction of simultaneously feasible FTRs with the proceeds applied to the embedded cost of the transmission system. 125/

Commission Response

We find that the proposed allocation of FTRs is acceptable. Under the pro forma tariff, transmission providers are entitled to reserve sufficient capacity to meet native load requirements (i.e., the customers for whom the transmission grid was planned and constructed in the first instance). Accordingly, it is entirely consistent to assign transmission providers FTRs to support their existing firm uses of the transmission system, including service for all native load customers.

As to the concerns of Clearinghouse, Cogen and USGen with respect to developing an auction process for allocating FTRs, as we note above, Supporting Companies have committed to make a filing before the end of 1997 to implement a process for auctioning FTRs beyond those retained by network and firm point-to-point transmission customers.

Allocation of FTRs Based On Network Load Versus Network Resources

Supporting Companies propose that network customers be allocated FTRs for network resources associated with each point of receipt and delivery, but that the total amount of FTRs allocated not exceed the network customer's annual peak load. A network customer has the discretion to determine which network resources to use for purposes of initially allocating FTRs.

Allegheny and Pennsylvania Rural Electric Association state that network customers will always have network resources in excess of load (i.e., reserves) and that, because FTRs are

124/ Clearinghouse at 6, 16-17 (Filed in Docket Nos. ER97-38-000 and ER97-3189-000).

125/ Cogen and USGen at 10-11 (Filed in Docket Nos. EC97-38-000, ER97-3189-000, and ER97-3273-000).

assigned for a MW amount of network resources which equals network load, network customers will not be protected from congestion charges when they use their remaining network resources. 126/ Other intervenors contend that it is unreasonable to give network customers the discretion to choose which of their network resources are assigned FTRs. They maintain that this will permit Supporting Companies to designate resources that are the most likely to generate congestion revenues.

Commission Response

We find that the FTRs are properly allocated to network customers based on network load. Transmission systems are designed to meet loads reliably, not to provide firm transmission for the aggregate capacity of network resources. This approach is also consistent with the pro forma tariff approach of providing for firm reservations corresponding to network load.

We also find acceptable the proposal to give network customers the discretion to choose which of their network resources are assigned FTRs. Under the pro forma tariff, all existing resources qualify as network resources. Supporting Companies' proposal simply will require RTOs to select which of their existing network resources to exclude from the congestion charge protection.

Allocation of Congestion Revenues To Network Customers

The pro forma tariff provides that network customers are assessed a transmission rate on the basis of monthly network loads. Under Supporting Companies' proposal, however, congestion revenues are distributed on the basis of FTRs, which are initially assigned based on firm contract reservation (i.e., based on annual peak).

Commission Response

We find that the billing determinants used for calculating the basic transmission charge for network customers should be modified to be consistent with the units used to determine the distribution of FTRs, and hence congestion revenues. Because network transmission rates are based on monthly loads, while congestion revenues will be distributed on the basis of annual peaks, under Supporting Companies' proposal network customers would receive a greater percentage of the FTRs (and congestion revenues) than their percentage share of transmission costs.

126/ Allegheny and Pennsylvania Rural Electric Association at 7-8 (Comments Filed in Docket Nos. OA97-261-000 and ER97-1082-000).

For point-to-point customers, this is not the case; congestion revenues are distributed using consistent MW reservations. Accordingly, we direct that Supporting Companies' proposal be revised with respect to the billing determinants used for the basic charge for network service so that they are equal to those used to distribute FTRs. 127/

VI. PJM Operating Agreement

A. Scope of The PJM Operating Agreement

The June 2 Filing proposes to modify the governance provisions of the PJM Operating Agreement for purposes of establishing PJM-OI as an independent body to operate the ISO, administer the PJM Transmission Tariff, operate the PX for hourly energy, approve a regional transmission expansion plan, and administer certain aspects of the Owners Agreement and PJM Reliability Assurance Agreement. The PJM Operating Agreement would continue to treat PJM as a limited liability corporation. An independent Board of Managers (PJM Board) would be responsible for supervision and oversight of the day-to-day operations of the PJM Pool through PJM-OI. The PJM Board members will neither represent any particular industry sectors nor have any affiliation with any of the parties to the PJM Operating Agreement. The PJM Board has broad responsibilities to oversee all matters pertaining to PJM-OI, with its primary responsibilities being to ensure that the ISO's functions are accomplished in a manner consistent with: (1) the safe and reliable operation of the PJM Pool; (2) the creation and operation of a robust, competitive, and non-discriminatory electric market in the PJM Control Area; and (3) the principle that a member or group of members shall not have undue influence over the operation of the PJM Pool. 128/

The PJM Operating Agreement also calls for the formation of a Members Committee, in which all PJM members will vote on the basis of the following sectors: Generation Owners, Other Suppliers, Transmission Owners, Electric Distributors, and End-Use Customers. Supporting Companies claim that the voting provisions ensure that no sector can control the Members Committee and that no sector can block action by the Members Committee. The rights reserved to members are to elect the PJM

127/ This change will also require a corresponding change to the divisor used to develop the unit charge. As noted earlier, the divisor will reflect the average of 12 monthly peaks rather than the annual peak. However, the network service "peaks" will reflect the monthly FTR MW rather than the actual network monthly load MW.

128/ See PJM Operating Agreement, Section 7.9.

Board, amend or terminate the PJM Operating Agreement, and provide advice and recommendations to the PJM Board and PJM-OI. The PJM Operating Agreement also creates User Groups, which allow members sharing a common interest to bring matters before the Members Committee and, if necessary, the PJM Board.

Supporting Companies also commit to make a filing before the end of 1997 to implement two refinements to the PJM Pool energy market: (1) a multi-settlement system to provide an opportunity for market participants to commit and obtain commitments to energy prices and transmission congestion charges at specified deadlines in advance of real-time dispatch; and (2) as mentioned above, an auction of FTRs not retained by network and firm point-to-point transmission customers.

B. ISO Principles

In Order No. 888, the Commission set out eleven principles for evaluating future ISO proposals. The Commission stated that these principles are applicable to ISOs that would be control area operators. The following analysis evaluates Supporting Companies' proposal with regard to the Commission's eleven ISO principles. With the modifications contained in this section and later sections of this Order, we find that the proposal satisfies our eleven ISO principles. The ISO principles provide a guidepost for this Commission in evaluating this ISO proposal.

Supporting Companies claim that no industry segment has the ability to control the ISO's functions or to prevent the ISO from acting, and that the PJM Board will be independent of any industry segment and will have complete responsibility for supervision and oversight of the day-to-day operations of the PJM Control Area. ^{129/} Supporting Companies also state that the voting rights continue to be structured so that no one industry segment can either force or block action. Supporting Companies explain further that the PJM Operating Agreement has been modified to modernize outdated provisions and clarify the responsibilities of the ISO and the parties under the PJM Operating Agreement.

Below, we discuss how the proposed ISO complies with the eleven ISO principles outlined in Order No. 888.

^{129/} Supporting Companies explain that their transmittal letter constitutes a formal application to recognize the PJM Interconnection, L.L.C. as an ISO (Transmittal letter at 6, Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

1. **The ISO's governance should be structured in a fair and non-discriminatory manner.**

Supporting Companies propose that the PJM Board consist of seven voting members with the president of the ISO as an additional non-voting member. 130/ The seven voting members will be selected by the Members Committee from a slate of candidates prepared by an independent consultant. Of the seven PJM Board members, four must have expertise and experience in corporate leadership at the senior management (or board of directors) level, or in the professional disciplines of finance, accounting, engineering or utility law and regulation. Of the other three PJM Board members, one must have expertise and experience in the operation of transmission dependent utilities, one must have expertise and experience in the operation or planning of transmission systems, and one must have expertise and experience in the areas of commercial markets and trading (and associated risk management).

The Members Committee, which selects the PJM Board members, will consist of parties to the PJM Operating Agreement. 131/ The Members Committee will consist of 5 sectors representing generation owners, other suppliers, transmission owners, electric distributors, and end-use customers. However, in order for a sector to be represented on the Members Committee with voting rights, it must have at least 5 members. 132/ A member can belong to only one sector and is limited to one vote within that sector. Each sector shall be entitled to cast one vote, which can be split into fractional components voting either for or against a measure. The sum of affirmative votes needed to pass a measure must be greater than the product of 0.667 times the number of sectors meeting the minimum membership requirements.

A number of intervenors raise concerns about the structure of the Members Committee. 133/ Several intervenors argue that

130/ The president of the ISO is appointed by the PJM Board and is responsible, in part, for directing the operation of PJM-OI.

131/ The Members Committee can also amend and terminate the PJM Operating Agreement and give advice and recommendations to the PJM Board and PJM-OI.

132/ For example, according to intervenors, because of the lack of retail access programs in the states covered by the PJM Control Area, there are no members in the end-use sector.

133/ Maryland Office of the People's Counsel and the Delaware Office of the Public Advocate (Joint Consumer Advocates),
(continued...)

the proposed governance does not provide a method for small users of the system, i.e., residential or small industrial customers, to immediately participate in the governance of the ISO. 134/ These intervenors assert that because of the lack of retail wheeling programs in the PJM Control Area, residential customers are prohibited from joining the end-users sector of the Members Committee because the PJM Operating Agreement requires that they also must be an eligible customer under the PJM Transmission Tariff. In addition, they argue that the \$5,000 annual dues and \$1,500 application fee (plus other sundry costs associated with membership in the ISO) are prohibitively expensive for small users of the system.

Several intervenors also argue that the governance structure excludes public interest and environmental groups from having any influence on the operation of the ISO. 135/

Several other intervenors do not object to the governance structure of the ISO, 136/ while Washington Gas recommends that the Commission approve the proposed ISO, subject to the outcome of a section 205 proceeding. 137/

In reply, Supporting Companies state that once retail access becomes a reality in the PJM Control Area, all residential and small industrial customers will become eligible customers under the PJM Transmission Tariff and hence will be eligible to join the end-users sector of the Members Committee. Furthermore, Supporting Companies argue that the membership fees are

133/ (...continued)

Natural Resources Defense Council, Inc. (NRDC), New Jersey Division of the Ratepayer Advocate (NJDR), Pennsylvania Office of Consumer Advocate (Pa.OCA), Industrial Coalition, Clearinghouse, CCEM, Old Dominion, Schuylkill, NJPIRG and PECO.

134/ Joint Consumer Advocates at 4, NRDC at 2, NJDR at 7, Pa.OCA at 3, Industrial Coalition at 10, and CCEM at 35 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

135/ Joint Consumer Advocates at 8, NRDC at 3, CCEM at 35, and Multiple Public Interest Organizations at 9 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

136/ DEMEC at 28, Duke Marketing at 5, Allegheny at 24-26, Board of Managers of PJM Interconnection, L.L.C. (PJM Board) at 2, Cogen and USGen at 4 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

137/ Washington Gas at 4 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

"comparatively minimal," as the Commission has previously recognized in Mid-Continent Area Power Pool, 138/ and that some small fee is required to ensure that applicants have a financial interest in the ISO. In response to the concerns of intervenors that the ISO lacks a public interest voice, Supporting Companies state that the PJM Operating Agreement requires the Members Committee to create one special User Group that will represent public interest and environmental groups before the ISO.

Commission Response

With the modifications discussed below, the Commission approves the ISO governance structure filed by Supporting Companies. The PJM Board has the broad technical skills that are necessary to manage the ISO and it possesses the requisite independence from the transmission owners that the Commission previously found to be lacking in Supporting Companies' prior restructuring application. 139/

ISO Principle No. 1 provides that a governance structure should fairly represent all users of the transmission system. We believe that the Members Committee established by the PJM Operating Agreement fairly represents the broadest possible users of the ISO. In response to intervenor concerns that residential and small industrial customers will be unable to participate in the governance of the ISO, we note that these customers will have a voice in the governance of the ISO through the end-use sector as retail access is introduced in the PJM Control Area. 140/ When retail access is introduced in the PJM Control Area, these customers will become eligible to use the PJM Transmission Tariff (i.e., by meeting the definition of an "eligible customer" under the tariff eligibility requirement). The proposed governance structure permits end-user representation when this sector becomes eligible to use the PJM Transmission Tariff. Therefore, no modification is required to satisfy ISO Principle No. 1.

138/ See Mid-Continent Area Power Pool 76 FERC ¶ 61,261 at 62,343 (1996) (Approving a membership fee of \$10,000 and an annual fee initially set at \$2,500).

139/ See Atlantic City Electric Company, et al., 77 FERC ¶ 61,148 (1996).

140/ The Pennsylvania Public Utility Commission has recently implemented a retail access program, effective November 1, 1997, that permits 250,000 customers the opportunity to choose their electric supplier. The implementation of retail access programs by the other state commissions that intervened in this proceeding would further increase the representation of retail and small industrial customers in the ISO's governance structure.

Easton objects to the proposed PJM Board nomination process and argues that a nominating committee, fairly representing all market participants, should select the slate of candidates to be presented to the Members Committee for election to the PJM Board. According to Easton, a nominating committee (rather than an independent consultant) would ensure that a fair and impartial procedure is applied in selecting the slate of board candidates.
141/

An independent consultant chosen by PJM-OI, upon consideration of the advice and recommendations of the Members Committee, selects the slate of candidates based upon the qualifications provided in the PJM Operating Agreement. 142/ The Members Committee may fill the vacancies on the PJM Board from the slate of candidates or (if the proposed slate of candidates are unacceptable) have PJM-OI direct the independent consultant to prepare a new slate of candidates. Because the Members Committee will ultimately decide which candidates are elected to the PJM Board, the Members Committee will effectively perform the role of the nominating committee requested by Easton. Accordingly, the Commission will not change the selection process filed by Supporting Companies.

Concerns raised by intervenors that public interest and environmental groups will not have a voice on the Members Committee are without merit. Public interest and environmental groups will have the ability to bring their concerns to the ISO through the previously mentioned User Group which the Members Committee is required to establish. 143/ While the User Group created for the public interest and environmental groups will not have voting rights on the Members Committee, a separate sector for groups that do not use the transmission system is not necessary for Supporting Companies proposal to meet the requirements of ISO Principle No. 1.

In addition to the public interest and environmental User Group, any five or more Members sharing a common interest may form a User Group to present proposals to the Members Committee and the PJM Board. In order for a User Group proposal to be presented to the Members Committee for consideration, three-fourths of the User Group must support the proposal. If the Members Committee does not adopt the User Group proposal, the User Group may present the proposal directly to the PJM Board if nine-tenths of the User Group supports the proposal.

141/ Easton at 33 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

142/ PJM Operating Agreement at 7.2.

143/ PJM Operating Agreement at Section 8.7(b).

The Commission disagrees with the concerns of Multiple Public Interest Organizations that the supermajority voting requirements imposed on User Groups will effectively stifle the ability of these groups to voice concerns to the ISO. As previously noted, the formation of a User Group requires a minimum of five parties sharing a common interest. It is reasonable to require a User Group that represents a common interest to garner the support of three-fourths of the group if the proposal truly represents the interests of the group. In addition, by requiring that a proposal have the support of a supermajority of the User Group, the Members Committee will be able to differentiate representative concerns of a group of Members versus the idiosyncratic concerns of a single Member.

Several intervenors criticize the requirement that a sector (generation owners, other suppliers, transmission owners, electric distributors, and end-use customers) must have five members before it can be represented on the Members Committee. 144/ Old Dominion is concerned that there may not be enough members of a certain sector (i.e., the Electric Distributor sector) to warrant representation on the Members Committee. Allegheny proposes that there should be no minimum membership requirements in order for a sector to be represented on the Members Committee.

The Commission concludes that the intervenors' concerns are unfounded and that their solutions are unworkable. In a control area as large as PJM, the requirement that a sector contain at least five members is unlikely to impede the formation of a sector. 145/ Furthermore, permitting a sector to have no minimum membership requirement would effectively allow a sector with one Member to control twenty percent of the votes on the Members Committee. Under Allegheny's proposal, if two sectors each contained a single Member, these two Members could effectively block the actions of the Members Committee. The intervenors' proposal would not represent a fair and non-discriminatory governance structure.

However, the Commission will require that the quorum requirement for action by the Members Committee be modified. Under Supporting Companies' proposal, a quorum will exist if at

144/ Old Dominion at 41 and Allegheny at 25 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

145/ If the initial membership is too small to form an Electric Distributor sector, the definition of the "Other Supplier" sector is broad enough to allow any Member that buys, sells, or transmits energy in, from, or through the PJM Control Area to have a voice on the Members Committee. PJM Operating Agreement at Section 1.30.

least two Members are present from each of at least three sectors (that contain the requisite five Members). 146/ Therefore, as few as six Members could modify the PJM Operating Agreement. Clearinghouse argues that the number of Members representing each of the three sectors should be a fixed percentage, such as fifty percent. This suggestion is reasonable. If the number of Members in a sector is large (such as ten or more), it would be unreasonable to permit only two members of that sector to represent the interests of the entire sector. The PJM Operating Agreement should be revised to require that a majority of each of the three sectors should be present for the Members Committee to act on a measure.

Intervenors also raise a number of issues that may affect the PJM Board's (and the Members Committee's) ability to independently operate the ISO. The PJM Board is concerned that parties may exercise implicit control over it by unilaterally amending or terminating the PJM Operating Agreement, the Owners Agreement and/or the Reliability Agreement without prior Commission approval. 147/ The PJM Board believes that in order to protect its best interests, any amendment or notice of termination of these agreements must be filed with the Commission and that the PJM Board must have the right to participate in any proceeding before the Commission. Moreover, in order to protect the viability and independence of the PJM Board, these changes should not be made effective prior to the Commission issuing an order approving the change. Supporting Companies agree with the PJM Board on this point.

The Commission agrees with the PJM Board and Supporting Companies and concludes that the PJM Operating Agreement, the Owners Agreement and the Reliability Agreement should be clarified to require that any notice of termination or withdrawal from the agreements must be filed with the Commission and may become effective only upon the Commission's approval. Parties should not be relieved of their obligations under the agreements without Commission approval of the filing. The PJM Board and any other interested party may then contest the filing, and the

146/ Voting at Members Committee meetings may be done in person or by telephone (or other electronic means authorized by the Members Committee). A Member may also designate a duly authorized substitute to vote in its place. PJM Operating Agreement at Section 8.3.2.

147/ For example, the RTOs, through the Owners Agreement, transfer a number of PJM Control Area operating responsibilities to the ISO. However, the Owners Agreement permits a party to withdraw from the Operating Agreement with ninety days notice. This could effectively terminate the ISO.

Commission will have ultimate authority to determine the reasonableness of the proposed modification. In addition, the Commission does not believe that a change to the notice of withdrawal period in the PJM Operating Agreement is appropriate. With the Commission filing requirement imposed on the agreements, the ISO will continue to operate. Moreover, the short notice period in the PJM Operating Agreement provides parties with a degree of flexibility to enter and exit the PX market as conditions warrant.

Finally, the Commission does not believe that the \$1,500 application and the \$5,000 annual membership fee are excessive nor will the fees preclude residential and small industrial customers from joining the ISO. The Commission agrees with Supporting Companies that some small fee is required to ensure that applicants have a financial interest in the ISO. While the specifics of retail access have not been formalized in the PJM Control Area, there is no restriction in the PJM Operating Agreement that would preclude a group of residential customers from establishing an organization (or designating an agent) that could pay the application fee and associated annual dues and represent their collective interest on the Members Committee. In addition, the Commission disagrees with Old Dominion and Allegheny that Supporting Companies should provide additional cost support for the proposed fees. The ISO is a non-profit entity under which all expenses will be collected through user fees, including the application and the membership fees. 148/

2. **An ISO and its employees should have no financial interest in the economic performance of any power market participant. An ISO should adopt and enforce strict conflict of interest standards.**

The ISO proposed by Supporting Companies will have no financial interest in the economic performance of any party to the related PJM agreements. However, it must be noted that the formation of the ISO was accomplished by simply converting the PJM Interconnection Association into a Limited Liability Corporation. While this was a problem with Supporting Companies' prior filing, 149/ the problem is rectified by the oversight of the independent PJM Board and Members Committee. Moreover, the ISO has developed an employee code of conduct that will prohibit an employee from disclosing market-sensitive information and from accepting gifts and favors that could raise conflict of interest concerns.

148/ The remaining costs of the ISO will be recovered through the Scheduling, System Control and Dispatching Service charge under the PJM Transmission Tariff.

149/ See 77 FERC ¶ 61,148 at 61,575 (1996).

PJM-OI will prepare the ISO's annual budget which will be reviewed by a seven member Finance Committee. The Finance Committee will consist of one representative of the parties to the Reliability Agreement, one representative of the parties to the Owners Agreement, two representatives of the Members Committee provided that they are not also a party to the Owners Agreement, one representative of PJM-OI selected by the President, and two Board members selected by the PJM Board. The Finance Committee is required to forward the proposed budget and its comments to the PJM Board which is responsible for approving the ISO's budget. Clearinghouse argues that Supporting Companies' proposal will stack the deck in favor of the transmission owners who will then have a direct input to compensation levels in the ISO. 150/

Commission Response

Clearinghouse's concerns are unfounded. Transmission owners will not be able to dominate the Finance Committee membership. In addition, as noted by Supporting Companies, the role of the Finance Committee is purely advisory. The PJM Board has final responsibility for the ISO budget.

Supporting Companies' also submitted a code of conduct applicable to officers and employees of the ISO and a separate code of conduct applicable to the PJM Board. In addition to the restrictions imposed by the codes of conduct, the PJM Operating Agreement states that a person is not eligible to become a Board member if he or she has been employed by an ISO Member within a 5-year period prior to the election. 151/ However, the PJM Operating Agreement does permit a PJM Board member to hold a de minimis security interest in any market participant. 152/ Officers and employees of the ISO are not currently prohibited from owning securities of market participants.

Clearinghouse argues that the ISO Board and its employees should not be permitted to own stock in any market participant and recommends that a divestiture date be specified in the PJM Operating Agreement. In response, Supporting Companies do not object to a divestiture requirement similar to the one imposed by

150/ Clearinghouse at 27 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

151/ PJM Operating Agreement at 7.2.

152/ The code of conduct for the PJM Board defines a de minimis interest as less than one percent of the voting securities of a market participant or its affiliates.

the Commission in New England Power Pool. 153/ However, Supporting Companies argue that the de minimis security interest permitted of the PJM Board members should not disqualify an otherwise qualified Board member. 154/

The Commission will require that all PJM Board members, officers and employees of the ISO divest their holdings of any market participant within six months of the date of the Commission order in this proceeding. In the future, all officers, employees and PJM Board members (hired or elected after the date of this order) must divest their interests in any market participant within six months of their hire or election. A six-month period is consistent with both the divestiture period specified in Order No. 888 for employees of a newly formed ISO and the Commission's most recent order in the California restructuring proceeding. 155/ Unlike the applicants in the New England ISO proposal, Supporting Companies have provided no economic justification for adopting a longer divestiture period.

Furthermore, the proposed de minimis ownership interest permitted of PJM Board members could translate into millions of dollars of financial interest in a market participant. Therefore, the provision permitting a Board member to hold a de minimis interest in a market participant should be deleted from the PJM Operating Agreement and the code of conduct.

3. An ISO should provide open access to the transmission system and all services under its control at non-pancaked rates pursuant to a single, unbundled, grid-wide tariff that applies to all eligible users in a non-discriminatory manner.

As discussed above, we agree that Supporting Companies' proposal will provide open access to the transmission system and all services under its control at single, non-pancaked rates in a non-discriminatory manner. Therefore, we find that Supporting

153/ See New England Power Pool (NEPOOL), 79 FERC ¶ 61,374 at 62,586-7 (1997). The Commission provided existing NEPOOL ISO Board members one year, and current employees three years, to divest any financial interest in market participants. Shorter divestiture periods were not ordered because of the resulting economic hardship associated with the decreased value of the employee stock plans acquired during their prior employment with the NEPOOL companies.

154/ According to Supporting Companies, none of the present PJM Board members owns securities in any of the PJM members.

155/ Pacific Gas and Electric Company, et al., 81 FERC ¶ 61,122 (1997).

Companies' proposal satisfies Principle No. 3 of the Commission's ISO Principles.

4. An ISO should have the primary responsibility in ensuring short-term reliability of grid operations. Its role in this responsibility should be well-defined and comply with applicable standards set by NERC and the regional reliability council.

According to Supporting Companies, the ISO, under the supervision and oversight of the PJM Board, will be responsible for the short-term reliability of the grid. The ISO will operate the grid in compliance with the existing PJM Manuals (which are referenced numerous times in the PJM Operating Agreement but have not been provided in the filing) along with Mid-Atlantic Area Council (MAAC) and NERC guidelines. The ISO will operate the PJM Control Area, manage and administer the energy market, direct and coordinate the operation of the designated transmission facilities, administer the PJM Transmission Tariff, coordinate transmission expansion planning and perform administrative support. In addition to its short-term grid operation role, the PJM Board is also responsible for approving the long-range Regional Transmission Expansion Plan.

NJEA argues that the ISO does not have enough authority in the event of an emergency to reliably operate the grid. ^{156/} Of particular concern to NJEA (and others) is a provision in the Owners Agreement which requires transmission owners to follow the operating instructions of the ISO during an emergency "to the maximum extent reasonably practicable." NJEA argues that this provision will permit the transmission owners to ignore the operating instructions of the ISO and thereby continue to dominate the operation of the PJM Control Area. In response, Supporting Companies assert that the PJM Operating Agreement provides the ISO with the plenary powers to reliably operate the grid and requires Members to abide by the ISO's operating instructions in the event of an emergency. Furthermore, Supporting Companies argue that it is unreasonable to require transmission owners to take actions that are unreasonable or impractical.

Commission Response

The Commission notes that the PJM Operating Agreement does provide the ISO with the ability to direct the actions of the Members as necessary to manage, alleviate or end an emergency.

^{156/} NJEA at 11-14 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

157/ In addition, Members are required to comply with all directives of the ISO during an emergency. 158/ However, the Commission agrees with the concerns raised by NJEA and directs that the phrase "to the maximum extent reasonably practicable" be deleted from Section 4.4.2 of the Owners Agreement. This language serves no useful purpose and could undercut the ISO's ability to direct the operation of the grid during an emergency. 159/ Moreover, this provision is inconsistent with the requirements imposed on the other Members of the ISO who must comply with the ISO's operating instructions (without qualifications). With this modification, the ISO proposal accurately defines the ISO's role in ensuring the short-term reliability of the grid. In addition, consistent with ISO Principle No. 4, the responsibilities of the ISO include compliance with applicable NERC and MAAC guidelines.

The ISO will also operate the grid in accordance with the PJM Manuals (which it will also update and maintain). Supporting Companies state that the PJM Manuals are available for public inspection and also posted on PJM's web site. However, several intervenors argue that the PJM Manuals should be filed with the Commission or, in the alternative, that any changes to the Manuals should be approved by the Members Committee. 160/

Under our existing "rule of reason" policy, we see no reason to require that the PJM Manuals be filed. The PJM Manuals implicate our jurisdiction because, generally, they involve "the installation, operation, or use of facilities for the transmission or delivery of power . . . in interstate commerce." 161/ However:

[T]here is an infinitude of practices affecting rates and service. The statutory directive [of section

157/ PJM Operating Agreement at 10.4 (xx).

158/ PJM Operating Agreement at 11.3.1(e).

159/ A party would still be able to take any action(s) that it deems necessary to prevent injury to persons or loss of human life or prevent damage to property.

160/ NJEA at 20 and DEMEC at 24 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

161/ See Prior Notice and Filing Requirements Under Part II of the Federal Power Act, 64 FERC ¶ 61,139 at 61,986 (1993) (explaining Commission jurisdiction with respect to all rates and charges that are "for or connected with," and all agreements that "affect or relate to," jurisdictional activities).

205(c)] must reasonably be read to require the recitation of only those practices that affect rates and services significantly, that are realistically susceptible of specification, and that are not so generally understood as to render recitation superfluous 162/

Therefore, the Commission will not require a section 205 filing of the PJM Manuals at this time because, while implicating our jurisdiction, they mostly involve general operating procedures. However, PJM-OI must make the documents available for public inspection on a permanent basis. Further, as we stated above, PJM-OI must revise the PJM Transmission Tariff and any agreement on file with the Commission to the extent that they define rates, terms and conditions of service by reference to the PJM Manuals. Any reference to the specific rates, terms and conditions must be set forth in the tariff and rate schedules as well.

In addition, the Commission does not believe that the Members Committee should be responsible for approving any revisions to the PJM Manuals. As correctly noted by Supporting Companies, the PJM Manuals involve thousands of pages of documents, and requiring that all revisions of the PJM Manuals go through the Members Committee would be unduly burdensome. The Members Committee is charged with providing advice and recommendations to the PJM Board and PJM-OI. PJM-OI, as supervised and overseen by the PJM Board, is responsible for maintaining the PJM Manuals. 163/ DEMEC has provided no justification for injecting the Members Committee into the day-to-day operations of the ISO.

5. An ISO should have control over the operation of interconnected transmission facilities within its region.

The ISO is responsible for directing the operation of the transmission facilities provided by parties to the Owners Agreement. 164/ Transmission facilities are defined in the Owners Agreement as those facilities: (1) being located within the PJM Control Area; and (2) meeting the definition of transmission facilities pursuant to FERC's Uniform System of

162/ Id. at 61,988 (quoting *City of Cleveland v. FERC*, 773 F.2d 1368, 1376 (D.C. Cir. 1985)) (emphasis in original).

163/ PJM Operating Agreement at 10.4(iii).

164/ PJM Operating Agreement at Section 10.4(xviii).

Accounts or having been classified as transmission facilities in a ruling by the Commission addressing such facilities. 165/

Several intervenors 166/ claim that the definition of transmission facilities is too vague and that Supporting Companies should be required to list all the transmission facilities turned over to the ISO. In response, Supporting Companies note that the transmission facilities that the ISO will be controlling are the same transmission facilities controlled by the old PJM Interconnection Association and currently controlled by the PJM Interconnection, L.L.C.

Commission Response

The ISO will have control over the operation of the interconnected transmission facilities within its region. Therefore, Supporting Companies have fully satisfied the requirements of ISO Principle No. 5. However, PJM-OI must maintain a detailed, up-to-date register which must be available to the public and this Commission, either on the PJM web site or the PJM OASIS, of the transmission lines and associated facilities controlled by the ISO. 167/ The ISO must also maintain historical records identifying the time period and the entity having operational control of the facilities. By maintaining a list of transmission facilities, transmission customers (and the Commission) will be able to determine where the ISO's responsibilities end and where those of the individual RTOs begin.

6. An ISO should identify constraints on the system and be able to take operational actions to relieve those constraints within the trading rules established by the governing body. These rules should promote efficient trading.

The ISO will administer both the transmission system and the energy market. The ISO will schedule and dispatch generation economically on the basis of least cost, security-constrained dispatch and the prices and operating characteristics offered by market sellers, continuing until sufficient generation is dispatched to serve the market energy purchase requirements of market buyers as well as PJM requirements for ancillary services. In the event of a constraint, the ISO will redispatch generation

165/ Owners Agreement at Section 1.18.

166/ See, e.g., Old Dominion at 42, Industrial Coalition at 18, Washington Gas at 15 and DEMEC at 23 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

167/ See Pacific Gas & Electric Company, et al., 77 FERC ¶ 61,204 at 61,822-23 (1996) and 80 FERC ¶ 61,128 (1997).

out of economic dispatch in order to relieve the constraint and serve the needs of energy market buyers.

Commission Response

The ISO proposed by Supporting Companies will be capable of identifying constraints and relieving those constraints within the trading rules established by the ISO, as modified and approved by the Commission in this order. With these modifications, Supporting Companies' proposal satisfies ISO Principle No. 6.

7. The ISO should have appropriate incentives for efficient management and administration and should procure the services needed for such management and administration in an open and competitive market.

Under Supporting Companies' proposal, the PJM Board has the authority to take whatever actions it deems necessary to ensure that the ISO provides efficient management and administration for the PJM Control Area. Many of the services that the ISO will need will be procured in an open and competitive market. However, Clearinghouse notes that there is no apparent limitation in the PJM Operating Agreement on the ability of the ISO to subcontract with any of the members for goods or services. 168/ In response, Supporting Companies agree to modify the PJM Operating Agreement to include a provision that would require the ISO to procure goods and services from a member only after open and competitive bidding. 169/

Commission Response

The Commission finds reasonable and acceptable Supporting Companies' commitment to modify the PJM Operating Agreement to prohibit the ISO from contracting with a Member for goods and services without an open and competitive bidding process. With this clarification, Supporting Companies' proposal satisfies ISO Principle No. 7.

8. An ISO's transmission and ancillary services pricing policies should promote the efficient use and investment in generation, transmission, and consumption. An ISO or an RTG of which the ISO is a member should conduct such studies as may be necessary to identify operational problems or appropriate expansions.

168/ Clearinghouse at 22 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

169/ Supporting Companies' Answer at 8 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

Supporting Companies propose a two-part rate: (1) a single, non-pancaked rate to recover the transmission revenue requirement of the RTOs; and (2) a transmission congestion charge designed to reflect the cost of using a constrained transmission path. Supporting Companies propose that transmission customers pay the embedded cost rate of the transmission owner where the point of delivery is located. As discussed above, Supporting Companies have not sufficiently explained the rates, terms and conditions of the proposed ancillary services.

Commission Response

As discussed herein, we have accepted, subject to certain modifications, Supporting Companies' transmission pricing proposal. Supporting Companies' proposal will provide for recovery of an RTO's transmission revenue requirement and will send the proper price signals with regard to the location and use of existing and future generation, transmission expansion, and consumption. However, Supporting Companies have not adequately supported the proposed ancillary services.

As we discuss *infra*, we find Supporting Companies' proposed transmission expansion plan, set forth in Schedule 6 of the PJM Operating Agreement, to be acceptable. We are satisfied that Supporting Companies' ISO proposal satisfies ISO Principle No. 8 with respect to the proposed transmission services. However, further justification of the ancillary services proposal is necessary, consistent with the discussion in this order.

9. An ISO should make transmission system information publicly available on a timely basis via an electronic information network consistent with the Commission's requirements.

According to Supporting Companies, the PJM OASIS is up and running and Supporting Companies commit that the ISO will comply with all the requirements of Order No. 889.

Commission Response

The Commission concludes that Supporting Companies have satisfied the requirements of ISO Principle No. 9.

10. An ISO should develop mechanisms to coordinate with neighboring control areas.

The ISO will operate the PJM Control Area and will continue to perform the same functions as the existing PJM Interconnection Association with respect to coordinating its activities with neighboring control areas.

Commission Response

The Commission concludes that Supporting Companies have fully satisfied the requirements of ISO Principle No. 10.

11. An ISO should establish an ADR process to resolve disputes in the first instance.

The PJM Operating Agreement contains the PJM Dispute Resolution Procedures which are intended to establish common and uniform procedures for resolving disputes arising under the PJM Operating Agreement (as well as the Reliability Agreement and the Owners Agreement). Mandatory, binding arbitration is required on disputes of less than \$1,000,000. ADR is not mandatory for other disputes nor are the results binding. In the event of a dispute over transmission service supplied under the PJM Transmission Tariff, the ADR procedures of the PJM Transmission Tariff take precedence over the PJM Dispute Resolution Procedures.

Allegheny and Old Dominion are opposed to the requirement that disputes of less than \$1,000,000 should be subject to mandatory, binding arbitration. 170/ They argue that such a large monetary limit could be unduly burdensome for small entities and suggest that arbitration should be voluntary with no monetary limit.

Commission Response

The Commission denies the intervenors' requested changes to the ADR procedures. As correctly noted by Supporting Companies, a monetary limit will help the ADR provisions to be effective. Moreover, any decisions of the arbitrator that affect matters subject to the jurisdiction of the Commission pursuant to section 205 must be filed with the Commission. 171/ In addition, a party affected by a binding arbitrator decision may, within one year of the judgment, request that the Commission vacate or modify the judgment based upon an error of law or a finding that the judgment is contrary to the statutes or regulations administered by the Commission. 172/ Therefore, the Commission will still have the ability to exercise its authority over an arbitrator's decision.

The PJM Dispute Resolution procedures also provide for the formation of an Alternative Dispute Resolution Committee (ADR

170/ Allegheny at 34 and Old Dominion at 42 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

171/ PJM Operating Agreement at Schedule 5, Section 4.12.

172/ Id. at Section 4.14.

Committee). The ADR Committee will consist of two representatives selected by each of the following: (1) PJM-OI; (2) the Members Committee; (3) the parties to the Reliability Agreement; and (4) the parties to the Owners Agreement. Responsibilities of the ADR Committee include, in pertinent part, maintaining a list of qualified mediators and arbitrators, determining whether mediation is warranted, and establishing procedures that it deems appropriate to further the fair and equitable resolution of disputes.

Clearinghouse alleges that the structure of the ADR Committee will permit the transmission owners to exert control over the ADR Committee. Clearinghouse argues that the Committee should be comprised of Members from each of the five sectors. 173/ In reply, Supporting Companies note that the composition of the ADR Committee simply reflects the different groups that are subject to the ADR procedures.

We deny Clearinghouse's request. Any action undertaken by the ADR Committee requires approval of two-thirds of the ADR Committee members. Initially, the transmission owners may control the votes of the Reliability Agreement and Owners Agreement members. However, those ADR Committee members would only constitute half of the votes. To pass a measure, the transmission owners would need two votes from a combination of PJM-OI members (which work for the PJM Board) or the Members Committee (which the transmission owners will not control). Moreover, because the ADR procedures are part of the PJM Operating Agreement, any changes to the ADR procedures must be filed with the Commission by the Members Committee. Thus, there are adequate safeguards in place to keep the transmission owners from controlling the ADR Committee.

However, the PJM Board is concerned that if a dispute arises between the PJM Board and a transmission owner, Section 8.6.1 of the Owners Agreement provides that the dispute will be resolved by an administrative committee composed of transmission owners rather than an impartial dispute resolution process (such as the ADR procedures of the PJM Transmission Tariff or the MAAC dispute resolution process). In reply, Supporting Companies agree to use the dispute resolution procedures of the PJM Operating Agreement if a dispute arises between the ISO and a transmission owner.

Supporting Companies agreement to use the dispute resolution procedures of the PJM Operating Agreement for disputes between the ISO and a transmission owner is reasonable and we will require that the Owners Agreement be modified accordingly. With

173/ Clearinghouse at 36 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

this clarification, Supporting Companies proposal satisfies ISO Principle No. 11.

Conclusion

Based on the above modifications, the Commission grants Supporting Companies' section 203 request to transfer control of their transmission facilities to the ISO.

C. Power Exchange

The PJM Operating Agreement provides for administration by PJM-OI of a pool spot energy market (i.e., the PX) and the least-cost, security constrained commitment and dispatch of generating resources to serve load in the PJM Control Area. The PX replicates the central dispatch provisions of the prior PJM pooling arrangement in all aspects except price. As with the prior PJM pooling arrangement, members have the option of transacting with others bilaterally or engaging in power sales through the central dispatch procedures.

Under the prior PJM pooling arrangement, the PJM Pool used a formula that set the rate for economy energy halfway between the buyer's decremental cost and the seller's incremental cost (a so-called "split-savings" rate). The proposals submitted by both Supporting Companies and PECO would change the pre-existing approach, in recognition of the need to accommodate competition in PJM by moving to a bid-based spot energy market.

The PX market clearing price for all generation (i.e., both generating resources from within the PJM Control Area and resources sold through the PX that are transferred from other control areas) will be based on the highest cost resource dispatched during the hour. Currently, each resource located within PJM would bid a price reflecting its running costs. ^{174/} In the absence of transmission constraints, the price for generation will equal the highest cost resource that was dispatched in the hour. In the presence of constraints, sellers would not be paid a single price. Instead, at each location the market clearing price would reflect the cost of resources that can reach that location (i.e., the locational marginal price).

^{174/} See Schedule 1, Article 1.2. We reject the request for clarification of Cogen and USGen that the requirement to bid the running cost of the unit applies only to those with "market power" and not to participants who have been approved to sell at market-based rates. Cogen and USGen at 19 (Filed in Docket Nos. EC97-38-000, ER97-3189-000 and ER97-3273-000). Supporting Companies have filed a market-based rate application in Docket No. ER97-3729-000 pursuant to which there would be no restriction on bid prices.

In constrained areas, where more expensive generators must be dispatched because constraints prevent access to the lower cost generators, the price will reflect the bid of the seller that must be dispatched because of the constraints.

Basing Generation Price On The Highest Cost Bid

Certain intervenors argue that it is inappropriate to pay all suppliers the highest cost bid and that energy rates would be lower if each supplier was simply paid its actual bid price. They also maintain that the proposal is defective because the market clearing price in locations affected by constraints is based on the cost of dispatching a generator that would not have been called upon absent the constraint.

Commission Response

We find that Supporting Companies' proposal that all suppliers be paid the highest cost bid is reasonable. If all sellers are paid only their actual bid price, i.e., running cost, as urged by intervenors, there would be no incentive to transact through the PX. Allowing sellers to earn a margin not only provides an incentive to sell, but also provides a contribution to fixed cost recovery. This approach is consistent with long-standing Commission policy that permits sellers to earn a margin above variable costs for economy energy sales. 175/ In addition, we believe that paying all sellers the market clearing price provides an incentive to generators to minimize costs in order to help maximize profits.

Supporting Companies' proposal to pay all sellers whose generation is dispatched the highest bid price at the location will also enhance efficiencies and benefit electricity consumers. Generators need not estimate the market price in advance in order to maximize their profits. Profit maximization will depend on being dispatched -- not on the bid price. Thus, suppliers will have an incentive to bid no higher than their variable costs.

Rebundling of Generation and Transmission

PECO, CCEM, and the Industrial Coalition assert that Supporting Companies' proposed LMP model rebundles generation and transmission, contrary to one of the fundamental precepts of the Open Access Rule. 176/ They maintain that, when the cost of

175/ See Commonwealth Edison Co, 23 FERC ¶ 61,068 at 61,232 (1979) (approving split-savings rates for economy energy sales).

176/ See PECO and Schuylkill at 12, CCEM, NJPIRG and Schuylkill
(continued...)

transmission is based on the difference in generation costs, this constitutes the rebundling of generation and transmission. They also maintain that the unbundling requirement is violated because the PX charges buyers a price for power that is subsequently apportioned between power suppliers and FTR holders.

Commission Response

We find that LMP does not rebundle generation and transmission. Wholesale generation service will be sold to the PX at the generation bus. The price paid by PJM-OI to power suppliers will reflect only the price of that generation. Further, transmission congestion charges collected through the PX are separately computed and paid to FTR holders. Thus, transmission and generation are two separate products -- the ability to purchase transmission is not conditioned on purchasing generation.

Nor does the fact that transmission congestion is priced based on the locational cost of generation amount to rebundling. The LMP model simply recognizes that the true measure of transmission congestion is the difference in energy prices on either side of a transmission constraint, a fact even recognized by CCEM's witness at the May 9, 1997 technical conference. 177/

PX Terms and Conditions

Certain intervenors allege that Supporting Companies' proposal provides more favorable terms and conditions for transmission of PX transactions than bilateral transactions. 178/ They maintain that PX transactions are excused from compliance with the terms of the PJM Transmission Tariff because PX sellers and buyers need not comply with requirements such as applying separately for transmission service, paying a deposit, waiting as long as 30 days for a response, submitting a separate transmission schedule, or confirming transactions. They also state that it is improper to allow PX bids to be due at noon the day before service commences, while bilateral power sale transactions must, as a practical matter, be finalized by 11 a.m.

176/ (...continued)
at 6, 13-14, and Industrial Coalition at 26 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

177/ See Tr. at 112 (where CCEM witness, Dr. Richard D. Tabors, stated that "[T]he spot price of transmission is the difference between the spot prices on the two sides of the constraint.").

178/ See, e.g., Clearinghouse at 18-21 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

the day before service commences in order to meet the noon deadline for scheduling transmission service. Clearinghouse argues that the PX should be required to determine generation prices first, and then commence a concurrent scheduling process for PX and bilateral transactions. 179/ Clearinghouse also maintains that, because other control areas are in different time zones, it may be impossible to arrange a transaction involving an off-system resource or load for the PX.

Supporting Companies respond that the intervenors' arguments reflect a misunderstanding of the PX rules or a desire to protect their own interests. 180/ Supporting Companies contend that the proposed terms and conditions are reasonable and do not favor any market participant. Supporting Companies add that operating details such as scheduling deadlines will be subject to review on an on-going basis to ensure that they remain appropriate, particularly with respect to inter-control area scheduling. 181/

Commission Response

We find that, in comparing the pertinent scheduling requirements of the PJM Transmission Tariff and the PX, there is no undue discrimination. First, we note that the intervenors focus on the terms and conditions of point-to-point service under the PJM Transmission Tariff, while PX purchasers will primarily be using network service (i.e., network customers may obtain transmission on an as available basis to reach non-network resources such as a purchase through the PX). The PJM Transmission Tariff adopts different procedures for point-to-point and network transmission services, consistent with the requirements of the pro forma tariff. Moreover, if PX purchasers use point-to-point service, they must do so separately under the PJM Transmission Tariff.

Second, even with respect to point-to-point services, the intervenors focus on the terms and conditions of long-term firm point-to-point transmission services (which require, inter alia, separate applications for each transaction, submitting applications 60 days in advance, waiting 30 days for an answer), while PX transactions are hourly economy energy sales that typically would not require a separate application or service agreement. Instead, the service may be requested between noon and 2 p.m. the day before the transaction, PJM-OI will respond to a request within 30 minutes, and schedule changes will be

179/ Id. at 18-20.

180/ Supporting Companies Answer at 42-43 (Filed in Docket No. EC97-38-000 and ER97-3189-000).

181/ Id. at 46.

permitted up to 30 minutes before the start of the transaction. These terms and conditions are comparable to those that apply to PX transactions.

Third, the intervenors' concern that PX purchasers do not need to finalize their power sale transactions until noon the day before, while non-PX purchasers effectively have an 11 a.m. deadline, mischaracterizes the true nature of the services. The transmission scheduling deadlines are 12 noon for both PX and bilateral transactions. Moreover, all transmission services for transactions outside the PX can make schedule changes up until 30 minutes before the hour, while this flexibility is not available for all transactions through the PX.

Although we reject the intervenors' arguments pertaining to scheduling-related terms and conditions, we do find that some provisions of the PX eligibility conditions concerning transmission requirements must be revised. Specifically, the definition in Article 1.3.3 for an External Market Buyer (which expressly includes purchases for loads within the PJM Control Area that are not served by network transmission service) and Article 1.7.9 (which states that any purchase from the PX by an External Market Buyer shall be delivered to the border of the PJM Control Area), are inconsistent and must be corrected. Also, Article 1.4.1 sets forth qualifications for market buyers in general and provides that Load Serving Entities (anyone that sells power at retail in the PJM Control Area) must take network service. ^{182/} Articles 1.4.1 and 1.7.9 do not provide the option found in Article 1.3.3 for PX buyers serving loads within the PJM Control Area to use point-to-point transmission service. We direct PJM-OI to revise Articles 1.4.1 and 1.7.9 to make them consistent with Article 1.3.3. In a like manner, Article 1.4.1 mandates that Load Serving Entities take network service and that non-Load Serving Entities take point-to-point services. These conditions are unreasonable. PX buyers should be able to choose

^{182/} DEMEC asserts that PJM-OI is responsible for determining who may sell to and buy from the PX and argues that PJM-OI should not be given this "absolute" authority. DEMEC at 26 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000). We do not find this to be problematic. The qualifications to become a market buyer are clearly set forth in Article 1.4 of the PJM Operating Agreement. PJM-OI will simply be confirming that the applicant has met the qualifications. DEMEC also states that, under Article 1.5, all members that participate in the PX as buyers are required to become sellers as well. DEMEC has misread this provision. Article 1.5 simply states that any member that is already a PX buyer may become a PX seller without meeting all of the listed requirements.

the type of transmission service that best meets their needs. Article 1.4.1 must be revised accordingly.

Whether PJM-OI Should Operate Both The ISO and PX

A number of intervenors object to the fact that PJM-OI will be responsible for operating both the PX and the ISO. ^{183/} They assert that with dual responsibilities, there will be a conflict of interest and PJM-OI will have the natural incentive to accommodate PX transactions to the disadvantage of non-PX transactions. They argue that even the perception of potential bias may impede the market because participants will be unwilling to transact through the PX. The intervenors contend that PJM-OI's involvement with generation markets should be no more than is necessary to maintain system reliability and to mitigate transmission constraints. The intervenors state that maximizing market efficiencies should not be a concern of PJM-OI and adding this to the list of its priorities will create scenarios where one must be compromised in favor of the other. The intervenors also state that the task of monitoring market power will be extremely difficult if the functions of transmission coordinators, central dispatcher, and PX operator are combined. They ask that, if the Commission allows PJM-OI to operate both the ISO and PX, this approach be phased out over the next two to three years.

Commission Response

We find it acceptable to have PJM-OI operate both the PX and ISO. There is no evidence that PJM-OI would have an incentive to favor transactions through the PX simply because it will be operating the ISO. PJM-OI consists of an independent, professional staff, having no financial interest in any market participant, that will operate both the ISO and PX according to well-defined rules and procedures. In this regard, we concluded above that the ISO proposed by Supporting Companies satisfies ISO Principle No. 2, i.e., that the ISO and its employees will have no financial interest in the economic performance of any power market participant and that the ISO will adopt and enforce strict conflict of interest standards. Further, PJM-OI will be subject to oversight by the PJM Members Committee, which represents the interests of the complete spectrum of market participants.

It should also be recognized that transacting through the PX is an option, not a requirement. To the extent that competitive markets prefer trading mechanisms that have different operating procedures and protocols, they will abandon the PX and the

^{183/} See, e.g., Clearinghouse at 4, 9-12 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000); DEMEC at 15-16 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

preferred trading mechanisms will be developed. Ultimately, the success of the PX will turn on its economic value to the market.

D. Other Issues Pertaining To The PJM Operating Agreement

Definition of Affiliate

Section 1.2 of the PJM Operating Agreement defines "affiliate" as follows:

"Affiliate" shall mean any two or more entities, one of which controls the other or that are under common control. "Control" shall mean the possession, directly or indirectly, of the power to direct the management or policies of an entity. Ownership of publicly-traded equity securities of another entity shall not result in control or affiliation for purposes of this agreement if the securities are held as an investment, the holder owns (in its name or as intermediaries) less than 10 percent of the outstanding securities of the entity, the holder does not have representation on the entity's board of directors (or equivalent managing entity) or vice versa, and the holder does not in fact exercise influence over day-to-day management decisions. Unless the contrary is demonstrated to the satisfaction of the Members Committee, control shall be presumed to arise from the ownership of or the power to vote, directly or indirectly, ten percent or more of the voting securities of such entity.

Cogen and USGen state that "project companies" are often formed for the limited purpose of owning a generating unit. Cogen and USGen state that, occasionally, investors have interests in more than one project company. Cogen and USGen state that these project companies should be viewed as unaffiliated for purposes of voting under the PJM Operating Agreement because each is a stand-alone business entity with individual contractual and fiduciary responsibilities. Cogen and USGen argue that one project company cannot represent the interests of another and ask the Commission to clarify that project companies with common owners will not be treated as affiliates under the PJM Operating Agreement. 184/ If these entities are not treated as affiliates, each would receive a separate vote.

184/ Cogen and USGen at 17-18 (Filed in Docket Nos. EC97-38-000, ER97-3189-000 and ER97-3273-000).

Commission Response

We will deny the request of Cogen and USGen. The PJM Operating Agreement defines affiliate in a manner consistent with the Commission's standard definition, and also allows the Members Committee to address disputes related to whether members are not affiliated despite their common ownership.

PJM-OI's Billing and Settlement Provisions

Section 15.1 of the PJM Operating Agreement requires that bills be paid, notwithstanding any disputed amount, subject to later adjustment to reflect the resolution of the dispute. Any member more than 30 days in arrears with respect to any financial obligation is in default and, if the default is not corrected within a second 30-day period, the member may lose its voting, committee and PX privileges. 185/ PJM-OI may assess the billing deficiency against all of the non-defaulting members as a group, but will also transfer the right of recovery to the members.

Clearinghouse maintains that there is no provision for payments of disputed charges to an escrow account, as in the pro forma tariff. 186/ Clearinghouse also objects to making up the billing deficiencies of other members and argues that PJM-OI should treat it as a bad debt which, if proven uncollectible, is recovered through its budget as a bad debt expense.

Commission Response

We will not order Supporting Companies to revise PJM-OI's billing and settlement provisions as requested by Clearinghouse. If funds were escrowed during billing disputes, PJM-OI would have no means to pay its obligations during the pendency of the dispute. Further, if we were to direct PJM-OI to create reserves for purposes of paying disputed charges, this would unnecessarily increase PJM-OI's operating costs.

Indemnity Provisions

Section 16.2 of the PJM Operating Agreement provides that, except in circumstances involving gross negligence or willful misconduct: (1) the PJM Interconnection, L.L.C. (LLC) will indemnify PJM-OI (the PJM Board and the LLC's officers, employees and agents) as well as any representatives of the members serving

185/ A customer in arrears in its financial obligations only to the PX will be able to continue to obtain services from the ISO, and vice versa.

186/ Clearinghouse at 32 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

on the Members Committee (collectively, LLC Indemnified Parties) from all liabilities to any third parties arising from the performance of the LLC under the PJM Operating Agreement, except in cases of willful misconduct; and (2) the LLC Indemnified Parties will not be personally liable for claims arising from the performance of the LLC, except if provided by applicable law for a lack of good faith, intentional misconduct, a knowing violation of law, or if the LLC Indemnified Party derives an improper personal benefit.

Clearinghouse maintains that the LLC should also indemnify the members themselves for third-party liabilities. 187/ In addition, Clearinghouse argues that, if members are not indemnified, "non-utilities" could be driven out of the market because, unlike franchised monopolies, they do not have the ability to pass on the cost of such liabilities to their captive ratepayers. Clearinghouse also argues that the LLC should be liable to members if the LLC's actions constitute simple negligence, consistent with the pro forma tariff.

Commission Response

We find that the indemnity provisions are reasonable. With respect to Clearinghouse's concern with the lack of member indemnification for third-party liabilities, the LLC Indemnified Parties are serving in a representative capacity and would not serve without indemnification, while the members represent only themselves. We also believe that the limited indemnity proposed is appropriate since the LLC has no significant assets.

RTO's Rights Provisions

Clearinghouse asserts that section 18.1 of the PJM Operating Agreement, entitled "Transmission Owners Rights," should be removed from the PJM Operating Agreement. 188/ This section addresses the RTO's rights to make various filings, to protect its facilities, and to dispose of assets. Clearinghouse states that these provisions are an unnecessary addition to the PJM Operating Agreement, and that the identical provisions are found in the Owners Agreement. 189/

187/ Clearinghouse at 33-34 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

188/ Clearinghouse at 34-35 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

189/ See Owners Agreement at Article 2, Section 2.2.

Commission Response

We will grant Clearinghouse's request, given that the same provisions are included in the Owners Agreement. We direct PJM-OI to remove the "Transmission Owners Rights" provisions from the PJM Operating Agreement.

Interconnection Requirements

The PJM Operating Agreement serves as the network operating agreement (NOA) required for PJM members under the PJM Transmission Tariff. In this respect, the PJM Operating Agreement establishes a number of requirements for Electric Distributors (any member that operates a distribution system). ^{190/} Certain intervenors maintain that these requirements may be burdensome for small utilities and should be waived, phased-in, or structured to allow small utilities to combine their efforts in meeting the requirements. Some intervenors also question the basis for the penalty charges for failure to meet the load shedding and emergency requirements.

Commission Response

We will not direct Supporting Companies to revise the various interconnection requirements in the PJM Operating Agreement. However, while it is appropriate to standardize the general requirements in the PJM Operating Agreement, we direct PJM-OI to apply the NOA requirements on a customer-specific basis (e.g., a distribution utility that owned no generating units could not provide black start capability). ^{191/}

As to the intervenors' arguments regarding the basis for penalty charges for failure to meet the load shedding and emergency requirements, we find that a charge of \$.16/kW/day is not unreasonable given that emergency energy is typically priced at a minimum of \$.10/kWh.

^{190/} These requirements involve equipment ratings, operating and maintenance practices, telemetering, automatic load-shedding equipment, power factor requirements, emergency coordination, blackstart capability, adequate control center coverage, and various operating data requirements. The PJM Operating Agreement also imposes a charge of \$.16/kW/day if an Electric Distributor fails to meet its obligation to have load-shedding equipment in place or fails to follow the emergency instructions of PJM-OI.

^{191/} See Atlantic City Electric, 77 FERC ¶ 61,144 at 61,534-35 (1997).

Regional Transmission Expansion Plan

Schedule 6 of the PJM Operating Agreement sets out the protocol for regional transmission expansion planning. It generally adopts the NERC and MAAC criteria, obligates the RTOs to supply staff, data and systems to support a regional analysis, and provides for the participation of all interested parties, including regulatory agencies and consumer advocates in affected states, as well as coordination with neighboring control areas. 192/ The regional transmission expansion plan will include a recommendation for cost responsibility; however, under Schedule 6, section 1.6, if the RTOs cannot unanimously agree, cost responsibility will be allocated to those entities who have indicated a willingness to bear some or all the costs and among the RTOs as follows: (1) 500 kV facilities will be allocated on the basis of the percentage of PJM load in each RTO's service area; (2) 230 kV or 345 kV facilities will be allocated half on the basis of the percentage of PJM load in each RTO's service area and half to the RTO(s) where the expansion is located; and (3) facilities below 230 kV will be allocated to the RTO(s) where the expansion is located.

Old Dominion maintains that the cost for all facilities, not just the 500 kv facilities, should be allocated on the basis of relative load, because the PJM grid is now a regional grid.

Commission Response

We find that the regional transmission expansion plan is reasonable. It provides for regional planning with the input of all affected parties, obligates the RTOs to construct necessary facilities, and establishes a cost sharing mechanism. We will not adopt Old Dominion's proposed modification to the cost sharing approach for transmission expansions. The transmission expansion plan will propose a specific cost allocation, and the parties will only turn to this allocation as a default mechanism. For that purpose, it reflects a reasonable compromise.

VII. Reliability Assurance Agreement

The ability of PJM members to pool their resources for purposes of reserve sharing has generated significant reliability and cost savings benefits for the PJM members over the years. In

192/ In response to intervenor concerns that environmental groups are not allowed to participate in the development of the regional transmission expansion plan (see, e.g., NRDC at 4 (filed in Docket Nos. EC97-38-000 and ER97-3189-000)), we note that the committee is required to invite broad participation, including "any other interested parties," a category that would encompass environmental groups.

order to implement a reserve sharing approach that would reduce the cost of installed capacity reserves, the PJM Pool developed a set of specific procedures for: (1) determining the pool-wide generation requirement needed to meet pool-wide loads, including reserves; (2) determining each member's individual obligation to contribute to the pool-wide generation requirement; (3) measuring each member's compliance with its obligation; and (4) developing charges that apply whenever a member fails to meet its individual obligation (referred to as a capacity deficiency).

Supporting Companies propose to continue this aspect of the restructured PJM Pool, but to accomplish the installed capacity reserve sharing aspects of the pooling arrangement under the PJM Reliability Assurance Agreement (Reliability Agreement). Only Load Serving Entities (LSEs), defined as any utility that sells power at retail to loads within the PJM Control Area, are parties to the Reliability Agreement. 193/ In addition to meeting the reliability requirements described above, Supporting Companies note that the Reliability Agreement, as proposed, requires LSEs to take network transmission service under the PJM Transmission Tariff. 194/ The Reliability Agreement will be administered by a committee containing representatives of each party, with all day-to-day functions delegated to PJM-OI.

The Reliability Agreement modifies traditional reserve sharing within PJM for purposes of accommodating the introduction of retail choice in portions of the PJM Control Area. In this regard, the time period for recognizing changes in retail loads is shortened to reflect the fact that, as retail choice is initiated within PJM, there may be more frequent changes in each supplier's loads. Each year, the combined capacity needs of the PJM Pool over the next five years will be recomputed according to a formula that takes into account projections of load, generating resource characteristics, generator outage rates (forced and planned), demand side management options, and the Capacity Benefit Margin. 195/ The result of this calculation is called

193/ This would encompass RTOs, any other traditional franchised utilities, such as municipals and cooperatives, as well as any power marketer that becomes authorized to sell power at retail within the PJM Control Area. An LSE that is a wholesale requirements customer of another utility may designate its supplier as the party responsible for meeting the requirements of the Reliability Agreement.

194/ As discussed below, we are modifying this provision to permit LSEs the option of taking network or point-to-point service.

195/ The Capacity Benefit Margin is the capacity available to the
(continued...)

the Forecast Pool Requirement. Each LSE is then assigned responsibility for a portion of the installed capacity needed to meet the Forecast Pool Requirement. In the past, this allocation has been based on relative loads. 196/

During the transition period towards retail choice, the calculations described above will be performed in two steps: (1) the Forecast LSE Obligation will be computed at the RTO level; and (2) each Forecast LSE Obligation will then be allocated among the LSEs within the RTO's service area. Each PJM member was previously obliged to demonstrate that it had sufficient capacity to meet its Forecast LSE Obligation over the following two years. Under the Reliability Agreement, each LSE must submit a plan indicating how it intends to meet its Forecast LSE Obligation over the following 24 months for loads that it serves under its franchise, and over the following three months for loads that it serves under a retail choice program. In any billing month, if an LSE fails to meet its installed capacity obligation, it will be assessed a capacity deficiency charge. 197/

Capacity Benefit Margin

Historically, the PJM members have agreed to treat a certain amount of transmission interface capacity as unavailable for firm individual transactions and to reserve it instead for the RTOs' own firm use in meeting generation reserves. This reserved interface capacity is referred to as the Capacity Benefit Margin. As a result of reserving interface capacity for this purpose, the Forecast Pool Requirement is reduced by the amount of installed capacity that the pool members would otherwise be required to maintain. The Reliability Agreement continues this practice.

195/ (...continued)

pool to use transmission interfaces to reach neighboring control areas during emergencies.

196/ For example, if the Forecast Pool Requirement were 62,500 MW (and assuming a 15% reserve margin), a LSE responsible for 10% of the combined pool loads would be obligated to provide 6,250 MW of installed capacity. This allocation is called the Forecast LSE Obligation.

197/ The capacity deficiency charge is billed on a daily basis, equating to an annual charge of \$58.40/kW/year. The capacity deficiency charge is carried forward from the prior PJM pooling arrangement and is based on the cost of installing a combustion turbine generator. The revenues from any capacity deficiency charges are distributed to LSEs that maintain installed capacity in excess of their Forecast LSE Obligation.

Certain intervenors contend that the proposed treatment of the Capacity Benefit Margin under the Reliability Agreement improperly restricts the amount of transmission interface capacity and, therefore, precludes them from obtaining firm power from other control areas. Supporting Companies argue that the Reliability Agreement reflects the status quo and benefits all LSEs, not just the RTOs, because they can meet the pool's reserve margin requirements with less generating capacity. Supporting Companies also contend that the Capacity Benefit Margin can be reduced by PJM-OI. 198/

Commission Response

Supporting Companies have not demonstrated that the PJM Pool's historical practice of withholding firm transmission interface capacity as a substitute for installed generating reserves is consistent with our open access policies. As an initial matter, it is inconsistent with the PJM Transmission Tariff, which covers all transmission uses (including the RTOs' use of the transmission system to serve native load). The PJM Transmission Tariff establishes specific application and reservation procedures for the use of firm transmission capacity and does not allow one group of transmission users (the RTOs) to remove firm transmission capacity without following those procedures. Also, while treating pool transmission interface capacity and pool installed reserves as interchangeable may have been reasonable when the beneficiaries of both were one and the same, that is no longer the case. Moreover, while Supporting Companies contend that their proposal extends the benefits of this practice to all LSEs equally, those LSEs that own generating capacity within the PJM Control Area (i.e., at least in the near-term, the eight RTOs) appear to benefit as suppliers as well as LSEs. In addition, Supporting Companies have not explained why firm transmission interface should be withheld from transmission customers serving loads outside of the PJM Control Area (non-LSEs) in order to benefit utilities serving load in the PJM Control Area (LSEs). For these reasons, we are not prepared to adopt Supporting Companies' proposal in this regard. However, we find that this issue has not been addressed thoroughly enough for the Commission to determine the resolution of this dispute or the need for a transition from the historical practice. We will direct the parties to file further briefs addressing the concerns

198/ The Reliability Agreement provides that the capacity benefit margin initially shall be 3,500 megawatts, and that PJM-OI, "in consultation with the Reliability Committee," may reduce the Capacity Benefit Margin. In making its decision, however, PJM-OI must "minimize the total cost of the capacity reserves" of the parties to the Reliability Agreement.

discussed above and proposing options for the Commission's consideration.

We direct interested parties to file briefs concerning this issue 120 days from the date of issuance of this order. 199/ We will then permit interested parties to file reply briefs. The reply briefs shall be filed no later than 150 days from the date of issuance of this order. 200/

Requiring LSE Participation

Article 2 of the Reliability Agreement states that "every entity which is or will become an LSE within the PJM Control Area is to become and remain a Party to the Agreement" Additionally, Section 11.6(b) of the PJM Operating Agreement requires that any LSE that intends to purchase power from the PX must become a party to the Reliability Agreement.

Certain intervenors oppose the mandatory requirement that LSEs join in the Reliability Agreement. Intervenors argue that a requirement for competitors to cooperate with each other in planning and operation, to coordinate capacity resource plans, and to share reserves, is incompatible with the emerging competitive markets. 201/ They also maintain that market forces should be relied upon to ensure that adequate resources are available to meet load.

Commission Response

We will accept Supporting Companies' proposal that LSEs who purchase from the PX must participate in the Reliability Agreement. The RTOs have committed to make all of their resources, to the extent not committed to serve native load or to make bilateral power sales, available to the PX and, absent a contractual requirement for LSEs to participate in long-term reliability, this commitment would allow the RTOs' competitors to unduly rely on the RTOs' resources for purposes of ensuring reliability. Our decision on this issue is based on: (1) the specific facts before us in this docket, particularly the fact that this requirement applies only to LSEs that choose to purchase from the PX and that will be effectively back-stopped by the RTOs' available generation capacity; and (2) the general

199/ Briefs should be filed in Docket No. ER97-3189-015.

200/ In the interim, the interface capacity classified as the Capacity Benefit Margin will continue to be available on a non-firm basis.

201/ See, e.g., Clearinghouse at 7, 38-39 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

preference of the state commissions within the PJM region that the traditional reliability aspects of the pool continue, at least during the transition to competitive retail markets when suppliers unpracticed in the area of reliability planning will be testing the waters of as many as five different retail competition programs.

Voting Rules

The Reliability Agreement provides that each party to the agreement will be a member of the Reliability Committee. The Reliability Committee has the authority to revise or terminate the Reliability Agreement and approve changes to pool reliability criteria. A two-thirds majority vote in each of two voting blocks is required for action on major items. One of the voting blocks provides for one member, one vote (i.e., within the block each party will have an individual vote), while the other voting block grants voting rights based on relative load (e.g., if a party serves 10% of the load represented by all parties, it will control 10% of the votes in the block). No party is entitled to more than 25% of the load-weighted votes, and at least three parties must dissent to block a proposal.

Some intervenors argue that the RTOs will exercise undue influence by controlling the load-weighted vote, and thereby having the power to block amendments to the Reliability Agreement that would promote competitive generation markets. 202/ For example, the intervenors note that the RTOs already own substantial amounts of generating capacity and will incur no out-of-pocket costs to meet a reserve obligation that is set higher than necessary for reliability purposes, while new entrants would incur out-of-pocket costs to acquire generating capacity for this purpose. The intervenors are concerned that RTOs will exercise their voting rights to block reductions to the reserve requirements as a way of driving up their competitors' costs. These intervenors ask that the Commission eliminate the voting block based on relative loads.

Commission Response

We find that the voting rules under the Reliability Agreement are acceptable. The voting rules are reasonably designed to prevent any member from exercising undue influence. Smaller utilities and new entrants will be properly represented in the one-member, one-vote voting block, while the load-based voting block will afford representation to members relative to their proportionate responsibility for assuring reliability in the PJM Control Area.

202/ See, e.g., Industrial Coalition at 23-24 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

Requiring LSEs To Obtain Network Service

All parties to the Reliability Agreement are required to obtain network transmission service. Certain intervenors, particularly those with behind the meter generation, oppose this requirement. Supporting Companies argue that this requirement is appropriate because, absent network service, each party could not rely on the availability of the other parties' resources for reliability purposes.

Commission Response

We find that it is unreasonable to require all LSEs to obtain network transmission service in order to be a party to the Reliability Agreement. LSEs should be allowed to determine what type of service, network or point-to-point, best meets their needs. We believe the requirement would impose an unreasonable restriction on the ability of LSEs to exercise their rights to obtain service under the PJM Transmission Tariff, particularly LSEs who have never relied on network service from the RTOs and, indeed, may have previously been refused such services.

Confidentiality of Market Information

The Reliability Agreement requires LSEs to submit generation resource plans directly to the Reliability Committee which, in turn, provides the data to PJM-OI to input into the specific formulas in the agreement. Some intervenors request that the Reliability Agreement be modified to ensure that sensitive market information is not released to PJM members by disclosing the information to the Reliability Committee. 203/

Commission Response

We agree with the intervenors that PJM members should not be provided with sensitive market information. Accordingly, we direct that the Reliability Agreement be modified to provide that the information be submitted to PJM-OI instead.

Cost Sharing

Upon application, each party is responsible for the costs of analyzing its application and must make a deposit. Except for the costs recovered through a nominal base fee (0.5% of the costs of administering the agreement), all costs are to be shared according to relative load. Allegheny argues that the 0.5% fee

203/ See, e.g., Industrial Coalition at 23. (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

is not cost-justified, and also challenges the \$500/day fee for the submission of late data. 204/

Commission Response

We find that the provisions pertaining to sharing the costs of administering the Reliability Agreement are acceptable. We believe it is reasonable for all LSE's to share in the costs of administering the Reliability Agreement in relation to their relative loads, and that the nominal base fee and the late submission fee are reasonable.

VIII. Transmission Owners Agreement

The Transmission Owners Agreement (Owners Agreement) provides that owners of transmission facilities in the PJM Control Area have agreed to offer regional transmission service under non-pancaked rates and to transfer to the ISO the responsibility for administration of the PJM Transmission Tariff and regional transmission planning and operations. The Owners Agreement creates an Administrative Committee of RTOs that may make recommendations to the ISO, but is expressly denied the ability to exercise any control over the functions and responsibilities transferred to the ISO. The Owners Agreement provides that transmission owners may file changes in transmission service rate design and non-rate terms and conditions under section 205 of the FPA only if the proposed changes are not rejected by a majority of the PJM Board. Any such rejected changes may be filed under section 206 of the FPA. The transmission owners have also reserved the rights to: (1) make a section 205 filing to seek recovery of their revenue requirement; (2) adopt and implement procedures to protect an owner's electrical facilities from physical damage or to prevent injury or damages to person or property; (3) build, acquire, sell, dispose, retire, merge, or otherwise transfer or convey all or any part of an owner's assets; and (4) take such actions as the owner deems necessary to fulfill its obligations under state or federal law to provide safe and reliable service. A party to the Owners Agreement may withdraw upon 90 days' notice as long as it has established a separate control area that complies with NERC requirements and "put in place alternative arrangements" to satisfy the Commission's open access requirements.

Certain intervenors raise concerns with respect to the Owners Agreement, including: (1) that the Owners Agreement limits PJM-OI's ability to direct changes in maintenance schedules to situations where it would significantly affect the efficient and reliable operation of the PJM Control Area; (2)

204/ Allegheny at 42,44 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

that the reserved right to take whatever actions necessary to fulfill its obligations under local, state or federal law is vague and could permit the RTOs to nullify the operational directives of PJM-OI; and (3) that the Owners Agreement is a meaningless commitment to restructuring PJM given the 90-day withdrawal right.

Commission Response

We find that the Owners Agreement is acceptable, subject to the modifications discussed below. While the Owners Agreements states that PJM-OI should not change maintenance schedules except when necessary, it adds that "the Parties shall comply with all maintenance schedules established by [PJM-OI]." We read the latter provision -- requiring parties to comply with all maintenance schedules established by PJM-OI -- to be controlling. In addition, if an RTO relies on its right to meet requirements under local, state or federal law for purposes of nullifying the operational directives of PJM-OI, parties are free to file a complaint under section 206 of the FPA. Finally, we do not believe that the 90-day withdrawal right makes the Owners Agreement a meaningless commitment to restructuring. The 90-day withdrawal right is effective only upon the Commission's approval and is, therefore, not a vehicle to undermine restructuring.

We will require that the RTOs modify the Owners Agreement, however, to eliminate provisions that would allow RTOs to unilaterally file to make changes in rate design, terms or conditions of jurisdictional services, except that an individual RTO may unilaterally seek a change in the revenue requirement underlying its jurisdictional rates. Given that we are accepting the PJM Transmission Tariff (subject to modifications), including the basic rate design, all changes in rate design, terms and conditions must be developed in accordance with the governance process approved in this order. As noted herein, PJM-OI has the right and responsibility to participate in the development of any such revisions and to intervene in any proceedings pertaining to such filings.

IX. Related Agreements

A. EHV Agreements

Supporting Companies and PECO proffered different approaches for treatment of three multi-lateral transmission facilities agreements -- the EHV Transmission Agreement, LDV Transmission System Agreement, and the S-E 500 kV Transmission System Agreement (collectively, EHV Agreements) -- for purposes of complying with the Open Access Rule. The EHV Agreements establish the rights to specific transmission services, primarily the transmission of power from jointly owned generating units to their owners throughout the PJM Control Area. The EHV Agreements

establish a cost sharing formula which, as a general matter, requires each transmission user to share in the costs of the high voltage facilities on the same basis as its usage. The EHV Agreements include rates and terms for additional transmission services that may be requested over these facilities.

Supporting Companies propose to amend these agreements to eliminate provisions that restrict the use of the transmission facilities under the PJM Transmission Tariff, so the facilities are available to all transmission customers on a not unduly discriminatory basis. Supporting Companies state that, as amended, most of the remaining provisions of these agreements concern the parties' cost sharing arrangements. Supporting Companies state that each of the PJM Companies installed facilities pursuant to the EHV Agreements subject to the express understanding that the other companies would contribute to, and that it would be fully compensated for, the costs of those facilities.

PECO asserts that the EHV Agreements should be terminated completely, all usage determined under the PJM Transmission Tariff, and the requirement to make transmission support payments eliminated. PECO states that, although the EHV Agreements should be terminated, specific operating and maintenance (O&M) functions must still be performed so long as certain facilities are jointly owned. As a result, PECO proposes new O&M agreements and the redesignation as rate schedules of other existing O&M agreements.

Commission Response

We find that it is reasonable to continue the cost sharing arrangements under the EHV Agreements rather than terminating the agreements. The EHV Agreements are intended to effect a form of joint ownership. Rather than owning all of the transmission facilities jointly, the parties agreed to own a portion of the facilities and to support the cost of facilities owned by others in a percentage equal to their use. Elimination of the support charges would relieve those that chose support payments of any further cost responsibility, while at the same time increasing the cost responsibility of those that chose construction. We believe this would be unreasonable.

We also find that Supporting Companies' proposed revisions to the EHV Agreements are reasonable, subject to certain modifications. The amendments are reasonable to the extent that they place the use of these facilities under the PJM Transmission Tariff and retain the cost sharing arrangements that continue to be reasonable.

Certain language in the amendments describing the transfer of usage provisions to the PJM Transmission Tariff, however, is unclear and must be revised. In this regard, Supporting

Companies' proposed amendment to the Extra High Voltage Transmission System Agreement states the following: 205/

Reservation of the EHV System under 3.1 of the EHV Agreement: (a) to deliver power from Keystone and Conemaugh Station to the Station owners, shall be an existing firm use under the Tariff; and (b) to provide PJM Control Area reliability, shall be determined by the control area operator pursuant to the Tariff.

The relevant sentence in Section 3.1 of the EHV Agreement states: 206/

The EHV System described in Article 2 shall be used for two principal purposes, (I) for transmitting the capacity and energy of Keystone [and Conemaugh] to the systems of the Station Owners, hereinafter referred to as the "generating station function," and (ii) for interchange of capacity and energy with other companies not signatories hereto, hereinafter referred to as the "inter-area tie function."

The intent of the statement that transmission of power from specific generating units shall be an "existing firm use" under the PJM Transmission Tariff is unclear. It would be appropriate for Supporting Companies' to preserve their right to designate these units as network resources and to select these resources for the allocation of FTRs; however, it is unclear whether that is the intent of the amendment. The second ambiguity is that the EHV Agreements mention a second principal purpose (inter-area tie function), while the amendment describes control area reliability as the second issue addressed under Section 3.1 of the agreements. Therefore, we direct the signatories to the EHV Agreements to revise the amendments to clearly state that all elements of the EHV Agreements concerning usage are eliminated, and all uses are placed under the PJM Transmission Tariff. 207/

B. Existing Bilateral Transmission Agreements

The parties have differing views regarding whether existing bilateral transmission agreements should be modified as a result of PJM restructuring. For example, DEMEC argues that, if the

205/ Similar language is contained in each of the amendments.

206/ Similar provisions are included in the other two agreements as well.

207/ It would be acceptable, of course, to designate the generating units listed in the EHV Agreements as network resources that are eligible for the award of FTRs.

Commission elects to impose LMP, it should order that all existing bilateral agreements may be redesigned to accommodate the features of the LMP pricing method, including the assignment of FTRs. Old Dominion argues that it would be unreasonable to leave intact existing bilateral agreements that have the effect of assessing multiple charges for the use of more than one transmission system. Old Dominion argues that, given the dramatic and sweeping changes to the pool's structure, it would be unreasonable to allow only some market players to participate and to hold others to inferior terms and higher rates. Old Dominion concludes that it is discriminatory to design superior rates and terms that benefit the RTOs alone, and asks that the Commission give existing customers the option to modify their existing, multiple rate arrangements and begin taking service under the PJM Transmission Tariff.

In contrast, other intervenors seek to maintain the benefits of their existing bilateral transmission agreements. Allegheny seeks assurance that PJM restructuring preserves its rights under a bilateral agreement to obtain transmission service at no charge, in recognition of it becoming the owner of 42 miles of 500 kV transmission facilities within the PP&L system. 208/ EPSA, as well as Cogen and USGen, seek assurance that they will not be forced to reform existing transmission agreements. 209/ Similarly, Supporting Companies argue that any reformation of existing bilateral agreements would be inconsistent with the Open Access Rule, where the Commission determined that it would generally not abrogate existing bilateral agreements.

Commission Response

Existing bilateral agreements under which the RTOs provide transmission service should be modified in light of PJM restructuring. While the transmission service obligations embodied in these contracts are grandfathered under Supporting Companies' proposal, it is essential that PJM-OI assume responsibility for administering all transmission services within the PJM Control Area. Also, to the extent that Supporting Companies' proposal permits RTOs to charge multi-system rates under existing bilateral agreements, they should be revised as well.

208/ Allegheny at 21-23 (Filed in Docket Nos. EC97-38-000 and ER97-3189-000).

209/ Cogen and USGen add, however, that at the expiration of any bilateral transmission agreements, they should not be renewed. Cogen and USGen at 17 (Filed in Docket Nos. EC97-38-000, ER97-3189-000 and ER97-3273-000).

The circumstances presented here are inapposite to those addressed in Order Nos. 888 and 888-A. In those orders, the Commission was considering the need to transfer transmission services from individual company bilateral agreements to an individual company tariff. Unlike PJM restructuring, nothing had changed with regard to the identity of the service provider, the nature of transmission service, or the configuration or operation of the transmission system. The very purpose of PJM restructuring, however, is to transfer the obligation to provide open access transmission services from the individual RTOs to the ISO. As such, it is essential to bring all stand alone transmission services under the control and administration of the ISO.

We direct that all bilateral agreements be modified, therefore, to the extent necessary to ensure that PJM-OI, as the ISO, has assumed responsibility for administering these transmission services (e.g., to arrange scheduling, to include these transmission obligations in planning, and to integrate these services as necessary with the PJM Transmission Tariff services that the bilateral customer may obtain). In addition, we direct that all bilateral agreements be revised to eliminate the potential for the incurrence of multiple transmission service charges within the PJM Control Area. ^{210/} This latter requirement would involve two types of situations: (1) where more than one RTO is the transmission provider for a single transaction under bilateral agreements; and (2) where the customer served under a bilateral agreement for a portion of its load intends to take network service under the PJM Transmission Tariff and will, therefore, pay for service on the basis of its total load under the network agreement. It is unreasonable for RTOs to design a comprehensive restructuring that reduces the rate for transactions among themselves alone. Continuation of multiple system rates only for those existing bilateral contracts that involve a non-RTO is unreasonable.

C. Unbundling of Existing Power Sales Contracts

Old Dominion maintains that existing power sale contracts that include a transmission component are also incompatible with PJM restructuring. Old Dominion states that it purchases power from PSE&G under a rate that reflects PSE&G's generation and transmission costs. PSE&G delivers the power to Delmarva for transmission to Old Dominion's loads. Old Dominion notes that,

^{210/} For example, if a customer pays multiple charges for the use of more than one transmission system (including any transmission charges paid to the power supplier under an unbundled power sale agreement), and the combined rates are higher than that customer would pay under the PJM Transmission Tariff, the rate must be reduced.

under PJM restructuring, the power customer pays PJM-OI for transmission service and PSE&G, as a power supplier, will incur no cost to transmit power to Old Dominion. Old Dominion argues that it would be inappropriate for PSE&G and other PJM power sellers to continue assessing a power sale rate that reflects a transmission cost that they will no longer incur after restructuring of PJM.

Commission Response

We will require RTOs to modify any existing bundled wholesale power sales agreements that are inconsistent with the restructured PJM transmission arrangements. Under PJM restructuring, the RTOs have transferred control of their transmission systems to the ISO and, in return, will be compensated for their transmission revenue requirement. In delivering power to wholesale customers, the transmission component of the rate should reflect the amount, if any, it pays PJM-OI to transmit that power. As explained by Old Dominion, for most transactions there will be no additional cost to an RTO, as power seller, to transmit power to customers located on the system of another RTO. We direct that the RTOs revise their power sale agreements accordingly.

X. Monitoring Plan

PJM restructuring will significantly alter the operation of the electric power market within PJM and will implement a novel congestion pricing approach. The Commission is accepting this proposal but believes it is important to monitor its implementation to assess undue discrimination and market operation. A monitoring function will allow an evaluation of how the pool and non-pool markets and transmission pricing arrangements are working.

Accordingly, within 90 days after issuance of this order, PJM-OI shall consult with the Commission Staff and submit to the Commission a proposed plan addressing the scope and informational requirements of the monitoring effort. The Commission expects the PJM-OI to monitor and report on issues related to the determination of congestion costs and the potential to exercise market power within PJM. The plan should evaluate the operation of both pool and bilateral markets to detect either design flaws or structural problems that may need to be addressed in future filings. The plan should also evaluate any proposed enforcement mechanisms that are necessary to assure compliance with pool rules. Most importantly, the plan must ensure that the monitoring program will be conducted in an independent and objective manner. We may provide further guidance about monitoring when we address the pending requests for market-based pricing for sales through the Power Exchange.

The Commission Orders:

(A) The motions to intervene out of time in this proceeding are hereby granted, as discussed in the body of this order.

(B) The answers to protests in this proceeding are hereby granted, as discussed in the body of this order.

(C) The motions for summary disposition, motions to consolidate, and requests for an evidentiary hearing are hereby denied, as discussed in the body of this order.

(D) The requests for rehearing filed in Docket Nos. OA97-261-001, ER97-3189-001, ER96-2516-002 and EC96-2668-002 are hereby denied, as discussed in the body of this order.

(E) Supporting Companies' application to recognize the PJM Interconnection, L.L.C. as an Independent System Operator is hereby conditionally granted pursuant to section 203 of the FPA, effective as of January 1, 1998, as discussed in the body of this order.

(F) Each RTO is hereby ordered to make the following compliance filings, on or before December 15, 1997, in Docket Nos. ER97-3189-001 (Atlantic City Electric), -002 (BG&E), -003 (Delmarva), -004 (GPU), -005 (PECO), -006 (PEPCO), -007 (Penelec), and -008 (PSE&G): (1) GPU is hereby ordered to revise its local service area rate to reflect a single-system rate, as discussed in the body of this order; (2) each RTO is hereby ordered to revise its rates to comply with the requirements that the billing determinants for network customers reflect the same figures that are used for FTRs, as discussed in the body of this order; and (3) each RTO that provided for crediting of non-firm revenues to its revenue requirement in developing its rates is hereby ordered to revise its rates to exclude those revenues from its revenue requirement.

(G) The PJM Transmission Tariff, filed by Supporting Companies in Docket Nos. ER97-3189-000 and EC97-38-000, is hereby conditionally accepted for filing, to become effective January 1, 1998, subject to the revisions discussed in the body of this order. PJM-OI is hereby ordered to implement the revised PJM Transmission Tariff, effective January 1, 1998, and to file a revised tariff that complies with the requirements of Order Nos. 888, 888-A and 888-B, and incorporates the revisions directed in Ordering Paragraph (F) above. PJM-OI is hereby ordered to file the revised tariff, on or before December 31, 1997, in Docket No. ER97-3189-011.

(H) Pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Energy Regulatory Commission by section 402(a) of the Department of Energy

Organization Act and by the Federal Power Act, particularly sections 205 and 206 thereof, and pursuant to the Commission's Rules of Practice and Procedure and the regulations under the Federal Power Act (18 C.F.R. Chapter I), separate public hearings shall be held in Docket Nos. ER97-3189-001, -002, -003, -004, -005, 006, -007 and -008, concerning the RTOs' reactive supply service charges and the justness and reasonableness of the rates proposed by individual RTOs (as revised pursuant to Ordering Paragraph (F) above), as discussed in the body of this order.

(I) Presiding administrative law judges, to be designated by the Chief Administrative Law Judge, shall convene prehearing conferences in these separate proceedings, to be held within approximately fifteen (15) days of the date of issuance of this order, in hearing rooms of the Federal Energy Regulatory Commission, 888 First Street, N.E., Washington, D.C. 20426. Such conferences shall be held for the purpose of establishing procedural schedules. The presiding judges are authorized to establish procedural dates, including dates for the RTOs' cases-in-chief, and to rule on all motions (except motions to dismiss) as provided for in the Commission's Rules of Practice and Procedure.

(J) PJM-OI is hereby ordered to file its Standards of Conduct, as required by Order Nos. 889, 889-A, and 889-B, as discussed in the body of this order. PJM-OI's filing shall be made on or before December 31, 1997, in Docket No. ER97-3189-011.

(K) The PJM Operating Agreement is hereby conditionally accepted for filing, subject to the revisions as discussed in the body of this order, to become effective January 1, 1998. PJM-OI is hereby ordered to file the revised PJM Operating Agreement, in accordance with the revisions directed in the body of this order, on or before December 31, 1997, in Docket No. ER97-3189-011.

(L) The Reliability Agreement is hereby conditionally accepted for filing, subject to the revisions as discussed in the body of this order, to become effective January 1, 1998. PJM-OI is hereby ordered to file a revised Reliability Agreement (as revised by the Reliability Committee), in accordance with the revisions directed in the body of this order. PJM-OI's filing should be made on or before December 31, 1997, in Docket No. ER97-3189-011.

(M) PJM-OI is hereby ordered to revise the ancillary services sections of the PJM Transmission Tariff to clearly and specifically set forth rates, terms and conditions and to explain how these provisions have been implemented, as discussed in the body of this order. In addition, PJM-OI and Supporting Companies are hereby ordered to explain any departures from the ancillary services requirements of Order Nos. 888 and 888-A. PJM-OI's and

Supporting Companies' filing(s) shall be made within 60 days of the date of issuance of this order, in Docket No. ER97-3189-009.

(N) PJM-OI is hereby ordered to file network service agreements for each RTO, as discussed in the body of this order. PJM-OI's filing shall be made on or before December 31, 1997, in Docket No. ER97-3189-010.

(O) The Owners Agreement is hereby conditionally accepted for filing, subject to the revisions as discussed in the body of this order, to become effective January 1, 1998. The RTOs are hereby ordered to file the revised Owners Agreement, in accordance with the directives in the body of this order, on or before December 31, 1997, in Docket No. ER97-3189-012.

(P) The RTOs are hereby ordered to make a filing explaining, as discussed in the body of this order, how they will ensure that: (1) PJM-OI has assumed responsibility for administering the bilateral agreements that are grandfathered; and (2) bilateral agreement customers are not subjected to multiple charges under separate bilateral agreements or through a combination of bilateral agreements and tariff services for the use of more than one transmission system. The RTOs' filings shall be made within 60 days of the date of issuance of this order, in Docket No. ER97-3189-013.

(Q) PJM-OI is hereby ordered to initiate, within 30 days of the date of issuance of this order, a process to resolve the issue of providing greater price certainty under Supporting Companies' locational marginal pricing method, and to file a revised congestion pricing proposal that addresses issues associated with price certainty, both as discussed in the body of this order. PJM-OI is ordered to file the revised congestion pricing proposal within 120 days of the date of issuance of this order, in Docket No. ER97-3189-014.

(R) Interested parties are hereby directed to file briefs concerning the allocation of the Capacity Benefit Margin, including a proposed transition timetable, 120 days from the date of issuance of this order, as discussed in the body of this order. Reply briefs shall be filed no later than 150 days from the date of issuance of this order. The briefs shall be filed in Docket No. ER97-3189-015.

(S) The amended EHV Agreements, filed by Supporting Companies in Docket Nos. ER97-3189-000 and EC97-38-000, are accepted for filing, as discussed in the body of this order. The signatories to the EHV Agreements are hereby ordered to file revised EHV Agreements, consistent with the discussion in the body of this order, on or before December 31, 1997, in Docket No. ER97-1082-000.

(T) The RTOs are hereby ordered to file unbundled power sales agreements, as discussed in the body of this order, within 60 days of the date of issuance of this order. In these filings, the RTOs shall identify any wholesale power sales that are not being revised and explain why they are compatible with PJM restructuring. These filings will be assigned new ER docket numbers. While the RTOs are not required to combine these filings, each RTO should, to the extent practicable, submit one filing covering all of its existing bilateral power sale agreements.

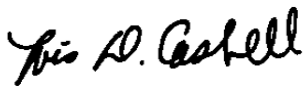
(U) PJM-OI is hereby ordered to file a proposal, on or before July 1, 2002, concerning the implementation of a uniform, system-wide rate that would apply to transmission services throughout the PJM Control Area.

(V) PJM-OI shall file a monitoring plan, as discussed in the body of this order, within 90 days from the date of issuance of this order.

(W) PJM Interconnection, L.L.C. and the PJM Companies are hereby informed of the rate schedule designations in Appendix B.

By the Commission.

(S E A L)


Lois D. Cashell,
Secretary.

Appendix A

**Motions To Intervene and Notices of Intervention
in Docket No. OA97-261-000**

Allegheny Electric Cooperative, Inc.
Bio Resources, Ltd.
Coalition for a Competitive Electric Market
Cogen Technologies NJ Venture
Cogen Technologies Linden Venture, LP
Delaware Municipal Electric Corporation, Inc.
Delaware Public Service Commission
Duke/Louis Dreyfus L.L.C.
Duquesne Light Company
Easton Utilities Commission of Easton, Maryland
Electric Clearinghouse, Inc.
Electric Power Supply Association
Hydro-Québec
Independent Energy Producers of New Jersey
Maryland Office of People's Counsel
Maryland Public Service Commission
Member Systems of the New York Power Pool
Mid-Atlantic Independent Power Producers
New England Power Pool
New Jersey Board of Public Utilities
New Jersey Division of the Ratepayer Advocate
New Jersey Industrial Customer Group
New York Mercantile Exchange*
New York State Electric & Gas Corporation

Niagara Mohawk Power Corporation

NJPIRG Citizen Lobby*

Northeast Utilities System

North Jersey Energy Associates

Old Dominion Electric Cooperative

Panda-Brandywine, L.P.

PanEnergy Trading & Market Services

PECO Energy Company

Pennsylvania Boroughs*

Pennsylvania Office of Consumer Advocate

Pennsylvania Power & Light Company

Pennsylvania Public Utility Commission

PJM Industrial Customer Coalition

Power Plant Research Program of the Maryland Department of
Natural Resources and the Maryland Energy Administration

Public Power Association of New Jersey

Schuylkill Energy Resources, Inc.

Sithe/Independence Power Partners, L.P.

U.S. Generating Company

Tractebel Energy Marketing, Inc.*

Washington Gas Energy Services, Inc.*

Motions To Intervene and Notices of Intervention
in Docket No. ER97-1082-000

Allegheny Electric Cooperative, Inc.

Bio Resources, Ltd.

Coalition for a Competitive Electric Market

Cogen Technologies NJ Venture
Delaware Municipal Electric Corporation, Inc.
Delaware Public Service Commission*
Duke/Louis Dreyfus L.L.C.
Duquesne Light Company
Easton Utilities Commission of Easton, Maryland
Electric Clearinghouse, Inc.
Electric Power Supply Association
Hydro-Québec
Independent Energy Producers of New Jersey
Maryland Office of People's Counsel
Maryland Public Service Commission
Member Systems of the New York Power Pool
Mid-Atlantic Independent Power Producers
Mid-Atlantic Power Supply Association
New England Power Pool
New Jersey Board of Public Utilities
New Jersey Division of the Ratepayer Advocate
New Jersey Industrial Customer Group
New York Mercantile Exchange*
Niagara Mohawk Power Corporation
NJPIRG Citizen Lobby*
Northeast Utilities Service Company
North Jersey Energy Associates
Old Dominion Electric Cooperative
Panda-Brandywine, L.P.

Docket No. OA97-261-000, et al.

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PanEnergy Trading and Marketing Services

PECO Energy Company

Pennsylvania Boroughs*

Pennsylvania Office of Consumer Advocate

Pennsylvania Power & Light Company

Pennsylvania Public Utility Commission

PJM Industrial Customer Coalition

Power Plant Research Program of the Maryland Department of
Natural Resources and the Maryland Energy Administration

Public Service Commission of the District of Columbia

Public Power Association of New Jersey

Schuylkill Energy Resources, Inc.

Sithe/Independence Power Partners, L.P.

Tractebel Energy Marketing, Inc.*

U.S. Generating Company

Washington Gas Energy Services, Inc.*

Motions To Intervene and Notices of Intervention
in Docket No. ER97-3189-000

Allegheny Electric Cooperative, Inc.

Central Hudson Gas & Electric Corporation

Coalition for a Competitive Electric Market

Cogen Technologies NJ Venture

Delaware Energy Users Group*

Delaware Municipal Electric Corporation, Inc.

Delaware Public Service Commission

Delaware Office of the Public Advocate*

Docket No. OA97-261-000, et al.

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Duke Energy Trading and Marketing, L.L.C.

Duke/Louis Dreyfus L.L.C.

Easton Utilities Commission of Easton, Maryland

Electric Clearinghouse, Inc.

Electric Power Supply Association

Maryland Office of People's Counsel

Maryland Public Service Commission

Member Systems of the New York Power Pool

Mid-Atlantic Power Supply Association

National Rural Electric Cooperative Association

Natural Resources Defense Council

New Jersey Board of Public Utilities

New Jersey Division of the Ratepayer Advocate

New York Mercantile Exchange

New York State Electric & Gas Corporation

NJ PIRG Citizen Lobby

North Jersey Energy Associates

Old Dominion Electric Cooperative

PECO Energy Company*

Pennsylvania Boroughs*

Pennsylvania Office of Consumer Advocate

Pennsylvania Public Utility Commission

PJM Industrial Customer Coalition

Public Power Association of New Jersey

Public Service Commission of the District of Columbia

Schuylkill Energy Resources, Inc.

U.S. Generating Company

Washington Gas Energy Services, Inc.

Motions To Intervene and Notices of Intervention
in Docket No. EC97-38-000

Allegheny Electric Cooperative, Inc.

Central Hudson Gas & Electric Corporation

Citizens Power LLC

Coalition for a Competitive Electric Market

Cogen Technologies NJ Venture

Delaware Energy Users Group*

Delaware Municipal Electric Corporation, Inc.

Delaware Public Service Commission

Delaware Office of the Public Advocate*

Duke Energy Trading and Marketing, L.L.C.

Duke/Louis Dreyfus L.L.C.

Electric Clearinghouse, Inc.

Electric Power Supply Association

Maryland Office of People's Counsel

Maryland Public Service Commission

Member Systems of the New York Power Pool

Mid-Atlantic Power Supply Association

National Rural Electric Cooperative Association

Natural Resources Defense Council

New Jersey Board of Public Utilities

New Jersey Division of the Ratepayer Advocate

New Jersey Industrial Customer Group

North Jersey Energy Associates
NJPIRG Citizen Lobby
Old Dominion Electric Cooperative
PECO Energy Company*
Pennsylvania Boroughs*
Pennsylvania Office of Consumer Advocate
Pennsylvania Public Utility Commission
PJM Industrial Customer Coalition
Public Power Association of New Jersey
Public Service Commission of the District of Columbia
Schuylkill Energy Resources, Inc.
U.S. Generating Company
Washington Gas Energy Services, Inc.

Motions To Intervene and Notices of Intervention
in Docket No. ER97-3273-000

Allegheny Electric Cooperative, Inc.
Citizens Power LLC*
Cogen Technologies NJ Venture
Delaware Energy Users Group*
Delaware Municipal Electric Corporation, Inc.
Delaware Office of the Public Advocate*
Delaware Public Service Commission*
Duke Energy Trading and Marketing, L.L.C.*
Duke/Louis Dreyfus L.L.C.*
Dupont Power Marketing, Inc.
Easton Utilities Commission of Easton, Maryland

Electric Clearinghouse, Inc.

Electric Power Supply Association

Maryland Office of People's Counsel

Maryland Public Service Commission

Mid-Atlantic Power Supply Association

National Rural Electric Cooperative Association

Natural Resources Defense Council

New Jersey Board of Public Utilities

New Jersey Division of the Ratepayer Advocate

New Jersey Industrial Customer Group

New York Mercantile Exchange*

New York State Electric & Gas Corporation

North Jersey Energy Associates

Old Dominion Electric Cooperative

Pennsylvania Boroughs*

Pennsylvania Office of Consumer Advocate*

Pennsylvania Public Utility Commission

PJM Industrial Customer Coalition

PJM Supporting Companies

Public Power Association of New Jersey

Public Service Commission of the District of Columbia

U.S. Generating Company

Washington Gas Energy Services, Inc.

XENERGY, Inc.*

Motions To Intervene and Notices of Intervention
in Docket No. EL7-44-000

Allegheny Electric Cooperative, Inc.
Ajay Goyal
Cogen Technologies NJ Venture
Duke Energy Trading and Marketing, L.L.C.
Dupont Power Marketing, Inc.
Easton Utilities Commission of Easton, Maryland
Electric Clearinghouse, Inc.
Maryland Office of People's Counsel
Maryland Public Service Commission
Member Systems of the New York Power Pool
New Jersey Division of the Ratepayer Advocate
New York Mercantile Exchange
NJPIRG Citizen Lobby
Northeast Utilities Service Company
North Jersey Energy Associates
Old Dominion Electric Cooperative
PECO Energy Company
Pennsylvania Public Utility Commission
PJM Industrial Customer Coalition
PJM Supporting Companies
Public Power Association of New Jersey
Public Service Commission of the District of Columbia
Washington Gas Energy Services, Inc.

Motions To Intervene in Docket No. OA97-678-000

Allegheny Electric Cooperative, Inc.

Cogen Technologies New Jersey Venture

Delaware Municipal Electric Corporation

Duke/Louis Dreyfus, LLC

Duke Energy Trading & Marketing, LLC

Easton Utilities Commission of Easton, Maryland

Electric Clearinghouse, Inc.

Maryland Public Service Commission

Member Systems of the New York Power Pool

New York Mercantile Exchange

North Jersey Energy Associates

Northeast Utilities Service Company

Old Dominion Electric Cooperative

Public Power Association of New Jersey

U.S. Generating Company

* Motion to intervene or notice of intervention out-of-time.

Appendix B

Rate Schedule Designations

Docket Nos. OA97-261-000 and ER97-1082-000

Effective: March 1, 1997

PJM Interconnection Association

- | | | |
|-----|---|------------------------------------|
| (1) | FERC Electric Tariff, Original
Volume No. 1 (Original Sheet
Nos. 1 through 169) | Open Access Transmission
Tariff |
| (2) | Rate Schedule FERC No. 18
(Supersedes Rate Schedule
FPC No. 1) | PJM Interconnection
Agreement |
| (3) | Rate Schedule FERC No. 19 | Transmission Owners
Agreement |

Atlantic City Electric Company

- | | | |
|-----|---|--|
| (4) | Supplement No. 41 to Rate
Schedule FPC No. 5 | Addendum to Extra High
Voltage Transmission
System Agreement |
| (5) | Supplement No. 2 to Rate
Schedule FPC No. 12 | Addendum to Susquehanna-
Eastern 500 kV
Transmission System
Agreement |
| (6) | Supplement No. 19 to Rate
Schedule FERC No. 13 | Addendum to Lower
Delaware Valley
Transmission System
Agreement |

Baltimore Gas & Electric Company

- | | | |
|-----|--|--|
| (7) | Supplement No. 41 to Rate
Schedule FPC No. 20 | Addendum to Extra High
Voltage Transmission
System Agreement |
|-----|--|--|

Delmarva Power & Light Company

- | | | |
|-----|--|---|
| (8) | Supplement No. 41 to Rate
Schedule FPC No. 34 | Addendum to Extra High
Voltage Transmission
System Agreement |
| (9) | Supplement No. 2 to Rate
Schedule FPC No. 41 | Addendum to Susquehanna-
Eastern 500 kV
Transmission System
Agreement Attachment |

- (10) Supplement No. 19 to Rate Schedule FERC No. 43 Addendum to Lower Delaware Valley Transmission System Agreement

Jersey Central Power & Light Company

- (11) Supplement No. 41 to Rate Schedule FPC No. 30 Addendum to Extra High Voltage Transmission System Agreement
- (12) Supplement No. 19 to Rate Schedule FERC No. 43 Addendum to Lower Delaware Valley Transmission System Agreement

Metropolitan Edison Company

- (13) Supplement No. 41 to Rate Schedule FPC No. 36 Addendum to Extra High Voltage Transmission System Agreement
- (14) Supplement No. 13 to Rate Schedule FPC No. 46 Addendum to Susquehanna-Eastern 500 kV Transmission System Agreement

PECO Energy Company

- (15) Supplement No. 41 to Rate Schedule FPC No. 30 Addendum to Extra High Voltage Transmission System Agreement
- (16) Supplement No. 2 to Rate Schedule FPC No. 43 Addendum to Susquehanna-Eastern 500 kV Transmission System Agreement
- (17) Supplement No. 19 to Rate Schedule FERC No. 45 Addendum to Lower Delaware Valley Transmission System Agreement

Pennsylvania Electric Company

- (18) Supplement No. 41 to Rate
Schedule FPC No. 57
- Addendum to Extra High
Voltage Transmission
System Agreement

Pennsylvania Power & Light Company

- (19) Supplement No. 41 to Rate
Schedule FPC No. 48
- Addendum to Extra High
Voltage Transmission
System Agreement
- (20) Supplement No. 2 to Rate
Schedule FPC No. 67
- Addendum to Susquehanna-
Eastern 500 kV
Transmission System
Agreement

Potomac Electric Power Company

- (21) Supplement No. 41 to Rate
Schedule FPC No. 26
- Addendum to Extra High
Voltage Transmission
System Agreement

Public Service Electric and Gas Company

- (22) Supplement No. 41 to Rate
Schedule FPC No. 42
- Addendum to Extra High
Voltage Transmission
System Agreement
- (23) Supplement No. 2 to Rate
Schedule FPC No. 58
- Addendum to Susquehanna-
Eastern 500 kV
Transmission System
Agreement
- (24) Supplement No. 19 to Rate
Schedule FERC No. 62
- Addendum to Lower
Delaware Valley
Transmission System
Agreement

UGI Utilities, Inc.

- (25) Supplement No. 41 to Rate
Schedule FPC No. 1
- Addendum to Extra High
Voltage Transmission
System Agreement
- (26) Supplement No. 2 to Rate
Schedule FPC No. 4
- Addendum to Susquehanna-
Eastern 500 kV
Transmission System
Agreement

PJM Interconnection, LLC

Docket No. ER97-2519-000

Effective: March 31, 1997

- (27) Rate Schedule FERC No. 20
(Supersedes Rate Schedule
FPC No. 18) PJM Operating Agreement

Docket No. ER97-3189-000

Effective: January 1, 1998

- (28) FERC Electric Tariff, First
Revised Volume No. 1 (Original
Sheet Nos. 1 through 177) Revised Open Access
Transmission Tariff
- (29) Rate Schedule FERC No. 21
(Supersedes Rate Schedule
FPC No. 20) Amended and Restated PJM
Operating Agreement
- (30) Rate Schedule FERC No. 22
(Supersedes Rate Schedule
FPC No. 19) Revised Transmission
Owners Agreement
- (31) Rate Schedule FERC No. 23
Reliability Assurance
Agreement