

108 FERC ¶ 61,120  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

OPINION NO. 476

Consolidated Edison Company of New York

Docket No. EL02-23-000  
(Phase II)

v.

Public Service Electric and Gas Company,  
PJM Interconnection, L.L.C., and  
New York Independent System Operator, Inc.

OPINION AND ORDER ON INITIAL DECISION

Issued: August 2, 2004

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APPEARANCES

*Donald J. Stauber and Brent L. Brandenburg* for Consolidated Edison Company of New York, Inc.

*Kenneth G. Jaffe, Timothy A. Ngau, Richard P. Bonnifield and Kenneth R. Carretta* for Public Service Electric and Gas Company.

*Barry S. Spector and Paul M. Flynn* for PJM Interconnection, L.L.C.

*Arnold H. Quint and Ted J. Murphy* for the New York Independent System Operator, Inc.

*Steven A. Weiler* for Arthur Kill Power LLC.

*Michael D. Cotleur and Thomas J. Burgess* for the Trial Staff of the Federal Energy Regulatory Commission.

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Before Commissioners: Pat Wood, III, Chairman;  
Nora Mead Brownell, Joseph T. Kelliher,  
and Suedeen G. Kelly.

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1. This case is before the Commission on exceptions to the June 11, 2003 initial decision issued in the second phase of this proceeding.<sup>1</sup> The case concerns interpretation of two contracts between Consolidated Edison Company of New York (ConEd) and Public Service Electric and Gas Company (PSE&G). Together, the contracts provide for PSE&G to accept up to 1,000 MW of power from ConEd in northern New Jersey and to deliver the same amount of power to ConEd in Brooklyn. ConEd filed a complaint stating that PSE&G had extensively curtailed re-deliveries in violation of its contract obligations. ConEd asked the Commission to direct PSE&G and also PJM Interconnection, L.L.C. (PJM) and the New York Independent System Operator, Inc. (NYISO) (collectively, the ISOs) to ensure that ConEd receives full delivery of the transmission service governed by the contracts. In this order, we affirm nearly all the Initial Decision's findings and make certain clarifications. This order benefits customers by enforcing the intent of the parties so that, to serve its customers, ConEd receives the power to which the contracts entitle it with the degree of firmness for which it contracted.

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<sup>1</sup> Consolidated Edison Company of New York, Inc. v. Public Service Electric and Gas Company, *et al.*, 103 FERC ¶ 63,047 (2003) (Initial Decision).

2. This order's major holdings are: PSE&G has curtailed ConEd's receipts of contract power, but the extent and propriety of the curtailments cannot be determined; NYISO and PJM are now responsible for transferring the contract power and avoiding curtailments; the transmission feeders between New Jersey and New York City must be open also to third parties' flows; PSE&G bears the costs where redispatch or another method is needed to support the power transfer under one contract; for the other contract, ConEd bears redispatch and congestion costs; ConEd must schedule its power transfers under the contracts one day ahead; the time PSE&G took to replace a failed transformer did not violate good utility standards; PSE&G must provide a spare transformer to support the power transfers under the contracts; ConEd has not shown that PSE&G abused market power concerning curtailment of the power transfers to enrich itself or its affiliate; and NYISO's and PJM's market monitoring units are to investigate as necessary to ensure that market power abuses involving power transfers under the contracts do not occur.

## **I. BACKGROUND**

### **A. 1975 and 1978 Contracts**

3. To meet New York City's load demands, ConEd imports power from upstate New York, either through the Westchester County Dunwoodie Interchange, using transmission lines now under NYISO's control, or through New Jersey, using transmission lines formerly under PSE&G's control and now under PJM's control. The New York -- New Jersey interties discussed in the two disputed contracts are the J and K Lines and the A, B and C Feeders.

4. The J and K Lines go from ConEd's Ramapo Substation in Rockland County, New York (Ramapo) across to PSE&G's Warwick Switching Station in Bergen County, New Jersey (Warwick). There, the two lines separate: the J Line continues to the New Milford Switching Station (New Milford) and the K Line continues to the Fair Lawn Switching Station (Fair Lawn).

5. The A Feeder goes from PSE&G's Linden Switching Station in Union County, New Jersey (Linden) by submarine cable under Arthur Kill<sup>2</sup> to ConEd's Goethals Substation on Staten Island (Goethals). Power from Goethals, whether delivered by the A Feeder or generated on Staten Island, reaches ConEd's Farragut Switching Station in Brooklyn (Farragut) via two ConEd transmission lines, Lines 25 and 26, whose combined total capacity is 920 MW.

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<sup>2</sup> Arthur Kill is the channel between Staten Island and New Jersey.

6. The B and C Feeders cross Upper New York Bay from PSE&G's Hudson Generating Station in Jersey City, New Jersey (Hudson) by submarine cable to Farragut. Each of the A, B and C Feeders has 500 MW capacity, for a combined total capacity of 1500 MW.

7. Phase angle regulators (PARs)<sup>3</sup> at Warwick and the A, B and C Feeders regulate power flows at those interconnections. PJM has taken over from PSE&G the operation and maintenance of the PARs at Warwick, while ConEd operates and maintains the PARs at the A, B, and C Feeders in accordance with the decisions of the ISOs. Because PSE&G uses 230 kV while ConEd uses 345 kV, power exchange between the two utilities requires the use of transformers.

8. In the 1960's, ConEd and PSE&G began to exchange generation to achieve more dependable electric service to their customers. The two utilities jointly constructed the Linden-Goethals tie (the A Feeder). Later, they constructed the first Hudson-Farragut tie (the B Feeder) and the Ramapo-Waldwick-New Milford tie (the J Line) so as to exchange and deliver up to 400 MW of power. On May 22, 1975, the utilities superseded their agreement governing this transfer with the first of the two disputed contracts, which we will refer to as the 1975 contract or 400 MW contract.

9. The 1975 contract provides for each utility to construct, operate, and maintain upgrades to its transmission facilities at the Ramapo-New Milford and Hudson-Farragut ties, and to make these facilities available to the other. The facilities to be provided by PSE&G included a transformer at Hudson. PSE&G agreed to transfer up to 400 MW of power for ConEd from Ramapo to Farragut via the upgraded facilities, the A Feeder, and PSE&G's and ConEd's internal transmission facilities, except when critical bulk-power facility outages in the northern part of its system reduced, in PSE&G's opinion, its ability to provide the transfer. ConEd agreed to transfer up to 400 MW of power for PSE&G from Linden to Hudson via the A and B Feeders and ConEd's own transmission facilities when major bulk power outages in the northern part of PSE&G's system impaired reliability of service in that area. ConEd, similarly, could curtail this transfer if, in its opinion, bulk power facility outages on its own system reduce its ability to provide the transfer.<sup>4</sup> ConEd also agreed to make specified annual payments to PSE&G.<sup>5</sup>

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<sup>3</sup> PARs are electrical devices that have some ability to control power flow through a particular component of the transmission network.

<sup>4</sup> 1975 contract (Exh. CE-6) at sections 4.1-4.2.

<sup>5</sup> 1975 contract at Article 3.

10. The utilities made a joint study to compare the feasibility of ConEd constructing a high voltage direct current transmission line from Ramapo to New York City against expansion of the existing transfer service through New Jersey. In December 1975, the utilities issued a joint report (Joint Report)<sup>6</sup> which concluded that expanding the transfer service would be more economical than constructing the new transmission line. The utilities executed, on May 8, 1978, a contract to increase the power transfer by 600 MW. We will refer to this contract as the 1978 contract or 600 MW contract.

11. The 1978 contract provided for PSE&G and ConEd to construct the second Hudson-Farragut tie (the C Feeder) and the Ramapo-Waldwick-Fair Lawn line (the K Line), with each utility constructing the portion in its state.<sup>7</sup> PSE&G agreed to transfer an additional 600 MW of power from Ramapo to Farragut, using existing lines, the new interconnection lines, and PSE&G's transmission facilities. The contract provides for curtailment of the transfer when critical bulk-power system outages make it impossible for PSE&G to maintain the transfer. It provided for PSE&G to plan, design, build and operate its system to supply its own load, meet its obligations to PJM, and transfer the 600 MW to ConEd, in addition to the 400 MW transfer.<sup>8</sup> PSE&G also agreed to provide two transformers at Hudson, one of which would replace the existing transformer (at the B Feeder). The existing transformer would be kept as a spare. ConEd agreed to make various payments to PSE&G during construction of the facilities, plus annual payments of \$57,000,000 for use of PSE&G transmission facilities needed for the transfer.<sup>9</sup>

12. Directly after executing the 1978 contract, ConEd and PSE&G amended their 1975 contract (May 1978 amendment). Among other provisions, the May 1978 amendment deleted certain sections of the 1975 contract and extended the 1975 contract's termination date to expire the same date as the 1978 contract (the end of 2020).<sup>10</sup>

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<sup>6</sup> "A Comparison of AC and DC Transmission Plans for Delivering Power From Ramapo To New York City In The 1980-1985 Period; A Joint Report Prepared by Con Edison [and] PSE&G" (Exh. CE-8).

<sup>7</sup> 1978 contract (Exh. CE-9) at Article I.

<sup>8</sup> 1978 contract at section III.B.

<sup>9</sup> 1978 contract at Article II, particularly section II.G.

<sup>10</sup> Unless otherwise indicated, we will refer to the 1975 contract, its May 1978 amendment, and the 1978 contract collectively as "the contracts" or "the two contracts."

## **B. ConEd's Complaint and the Commission's Hearing Order**

13. ConEd's complaint against PSE&G, PJM and NYISO alleged principally that PSE&G was treating service under the two contracts as non-firm and was wrongfully curtailing delivery. ConEd alleged further that PSE&G had failed, in contravention of the contracts and good utility practice, to provide and maintain a spare transformer for use at the A, B and C Feeders. It alleged that PSE&G failed to maintain sufficient capacity in its facilities to satisfy its obligations to ConEd and other transmission customers. ConEd also asserted that PSE&G was unlawfully exercising market power, to ConEd's detriment.

14. PSE&G insisted that the contracts were not for firm transmission service, but only for transfers effectuated by coordinated adjustments of the PARs. PSE&G counter-charged that ConEd's connection of new generation without reinforcement of the ConEd transmission system had reduced PSE&G's ability to transfer power into New York City under the contracts. PSE&G disputed that the contracts required it to replace the spare transformer, which had failed, and denied that its affiliate's purchase of transmission congestion contracts was an exercise of market power.

15. PJM answered that it had accepted responsibility to administer the contracts and the applicable transmission facilities, including the PARs, and that it administers the contracts properly. NYISO answered that administration of the contracts has been problematic, and that it and PJM, together, should be ultimately responsible for administering the transfers.

16. In its order setting the complaint and answers for hearing,<sup>11</sup> the Commission divided the proceeding into two phases. The Phase I hearing would investigate the three issues that ConEd characterized as most needing prompt resolution: PSE&G's and PJM's obligations to deliver 1,000 MW of wheeled service; when the service can be curtailed; whether curtailment would be *pro rata* with other services; and whether PSE&G is obliged to provide a spare transformer. The Phase II hearing would investigate the remaining issues. The Commission also directed the parties and the Presiding Judge to address ConEd's proposed remedies with a view to defining the rights and obligations of the parties that would govern future conduct under the contracts in light of current circumstances.<sup>12</sup>

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<sup>11</sup> Consolidated Edison Company of New York, Inc. v. Public Service Electric and Gas Company, *et al.*, 99 FERC ¶ 61,033 (2002) (Hearing Order).

<sup>12</sup> Hearing Order at 61,127. *See also*, ConEd's complaint and PSE&G's answer.

## C. Phase I

### 1. Initial Decision

17. The Initial Decision on Phase I<sup>13</sup> concluded that: (1) the contracts are neither “firm” nor “interruptible” as the terms are used today by utilities that provide service under an open access transmission tariff (OATT or tariff); (2) the contracts did not limit PSE&G’s responsibility in providing the transfers to merely adjusting the tap settings on the PARs under its control; (3) PSE&G could curtail the contract service to ConEd only if ConEd sent less than the full 1,000 MW, or if there were outages of critical bulk-power facilities in the northern portion of the PSE&G system, or to avoid shedding native load, and for other causes justifying curtailment, and such curtailment by PSE&G must be *pro rata* with firm transmission customers under the PJM OATT; and (4) PSE&G was not required to provide a spare transformer.

### 2. Commission Order

18. In its order on the Initial Decision in Phase I,<sup>14</sup> the Commission determined the nature of the service under each contract largely by looking to the reciprocal operating procedures that ConEd and PSE&G had adopted in 1984 to govern the transfers.<sup>15</sup> Accordingly, the Commission found that PSE&G and PJM are required to redispatch to support the 600 MW transfer under the 1978 contract, if that is the most economical method given ConEd’s other alternatives, but are not required to redispatch to support the 400 MW transfer under the 1975 contract. The Commission said that ConEd could “firm up” the 1975 contract by making a supplemental agreement.<sup>16</sup>

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<sup>13</sup> Consolidated Edison Company of New York, Inc. v. Public Service Electric and Gas Company, *et al.*, 99 FERC ¶ 63,028 (2002) (Phase I Initial Decision).

<sup>14</sup> Consolidated Edison Company of New York, Inc. v. Public Service Electric and Gas Company, *et al.*, 101 FERC ¶¶61,282 (2002) (Phase I Order), *reh’g denied*, 105 FERC ¶ 61,343 (2003) (Rehearing Order).

<sup>15</sup> “Con Edison System Operating Directive,” Number SO-84-3, November 16, 1984, Exh. CE-36; “Con Edison – PSE&G Interconnections Operations,” Memorandum to Chief Systems Operator - Electric, October 4, 1984, Exh. PS-12.

<sup>16</sup> Phase I Order at P 33, 36, & 39.

19. The Commission stated that before it could make a final decision on recovery of redispatch costs under the 600 MW contract, and potentially under a “firmed up” 400 MW contract, it needed further development of the record on grandfathered contracts. The Commission raised five issues concerning: (1) PSE&G’s history of redispatching to support the two contracts and other grandfathered contracts both before and after formation of PJM; (2) PJM’s practices towards recovering redispatch costs associated with grandfathered contracts; (3) validity today of PJM’s policy of recovery of redispatch costs associated with grandfathered contracts and whether this policy should apply to the two contracts; (4) applicability of Locational Marginal Pricing (LMP)<sup>17</sup> under the Commission’s Standard Market Design (SMD)<sup>18</sup> rulemaking proceeding to recovery of redispatch costs for grandfathered contracts; and (5) whether PJM’s policies on recovery of redispatch costs could be made specific to costs of its individual grandfathered contracts.<sup>19</sup>

20. The Commission postponed its final decisions on the Presiding Judge’s findings that the two contracts do not expressly require PSE&G to provide a spare transformer for its interconnections with ConEd and that ConEd has not demonstrated that good utility practice requires a spare transformer.<sup>20</sup> The Commission directed the parties to address in Phase II the question of whether a spare transformer is required and how its costs would be recovered, stating that both good utility practice and contract construction govern this question. It directed the parties to address reasonable economic means of ensuring essentially firm service, either with or without a spare transformer, consistent with the meaning of good utility practice.<sup>21</sup>

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<sup>17</sup> Under Locational Marginal Pricing, an ISO calculates a price for electricity at each separate supply location within its service area. Each location’s price reflects the marginal cost (as reflected in suppliers’ bids) to deliver electricity to that location. PJM and NYISO differ slightly in the way they calculate LMP. PJM makes a separate calculation for every buyer location, while NYISO aggregates buyers into zones and calculates one price for each zone. Also, PJM and NYISO have minor differences in the bids that are eligible to set the price.

<sup>18</sup> Remediating Undue Discrimination Through Open Access Transmission Service and Standard Electricity Market Design, Notice of Proposed Rulemaking, FERC Stats. & Regs. ¶ 32,563 (2002).

<sup>19</sup> Phase I Order at P 39.

<sup>20</sup> Phase I Initial Decision at P 71-74.

<sup>21</sup> Phase I Order at P 47, P 51 & P-71.

21. The Commission directed the parties to examine PJM's allegations that allowing transfers under the contracts to become scheduled transactions would enable entities to game this arrangement, and that real time actions could inappropriately match day-ahead nominations. The Commission asked whether PSE&G could legitimately nominate off-setting flows to avoid redispatch, and not be in clear violation of the contracts, and why this would be difficult to prevent. The Commission directed the parties to address the question of an appropriate operational protocol to implement the contracts.<sup>22</sup>

22. In response to questions that the parties, especially PJM, had raised, the Commission proceeded to give preliminary guidance for developing the operational protocol.<sup>23</sup> It said that PJM should be permitted to add or subtract other circulating flows when determining whether the desired flow has occurred. This determination would be similar to the "desired flow" calculation that PJM and NYISO currently manage on the 5018 Line under a protocol.<sup>24</sup> The Commission found it appropriate for third party tariff transactions to flow on the tielines. Thus, it would be inappropriate to disallow tariff transactions and any resulting counterflows on the interconnections when calculating performance under the contracts.<sup>25</sup> Regarding the priority of the contract service relative to tariff services, and whether PJM is required to curtail tariff services if tariff flows prevent it from receiving or delivering the ConEd contract amounts, the Commission recommended that the parties follow the existing North American Electric Reliability Council (NERC) Transmission Loading Relief (TLR) procedures. It said also that the parties should explore the circumstances under which such procedures are applicable, and when these TLR procedures or the unique nature of the contracts may cause operational or reliability problems.<sup>26</sup>

23. The Commission stated that while it found that PJM must redispatch generation under the 1978 contract to support the 600 MW transfer, so long as there were no outages on PSE&G's system making this service impossible, the Commission could not determine all circumstances that would require PJM or NYISO to redispatch. It did not want to force PJM to operate contrary to good utility practice or to incur additional costs

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<sup>22</sup> Phase I Order at P 63.

<sup>23</sup> Phase I Order at P 63.

<sup>24</sup> PJM and NYISO regularly flow power between their systems over the 5018 line between Ramapo and PSE&G's Branchburg Substation, Bergen County, New Jersey.

<sup>25</sup> Phase I Order at P 65-66.

<sup>26</sup> Phase I Order at P 65-67.

when there were other appropriate alternatives. Accordingly, it said that it would allow PJM and NYISO to incorporate such alternatives into the parties' operating protocol. Additionally, the Commission requested supplementation of the record before it could decide how redispatch costs should be recovered when redispatch is required.<sup>27</sup>

24. Lastly, the Commission directed the parties to account for what appear to be impairments to power deliveries to ConEd because of new generator interconnections on ConEd's system, and to address these considerations in the operating protocol.<sup>28</sup>

### **3. Rehearing Order**

25. On rehearing, the Commission upheld the conclusions in the Phase I Order. It emphasized that the preliminary findings concerning counterflows, calculation of performance under the contracts and third party uses of the feeders represented preliminary guidance, pending further development of the record during the Phase II hearing.<sup>29</sup>

26. The Commission clarified that it had not made a specific finding that ConEd had impaired PSE&G's performance under the two contracts, nor had it implied that PSE&G was entitled to a permanent reduction in its service obligations. The purpose of the statement in the Phase I Order that apparently ConEd had impaired delivery via the A Feeder by interconnecting new generation on its system was to direct the parties to account for any operational circumstances or conditions that might affect the flows to ConEd when developing the operating protocol.<sup>30</sup>

### **D. Phase II Initial Decision**

27. For the Phase II hearing, the parties and the Presiding Judge grouped the issues into four headings: (1) Retrospective Issues Regarding Transmission Service; (2) Prospective Issues Regarding Transmission Service; (3) Transformer Replacement; and (4) Alleged PSE&G Market Power. The Phase II Initial Decision's findings are summarized below:

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<sup>27</sup> Phase I Order at P 68-69.

<sup>28</sup> Phase I Order at P 70.

<sup>29</sup> Rehearing Order at P 24 & P 26.

<sup>30</sup> Rehearing Order at P 29.

(A) Within 30 days after Commission affirmation of the Initial Decision, representatives from ConEd, PSE&G, NYISO, and PJM shall meet to develop a protocol for transmission service under the two contracts; the protocol must be consistent with the Commission's Phase I Order and the Initial Decision; the parties shall file the protocol under section 205 of the Federal Power Act, 16 U.S.C. § 824d (2000) (FPA); the parties shall also file necessary confirming amendments to their OATTs; the parties shall file progress reports with the presiding judge every 30 days, and the presiding judge will recommend steps to resolve disagreements leading to impasse.

(B) PJM and NYISO shall take control of the PARs and other transmission facilities used or useful to control the flow of power between ConEd and PSE&G; PJM and NYISO shall allow third parties to use the tielines connecting ConEd and PSE&G.

(C) PSE&G shall, within six months of Commission affirmation of the Initial Decision, take the steps necessary to make a spare transformer available at its Hudson Station. PSE&G may satisfy this requirement by arranging with ConEd for use of the latter's spare transformer at its Goethals Station.

(D) ConEd's complaint that PSE&G was negligent in its acquisition of a replacement transformer for the Hudson station is unsupported.

(E) ConEd and NYISO should give prompt attention to remedying the apparent deficiency of transmission capacity between Staten Island and the rest of New York City.

(F) ConEd's complaint that PSE&G has market power which it has abused is unsupported. The market monitoring units of PJM and NYISO must monitor the activities of PSE&G and ConEd with respect to actions taken under the 1975 and 1978 contracts.

28. On July 11, 2003, briefs on exceptions were filed by: ConEd, PSE&G, NYISO, PJM, Arthur Kill Power LLC (Arthur Kill Power),<sup>31</sup> and Trial Staff. On July 31, 2003, these parties filed briefs opposing exceptions.

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<sup>31</sup> Arthur Kill Power is among the companies on whose behalf the NRG Companies intervened. It owns the Arthur Kill Generating Station on Staten Island, which connects to Brooklyn and thence to the NYISO transmission system via Goethals and ConEd's Lines 25 and 26.

## II. DISCUSSION

### A. Procedural Matters

#### 1. Blackout Report

29. On April 9, 2004, ConEd filed a motion requesting the Commission to take official notice of the April 2004 report issued by the U.S.-Canada Power System Outage Task Force, "Final Report on the August 14, 2003 Blackout in the United States and Canada: Causes and Recommendations" (Blackout Report). Citing the Blackout Report's recommendation that federal, Canadian, and state regulators integrate a "reliability impact" consideration into their decision-making process,<sup>32</sup> ConEd asked the Commission to undertake a reliability impact consideration in this proceeding. PSE&G answered that reliability is not relevant to the proceeding, which is primarily a matter of economics.

30. We agree with PSE&G. While we wholeheartedly endorse the Blackout Report's recommendations, we find that this proceeding does not call for undertaking a reliability impact consideration.

#### 2. CEII Materials

31. The Presiding Judge ruled that some of the material related to the failed transformer issue would be received in closed session.<sup>33</sup> This material identified critical elements of the PSE&G system and thereby qualified as critical energy infrastructure information (CEII). Certain of ConEd's and PSE&G's exhibits, portions of their briefs and portions of Trial Staff's briefs were filed under the confidentiality provisions of Rule 903 of the Commission's Rules and Regulations.<sup>34</sup> The Presiding Judge followed the procedures set forth in Order No. 630.<sup>35</sup> Only parties, their counsels, and signatories to the non-disclosure agreement were present during discussion of these confidential materials. The publicly-issued Phase II Initial Decision omitted Appendix B which contains the Presiding Judge's conclusions concerning the failed transformer.

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<sup>32</sup> Blackout Report at 147.

<sup>33</sup> See Phase II Hearing Transcript, March 4, 2003, at 462-64.

<sup>34</sup> 18 C.F.R. § 385.903 (2003).

<sup>35</sup> FERC Stats. & Regs. ¶ 31,140 (2003).

32. After review of the confidential exhibits and testimony, we agree with the Presiding Judge that they qualify as CEII. Although we have used these confidential materials to inform our thinking, their release is unnecessary for us to explain our decision.<sup>36</sup> However, the redacted material in the briefs submitted at hearing,<sup>37</sup> the post-hearing briefs,<sup>38</sup> and Appendix B of the Initial Decision do not need to remain confidential because these items do not provide information useful for terrorists.

33. The General Counsel informed ConEd and PSE&G on March 29, 2004 of the Commission's intention to release the redacted matter in their respective briefs. ConEd opposed disclosure, explaining that this material relates to the policies and practices of PSE&G with respect to its transmission system. PSE&G stated that it no longer asserts a confidentiality interest in the briefs' references to certain protected materials that were introduced in evidence during the hearing and that it had no objection to release of the briefs.<sup>39</sup>

34. We will remove the protected status of these five briefs and Appendix B of the Initial Decision, effective ten days after issuance of this order. Similarly, we will not assign confidential treatment to this order.

#### **B. Retrospective Issues**

35. We turn now to the Presiding Judge's specific findings, starting with his three retrospective issues concerning curtailment: whether PSE&G had curtailed contract service to ConEd; if curtailment had occurred, whether it was consistent with the two contracts; and whether ConEd or NYISO contributed to any curtailments, ConEd through generator interconnection or otherwise, and NYISO through its planning process.

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<sup>36</sup> All active parties to this proceeding have had access to the protected materials. Other entities seeking access to the protected materials may request them by following the Commission's procedures set forth at 18 C.F.R. § 388.112 (2003).

<sup>37</sup> ConEd's April 16, 2003 Initial Brief; PSE&G's May 1, 2003 Reply Brief; Trial Staff's May 1, 2003 Reply Brief.

<sup>38</sup> ConEd's Brief Opposing Exceptions; PSE&G's Brief on Exceptions; Trial Staff's Brief Opposing Exceptions.

<sup>39</sup> ConEd's and PSE&G's filings of March 29, 2004.

## 1. Curtailement by PSE&G and Contract Consistency

### a. Initial Decision

36. On the question whether PSE&G had curtailed service, the Presiding Judge found that if “curtailment” means that PSE&G failed to redeliver all the power that it was obligated to deliver, then PSE&G probably curtailed service to ConEd on occasion. However, the Presiding Judge could not determine the extent to which curtailment occurred nor whether the curtailment was entirely justified. He observed that power generated by Cogen Technologies Linden Venture, L.P., (Cogen Tech) limits ConEd’s ability to import via the A Feeder power transferred by PSE&G under the two contracts.<sup>40</sup> He could not ascertain whether this impairment was responsible for PSE&G’s curtailment. He observed that PSE&G could easily have avoided such impairment by routing more of its re-deliveries over the B and C Feeders.<sup>41</sup> He also recommended development of permanent institutions to resolve conflicts between utilities that are members of different transmission entities but must do business with one another.<sup>42</sup>

37. To investigate the complained-of curtailment, the Presiding Judge examined ConEd’s records that show delivery of at least 1,000 MW to PSE&G’s Waldwick interface and re-deliveries by PSE&G consistently well below 1,000 MW. He also examined PSE&G’s records, which show that PSE&G had transferred to ConEd virtually the same quantity of power that ConEd had delivered to it. The Presiding Judge explained this apparent contradiction as the difference between ConEd’s concern for contemporaneous transfer and PSE&G’s actual transfer over time. He found that this represents a “curtailment” of ConEd by PSE&G.<sup>43</sup>

38. Addressing whether the curtailments were consistent with the two contracts, the Presiding Judge concluded that PSE&G has, at times, curtailed transmission service to ConEd in violation of the contracts.<sup>44</sup> The Presiding Judge noted that ConEd would not

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<sup>40</sup> Cogen Tech generates power at Linden, New Jersey. This power goes by underwater cable to a ring bus at Goethals. Like Arthur Kill Power’s generation, it competes with power entering Staten Island via the A Feeder for transmission to Farragut over ConEd’s Lines 25 and 26.

<sup>41</sup> Initial Decision at P 20.

<sup>42</sup> Initial Decision at P 19.

<sup>43</sup> Initial Decision at P 24.

<sup>44</sup> Initial Decision at P 25.

want a power flow to the New York City “load pocket”<sup>45</sup> that diminishes during peak periods, such as 2 p.m. on a hot day, and makes up the deficiency during non-peak periods, such as 2 a.m. Therefore, he found that such transmission service was not what the parties had bargained for in the two contracts and PSE&G did not provide the service it promised under the two contracts.<sup>46</sup> The Presiding Judge added that the record does not establish that PSE&G intentionally withheld service under the contracts and appropriated ConEd’s electricity to serve its own load.<sup>47</sup>

39. The Presiding Judge rejected PSE&G’s arguments that counterflows from New York to New Jersey caused meters to run backwards. The deficiencies were too severe and there were virtually no scheduled transfers from NYISO to PJM at these times. The Presiding Judge found that PSE&G had not demonstrated that the outages it experienced during these times meet the standard of “critical bulk-power facility outages in the northern portion of the PSE&G system,” the grounds for curtailment permitted by the two contracts.<sup>48</sup>

#### **b. Parties’ Positions**

40. PSE&G did not contest the Presiding Judge’s findings that it has probably curtailed service to ConEd on occasion in violation of the two contracts.

41. PJM asks the Commission not to affirm the Presiding Judge’s conclusion that PSE&G curtailed service to ConEd. It also asks the Commission to state that the evidence does not establish that PJM failed to properly administer the two contracts. PJM explains that the contracts do not define delivery or performance, and that PSE&G and ConEd never gave PJM an agreed standard for determining deliveries or performance. Until the Commission gives guidance on how to administer the contracts, no reasonable basis exists for asserting that delivery has either occurred or been curtailed. PJM says that a simple comparison of meter readings does not support a claim of curtailment. PJM, NYISO and their neighbors have interconnected systems, and flows from numerous other transactions on these systems will appear on the A, B and C

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<sup>45</sup> A “load pocket” is an area of heavy demand for electricity that has insufficient local generating resources to provide for the area’s peak demand.

<sup>46</sup> Initial Decision at P 25 & 30.

<sup>47</sup> Initial Decision at P 30.

<sup>48</sup> Initial Decision at P 26.

Feeders, and on the J and K Lines. Meter readings at Waldwick and Farragut do not take into account loop flows, flows associated with other transactions, and counterflows that mask adequate deliveries into New York City.<sup>49</sup>

42. Trial Staff also argues that the Initial Decision errs in finding that PSE&G curtailed deliveries. Trial Staff states that PSE&G's deliveries to ConEd occurred over all thirteen interties between NYISO and PJM. It states that ConEd did not analyze flows over these interties, but focused only on flows over the A, B and C Feeders. Trial Staff says that curtailments could not have occurred because both PJM and NYISO are in balance with each other and the transfers therefore must also be in balance. Were the systems not in balance over a noticeable length of time, PJM and NYISO both would have noticed this.<sup>50</sup> Furthermore, ConEd did not prove that there were curtailments because it did not present hourly flow data showing flows and counterflows across all thirteen tielines. Trial Staff argues that flows over all these lines must be considered before finding curtailment by PSE&G because ConEd impaired delivery over the A Feeder.<sup>51</sup>

43. In its Brief Opposing Exceptions, ConEd states that it does not seek a remedy against PJM, notwithstanding PJM's failure to administer the contracts. ConEd says that PSE&G, PJM and NYISO all took no responsibility for providing or administering the contract service until ConEd filed the complaint that began this proceeding. ConEd insists that PSE&G has the burden of justifying the insufficiencies of power re-deliveries over the A, B and C Feeders once ConEd has shown meter readings that are lower than the transfer quantity nominated by ConEd. It complains of PSE&G's lack of re-delivery during peak hours despite ConEd's requests for PAR adjustments that would have increased the transfer level. ConEd says that evidence on the effects of counterflows on PSE&G's re-deliveries is conflicting. It says that PSE&G has refused to provide information on the causes of curtailments and that the list of outages does not distinguish between maintenance outages and economic shutdowns. ConEd alleges that PSE&G curtails when it experiences or anticipates a contingency, not because of facility outages, which violates the two contracts. The result has been price increases in New York, harming ConEd and its customers.<sup>52</sup>

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<sup>49</sup> PJM's Brief on Exceptions at 7-8.

<sup>50</sup> Trial Staff's Brief on Exceptions at 7-8 & 11.

<sup>51</sup> Trial Staff's Brief on Exceptions at 11-13.

<sup>52</sup> ConEd's Brief Opposing Exceptions at 4-10.

**c. Commission Response**

44. We agree with the Presiding Judge that the record shows that PSE&G and PJM, together, have failed to re-deliver power to ConEd at times when ConEd needed the power. We agree also that the power delivery contemplated by the two contracts is much closer to contemporaneous than over time. We find that these two grandfathered contracts specify power re-deliveries to ConEd over the three feeders between PSE&G and ConEd, not over other interties. Therefore, we disagree with Trial Staff's arguments regarding the other interties. Like the Presiding Judge, we conclude that PSE&G and PJM have probably curtailed deliveries improperly under the two contracts, and we also are unable to determine the extent of these past curtailments. However, our emphasis, and we think the primary concern of ConEd, is not with past curtailments of contract power deliveries but with avoiding future curtailments until the contracts expire in 2020. We discuss this further under Prospective Issues.

**2. Impairment by ConEd**

**a. Initial Decision**

45. The Presiding Judge concluded that ConEd's power purchases from Cogen Tech and from generators on Staten Island had impaired PSE&G's ability to re-deliver power under the contracts.<sup>53</sup> The combined capacity of the A, B and C Feeders (1500 MW) is more than sufficient to carry the Cogen Tech power, the power generated on Staten Island (such as Arthur Kill Power's generation) and the contracts' 1,000 MW. However, the Presiding Judge found that the two contracts give PSE&G the preferential right to use all of the A Feeder's capacity for re-delivery.<sup>54</sup> He found further that ConEd's receipt at Goethals of 600 MW from Cogen Tech for transmission off Staten Island to Farragut reduces PSE&G's ability to deliver power over the A Feeder by approximately 200 MW. Thus, by displacing PSE&G's use of that capacity, ConEd has impaired PSE&G's ability to make the contract re-deliveries.<sup>55</sup>

46. The Presiding Judge found that the capacity of ConEd's internal transmission system, between Staten Island and the rest of New York City, is becoming insufficient to carry the contract power, Cogen Tech's power and power generated on Staten Island. He cited studies demonstrating that if a contingency removed one of ConEd's tielines from Staten Island to Brooklyn, then ConEd would be left with insufficient internal

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<sup>53</sup> Initial Decision at P 27.

<sup>54</sup> Initial Decision at P 27.

<sup>55</sup> Initial Decision at P 27.

transmission ties to handle full re-deliveries under the two contracts.<sup>56</sup> He agreed with PSE&G that ConEd and NYISO need to build increased transmission capacity between Staten Island and the rest of New York City.<sup>57</sup> The Presiding Judge did not discuss whether NYISO has contributed to impairments because PSE&G, in its reply brief, stated that it is not challenging the sufficiency of NYISO's planning process for purposes of meeting its system obligations.<sup>58</sup> He emphasized that the issues of invidious treatment by PSE&G and whether ConEd is itself at fault are collateral to the main issue of requiring all parties to participate in arrangements to assure that improper curtailment of the contract service will not take place and that other steps will be taken to assure the reliability of New York City's Electricity supply.<sup>59</sup>

**b. Parties' Positions**

47. PSE&G faults the Initial Decision for not providing a meaningful remedy for ConEd's impairment of service under the two contracts. It says that listing the impairments with a brief narrative description is insufficient. PSE&G argues that the Commission should reduce PSE&G's 1,000 MW service obligation down to 650 MW to reflect ConEd's impairment as previously found by the Commission,<sup>60</sup> and then down to 450 MW (400MW under the 400 MW contract, not supported by redispatch, and 50 MW under the 600 MW contract, supported by redispatch) to reflect ConEd's connection of the Cogen Tech generation. This reduction should be permanent, or at least until ConEd or NYISO remedies the impairment. PSE&G argues that PJM should not have to reserve capacity on its system to provide service to ConEd at all times when ConEd's impairments prevent receipt at all times of the 1,000 MW contemplated by the two contracts. It argues that permanent reduction of the contract amount would be consistent with ConEd's claimed practice of reducing service under the contracts when its own impairments occur.<sup>61</sup>

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<sup>56</sup> Initial Decision at P 28, *citing* Exh. CE-141, Exh. CE-143, and Exh. PS-109.

<sup>57</sup> Initial Decision at P 28.

<sup>58</sup> Initial Decision at P 29.

<sup>59</sup> Initial Decision at P 31.

<sup>60</sup> PSE&G cites the Phase I Order at P 70.

<sup>61</sup> PSE&G's Brief on Exceptions at 18-21.

48. ConEd disputes the Initial Decision's finding that it has impaired PSE&G's performance under the contracts by interconnecting Cogen Tech generation to its system and objects to PSE&G attempting to limit ConEd's attachment of generation to Staten Island transmission facilities and to the New York bulk power system. ConEd says that the contracts' impairment provisions do not apply to the A Feeder. Section 5.3 of the 1975 contract and section III.F of the 1978 contract limit interconnections only on the Hudson-Farragut Line (the B and C Feeders), not on the A Feeder or any Staten Island transmission facilities.<sup>62</sup> Consequently, the capacity of ConEd's Staten Island transmission facilities and connection of generation to these facilities are irrelevant. It says that, historically, approximately one third of PSE&G's deliveries have been made over the A Feeder. ConEd adds that it has not impeded contract deliveries over the B and C Feeders because it has not attached generation to the "interconnections" specified in these contracts. Even if PSE&G had the preferential right to all the A Feeder's capacity, that right would not make the non-impairment provisions of the contracts applicable to the A Feeder, or to capacity on ConEd's own transmission facilities downstream of the A Feeder's terminus at Goethals (capacity between Goethals and Farragut).<sup>63</sup>

49. ConEd points out that the two contracts are not use-it-or-lose-it contracts. ConEd is not obligated to take the full 1,000 MW at all times, and any reductions in ConEd's nominations are not contract impairments nor breaches of contract provisions that would justify reduction of the contracts' full 1,000 MW of service. Moreover, ConEd pays a fixed carrying charge to reserve the transmission capacity under the contracts. ConEd states that reduced output by Cogen Tech has not resulted in correspondingly increased flows over the A Feeder. It insists that transmission capability off Staten Island is

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<sup>62</sup> Section 5.3 of the 1975 contract states that, "Con Edison and PS may, at no charge to the other party, . . . connect additional load or generation to the interconnections described in Sections 1.1 [Hudson-Farragut facilities] and 1.2 [Ramapo-New Milford facilities] provided that such connections will not impair the functions of said interconnections pursuant to Sections 4.1 and 4.2 [the power transfers] or materially reduce power transfer capability between the Pennsylvania-New Jersey-Maryland Interconnection and the New York Power Pool."

Section III.F of the 1978 contract states that, "Future connections of generation and/or load may be made to the new interconnections in either New York or New Jersey provided that it is mutually agreed that such connections will not impair the functions of these interconnections as described in Item III-B [power transfer] and III-I [provision for increasing the power transfer to 1200 MW] herein or cause a reduction in intra-pool or inter-pool transfer capacities."

<sup>63</sup> ConEd's Brief on Exceptions at 29-32.

sufficient, and that transmission capacity need not be increased each time additional generation capacity is attached to the system.<sup>64</sup> Its analysis demonstrates that the capacity of the off-Staten Island tielines exceeds the surplus generation capacity, *i.e.*, generation capacity connected to Staten Island minus the Staten Island load.<sup>65</sup>

50. ConEd disputes the findings of the PSE&G study, adopted by the Presiding Judge, that ConEd's receipt at Goethals of 600 MW from Cogen Tech impairs PSE&G's deliveries over the A Feeder by 200 MW. ConEd says that its average receipts from Cogen Tech are only 440 MW. The PSE&G study assumed that the Cogen Tech generator and the A Feeder are connected to a common bus while, in reality, they are separately connected to different substations on different feeders. ConEd says that actual experience shows that A Feeder flows exceed 300 MW (the difference between the feeder's 500 MW capacity and the claimed 200 MW impairment), and that when the Cogen Tech generator is off-line or operating at low levels, flows over the A Feeder do not increase.<sup>66</sup>

51. ConEd denies that reverse flows are an impairment by it of PSE&G's service. It says that PSE&G has not proved that ConEd caused the reverse flows and that the reverse flows are infrequent and brief.<sup>67</sup>

52. ConEd denies that it needs to increase transmission capacity between Staten Island and the rest of New York City. It points out that the Staten Island generators sell their output into the spot market rather than on a firm bilateral basis, and that transmission planning can optimize power delivery arrangements to supply load reliably and economically. Transmission expansion for delivery purpose is market driven; the Commission should not substitute its judgment for that of the market; NYISO should provide market participants with information so that they can undertake transmission expansion for economic reasons. ConEd says that if the Commission wishes to require construction of transmission facilities, it must do so under sections 210-212 of the Federal Power Act, 16 U.S.C. §§ 824i-824k (2000), and cannot delegate such statutory authority to NYISO.<sup>68</sup>

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<sup>64</sup> ConEd's Brief on Exceptions at 32-34.

<sup>65</sup> ConEd's Brief Opposing Exceptions at 20-21.

<sup>66</sup> ConEd's Brief Opposing Exceptions at 22-23.

<sup>67</sup> ConEd's Brief on Exceptions at 34-35.

<sup>68</sup> ConEd's Brief on Exceptions at 35-36.

53. Lastly, ConEd disputes the Initial Decision's holding that under the contracts, PSE&G has the preferential right to use all the A Feeder's capacity. It argues that the 1975 contract requires equal distribution of the 400 MW over the A and B Feeders, while the 1978 contract requires equal distribution of the 600 MW over the B and C Feeders. Both contracts require PSE&G to deliver the power at Farragut. While the 1975 contract permits PSE&G to use the A and B Feeders, because it permits use of PSE&G and ConEd internal facilities, the 1978 contract does not permit use of the ConEd internal facilities. Therefore, use of the A Feeder is precluded for delivery of the 600 MW. Also, the 1978 contract was a substitute for a tieline from Ramapo to Manhattan. ConEd assumed over \$750 million of cost responsibility for the C Feeder and the K Line, which it would not have done without the expectation that the C Feeder would be the principal transmission pathway for service under the 1978 contract.

54. ConEd points out that for 14 years prior to this case, flows under the contracts were distributed approximately equally among the A, B and C Feeders. It cites to the Initial Decision's finding that the distribution-of-flows-issue is guided by the parties' past practices, as was the case with the Commission's conclusion of when PSE&G needed to supply off-cost generation.<sup>69</sup> It argues that here, too, the utilities' past practices indicate how flow distribution over the feeders should be resolved. ConEd urges that PSE&G should not be permitted to deliver 500 MW over the A Feeder (the feeder's full capacity).<sup>70</sup>

55. NYISO states that the Commission should not require it to take extraordinary steps to address alleged transmission deficiencies on Staten Island. Non-market based action was neither set for hearing nor explored there. NYISO interconnection procedures meet all reliability criteria; the current situation on Staten Island is not a threat to reliability; NYISO market signals are encouraging appropriate infrastructure decisions; and NYISO staff has begun to evaluate possible transmission capacity additions between Staten Island and Brooklyn. NYISO says that transmission congestion is not necessarily a threat to reliability, but rather an economic issue that can be addressed by market mechanisms, such as financial hedging instruments or market-driven construction. Moreover, NYISO has little authority to actively address Staten Island's infrastructure deficiencies.<sup>71</sup>

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<sup>69</sup> ConEd cites the Initial Decision at P 60.

<sup>70</sup> ConEd's Brief on Exceptions at 36-39.

<sup>71</sup> NYISO's Brief on Exceptions at 8-9.

56. Arthur Kill Power disputes the Presiding Judge's finding that PSE&G has the preferential right to use the A Feeder, and agrees with ConEd that no more than 200 MW under the 1975 contract can be delivered over the A Feeder. It proposes, for deliveries under the 1978 contract, that PSE&G pay for rights to use ConEd's internal transmission facilities.<sup>72</sup> The tielines connecting Staten Island to the rest of New York City are inadequate by about 136 MW, a deficit that can be expected to reach 436 MW if PSE&G has unfettered discretion to deliver power over the A Feeder.<sup>73</sup> It asks the Commission, should it find that ConEd has impaired contract deliveries over the A Feeder, to reduce PSE&G's obligation under the 1975 contract from 400 MW to 200 MW, which must flow only over B Feeder.<sup>74</sup>

**c. Commission Response**

57. We agree with the Presiding Judge's finding that where PSE&G sought to use the A Feeder for redelivery of the contract power, and ConEd's use of Lines 25 and 26, from Staten Island to Brooklyn, displaced PSE&G's ability to use the A Feeder, ConEd impaired PSE&G's ability to provide service. However, after reviewing the 1975 and 1978 contracts, we disagree with his finding that PSE&G has the preferential right to use all of the A Feeder's capacity.

58. Section 4.1 of the 1975 contract states that PSE&G "agrees to transfer up to 400 megawatts of power from Ramapo to Farragut, utilizing said interconnections [Ramapo-New Milford (J Line) and Hudson-Farragut interconnections (B Feeder)], as well as the existing Linden-Goethals 230-kv interconnection [(A Feeder)], and other PS and Con Edison internal transmission facilities." Section III.B of the 1978 contract states, "Under normal conditions PS will transfer a maximum of 600 MW, upon completion of the [Second Hudson-Farragut Interconnection (the C Feeder) and the Second Ramapo-Waldwick Interconnection (K Line)], in addition to the 400 MW transfer presently in effect, from Ramapo to Farragut utilizing the new and existing Ramapo-Waldwick and Hudson-Farragut interconnections, the existing Linden-Goethals interconnection, . . . and other PS internal transmission facilities." We read these contract sections as specifying only which tielines will be used for the power transfer. We do not read them as reserving capacity over the A Feeder (Linden-Goethals) for as much of the transfer as PSE&G, in its sole discretion, chooses to flow.

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<sup>72</sup> Arthur Kill Power's Brief on Exceptions at 17-19.

<sup>73</sup> Arthur Kill Power's Brief on Exceptions at 19 & 21-26

<sup>74</sup> Arthur Kill Power's Brief on Exceptions at 27.

59. Today, PJM and NYISO have stepped into the shoes of PSE&G and ConEd and have assumed responsibility for the contract re-deliveries. We have noted the Presiding Judge's finding that impairments by ConEd could have been avoided had PSE&G and PJM been cooperative and routed the contract service, by PAR changes, over the B and C Feeders instead of the A Feeder. We expect the ISOs to work together cooperatively when scheduling the contract service to maximize the amount of power that can be flowed into New York City over the three feeders, whether contract power or other power.

60. This proceeding does not concern constructing new transmission capacity between Staten Island and the rest of New York City. However, we note, in connection with the Presiding Judge's recommendation that ConEd and NYISO remedy the apparent deficiency, NYISO's statement that it began a system impact study to evaluate possible transmission capacity additions between Staten Island and Brooklyn.<sup>75</sup>

### **C. Prospective Issues**

61. We will discuss the prospective issues as follows, closely paralleling the Initial Decision: (1) Scheduling Service and Desired Flow Calculations; (2) PAR Control and PAR Tap Reservations; (3) Third Party Use of Feeders; (4) Alternative Proxy Bus; (5) Measurement of Flows and Management of PARs; (6) Scheduling the Wheel; (7) Non-discrimination and Incremental Cost of Redispatch; (8) Employing Redispatch; (9) Service Under the 400 MW Contract; (10) Curtailment Rules; (11) Future Impairments of Service; (12) Distribution of Service Among the A, B and C Feeders; (13) Outages and Identification of Critical Bulk Power Facilities; and (14) other issues.

#### **1. Scheduling Service and Desired Flow Calculations**

62. The Presiding Judge pointed out that currently PJM and NYISO do not schedule service under the two contracts, and do not include it in the Desired Net Interchange (DNI)<sup>76</sup> between them, as they do other "grandfathered" service under contracts pre-dating the two ISOs. Rather, both ISOs treat the contract service as mere "circulation," and do not take responsibility for providing it. The Presiding Judge concluded that the transfer service should be part of the DNI, for which both ISOs are responsible. He referred to PJM's and NYISO's practice of calculating a "desired flow" for the 5018 Line and to statements by PJM and NYISO that they can administer a "desired flow" for

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<sup>75</sup> NYISO's Brief on Exceptions at 8.

<sup>76</sup> DNI is a figure produced daily and jointly by both ISOs to specify the scheduled net flow from one ISO to the other on an hourly basis for the following day.

service under the two contracts. He concluded that the two ISOs plus ConEd and PSE&G can develop operating protocols under which the ISOs will manage a scheduled transmission service to develop the expected net flows on the J and K Lines, between Ramapo and Waldwick, and on the A, B and C Feeders. The desired flow regime under these operating protocols would be similar to the regime governing flows over the 5018 Line.<sup>77</sup>

63. No party opposes the Initial Decision's conclusion that scheduling the wheeled contract service and using a desired flow regime similar to that of the 5018 Line is a good solution. PJM clarifies that the correct term is "desired flow," not DNI; the "desired flow" calculation instructs the two ISO's operators to target specific flow levels to occur on specific lines or sets of lines, while the DNI is a calculation that nets to zero without concern for use of particular lines.<sup>78</sup>

64. We will affirm the Presiding Judge's conclusion that the transfer service under the contracts should be scheduled similarly to the desired flow regime for the 5018 line and also PJM's correction of terminology. We emphasize that we do not affirm the concept that the ISOs' joint obligation in transferring the contract power is necessarily limited to specific transmission lines. While all parties anticipate that the power will enter by the J and K Lines and exit by the A, B and C Feeders, the obligation that we impose on the two ISOs is simply to transfer the contract power, together with all the other power flows that they must transmit, and to maximize total transmission.

## **2. PAR Control and PAR Tap Reservations**

65. The Presiding Judge questioned whether ConEd and PSE&G have turned over to NYISO and PJM operational control of the PARs regulating the flow of power at the A, B and C Feeders and at Waldwick. He found that because the PARs are transmission facilities, Orders Nos. 888<sup>79</sup> and 2000<sup>80</sup> require them to be under the operational control

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<sup>77</sup> Initial Decision at P 33-34.

<sup>78</sup> PJM's Brief on Exceptions at 22-23.

<sup>79</sup> Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities and 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 No. 888-A, 62 Fed. Reg. 12,274 (March 14, 1997), FERC Stats. & Regs. ¶ 31,048 (1997), *order on reh'g*, Order No. 888-B, 81 FERC ¶ 61,248 (1997), *order on reh'g*, Order No. 888-C, 82 FERC ¶ 61,046 (1998), *aff'd in relevant part sub nom.* Transmission Access Policy Study Group, *et al.* v. FERC, 225 F.3d 667 (D.C. Cir. 2000), *aff'd sub nom.* New York v. FERC, 535 U.S. 1 (2002)

(continued)

of the two ISOs. He recommended that the Commission reject PSE&G's argument that PAR control should be the primary method for it to satisfy its contract transfers to ConEd. Rather, the ISOs should have the discretion to employ the PARs or other means to fulfill their obligation to achieve the desired flow under the contracts.<sup>81</sup>

66. The Presiding Judge recommended that the Commission reject ConEd's request that certain of the PAR taps (settings) be reserved for its exclusive use. He found no evidence that the two ISOs are unable to provide ConEd with the service to which it is entitled. He cited the recommendations of various witnesses that NYISO, not ConEd, should control the PARs at Goethals and Farragut, and found that PJM should control the PARs at Warwick. He concluded that the parties' forthcoming operating protocols must give the ISOs operational control of the PARs.<sup>82</sup>

67. ConEd objects to the recommendation that no PAR taps at the A, B and C Feeders be reserved for it. ConEd explains that it operates the PARs in accordance with the decisions of PJM and NYISO. These decisions are made after conference among the four concerned parties, PJM, NYISO, PSE&G, and ConEd. ConEd characterizes PAR use as a seam issue between NYISO and PJM, which pursue economic and reliability objectives without coordination. ConEd recommends that the Commission require the parties' operating protocols to adopt the current practice of reserving some PAR taps for response to system emergencies and contingencies. ConEd urges the Commission to leave the exact number of such PAR taps to be specified in the operating protocols.<sup>83</sup>

68. PSE&G says that under the 1984 operating agreements, power transfers under the two contracts were made by coordinated adjustments of the PARs at Waldwick, Farragut, and Goethals. It objects to permitting ConEd to reserve three or four tap positions at each end of the PARs' range to remedy weaknesses arising on ConEd's own transmission system, thus shifting costs and reliability concerns from ConEd to PSE&G. Such a

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(Order No. 888).

<sup>80</sup> Regional Transmission Organizations, Order No. 2000, FERC Stats. & Regs. ¶ 31,089 (1999), *order on reh'g*, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092, *aff'd sub nom.* Public Utility District No. 1 of Snohomish County, Washington v. FERC, 272 F.3d 607 (2001) (Order No. 2000).

<sup>81</sup> Initial Decision at P 35.

<sup>82</sup> Initial Decision at P 36-37.

<sup>83</sup> ConEd's Brief on Exceptions at 7-8.

reservation would be a change from current practice. It would also reduce the capability of the PARs to draw power across the A, B and C Feeders by as much as 270 MW, and therefore increase the number of occasions when PJM is required to redispatch generation out of merit to deliver the 1978 contract's 600 MW. PSE&G contradicts ConEd's statement that NYISO currently has authority to control PAR tap positions, saying that ConEd has veto authority. It urges the Commission to affirm the Initial Decision and to give to NYISO real operational control over the PARs at Farragut and Goethals. PSE&G also states that it does not object if the operating protocols permit the ISOs to reserve the minimum number of PAR tap positions that will prevent physical damage to the PARs, and says that only one tap at each end of the range of the PARs is necessary for this purpose.<sup>84</sup>

69. Trial Staff states that all participants agree that the PARs should be under the control of the ISOs. It urges the Commission to reject ConEd's request for reservation of three or four taps for reliability.<sup>85</sup>

70. We observe that the parties are less far apart than appears. No party disputes that the ISOs should control all the PAR tap positions. The question is whether to direct the ISOs to reserve certain tap positions for reliability, a reservation that apparently favors ConEd over PSE&G at present. We affirm the Initial Decision's holding that each ISO must control all the PARs and tap positions in its area. Because we are placing responsibility for the transfer of ConEd's power under the contracts on the two ISOs, we will leave it to them, in the forthcoming operating protocols, to decide whether reliability concerns require the reservation of any PAR tap positions to ensure reliability for ConEd or PSE&G or other entities flowing power over the J and K Lines and the A, B and C Feeders.

### **3. Third Party Use of the Feeders**

#### **a. Initial Decision**

71. The Presiding Judge addressed ConEd's concern that permitting third parties to use the A, B and C Feeders would degrade reliability of the transmission service to the New York City load pocket. ConEd fears that generators in upstate New York and New England could more easily sell power to loads in PJM; this additional transmission would further congest the already constrained Dunwoodie Interchange, preventing power from reaching New York City or requiring payment of higher congestion charges. The

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<sup>84</sup> PSE&G's Brief Opposing Exceptions at 6-11.

<sup>85</sup> Trial Staff's Brief Opposing Exceptions at 12.

Presiding Judge rejected ConEd's hypothesis as lacking data to support it, and as being about economics, not reliability. NYISO routinely relieves congestion by use of its LMP-based congestion management system. He added that PJM has committed to support reliability of service in New York City with its established emergency procedures.<sup>86</sup>

72. The Presiding Judge found that the A, B and C Feeders are transmission facilities and therefore that Order No. 888 requires their operation on an open-access basis, *i.e.*, they are available for third party use. He reminded ConEd that Order No. 888 entitles ConEd to reserve sufficient transmission capacity for its own use to reliably serve its native load. The Presiding Judge said that the ISOs must treat the two contracts as they treat other grandfathered firm transmission agreements. Citing *Central Hudson Gas & Electric Corp.*, 88 FERC ¶ 61,138 (1999) (*Central Hudson*), he pointed out that, under Schedule K of NYISO's OATT, holders of grandfathered physical transmission rights that were not converted to financial rights under the LMP program are entitled to flow without curtailment for economic reasons. Hence, ConEd is protected from the risk of being curtailed in favor of other potential users of the Dunwoodie Interchange.<sup>87</sup>

73. The Presiding Judge also pointed out that under Order No. 2000, NYISO is responsible for ensuring that open access use of the A, B and C Feeders by third parties is compatible with ConEd's need for dependable transmission capacity to serve New York City. He referred to NYISO's statement that its scheduling practice has always been to reserve sufficient capacity across the NYISO-PJM interface to ensure operation of the two contracts, but that this practice has not ordinarily precluded third party transactions. He said that NYISO appears to be capable of fulfilling its responsibilities to ConEd while allowing third parties to use the A, B and C Feeders' remaining capacity.<sup>88</sup>

**b. ConEd's Position**

74. ConEd does not object to third party transactions that flow over the A, B and C Feeders from PJM into New York City. It objects to what it calls counterflows over the A, B and C Feeders from New York City to PJM without two conditions: a Minimum Flow Condition that would require such counterflows to be offset by other third-party

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<sup>86</sup> Initial Decision at P 38.

<sup>87</sup> *Central Hudson*, 88 FERC at pp. 61,388-89 (member systems entering NYISO will honor the rates, terms and conditions of existing agreements until they are modified under sections 205 or 206 of the FPA).

<sup>88</sup> Initial Decision at P 39.

transactions flowing from PJM into New York City; and creation of additional proxy busses beyond the single existing proxy bus to give accurate price signals relating to LMP and congestion costs. ConEd states that the Presiding Judge erroneously regarded third party use of the feeders as a matter of economics, not reliability, and therefore erroneously rejected ConEd's reliability-based conditions. It emphasizes that New York City depends for reliability on its transmission ties to PJM and upstate New York. ConEd distinguishes the B and C Feeders, which were constructed to reduce loadings and congestion on the Dunwoodie Interchange into New York City, from the 5018 Line, which was built to handle scheduled deliveries between the New York and PJM Power Pools and was designed to account for unscheduled parallel path flows between the power pools.<sup>89</sup>

75. ConEd says that most A, B and C Feeder counterflows are through-and-out transactions that originate north of New York City, increasing congestion on the Westchester County transmission system and reducing physical flows into the City on the three feeders. These counterflows reduce operational flexibility and make in-City generation the only resource available for clearing contingency overload conditions. Because generation and system operations are tightly constrained, even a small decrement of power significantly affects system reliability. ConEd says that its Multi-Area Reliability Simulation (MARS) study, which modeled the effects of counterflows on New York City reliability, showed that a 500 MW firm transaction from New England into PJM would cause significant declines in reliability in New York City. ConEd says that the results predicted by the MARS study actually occurred on April 18, 2002. Scheduled deliveries from New York into PJM created large counterflows over the A, B and C Feeders that exceeded the flow-control capability of the PARs and offset deliveries under the 400 MW and 600 MW contracts, nearly causing ConEd to shed load. ConEd says that this experience shows the Initial Decision's error in regarding counterflows as a matter of economics, not of reliability.<sup>90</sup>

76. ConEd says that its proposed Minimum Flow Arrangement for the A, B and C Feeders would not impede open access transmission service between the New York and PJM control areas. Ten other transmission tielines, with rated capacity of 5,363 MW, link the two control areas, while third party flows have rarely exceeded 2,500 MW. This capacity is adequate to accommodate third party transactions, including any counterflows affected by ConEd's proposed Minimum Flow Arrangement. ConEd urges that its proposed Minimum Flow Arrangement is consistent with Order No. 888 because it would allow third party transactions while providing reliable service. ConEd discounts PJM's

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<sup>89</sup> ConEd's Brief on Exceptions at 9-11.

<sup>90</sup> ConEd's Brief on Exceptions at 12-15.

assurance that PJM would use established emergency procedures to support reliability of service to New York City, saying that emergency states are extreme operating conditions and rarely declared, whereas reliability problems associated with counterflows occur routinely.<sup>91</sup>

77. ConEd argues next that, as long as NYISO and PJM use a single proxy bus to schedule and price transactions between their control areas,<sup>92</sup> they are using a theoretical power flow that is inconsistent with the actual power flow. Furthermore, the single proxy bus creates third party counterflows over the A, B and C Feeders out of New York City, endangering reliability, while discouraging third party flows into the City. Although the single proxy bus deems power to enter the New York control area at an upstate location, in reality most of the power flowing between New Jersey and New York City flows over the A, B and C Feeders. Also, because power is deemed to enter the New York control area west of the Central-East interface,<sup>93</sup> ConEd says that when the ISOs determine congestion charges and credits, they impose congestion charges on power entering New York City while extending congestion credits to power flowing to New Jersey, power that ConEd says will use the A, B and C Feeders. ConEd says that the single proxy bus arrangement compounds reliability problems associated with counterflows out of New York City to New Jersey. ConEd asks that the operating protocols “condition third-party access to a seams-elimination remedy that neutralizes the perverse features of the present single proxy bus and reconciles transactional assumptions with actual flow patterns.”<sup>94</sup>

**c. PSE&G’s Position**

78. PSE&G challenges ConEd’s contention that southward transactions moving through New York City create unique reliability concerns that northward transactions into or through New York City do not create. ConEd’s proposed restrictions on counterflows at the A, B and C Feeders are really an attempt to limit congestion costs at the constrained Dunwoodie Interchange and to obtain discounted and preferential access there. PSE&G says that ConEd’s proposed restrictions would not increase the transfer

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<sup>91</sup> ConEd’s Brief on Exceptions at 15-18.

<sup>92</sup> For purposes of scheduling transactions between their control areas and for determining congestion charges, NYISO and PJM consider all transactions as occurring between Marcy, in upstate New York and Keystone, in western Pennsylvania.

<sup>93</sup> The Central-East interface divides western and eastern control areas in New York State.

<sup>94</sup> ConEd’s Brief on Exceptions at 18-21.

capability of the Dunwoodie Interchange or help reliability; they would only reduce the price that ConEd must pay to use the Dunwoodie Interchange. PSE&G says that for economic reasons, ConEd may prefer to import power from upstate New York, New England or Canada, rather than from Pennsylvania or Ohio, but that it makes no difference to reliability.<sup>95</sup>

79. PSE&G denies that counterflows on the A, B and C Feeders would harm reliability in New York City because NYISO ensures that its scheduled transmission service does not impair reliability.<sup>96</sup> On April 18, 2002, the example cited by ConEd, NYISO curtailed southward non-firm transactions through New York City that were creating ConEd's concern. PSE&G explains that any transaction passing through a utility's system arguably reduces the system's reliability in that it uses a portion of the system's available capacity without serving any of the system's load.<sup>97</sup>

80. PSE&G emphasizes that Order No. 888 requires a utility to make its transmission facilities available on a non-discriminatory basis unless reliability standards would be violated. Substantial third party transactions, including counterflows, are already on the three feeders, and these transactions have not caused ConEd to shed load.<sup>98</sup> PSE&G criticizes ConEd's MARS study because the study ignored NYISO's role in refusing to schedule transactions or curtailing them to avoid adverse reliability consequences and because the MARS program is not designed to measure the effect of a transmission transaction on the reliability of a utility's system.<sup>99</sup>

81. PSE&G points out that the costs of the A, B and C Feeders are included in the revenue requirement upon which ConEd bases its charges under the NYISO transmission tariff. All transmission customers pay a portion of these costs and are entitled to non-discriminatory access to these transmission facilities.<sup>100</sup>

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<sup>95</sup> PSE&G's Brief Opposing Exceptions at 13-14.

<sup>96</sup> PSE&G cites NYISO's statement, in its Brief on Exceptions at 8, that all reliability criteria are met under NYISO's interconnection procedures.

<sup>97</sup> PSE&G's Brief Opposing Exceptions at 15-16.

<sup>98</sup> PSE&G's Brief Opposing Exceptions at 17-18.

<sup>99</sup> PSE&G's Brief opposing Exceptions at 18-20.

<sup>100</sup> PSE&G's Brief Opposing Exceptions at 20-21.

82. PSE&G says that third party transactions and inadvertent flows can sometimes cause the meters at the A, B and C Feeders to read less than 1,000 MW, even when PSE&G is delivering at least that much power. It wants such transactions and flows taken into account when measuring its deliveries under the two contracts. PSE&G recommends that PJM and NYISO use the Desired Flow calculation for the A, B and C Feeders, the J and K Lines, and the 5018 Line, to make the capacity of these tielines between PSE&G's and ConEd's systems available to third parties on an open access basis without depriving ConEd of the service to which the two contracts entitle it. PSE&G answers ConEd's suggestion that the other ten tielines between the PJM and NYISO service areas would suffice for third party transactions by reminding ConEd of its commitment to make its transmission facilities available on a non-discriminatory basis under the NYISO tariff.<sup>101</sup>

**d. PJM's Position**

83. PJM<sup>102</sup> repeats many of PSE&G's arguments. It adds that the Minimum Flow Arrangement is simply a variant of ConEd's "metered flow" approach that the Commission rejected in the December 2002 Order in favor of "net metering."<sup>103</sup> Adoption of ConEd's Minimum Flow Arrangement would limit open access flows from PJM to New York across the J and K Lines and would greatly reduce the available transmission capacity between PJM and New York. Addressing ConEd's contention that counterflows from New York to New Jersey reduce the physical flow of energy into New York City, PJM says that the presence of offsetting flows from open access tariff transactions on the A, B and C Feeders does not mean that load in the City is not being served; it means only that such load is being served by a physical flow of energy from somewhere other than New Jersey.<sup>104</sup>

84. PJM says that ConEd is more concerned over energy prices than reliability. The congestion on the Dunwoodie Interchange and the Westchester County transmission

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<sup>101</sup> PSE&G Brief Opposing Exceptions at 22-26.

<sup>102</sup> NYISO does not address third party use of the feeders.

<sup>103</sup> PJM apparently refers to the Commission's holdings (at P 65-66 of the Phase I Order) that PJM should be permitted to add or subtract other circulating flows to determine whether the desired flow has occurred, in the absence of evidence that this would not provide service to ConEd, and that third party transactions must be allowed to flow on the tielines.

<sup>104</sup> PJM's Brief Opposing Exceptions at 10-12.

system is routinely relieved by NYISO's LMP-based congestion management system. PJM says that in the rare instances when contingencies occur and redispatching more expensive generation in New York City will not relieve the constraint and New York City cannot be adequately served from other sources, PJM will adjust the PARs in coordination with NYISO to increase flows into the City. It points out that NYISO has full tariff authority over the transmission transactions from New York to PJM that cause the counterflows and that NYISO can curtail or interrupt these third-party transactions to relieve constraints in an emergency, as it did on April 18, 2002.<sup>105</sup>

**e. Commission Response**

85. We will affirm the Initial Decision's holding that the forthcoming operating protocols must provide that the A, B and C Feeders, like other tielines between the PJM and NYISO control areas, are available to third parties on an open access basis. This availability, as the Presiding Judge pointed out, is subject to ConEd's right, under these grandfathered contracts, to reserve sufficient transmission capacity for its own use, as provide by Order No. 888.<sup>106</sup> We reject ConEd's request that we require the offset of counterflows from New York to New Jersey by other third party transactions flowing from PJM to New York. We also reject ConEd's request to restrict third party use of the A, B and C Feeders' capacities by a Minimum Flow Arrangement. That ConEd constructed the B and C Feeders to reduce loading on the Dunwoodie Interchange is irrelevant today when Order No. 888 governs access to transmission capacity. We agree with PSE&G and PJM that ConEd's concern is really an economic concern. We will require PJM and NYISO to cooperate in avoiding reliability problems in New York City and in ensuring that ConEd receives the power to which the two contracts entitle it.

86. We address ConEd's request for establishment of alternative proxy busses in the next section.

**4. Alternative Proxy Bus**

**a. Initial Decision**

87. The Presiding Judge pointed out that the existing Proxy Bus convention is merely a method of calculating the transmission rate when power crosses the seam between NYISO and PJM. It has nothing to do with the reliability or adequacy of transmission

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<sup>105</sup> PJM's Brief Opposing Exceptions at 13.

<sup>106</sup> See Order No. 888, FERC Stats. & Regs. ¶ 31,036 at 31,663-64.

service. It is needed because each ISO uses a slightly different LMP regimen.<sup>107</sup> The Presiding Judge found that the existing Proxy Bus convention, which applies generally to flows across the NYISO-PJM seam, will not affect the transmission charges for service under the two contracts. He noted PJM's commitment to use the difference between actual locational marginal prices at the J and K Lines and at the A, B and C Feeders to derive congestion charges for transactions under the two contracts. Thus, the Presiding Judge concluded that this proceeding need not address alternative proxy busses. He recommended that selection and use of the proxy bus convention be left to the discretion of NYISO and PJM.<sup>108</sup>

**b. Parties' Positions**

88. ConEd does not discuss PJM's commitment to use actual LMPs to derive congestion charges under the two contracts. Rather, as described above, it argues that the single proxy bus arrangement subsidizes counterflows out of New York City, thus eroding the value of the two contracts, while burdening flows into the City with congestion charges.

89. Arthur Kill Power criticizes as only partly correct the Initial Decision's reliance on PJM's commitment to use actual LMPs to derive congestion charges under the two contracts. It says that the Commission should require PJM to use actual LMPs not only for transactions under the two contracts but for all transactions over the J and K Lines and the A, B and C Feeders because these five feeders provide approximately 60 percent of the total available transmission capacity between NYISO and PJM and because the Initial Decision requires third party open access over them. Further, when requiring ConEd to compare its supply options (presumably in instances indicating redispatch), the Commission should require the use of the actual price of power at the feeders. Arthur Kill Power says that the Initial Decision ignores the rate effect of the NYISO segment of the transfer on ConEd and other market participants. It says that the NYISO-PJM interface should be modeled to accurately reflect local effects and provide greater market efficiency. Like ConEd, it says that use of the single proxy bus does not replicate the

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<sup>107</sup> Initial Decision at P 42. The actual energy flow is determined by the laws of physics. For pricing purposes, PJM and NYISO assume that the flow between them in either direction is between Marcy in upstate New York and Keystone in western Pennsylvania.

<sup>108</sup> Initial Decision at P 43.

actual power prices involved in sales into and out of New York City. It requests additional proxy busses or pricing based on the nodal prices on the five contract transmission lines.<sup>109</sup>

90. PSE&G says that the proxy bus issue has no bearing on transmission service under the two contracts. Because the contracts contemplate circulation through PJM of power from the upstate NYISO system to New York City, also in NYISO's region, rather than energy sales between parties in PJM and parties in NYISO, the manner in which each ISO prices energy purchased from a supplier in the other ISO is irrelevant. Regarding how to price power to identify each ISO's redispatch costs for the contracts, PSE&G recommends that, because PJM and NYISO already identify prices at the relevant busses, the two ISOs can use those individual bus prices to identify the costs of redispatch needed for service under the contracts. Lastly, PSE&G points out that other parties did not have notice that this proceeding would consider the issue of the single proxy bus. The issue should be discussed, if necessary, in a separate proceeding.<sup>110</sup> NYISO and PJM also make this point.

91. NYISO acknowledges that the single proxy bus is an imperfect simplification, but adds that neither it nor PJM has found a way to introduce multiple proxy busses and avoid gaming. It says that the operating protocol for the two contracts can be instituted before solution of the single proxy bus issue. Inter-ISO scheduling and pricing are reasonably efficient under the single proxy bus. It and PJM can implement the two contracts while they work to improve the single proxy bus framework.<sup>111</sup>

92. PJM defends its use of the current proxy bus arrangement. Because the arrangement includes dynamic weight-averaging based on actual flows in the east and west, it makes for more accurate proxy prices. PJM says that ConEd's and Arthur Kill Power's objections do not acknowledge the current dynamic pricing method. The measure of congestion charges would be the difference between the LMP at the J and K lines and the LMP at the A, B and C Lines which, PJM explains, are physical LMP price nodes within PJM, not proxy busses.<sup>112</sup>

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<sup>109</sup> Arthur Kill Power's Brief on Exceptions at 44-47.

<sup>110</sup> PSE&G's Brief Opposing Exceptions at 26-28.

<sup>111</sup> NYISO's Brief Opposing Exceptions at 3-5.

<sup>112</sup> PJM's Brief Opposing Exceptions at 15-19.

**c. Commission Response**

93. ConEd and Arthur Kill Power have not introduced any new arguments that cause us to modify the Presiding Judge's findings, which we will affirm. Because one of these affirmed findings is that PJM's and NYISO's use of their proxy bus does not affect reliability or the adequacy of power transferred to ConEd under the two contracts, this proceeding is not the appropriate proceeding for addressing complaints about the single proxy bus. Concerning computation of congestion costs and redispatch costs, we will hold PJM to its assurance, also relied upon by the Presiding Judge, that PJM can use the physical LMP price nodes at the J and K Lines and the A, B and C Feeders. We will require the parties to include such computation of costs in the forthcoming operating protocols.

**5. Measurement of Flows; Management of PARs**

94. The Presiding Judge found that ConEd did not develop credible evidence that use of the techniques used to measure and manage desired flows over the 5018 Line would deny it the transfer service to which it is entitled under the two contracts. He found further that details of how that service is to be rendered must be left to the parties, including the ISOs. He found also that control of the PARs, which are transmission facilities, must be vested in the ISOs, who must adjust the taps in real time to produce the desired flow targets that they have set. The detailed methodology for doing so is to be left to the ISOs, in consultation with PSE&G and ConEd.<sup>113</sup> The parties did not object to the Presiding Judge's findings. We affirm these findings.

**6. Scheduling the Wheel**

95. The Presiding Judge found that because, today, the ISOs administer transmission service in their regions and operate through schedules, ConEd must therefore become a part of this system in order to receive its contract power. He found that the power transfers for the contract service over PSE&G's facilities must be scheduled in much the same manner as any other firm transmission service. ConEd will have to announce to PJM and NYISO, a day in advance, the service it desires under the contracts so that this service, to the extent that ConEd is entitled to receive it, may be included in the two ISOs' schedules.<sup>114</sup>

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<sup>113</sup> Initial Decision at P 44-45.

<sup>114</sup> Initial Decision at P 40.

96. No party opposed the Presiding Judge's findings about the theoretical merits of requiring ConEd to schedule its contract service a day ahead, findings that we will affirm. The controversy is over the details of how to give the advance notice and to measure redispatch costs. We discuss the details in the next item.

## 7. Non-discrimination and Measuring Redispatch Costs

97. The Presiding Judge said that advance notice to PJM by ConEd of the service it wants to schedule under the two contracts will allow PJM to determine whether providing the service to ConEd will require operation of generation facilities out of merit and whether redispatch is the most economical method for providing the service or whether ConEd has less expensive alternatives. If ConEd does, he continued, then it must use the comparison-of-options approach, as the Commission has ruled.<sup>115</sup> Absent advance scheduling, ConEd could not know what costs PSE&G or PJM might incur to redispatch generation under the 600 MW contract. Also, ConEd will learn in advance when service under the 400 MW contract may be curtailed because out-of-merit dispatch will be required to provide that service. ConEd can then decide whether to "buy through" by paying the "incremental cost of redispatch" to avoid curtailment under that contract. The Presiding Judge recommended that the operating protocols provide for the buy-through option, as well as for the rates (or a formula for determining the rates) for exercising this option. He also adopted the Commission's recommendation<sup>116</sup> that pending resolution of this issue, the parties agree to escrow ConEd's payments of PJM's proposed rates, subject to refund.<sup>117</sup>

### a. Parties' Positions

98. PJM says that advance notice to ConEd of when service under the two contracts will require redispatch gives ConEd preferential access to highly sensitive market data. PJM points out that it cannot tell ConEd when it anticipates off-cost operation without violating its fundamental mission of impartial market administration and the Commission's Open Access Same-time Information Systems (OASIS) Standards of Conduct<sup>118</sup> which require PJM to keep market-sensitive information about generation

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<sup>115</sup> See Phase I Order at P 38.

<sup>116</sup> See Phase I Order at P 39 n.38.

<sup>117</sup> Initial Decision at P 41.

<sup>118</sup> 18 C.F.R. § 37.4 (2003).

dispatch operations confidential.<sup>119</sup> PJM wants to make available to ConEd only information that all market participants can obtain from PJM's OASIS and posted day-ahead LMP data. It says that ConEd does not require preferential access to information in order to exercise the same congestion buy-through option that non-firm PJM transmission customers exercise when they decide they are willing to pay congestion costs.<sup>120</sup>

99. PJM also seeks clarification of "incremental cost of redispatch." It says that it does not associate congestion with an increment of energy flowing on a constrained path. It assumes, under its LMP-based congestion management system, that all users of the constrained path cause the constraint and should be responsible for the resulting congestion costs. PJM asks the Commission to clarify that PJM may rely on its existing congestion management method to determine the cost for ConEd to "buy through" for the 400 MW wheel, and that the measure of congestion should be the difference between the LMPs at the A, B and C Feeders, and those at the J and K Lines.<sup>121</sup>

100. NYISO requests clarification of the Initial Decision's statement that advance notice by PJM to ConEd will enable PJM to determine whether redispatch is the most economical method of providing service under the contracts or whether ConEd has less expensive alternatives. NYISO objects to PJM making a unilateral decision whether it or NYISO must redispatch to support service under the contracts. Rather, these redispatching decisions should be based on comparison of each ISO's relevant redispatch costs, with the ISO having lower redispatching costs supporting the flows by redispatching its system to the point where both ISO have the same redispatching costs. The operating protocols should define the objective criteria that the two ISOs, together, will use to make redispatching determinations.<sup>122</sup>

101. ConEd opposes PJM's request to make the incremental cost of redispatch equal to the congestion costs determined by PJM's LMP methodology. It recommends use of an incremental congestion analysis. Assessing LMP charges representing congestion between the Waldwick Substation and the Hudson or Linden Substations conflicts with the 400 MW contract. Using PJM's congestion management system of LMP price

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<sup>119</sup> PJM's Brief on Exceptions at 12-13, *citing* the PJM Operating Agreement at section 18.7.

<sup>120</sup> PJM's Brief on Exceptions at 14.

<sup>121</sup> PJM's Brief on Exceptions at 18-19.

<sup>122</sup> NYISO's Brief on Exceptions at 10.

differentials will frequently and erroneously attribute congestion between Waldwick and Hudson/Linden to the 400 MW contract and cause curtailments under that contract.<sup>123</sup> The 400 MW contract, ConEd says, was structured as a generation exchange, contemplating that PSE&G would consume power received from ConEd in its northern zone and redeliver other power from the Hudson/Linden area to New York City; it did not contemplate transmission of power from Waldwick to the Hudson/Linden area.<sup>124</sup>

102. Con Ed suggests that PJM could implement the Initial Decision's incremental approach in conjunction with its current practice by conducting multiple runs in its set-up process for the day-ahead market. The run to identify whether out-of-merit generation would be required specifically to support service under the 400 MW contract should include all scheduled PJM firm point-to-point transmission service plus the 400 MW contractual service. Only if this run indicates that such services by themselves require redispatch because of congestion on a transmission facility in PSE&G's northern zone would PJM then be obligated to notify ConEd as to the amount of service that could be rendered without the need for redispatch. ConEd refers to NYISO's current practice of making multiple local reliability runs in its day-ahead market and to PJM's statement during the hearing that it would be feasible for it to do the same.<sup>125</sup>

**b. Commission Response**

103. We agree with PJM that advance notice to only ConEd of when service under the two contracts will require redispatch would violate impartial market administration and the Commission's OASIS Standards of Conduct. We find that this problem can be remedied by PJM not only giving ConEd reasonable notice of when redispatch is required for delivery of power under the contracts but by simultaneously posting this notice on its website. Similarly, PJM should post ConEd's response. We believe that the parties, in developing the forthcoming operating protocols, should have the first opportunity to determine what constitutes reasonable notice and the procedures for giving reasonable notice.

104. We will grant the clarification requested by NYISO. The decisions in each event of whether redispatch is the most economical way of providing service under the contracts, whether ConEd has more economical alternatives available to it, or whether

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<sup>123</sup> ConEd's Brief Opposing Exceptions at 17-18.

<sup>124</sup> ConEd's Brief Opposing Exceptions at 18-19.

<sup>125</sup> ConEd's Brief Opposing Exceptions at 18, *citing* hearing transcript at 1329 & Exh. PJM-3 at 15.

PJM or NYISO must redispatch are not made solely by PJM. We believe that the parties, in developing the forthcoming operating protocols, should have the first opportunity to determine the standards by which these decisions are made and who will make these decisions.

105. Additionally, we believe that the parties, in developing the forthcoming operating protocols, should have the first opportunity to determine the methodology for reflecting the Commission's determination that service under the 400 MW contract is more firm than service to non-firm customers when computing the incremental costs of redispatch for ConEd to avoid curtailment under the 400 MW contract. Similarly, we will not specify in this order the precise calculation of incremental costs of redispatch but will give the parties the first opportunity to make such a determination. We will affirm the Presiding Judge's recommendation concerning establishment of the escrow account.

## **8. Congestion and Redispatch Costs**

### **a. Initial Decision**

106. Noting the Commission's finding, in the Phase I Order, that PJM is required to redispatch generation under the 600 MW contract, under certain circumstances but not when there is a more economical method of providing service to ConEd, the Presiding Judge found that the operating protocols must provide for a comparison of the costs of generation redispatch and the costs (and likely efficacy) of other options for providing service under the 600 MW contract before PJM must redispatch to provide service under that contract.<sup>126</sup> He found also, based on section III.B of the 600 MW contract, that PSE&G has an obligation to eliminate or avoid any congestion that might impede service to ConEd. He concluded that PSE&G, not ConEd, should be required to pay any congestion charges for providing service under the 600 MW contract. Therefore, he directed that the operating protocols may not assign cost responsibility for congestion affecting service under the 600 MW contract to ConEd.<sup>127</sup>

107. The Presiding Judge found also that under the 600 MW contract, ConEd has already paid for and continues to pay for redispatch. Therefore, the operating protocols must not require ConEd to pay for generation redispatch to support its service under the 600 MW contract. He declined to substitute, as PJM had recommended, treating ConEd like PJM's other firm transmission customers by granting ConEd firm transmission rights to ensure service under the 600 MW contract. As PJM had conceded, holders of firm

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<sup>126</sup> Initial Decision at P 47.

<sup>127</sup> Initial Decision at P 48-49.

transmission rights are not always fully hedged. For the 400 MW contract, the Presiding Judge rejected PSE&G's suggestion that the service be treated as interruptible under the PJM tariff with a buy-through option. He found that the parties will have to arrive at a method whereby ConEd can purchase firm transmission rights or pay its share of the incremental cost of redispatch to have generation dispatched out of merit to support that contract's firm service.<sup>128</sup>

108. Concerning the comparison of alternatives to determine when redispatch is warranted, the Presiding Judge adopted the test proffered by NYISO. The two ISOs would compare their internal redispatch costs relevant to flows under the two contracts. The NYISO redispatch cost would be the difference between the congestion cost at Ramapo and the congestion cost at either Goethals or Farragut, which is the same amount as the difference between the two locations' LMPs. The ISO with the lower redispatch cost would support the contract flows by redispatching its system to the point where the redispatching costs of both ISOs were the same.<sup>129</sup>

**b. Arguments on Exceptions**

109. ConEd notes that the 1984 Operating Procedures were the basis for the Commission's holding, in the Phase I Order, that the parties must compare alternatives to redispatch before PSE&G is required to redispatch. It argues that, accordingly, the parties' forthcoming operating protocols must implement the terms of these 1984 Operating Procedures. It asks the Commission to require incorporation into the forthcoming protocols of the two conditions of the 1984 Operating Procedures that ConEd and PSE&G used &G when comparing alternatives and waiving PSE&G's service obligation. The first is the existence of abnormal conditions, which these procedures define as two or more bulk power facilities in PSE&G's northern area being out of service and another outage would result in unacceptable system conditions. The second is that after abnormal conditions have arisen, ConEd and PSE&G agree to a mutually agreeable power transaction, *i.e.*, a non-firm power sale between them. Additionally, ConEd urges that the forthcoming protocols provide that only ConEd may perform the comparison of alternatives, because it alone knows its supply alternatives and risks, and that such comparison be done without regulatory oversight.<sup>130</sup>

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<sup>128</sup> Initial Decision at P 51.

<sup>129</sup> Initial Decision at P 50.

<sup>130</sup> ConEd's Brief on Exceptions at 23.

110. ConEd objects to NYISO's methodology for comparing cost alternatives. It argues that NYISO's methodology and the operating protocols should not significantly alter the historic frequency of when cost alternatives are compared. It says that PSE&G and PJM have not redispatched to support the 600 MW contract during the past ten years. It argues that NYISO's methodology will likely result in considering alternatives more often than has historically been required. ConEd says that focusing solely on relative congestion prices in PJM and New York would decrease deliveries over the A, B and C Feeders and increase them over ConEd's Westchester facilities, causing increased loading at the Dunwoodie Interchange and creating reliability problems.<sup>131</sup>

111. ConEd says that the NYISO methodology wrongly compares congestion prices rather than delivered energy costs by comparing PJM's locational marginal congestion prices in PSE&G's northern zone to NYISO's locational marginal congestion prices in New York City. Further, the NYISO methodology ignores the conditions on PJM's and NYISO's systems, the size of the loads that would be affected, and the shape of the supply curves in PJM and NYISO. ConEd says that the NYISO methodology is unworkable because it uses a day-ahead basis rather than a real-time basis. The NYISO market closes seven hours ahead of the PJM market, forcing ConEd to make assumptions about PJM's subsequent decisions on the need to redispatch since congestion levels change after closing of the day-ahead market. Additionally, the day-ahead methodology does not provide ConEd with incentive to curtail the PSE&G transfer in response to changed circumstances that occur in real time. Instead of adopting NYISO's day-ahead methodology for the forthcoming operating protocols, ConEd urges that the comparison of alternatives required by the Commission be of options that are available to ConEd in real time so that it and PSE&G may negotiate a mutually agreeable arrangement for reducing the contract transfer.<sup>132</sup>

112. ConEd continues that the NYISO methodology is contrary to good utility practice because comparison of alternatives is not used for any other grandfathered contracts. Good utility practice means standards that are generally followed in the industry and reasonable judgment under the circumstances. It does not apply to the comparison of alternatives methodology which is not mandated for any other grandfathered contract. ConEd says that PJM and PSE&G assume that good utility practice requires the equalization of congestion costs in neighboring control areas while NYISO assumes that good utility practice requires the equalization of locational marginal congestion prices in PJM and New York. ConEd says that it is unreasonable to say that good utility practice requires the equalization of congestion costs but not energy prices. Unless the

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<sup>131</sup> ConEd's Brief on Exceptions at 24-25.

<sup>132</sup> ConEd's Brief on Exceptions at 25-26.

comparison is to delivered energy costs, instead of congestion prices, consumers in New Jersey will get both relief from redispatch costs and energy prices that usually are lower than those in New York City.<sup>133</sup>

113. PSE&G objects to the Initial Decision's assignment to it of congestion costs associated with redispatching generation under the 600 MW contract. It refers to the Commission's statement in the Phase I Order that the "need for efficient economic incentives and the equitable principle of cost recovery following cost causation would indicate that ConEd should pay any resulting costs of redispatch." Because this might be contrary to existing practice on PJM's system, the Commission wanted the record developed further, particularly concerning grandfathered contracts, before making a final decision concerning recovery of redispatch costs for the two contracts.<sup>134</sup> PSE&G interprets the Commission's statements as meaning that redispatch costs should be assigned to ConEd unless doing so would treat ConEd unfairly in comparison to customers under other grandfathered contracts. The existing practice on the PJM system regarding customers with grandfathered contracts is to assign congestion costs to them and to treat them like customers taking firm transmission under the PJM OATT. PSE&G objects to the Initial Decision treating ConEd better than other similarly situated customers in PJM while treating PSE&G worse than those transmission owners in PJM who do not pay congestion costs associated with grandfathered transmission contracts. PSE&G says that even ConEd's own witness agreed that allocating congestion costs to ConEd would provide an incentive to schedule service efficiently.<sup>135</sup>

114. PSE&G continues that if the Commission does not assign congestion costs to ConEd, it should not assign them to PSE&G. Rather, the Commission should allocate congestion costs in accordance with the rules of the PJM LMP-based energy market; *i.e.*, the costs should be reflected in the energy prices in the PJM market and recovered from participants in that market. If the Commission declines to do this, the Commission should clarify that PSE&G is entitled to a daily allocation of financial transmission

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<sup>133</sup> ConEd's Brief on Exceptions at 27-29.

<sup>134</sup> Phase I Order at P 39.

<sup>135</sup> PSE&G's Brief on Exceptions at 11-15.

rights<sup>136</sup> from PJM equal to ConEd's day-ahead schedule consistent with the obligation to pay congestion costs. Otherwise, PSE&G will have redispatch costs to which it never agreed without the hedge of financial transmission rights.<sup>137</sup>

115. NYISO wants the forthcoming protocol to state that, consistent with the comparison of alternatives test, redispatching decisions will be made jointly by the ISOs and will be based on comparison of each ISO's relevant redispatch costs. The ISO with the lower redispatching costs should support the contract flows to the point where both ISOs have the same redispatching cost. Further, in making this determination together, the ISOs would use objective criteria, to be defined in the operating protocols.<sup>138</sup>

116. NYISO asks the Commission to clarify that its comparison of alternatives methodology is to be incorporated into the operating protocols and that the protocols are to establish the procedures that ConEd must follow when giving its day-ahead notice of desired service under the two contracts. NYISO asks for clarification that the comparison of alternatives methodology, not the "desired flow" methodology that would be used to measure flows, must govern the ISOs' redispatching decisions. NYISO explains that the desired flow methodology used at the 5018 Line was developed for reasons that differ from the purposes of the two contracts and concerns facilities used for different purposes. Its use could effectively nullify the comparison of alternatives methodology, which was designed expressly for the two contracts.<sup>139</sup>

117. PJM asks for clarification that comparison of redispatch options is required only when both ISOs face redispatch. It requests that the operating protocols provide for system reconfiguration, such as a PAR move, before redispatch if system reconfiguration

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<sup>136</sup> Financial transmission rights are financial instruments that entitle the holder to receive compensation for certain congestion-related transmission charges that arise when the grid is congested and differences in locational prices result from the redispatch of generators out of merit order to relieve that congestion.

Under the PJM OATT, firm transmission customers pay the costs of congestion associated with their service and receive an allocation of financial transmission rights from PJM to function as a financial hedge against their exposure to those costs. PSE&G's Brief on Exceptions at 17.

<sup>137</sup> PSE&G's Brief on Exceptions at 16-17.

<sup>138</sup> NYISO's Brief on Exceptions at 10.

<sup>139</sup> NYISO's Brief on Exceptions at 11-12.

can minimize one ISO's off-cost exposure without redispatch consequences for the other. PJM also asks that the operating protocols permit a market-participant-directed comparison of options to prevail over the ISO-directed comparison of options if the entity responsible for redispatch costs (ConEd or PSE&G) elects to use LMP-based congestion management tools, assuming that the entity also elects to be subject to financial transmission rights and congestion management procedures under PJM's OATT.<sup>140</sup>

c. **Arguments Opposing Exceptions**

118. ConEd disagrees with PSE&G's position that ConEd should pay redispatch costs. It says first that this is contrary to the 600 MW contract. That contract envisages that PSE&G will use generation to effectuate the transfer. It limits charges to ConEd to those described in the contract and does not require ConEd to reimburse PSE&G for generation-related costs. Second, such reimbursement may not be implied. ConEd cites *Pennsylvania-New Jersey-Maryland Interconnection*, 81 FERC ¶ 61,257 at 62,280-81 (1997) (*PJM Interconnection*), where the Commission rejected all modifications to grandfathered contracts except those designating PJM as the transmission provider and eliminating pancaked rates.<sup>141</sup>

119. ConEd cites the record developed during the Phase II hearing as supporting its position. Because redispatch has not been used to support service under the two contracts for ten years, the Commission's economic efficiency considerations are effectively rendered moot. PJM's practice, like that of NYISO, is to redispatch in support of grandfathered services without imposing redispatch costs on the grandfathered customers, and ConEd should not be treated differently. Moreover, unlike customers under other PJM grandfathered contracts, ConEd funded construction of the PSE&G facilities used to transfer the power. Possible inefficiencies under grandfathered contracts do not justify their abrogation or the imposition of congestion charges. Honoring grandfathered contracts is important because market participants will be deterred from investing in infrastructure and transactions if their contracts will not be honored. Imposition of redispatch costs converts a pre-existing contract to OATT service, and the Commission's policy, as shown by the Commission's SMD Notice of Proposed Rulemaking,<sup>142</sup> is to

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<sup>140</sup> PJM's Brief on Exceptions at 15-16.

<sup>141</sup> ConEd's Brief Opposing Exceptions at 11-12.

<sup>142</sup> See n.19, *supra*.

leave such decisions to the discretion of the grandfathered customer. PJM's LMP-based treatment of redispatch costs would allocate to ConEd congestion costs caused by other transmission services.<sup>143</sup>

120. ConEd opposes PJM's recommendation that the Commission allocate congestion costs according the rules of the PJM-LMP based energy market. It emphasizes that the Commission rejected PJM's proposal to redesign all grandfathered contracts to accommodate LMP pricing, including the assignment of fixed transmission rights.<sup>144</sup> In regard to the need for redispatch under the 400 MW contract, ConEd says that during 2002, PJM's practice was to assess congestion charges between Waldwick and Hudson/Linden even when, two-thirds of the time, the congestion was unrelated to the transmission facilities in PSE&G's northern zone. The existence of LMP congestion charges does not mean that there is a need to redispatch under the contracts. ConEd asks the Commission to determine the need for redispatch under the contracts by a more refined screening procedure than the existence of LMP congestion charges.<sup>145</sup>

121. PSE&G says that in the Phase I Order the Commission did not remand the question of whether redispatch by PJM should be conditioned on the absence of lower-cost alternatives to ConEd or whether a comparison of alternatives was required. The Commission remanded only the question of how to implement a comparison of alternatives.<sup>146</sup> PSE&G supports the NYISO comparison of alternatives methodology as allocating redispatch responsibility between the two entities that are now responsible for implementing the two contracts. It says that this procedure most likely will be required when there are outages of bulk power facilities. It objects to ConEd making the comparison of alternatives and wants the ISOs to do so. It disputes that the NYISO methodology would require a comparison of alternatives more frequently than in the past. The NYISO methodology would be used only when redispatch is needed to support service under the 600 MW contract and not whenever there is congestion anywhere in PJM.<sup>147</sup>

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<sup>143</sup> ConEd's Brief Opposing Exceptions at 12-15.

<sup>144</sup> ConEd's Brief Opposing Exceptions at 15-16, citing *PJM Interconnection*, 81 FERC at 62,280.

<sup>145</sup> ConEd's Brief Opposing Exceptions at 15-16.

<sup>146</sup> PSE&G's Brief Opposing Exceptions at 29-30.

<sup>147</sup> PSE&G's Brief Opposing Exceptions at 30-33.

122. PSE&G says that the Commission did not find that ConEd was entitled to service from PJM that minimizes ConEd's costs without regard to the level of redispatch costs incurred by PJM to provide that service. The correct comparison is of the parties' incremental cost of their respective solutions, not ConEd's total delivered energy cost, against whether a particular solution minimizes the incremental cost. PSE&G says that other market participants routinely schedule their service and take into account the different closing times of the NYISO and PJM day-ahead markets and the differences between the day-ahead market and the real-time market. ConEd should do so also.<sup>148</sup>

123. NYISO says that ConEd's criticism of NYISO's proposed comparison of alternatives methodology is essentially a collateral attack on the Phase I Order, which mandates economic evaluation of redispatch options available to ConEd compared to PSE&G's redispatch costs before requiring PJM to redispatch to support the 600 MW contract. NYISO defends its comparison of alternatives methodology as a solution to a novel problem. It answers ConEd's objection that the day-ahead basis makes the methodology unworkable by saying that the proposed methodology is designed to work on a day-ahead basis and to take advantage of the different bidding/posting times in the NYISO and PJM markets; specific implementation details will be included in the operating protocols. As to the relationship between the comparison of alternatives methodology and good utility practice, NYISO says that the two are not inconsistent merely because of lack of historic use of the methodology. Also, there is no inconsistency because good utility practice relates only to reliability and operating practices, not to allocation of economic benefits under a contract.<sup>149</sup>

124. NYISO urges that ConEd not be permitted to perform the comparison of alternatives without the ISOs' involvement. NYISO says that it and PJM will simply compare the relevant costs, using information that they alone have, and will automatically make a joint redispatching decision based on their relative redispatching costs; their involvement will not compromise their independence. ConEd could not play this role without having access to highly confidential market information. Moreover, NYISO and PJM redispatching decisions affect all stakeholders, and ConEd cannot be expected to elevate regional concerns over its own business interests. So that all market participants can observe the fairness in the way the comparison of alternatives mechanism is implemented, the Commission should require that the ISOs implement the mechanism as transparently as possible.<sup>150</sup>

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<sup>148</sup> PSE&G's Brief Opposing Exceptions at 34-35.

<sup>149</sup> NYISO's Brief Opposing Exceptions at 5-6.

<sup>150</sup> NYISO Brief Opposing Exceptions at 6-7.

125. PJM states that it does not object to NYISO's comparison of alternatives methodology so long as this approach applies only when both ISOs face redispatch, the parties include the congestion cost comparison in the operating protocols, and redispatch is required only to effectuate the desired flow under the two contracts.<sup>151</sup>

**d. Commission Response**

126. We affirm the Presiding Judge's adoption generally of NYISO's comparison of alternatives test as the best way of achieving impartiality when comparing redispatch costs against the costs of power purchase. We reject ConEd's request that it be the entity to make the comparison because we agree with NYISO that ConEd's concern is its legitimate business interests, not regional concerns. We will give the parties the first opportunity to propose specific procedures for comparing alternatives in the forthcoming operating protocols.

127. We also affirm the Presiding Judge's finding that ConEd cannot be required to pay congestion costs or redispatch costs under the 1978 contract.<sup>152</sup> Therefore, ConEd's arguments concerning how the alternatives are to be compared are beside the point. The obligation rests upon NYISO and PJM to provide ConEd, at Goethals or Farragut, with the amount of power that ConEd transferred under the 600 MW contract without additional costs. We find that good utility practice does not govern the use, under the 1978 contract, of choosing a methodology for comparing alternatives to redispatch.

128. We reject PSE&G's interpretation of the Phase I Order as requiring ConEd to be treated identically to other PSE&G grandfathered customers. We agree with the Presiding Judge's statement that these contracts are unique, and that they mean what they say.<sup>153</sup> We agree also with the Presiding Judge's finding that in executing the 600 MW contract, PSE&G took upon its shoulders the risk that congestion might interfere with the wheeled service or increase its costs of transmission to ConEd. We will not make PSE&G's requested clarification concerning allocation of financial transmission rights. We agree with the Presiding Judge that the appropriateness of such an arrangement is for the parties to work out in the forthcoming operating protocols.<sup>154</sup>

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<sup>151</sup> PJM's Brief Opposing Exceptions at 7-9.

<sup>152</sup> Initial Decision at P 49.

<sup>153</sup> Phase I Initial Decision, 99 FERC ¶ 63,028 at P 53.

<sup>154</sup> Initial Decision at P 51.

129. We clarify, as requested by NYISO, that PJM does not unilaterally determine whether it or NYISO must redispatch to support service under the two contracts, but that this decision must be made by both ISOs, working together. We will not, as requested by PJM, require both ISOs to face redispatch before alternatives are compared, nor will we require system reconfiguration or specify use of LMP-based congestion management tools as alternatives to redispatch. We leave such decisions to NYISO, PJM, ConEd, and PSE&G as they work out the forthcoming operating protocols.

## **9. Service under the 400 MW Contract**

### **a. Initial Decision**

130. The Presiding Judge rejected PSE&G's argument that the Commission should require the parties to treat service under the 400 MW contract as interruptible under the PJM OATT, citing the Commission's finding in the Phase I Order that service under this contract is firm, except that out-of-merit dispatch is not required to support it from curtailment. He proposed that PJM create a separate category for this service under its OATT, treating the service as firm for scheduling purposes unless PJM anticipates that out-of-merit generation is needed to support transmission in northern New Jersey. If this occurs, ConEd should be so informed and given an opportunity to "firm up" the service by acquiring firm transmission rights or paying its share of the incremental cost of redispatch. Service under the 400 MW contract that had not been "firmed up" would be rendered only when all of PJM's firm transmission obligations are satisfied, but ahead of interruptible transmission obligations.<sup>155</sup>

131. The Presiding Judge recommended also that ConEd be given a reasonable opportunity to further "firm up" its service by acquiring firm transmission rights or paying its share of the incremental cost of redispatch. Thus, when PJM anticipates a need to dispatch generation out of merit to support its transmission service in northern New Jersey and environs, service under the 400 MW contract would have a priority below that of firm service for customers who pay congestion charges, unless ConEd agrees to pay congestion charges also, in which case it would have the same priority.<sup>156</sup>

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<sup>155</sup> Initial Decision at P 52.

<sup>156</sup> Initial Decision at P 52, 54.

132. The Presiding Judge endorsed scheduling of service under the 400 MW and 600 MW contracts as part of NYISO's and PJM's day-ahead schedules. He directed the ISOs to do so in the same manner as they schedule transmission services generally under their tariffs.<sup>157</sup>

133. The Presiding Judge rejected ConEd's argument that, under the 600 MW contract, it should have a higher priority than other firm customers ("super-firm") because the 600 MW contract required PSE&G to build and operate its system to meet its obligations to ConEd, a commitment not applicable to those other customers.<sup>158</sup>

**b. Parties' Arguments**

134. PJM agrees to establishing a new service category, between firm and non-firm, for the 400 MW transfer. It requests clarification that when ConEd is unwilling to pay redispatch costs but other customers with non-firm service are willing to pay redispatch costs, those other customers have priority over ConEd.<sup>159</sup>

135. PJM refers to the Presiding Judge's statement that when ConEd learns that out-of-merit dispatch will be required to provide service under the 400 MW contract, ConEd should be given the option to "buy through" the service by paying an additional charge to compensate PSE&G and PJM for the incremental cost of redispatch to avoid curtailment.<sup>160</sup> PJM seeks clarification of "incremental." It explains that its LMP-based congestion management system assigns congestion costs locationally, not by which entity used the transmission facility first or by associating congestion with an increment of energy flowing on the constrained path. The LMP approach assumes that all users cause the constraint, so all users are responsible for the resulting congestion costs. PJM asks for clarification that the Initial Decision does not change PJM's LMP congestion management assumptions, and that it may continue to use its established congestion management method to determine the cost to ConEd to "buy through" congestion for the 400 MW transfer. PJM proposes that the measure of congestion be the difference between the LMPs at the A, B and C Feeders, compared to the J and K Lines.<sup>161</sup>

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<sup>157</sup> Initial Decision at P 53.

<sup>158</sup> Initial Decision at P 54.

<sup>159</sup> PJM's Brief on Exceptions at 17-18.

<sup>160</sup> Initial Decision at P 41.

<sup>161</sup> PJM's Brief on Exceptions at 18-19.

136. ConEd opposes PJM's clarifications, saying that they will subordinate ConEd's service under the 400 MW contract to PJM's non-firm customers who are willing to pay congestion costs, in effect making ConEd's service non-firm. ConEd points out that the Initial Decision found repeatedly that the service is firm. ConEd argues that its 400 MW contract differs markedly from service agreements of non-firm OATT service customers who pay congestion costs. The 400 MW contract is not for delivery of power from Waldwick to PSE&G's Hudson and Linden substations; it is for an exchange of generation, with PSE&G consuming power received from ConEd in its northern zone and redelivering other power from its Hudson and Linden generating stations to ConEd in New York City. Unlike customers' service agreements under PJM's OATT, the 400 MW contract provided for construction of extensive transmission facilities on PSE&G's system (the J Line, B Feeder and various substation facilities) and for ConEd to pay a reservation charge that applies without regard to the level of service rendered. Hence, ConEd says, service under the 400 MW contract should not be conditioned on its matching the payments of other customers with respect to congestion between Waldwick and Hudson or Linden.<sup>162</sup>

137. Arthur Kill Power argues that no more than 200 MW under the 1975 contract should flow over the A Feeder while all 600 MW under the 1978 contract should flow over the B and C Feeders. This limitation would promote reliability by allowing more power to be delivered to Brooklyn via a more direct delivery route, by ensuring that the Arthur Kill Station could provide spinning reserves to NYISO to prevent load shedding, and by allowing the A Feeder to provide energy to New York City or New Jersey. If the Commission reduces PSE&G's obligation to deliver power under the 400 MW contract, PSE&G should have a commensurate reduction in its rights to deliver over the A Feeder.<sup>163</sup>

**c. Commission Response**

138. We affirm the Presiding Judge's recommendation that PJM create a separate category in its OATT for service under the 400 MW contract. We have already affirmed his finding that for ConEd to "firm up" this service, it need pay only the incremental cost of redispatch to avoid curtailment. For scheduling, service under the 400 MW contract has higher priority than service to non-firm customers who agree to pay congestion costs. Therefore, we deny PJM's requested clarification that customers with non-firm service who pay redispatch costs have priority over ConEd's entitlement under the 400 MW contract; the requested clarification would reduce the 400 MW contract's firm service to

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<sup>162</sup> ConEd's Brief Opposing Exceptions at 17-19.

<sup>163</sup> Arthur Kill Power's Brief on Exceptions at 41-43.

non-firm service. Rather than adopt PJM's requested clarifications concerning how to calculate the costs for ConEd to "buy through" congestion for the 400 MW transfer, we find it preferable to let the parties work out these provisions themselves, at least in the first instance. We deny Arthur Kill Power's requests that we designate the amount of the A Feeder's capacity that PSE&G may use. Decisions about the paths to flow power between NYISO and PJM belong to those two ISOs under the open access principles established by Order No. 888. They are also charged with preventing load shedding and protecting reliability of power.

## **10. Curtailment Rules**

139. In the Phase I Order, the Commission responded to PJM's request for guidance on which has priority for curtailment purposes, transmission service under the PJM tariff or transmission service under the two contracts. The Commission said that, ordinarily, PJM should follow the transmission line loading relief procedures of the North American Electric Reliability Council, but that the parties should explore the applicability of these procedures.<sup>164</sup> During the Phase II hearing, the parties agreed that they prefer the current system whereby PJM and NYISO use LMP to assign curtailment priority. The Presiding Judge therefore recommended that the ISOs continue to use their current LMP-based systems when assigning curtailment priority for ConEd's service under the two contracts.<sup>165</sup> No party opposed the Presiding Judge's recommendation, which we affirm.

## **11. Future Impairments of Service**

140. The Presiding Judge observed that because neither ISO took responsibility for providing service under the two contracts, the question of ConEd possibly impairing service under the two contracts by virtue of interconnecting new generation "fell between the cracks." ConEd had sought no approvals to interconnect Cogen Tech generation with its Goethals substation, nor did NYISO concern itself with sufficiency of transmission capacity connecting Staten Island with the rest of New York City. The Presiding Judge did not discuss specifically whether or not ConEd's attachment of the Cogen Tech's generation to Goethals has impaired PSE&G's deliveries. He stated that the operating protocols must require both ConEd and PSE&G to seek and receive approval from PJM and NYISO before attaching new generation to their systems to ensure that the interconnection will not impair service to ConEd under the two contracts. He repeated the Commission's request that NYISO address, on an urgent basis, the apparent lack of sufficient transmission capacity to transfer all the power generated on Staten Island and

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<sup>164</sup> Phase I Order at P 67.

<sup>165</sup> Initial Decision at P 55.

the power flowing onto Staten Island over the A Feeder. He repeated the Commission's directive that the parties list, in the operating protocols, all known and projected impairments of power deliveries affecting deliveries to ConEd.<sup>166</sup>

**a. Parties' Positions**

141. PSE&G argues that the Presiding Judge overlooked evidence that ConEd has impaired service under the two contracts by interconnecting new generation and by failing to reinforce its internal transmission system. PSE&G objects to reserving capacity on its system that ConEd does not use. It says that impairment on one feeder reduces its ability to use any of the feeders and also increases the likelihood and cost of redispatch. PSE&G argues that because ConEd has impaired delivery, the Commission should reduce ConEd's total entitlement under the two contracts to 450 MW (50 MW under the 600 MW contract, supported by redispatch, and 400 MW under the 400 MW contract) either permanently or until ConEd or NYISO remedies the impairment.<sup>167</sup>

142. ConEd denies that it has impaired PSE&G's deliveries in violation of the two contracts. It points out that the two contracts' impairment provisions do not apply to the A Feeder or to any Staten Island transmission facilities and concludes that Staten Island conditions are irrelevant to the contract issues here. It says that reduced flows from Cogen Tech have not resulted in correspondingly increased flows over the A Feeder. It points out that NYISO did not exist in 1992, when the Cogen Tech facility was connected, and that it submitted reports and studies about the facility to NYISO's predecessor, the New York Power Pool. It denies that nomination of a transfer level less than 1,000 MW impairs PSE&G's performance under the contracts because the contracts are not use-it-or-lose-it contracts. ConEd is free to nominate a transfer level and PSE&G must transfer that quantity of energy.

143. ConEd denies that it causes the reverse flows, from New York to New Jersey, which are infrequent and brief. It adds that PSE&G wants to recognize third-party flows for curtailment purposes and ignore them for impairment purposes. It says that transmission capacity off Staten Island exceeds the amount of on-Island generation minus on-Island load. Market conditions, not the Commission, should induce ConEd to expand transmission capacity between Staten Island and the rest of New York.<sup>168</sup>

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<sup>166</sup> Initial Decision at P 56.

<sup>167</sup> PSE&G's Brief on Exceptions at 18-21.

<sup>168</sup> ConEd's Brief on Exceptions at 29-36.

144. NYISO points out that the question of whether non-market based action is needed to improve Staten Island's transmission infrastructure was not among the issues set for hearing. It says that, at the request of a market participant, it has begun a system impact study to evaluate additional transmission capacity between Staten Island and Brooklyn. No evidence shows that the current situation of transmission congestion on Staten Island is a threat to reliability, and congestion is largely an economic issue. NYISO says also that it has little authority to address Staten Island's alleged infrastructure deficiencies.<sup>169</sup>

145. NYISO objects to adopting a physical non-impairment rule that is incompatible with its other planning requirements and to the Presiding Judge's requiring approval from both NYISO and PJM before ConEd or PSE&G can attach new generation to its system. NYISO's planning procedures do not include a physical deliverability criterion because its deliverability decisions are based on economic factors in real time; it does not need to consider the deliverability of specific units as a long-term reliability planning matter. NYISO says that the Presiding Judge's approval requirement would require NYISO to modify its interconnecting procedures to ensure that service under the two contracts would not be impaired.

146. Further, NYISO asks the Commission to clarify what it means by "impairment." It says that an impairment under the two contracts should not be defined to include market-driven conditions that cause re-dispatch of transactions based upon the economic bids and offers of market participants. Instead, the Commission should require only that the ISOs identify impairments associated with violations of established reliability criteria.<sup>170</sup>

147. Arthur Kill Power says that transmission capacity between Staten Island and Brooklyn is constrained and will worsen unless PSE&G's use of the A Feeder's capacity is limited.<sup>171</sup> It denies that its dispatches cause the constraint or cause counterflows back across the A Feeder.<sup>172</sup>

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<sup>169</sup> NYISO's Brief on Exceptions at 7-9.

<sup>170</sup> NYISO's Brief on Exceptions at 12-13.

<sup>171</sup> Arthur Kill Power's Brief on Exceptions at 14-15.

<sup>172</sup> Arthur Kill Power's Brief Opposing Exceptions at 4-5.

**b. Commission Response**

148. Like the Presiding Judge, we are particularly concerned with looking to the future. The issue of whether ConEd impaired PSE&G's performance under the contracts was addressed adequately in the Rehearing Order. There, the Commission did not make a specific finding that ConEd impaired PSE&G's performance, and did not imply that PSE&G's contractual service obligations could be reduced. Rather, the record showed that impairments existed. What is important now is to have the parties identify all impairments so that they may be remedied under the forthcoming operating protocols and ConEd will receive the service to which the contracts entitle it.<sup>173</sup> Listing all known and projected impairments is an essential first step to remedying them.

149. We will revise the Presiding Judge's recommendation concerning notification to and approval by NYISO and PJM before ConEd and PSE&G may attach new generation facilities to their systems. We will instead require the parties to include, in the forthcoming operating protocols, procedures under which ConEd or PSE&G will notify its respective ISO before attaching new generation. We will also require the parties to include in the operating protocols procedures for determining possible impairments caused by these proposed new attachments and then for acting upon such determinations of impairment.

150. Our requirement that NYISO and PJM evaluate PSE&G's or ConEd's attachment of new generation to their respective transmission systems applies only to the effects of such attachment on power deliveries under the two contracts. Our concern is with the capacity of the J and K Lines, the A, B and C Feeders and the internal ConEd and PSE&G lines to flow contract power. We do not require NYISO to revise its interconnection procedures. We do, however, expect NYISO and PJM to identify circumstances when ConEd's or PJM's attachment of new generation would impair contract power deliveries. In this regard, we clarify that our use of "impairment" is limited to the physical capability of transmission lines and to the effects of attachment on reliability criteria. We do not intend impairment in these circumstances to include market or other economic considerations.

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<sup>173</sup> Rehearing Order, 105 FERC ¶ 61,343 at P 29.

## 12. Distribution of service among the A, B and C Feeders

### a. Initial Decision

151. ConEd had requested that no more than 20 percent of the power delivered under the contracts, *i.e.*, up to 200 MW of the total 1,000 MW of service, flow over the A Feeder. 200 MW is half of the total amount of the 400 MW contract, which concerns power flows over the A and B Feeders. ConEd said that re-deliveries under the 600 MW contract should use only the B and C Feeders.

152. The Presiding Judge denied ConEd's request on two grounds, contract construction and course of conduct. First, he cited section 4.1 of the 400 MW contract, which provides for PSE&G to "transfer up to 400 MW of power from Ramapo to Farragut, utilizing [the Ramapo-New Milford and Hudson-Farragut interconnections], as well as the existing Linden-Goethals 230-kv interconnection, and other PS and Con Edison internal transmission facilities." This provision, he found, permits PSE&G to transfer power over the A Feeder without any restriction as to amount or proportion. In the 600 MW contract, he found that section III.B specifies use of the A Feeder without limiting the feeder's use: "Under normal conditions, PS will transfer a maximum of 600 MW . . . in addition to the 400 transfer presently in effect, from Ramapo to Farragut, utilizing the new and existing Ramapo-Waldwick and Hudson-Farragut interconnections, the existing Linden-Goethals interconnection . . . and other PS internal transmission facilities." The only way to utilize the Linden-Goethals interconnection to move power to Farragut is by ConEd's internal transmission facilities. Omission of their mention was either inadvertent or a consequence of the writers' familiarity with how ConEd would transfer power from Goethals to Farragut. Second, the Presiding Judge relied on ConEd not making an issue in past years of how deliveries were allocated among the feeders, and not requesting the 200 MW limitation on the A Feeder's use until this proceeding.

153. The Presiding Judge concluded that, under the contracts, PSE&G (now PJM) has the option of using any of the feeders in whatever proportion it sees fit to render service to ConEd. However, the Presiding Judge also found that PJM may not reduce contract deliveries simply because the A Feeder is at capacity. PJM is obliged to attempt to achieve the desired flow while satisfying the distribution factor analysis that it and NYISO have performed. Only if, under normal economic operations, the nominated flow cannot be achieved through the three feeders may the 400 MW be reduced to accommodate the impairment. Even then, ConEd has the option of paying the incremental cost of relieving the constraint to prevent curtailment of its service. The Presiding Judge said that the operating protocols should address the distribution of flows.<sup>174</sup>

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<sup>174</sup> Initial Decision at P 57-61.

**b. Parties' Positions**

154. ConEd objects to permitting up to 500 MW of contract flow over the A Feeder without any restriction. It refers to the studies that it and PSE&G conducted in 1975 that presumed only up to 150 MW flow over the A Feeder. It refers also to the origin of the 600 MW contract as the functional equivalent of a DC line from Ramapo to Manhattan without mention of ConEd's internal transmission facilities. It points to the over \$750 million cost responsibility it assumed for the K Line and the C Feeder based on the mutual understanding that this would be the principal transmission pathway for service under that contract. It challenges the course of conduct reasoning by saying that PSE&G rebuffed repeated requests for increased deliveries over the B and C Feeders, and that the distribution of flows for the past 14 years has been approximately equal over the three feeders.<sup>175</sup>

155. Arthur Kill Power says that it is harmed by every megawatt flowing over the A Feeder, while use of the B and C Feeders would not harm PSE&G and objects to permitting unrestricted flow over the A Feeder. It argues that all deliveries under the 600 MW contract should use the B and C Feeders because of contract intent, engineering and reliability. Arthur Kill Power points out that during eleven months, between August 2000 and July 2001, when the A Feeder was down, PSE&G transmitted an average of 337 MW over the B Feeder and 326 over the C Feeder. It says that the 600 MW contract intended reservation of the A Feeder for emergencies. Flowing the full 600 MW of the 1978 contract over the B and C Feeders would promote reliability because this would allow Arthur Kill Station to provide spinning reserves to NYISO and prevent load shedding. Also, the A Feeder would have capacity to provide energy to either New York or New Jersey during emergencies.<sup>176</sup>

156. PSE&G supports the Initial Decision's conclusion that PJM may use all three feeders. It says that use of the A Feeder will give ConEd incentive to upgrade its interconnections between Staten Island and the rest of the ConEd system. Arthur Kill Power should not be able to impose costs on PJM customers in order to gain protection against competition from more economical generation from upstate New York. PSE&G says that PJM's reliability is enhanced by the flexibility to use three rather than two contract paths.<sup>177</sup>

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<sup>175</sup> ConEd's Brief on Exceptions at 36-40.

<sup>176</sup> Arthur Kill Power's Brief on Exceptions at 27-43.

<sup>177</sup> PSE&G's Brief Opposing Exceptions at 42-47.

157. NYISO disagrees with Arthur Kill Power's claims that reliability or planning considerations support excluding flows from the A Feeder. It also says that such an exclusion would interfere with its "comparison of alternatives" methodology. This methodology will dictate the most efficient distribution of flows on the three feeders. NYISO asks the Commission to clarify that the ISOs must always have the flexibility to use these feeders to address system reliability and operating conditions appropriately.<sup>178</sup>

158. Similarly, PJM states that allowing it and NYISO discretion to determine the optimum allocation of flows on the three feeders will enable the ISOs to maximize efficiency, including effectuating the contract transfers, and to maintain reliability without artificial constraints.<sup>179</sup> Trial Staff states that ConEd's attempt to limit use of the A Feeder results from its having impaired service over that feeder.<sup>180</sup>

**c. Commission Response**

159. We affirm the Presiding Judge's conclusion that service over the A Feeder under the two contracts should not be limited, as ConEd requests, to a maximum of 200 MW. We affirm also his conclusion that PJM may not reduce deliveries simply because the A Feeder is at capacity. The forthcoming operating protocols must include such provisions. The purpose of the contract re-deliveries over the three feeders and of Arthur Kill Power's generation is to provide New York City with reliable electric power at the lowest available cost. We will expect NYISO to keep this purpose in mind and to maximize the economic efficiency and reliability of this power and of systems operations when determining the distribution of contract flow among the three feeders. Although PJM understandably does not have the same objective of protecting New York City's access to reliable power at lowest cost, PJM nevertheless is responsible for ensuring that ConEd receives the transmission service to which the contracts entitle it.

**13. Outages and Identification of Critical Bulk Power Facilities**

**a. Initial Decision**

160. The Presiding Judge noted that both contracts permit PSE&G to curtail the contract service when it has suffered an outage. He stated that while ConEd and PSE&G agree on the need for a study to identify the critical bulk power facilities whose outages

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<sup>178</sup> NYISO's Brief Opposing Exceptions at 9.

<sup>179</sup> PJM's Brief Opposing Exceptions at 19.

<sup>180</sup> Trial Staff's Brief Opposing Exceptions at 23.

might warrant curtailment of service, and that the study should be periodically revised to meet current conditions, they disagreed on the detail of the study. ConEd wanted these facilities identified separately and precisely for both contracts. PJM argued that because the 400 MW contract does not require redispatch, the critical bulk power facilities that relate to that contract need not be identified.

161. The Presiding Judge agreed with ConEd that the critical bulk power facilities must be separately and precisely identified for both contracts. He said that while PJM does not have a duty to redispatch under the 1975 contract, this does not mean that it may curtail service under the contract. Also, the purpose of identifying the facilities under both contracts is to enable ConEd to verify that it is being treated fairly and in accordance with the contracts.

162. The Presiding Judge concluded that the precise parameters of the study should be determined not by the Commission, but by the parties, all of whom perform similar studies in their day-to-day operations. He recommended that the operating protocols provide for: (1) identification of the bulk power facilities whose outage may result in reduced service to ConEd under either contract; (2) advance or immediate notice to Con Ed when such an outage will occur or has occurred and its probable duration and consequence; and (3) a right for ConEd to “buy through” the potential curtailment.<sup>181</sup>

**b. Parties’ Positions**

163. NYISO requests clarification that it and PJM will be included in developing all studies and updates. It points out that the two ISOs will not only implement the transfers under the contracts, but will be responsible for identifying critical outages and making appropriate operational adjustments.

164. NYISO states also that the Initial Decision did not make a finding on one issue. ConEd had argued that the critical bulk-power facility outage studies are only guidelines that indicate the occurrence and level of curtailment that might be associated with outages; their results should not be regarded as definitive grounds for curtailment. NYISO’s position is that the point of conducting the studies is to calculate the amount by which flows under the contracts should be reduced if specific outages occur. This information should be incorporated into the operating protocols so that the ISOs have unambiguous rules to follow in real-time operations and when scheduling each ISO’s

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<sup>181</sup> Initial Decision at P 62-63.

day-ahead market. NYISO asks the Commission to clarify that the studies' results must be binding, with the caveat that it and PJM should be given discretion to address any unforeseen conditions not anticipated during the ex-ante studies.<sup>182</sup>

165. PSE&G states that the Presiding Judge implies that deliveries under the 400 MW contract can be curtailed only when there is an outage of "critical bulk power facilities" under that contract. It says that this is at odds with the Phase I Order, which determined that service under the 400 MW contract can be curtailed whenever redispatch is required to support such service, subject to ConEd's paying redispatch costs under the operating protocols. PSE&G requests clarification that identification of these facilities is simply to determine when service may be curtailed because of their outage, in addition to the times when redispatch is needed to support the service. PSE&G also requests that the Commission clarify that, if there are critical bulk power facilities whose outages would permit curtailment of service under the 400 MW contract, and circumstances warrant that PSE&G's system be upgraded to avoid such curtailments, then, under the May 1978 amendment, ConEd will be required to pay additional compensation in accordance with the results of a joint study by the two parties.<sup>183</sup>

166. ConEd opposes NYISO's requested clarification that critical bulk-power facility outage studies results are binding on ISO operations. ConEd interprets NYISO's request as meaning that the results of the critical facility study will authorize curtailment of ConEd's service, without regard to actual system conditions when an outage occurs. ConEd says that the study results must be regarded as guidelines that indicate the possible occurrence and level of curtailment that might be associated with outages of critical bulk-power facilities. The study results cannot enable PSE&G to curtail service because the studies are only hypothetical. They are based on assumed conditions, not all the conditions that might affect PSE&G's ability to continue service.<sup>184</sup>

167. ConEd opposes PSE&G's requested clarification that the May 1978 amendment requires ConEd to pay additional compensation for upgrades to PSE&G's system to avoid outages. Concerning PSE&G's interpretation of the May 1978 amendment, ConEd says that the amendment permitted a change in the compensation paid by ConEd only if a joint study were performed prior to May 1, 1992. It says also that PSE&G's interpretation conflicts with the un-amended provisions of the 1975 contract.<sup>185</sup>

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<sup>182</sup> NYISO's Brief on Exceptions at 14-15.

<sup>183</sup> PSE&G's Brief on Exceptions at 29-30.

<sup>184</sup> ConEd's Brief Opposing Exceptions at 30-31.

<sup>185</sup> ConEd's Brief Opposing Exceptions at 29-30.

**c. Commission Response**

168. We clarify that NYISO and PJM are to be included in designing and performing the critical bulk facility outages studies and any revisions. We deny NYISO's requested clarification that the study results will dictate unambiguously how it and PJM must react to outages of critical bulk-power facilities. We find persuasive ConEd's argument that the hypothetical studies cannot take into account all conditions as they may actually occur at the time of an outage. The study results and subsequent updates are guidelines for the ISOs to consult if an actual critical bulk facility outage occurs. The ISOs must determine, under the conditions at that time, whether to curtail service under the two contracts. Historically, PSE&G has been able to serve firm load even when experiencing facility outages.

169. We decline to give an advisory opinion interpreting the two contracts' provisions concerning whether ConEd must provide PSE&G with additional compensation for the latter to upgrade its critical bulk facilities to avoid outages. We will rule on this issue if the parties bring before us a real dispute that they cannot resolve.

**14. Other Issues**

**a. Participants to Develop Protocols**

170. Both Trial Staff and Arthur Kill Power request inclusion in developing the operating protocols.<sup>186</sup> NYISO opposes their inclusion. It says that Trial Staff is not a party to the contracts and does not have expert knowledge that would assist the ISOs in their resolution of operational and technical issues. Development of the operating protocols will not involve policy and legal issues and will not have a public interest component. Because the operating protocols will be filed under section 205 of the FPA, all interested entities will have the right to review them and any related proposed tariff amendments. At that time, Arthur Kill Power, like other stakeholders, can protect its interests. PJM raises similar objections.

171. We agree with the ISOs that Trial Staff's and Arthur Kill Power's mandatory participation is unnecessary for development of the forthcoming operating protocols.

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<sup>186</sup> Trial Staff's Brief on Exceptions at 13; Arthur Kill Power's Brief on Exceptions at 48.

**b. Permanent Institutions**

172. NYISO objects to the Presiding Judge's recommendation that utilities and ISOs develop permanent institutions to resolve conflicts between utilities that are members of different ISOs and must do business with each other. NYISO says such institutions would be redundant and would unnecessarily duplicate established Commission procedures as well as existing inter-ISO seams arrangements. The Presiding Judge's recommendation was just that, a recommendation; we need not rule on it.

**C. Spare Transformer and Good Utility Practice**

**1. Background**

173. A transformer is essential to interconnect PSE&G's and ConEd's systems because PSE&G's system operates at 230 kV, while ConEd's system operates at 345 kV. In the 1975 contract, PSE&G agreed to provide a transformer at Hudson. In the 1978 contract, PSE&G agreed to provide two new transformers at Hudson, for the B and C Feeders, one of which would replace the existing transformer that would be kept as a spare.

174. In September 1999, the B Feeder transformer failed. The spare transformer replacing it failed two months later. The B Feeder was out of service until May 2001, during which time power transfers under the contracts were substantially reduced. ConEd faulted PSE&G on two counts. PSE&G took too long to install a working transformer at Hudson for the B Feeder, and it refused to replace the spare transformer, as the 1975 contract required. PSE&G responded that it had acted in a prudent and timely manner to install a working transformer, and that the 1978 amendment to the 1975 contract eliminated the obligation for PSE&G to provide a spare transformer. PSE&G responded further that the dispute is really over who should pay for a spare transformer, a dispute that should be resolved by arbitration, as provided in the 1975 contract.

175. During Phase I, the parties asked the Commission to decide whether the two contracts obligated PSE&G to maintain a spare transformer. In the Phase I Initial Decision, the Presiding Judge determined that the two contracts do not expressly require PSE&G to keep a spare transformer on hand at all times.<sup>187</sup> He found also that ConEd had not provided persuasive evidence that PSE&G's refusal to provide a spare transformer available violated "good utility practice."<sup>188</sup>

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<sup>187</sup> Initial Decision I at P 71.

<sup>188</sup> Initial Decision I at P 73.

176. In the Phase I Order, the Commission deferred until Phase II its final determination of whether the two contracts or good utility practice require PSE&G to maintain a spare transformer. It instructed the parties to address during Phase II whether there are alternatives to maintaining a spare transformer, consistent with the Commission's finding that the contract service must be supported by actions providing essentially firm service and taking into consideration, within the meaning of good utility practice, the principles of reliability and reasonable cost.<sup>189</sup> The Presiding Judge interpreted this charge as covering an additional question, whether PSE&G had followed good utility practice and had responded in timely fashion to the failure of the B Feeder transformer.

## **2. Good Utility Practice and Restoration of Service**

177. The Presiding Judge defined good utility practice by reference to Order No. 888, which mirrors the 1996 definition published by the Institute of Electrical and Electronic Engineers Power Engineering Society.<sup>190</sup> He concluded that ConEd had not carried its burden of showing that PSE&G had violated good utility practice in responding to the failure of the B Feeder transformer. His conclusion relied first on the absence of a standard in the regional reliability group to which PSE&G belongs for length of time to restore service on facilities that interconnect utilities. Second, he relied on Trial Staff's witness who testified that PSE&G had not delayed unduly in ordering the replacement transformer and had acted in conformance with good utility practice.<sup>191</sup>

178. The only party to comment on the Presiding Judge's conclusion was Trial Staff who concurred with the Presiding Judge's conclusion. We agree with the Presiding Judge's analysis. We will affirm his conclusion that PSE&G did not violate good utility practice when responding to failure of the primary transformer for the B Feeder.

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<sup>189</sup> Phase I Order at P 51 & 71.

<sup>190</sup> Initial Decision at P B-9, *citing* Order No. 888, FERC Stats & Regs. ¶ 31,036 at 31,931.

<sup>191</sup> Initial Decision at P B-12 & 13.

### 3. Good Utility Practice and Spare Transformer

#### a. Initial Decision

179. After discussing whether good utility practice requires PSE&G to keep a spare transformer available for Hudson, and what are reasonable means of ensuring service either with or without a transformer, the Presiding Judge concluded that PSE&G must make a spare transformer available at Hudson as a matter of good utility practice.<sup>192</sup>

180. The Presiding Judge said that it is a judgment call whether general utility standards or PSE&G's standards require a spare transformer to be available at Hudson. He found persuasive the events between September 1999 and November 2002, when PSE&G took 21 months to restore service over the B Feeder and during which time contract service to ConEd was curtailed. He found unpersuasive PSE&G's argument that good utility practice does not require a spare transformer at Hudson because the system can provide long-term tolerance for the transformer's loss while a replacement is ordered and delivered. He disagreed with PSE&G's assertion that only two of the three feeders are needed to carry the firm contract service to which ConEd is entitled. He found that PSE&G based this assertion on the mistaken view that the 400 MW delivery under the 1975 contract is not firm service. He disagreed with PSE&G's argument that running both the B and C Feeders from a single transformer is feasible, and its proposal to move an in-service transformer from Waldwick to Hudson. PSE&G has not established to anyone's satisfaction that using only one transformer at the B and C Feeders is feasible; ConEd had refused to approve such a solution during the 21-month outage, when it was desperate for service. Moving a transformer from Waldwick is of doubtful feasibility because PSE&G has not tried to move one or studied doing so. Also, the railroad facilities used to get equipment to Waldwick are no longer available. Lastly, PSE&G had never considered moving a Waldwick transformer during the 21-month outage.<sup>193</sup>

181. The Presiding Judge rejected PSE&G's proposal that requires ConEd to choose between installing a spare transformer at Hudson at its expense or other economic solutions, such as paying for redispatch. He concluded that the two contracts make PSE&G responsible for acquiring and maintaining the transmission facilities needed to transfer the power to ConEd. Under the contracts, ConEd already pays PSE&G for its share of PSE&G's incremental costs, and should not be required to pay a second time for the same service.<sup>194</sup>

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<sup>192</sup> Initial Decision at P B-15 and Ordering Paragraph (C).

<sup>193</sup> Initial Decision at P B-15 – B-16.

<sup>194</sup> Initial Decision at P B-17.

182. The Presiding Judge suggested that PSE&G pursue ConEd's offer to make available, as a spare transformer for Hudson, the spare transformer that ConEd bought for the A Feeder. This transformer is from the same manufacturer as the current replacement transformer at Hudson and, according to ConEd, could be modified to serve at Hudson.<sup>195</sup>

**b. Parties' Positions**

183. PSE&G states that ConEd failed to carry its burden of showing that good utility practice requires a spare transformer at Hudson. It points out that Con Ed did not introduce evidence that either PJM or the Mid-Atlantic Area Council, PSE&G's regional reliability council, would so require. PSE&G says that because each of the A, B and C Feeders is rated at 500 MW, only two feeders are needed to re-deliver the contract power to ConEd, provided that ConEd does not impair PSE&G's ability to use both feeders' capacity. Only one transformer at Hudson is feasible because the B and C Feeders can be paralleled to one transformer; ConEd's resistance to this approach during the 21-month outage does not mean that this approach is contrary to good utility practice. PSE&G insists that moving one of the three Waldwick transformers to replace a failed transformer at Hudson on an interim basis would take the same time as moving a spare transformer stored on site because most of the difficulty of moving a transformer is within the station. Similarly, modification of ConEd's spare transformer, located in New York City, for use at Hudson would present the same transportation difficulties as moving a PSE&G transformer from Waldwick.

184. ConEd states that PSE&G's own standards state that the risk of operating a part of the transmission system without a spare transformer is unacceptable, and that a no-spare policy should be applied only where the system can provide a long-term tolerance for the loss of the transformer while awaiting a replacement. ConEd says that PSE&G was reluctant to shift a Waldwick transformer to Hudson during the 21-month outage because of adverse reliability effect on PSE&G's own system. ConEd says that PSE&G's reliance on only two of the three feeders for delivering the contract power is contradicted by experience, which shows that full service cannot be maintained without all three feeders. Moreover, the power to be delivered under the 400 MW contract, except for the

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<sup>195</sup> Initial Decision at P B-18 and Ordering Paragraph (C).

ConEd stated that it purchased a spare transformer, in June 2000, for two reasons. The transformer would back up the A Feeder's primary transformer, at Goethals. Also, because of PSE&G's inaction during B Feeder outage, this transformer could be modified for use at Hudson to back up PSE&G's primary transformers there. ConEd stated that PSE&G finds fault with this solution, but that ConEd remains willing to pursue the shared transformer arrangement. ConEd's April 14, 2003 Initial Brief at 65.

need to redispatch, is for firm service and cannot be reduced. Use of all three feeders for open access service will increase the number of customers seeking to use these feeders, customers who would be affected by lack of a spare transformer. Connecting the B and C Feeders in parallel when a transformer fails gives less capacity than restoring a failed transformer. It is also an unreliable solution because a single event on PSE&G's system could open the ring busses or circuits at Farragut.

185. Trial Staff states that the Waldwick transformer is an appropriate spare for Hudson. It discourages use of ConEd's spare transformer bought for the A Feeder. This transformer is too big and does not duplicate the specifications of the B transformer, and such use would leave ConEd vulnerable at its weakest point, the A Feeder.

### c. Commission Response

186. We agree with the Presiding Judge that good utility practice requires a working spare transformer for use at Hudson for the A, B and C Feeders. Our conclusion derives primarily from the Presiding Judge's finding, which we affirm, that PSE&G did not violate good utility practice or act imprudently when dealing with the failures of the primary and back-up transformers on the B Feeder. A period of 21 months to replace a failed transformer on a 500 MW tieline serving the New York City load pocket is within good utility practice only when there is a spare transformer to protect that service during the outage. The second reason for our conclusion is that, when faced with the long outage, PSE&G declined to move one of its Waldwick transformers to Hudson to enable transmission over the B Feeder. Additionally, our decision that the A, B and C Feeders must be available to third parties for OATT service as well as to ConEd for the contract service increases the need for a spare transformer to maintain the continuing availability of all these feeders.

## 4. Contract Provisions and the Spare Transformer

187. The 1975 (400 MW) contract provides, at section 1.1: "PS shall construct and make available to Con Edison the portions of the Hudson-Farragut interconnection described in Schedule I." Schedule I provides, "Public Service Electric and Gas Company (PS) shall construct and make available the following facilities: . . . Hudson Switching Station Terminal facilities . . . consisting principally of . . . a 500-mva [megavolt-ampere]-345/230-kv [kilovolt] autotransformer equipped with tap changing under load." Section 2.3 provides, "PS shall own, operate and maintain the facilities described in Schedules I and III."

188. The 1978 (600 MW) contract provides, at section I.B.1.b, "PS will construct or cause to be constructed: . . . Two 345/230-kv autotransformers . . . at Hudson Generating Station, one for replacing the autotransformer in the existing Hudson-Farragut interconnection, which will be retained as a non-operating spare."

189. The Presiding Judge did not revisit in this proceeding his earlier conclusion that the 1975 and 1978 contracts do not require PSE&G to provide a spare transformer to support contract service.<sup>196</sup>

**a. Parties' Positions**

190. ConEd argues that section 6.4 of the 1975 contract, entitled "Catastrophe or Condemnation," applies to provision of a spare transformer at Hudson because the spare transformer is among the interconnection facilities at Hudson that the 1975 contract required PSE&G to provide, and section I.B.1.b of the 1978 contract requires its retention as a spare. Section 6.4 of the 1975 contract provides:

If all, or a material part, of any of the facilities of each interconnection should be destroyed or damaged to such a degree that one or both interconnections are no longer useful, or condemned, or if less than a material part shall be destroyed, damaged or condemned, the proceeds of any insurance or any condemnation award shall be payable to the party or parties in whom title exists, and the party or parties shall repair, restore, or reconstruct the damaged, destroyed, or condemned facilities in such a manner as to restore the facilities to substantially the same general character or use as the original interconnection or to such other character or use as the parties may then mutually agree.

ConEd says that this section does not distinguish between operating facilities and spare facilities. It argues that section 6.7 of the 1975 contract requires both parties to insure or self-insure their own facilities,<sup>197</sup> and that its annual payments to PSE&G under that contract are fixed, so that it should not be obliged to pay further.<sup>198</sup>

191. PSE&G's position is that only section I.B.1.b of the 1978 contract governs its responsibility for a spare transformer. It argues that this section requires PSE&G to keep only the replaced original transformer as a spare and does not require, if the replaced transformer is no longer usable, that PSE&G must obtain a different transformer to be available as a spare. PSE&G maintains that it fulfilled the section's requirement by

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<sup>196</sup> See Phase I Initial Decision at P 74 and Ordering Paragraph (B).

<sup>197</sup> The section also provides for each party to determine the kind and amount of insurance required to protect its interests in the performance of the functions required under the contract.

<sup>198</sup> ConEd's Brief Opposing Exceptions at 26-28.

maintaining the original transformer until it became unusable. PSE&G says that section 6.4 of the 1975 contract, which ConEd cites, applies only if a catastrophe or condemnation has occurred, which has not happened here. Moreover, once the transformer became a spare transformer, it was no longer among the facilities of each interconnection to which section 6.4 applies. PSE&G characterizes the dispute over the spare transformer as an ordinary commercial dispute over who is responsible for the cost of a new spare transformer under the 1975 contract. Because this contract provides, at section 6.10, for disputes to be submitted to arbitration, the Commission should not address ConEd's claim of a new transformer, but should require ConEd to arbitrate the claim.

192. PSE&G argues that if the Commission finds that good utility practice requires the provision of a spare transformer at Hudson, under the two contracts, ConEd must compensate PSE&G for the expense of a spare transformer. A spare transformer would be an addition to the contract facilities. Section 6.2 of the 1975 contract requires each party to make additions at its own expense. Section II.B of the 1978 contract provides for ConEd to pay monthly charges on plant investment plus subsequent additions approved by both parties. PSE&G says that ConEd's contract payments are for the 538 MVA<sup>199</sup> transformer that became surplus when replaced by the larger 750 MVA transformers of the 1978 contract. If ConEd now wants a larger transformer, it should pay for it. Also, ConEd should pay for modifying the transformer that it offered to PSE&G.<sup>200</sup>

#### **b. Commission Response**

193. In the Phase I Order, the Commission found that additional contract provisions may bear on the issue of the spare transformer. It cited: section 7 of the 1978 amendment, executed in contemplation of the 1978 contract, where the parties described which facilities should be deleted from schedule I of the 1975 contract, and did not mention the original transformer that had become the spare; section 8 of the 1978 amendment, which provided for continuation of the provisions of the 1975 contract not expressly amended; and section 6.2(a) of the 1975 contract, which discusses replacements that either party thinks appropriate, leaving payment for such equipment to the parties' mutual agreement.<sup>201</sup>

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<sup>199</sup> MVA refers to a transformer's rating. Mathematically, it is a function of capacity, measured by MW, and reactive power measured by megavolt-ampere reactive (MVAR). MVA squared equals the sum of the squares of MW and MVAR.

<sup>200</sup> PSE&G's Brief on Exceptions at 25-28.

<sup>201</sup> December 2002 Order at P 49.

194. After careful study of the two contracts, we find that when the parties executed the 1978 contract, they contemplated that a spare transformer, which logically must be in working condition, would be among the facilities that PSE&G would provide for prompt use at Hudson. We examined also the Joint Report prepared by ConEd and PSE&G,<sup>202</sup> which preceded execution of the 1978 contract. The opening paragraph of the 1978 contract refers to the Joint Report and to its conclusion that capital savings can be effected through adoption of a joint transmission development for 600 MW. The Joint Report describes how ConEd considered installing a 600 MW tie between Ramapo and New York City, and how discussion led the two utilities to determine that integrated PSE&G/ConEd plans would be alternatives to providing the desired deliveries and would be the full functional equivalent of the Ramapo-New York City tieline.<sup>203</sup> The Joint Report states also that the utilities tested their plans by simulated wheeling, primarily via the northern PSE&G system and the Ramapo-Waldwick and Hudson-New York City interconnections (the B Feeder) with no substantial flow placed on the Linden-Goethals interconnection (the A Feeder), although the utilities contemplated reasonable use of this interconnection for day-to-day operating flexibilities.<sup>204</sup> Thus, the parties intended in executing the 1978 contract that the B and C Feeders be the principal pathway for the contract's 600 MW transfer. We see, therefore, the significance in the 1978 contract of providing a spare transformer at Hudson.

195. We reject PSE&G's contention that the 1978 contract assigned it the responsibility for a spare transformer only until the replaced transformer was no longer usable. PSE&G's contention disagrees with the Joint Report's conclusion that the integrated PSE&G/ConEd plans should be the full functional equivalent of a Ramapo-New York City tieline and its expectation that the power transfer would use primarily the B and C Feeders. We find that the full functional equivalent of a tieline means that the joint transmission development would have the same reliability as a tieline. A non-working transformer is useless. Clearly, the parties intended the spare transformer to be able to function when called into service. We conclude that the utilities intended, in the 1978 contract, that PSE&G would continue to provide a functioning spare transformer for use at Hudson to protect the reliability of the 600 MW transfer, and that ConEd's ongoing payments to PSE&G would be sufficient compensation for all contract requirements, including the continued provision and maintenance of a spare transformer.

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<sup>202</sup> See note 6, *supra*.

<sup>203</sup> Joint Report at 8.

<sup>204</sup> Joint Report at 10.

196. We note that the heading of section I of the 1978 contract, in which retention of the replaced Hudson transformer as a non-operating spare is discussed, is “Facilities to be Provided.”<sup>205</sup> This supports our conclusion that the parties intended that a spare transformer always be among the facilities of the Hudson-Farragut interconnection. We reject PSE&G’s argument that by becoming a spare, the transformer lost its characterization as an interconnection facility.

197. To determine who should bear the costs of replacing the failed spare transformer and the replacement transformer’s specifications, we look to the 1975 contract. Section 6.2(b) applies to replacements required by lawful requirement of any administrative body, such as the replacement that we require. This subsection states, “Payment for any capital improvements, betterments, replacements, reinforcements or additions to the facilities shall be determined by mutual agreement of the parties. For the purposes of this Section, the terms . . . replacements . . . shall include all capital expenditures *other than those required to substantially maintain the facilities’ original capacity and operating efficiency* (emphasis added).” The replacement transformer that we require is one that substantially maintains the original capacity and operating efficiency of the facilities at Hudson. Therefore, payment for it is not determined by mutual agreement of the parties.

198. PSE&G states that it installed a 538 MVA transformer, which was superior to the 500 MVA transformer required by the 1975 contract. PSE&G states also that ConEd wants the replacement spare transformer to have the reliability associated with a 750 MW transformer.<sup>206</sup> Following the rule of the parties’ course of conduct, we will require PSE&G to obtain and install at Hudson a transformer with specifications that equate to those of the 538 MVA transformer actually installed under the 1975 contract. We find that the incremental costs of a superior replacement transformer, if that is what the parties decide is the better course, shall be determined by the mutual agreement of the parties. If the parties cannot agree on division of those incremental costs, we direct them to follow the arbitration provisions of section 6.10 of the 1975 contract. We will affirm the Presiding Judge’s alternative, which permits PSE&G to fulfill its obligation to provide a spare transformer for Hudson by installing the spare transformer that ConEd purchased for Goethals, but only if that is what both parties now wish to do.

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<sup>205</sup> Section I.B.1.b of the 1978 contract.

<sup>206</sup> PSE&G’s Brief on Exceptions at 28.

## **D. Market Power**

199. ConEd's complaint alleged that PSE&G has market power and that it has abused that power. In the Hearing Order, the Commission found that ConEd had not demonstrated such abuse. Nevertheless, the Commission said that ConEd could pursue this matter at hearing if it could develop and support a reasonably precise and plausible scenario describing the conduct of PSE&G and its affiliates, how that conduct violated Commission rules, and how PSE&G unfairly benefited.<sup>207</sup>

200. The Initial Decision divided ConEd's allegations into three separate questions: Does PSE&G have market power? If PSE&G has market power, has it, by its performance under the contracts or by curtailment of such performance, abused its market power and thereby improperly enriched itself or its affiliates? Should the operating protocols address gaming associated with the scheduling of service under the agreements, and, if so, how should it be addressed; are market monitoring and potential market power mitigation measures required?<sup>208</sup>

### **1. Possession and Abuse of Market Power**

#### **a. Initial Decision**

201. The Presiding Judge described the source of ConEd's allegations that PSE&G has and abuses market power as the purchases, by a PSE&G trading affiliate, of Transmission Congestion Contracts (TCCs) on NYISO's market.<sup>209</sup> Some of these TCCs pertained to firm transmission in the corridor that includes the Dunwoodie Interchange and New York City. ConEd alleged that PSE&G's control over the transfer of ConEd's daily entitlement of 1,000 MW, via the A, B and C Feeders, coupled with the PSE&G affiliate's ownership of TCCs for a critical transmission corridor serving New York City, gave PSE&G the means and the motive to exercise market power and enrich itself. Curtailed transfers under the two contracts would enhance the value of these TCCs.

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<sup>207</sup> Hearing Order, 99 FERC at 61,125.

<sup>208</sup> Initial Decision at P 64.

<sup>209</sup> TCCs are financial instruments that consist of the financial right to congestion costs and revenues between two points in the NYISO grid. TCCs are thus a hedge against transmission congestion, and act like financial transmission rights on the PJM system.

ConEd posited that the ability of any service provider into a load pocket to withhold 1,000 MW without incurring any direct financial penalty demonstrates that such a party has market power.<sup>210</sup>

202. The Presiding Judge disagreed with ConEd on the basis of three findings. First, he found that if PSE&G withholds service and fails to live up to its contractual obligation to provide the service, it is subject to suit in which a judgment will be rendered in ConEd's favor. Second, he found that the Commission has jurisdiction over PSE&G's performance of transactions in the transmission of electricity in interstate commerce, as demonstrated by this proceeding. Third, as PJM has pointed out, PJM and NYISO are taking over responsibility for operating the transmission systems in a manner designed to ensure that ConEd receives its entitled service. PJM, not PSE&G, will determine whether to agree to ConEd's requests for PAR adjustments that largely control the extent to which power flows through the PSE&G system and over the three feeders to New York City. Additionally, the Presiding Judge pointed out that PSE&G has never withheld 1,000 MW of service to ConEd.<sup>211</sup>

203. The Presiding Judge therefore concluded that ConEd failed to establish that PSE&G has "invidious" market power. Because PSE&G could not abuse market power that it did not have, he concluded that PSE&G has not abused such market power. He found that the occurrence of curtailment, from time to time, does not demonstrate that its cause was PSE&G's desire to profit in transmission-cost hedges. ConEd offered only suspicions, which are insufficient to support the charge that market power abuse has taken place.<sup>212</sup>

204. The Presiding Judge advised PSE&G to "avoid fishing in troubled waters," and recommended that its affiliate not speculate in NYISO's TCCs. He observed that because NYISO posts trades in TCCs on its OASIS or web site, ConEd can ascertain when PSE&G seems to be acquiring TCCs without any corresponding obligation to serve load in NYISO.<sup>213</sup>

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<sup>210</sup> Initial Decision at P 64-66, *citing* ConEd's April 16, 2003 Initial Brief at 65.

<sup>211</sup> Initial Decision at P 66.

<sup>212</sup> Initial Decision at P 67.

<sup>213</sup> Initial Decision at P 68.

**b. Parties' Positions**

205. PSE&G objects to the Presiding Judge's recommendation that its affiliate refrain from purchasing or trading in TCCs to avoid suspicion. PSE&G states that nothing in Commission policy precludes any interested party from participating in TCCs or equivalent financial transmission rights, whether or not the party is affiliated with a transmission owner. Such preclusion would dampen the liquidity of these markets, and self-imposed restraints are not compatible with the deregulated and increasingly competitive wholesale electric markets that the Commission fosters.<sup>214</sup>

206. ConEd calls groundless PSE&G's arguments about dampened competition if its affiliate is precluded from participating in TCCs.<sup>215</sup>

207. Trial Staff points out that ConEd presented neither factual evidence to support its allegations, nor citation to an authority on market power supporting its statement that the ability of a service provider into a load pocket to withhold 1,000 MW without incurring any direct financial penalty shows market power.<sup>216</sup>

**c. Commission Response**

208. We conclude that PSE&G has not been shown to have exercised market power, even if it had such power. We agree with the Presiding Judge that ConEd did not support its allegations and that occasional curtailments do not demonstrate PSE&G's intent to profit from its affiliate's transmission cost hedges. The Presiding Judge's recommendation that PSE&G's affiliate should cease trading in TCCs or their equivalents in the New York City area was just that, a recommendation, not a requirement. We need not address this issue.

**2. Gaming and Market Monitoring**

**a. Initial Decision**

209. The Presiding Judge explains that PSE&G and PJM had been concerned with the possibility of gaming because the transfer under the two contracts would be included in the day-ahead scheduling process without agreement on a protocol for gauging that the

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<sup>214</sup> PSE&G's Brief on Exceptions at 30-31.

<sup>215</sup> ConEd's Brief Opposing Exceptions at 28.

<sup>216</sup> Trial Staff's Brief Opposing Exceptions at 32-33.

transfer was performed in real time. However, PJM later said that its gaming concerns are moot because the parties have agreed that the ISOs will administer the wheel in real time. PJM and PSE&G asked that the operating protocols include provisions to guard against gaming.

210. The Presiding Judge observed that PJM's objective of achieving a rational relationship between the demands of day-ahead scheduling and ConEd's claimed contractual right to vary the extent of the wheel in real time is satisfied by the requirement that ConEd schedule its service under the two contracts on a day-ahead basis, like all other transmission customers of PJM and NYISO.<sup>217</sup>

211. The Presiding Judge recommended that, at least on an interim basis, the Commission include in the operating protocols authorization for the market monitoring units of both ISOs to conduct such investigations as may be necessary, including investigations into activities outside the region of the ISO to which each market monitoring unit belongs, to ensure that gaming, abuse of market power, or similar activities do not take place. He recommended that the exact parameters of the market monitors' authority, to the extent they are not already controlled by NYISO's and PJM's charters, be spelled out in the operating protocols.<sup>218</sup> He recommended also amendment of the ISOs' OATTs to authorize their market monitoring units to monitor and investigate PSE&G's and ConEd's activities with respect to actions taken under the two contracts to ensure that there are no market power abuses.<sup>219</sup>

**b. Parties' Positions**

212. No party objected to the Presiding Judge's recommendation that NYISO's and PJM's market monitoring units investigate, as necessary, actions by ConEd and PSE&G under the two contracts that might indicate an abuse of market power.

213. PJM, however, states that the Initial Decision's discussion describes too broadly the investigations that the ISOs' market monitoring units should conduct, while Ordering Paragraph (F) restricts the market monitoring units to monitoring the activities of PSE&G and ConEd to ensure that there are no market power abuses only with respect to actions

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<sup>217</sup> Initial Decision at P 69.

<sup>218</sup> Initial Decision at P 71.

<sup>219</sup> Initial Decision at Ordering Paragraph (F).

taken under the two contracts. PJM asks the Commission to clarify that it intends the narrower scope of the ordering paragraph, and that any extra-territorial investigations should be conducted jointly, with the “host” market monitoring unit involved as well.<sup>220</sup>

214. ConEd states that PSE&G is uniquely situated and that no other TCC market participant has been found to have curtailed transmission service affecting that market in violation of contractual obligations. This underscores the need for vigilant efforts by the PJM and NYISO market monitoring units to monitor actions taken in the one control area that might affect market operation in the other control area.<sup>221</sup>

**c. Commission Response**

215. We find that the forthcoming operating protocols should include authorization for the market monitoring units of PJM and NYISO to conduct such investigations as may be necessary to ensure that gaming, abuse of market power, or similar activities do not take place with regard to power transfers under the two contracts. We clarify that such investigations by one market monitoring unit that go into the region of the other ISO should be undertaken jointly with the other market monitoring unit. We already have required that the forthcoming operating protocols be filed with the Commission under section 205 of the FPA. We direct NYISO and PJM to review their respective tariffs to determine whether these documents already authorize their market monitoring units to pursue the investigations required by this order. If they do, NYISO and PJM should so certify in a filing made within 30 days of the date of this order. If these documents need amendment to enable the market monitoring units to carry out their added responsibilities, NYISO and PJM are to file such amendments within 30 days of the date of this order.

**E. Reporting Requirements**

216. We affirm the Initial Decision’s directive at Ordering Paragraph (A) requiring ConEd, PSE&G, NYISO and PJM to report to him at 30-day intervals their progress in drafting the forthcoming operating protocols. Because this dispute over power transfers would not have been brought before us but for the seam between NYISO and PJM, and because of our strong interest in eliminating seams issues, we will impose an additional reporting requirement. Within 90 days of the date of this order, these parties are to file their operating protocols. If there are outstanding issues, the parties are to explain why they have been unable to resolve them.

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<sup>220</sup> PJM’s Brief on Exceptions at 21.

<sup>221</sup> ConEd’s Brief Opposing Exceptions at 28.

The Commission orders:

(A) The Initial Decision is hereby affirmed in part and modified in part, as discussed in the body of this order.

(B) NYISO and PJM are hereby directed to file either their certifications or their tariff amendments, as discussed in the body of this order, within 30 days of the date of this order.

(C) NYISO, PJM, ConEd and PSE&G are hereby directed to file their operating protocols for power transfers under the two contracts, as discussed in the body of this order, within 90 days of the date of this order.

By the Commission.

( S E A L )

Linda Mitry,  
Acting Secretary.