UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;

Nora Mead Brownell, and Suedeen G. Kelly.

Northern Indiana Public Service Co.

Docket No. EL05-103-000

v.

Midwest Independent Transmission System Operator, Inc. and PJM Interconnection, L.L.C.

ORDER DISMISSING COMPLAINT

(Issued April 21, 2006)

1. We return to a complaint (Complaint) by Northern Indiana Public Service Company (Northern Indiana), filed on May 2, 2005, under sections 206 and 306 of the Federal Power Act, against the regional transmission organizations (RTOs), Midwest Independent Transmission System Operator, Inc. (Midwest ISO) and PJM Interconnection, L.L.C. (PJM). Northern Indiana complained that the two RTOs were inadequately addressing transmission problems on Northern Indiana's system. Northern Indiana ascribes these problems to parallel flows caused by west-to-east transmission from PJM's western area served by Commonwealth Edison Company and Commonwealth Edison Company of Indiana (ComEd)² (ComEd Zone) to PJM's eastern portion (PJM-East). The Commission directed Midwest ISO and PJM, which had already undertaken to study Northern Indiana's transmission problems, to file interim reports on their study and their final conclusions and recommendations. The Commission left open

¹ 16 U.S.C. §§ 824e and 825e (2000).

² ComEd is a wholly-owned subsidiary of Exelon Corporation (Exelon), which also owns PECO Energy, in Pennsylvania.

³ Northern Indiana Public Service Co. v. Midwest Independent Transmission System Operator, Inc. and PJM Interconnection, L.L.C., 111 FERC ¶ 61,474 at P 23-28 (2005) (2005 Order).

the option that, after evaluating the information in these reports, it would issue a substantive order on the Complaint and address changes to the RTO's procedures and joint operations.⁴ For the reasons discussed below, we will dismiss the Complaint.

Background

2. In 2002, the Commission conditionally accepted the choices of ComEd and American Electric Power Service Corporation (AEP), on behalf of certain of its operating company affiliates, ⁵ to join PJM. ⁶ The Commission found that the proposed choices resulted in irregular configurations of Midwest ISO's and PJM's footprints and potential seams issues. However, it found that with certain conditions to address and mitigate the impact of the resultant RTO configurations, accepting these utilities' choices to join PJM would be consistent with the RTO scope and configuration requirements of Order No. 2000. ⁷ Among these conditions, the Commission required the two RTOs to establish a joint operational agreement to provide for efficient management of the Midwest ISO-PJM seams. ⁸

⁴ *Id.* at P 29.

⁵ Appalachian Power Company, Columbus Southern Power Company, Indiana Michigan Power Company, Kentucky Power Company, Kingsport Power Company, Ohio Power Company, and Wheeling Power Company.

⁶ See Alliance Cos., 100 FERC ¶ 61,137 (2002), order on clarification, 102 FERC ¶ 61,214, order on reh'g and clarification, 103 FERC ¶ 61,274, order denying reh'g and granting clarification, 105 FERC ¶ 61,215 (2003), appeal docketed sub nom. American Electric Power Service Corp. v. FERC, No. 03-1223 (D.C. Cir. August 1, 2003) (Alliance). AEP, ComEd, and Northern Indiana were previously members of the proposed but rejected Alliance RTO. Northern Indiana chose to join Midwest ISO.

⁷ 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 (2000), aff'd sub nom. Public Utility District No. 1 of Snohomish County, Washington v. FERC, 272 F.3d. 607 (D.C. Cir. 2001).

⁸ See Alliance, 100 FERC ¶ 61,137 at P 40, 48, 53.

- 3. The RTOs negotiated a Joint Operating Agreement (JOA), which the Commission accepted on March 18, 2004. The JOA became effective on May 1, 2004, as did ComEd's joining PJM. AEP joined PJM on October 1, 2004.
- 4. The JOA was implemented in phases. Phase 1, the market-to-non-market phase, commenced upon ComEd's integration into PJM. During Phase 1, the JOA provisions for inter-RTO coordination reflected that PJM operated a market based on locational marginal prices (LMP) while Midwest ISO did not operate a market. On March 3, 2005, the Commission accepted amendments to the JOA to establish the protocols by which the RTOs would jointly coordinate the operation of their respective markets, beginning April 1, 2005, when Midwest ISO would commence operation of its LMP-based market (Phase 2 or the market-to-market phase). The RTOs' additional cooperative measures in Phase 2 include consistency in calculating LMP at coordinated flowgates and the RTOs' interfaces with each other, and coordinated generation redispatch to manage congestion on coordinated flowgates. ¹²
- 5. Northern Indiana explains that its service territory lies between the service territories of ComEd and an AEP operating company, and that its transmission system and those companies' transmission systems are substantially interconnected at the Midwest ISO PJM seams. Northern Indiana states that its transmission system consists of 138 kV and 345 kV lines, while the lines owned by ComEd and AEP that traverse Northern Indiana's service territory are 345 kV and 765 kV lines. Northern Indiana continues that the low impedance of its lower voltage lines, combined with proximity to these higher voltage third-party lines with large west-to-east flows results in considerable unscheduled power flows (parallel flows or loop flows) onto its transmission system.

⁹ Midwest Independent Transmission System Operator, Inc. and PJM Interconnection, L.L.C., 106 FERC ¶ 61,251, order on reh'g and clarification, 108 FERC ¶ 61,143, order on clarification and denying reh'g, 109 FERC ¶ 61,166 (2004).

 $^{^{10}}$ See PJM Interconnection, L.L.C., 106 FERC \S 61,253, order accepting compliance filing and conditionally accepting service agreement, 107 FERC \P 61,087, order on reh'g, 109 FERC \S 61,094 (2004).

 $^{^{11}}$ See PJM Interconnection, L.L.C., 108 FERC \P 61,318 (2004), reh'g denied, 110 FERC \P 61,395 (2005). See also PJM Interconnection, L.L.C., 108 FERC \P 61,317, clarification granted, 109 FERC \P 61,311 (2004).

¹² See Midwest Independent Transmission System Operator, Inc. and PJM Interconnection, L.L.C., 110 FERC ¶ 61,226 (2005). See also Midwest Independent Transmission System Operator, Inc. and PJM Interconnection, L.L.C., 112 FERC ¶ 61,029 (2005).

- 6. In its Complaint, Northern Indiana states that, during the period between May 1, 2004, and September 30, 2004, a period when ComEd had joined PJM but not AEP, Northern Indiana experienced some intermittent increases in unscheduled west-to-east load flows, usually during off-peak hours, and that occasionally Midwest ISO declared Transmission Loading Relief (TLR) procedures on the Northern Indiana system. However, Northern Indiana continues, after AEP joined PJM, on October 1, 2004, Midwest ISO declared more frequent and higher level TLRs. ¹³ Northern Indiana states that, nearly every day during the fall of 2004, Midwest ISO issued a TLR Level 3a¹⁴ or greater alert on the Northern Indiana system. These TLRs required Northern Indiana to back-off generation and purchase more expensive power from other sources to serve its load, to curtail non-firm transactions, to re-dispatch its generating units, to reconfigure its transmission system, and to make last minute cancellations of scheduled maintenance. Northern Indiana ascribes the worsening of its transmission problems to PJM now dispatching power from the base-loaded nuclear units within its ComEd Zone, PJM's lowest-cost, off-peak resources, largely over the Com-Ed – AEP transmission path, which increased parallel flows on the Northern Indiana system. 15
- 7. Between the April 1, 2005 commencement of the Midwest ISO Phase 2 market and April 25, 2005, a week before Northern Indiana filed its Complaint, Northern Indiana states that Midwest ISO issued a TLR Level 3a four times, despite a significant amount of nuclear generation in the ComEd Zone being out of service. In the Complaint, Northern Indiana stated that it and Midwest ISO had limited experience on which to base any conclusions regarding what effects, if any, the market-to-market Phase 2 would have on Northern Indiana's operational problems. Northern Indiana also stated that Midwest ISO and PJM had agreed to study the Northern Indiana transmission system to determine whether the Phase 2 market requires further changes to Midwest ISO and PJM operations, including flow entitlements, whether the RTOs have adequate models and understanding of those flows, and if changes need to be made to operating procedures. ¹⁶

¹³ For instance, on October 1, 2004, Northern Indiana experienced such serious operational problems that Midwest ISO declared a TLR Level 6, or system emergency procedures, that required Northern Indiana to curtail non-firm transactions, implement emergency redispatch of its generating units, and reconfigure a portion of its system.

¹⁴ TLR level 3a requires reallocation of transmission service by curtailing interchange transactions using non-firm point-to-point transmission service to allow interchange transactions using high-priority transmission service.

¹⁵ Complaint at 9-13.

¹⁶ Complaint at 14-15.

- 8. Northern Indiana asked the Commission: (1) to monitor and oversee the transmission study undertaken by Midwest ISO and PJM; (2) to amend the JOA to incorporate the remedial measures suggested by the transmission study as necessary for reliable and efficient operation of Northern Indiana's transmission system; and (3) in the event that the transmission study's recommendations do not suffice to ensure no adverse effects on Northern Indiana's transmission system, to require Midwest ISO and PJM to take the necessary steps to so ensure and to protect Northern Indiana from seams issues caused by ComEd and AEP joining PJM.
- 9. Answers by Midwest ISO and PJM demonstrated the RTOs' commitment to conduct the identified transmission study in which they would examine coordinated flowgate allocations, congestion management under the JOA, and the need for transmission expansions.
- 10. The Commission found the parties to be in substantial agreement that additional study and more information were required before any decision could be made about specific adjustments to address Northern Indiana's transmission problems. The Commission ordered Midwest ISO and PJM to file interim progress reports on July 15, August 15, and September 15, 2005. It required, by October 15, 2005, the filing of an assessment of the RTOs' coordinated congestion management, under Phase 2 of the JOA, with respect to the flowgates on the Northern Indiana system subject to reciprocal coordination. It ordered the RTOs to file, by December 31, 2005, the transmission study's final results and recommendations, with supporting data and recommended remedies, if warranted, including changes to the JOA.¹⁷
- 11. The RTOs filed their reports in timely fashion, including the final report, "Northern Indiana Transmission Study Final Report Completed by MISO and PJM January 2006" (Transmission Report). They supplemented the Transmission Report with an update containing specific recommendations, filed March 8, 2006 (Update). The major findings, conclusions, and recommendations of the Transmission Report and Update are:
 - (A) The source of Northern Indiana's problems is the increase in west-toeast power flows from the ComEd zone to PJM-East. Although the problem

 $^{^{17}}$ 2005 Order, 111 FERC ¶ 61,474 at P 23, 26-28. By notice of December 27, 2005, the due date for the final report was extended to January 17, 2006.

¹⁸ On January 31, 2006, the RTOs filed a redacted version with Critical Energy Infrastructure Information removed. *See* 18 C.F.R. § 388.112 (2005). Citations in this order refer to the redacted version.

existed prior to ComEd joining PJM, the flows increased after finalization of ComEd's and AEP's integration into PJM. ¹⁹

- (B) Midwest ISO and PJM studied time periods when the market-to-market process was utilized to control flows through the constrained Northern Indiana flowgate. Some of the time, the RTOs were able to effectively control flows on the flowgate through coordinated redispatch of generation available in their markets; some of the time they were unable to effectively control flow through such redispatch. The RTOs' ability to redispatch generators in order to relieve the constraint depends on a number of factors, including the amount of cost-effective generation actually available to redispatch, other system constraints that would appear as a result of the redispatch, and simultaneous actions that they would have to take to respond to other system conditions. The market-to-market process can manage constraint on the flowgate only when generation is effectively available in the markets for redispatch; when such generation is unavailable, other actions are needed to manage constraint on the flowgate.²⁰
- (C) When redispatch of generation in the markets does not relieve the Northern Indiana flowgates, the RTOs resort to additional TLR procedures, ²¹ including reconfiguration of Northern Indiana's transmission facilities by opening three specified 138 kV lines or Northern Indiana's Wolf Lake 138 Bus Tie. However, such actions degrade the reliability of Northern Indiana's transmission system by putting native load at risk for the next contingency. The RTOs agreed that the need to construct specified upgrades to the Northern Indiana transmission system would be triggered by the future occurrence of either of: (a) more than one required opening of the bus tie in any month, or any single operation required for 24 hours or more after implementing market-to-market procedures; or (b) any single instance requiring the opening of the three specified 138 kV lines. ²²

¹⁹ Transmission Report cover letter at 3.

²⁰ Transmission Report at 5-8.

²¹ When the Northern Indiana flowgate is constrained, Midwest ISO and PJM call a TLR Level 3 concurrently with using market-to-market redispatch if any third party interchange transactions originating and/or terminating outside the combined Midwest ISO-PJM market footprint, and using non-firm point-to-point service, have a more than five percent impact on the flowgate.

²² Transmission Report at 20-21.

- (D) Midwest ISO and PJM identified upgrade options that would increase the maximum transfer capability from ComEd to the remainder of PJM from 4002 MW, the maximum transfer capability found in the base case, to approximately 7,000 MW, the RTOs' assumed potentially desirable target for transfer capability. The specified upgrades are: (a) reconductoring Northern Indiana's State Line Wolf Lake Sheffield 138 kV lines and (b) upgrading the Current Transformers of the Dune Acres Michigan City 138 kV Circuits. Together, these upgrades will increase transfer capability to approximately 6,300 MW at an estimated cost of \$1,178,000.
- (E) Midwest ISO and PJM recommend that the cost for constructing these upgrades be allocated between Midwest ISO and PJM based on the relative contribution of the load of each of the combined RTOs to loading on the selected upgrade facilities. Using this methodology, the RTOs state that they will calculate the cost allocation within 30 days of an operational event triggering the upgrades.²⁵
- 12. Midwest ISO and PJM state that the Transmission Report's cost allocation methodology was completed outside of the stakeholder process to specifically address the identified operational performance issue, and that this was necessary because of the timing of the response required by the Commission. ²⁶
- 13. In support of the Transmission Report's cost-sharing proposal, the RTOs point out that no present JOA provision applies to the current situation. They characterize the proposal as allocating costs based on the potential benefits each party will realize, and on the impact that existing flows have on the affected facilities. The RTOs intend that this cost-sharing allocation method, which they propose outside of the stakeholder process,

²³ Transmission Report at 20.

²⁴ Update at 3. The Update also estimates that to increase the transfer capability by an additional 500 MW would cost another \$1,000,000, which would be almost doubling of the cost for less than 10% of incremental transfer capability. Update at 2.

²⁵ Transmission Report at 21.

²⁶ Transmission Report at 21-22. Presumably, the RTOs mean that Commission's December 31, 2005 deadline for the filing of the final report gave insufficient time for stakeholder consultation.

not set a precedent for the upcoming June 1, 2006 cross-border cost allocation proposal (June 2006 Proposal) required by the Commission's November 21, 2005 order.²⁷ The costs of constructing the triggered upgrades allocated to each RTO would be allocated to customers of Midwest ISO and PJM according to the RTOs' respective tariffs and operating agreements.²⁸ Should additional upgrades be needed to relieve future constraints, they propose that the costs for such additional upgrades be addressed through the cross-border processes to be developed pursuant to the November Order.²⁹

The November Order conditionally accepted the cross-border allocation for facilities built to improve reliability as based on the relative contribution of the load of each of the combined RTOs to loading on the constrained facility giving rise to the upgrades. In order for the costs of such cross-border reliability facilities to be allocated between the RTOS: (1) the cost allocation to the RTO in which the project is not being constructed must be a minimum of \$10 million; (2) the contribution of the cross-border RTO to loading on the constrained facility, which gives rise to the cross-border allocation project, must be at least five percent of the total loading on the constrained facility; and (3) the cross-border allocation project must have an in-service date after December 31, 2007. In addition, certain projects were grandfathered and excluded from a cross-border allocation, notwithstanding their actual in-service dates. November Order at P4, 10.

²⁷ See Midwest Independent Transmission System Operator, Inc., Docket No. ER05-6, et al., 113 FERC ¶ 61,194 (2005) (November Order). This order addressed the RTOs' proposal, filed in compliance with the Commission's November 18, 2004 order in Midwest Independent Transmission System Operator, Inc., 109 FERC ¶ 61,168 (2004), reh'g pending, that addressed rates for transmission between Midwest ISO and PJM. The RTOs' filing addressed the allocation of the cost of new cross-border transmission facilities that are built in one of the RTOs but provide benefits to customers in the other RTO. Distinguishing between transmission projects constructed for reliability purposes and those constructed for economic purposes, the Commission noted that the RTOs' proposal did not address cost allocation for economic projects. It therefore directed the RTOs to file, by June 1, 2006, a proposal addressing the distinction between these two types of projects, whether they should be planned for differently, and if so, how, and, of concern to this instant proceeding, how costs should be allocated for economic projects to produce just and reasonable results. The Commission encouraged the RTOs to follow their stakeholder processes in developing their proposal, and urged that cost allocation methods follow cost causation principles. November Order at P 12.

²⁸ Transmission Report at 4.

²⁹ Update at 3.

Notice and Responsive Filings

- 14. Notice of Midwest ISO and PJM's Transmission Report was published in the *Federal Register*, 71 Fed. Reg. 8298 (2006), with interventions and protests due on or before February 17, 2006. The Indiana Office of Utility Consumer Counselor (Indiana Consumer Office) filed a motion to intervene and comments. Also filing comments were previous intervenors, Detroit Edison Company (Detroit Edison) and Exelon. Northern Indiana filed Comments, and then, on March 1, 2006, Reply Comments to Exelon's Comments.
- 15. Northern Indiana agrees generally with the Transmission Report's conclusions and recommendations as they relate to the cause of the transmission problems on its system, and to construction of the recommended upgrades to relieve these problems. Northern Indiana states that it is important to recognize what the proposed upgrades are intended to do and the limitations that will exist after the selected upgrades have been completed. It notes that the upgrades identified in the Transmission Report are intended to enhance the west-to-east transfer capabilities across the Northern Indiana system, but points out that the studies performed and the report's recommendations do not address the reactive power support necessary to accommodate the west-to-east transfers nor, should ComEd increase its transfers in excess of the new, 7,000 MW transfer capability, the excessive parallel flows that would again cause operational and reliability problems on the Northern Indiana transmission system. Indiana Consumer Office addresses the second criticism and recommends that the RTOs take into consideration future developments that could affect the west-to-east transfer levels.
- 16. The parties' remaining comments focus on the Transmission Report's recommendation that the costs for the specified upgrades, should a triggering event require their construction, be based on the relative contribution of the load of each of the combined RTOs to loading on the selected upgrade facilities.
- 17. Northern Indiana and Detroit Edison both ask the Commission to rule that costs for the recommended upgrades be allocated to PJM. Detroit Edison argues that principles of cost causation and benefit support such allocation because the need for these transmission upgrades, which will enhance transfer capability from ComEd to PJM-East, has been caused by PJM market participants and loads, who will be the principal beneficiaries.
- 18. Northern Indiana states that the Transmission Report finds that ComEd's transfers to PJM-East are the sole cause for the needed upgrades. It argues that because these transfers are economic in nature, neither Midwest ISO nor it should bear the costs of the recommended upgrades. It criticizes the Transmission Report's proposed cost allocation for treating the upgrades as if required by reliability. It refutes such treatment by stating that it does not need the recommended upgrades to serve its customers nor does Midwest

ISO need them to provide transmission service. Northern Indiana asks the Commission, should it determine that Northern Indiana should bear any portion of the upgrades' costs, to require not upgrades but modification of PJM's operations that will reduce the economic transfers by ComEd to PJM-East to a level that does not cause reliability problems on the Northern Indiana transmission system.

- 19. Exelon endorses the recommended methodology for allocating the cost of the recommended upgrades. It states that the congestion on the Northern Indiana flowgate, which the proposed upgrades are expected to remedy, is not attributable solely to transfers from ComEd to PJM-East, but also to west-to-east flows of Midwest ISO. Because Midwest ISO will benefit as well as PJM, Exelon asks the Commission not to determine that all upgrade costs should be allocated to PJM.
- 20. Indiana Consumer Office finds that the Transmission Report inadequately accounts for the relationship between reliability and economic transmission projects. It observes that the substantially increased flows between Midwest ISO and PJM take place primarily for economic reasons, and that, but for these economic flows, Northern Indiana would not need the recommended upgrades to protect its transmission system's reliability. Indiana Consumer Office suggests that cost methodologies should take into account whether a project is for reliability or economic purposes and also who will benefit from the increased access that the project will provide. It recommends that the cost of such upgrades be based not on allocation of load at the time of upgrade but on incremental load before and after the project. This way, the beneficiaries of a transfer, would fairly pay the greater share of the costs. Indiana Consumer Council states that this particular issue has yet to be vetted in the Midwest ISO and PJM stakeholder processes, and that the larger issue of how to address economic and reliability transmission expansion is currently the focus of stakeholder activity at the RTOs, and will result in filings on June 1, 2006.

Discussion

Procedural Matters

21. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2005), Indiana Consumer Office's timely, unopposed motion to intervene serves to make it a party to this proceeding.

Commission Determination

22. All parties support the Transmission Report's recommendations for constructing the specified facility upgrades in the event that the market-to-market process for generation redispatch under the JOA is insufficient to resolve the parallel flow problems and a triggering event, as outlined in the Transmission Report, occur. The major issue

raised is the proposed allocation of the cost of constructing the upgrades should a triggering event occur.

- As discussed above, ³⁰ the Docket No. ER05-6, et al. proceeding is addressing how 23. to allocate the cost of new cross-border transmission facilities that are built in one of the RTOs but provide benefits to customers in the other RTO. In the November Order, the Commission accepted, subject to conditions, the RTOs' proposed revisions to the JOA to provide for allocating the costs of cross-border facilities needed to meet reliability criteria. It directed a further filing, by June 1, 2006, containing the RTOs' proposal for allocating the costs of cross-border facilities planned to address operational or economic performance criteria, i.e., the June 2006 Proposal. The recommended upgrades at issue here were planned to resolve operational performance issues due to increased transfers from the ComEd Zone to PJM-East during off-peak periods, and to meet a potentially desirable target level for such transfers in the future. Thus, as the RTOs point out, no JOA provision applies to the current situation. Rather, allocation of the costs of such upgrades will be addressed in the RTOs' upcoming June 2006 Proposal. Given that the triggering events have not yet occurred, and since allocation of the cost of such upgrades is to be addressed in the near future, we find that it is unnecessary to address separately, in this proceeding, the question of responsibility for the cost of these recommended upgrades.
- 24. Moreover, we question whether these upgrades are so unique that a special allocation process, outside of the to-be-revised JOA, must be used. Each RTO builds facilities that benefit customers in the other RTO. Thus, it is important that allocation of the costs of individual projects be determined according to generally applicable tariff provisions that apply to both RTOs for comparable facilities, and not on a piecemeal basis, unless unique circumstances are present. If the RTOs believe that the recommended upgrades, because of their nature or timing, require special cost allocation provisions, they should include such provisions to apply not only to the recommended upgrades but to all comparable upgrades in the June 2006 Proposal, for our consideration in the context of the overall cross-border allocation provisions.
- 25. We find unsubstantiated or speculative Northern Indiana's concern over sufficiency of reactive power support to accommodate the targeted 7,000 MW transfers from the ComEd Zone to PJM-East, and its concern that future increases in west-to-east flows above 7,000 MW will heighten parallel flows with resultant harmful effects on Northern Indiana's transmission system. If such problems occur, Northern Indiana may raise these issues at that time through an appropriate filing.

³⁰ See note 27, supra.

26. Accordingly, based on the commitments in the Transmission Report to construct the recommended facilities should a triggering event occur, we will dismiss this Complaint. Should these facilities be scheduled for construction and an issue arises as to cost allocation that is not resolved by provisions that the Commission has accepted to amend the JOA, the parties may make new filings addressing the issue at that time.

The Commission orders:

- (A) The Complaint filed by Northern Indiana in this proceeding is hereby dismissed, without prejudice, as discussed in the body of this order.
- (B) Midwest ISO and PJM are hereby directed to include in their filings of June 1, 2006, in Docket No. ER05-6, *et* al., recommendations for costs apportionment for the situation described in the body of this order.

By the Commission.

(SEAL)

Magalie R. Salas, Secretary.