

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

PJM Interconnection, L.L.C.

Docket Nos. ER06-232-000
ER06-232-001

ORDER ACCEPTING TARIFF REVISIONS, SUBJECT TO CONDITIONS

(Issued April 25, 2006)

1. On November 18, 2005, PJM Interconnection, L.L.C. (PJM) filed proposed modifications to its Open Access Transmission Tariff (OATT) and related agreements to allow transmission outage acceleration or rescheduling based on net economic benefits. PJM explains that the new provisions would allow generation owners and other market participants to avoid or reduce unhedged transmission congestion when the costs of accelerating or rescheduling an outage are less than the congestion costs would be if the outage proceeded as originally scheduled. On February 24, 2006, PJM submitted an Amendment to Filing (amendment) to clarify several issues in response to a January 25, 2006 Commission deficiency letter. PJM's proposed modifications are accepted, subject to PJM filing revisions to its OATT and Operating Agreement, as discussed in the body of this order.

Background

2. PJM states that while the existing tariff provides for transmission outage rescheduling when needed to protect reliability, there is no tariff mechanism for rescheduling or accelerating an outage solely based on the economic grounds that rescheduling is less costly than the transmission congestion revenue inadequacies the scheduled outage would cause. To develop economic rescheduling, PJM formed the Transmission Outage Impact Mitigation Working Group in 2004. Their proposal, submitted with this filing, was endorsed without opposition at the September 29, 2005 PJM Members Committee regular meeting.¹

3. The proposed rules, which apply to both planned and forced outages, are set forth in a new section 1.9.4A of the OATT and Operating Agreement. The rules would apply to two types of situations: (1) planned outages associated with interconnection of a

¹ See transmittal letter at 3.

specific generation unit; and (2) planned or forced outages PJM determines could last at least three days and cause congestion revenue inadequacy in excess of \$500,000. For forced outages, while the start date cannot be changed due to emergency conditions, opportunities may exist to reduce the duration of the outage and thus congestion.

4. For outage changes to interconnect a generator unit, PJM would submit the generation owner's acceleration or rescheduling request to the affected transmission owner. If the transmission owner is willing to change the outage schedule, based on factors such as additional labor, contractor or equipment delivery costs, it will provide estimates of the revised outage schedule and associated costs.² The generator owner then must notify PJM whether it wishes the outage to be rescheduled or accelerated on the terms specified by the transmission owner. If the generation owner accepts, the generation owner will be responsible for all costs incurred by the transmission owner as a result of the rescheduling, unless the generation owner notifies PJM that it no longer desires to participate in the outage rescheduling when the actual costs exceed the estimated costs by more than 120 percent. Generation owners' cost responsibility may be partially relieved if they notify PJM that they no longer wish the outage to proceed as rescheduled, once they are notified of the transmission owners' increased costs. If the generation owners advise PJM that they do not wish to proceed under the revised outage schedule, the generation owners would be responsible for all costs incurred or committed by the transmission owner as of the date the transmission owner notified PJM of the increased costs.

5. PJM proposes that any market participant may request accelerating or rescheduling a planned or forced outage expected to last more than three days and cause congestion revenue inadequacy in excess of \$500,000. PJM states that the procedures for outage changes due to congestion would be generally the same as for outages due to the interconnection of a generator unit with the exception of cases with multiple requesting parties. For multiple requesting parties, PJM would provide the transmission owner's revised schedule and costs to each of the participants, and advise them of how many participants requested the acceleration or rescheduling. Each participant must then advise PJM that it wants to proceed with the revised schedule and provide the amount it is willing to pay for such revised schedule.

² Typically, accommodating such a request could involve additional costs for labor (direct or third party) from working overtime or on weekends or holidays, or additional vendor or contractor costs for expedited or rescheduled production, delivery, or provision of material, equipment or services.

6. PJM explains that the outage change will proceed only if the cumulative “willing to pay” amounts provided by the participants collectively exceeds the transmission owner’s cost estimate by a margin³ that provides a reasonable degree of certainty that actual costs will not exceed the “willing to pay” amounts and PJM determines the revised schedule would reduce the level of congestion revenue inadequacy. The total costs of outages that proceed will be shared by all participants based on their specified “willing to pay” amounts. If any of the multiple participants chooses not to go forward with the outage change due to cost estimates exceeding 120 percent, the outage change will only go forward if the remaining “willing to pay” amounts collectively cover the full cost of the outage change.

Notices, Interventions, Protests and Responsive Pleadings

7. Notice of PJM’s November 18, 2005 filing was published on December 1, 2005, with protests and interventions due on or before December 9, 2005. Notice of PJM’s February 24, 2006 amendment was published in the *Federal Register*, 71 Fed. Reg. 12,351 (2006), with protests and interventions due on or before March 17, 2006.

8. On December 29, 2005, Old Dominion Electric Cooperative (Old Dominion) filed a protest. In its protest, Old Dominion raises a number of issues. Regarding the \$500,000 minimum congestion revenue inadequacy threshold, Old Dominion argues that to further enhance flexibility and promote overall efficiency, there should be no minimum fixed dollar amount or, if a minimum is permitted, it should be much lower. Old Dominion asserts that the threshold criteria should be whenever the costs of an outage change are less than potential congestion costs, and \$500,000 is a significant amount that is not justified conceptually. Regarding the three-day minimum outage duration, Old Dominion asserts that the criterion is too stringent and there should be no minimum duration criterion. For example, Old Dominion explains that a 6 hour outage resulting in tens of thousands of dollars in congestion costs could not be rescheduled to off-peak times. Further, Old Dominion asserts that the \$500,000 minimum and three-day outage duration criteria are unduly preferential in that they do not also apply to generation owners’ outage change requests associated with generation interconnections.

9. Regarding the proposal that transmission acceleration or rescheduling requests be granted based on whether the amount market participants are “willing to pay” collectively exceeds the transmission owners’ Acceleration Estimate by a “reasonable margin,” Old

³ PJM states that it will specify this margin in the Manuals. PJM further stated that it anticipates the margin initially will be a factor of two for most outages, with a higher factor (reflecting greater potential cost variability) for outages to equipment inside a plant or substation.

Dominion asserts that no margin is necessary. Old Dominion objects to any integer multiplier of the outage acceleration costs being used to determine a “reasonable margin.” Old Dominion further asserts that if a margin is used, it should be stipulated in the Operating Agreement rather than the PJM manuals because this issue could be a significant barrier to requesting outage accelerations.

10. Old Dominion additionally asserts that using the “willing to pay” amounts to allocate the total costs of outage changes among multiple participants is flawed. Old Dominion states that those who “pony-up” to pay for outage changes will create a “free-rider” effect for those who do not pay and that PJM needs a formal procedure for multiple beneficiaries of a potential outage change to be collectively put in contact with one another for discussions of “willingness to pay.”

11. On January 13, 2006, PJM filed an answer to Old Dominion’s protest. PJM claims that the \$500,000 minimum threshold is necessary due to forecasting uncertainty to ensure that benefits outweigh costs. PJM asserts that if there were a significantly lower threshold, PJM could forecast congestion costs for an outage that, due to actual system conditions, turn out to be much lower....” Regarding the three-day minimum, PJM argues that “If an outage is less than three days, there is very little room for acceleration” and that the duration minimum is to avoid PJM incurring administrative costs and burdens for relatively small economic gains. PJM explains that a market participant and a PJM transmission owner may bilaterally agree to accelerate or move a transmission outage outside of the proposed procedures. PJM contends that the requirement that market participants be “willing to pay” a reasonable multiple of the estimated cost of the outage change (margin) protects against unanticipated costs, particularly it helps to insure that market participants are not obligated to pay unexpected amounts that in their judgment were not economically warranted.

12. In response to the concerns expressed regarding including the margins in PJM’s manuals rather than in the tariff, PJM argues that specifying the margins in the manuals would provide the flexibility to adjust what is considered “reasonable” as experience is gained, without the need to file with the Commission. PJM states that Old Dominion’s assertion that not requiring outage changes for interconnections of generators to meet the minimum criteria is preferential to generation owners indicates a misunderstanding of the proposed rules. PJM notes that no evaluation of congestion is involved in outage changes for interconnections. PJM explains that the interconnection of a generating unit is based on a generation owner’s plant economics, and that any market participant can request an outage change based on the congestion criteria in proposed section 1.9.4A(c). Finally, PJM argues that Old Dominion’s assertion that “PJM should take broader steps to fairly

allocate the interim congestion costs associated with outages that are not properly scheduled through PJM,” is beyond the scope of this proceeding. PJM states it is unaware of any history of any improperly scheduled outages in PJM.

13. On January 25, 2006, the Commission issued a deficiency letter asking PJM to: 1) justify the proposed three-day and \$500,000 criteria, 2) justify the proposed “willing to pay” margins and their inclusion in the manual rather than in the tariff and, 3) justify treating interconnection of a generation unit differently from other outage change requests and clarify whether third parties can request outage changes for generator interconnections that cause congestion.

14. On February 24, 2006, PJM filed an amendment to its November 18, 2005 filing in response to the deficiency letter. PJM states that the specific three-day and \$500,000 criteria resulted from discussions among transmission owners, market participants and PJM and are needed to ensure a benefit will result from transmission outage changes. PJM notes that, for the April/May 2006 time period, eleven transmission outages are scheduled that meet both the three-day and \$500,000 criteria. PJM explains that these eleven scheduled outages capture 89.93 percent of the total forecasted congestion revenue inadequacy resulting from all currently scheduled transmission outages for these months. Thus, most of the congestion revenue inadequacies for the two months can be addressed by outage changes that meet the proposed criteria.

15. In response to arguments that cumulative participants’ “willing to pay” amounts should not exceed transmission owners’ Acceleration Estimate by specific margins, PJM explains that, since such outages have a history of unforeseen complications that increase costs, actual costs should be ensured by a “reasonable margin.” PJM states that, the specific margins of two times the estimated costs for outside outage changes and five times the estimated costs for inside outage changes are justified because, according to transmission owners, the unforeseen complications are more likely to be incurred inside a substation or plant than outside it. For example, PJM explains, outside maintenance usually involves overhead or underground cables that are straightforward and can be readily inspected. In contrast, inside maintenance is not as easily pre-determined, and the scope of the work cannot be fully assessed until the equipment has been removed from service for inspection. PJM adds that although it believes placing the margins in the tariff would reduce its flexibility to adjust them to reflect actual experience, it is willing to do so.

16. PJM argues that it is appropriate to treat generator interconnections different than other outage change requests (by not imposing the same three-day and \$500,000 minimum criteria) because, while other outage changes are intended to lessen the immediate economic impact of congestion, generator interconnections are not. PJM

explains that the generator interconnection provisions are intended to give generation owners an opportunity to accelerate or reschedule outages that directly impact their operations and revenues. PJM states that other market participants typically do not suffer lost revenues from such an outage. PJM further states that, under proposed section 1.9.4A(b), any market participant, including load serving entities, can request transmission outage acceleration or rescheduling of a generation interconnection if the outage causes congestion and meets the three-day and \$500,000 congestion revenue inadequacy criteria.

Procedural Matters

17. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedures, 18 C.F.R. § 385.214 (2005), the timely unopposed motions to intervene and notices of intervention serve to make the entities that filed them parties to this proceeding.

18. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2005), prohibits an answer to a protest unless otherwise ordered by the decisional authority. We will accept PJM's answer because it has provided information that assisted us in our decision-making process.

Discussion

19. The Commission will accept PJM's proposed OATT revisions as just and reasonable, to become effective February 1, 2006, with the condition that PJM include the outage margins in its OATT. The revisions proposed by PJM improve customer options by enabling customers to defer transmission outages when the congestion costs to the customers exceed the cost of rescheduling the outages.

20. These provisions were developed by PJM's stakeholders and were endorsed without opposition by PJM's Members Committee. Old Dominion is the only customer objecting to the proposed changes. It states that it does not object to the implementation of the outage rescheduling provisions, but seeks to eliminate elements of the program that PJM states are designed to ensure that the benefits of rescheduling of transmission outages outweigh the costs.

21. Old Dominion argues that there should be no minimum congestion revenue inadequacy threshold and the three-day minimum duration criteria are too stringent. The Commission cannot find that PJM's inclusion of these protections is unjust and unreasonable. PJM's stakeholders and other customers support such protections to ensure that the administrative costs of outage changes are covered and that such changes provide economic benefits to customers. PJM and the transmission owner must take a

number of steps after the identification of a transmission outage, such as developing an Acceleration Estimate and instituting the posting and bidding process. It is reasonable to establish a threshold before such costs are incurred.

22. Moreover, because the customer provisions are, in essence, a joint venture between a number of customers, it is reasonable for there to be protections to ensure that the benefits to be derived from the program exceed the costs. Customers' risk tolerances with respect to the potential for cost and benefit variations may differ, and these protections help to ensure that the benefits of the program meet customer expectations. The \$500,000 and three-day limits help to cover the potential for misestimates of congestion costs that could reduce the benefits of rescheduling outages. Similarly, since the customers are required to fully cover the transmission owner's costs, the margin multipliers help to account for possible errors in projecting costs.

23. These limitations do not appear to severely limit customers' abilities to benefit from this program during times when congestion costs are high. As PJM points out, the eleven outages scheduled for April/May 2006 meeting its criteria represent 89 percent of the forecasted congestion revenue inadequacy for these months. Furthermore, these OATT provisions would not prevent Old Dominion and other market participants from entering into their own bilateral agreements with transmission owners to change outages that do not meet the criteria.

24. Old Dominion argues the fact that the \$500,000 limit and three-day duration limit are not applied to generation owners is unduly preferential. The Commission does not find these provisions to be unduly discriminatory. The outage changes for generator interconnections are not driven by congestion economics, unlike customer outage changes. Outage changes for generator interconnections are driven by generation owners' plant economics and ability to sell power, rather than congestion savings. Also, outages affecting generators will generally affect only one or at most a few generators, while outages affecting customers may affect a larger number of customers and require allocations of costs among those customers. Generators, therefore, can better evaluate the costs and benefits of outage reassignments without the need for the protections that the customers themselves support in the context of joint action.

25. Old Dominion claims that using "willing to pay" amounts to allocate costs among multiple participants is flawed and creates a "free-rider" effect. Old Dominion also requests a formal procedure to place multiple beneficiaries of an outage change in contact with one another. There may be a variety of ways to handle the allocation of bids and costs when multiple parties benefit from congestion reduction, and PJM's proposal to use individual customer bids is not an unreasonable one. PJM's proposed allocation of costs based on participants' "willing[ness] to pay" reasonably reflects participants' economic

judgments and congestion values. Similarly, for cost overruns, this method reflects participants' judgments and values and aligns the assignment of unexpected excess costs with expectations. Further, any participant wishing to take a "free ride" by not indicating a willingness to pay takes a risk that an outage change from which it would benefit would not take place because the total "willing to pay" amount is too low. This would lessen the free rider effect.

26. Regarding Old Dominion's recommendation that PJM facilitate communications among multiple participants, PJM's proposal already provides for PJM to tell each participant how many participants requested the outage change and for participant updates on any ongoing transmission owners' schedule and cost revisions as requested.⁴ Based on this information, Old Dominion and other market participants can get together on their own, outside of PJM's process, to reach agreement on "willing to pay" amounts for outage changes from which they all benefit.

27. We find, however, that PJM must include the outage change margins in its OATT, rather than in its manuals. PJM states that including the margins in the manuals will provide it with the flexibility to change them quickly based on actual experience over time. However, since the margins are a critical component of outage acceleration or rescheduling assessment, we find that the actual margins, or a formula method for determining them, should be placed in PJM's OATT, so that PJM must make a tariff filing to justify changing these margins. PJM stated, in its February 24, 2006 filing, that it is willing to include the margins in its OATT. Accordingly, within 30 days of the date of this order, PJM is directed to file revisions to its OATT and Operating Agreement to include the actual margins, or a formula method for determining them.

The Commission orders:

(A) PJM's proposed modifications to its Tariff and Operating Agreement are accepted, effective February 1, 2006, subject to conditions.

⁴ See transmittal letter at 6.

(B) PJM is directed to file revisions to its OATT and Operating Agreement as discussed in the body of this order, within 30 days of the issuance of this order.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.