

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Sudeen G. Kelly, Marc Spitzer,
Philip D. Moeller, and Jon Wellinghoff.

PPL EnergyPlus, LLC
PPL Martins Creek, LLC
PPL Susquehanna, LLC
PPL Montour, LLC
PPL Brunner Island, LLC
PPL Holtwood, LLC
PPL University Park, LLC
Lower Mount Bethel Energy, LLC

Docket No. EL06-90-000

v.

PJM Interconnection, L.L.C.

ORDER ON COMPLAINT

(Issued December 26, 2006)

1. On July 25, 2006, PPL EnergyPlus, LLC, *et al.*¹ (collectively PPL) filed a complaint pursuant to section 206 of the Federal Power Act (FPA)² against PJM Interconnection, L.L.C. (PJM). PPL alleges that PJM violated the terms of its Amended

¹ Joined by PPL Martins Creek, LLC, PPL Susquehanna, LLC, PPL Montour, LLC, PPL Brunner Island, LLC, PPL Holtwood, LLC, PPL University Park, LLC, and Lower Mount Bethel Energy, LLC.

² 16 U.S.C. § 824e (2000).

and Restated Operating Agreement (Operating Agreement)³ by: (i) failing to dispatch certain of PPL's generation resources during a reliability emergency on July 27, 2005; and (ii) imposing Offer Price Caps on the PPL generating facilities that were brought on line at PJM's request on that date.⁴ PPL requests that the price-capped volumes in question be recalculated on a market-wide basis at the bid level that would have applied to PPL's generation output had it been run in economic merit order. PPL also requests that the Commission initiate an investigation to determine whether on other days, since April 1, 1999, PJM has improperly imposed Offer Price Caps and/or failed to run supplies that should have been run. Finally, PPL requests an order requiring PJM to provide status reports regarding the duties and functions it is required to oversee during the course of a system emergency. For the reasons discussed below, we will deny PPL's complaint.

Background

2. PPL states that on July 27, 2005, extreme weather conditions produced a spike in demand that, in turn, gave rise to a transmission constraint on the Bedington-Black Oak transmission line (from 11:03 a.m. to 2:26 p.m., and then again, from 3:11 p.m. to 5:57 p.m.).⁵ PPL states that in response to these events, PJM implemented Load Management Curtailment procedures for the Mid-Atlantic region at 11:20 a.m.,⁶ issued a Primary Reserve Warning at 12:59 p.m.,⁷ offered to buy emergency power from adjacent pools at

³ Third Revised Rate Schedule, FERC No. 24.

⁴ As noted below, Offer Price Caps were implemented by PJM on the day in question, pursuant to PJM's then-effective procedures, as set forth in section 6.4 of the PJM Operating Agreement. These procedures have since been revised by an agreement reached by PJM and its market participants in Docket No. EL03-236-000 (Scarcity Pricing Settlement). See *PJM Interconnection, L.L.C.*, 114 FERC ¶ 61,076 (2006).

⁵ The Bedington-Black Oak transmission line is a 500 kv line used for transfers of energy from west to east in PJM. It follows the Maryland-West Virginia border at the western end of Maryland.

⁶ See PJM Emergency Operations Manual 13, revision 22.

⁷ *Id.* at 18.

1:03 p.m.,⁸ declared a Maximum Emergency Generation event for the Mid-Atlantic and Southern control zones at 1:30 p.m.,⁹ and issued a five percent Voltage Reduction covering certain of its eastern zones at 1:39 p.m.¹⁰ PPL does not contest the need for these actions or the manner in which they were implemented by PJM.

3. PPL states, however, that when operating under these conditions, PJM is required, first, to load all available resources that are economically the least cost units to dispatch. PPL states that only then is PJM authorized to call on emergency resources, as necessary. In addition, PPL states that while these emergency resources were subject to Offer Price Caps on the date in question (the rules have since been changed), PJM may only impose Offer Price Caps when it dispatches a resource: (i) out of economic merit order; (ii) to relieve a transmission capability limit; (iii) to maintain system reliability; and (iv) subject to certain suspension provisions, discussed below. PPL asserts that PJM failed to follow these requirements.

4. First, PPL states that even after the declaration of the Maximum Emergency Generation event, at 1:30 p.m., PJM failed to load several of PPL's combustion turbine (CT) units that would have been eligible to run as economic generation, *i.e.*, its Fishbach CT units 1-2. PPL states that the Fishbach CT units did not come on line until 2:40 p.m.¹¹

⁸ *Id.* at 22.

⁹ *Id.* A Maximum Emergency Generation event may be declared, under PJM's Emergency Operations Manual, to increase generation output above the maximum economic level. The Maximum Emergency Generation event at issue here remained in effect until 5:55 p.m.

¹⁰ *Id.* at 28. The Voltage Reduction remained in effect until 5:30 p.m.

¹¹ As noted below, PPL does not seek a specific remedy for this asserted error on PJM's part. Rather it requests that PJM be required to "cease and desist" from such practices in the future and that the Commission provide such other remedies as it considers appropriate.

5. Second, PPL asserts that when its CT units (including its Fishbach CT units) *were* brought on line, PJM improperly imposed Offer Price Caps.¹² Specifically, PPL claims that it was instructed by PJM's dispatcher to bring its Fishbach CT units on line for economic dispatch, i.e., as in-merit supplies. PPL relies on a PJM audiotape (as supplied by PJM) in which the PJM dispatcher instructs PPL: "bring on Fishbach – economics." With respect to its other CT units, PPL asserts that PJM failed to notify PPL that any of these units would be run subject to Offer Price Caps, even though PJM had indicated to PPL that it would make individual calls to direct the loading of Maximum Emergency Generation.¹³ PPL asserts that, in particular, four of its CT units (Harwood, West Shore, Harrisburg, and Allentown) were "specifically requested to operate by PJM to provide energy in economic dispatch."¹⁴

6. PPL argues that in alluding to the term "economics" (as it relates to the Fishbach CT units) and in failing to provide notice that its remaining CT units would be price-

¹² PPL's CT units are located in PJM's Mid-Atlantic zone. Offer Price Caps are governed by the PJM Operating Agreement at section 6.4.1(a), which states in relevant part:

[I]f at any time it is determined by [PJM] . . . that any generation resource may be dispatched out of economic order to maintain system reliability as a result of limits on transmission capability, the offer prices for energy from such resource shall be capped at the levels specified [in this section]. If [PJM] is able to do so, such offer prices shall be capped only during each hour when the transmission limit affects the schedule of the affected resource, and otherwise shall be capped for the entire Operating Day.

¹³ See PPL complaint at 9, *citing* July 27, 2005 PJM audiotape. The Jenkins CT units 1-2 and the Lock Haven CT unit went on line at 2:35 p.m. and went off line, at PJM's request, between 6:48 p.m. and 7:04 p.m. PPL states that the Allentown CT units 1-4, the Harrisburg CT units 1-4, the Harwood CT units 1-2, and the West Shore CT units 1-2 came on line at 4:00 p.m. and went off line, at PJM's request, between 6:48 p.m. and 7:04 p.m.

¹⁴ PPL complaint at 10, *citing* Affidavit of Michael S. Cudwadie at P 20 and P 22. The affidavit relied upon by PPL states, in relevant part, that the "PJM dispatcher did not indicate that any of the units would be operating for reliability purposes."

capped, PJM bound itself to run *each* of these units in economic merit order. In support of its argument, PPL relies on section 6.4.1 (*see supra* note 10) and a number of other provisions contained in schedule 1 of the PJM Operating Agreement addressing the general application of PJM's locational marginal prices (LMP) market model. Specifically, PPL relies on section 1.7.7 (providing that the price paid for energy bought and sold in PJM will reflect the hourly LMP at each load and generation bus); section 2.1 (requiring PJM to calculate LMPs); section 2.2 (stating that "[e]very offer of energy by a Market Seller from a resource that is following economic dispatch instructions of [PJM] is utilized in the calculation of [LMPs]"); section 2.4 (stating that a resource that is following economic dispatch instructions is included in the calculation of Real-Time Prices if the resource is specifically requested to operate by the PJM dispatcher); and section 2.5 (setting forth the criteria that PJM is required to follow to calculate real-time prices).

7. PPL also disputes the need for Offer Price Caps over a 45-minute period (from 2:26 p.m. to 3:11 p.m.). PPL asserts that during this interval, there was no transmission constraint on the Bedington-Black Oak transmission line. PPL also states that PJM failed to consider its ability to suspend its Offer Price Caps by operation of a Three-Pivotal Supplier Test, i.e., in any hour in which there might have been three or fewer generation suppliers available for redispatch that would have been "jointly pivotal" with respect to the constraints at issue.¹⁵ PPL asserts that the Three Pivotal Supplier Test is used to determine, hourly, whether suppliers should, or should not, be subject to Offer Price Caps with respect to a particular transmission constraint.

8. PPL states that when it reviewed its billing report on August 10, 2005, it realized for the first time that its payments for July 27th, covering the supplies that had been requested by PJM, failed to reflect PPL's market-based offers and that the compensation PPL received was based on cost. PPL states that it filed a complaint with PJM concerning this matter and that PJM subsequently responded to written questions from

¹⁵ *See* PJM Operating Agreement at section 6.4.1(e), which states in relevant part:

Offer Price Caps shall be suspended for any transmission limit(s) for any hour in which there are not three or fewer generation suppliers available for redispatch under subsection (a) that are jointly pivotal with respect to such limit(s).

PPL, which were posted on PJM's website. PPL states, however, that its complaint was denied by PJM.

9. PPL requests that the Commission issue an order finding that PJM violated its Operating Agreement by: (i) failing to dispatch its Fishbach CT units; and (ii) imposing Offer Price Caps on the units that were run. PPL also requests that PJM be ordered to: (i) recalculate market clearing prices for energy supplied to it on July 27, 2005; (ii) pay PPL recalculated amounts for energy that PPL supplied, with interest on amounts improperly withheld; and (iii) provide performance reports ensuring its compliance with the procedures at issue here. Finally, PPL requests that the Commission initiate an investigation of PJM's operations on other days when PJM declared emergency operations since April 1, 1999.

Notice of Filing and Responsive Pleadings

10. Notice of PPL's complaint was published in the *Federal Register* with interventions, answers, protests and comments due on or before August 24, 2006.¹⁶ An answer was timely filed by PJM; motions to intervene were timely filed by the entities noted in the Appendix to this order; comments were filed by Sempra Energy Trading Corp. (Sempra), Constellation Energy Group Companies (Constellation), and Williams Power Company, Inc. (Williams); and on August 29, 2006, a motion to intervene out of time was filed by American Municipal Power – Ohio, Inc. (AMP-Ohio).

A. PJM's Answer

11. PJM, in its answer, argues that PPL's complaint should be dismissed on procedural grounds. Specifically, PJM argues that complaints concerning dispatch matters are not permitted under schedule 1, section 1.8.2 of the PJM Operating Agreement.¹⁷ PJM states that under this provision, a specified process exists for

¹⁶ 71 Fed. Reg. 43,727 (2006).

¹⁷ Section 1.8.2 ("Market or Control Area Hourly Operational Disputes") provides, in relevant part, as follows:

- (a) Market Participants shall comply with all determinations of the Office of the Interconnection on the selection, scheduling or dispatch of resources in the PJM Interchange Energy Market, or to meet the operational requirements of the PJM Region. Complaints arising from

(continued)

addressing questions about dispatch decisions (a process that allows any such concerns to be presented to PJM's Members Committee for resolution) *in lieu* of the complaint remedy sought here. PJM explains that recognizing the stress of system operations and PJM's need to exercise judgment in making dispatch decisions, particularly in emergencies, PJM's members expressly decided to limit such challenges in this manner. PJM argues that lack of confidence in its markets would be the result if a member such as PPL could obtain a re-running of the PJM markets and an investigation of market outcomes every time it didn't like an hourly result.

12. In addition, PJM argues that under the Scarcity Pricing Settlement, a stakeholder process has been established to consider modifications, on a prospective basis, to PJM's rules and procedures concerning the eligibility of out-of-merit generating units to set prices. PJM asserts that under this settlement, PPL agreed to preclude any retroactive changes to prior market outcomes arising from this review.

13. PJM asserts that even assuming that PPL's complaint is not procedurally barred, PPL's complaint should be dismissed on the merits. PJM argues that PPL's CT units were brought on line due to the existence of a transmission constraint on the Bedington-Black Oak transmission line, which prevented PJM from running nearly 12,000 megawatts of economic generation that remained available west of the Bedington-Black

or relating to such determinations shall be brought to the attention of the Office of the Interconnection. . . . (c) If . . . the Market Participant raising the dispute . . . believes that the matter in dispute has not been adequately resolved . . . [it] may make a written request for review of the matter by the Members Committee. . . . (d) Subject to the right of a Market Participant to obtain correction of accounting or billing errors, [neither PJM nor] a Market Participant shall . . . be entitled to actual, compensatory, consequential or punitive damages, opportunity costs, or other form of reimbursement from [PJM] or any other Market Participant for any loss, liability or claim, including any claim for lost profits, incurred as a result of a mistake, error or other fault by the Office of the Interconnection in the selection, scheduling or dispatch of resources.

Oak line but which remained unloaded.¹⁸ PJM argues that as a result of the Bedington-Black Oak constraint, PJM was required to serve the Mid-Atlantic and Southern regions of PJM with resources (including PPL's resources) that it otherwise would not have had to dispatch.¹⁹ PJM states that, as such, the supplies provided by PPL's CT units were subject to Offer Price Caps, as then required by section 6.4.1.²⁰

14. Moreover, PJM contends that these Offer Price Caps were mandatory, i.e., that they were required under section 6.4.1, as a filed rate, and thus could not have been superceded or negotiated away by PJM's dispatcher. For this same reason, PJM asserts that it was not required to provide advance notice to PPL of a price provision that was already set forth in its Operating Agreement. PJM asserts that regardless, PPL was required to follow PJM's emergency directives, as authorized by section 11.3.1(e) of the Operating Agreement, to bring its CT units on line.

15. PJM also challenges PPL's assertion that its CT units should not have been made subject to Offer Price Caps because these units were brought on line during a 45-minute interval when there was no constraint on the Bedington-Black Oak transmission line.²¹ PJM asserts that, in fact, these units were properly run because of, or in anticipation of,

¹⁸ Specifically, PJM claims that this line was constrained for the following hours: from 12:06 a.m. to 12:42 a.m.; from 3:19 a.m. to 4:42 a.m.; from 5:30 a.m. to 7:29 a.m.; from 7:57 a.m. to 8:13 a.m.; from 8:34 a.m. to 10:02 a.m.; from 11:03 a.m. to 12:26 p.m.; from 3:11 p.m. to 5:57 p.m.; and from 9:43 p.m. to 10:34 p.m..

¹⁹ PJM notes that the PPL CT units had a positive distribution factor (DFAX) of between 7 and 9 percent with respect to the Bedington-Black Oak constraint.

²⁰ PJM states that the section 6.4.1(d) has since been modified to lift Offer Price Caps in scarcity conditions. *See PJM Interconnection, L.L.C.*, 114 FERC ¶ 61,076 (2006).

²¹ PJM notes that the short period during which the Bedington-Black Oak line was not constrained was likely the result of the loading of emergency generation and a five percent voltage reduction in the east that took effect at about 2:30 p.m. PJM submits, however, that these conditions provided only brief, temporary relief from the constraint, which would not change PJM dispatcher actions in managing the emergency conditions under which PJM was operating.

the constraint. PJM further notes that under schedule 1, section 6.4.1, PJM is required to impose Offer Price Caps if, at any time, PJM determines that a generation resource “may be” dispatched out of economic merit order. PJM claims that no responsible dispatcher would start shutting off eastern units under the circumstances presented here, given the possibility that these same units, when required again, would not be able to restart. In addition, PJM claims that it was prudent to keep PPL’s CT units on line as the emergency subsided in order to ensure continued reliable operations.

16. PJM also responds to PPL’s argument that PJM failed to consider its ability to suspend its Offer Price Caps by operation of a Three-Pivotal Supplier Test. PJM argues that PPL offers no evidence that the Three-Pivotal Supplier Test, if conducted, would have been passed during the hours in dispute and that according to a study made by the PJM market monitor, in October 2004, the Bedington-Black Oak constraint did not pass the test.²² PJM further asserts that on the date in question, it was under no obligation to conduct this test in real time.

17. Finally, PJM argues that the relief sought in this case by PPL, even assuming it were warranted as to PPL, would necessarily require a re-running of the entire market. PJM asserts that the resulting benefits would be outweighed by other considerations. PJM submits that any such recalculation “would likely not produce accurate real-world results, as it would depend (at several points) on predictions of how other market participants would respond at the time they made their actual market decisions if this or that variable had been changed.”²³

18. As noted above, comments were submitted by Constellation, Sempra, and Williams. Constellation submits that the Commission should be judicious in its application of energy price recalculation as a remedy because such a remedy would involve recalculating prices applicable to all other affected market participants. Sempra agrees that real-time market prices would need to be recalculated on a market-wide basis, but submits that PPL’s complaint appears to raise valid issues that should be investigated

²² See PJM answer at 20, *citing* PJM Market Monitor Report Regarding Offer Capping of Major Transmission Constraints, filed in Docket No. ER04-539-001 (October 26, 2004).

²³ PJM answer at 10, *citing* *New York Independent System Operator, Inc.*, 115 FERC ¶ 61,026 at P 55 (2006).

by the Commission. Williams asserts that the complaint raises valid issues and requests that the Commission initiate a broader investigation into PJM's dispatch and price settlement practices beyond PJM's actions during emergency conditions, including the way PJM chooses units for economic dispatch. Williams also asserts that PJM should be required to submit to a periodic third party audit of its LMP settlement and dispatch practices.

B. PPL's Answer

19. On September 18, 2006, PPL filed an answer to PJM's answer.²⁴ First, PPL takes issue with PJM's assertion that schedule 1, section 1.8.2 of the PJM Operating Agreement bars PPL's complaint on procedural grounds, i.e., because, as asserted by PJM, PPL's only forum for its complaint is before the PJM Members Committee. While PPL does not dispute that section 1.8.2. does bar certain actions from being pursued before the Commission, PPL argues that its complaint is not about the correction of a dispatching error, as covered by that provision, but rather about a billing error, i.e., a dispute specifically excluded from the operation of section 1.8.2. PPL further asserts that a complaint seeking the correction of a billing error seeks only the "filed rate" and thus does not constitute prohibited retroactive ratemaking or a violation of the *Mobile-Sierra* doctrine.²⁵

20. PPL also rebuts the assertion made by PJM that the stakeholder process instituted in connection with the Scarcity Pricing Settlement was intended to bar a complaint such as that submitted here by PPL. PPL submits that the Scarcity Pricing Settlement does not bar a complaint in which a tariff violation is asserted.

21. PPL also takes issue with PJM's reliance on the Bedington-Black Oak transmission line constraint as the justification for the Offer Price Caps imposed in this case on PPL. PPL argues that this transmission line has experienced frequent constraints,

²⁴ PPL also characterizes its answer as a motion for partial summary disposition. However, because PPL's asserted motion restates the claims for relief set forth in its complaint, or otherwise respond to arguments made by PJM in its answer, we will treat PPL's motion as an answer.

²⁵ See *United Gas Pipe Line Co. v. Mobile Gas Serv. Corp.*, 350 U.S. 332 (1956) (*Mobile*); *FPC v. Sierra Pacific Power*, 350 U.S. 348 (1956) (*Sierra*).

many of which have *not* triggered Offer Price Caps.²⁶ PPL argues that, as such, the criteria relied upon by PJM in imposing Offer Price Caps on the day in dispute, is unclear and potentially arbitrary. PPL notes, for example, that in the Market Monitor's October 2004 report, the following considerations were cited by PJM:

The [Offer Price Caps] rule provides that PJM system operators will always attempt to find the least cost solution to any constraint. A primary source of such least cost solutions can be the re-dispatch downward (lower) of units. When cost effective lowers are available, PJM system operators do not offer cap any unit. However, when system conditions mean that such resources are not available and the level of competition is reduced, PJM system operators will offer cap out of merit units that are needed to control the constraint.

PPL asserts that, here, it is unclear whether and to what extent PJM followed this criterion. In addition, PPL questions whether DFAX impact of its CT units on the Bedington-Black Oak line was, as asserted by PJM, between 7 percent and 9 percent. PPL submits that PJM has provided no objective evidence in support of this contention. PPL argues, to the contrary, that substantial evidence exists that the DFAX impact would not have been high enough to assist in the relief of the Bedington-Black Oak constraint.²⁷ PPL further notes that in the Scarcity Pricing Settlement, only those units with a 5 percent or greater DFAX are considered relevant supply to relieve the Bedington-Black Oak constraint.

22. PPL also takes issue with PJM's understanding of its authority under section 6.4.1(a). PPL argues that under that provision, Offer Price Caps may not be imposed absent an advance, real time determination that PPL's CT units were "out of economic merit order" (a term not defined in PJM's tariff). PPL argues that PJM has presented no evidence regarding its determinations that PPL's CT units were, in fact, out of economic merit order. PPL further argues that PJM offered no explanation as to why its dispatcher

²⁶ PPL notes, for example, that the Bedington-Black Oak was constrained for 24 hours in the day ahead market in October 2004 and yet had no Offer Price Caps imposed.

²⁷ See PPL answer at 21, *citing* NERC's Central Repository for Security Events, NERC Factor Viewer (showing a DFAX impact for the Fishbach CT units of 3.1 percent at 3:00 p.m. on July 27, 2005).

would not, or could not, tell PPL, in real time, that its units would not be run in merit order. In addition, PPL argues that the fact that its CT units were being called at a time when lower cost generation west of the Bedington-Black Oak line was not running, does not necessarily mean that PPL's CT units were out of economic merit order.

23. PPL also argues that PJM is required to make a real time determination that these units are required to maintain system reliability, i.e., a particular localized problem requiring dispatch to relieve a constraint. PPL argues that the unavailability of 12,000 MW of less expensive generation west of the Bedington-Black Oak line does not necessarily address this reliability issue as it relates to the Mid-Atlantic zone. PPL notes that until relatively recently, the Mid-Atlantic zone was the entire PJM region and had its own generation resource requirements. PPL argues that the system was designed and adequate generation resources were constructed to assure reliability in this zone with the then applicable western transmission constraints appropriately considered. PPL submits that the expansion of PJM does not eliminate the need for PJM to determine whether or not generation defined as "eastern" is being run to maintain system reliability, prior to offer capping eastern generation.

24. PPL also argues that the Market Monitor's October 2004 report, on which PJM relies, provides no support for offer capping PPL's CT units. PPL argues that this report offers no evaluation of congestion patterns in July 2005, which differed significantly from those congestion patterns that were studied (which pre-dated the integration into PJM of the Duquesne Light Company).

C. PJM's Answer To PPL's Answer

25. On October 3, 2006, PJM filed an answer to PPL's answer. First, PJM responds to PPL's assertion that the term "out of economic merit order" is vague and, as applied in this case, arbitrary or otherwise unfair. PJM argues that, in fact, there is no need to define this term in its tariff because the term is generally understood throughout the industry. PJM asserts that it refers to a dispatch sequence in which the least cost generator is not dispatched to supply the next increment of system load.²⁸ PJM asserts that when it ran PPL's higher priced CT units, in place of the 12,000 megawatts of lower

²⁸ PJM answer at 13, *citing Generator Run Status Information*, Notice of Inquiry, 111 FERC ¶ 61,275 at P 9, n.5 (2005).

priced generation it could not run due to constraints, these units were being dispatched, by definition, out of economic order.

26. PJM also disputes the relevance and accuracy of PPL's assertion that PJM's dispatchers made (or failed to make) certain representations to PPL regarding the dispatch status of PPL's CT units. PJM argues that its dispatchers cannot make enforceable pricing decisions and cannot override PJM's Offer Price Caps rule, either by their statements (as relevant, here, to the Fishbach units) or by their omissions (as relevant to PPL's remaining CT units).

27. PJM also responds to PPL's assertion that PJM was required to provide advance notice to PPL that its CT units were required in order to address a transmission constraint. PJM argues, to the contrary, that it has sufficiently demonstrated that: (i) the Bedington-Black Oak line was expected to be constrained throughout the day; and (ii) PPL's CT units were more expensive than the 12,000 megawatts of western generation that PJM's dispatchers would have preferred to, but could not, run due to the expected and then actual constraints. PJM asserts that no further proof is required.

28. Finally, PJM responds to PPL's assertion that the DFAX impacts that PPL's CT units had on the Bedington-Black Oak line may have been as low as 3 percent, not the 7 to 9 percent, as claimed by PJM's 2004 Market Monitor report. PJM argues that schedule 1, section 6.4 of the PJM Operating Agreement contains no minimum DFAX impact level conditioning its application of Offer Price Caps. PJM submits that under section 6.4, the fact that PPL's units were dispatched out of merit order due to a transmission constraint is all that is required, regardless of the DFAX impacts.

Discussion

A. Procedural Matters

29. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure,²⁹ the notices of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. In addition, we will accept the unopposed late-filed intervention of AMP-Ohio.

²⁹ 18 C.F.R. § 385.214 (2006).

30. Rule 213(a) of the Commission's Rules of Practice and Procedure³⁰ prohibits an answer to an answer, unless otherwise permitted by the decisional authority. We will accept each of the above-noted answers, given the complex issues presented herein and because these answers have provided information that aided in clarifying the relevant facts, as discussed below.

B. Whether PPL's Complaint is Procedurally Barred

31. We agree with PJM, in part, regarding its interpretation of schedule 1, section 1.8.2 of the PJM Operating Agreement. Specifically, we agree that section 1.8.2 bars PPL from litigating before the Commission, the issue of whether PJM should have dispatched the Fishbach CT units earlier than it did on the day in dispute.³¹

32. Section 1.8.2 provides that disputes concerning these issues should be made, if at all, to PJM. Specifically, section 1.8.2(a) states that "[c]omplaints arising from or relating to [the selection, scheduling or dispatch of resources] shall be brought to the attention of the Office of the Interconnection." Section 1.8.2(d) further provides that PJM's market participants shall not be entitled to any "form of reimbursement from [PJM] or any other Market Participant for any loss, liability or claim, including any claim for lost profits, incurred as a result of a mistake, error or other fault by [PJM] in the selection, scheduling or dispatch of resources."

33. As PJM notes in its answer, there is a sound policy rationale supporting this claim limitation. First, PJM, as the independent transmission operator, needs to have discretion to dispatch resources as necessary to meet load and ensure reliability depending on the

³⁰ *Id.* at § 385.213(a)(2).

³¹ Any party may file a complaint under section 206 and/or section 306 of the FPA if PJM fails to follow its dispatch procedures, which are set forth in schedule 1, section 1.7.6 of the PJM Operating Agreement, or if it believes that these procedures are unjust or unreasonable. While a party is entitled to file a complaint with the Commission in these circumstances, we note that the remedy available to such parties is limited by section 1.8.2 of the PJM Operating Agreement, which provides that market participants are not entitled to any form of monetary damages as a result of a mistake or error by PJM in the dispatch of resources.

circumstances affecting the grid at a particular point in time. PJM and the signatories to the Operating Agreement, including PPL, have agreed that disputes concerning these matters *not* lead to the retroactive unraveling of PJM's market dispatch decisions leading to re-creation of hypothetical prices based on potentially different dispatch decisions. As PJM correctly notes in its answer, the parties' claim limitation agreement recognizes the day-to-day stress of system operations and the need, on PJM's part, to exercise judgment in making dispatch decisions, particularly in emergencies. Because such dispatch decisions are made in real-time, such decisions cannot be reversed and trying to recreate monetary damages for potential errors would be difficult and inappropriate.

34. Second, parties raising disputes concerning these matters have a forum in which these disputes may be addressed and resolved on a prospective basis by parties with expertise in operating an electrical grid. Specifically, disputes may be brought before the Office of the Interconnection, which is charged with the responsibility of investigating the matter and giving notice to any other market participants that may be affected by the dispute. These parties are also responsible for reviewing the relevant facts and seeking agreement on a resolution of the dispute, while the Office of the Interconnection is authorized to implement any changes it deems appropriate. In addition, an aggrieved party may make a written request for review of the matter by the Members Committee, if the matter in dispute has not been adequately resolved or discloses a need for changes in standards or policies, as established under the PJM Operating Agreement.

35. However, we disagree that section 1.8.2 operates as a bar regarding the rates applicable to those CT units that were run by PJM. Section 1.8.2(d) expressly exempts from its provisions any issues that do not deal with the selection, scheduling or dispatch of resources including claims seeking "correction of accounting or billing errors." A dispute over a rate charged or assessed by PJM (in this case the application of an Offer Price Cap) is just such a claim. Accordingly, we address this issue below on its merits.

C. Whether PJM Appropriately Imposed Offer Price Caps

36. Offer Price Caps are applied by PJM to limit the ability of generators in load pockets to exercise market power when transmission constraints require that specific generators be run, i.e., when reliability needs require that these generators be run even though lower-priced generators would be available "but for" the transmission constraint. Because lower-priced generators cannot be run under these circumstances, generators within the load pocket that are required to be run for reliability purposes must be dispatched, even if the bids they have submitted are not competitive. To limit the ability

of these generators to exercise market power, section 6.4 of PJM's Operating Agreement imposes Offer Price Caps.³²

37. Section 6.4 provides generators with options for determining a competitive offer price. Generators, for example, can select an offer cap equal to their incremental cost (including lost opportunity costs) plus 10 percent.³³ Conversely, the generator can seek to negotiate a higher offer cap with the Office of Interconnection, subject to appeal to the Commission. Regardless, the generator will be paid at the market clearing price.

38. For the reasons discussed below, we find that PJM appropriately applied the Offer Price Cap provisions of its Operating Agreement to those PPL CT units that were run, at PJM's direction, on July 27, 2005. PPL does not dispute that, on the day in question, PJM's Mid-Atlantic and Southern regions were experiencing high demand.³⁴ Nor does PPL dispute that this high demand was expected to continue throughout the day and that, as a result of these conditions, a constraint occurred on the Bedington-Black Oak transmission line.³⁵ Nor does PPL challenge the system-wide responses taken by PJM as a result of these conditions, including (i) the Load Management Curtailment Procedures implemented for the Mid-Atlantic region at 11:20 a.m.; (ii) the Primary Reserve Warning issued at 11:20 a.m.; (iii) the offer to buy emergency power from adjacent pools at 1:03

³² See *PJM Interconnection, LLC*, 107 FERC ¶ 61,112 at P 3, 25, and 36 (2004) (*Reliability Compensation Order*) (“the Commission finds that PJM's current offer capping rules work effectively to mitigate market power in a manner that is fair to most generating units”).

³³ *Id.* at P 27. For most units the Commission has found that an offer cap of incremental costs plus 10 percent reasonably reflects the bid a competitive firm would make in the short run, because any price the firm receives above marginal cost will generate sufficient revenue to cover its operating costs and contribute to the recovery of its fixed costs. See *PJM Interconnection, LLC*, 110 FERC ¶ 61,053 at P 25 (2005) (*Reliability Compensation Rehearing Order*).

³⁴ PPL Complaint at P 6 and n.3.

³⁵ PJM Answer, Affidavit of Andrew L. Ott at P 3-10.

p.m.; (iv) the Maximum Emergency Generation Event declared for the Mid-Atlantic and Southern control zones at 1:30 p.m.; and (v) the Voltage Reduction order issued at 1:39 p.m.

39. PJM is authorized to declare a Maximum Generation Emergency event when it is required to increase generation output above the maximum economic level. Here, it was required to do so because of the constraint on the Bedington-Black Oak line. Given this constraint, PJM was unable to bring on line least-cost generation located west of the constraint to serve load east of the constraint, *i.e.*, but for the constraint, this western generation would have been brought on line. However, because this generation could not be brought on line, PJM was required, instead, to dispatch generators out of economic merit order for the purpose of maintaining system reliability. Out of merit order means that the unit is being dispatched even though a lower-priced unit would have been available but for the transmission constraint.³⁶ On the day in question, then, we find that PPL's generators, each of which are located east of the Bedington-Black Oak constraint, were dispatched by PJM for this reason, *i.e.*, because the running of these units had a positive effect on the constraint.³⁷ Based on these facts, we find that PJM appropriately imposed Offer Price Caps in conformance with section 6.4.1 of the Operating Agreement.

40. Section 6.4.1(a) provides that "if, at any time, it is determined by the Office of the Interconnection ... that any generation resource may be dispatched out of economic merit order to maintain system reliability as a result of limits on transmission capability, the offer prices for energy from such resource shall be capped" Out of economic merit order refers to the dispatch of a higher priced unit when a lower priced unit had sufficient power to serve that load. Given PJM's determination that PPL's CT units were required to be run due to PJM's inability to bring on line the almost 12,000 megawatts of supply

³⁶ See *Reliability Compensation Rehearing Order*, 110 FERC ¶ 61,053 at P 26 (out of merit refers to bids that are higher than an available bid outside the load pocket).

³⁷ See PJM answer, Aff. Of Andrew L. Ott at P 5. See also PPL complaint, Exh. J, Att. 12 (July 27, 2005 audiotape transcript indicating in real time that PJM was trying to pick up generation east of the constraint).

west of the Bedington-Black Oak constraint, Offer Price Caps became mandatory as required by PJM's then-effective filed rates.³⁸

41. PPL, in disputing the PJM's reliance on section 6.4.1, argues in effect that the statements and omissions made by PJM's dispatcher during the course of the emergency can and did trump the Operating Agreement. We disagree. First, while PPL asserts that it was told by the dispatcher that each of its CT units were being called into service in economic merit order, the record evidence presented here suggests otherwise. In fact, the *only* reference to an "economic" run made by the dispatcher concerned *only* the Fishbach CT units. No such statements were made by the dispatcher regarding any of PPL's other CT units.

42. Second, section 6.4.1 does not support PPL's argument that a representation made by the dispatcher can overrule PJM's Operating Agreement. Section 6.4.1 states, in relevant part, that "if, at any time, it is determined by [PJM] . . . that any generation resource may be dispatched out of economic merit order to maintain system reliability as a result of limits on transmission capability, the offer prices for energy from such resource shall be capped . . ." PPL appears to rely on the clause "if, at any time, it is determined" to suggest that the dispatcher can irrevocably commit PJM to run a given unit in economic merit order. However, the Operating Agreement only provides the authority to dispatch a unit out of standard dispatch order to maintain system reliability; the question of whether an Offer Price Cap should be applied is not discretionary. The Operating Agreement provides that once the unit is dispatched out of merit order, energy from that resource "shall be capped." In this case, PPL's bids were clearly out of merit order, because their bid prices were higher than the bids of other units, a fact which PPL does not dispute. Thus, the Operating Agreement does not give the dispatcher authority to determine the pricing of a dispatched unit. Specifically, sections 2.4(c) of schedule 1 of the Operating Agreement states, in relevant part, "units that must be run for local area protection shall not be considered in the calculation of Real-Time Prices," and section 6.4.1 of the Operating Agreement states "that any generation resource may be dispatched out of economic merit order to maintain system reliability as a result of limits on

³⁸ In addition, PPL's CT units were required to be available for dispatch in the day-ahead market, given their status as Capacity Resources. *See* PPL complaint at Exh. I, Aff. of Mark A. Heimbach at P 10.

transmission capability, the offer prices for energy from such shall be capped” These provisions established the filed rate here.³⁹

43. Moreover, the comments from the dispatcher would not have affected PPL’s obligation to run the units in question. As PPL recognizes, its CT units are classified as capacity resources by PJM,⁴⁰ *i.e.*, they are entitled to receive payments in return for their obligation to stand ready to provide energy at the price determined by the PJM tariff, when dispatched. As such, PPL would have been required to run these units at the Offer Price Cap amount, even if the dispatcher had informed PPL that the units would not be capped.

44. PPL appears to contend that because its CT units were located in PJM’s Mid-Atlantic Zone, they need not have been dispatched out of merit order because the system is designed, and adequate generation resources were constructed, to assure reliability in this zone regardless of any constraints that may have existed to the west.⁴¹ We disagree. Section 6.4.1(d) provides that “Offer Price Caps shall not be applicable to generation resources used to relieve the Western, Central and Eastern reactive limits in the MAAC Control Zone and APS South Interface.” This provision was adopted because these areas have a sufficient amount of generation resources such that dispatching a generator out of merit order would not lead to the exercise of market power.⁴² However, the Bedington-Black Oak transmission constraint is not included as an interface for which Offer Price Caps will not be applied. As such, PJM correctly applied its Offer Price Cap rules to

³⁹ See *Pac. Gas and Elec. Co. v. FERC*, 373 F.3d 1315, 1319 (D.C. Cir. 2004) quoting *Ark. La. Gas Co. v. Hall*, 453 U.S. 571, 578 (1981); see also *City of Vernon*, 115 FERC ¶ 61,297, at n.41 (2006); *Mont.-Dakota Utils. v. Nw. Pub. Serv. Co.*, 341 U.S. 246, 251-52 (1951).

⁴⁰ PPL complaint, Exh. I (PPL-MAH), p 4.

⁴¹ PPL September 18, 2006 answer at 19-20, *citing* Exh. K to the PPL’s complaint, Aff. of Jeffrey Tranen.

⁴² See *PJM Interconnection, LLC*, 111 FERC ¶ 61,066 (2005) (establishing a hearing to determine proper mitigation in control areas), *order accepting settlement*, 114 FERC ¶ 61,080 (2006).

PPL's CT units, given the existence of a transmission constraint on the Bedington-Black Oak line during the relevant period at issue here.

45. PPL also asserts that its CT units should not have been made subject to Offer Price Caps because these units were brought on line during a 45-minute interval when there was no constraint on the Bedington-Black Oak transmission line.⁴³ We disagree. As PJM explained in its answer, the short period during which the Bedington-Black Oak line was not constrained was the result of PJM's emergency response measures, i.e., the loading of emergency generation and the five percent voltage reduction implemented by PJM east of the transmission constraint. Since these conditions provided only temporary relief, however, they would not change PJM dispatcher actions in managing the emergency conditions.

46. PJM further explains, and we agree, that no responsible dispatcher would start shutting off eastern units, given the possibility that these same units, when required again, would not be able to restart. In fact, the efforts to restart one of the Fishbach CT units on the day in question support this approach, when it tripped 28 minutes after it went online, was offline for 71 minutes, went back online for 7 minutes, and then tripped and was offline for another 34 minutes.⁴⁴ Under these conditions, even if no constraint was apparent for a brief period of time, PJM acted prudently in treating the situation as if the constraint applied and in dispatching the PPL units rather than relying on the lower-cost western units.

47. Under section 6.4.1, the Office of Interconnection can decide at any time that a unit be dispatched out of merit order to maintain system reliability as a result of limits on transmission capability. For the reasons discussed above, we find that PJM acted reasonably in dispatching PPL's CT units for reliability even if a transmission constraint was not binding for a short period of time. Moreover, section 6.4.1(a) provides that "if the Office of the Interconnection is able to do so, such offer prices shall be capped only during each hour when the transmission limit affects the schedule of the affected resource, and otherwise shall be capped for the entire Operating Day." Given the fluctuating emergency circumstances prevailing on the day in question, PJM reasonably could determine that Offer Price Caps could not be applied on an hourly basis.

⁴³ See PPL complaint at Exh. K, Aff. of Jeffrey Tranen at P 6.

⁴⁴ *Id.* at n.14.

48. PPL also argues that PJM was required to make a real time determination that PPL's CT units were required to maintain system reliability and that PPL's CT units were, in fact, out of economic merit order. We find that PJM has adequately demonstrated that the Bedington-Black Oak line was expected to be constrained throughout the day and that the less expensive generation west of the transmission constraint could not run due to constraints on the Bedington-Black Oak line. We also find that section 6.4.1 of the Operating Agreement does not require PJM to provide advance notice of a price provision that is contained in the Operating Agreement. Moreover, section 11.3.1(e) of the Operating Agreement requires PPL to bring on line its CT units in accordance with the PJM dispatcher's directive – a directive that does not require advance notice.

49. PPL also takes issue with PJM's reliance on the Bedington-Black Oak transmission line constraint as the justification for the Offer Price Caps imposed in this case on PPL. PPL argues that this transmission line has experienced frequent constraints, many of which have *not* triggered Offer Price Caps. The Commission finds that it was not the constraint on the line that in and of itself triggered the Offer Price Caps; rather, it was the fact that the constraint caused reliability concerns that mandated the dispatch of PPL's units out of economic merit which gives rise to the mitigation. Although the Bedington-Black Oak transmission line is often constrained, it is not always necessary to dispatch CT units out of merit order to maintain system reliability.

50. PPL argues next that the DFAX impact would not have been high enough to assist in the relief of the Bedington-Black Oak constraint. However, as PJM correctly notes, schedule 1, section 6.4 of the PJM Operating Agreement contains no minimum DFAX impact level conditioning its application of Offer Price Caps. Offer Price Caps must be applied under section 6.4 whenever a unit is dispatched out of merit order due to a transmission constraint that prevents lower priced units from being dispatched. Further, as discussed above, we find that PJM acted prudently by dispatching and keeping on line PPL's CT units. Thus, the Commission finds that the DFAX impact is not controlling in this proceeding.

51. Finally, PPL argues that PJM failed to consider its ability to suspend its Offer Price Caps by operation of a Three-Pivotal Supplier Test. The Three-Pivotal Supplier test was instituted by PJM to ensure that it did not apply Offer Price Caps in situations in which generators could not exercise market power.⁴⁵ We agree with PPL that as of

⁴⁵ *Reliability Compensation Order*, 107 FERC ¶ 61,112.

May 6, 2004, PJM was obligated to apply the Three-Pivotal Supplier test on a real time basis.⁴⁶ However, we see no basis for granting PPL relief for this tariff violation. In fact, PPL offers no evidence that the Three-Pivotal Supplier Test would have been passed during the hours in dispute, while PJM offers evidence to the contrary, *i.e.*, according to a study made by the PJM market monitor, in October 2004, the Bedington-Black Oak constraint would not have passed the test.

D. PPL's Remaining Claims for Relief

52. We deny PPL's remaining requests, *i.e.*, its requests that: (i) PJM be required to provide performance reports ensuring its compliance with the procedures at issue here; and (ii) an investigation be initiated concerning PJM's operations on other days when PJM declared emergency operations since April 1, 1999. Based on the findings and facts reviewed above, PPL has not demonstrated a need supporting these requests. Specifically, PPL has not established that PJM's Offer Price Caps have been inappropriately applied by PJM or otherwise warrant further investigation relating to the manner in which the then-effective provisions were implemented. No other complaints concerning these matters are currently pending before the Commission.

The Commission orders:

PPL's complaint is hereby denied, as discussed in the body of this order.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

⁴⁶ *Id.*

Appendix

Intervenors

Allegheny Power and Allegheny Energy
Supply Company, LLC
American Electric Power Service Corporation
American Municipal Power – Ohio, Inc. *
Conectiv Energy Supply, Inc.
Constellation Energy Group Companies **
Dominion Resources Services, Inc. **
Edison Mission Energy, Edison Mission
Marketing & Trading, Inc., and
Midwest Generation EME, LLC
Exelon Corporation
DPL Companies
Mirant Energy Trading, LLC, Mirant Chalk
Point, LLC, Mirant Mid-Atlantic, LLC, and
Mirant Potomac River, LC
Mittal Steel USA Inc.
NRG Companies
Old Dominion Electric Cooperative
PJM Industrial Customer Coalition
PJM Interconnection, L.L.C.
PSEG Companies
Reliant Energy, Inc.
Sempra Energy Trading Corp. **
Williams Power Company, Inc. **

* late intervention

** parties submitting comments