UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

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

PJM Interconnection, L.L.C. Docket No. EL03-236-000

ORDER ON TARIFF FILING

(Issued May 6, 2004)

1. As directed by the Commission,[1] PJM Interconnection, LLC (PJM) has examined various issues concerning generating units that are required to run for reliability and, in light of its examination, has filed revisions that it believes appropriate under section 206 of the Federal Power Act (FPA) to the local market power mitigation provisions in its Open Access Transmission Tariff (OATT) and its Operating Agreement. In this order, the Commission considers PJM's proposed provisions within the context of market design for organized electric markets as a whole and announces a general Reliability Compensation policy. The Commission then rules on the specific provisions in PJM's filing in accordance with this policy.

I. Background

2. On April 2, 2003, in Docket No. EL03-116-000, Reliant Energy Mid-Atlantic Power Holdings, LLC (Reliant) tendered for filing a complaint against PJM complaining that the offer price caps on certain of its generation facilities in PJM operating areas subject to chronic transmission constraints were not just and reasonable and requesting approval of a Formula Price Cap Mitigation Proposal (Proposal) applicable to those facilities.

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[1] Reliant Energy Mid-Atlantic Power Holdings, LLC, et al., 104 FERC ¶ 61,040 (2003) (July 9 Order).

3. The existing offer price caps are contained in section 6.4.1 of Schedule 1 of PJM's Operating Agreement and Appendix K of PJM's OATT. The existing procedures apply offer price caps to generation resources that are dispatched out of economic merit order to maintain reliability. The purpose of the offer caps is to "restrain the exercise of local market power by generators whose units must be dispatched out of economic merit order when transmission constraints require running the units to ensure reliability of service to customers."[2] Section 6.4.2 of Schedule 1 of the Operating Agreement provides for three alternative offer caps: (a) the weighted average locational marginal price at the generation bus, (b) the incremental operating cost of the generation resource plus 10 percent of such costs, or (c) an amount determined by agreement between PJM and the market seller. While the bids of out of merit generators are offer-capped, such generators receive a price equal to the greater of the capped offer price or the Locational Marginal Price.

4. On July 9, 2003, the Commission issued an order[3] finding that Reliant had not sustained its burden of proof to make a showing that the current offer caps in the PJM region were unjust and unreasonable. Reliant had not provided data to show that its units in PJM were not recovering fixed and variable costs, nor did it show that the PJM mechanism had failed to provide its units or units in general a reasonable opportunity to recover their costs, or that the offer caps had provided insufficient revenues to create an incentive for new entry. The Commission therefore denied Reliant's complaint.

5. While it denied the complaint, the Commission nonetheless noted that PJM itself had recognized that its current provisions may not have been the most appropriate mechanism for providing recovery to Reliability Must Run (RMR) units, particularly as they relate to scarcity pricing. The Commission stated that the issue of a long-term solution for RMR cost recovery was of sufficient importance to warrant quick resolution. The Commission therefore found that PJM should re-examine its mechanism to ensure that it was providing appropriate compensation for mitigating market power for must-run services. It directed PJM to make a filing by September 30, 2003, either to revise its tariff or to justify its existing provisions. Additionally, the Commission directed PJM to include detailed analysis of which plants are in fact needed for reliability and should receive some kind of extraordinary payment from load and on how units such as Reliant's were operated to support reliability in PJM.

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[2] PJM September 30 Transmittal Letter at page 6.

[3] Reliant Energy Mid-Atlantic Power Holdings, LLC, et al., 104 FERC ¶ 61,040 (2003) (July 9 Order).

6. The July 9 Order further noted that in analyzing its September filing, PJM should consider whether its current market design, including its mitigation measures, satisfied the requirement of the FPA that rates must be just and reasonable. In the context of a bid-based market design like that found in PJM (and taking into account all of the elements of that market design, including mitigation), the Commission was particularly interested in whether there were both adequate incentives to attract and retain needed investment as well as rates that were not excessive. The July 9 Order also directed PJM to include such an analysis in each of its future Annual State of the Market reports.

7. On September 30, 2003, PJM filed amended tariff sheets, pursuant to section 206 of the Federal Power Act (FPA),[4] to revise the offer price cap rules for must run generating units, and to establish a Local Market Auction to address long term scarcity that would produce unreliable operations in load pockets should such a condition arise in PJM.[5] PJM also proposes to amend the Operating Agreement and PJM Tariff to require that all owners of generation located in the region become members of PJM or otherwise agree to abide by all PJM rules regarding generation and transmission. PJM requests an effective date of June 1, 2004.

8. On December 19, 2003 the Commission issued an order establishing a technical conference in this docket and in Docket No. PL04-2-000, Compensation for Generating Units Subject to Local Market Power Mitigation in Bid-Based Markets.[6] The

[4] 16 U.S.C. §824e (2000).

[5] The PJM Board of Managers may make a filing under section 206 of the FPA pursuant to section 7.7(vi) of the PJM Operating Agreement (PJM OA) if it believes that any provision of the Operating Agreement is unjust, unreasonable, or unduly discriminatory. The filing is supported by approximately 62.5 percent of the PJM members, however, 66.7 percent is needed for PJM to make a filing under section 205 of the FPA. PJM OA section 8.4(c). PJM states that 93 percent of the generation owner sector and 58 percent of the other supplier sector opposed the amendments. (PJM states that on the basis of Megawatts of capacity owned, however, representatives of more than half of the total generation capacity in PJM voted in favor of the amendments.) In contrast, 100 percent of the end user sector, 89 percent of the electric distributors sector, and 75 percent of the transmission sector supported the amendments, with the opposition votes in the transmission and electric distributors sectors cast by entities that own generation. PJM Filing at 13-14.

[6] Order Establishing Technical Conference, 105 FERC ¶ 61,312 (2003) (December 19 Order).

Commission noted that the issue of how to price must-run generating units has arisen not only in PJM but in other regions as well and that these issues are fundamental to the proper and efficient design and operation of electric markets. It directed that a technical conference be held to obtain more information about PJM's proposal and to consider the alternatives proposed.

9. A technical conference was held on February 4 and 5, 2004. The first day of the conference was devoted to Docket No. PL04-2-000 and consisted of a general discussion of the issues with regard to compensation of must run generating units. The second day of the conference was concerned with the instant docket and consisted of a discussion of compensation issues for must run generating units in PJM. Following the technical conferences, comments were due in this docket on February 20, 2004 and reply comments were due in this docket on March 1, 2004.

II. Late Interventions

10. The Commission's December 19 Order accepted all interventions filed prior to that date. Since December 19, several additional persons have filed late motions to intervene: BP Energy Co. (February 20, 2004); Commonwealth Shore Power, LLC (February 18, 2004); ELCON (February 20, 2004); ISO New England (January 5, 2004); National Energy Marketers Association (February 20, 2004); New York Independent System Operator (February 3, 2004) and the PJM Industrial Customer Coalition (February 20, 2004). Given the early stage of this proceeding and the absence of undue delay or prejudice, we find good cause to grant these untimely, unopposed interventions.

III. PJM's Filing

11. On September 30, 2003, PJM made a filing (filing or PJM Filing) pursuant to section 206 of the FPA in compliance with the Commission's Reliant order.[7] Under that section, it must show that the existing tariff provisions, if any, are unjust and

[7] Reliant Energy Mid-Atlantic Power Holdings, LLC v. PJM Interconnection, L.L.C., 104 FERC ¶ 61,040 (2003).

unreasonable or are unduly discriminatory or preferential. It must also show that its proposal is just and reasonable.[8]

12. PJM states the filing (1) maintains the offer price cap rules for generation units that are run out of economic merit order but proposes to revise those rules by eliminating the exemption for units constructed after July 9, 1996 and suspending offer caps in localities found to be competitive, (2) establishes a Local Market Auction to address long term scarcity that would produce unreliable operations in load pockets should such a condition arise in PJM, and (3) requires all owners of generation (and lessees with rights equivalent to ownership) located in the PJM region to become members of PJM or otherwise agree to abide by all PJM rules regarding generation and transmission. As required by the Reliant order, PJM also addresses the issues of whether its current market design, including mitigation measures, results in just and reasonable rates and whether it provides both adequate incentives to attract and retain needed investment and rates that are not excessive.

13. In addition, PJM provides information in its filing and other pleadings concerning reliability must-run generators in its region and how units such as Reliant's are operated to support reliability in PJM. In response to a Commission request at the technical conference, PJM submits information concerning how many generators are offer capped and the extent in hours and Megawatts to which they are offer capped.[9] PJM also provides analyses of the Reliant generating units at issue in the current docket.[10]

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[8] Section 206(a), Federal Power Act; Midwest Independent Transmission System Operator, 104 FERC ¶ 61,105, order on reh'g, 105 FERC ¶ 61,212 (2003) (investigation of regional through and out rates under section 206 finding them unjust and unreasonable and establishing a new, just and reasonable rate design); Promoting Wholesale Competition Through Open Access non-Discriminatory Transmission Services by Public Utilities; Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, FERC Stats. & Regs., Regulation Preambles 1991-1996, ¶ 31,036 at 31,669-73 (April 24, 1996) (Commission's authority under section 206, inter alia, to remedy unjust and unreasonable rates and undue discrimination). See also, Western Resources, Inc. v. FERC, 9 F.3d 1568, 1579-80 (D.C. Cir. 1993) (discussing section 5 of the Natural Gas Act which is parallel to section 206 of the Federal Power Act).

[9] Comments of PJM Interconnection, L.L.C., Docket No. EL03-236-000 (February 20, 2004).

[10] Declaration of Joseph E. Bowring P 55, PJM Filing

IV. Discussion

14. In this and other proceedings concerning organized wholesale electric markets, the Commission has had to consider appropriate compensation to generators needed for reliability but subject to market power mitigation. Market power mitigation (which impacts revenue received by units needed to ensure reliability) can conflict with the longer term goal of attracting and retaining necessary infrastructure to assure long-term reliability in such markets ("Reliability Compensation Issues").

15. As a result, the Commission has determined that there is not necessarily a standard regulatory response to this set of issues. The Commission will, however, employ an overarching analytical approach which will institute a consistent and disciplined way of looking at these issues and arriving at an effective result for the organized market in question. In undertaking our analysis and arriving at our solution, we will take account of the present circumstances and expected future needs of each market. Thus, while "one size might not fit all," the approach for determining the right path to solve Reliability Compensation Issues should be both uniform and transparent. In this order, we provide guidance on the Commission's perspective of how solutions to these issues should be developed so that RTO/ISOs and stakeholders in organized markets will be able to work more effectively to address these issues within their own processes.

16. Our process begins with the inquiry: does this organized market exhibit material short-term or long-term Reliability Compensation Issues? Short-term Reliability Compensation Issues relate principally to the appropriate compensation for units that are needed for reliability and are subject to mitigation with the result that the units are receiving non-compensatory revenue impacting their ability to provide service. Long-term Reliability Compensation Issues relate principally to local capacity shortages identified in the organized market's reliability-based planning process resulting from the reasonably expected retirement of units or the need for new infrastructure that is not anticipated to be installed.

17. If the inquiry shows that the organized market exhibits material Reliability Compensation Issues, the next step is to evaluate whether market design improvements can be implemented that will work to resolve the issues. Conversely, if the inquiry does not find that the organized market exhibits material Reliability Compensation Issues and the issue is of sufficiently narrow scope, then significant focus on general design issues is not required and targeted approaches (such as unit specific contracts or compensation schemes) may be appropriate.

18. In undertaking this evaluation, the specific Reliability Compensation Issues present in the organized market should be reviewed and the market design changes targeted thoughtfully at their resolution. Thus, the presence of Reliability Compensation

Issues (whether long-term, short-term or both) should be identified and there should be a demonstration that the solution proposed is feasible, implementible and expected (with a high degree of probability) to solve the problem. Such demonstration must include a showing that the revenue produced by the proposed solution is adequate to actually solve the problem at hand and that the proposed solution includes safeguards to prevent the unwarranted exercise of market power beyond the recovery of such necessary revenue.

19. Reliability Compensation Issues can easily occur when the market design elements are not well coordinated and the value of services that provide local reliability is not reflected in the market. The value of such service should be apparent to both buyers and sellers. Market design features that can work as solutions to these problems include: locational changes such as locational installed capacity, locational operating reserves, locational pricing for energy in times of local operating reserves scarcity; higher bid caps or relaxed mitigation for otherwise mitigated units needed for reliability (increased reference prices; proxy unit based approaches; increased offer caps in unit-based cost capping regimes); or other approaches that are designed to solve the Reliability Compensation Issues while also taking into account appropriate protections against the unwarranted exercise of market power. Further, basic market design should be considered to prevent the existence of these problems. For example, markets with such features as generator deliverability requirements should be less likely to face Reliability Compensation Issues than those that do not. In addition, market features such as uplift spread broadly across market participants can serve to mask the problems and create subsidies which can defeat the goal of incenting infrastructure where it is most needed.

20. We believe that the use of market design improved features is the preferred choice for solving material Reliability Compensation Issues. However, we recognize that market design changes may not be effective in every situation where such issues are present. Accordingly, we believe that if after such changes are made or it is recognized up front that market design changes can not be effective for solving the particular problem at hand, then other mechanisms should be utilized to deal with the issues. For example, we are mindful of the comments made to us by representatives of the financial community, that dependence on price volatility for investment is an inadequate foundation for cost-effective financing of new infrastructure. A clear preference for long-term contracts and/or reliable revenue streams was stated.[11] Ideally, the market should encourage LSEs to engage in long-term bilateral contracting to support needed investment, however, some market structures do not appear compatible with such an

[11] See comments of Frank Napolitano, Lehman Brothers, Inc., and Jonathan Baliff, Credit Suisse First Boston Corporation, during the February 4, 2004 Technical Conference in Docket PL04-2, particularly pages 108-112.

approach.[12] We believe that market design features such as locational requirements for installed capacity may prove an effective approach to create stable revenue streams.

21. However, we understand in certain circumstances these market design measures may not prove effective. In those circumstances, the Commission is willing to consider specific proposals to provide an appropriate last resort process such as an RTO/ISO administered auction to create a long-term commitment which can support cost-effective financing where the problem is projected to be a long-term one. Short-term remedies such as generator specific contracts entered into by the RTO/ISO may also be appropriate. We note that the foregoing should be viewed as backstops to the market design based solutions that are required to insure reliability. Moreover, in considering whether these latter actions should be adopted, the Commission will need to consider whether, or under what circumstances, it is appropriate for a RTO/ISO to procure capacity on its own initiative. We are concerned that when an RTO/ISO negotiates contracts to procure power, it may assume an interest in market prices which could sacrifice its independence and change its incentives. RTO/ISO auctions/RFPs are not substitutes for market design based solutions, and should only be invoked when there is an affirmative finding that market design solutions will not effectively solve the problem.

22. Finally, in implementing RTO/ISO based backstops, the rules should provide for a clear triggering event that authorizes the RTO/ISO to act. Such a triggering event should reflect findings that, for the reasons set forth above, market design options are not appropriate and an auction/RFP is the most effective vehicle for creating a solution. Further, consistent with our views regarding the negative implications of broadly spread uplift charges, the payment obligations resulting from the auction/RFP process should be allocated to the local area benefiting from the reliability improvement. Finally, like the market design process, the analytical process resulting in a RTO/ISO administered auction/RFP, should be transparent, include material stakeholder input, and attempt to create a consensus of market participants, most importantly the market participants in the reliability impacted area. While lack of consensus is not a reason not to act, a recognition of the issue and the fact that a solution will impact the market participants in an affected area should create an environment where effective solutions (consistent with the criteria set forth above) driven by impacted parties can be explored with the recognition that failure to arrive at such a solution will not serve as a basis not to act.

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[12] While long-term bi-lateral contracts with creditworthy counterparties would provide the support needed for investment, such contracts have not always materialized due to lack of clear price signals coupled with the existence of socialized uplift and short time horizons on the part of load serving entities as either default service providers or competitive retail suppliers.

23. We have applied this policy on Reliability Compensation to the PJM market and to the September 30 filing. The Commission finds that the PJM market exhibits few material short-term or long-term Reliability Compensation Issues. The record in this proceeding does not include examples of persistent or material Reliability Compensation Issues which would require significant revisions to the existing PJM market design. In large part, this is because elements of PJM's market design are designed to ensure that there is construction of adequate transmission infrastructure. PJM's current market design provides that new generators that wish to sell in PJM's capacity markets build sufficient transmission upgrades to be deliverable to anywhere in PJM. Additionally, through its transmission planning process PJM also identifies transmission upgrades that are needed to ensure the reliability of service. Recently, PJM has also started planning transmission upgrades that are economic in nature. The transmission owners within PJM have specific obligations to construct transmission upgrades determined to be needed for reliability or for economic reasons through the transmission planning process.[13] Because of these aspects of its market design, PJM's market does not need major changes due to Reliability Compensation Issues. Nevertheless, the record in this case supports the need for certain changes to the market design to better reflect scarcity conditions in the market prices as well as certain changes to the mitigation rules to provide clearer rules for the limited number of units that are subject to mitigation for a significant portion of their run-hours. These changes are discussed herein.

A. Local Market Rules

1. PJM Filing

24. PJM does not propose to change the offer capping mechanism itself. It believes this mechanism is effective in addressing local market power when generation is sufficient. PJM believes, however, that its local market rules can be enhanced through certain revisions. The proposed revisions consist, first, of removing the exemption for generating units constructed on or after July 9, 1996 (post-1996 units) from the offer cap provisions and recompensing these units at a negotiated level that would reflect competitive conditions. PJM also proposes suspending offer capping when the PJM Market Monitoring Unit (MMU) determines that the generation supply in a locality is sufficiently competitive, generally when there are four or more pivotal suppliers. PJM also responds to the Commission's directive in the Reliant order to consider whether its current market design, including its mitigation measures, satisfies the requirement of the FPA that rates must be just and reasonable. PJM's reasons for retaining its offer capping

[13] Note that PJM's Economic Expansion process is currently the subject of a rehearing request in Dockets RT01-2-013.

mechanism and its proposed revisions to the offer capping provisions are described below.

25. PJM states the offer caps "'are intended to address market power in load pockets where customers are dependent on must run generators, that are often few in number within the load pocket.'"[14] PJM explains that on its system, there is sufficient generation capacity in load pockets, but the generating units in load pockets can exercise market power because they are generally owned by only one or two companies.[15] PJM states that in the absence of offer caps, when transmission in a portion of the system is constrained and there is insufficient competition among generators in the load pocket, generation resources in the affected load pocket could extract monopoly profits because the constraint requires PJM to call upon the units to operate to maintain reliable service in an affected area.[16] PJM caps a generating unit's offer price only when there are limits on transmission capability and it must dispatch the generation resource out of economic merit order to maintain system reliability.[17] PJM states that its existing offer capping

[14] Citing Atlantic City Electric Company, 86 FERC ¶ 61,248 n.50 (1999).

[15] Declaration of Joseph E. Bowring P 30-35 and 40, PJM Filing. In the Reliant case, Reliant owned at least 179 MW of generation in a load pocket known as West Met Ed (the western portion of the Metropolitan Edison zone). In one instance, a total of 90 MW was needed in the load pocket because demand was 790 MW and there was only 700 MW of transmission import capability at that time. PJM required Reliant's units to run under an offer cap because their offers were higher than the market rate, not because there was a scarcity of generating capacity. Reliant order, 104 FERC ¶ 61,040 P 3; Declaration of Joseph E. Bowring P 55, PJM Filing; Answer of PJM Interconnection, L.L.C. to Complaint at 15-17, Docket No. EL03-116-000 (April 25, 2003).

[16] Competition among generators may be insufficient, and therefore, a generator may be able to exercise local market power, either when there is a concentration of generator ownership within a load pocket, or the need for local units to operate to assure system reliability and stability within the load pocket. Standard Market Design Notice of Proposed Rulemaking, Remedying Undue Discrimination through Open Access Transmission Service and Standard Electricity Market Design, Notice of Proposed Rulemaking, IV FERC Stats. & Regs. ¶ 32,563 P 406 (2002) (SMD NOPR).

[17] Section 6.4.1, Original Sheet No. 401, PJM Interconnection, L.L.C., FERC Electric Tariff, Sixth Revised Volume No. 1.

mechanism effectively addresses local market power in load pockets when there is no scarcity of generation.[18]

26. PJM also states that its offer capping provisions adequately compensate generation owners. PJM states that when there are no transmission constraints, the generating units in a load pocket may bid without limits in the energy and capacity markets. The offer capping provisions limit the offer price a generator in a load pocket can make only when there is a transmission constraint and the unit must run to maintain reliability.[19] PJM states that an offer of marginal costs plus ten percent reasonably reflects the level at which a unit in a competitive market would offer its energy for sale.[20]

27. PJM also states that it is important that the definition of marginal cost in the calculation of the offer cap be accurate.[21] PJM states that the definition of marginal cost should include a measure of opportunity costs, when relevant, plus a measure of risk, when relevant. It would be appropriate, PJM states, to include as an opportunity cost the forgone optionality value of a unit with environmentally limited run hours that is required to run offer capped by PJM's system operators during lower value winter months. PJM states it implemented such an opportunity cost adder for Reliant and that the PJM MMU is working with stakeholders to develop methods to make operational these components of marginal cost and also components of marginal cost for start-up costs. PJM states that such refinements in the definition of marginal cost will be incorporated into the final rules developed by the Local Market Power Mitigation Working Group.[22]

28. PJM also explains that the offer capped unit receives the higher of its capped offer price or the market-determined clearing LMP in the absence of constraints.[23] Thus, offer capped units are not limited to a price equal to the offer cap. The result is that units receiving the LMP may receive significant additional energy market revenues even when they are offer capped and they always receive at least as much as they would if they were

[18] PJM Filing at 2.

[19] Answer of PJM Interconnection, L.L.C. to Protests at 13 (November 19, 2003); PJM Filing at 9 and attached Declaration of Joseph E. Bowring at P 9.

[20] Declaration of Joseph E. Bowring P 16, PJM Filing.

[21] Declaration of Joseph E. Bowring P 37, PJM Filing.

[22] Declaration of Joseph E. Bowring P 37, PJM Filing.

[23] PJM Filing at 9.

paid the unconstrained PJM market price. PJM states that, for example, in 2001, there were 792 cases where the price paid an offer capped unit exceeded the offer cap by more than $500 per MWh.[24]

2. Protests and Comments

29. PJM's default mitigation policy has received a sizable number of comments and protests in this docket, particularly as it applies to older, inefficient peaking units – the Reliant complaint had specifically requested that this policy be changed.

30. Only two parties (FirstEnergy Companies and Joint Consumer Advocates[25]) filed comments that support the maintenance of the current offer-capping 110% mitigation scheme. The Joint Consumer Advocates argues that the current approach is just and reasonable because it allows market prices along with mitigation with necessary. FirstEnergy agrees that the rules continue to be necessary to prevent the exercise of market power by generators operating in potential load pockets, but they did suggest that procedures concerning unit mothballing and retirement will need to be developed.

31. Multiple parties filed comments and protests that were critical of PJM's mitigation structure. Common arguments raised in these comments are that (a) offer-capping limits development of competitive markets, and does not attract capital necessary for infrastructure development, (b) any mitigation approach should enhance the overall market design, and should be consistent with all other market design features, and (c) that units subject to mitigation are not able to recover their "going-forward" costs, and these units must have the opportunity to recover annual variable and fixed costs, at the minimum. These commenters argue that PJM did not sufficiently respond to the Commission's July 9 directives for detailed analysis of these issues. The Delaware Municipal Electric Cooperative (DEMEC) state that PJM has not demonstrated that offer caps address and remedy market power.

32. A number of specific comments and criticisms were raised by multiple parties about aspects of PJM's current mitigation procedure. Consolidated Edison Energy and PPL Parties argue that mitigation measures should only be applied when there is a demonstration that bidding behavior would enable generators to be able exert market

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[24] Declaration of Joseph E. Bowring P 11, PJM Filing.

[25] Comprised of the Maryland Office of People's Counsel ("MPC"), the Pennsylvania Office of Consumer Advocate ("Pa. OCA"), the Ohio Consumers Counsel ("OCC") and the District of Columbia Office of People's Counsel ("D.C. OPC") (collectively referred to as the "Joint Consumer Advocates").

power. Exelon and Pepco Holdings both comment that the "one-size-fits-all" nature of PJM's mitigation is inappropriate, particularly for units with low run hours and unpredictable mitigation, and argue for a "menu" of options that fit the specific circumstances of specific must-run units. Exelon raises similar arguments and states that offer capping should occur only when there is local market power or concentration in a load pocket and a related unit or units are needed to run to preserve system reliability. Exelon also notes that PJM's OATT and Operating Agreement provide that a unit owner can seek to negotiate with PJM for an appropriate offer cap level, but PJM is not obligated to negotiate. In particular, Pepco Holdings believes that generators that provide short term mandatory reliability services should be fairly compensated. Commonwealth Chesapeake also believes that mitigation measures which take into account the unique circumstances of each case, including without limitation fuel supply infrastructure, construction cost premiums and asset age, may be needed for units that are needed to meet reliability standards. ODEC recommends in the event that generating units that are subject to mitigation are unable to recover sufficient revenues on an annual basis, the unit owner should have the option of negotiating a cost-of-service contract with PJM whereby PJM could schedule the output of the generating unit at its discretion. Furthermore, Old Dominion Electric Cooperative (ODEC) argues that current mitigation mechanism presents another opportunity for over-mitigation because it subjects the entire generating capacity of must-run units to mitigation.

33. Several parties suggested revisions to PJM's mitigation approach. Multiple parties recommend that the definition of incremental cost be changed to include additional cost components. PSEG requests that if the existing mitigation is continued PJM should revise its current Cost Development Task Force (CDTF) guidelines, as described above, to capture all of the appropriate variable costs that a generating unit may incur, including opportunity costs.[26] Exelon and PJM's Supplier Caucus argued that the one-size-fits-all approach used by PJM is inappropriate. They propose that a mixture of formula offer caps, negotiated offer caps, capacity contracts, and scarcity pricing be used depending on whether scarcity exists and whether the hours when a unit is operated as a RMR are predictable. Pepco Holdings submitted a similar proposal to address compensation for existing RMR units. Under their proposal, there would be different treatments of RMR units based on how often they were offer-capped. For units that are offer capped less than 80% of their run hours, Pepco Holdings proposes To-Go" cost plus 10%, where "To-Go" cost is defined to include Fixed O&M, Taxes, Insurance and Working Capital, and excludes only Depreciation, Amortization, Interest and Return on Capital. For units offer capped greater than 80% of their run hours and are needed for reliability, PJM should be

[26] PSEG also notes that the PJM MMU has stated that PJM will review those guidelines, but that no specific improvements have been set forth to date.

required to negotiate an RMR-type contract allowing for recovery of all embedded costs net of market revenues. This should not be a yearly election so as not to give the unit owner a competitive advantage in the market, but may incorporate a yearly evaluation by PJM to ensure a unit's continued eligibility.

34. Additional parties offered significant revisions to PJM's mitigation. ODEC's proposal involves determining pivotal suppliers and pivotal quantities of generation from these suppliers, and mitigating only these pivotal quantities. Payments to mitigated units would be based on either cost-based rates or market-based prices. Reliant offered a System Surrogate Unit methodology that bases payments to units that fail a market power screen on the cost of the last unit expected to be dispatched in PJM. RMR units would be allowed to retire, but only after an auction is conducted. PPL Parties proposed a broader auction that could be requested by either generation or load. Bids in this auction would be made in the form of a supplemental capacity payment. PSEG advocates an interim mitigation solution based on RMR agreements before an auction process can be implemented. Under their proposal, PJM would collect these costs from those network load customers that have benefited from the continued availability of the unit in question, and do so on a sub-zonal basis to avoid harming those customers that have not benefited directly from the unit's continual availability. PSEG also requests that the Commission also condition its acceptance of any RMR agreement on a showing that the relevant area failed PJM's "Deliverability to Load" test.[27]

35. PJM filed an answer to the initial comments and protests, participated in the February 5 Technical Conference, and submitted comments and reply comments following the Technical Conference. It also reiterated its positions that (a) offer caps based on incremental cost plus 10 percent are compensatory, and (b) short-term scarcity pricing is an inappropriate administrative intervention in the market. PJM also emphasized that the size of the problem is small. According to the PJM Market Monitor, there are some hour intervals when there could be 30 units, but typically it is a relatively small number of units, a relatively small number of megawatts, also generally constrained, where it's systematic to a very small number of load pockets.[28] In support of

[27] This test "ensures that, within accepted probabilities, energy will be able to be delivered to applicable PJM regional load, regardless of cost, from the aggregate of capacity resources available to PJM." Manual 14B: Generation and Transmission Interconnection Planning at 51-52 (effective October 31, 2003), available at *http://www.pjm.com/contributions/pjm-manuals/pdf/m14bv02.pdf* (last visited February 20, 2004).

[28] Transcript of February 5, 2004 Technical Conference, Page 15, 9-13.

its assertion that PJM's offer-capping does not result in financial harm to the affected units, PJM states that its offer-capped units have received compensation similar to other non-capped units,[29] PJM further urged the Commission to reject the proposed alternatives to its filing because they were not subject to review in the stakeholder process.

3. Commission Response

36. 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. As such, the Commission does not find that changes are needed to these mitigation rules for most generating units. The data presented by PJM indicates that overall the cost capping provisions are used in a limited number of hours. [30] Most generating units within PJM are subject to mitigation for only a few hours a year. Therefore, the Commission finds that the parties supporting a wholesale revision to these rules have not met their burden of proof to show that these rules are unjust and unreasonable. However, as discussed below, narrower changes are needed to these rules.

37. As an initial matter we note that PJM's filing failed to fully comply with our directions in the July 9 Order. In particular, PJM did not provide "detailed analysis" of how units are operated to support reliability, nor did it provide sufficient assurance that the current mitigation is providing appropriate compensation for must-run services. Further, while PJM presented information on the amount of offer-capping and general statements on relative compensation with respect to non-offer-capped units, PJM did not adequately show the totality of its market design provides a sufficient opportunity to recover costs for units that are operated primarily to support local reliability. Units that are used a high percentage of the time to support reliability typically have high marginal costs, and are not dispatched in merit order most of the time. Under PJM's current market rules, the bid of the least efficient unit dispatched will set the market price. If a unit is mitigated, its bid is limited to its incremental cost plus 10%. Accordingly, a frequently mitigated unit may set the market price in many periods when it is dispatched, and during these periods it will only receive its incremental costs + 10%, which might not be sufficient to enable recovery of its fixed costs over the long term. In addition, under

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[29] Transcript of February 5, 2004 Technical Conference, Page 16, 11-16. See also, PJM Market Monitoring Unit, 2003 State of the Market, March 4, 2004, page 52

[30] PJM reports that in 2003, an average of 0.3 percent of MW were offer capped (PJM March 1, 2004 Reply Comments, page 3), and that only 1.1 percent or less of units that bid into PJM had their bids offer-capped (PJM February 20, 2004 Initial Comments, Figure 4).

PJM's current tariff, these frequently mitigated units do not have a right to alternative compensation that would allow them to recover their going forward costs, at the minimum.

38. The Commission finds that the existing tariff provisions for offer-capping are unjust and unreasonable for these types of units because they do not include a specific process for such units to obtain a higher bid cap or other means of ensuring a reasonable opportunity for recovering their costs. Rather, the current tariff allows for negotiation between the generator and PJM. Since the negotiations are at the discretion of PJM, the current tariff does not provide the generator with a clear statement of its rights if an agreement cannot be negotiated. Nor does the current tariff provide any guidance on when a generator may be entitled to a higher bid cap or other type of arrangement. Because these provisions rely entirely on the discretion of PJM and do not clearly lay out the rights of generators, the Commission finds that the existing provisions are unjust and unreasonable. To address this deficiency, the Commission directs PJM to modify aspects of its offer-capping approach. As Exelon and Pepco Holdings argue, PJM's "one-size-fits-all" solution is not appropriate for units with low run hours and unpredictable mitigation. The recommendations of Exelon, PJM's Supplier Caucus, and Pepco Holdings that the Commission direct PJM to offer a menu of mitigation depending on local system requirements and the circumstances of the RMR unit have merit. In addition, the Commission finds PJM's policy on retirement is unclear, and directs further clarification.[31] Units with high marginal costs may find that it is economic to retire if they are able to run for only a few hours a year. A clear retirement policy will provide rules that detail when generators can retire for economic reasons and when generators that would otherwise retire for economic reasons must continue to operate to ensure reliability.

39. The Commission believes that two changes to the offer-capping provisions of the tariff are needed to provide clear rules for both PJM and the generators. First, the rules must clearly spell out the rights generators have to higher bid caps when they are subject to frequent mitigation. Therefore, the Commission directs PJM to revise its tariff to provide the right to frequently mitigated units needed for reliability (i.e., units that are

[31] Joe Bowring, the PJM MMU, admitted the lack of clarity in the PJM tariffs at the Technical Conference.

offer capped for 80% or more of their run hours,[32] are needed for reliability, and are not recovering sufficient revenues to cover their costs) to receive higher offer caps or alternative compensation. The Commission finds that there should be a rebuttable presumption that all units offer capped for 80% or more of their run hours be considered units needed for reliability. PJM will have the burden to demonstrate that such units are not needed for reliability.[33]

40. Since these units are providing reliability services and may not currently receive adequate compensation for this service, these must-run units need to be compensated at a level that adequately covers their fixed and variable costs.[34] We direct PJM to develop a policy which would provide a reasonable opportunity for recovery of going forward costs, at the minimum, when the above conditions hold. Such a policy can consist of market design changes, such as higher bid caps for such units. It may also include RMR-type contracts or a set of capacity payments that are designed to allow for recovery of going forward costs. As noted earlier, there are several issues that need to be addressed if PJM chooses RMR or capacity payment agreements, such as whether such contracts provide appropriate long term investment signals and may discourage locational investments that increase the reliability of the system. Therefore, if PJM proposes an RMR contract that provides fixed cost recovery, it needs to explain why market design approaches are ill-suited to remedy the problem.

41. Second, the current tariff does not provide sufficient ability to resolve disputes relating to compensation for these units. The Commission finds that this issue should at the outset be addressed through bilateral negotiations, as provided in the current tariff. The Commission directs PJM to file any agreements with these units with the Commission, along with explanations of how the negotiated agreements comply with the Commission policy stated above. However, we are concerned that the tariff does not provide a process if the negotiations are unsuccessful. We find that after allowing time for bilateral negotiations, unresolved issues should be brought to the Commission for

[32] The Commission adopts Pepco Holdings use of 80% of run hours as a good proxy of a unit that is used primarily to support local reliability. Units with this level of offer capping are typically inefficient, peaking units that are operated for a unpredictable number of hours.

[33] For example, unless the units are demonstrably needed for reliability, PJM should be willing to let them retire.

[34] Fixed costs do not include any acquisition premiums that resulted from sale of the unit.

resolution. Therefore, the Commission further directs PJM to add a new section or language to 6.4.2(iii) that if the Office of Interconnection and Market Seller cannot reach agreement after 60 days from the commencement of negotiations, then the parties can bring the dispute to the Commission for resolution.

42. In addition, as multiple commenters have argued, PJM's policy on retirement is unclear, and requires further clarification. As the commenters argue, a clear policy on retirement will assist in identifying and clarifying the need for must-run units. For example, if a unit that is offer-capped greater than 80% of its run hours and the unit is not needed for reliability, there should be no obstacles to the retirement of the unit, as long as the retirement process provides sufficient notice. If the unit cannot be permitted to retire because of reliability concerns, the generator should be compensated for keeping the unit in service. The Commission directs PJM to develop a clear policy on retirement, and file revised rules on retirement within 180 days. In its retirement filing, the Commission directs PJM to address issues raised about non-recovery, inability to retire due to the need to maintain reliability, and retirement auctions. In particular, due to concerns about physical withholding, the Commission directs PJM to consider ODEC's recommendation that owners of generating units who wish to retire them be required to auction the units off to the market prior to retirement.

B. Suspension of Offer Capping

1. PJM Filing

43. PJM proposes to add a new provision, section 6.4.1 (e), to allow suspension of the offer caps when competitive conditions exist in a load pocket.[35] PJM states this section enhances its local market rules because it provides a mechanism for the PJM MMU to determine whether a locality is competitive and remove offer price caps when they are no longer necessary. PJM states this is a significant relaxation of PJM's local market rules.

44. The proposal provides that, generally, the generation supply in a locality shall not be deemed sufficiently competitive to warrant suspending offer price caps when three or fewer generation suppliers are jointly pivotal because all are required to serve the load in

[35] First Revised Sheet Nos. 131 and 131A, Schedule 1, PJM OA; First Revised Sheet No. 402, Attachment K--Appendix, PJM OATT.

the locality.[36] PJM chose three pivotal suppliers as the threshold based on concerns about joint exercises of market power by three or fewer suppliers. Regardless of the number of generation suppliers in a load pocket, however, the PJM MMU will monitor the PJM transmission system on an on-going basis to determine whether load pockets are sufficiently competitive to warrant suspension of offer price capping. If it determines that sufficient competition exists, the PJM MMU will suspend offer price capping in the load pocket and will post notice of the suspension on the PJM Internet site. Similarly, the PJM MMU will monitor whether load pockets have become non-competitive, and if it determines a load pocket has become non-competitive, it will post a notice on the PJM Internet site reinstating offer price capping.

2. <u>Protests and Comments</u>

45. The primary criticisms raised by parties about PJM's proposal are that the proposed suspension authority requested for the MMU is too broad and the criteria for suspension are not sufficiently clear. For example, the NRG Companies argue that PJM's standard is "arbitrary, excessive, and inconsistent with reasoned Commission precedent."[37] The Electric Power Supply Association (EPSA) and the Virginia State Corporation Commission (Virginia SCC) are concerned about the degree of discretion provided to PJM to suspend offer caps, and lacks detail. The SCC requests more detail be provided in regard to what criteria and data the MMU would use in its analyses of local market competitiveness. The SCC also requests that stakeholders have notice prior

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[36] A pivotal supplier is a supplier whose output is required in order to meet relevant load. Declaration of Joseph E. Bowring P 49 and 50, PJM Filing. PJM provides the following example. If there are five suppliers in an area, each with 100 MW of generation capability and the load in the area is 500 MW, all five suppliers are individually and jointly pivotal. If load is 400 MW, no single supplier is pivotal, but two suppliers are jointly pivotal. If the load is 300 MW, no single supplier is pivotal, but three suppliers are jointly pivotal. The measure of pivotal is [(Total Supply - Participants' Supply)/(Total Load)]. When this measure is less than 1.0, the relevant participants in the numerator are pivotal. Declaration P 50.

[37] The Commission precedents that NRG cites are <u>Midwest Independent Transmission System Operator, Inc</u>., ER03-323-000, 102 FERC ¶ 61,280 at P 71 (2003), <u>request for rehearing denied</u>, 105 FERC ¶ 61,147 at P 35 (2003). Note that these are guidance orders.

to such a decision, and that PJM must make a filing to the Commission prior to suspension or reinstatement of offer caps.

46. Several commenters raise specific concerns about PJM's suspension proposal, particularly the definition of market power implied by the proposed pivotal test. Pepco Holdings requests that PJM be required to establish a clear objective standard on what constitutes abuse of market power, and directs PJM to base its market power analysis on Department of Justice/Federal Trade Commission (DOJ/FTC) merger guidelines. Consolidated Edison Energy and Pepco Holdings argue that PJM's proposed pivotal test is too stringent, and argues that conduct and impact tests are more appropriate. DEMEC suggests that PJM utilize an HHI test, in addition to the pivotal test, to determine whether to suspend offer caps. NEM submits that the existence of three or fewer jointly pivotal units does not justify a presumption of market power abuse that requires mitigation. NEM believes market power must both exist and be abused, i.e., there must be an intent to manipulate prices.

3. Commission Response

47. The Commission finds that it is important that the mitigation measures be designed to be in effect only when there is an actual opportunity to exercise market power. Consequently, the Commission accepts PJM's proposal, with modifications. This proposal appropriately addresses a key problem with the current mitigation approach, while continuing to address local market power. If it can be determined that local market power does not exist, then there is no rationale to offer-cap bids.

48. However, while the Commission agrees with the underlying rationale for this measure, we are concerned that as structured it relies on discretion rather than clearly defined triggers. The Commission finds that the proposed suspension of mitigation accords the market monitor excessive discretion in determining the degree of competitiveness.[38] Consequently, the Commission directs PJM to submit a compliance

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[38] For instance, proposed section 6.4.1(e) states that "offer caps may be suspended in a locality when the Market Monitoring Unit determines that the generation supply in such locality is sufficiently competitive. Generally, the generation supply in a locality shall be deemed not sufficiently competitive to warrant suspending offer price caps when three or fewer generation suppliers are jointly pivotal because all are required to serve the load in the locality." [Emphasis added] This proposed language only suggests that the Market Monitoring Unit might use the competitiveness standard subject to the discretion of the Market Monitoring Unit. The Commission has in the past rejected according this level of discretion to market monitors. See PJM Interconnection, LLC, 106 FERC ¶ 62,277 at P35-36 and Investigation of Terms and Conditions of Public Utility Market-

(continued)

filing within 60 days which will (a) provide additional justification of PJM's proposed jointly pivotal competitiveness standard, and (b) revise the proposed tariff language to include clear procedures establishing when PJM will apply the standard.

C. Elimination of Exemption for Post-1996 Units

1. PJM Filing

49. PJM proposes to eliminate the exemption from the offer cap rules for generating units for which construction commenced on or after July 9, 1996 (post-1996 units).[39] PJM proposes a new provision, section 6.4.2(iv), specifying that for generating units for which construction commenced after July 9, 1996 and before September 30, 2003, the offer price cap will be "a negotiated amount that reflects the level that reasonably could be expected to be offered by the generating unit under competitive conditions."[40] PJM's transmittal letter explains that the negotiated amount will be established in agreements between the generating unit and PJM. PJM states that in the event the negotiations do not lead to a solution, the PJM MMU would make a filing with the Commission to resolve the issues.[41] PJM asserts the proposed provision protects post-1996 units that relied on the exemption, but that may have local market power, from being under compensated.

50. PJM asserts there is no sound basis for exempting post-1996 units from local market power mitigation. It states this exemption was originally included in the local market rules based on an argument that while entry of new generation will eliminate opportunities for local market power, price cap regulation may deter some potential entry.[42] PJM asserts that the exemption is no longer necessary for this purpose. It asserts that its proposed Local Market Auction will enable PJM to determine on a case-by-case basis whether scarcity exists within subregions of PJM and whether entry needs to be encouraged through an auction. The Local Market Auction, it states, will permit

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Based Rate Authorizations, California Independent System Operator Corp., 105 FERC ¶ 61,218 (2003)

[39] Section 6.1, First Revised Sheet No. 129, Schedule 1,PJM OA; section 6.1, First Revised Sheet No. 399, Attachment K--Appendix, PJM OATT.

[40] Section 6.1, First Revised Sheet No. 131, Schedule 1, PJM OA; First Revised Sheet No. 402A, Attachment K--Appendix, PJM OATT.

[41] Declaration of Joseph E. Bowring P 52, PJM Filing.

[42] Atlantic City Electric Co., 86 FERC ¶ 61,248 at p. 61,904 (1999).

generators that locate in load pockets with scarcity to be compensated adequately for doing so through a fixed capacity payment.

51. PJM also states that July 9, 1996 is the date the Commission established for exempting new generators from having to demonstrate a lack of market power in order to receive market based rate authority, not for exempting new generating units from market mitigation measures. PJM asserts that in enacting the blanket exemption for new generation from demonstrating lack of market power, the Commission recognized that in specific instances a new generator may, in fact, have market power.[43] PJM asserts that in a load pocket, a new generator can, at times, have the same market power that existing generators possess. PJM asserts that removing the offer price capping exemption for post-1996 units permits PJM to mitigate such market power when it arises. PJM asserts there are post-1996 units in PJM that have the ability and the incentive to exercise local market power, although currently this ability is quite limited,[44] and that it makes sense to address the local market power mitigation of these units and also of future units before exercise of local market power by these units becomes a significant issue. PJM asserts that the Commission recognized in the Reliant order that other markets do not exempt new generators from offer price capping,[45] so that eliminating the exemption in PJM would make its market rules consistent with those of other Independent System Operators.

2. Protests and Comments

52. Generators and marketers generally favor continuing the exemption of post-1996 units from offer capping mitigation. They argue that new generating units were built with a clear understanding that they would not be subject to the local mitigation rules, and it would be inappropriate to change the regulatory compact that helped encourage their construction. Some generators and marketers argue that, in the event that mitigation is applied to post-1996 units, mitigation should be "looser" than the current, 110 percent of marginal cost offer cap.

53. Representatives of buyers (such as munis, co-ops, state commissions, industrial customers etc.) generally support removing the exemption. They argue that new

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[43] Order No. 888 at p. 31,657; see also Delta Energy Center, LLC, 98 FERC ¶ 61,124 at p. 61,373 (2002).

[44] Declaration of Joseph E. Bowring P 53, PJM Filing.

[45] Reliant, 104 FERC P 31.

generators can have the ability to exercise local market power, and thus, there should be no distinction between pre- and post-1996 units in applying mitigation measures.

3. Commission Response

54. The Commission finds that the record in this proceeding does not support a finding that the exemption for post-1996 units has been unjust and unreasonable. It does not present sufficient evidence that any post-1996 units have been exercising market power. PJM's support for its proposed removal of the exemption references a potential in the future and a single unit on the Delmarva peninsula, but it does not support this concern with any analysis.

55. The Commission is also concerned about equity issues associated with changing the rules for units that were built with the expectation that they would not be offer-capped. Removal of the exemption would likely result in lowered revenues and valuation for the units. Moreover, it could create further regulatory uncertainty that could discourage future investment.

56. The Commission, therefore, rejects PJM's proposed blanket removal of the post-1996 exemption because of the equity and regulatory uncertainty concerns. The Commission recognizes that in this case the PJM market monitor has expressed concerns that certain post-1996 units may be able to exercise market power. We will consider specific evidence presented by the market monitor or others that a specific generation unit possesses market power on a case-by-case basis.[46] In such cases, there must be a specific showing that the unit has the potential to exercise market power, including, for example, whether the unit is affiliated with existing generators in the same local area, and a proposal regarding specific mitigation measures tailored to that unit's potential to exercise market power. Additionally, the party making the filing should indicate whether there are other ways of remedying the potential for the market power, such as additional construction of transmission, that could solve the problem at a reasonable cost.

D. Local Market Auction

1. PJM Filing

57. PJM proposes a Local Market Auction to address long term scarcity. PJM states long term scarcity exists "when local load exceeds the sum of the import capability into

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[46] For example, if the owner of a new unit owns other older generation located close to the new unit, then the evidence may be sufficient to justify special treatment for the new unit.

an area and local generation in that area."[47] PJM states that currently there are no long term scarcity conditions that affect reliability in any PJM load pockets. PJM states it regularly performs a series of tests to determine reliability within PJM and in subareas defined by transmission constraints within PJM. "The results of those tests currently indicate that there are no areas within PJM where there are reliability issues due to inadequate generation."[48] Thus, PJM wishes to enhance its local market rules by addressing long term scarcity should it arise.

58. PJM proposes to add a new section 6.5 to establish the Local Market Auction to address possible long term scarcity.[49] Section 6.5 provides that if the PJM MMU, in consultation with the Office of the Interconnection,[50] determines that "present or projected local system conditions, as a result of both transmission constraints and generation availability, are expected to result in unreliable operations in a locality," the PJM MMU may request the Office of the Interconnection to conduct a Local Market Auction.

59. PJM states that the auction details need to be developed and will be addressed by PJM and stakeholders, with the resulting additional operating rules set forth in the PJM Manuals, or, as appropriate, in further amendments to the PJM OA and OATT. These details include (1) auction bidding rules for participants, (2) criteria by which PJM will evaluate bids in the auction, (3) the extent to which existing units in a load pocket should receive the clearing price set by the auction, and (4) rules regarding retirement and mothballing of generating units and their ability to trigger scarcity conditions. PJM Filing at 19-20. PJM states that the PJM MMU recognizes that existing units in an area

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[47] PJM Filing at 16. PJM states similarly on page 10 of its filing that long term scarcity exists "when there is inadequate generation and transmission import capability to serve the load in an area."

[48] Declaration of Joseph E. Bowring P 29, PJM Filing.

[49] Section 6.5, Second Revised Sheet No. 132 and Original Sheet No. 132.01, Schedule 1, PJM OA; section 6.5, Original Sheet Nos. 402A and 402B, Attachment K--Appendix, PJM OATT.

[50] The Office of the Interconnection consists of the employees and agents of the PJM Interconnection, LLC engaged in implementing the PJM OA and administering the PJM OATT, subject to the supervision of the PJM Board. Section 1.27, Original Sheet No. 22, PJM OA.

being addressed by an auction should also receive the auction clearing price in exchange for a long term-contract.[51]

60. At the time PJM made the filing, it intended to develop the more detailed rules within the next 120 days and make necessary filings with the Commission. In its Answer in this proceeding, PJM reiterates its commitment to work out the details of the auction with stakeholders and states it is seeking guidance from the Commission concerning the auction approach it has proposed in its filing.[52]

61. PJM states that in the Local Market Auction, it will pick the lowest cost option among transmission, generation, and load response to meet the reliability needs of the locality. It may select alternatives that are offered in the auction or transmission alternatives that it may direct be constructed pursuant to the Regional Transmission Expansion Planning Protocol in Schedule 6 of the PJM OA. PJM states it may decline to hold an auction if it determines that a transmission alternative would have an obviously lower cost than other alternatives and that it may direct the construction of this alternative. PJM also states it will monitor the competitiveness of the auction and, if it is not competitive, will hold a new auction or address the reliability issues in the Regional Transmission Expansion Planning Process (RTEPP).

62. With respect to the RTEPP, PJM states that the details of the coordination between the two processes need to be finalized prior to implementation of the Local Market Auction.[53] It asserts, however, that the two processes will not conflict. It states that the details to be established include when a condition of long term scarcity exists that the current Regional Transmission Expansion Plan will not resolve in a timely manner and the treatment in the context of an auction of elements of the current Regional Transmission Expansion Plan. PJM states that the PJM MMU and the PJM System Planning staff will work with stakeholders to develop procedures for evaluating proposals, selecting a solution for implementation, and integrating that solution into the Regional Transmission Expansion Plan. PJM states the Local Market Auction will be one more piece of a fully integrated planning process.

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[51] Declaration of Joseph E. Bowring P 45, PJM Filing.

[52] Answer of PJM Interconnection, LLC to Protests at pp. 17 (November 19, 2003).

[53] Answer of PJM Interconnection, LLC to Protests at pp. 15-17 (November 19, 2003).

63. PJM will enter into a long-term contract with the selected entity on behalf of the Load Serving Entities in the affected locality. In its transmittal letter, PJM states that if a generator wins the auction, the generator would receive a fixed capacity cost adder for the life of the unit, or a defined long-term contract period, in return for performance guarantees and energy offer price capping when required. Similarly, if a demand side management alternative wins the auction, it would receive a fixed capacity adder for the duration of the long-term offer, in return for performance guarantees and energy offer capping. If a transmission alternative wins the auction, the transmission owners would receive long-term revenue assurances. The costs of the new facility will be recovered from the Load Serving Entities in the affected load pocket[54] and shall be specified in a rate set forth in a separate schedule to the PJM OA.

64. PJM states that the competitive auction approach to long term scarcity which it is proposing is the better of two broad potential approaches to providing incentives to generators to locate in load pockets if they are needed for reliability. PJM opposes the other approach which it describes as short term "scarcity pricing" that is administratively set. PJM states this type of pricing is based on short term energy prices. PJM asserts that a competitive short term scarcity price cannot be defined and that an administratively set short term scarcity price does not result from a competitive process. PJM states that administratively set short term scarcity pricing translates immediately into higher energy prices in the load pocket whenever short term or long term scarcity conditions occur.[55] PJM asserts that administratively set scarcity pricing is an inefficient way to create incentives for entry. This approach, it asserts, would lead to price volatility--either the entry of a new generator in response to the high price signals would resolve the scarcity issue and energy prices would fall, or the expectation of such an effect could result in insufficient new capacity responding to the scarcity pricing and the persistence of high short term scarcity prices even after the new entry.

65. PJM supports its competitive auction proposal as producing the best price for resolving scarcity issues because the price would be the result of a competitive bidding process. It states the auction is designed to provide a market-based incentive to retain and attract appropriate levels of investment and that the auction would result in a long-term solution to scarcity and a correspondingly long-term commitment by load to pay the incremental fixed costs of the selected option. The fact that the auction winner must

[54] PJM cites California power Exchange Corp., 102 FERC ¶ 61,208 (2003), as supporting the appropriateness of charging the beneficiaries of the new facility for its costs.

[55] Declaration of Joseph E. Bowring P 39, PJM Filing.

enter into a long-term contract, PJM states, guarantees that the reliability needs of the load pocket will be met on a long-term basis, not just temporarily. PJM states that the auction clearing prices will be disciplined by the transmission alternative that PJM can direct.

66. PJM states that the competitive auction also meets the Commission's concerns, as expressed in the Reliant order,[56] as to whether there are both adequate incentives to attract and retain needed investment as well as rates that are not excessive in the context of PJM's bid-based market design, including its mitigation features. PJM states the competitive auction provides both the appropriate incentives and rates that are not excessive. It states the competitive auction will result in a market based solution to scarcity with the auction clearing price based on competing resources and the cheapest alternative selected. PJM states the solution chosen will receive fixed capacity cost adders (or if transmission, long-term revenue requirement increases) that will provide incentives to attract and retain appropriate levels of investment without resulting in excessive rates. PJM states that a well designed auction will result in market based incentives that will attract and retain investment in areas where it is needed and will prevent the payment of excessive rates such as those that would result from the short term scarcity pricing approach.[57]

2. Protests and Comments

67. PJM's auction proposal was received poorly by commenters owning generating units in both their initial comments and in the post-technical conference comments. The most common complaint was that the details of the auction were sketchy and additional information on the structure, timing, and relationship with transmission expansion would be necessary before it should be accepted by the Commission. Another common complaint was that the PJM proposal places too much discretion in the hands of the MMU to determine when a local market auction would be called.

68. While most commenters were in support of auctions in concept, several commenters advocated their use only as a last resort. Con Edison Energy argues that the most appropriate response to a lack of infrastructure in PJM should be through the market, and that necessary market reforms should be implemented to address lack of resource adequacy within load pockets. Others, such as DEMEC, question the need for an auction and advocate transmission additions to address load pockets and congestion.

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[56] 104 FERC ¶ 61,040 P 38.

[57] PJM Filing at 19; Declaration of Joseph E. Bowring P 41, 45, and 46, PJM Filing.

Conversely, NEM argues the current proposal, which has a transmission backstop, would give unfair competitive advantage to transmission owners.

69. Several commenters (i.e., PPL Parties, Reliant, and PSEG) submitted alternative auction proposals which would either change the trigger conditions for an auction or give other parties the ability to request an auction. Reliant argues that an auction should only be conducted when a unit wishes to retire. PPL argues for an open ability to request an auction by any party. PSEG offers an auction process similar to the New Jersey Basic Generation Service auction and NERA's Resource Adequacy Model proposal.

70. Issues associated with the role of PJM as an RTO in procuring long-term infrastructure were also raised. Several commenters state that there are no existing agreements within the PJM tariffs that give PJM the ability to procure generation or installed capacity on behalf of load. Hence, there are no current mechanisms for PJM to allocate capacity procurement costs to load. FirstEnergy argues that the proposal should be amended to allow LSEs the right of review over the auction process, since they will ultimately be responsible for payment.

71. In its post-technical conference notice, Staff asked (a) whether the Commission needs to make a determination on the concept of an auction in order to go forward, and (b) who should be responsible for capacity procurement – the RTO or LSEs under state oversight. On the first question, commenters indicated that guidance on the desirability of an auction from the Commission would be desirable. On the broader question on who should be responsible for procurement, most commenters stated that it should be the RTO acting as an agent or broker for load, and that ultimately load would have the contractual arrangement with the supplier.

3. Commission Response

72. The Commission believes RTO resource procurement, whether long-term contracts or direct procurement of generation, could, in limited situations, be necessary to provide adequate incentive to generators and the financial community to build new infrastructure in load pockets. If such actions are taken at all, then they should be only implemented as a backstop mechanism that results when no reasonable market design improvements can address and lead to resolution of the issue. The Commission does not wish to dismiss the use of an auction to address a reliability problem within a load pocket, and supports the reliance on transmission infrastructure as the default solution to resolve local reliability problems. The Commission does have concerns about who is ultimately responsible for capacity procurement. Moreover, we do not wish to impose costs on those market participants that have adequately planned for their own resource needs. For instance, a customer that has responsibly procured adequate resources to serve its future load within a load pocket should not be obligated to pay for the costs of

procurement needs that result from those that have not. Under that circumstance, the responsible participant would in effect be penalized. Such a policy would ultimately discourage market participants from voluntarily entering into forward-looking solutions and encourage reliance on RTO procurement processes.

73. The Commission rejects PJM's local market auction proposal as it is currently designed.[58] PJM has not met its burden to justify that its proposal is just and reasonable. As noted by many commenters, PJM's local market auction proposal lacks sufficient detail on the proposed auction.

74. Although we reject PJM's auction, we are still open to a last-resort auction that will address long-term reliability problems within PJM. Such an auction should reflect the following issues. First, the default transmission solution feature of the PJM proposal should be retained. Second, the proper role for the RTO is to identify areas where there is a reliability problem that can be addressed by generation, transmission or demand response. Third, the Commission supports the use of a multi-year planning horizon (e.g., three years). Fourth, PJM should act as a facilitator between affected load and generators in helping arrange the auction. PJM could be responsible for monitoring the market for the emergence of potential long-term scarcity, and for informing the public when it identifies such potential. Fifth, to ensure that the costs incurred to correct the reliability problem are allocated to affected load, the costs of the selected infrastructure should be allocated at ideally a subzone level to the load responsible for the problem. PJM's filing should also address the concerns raised by commenters about the potential disadvantages, as well as the advantages, of PJM procuring capacity on its own initiative. Thus, PJM's filing should consider the circumstances under which an auction should be conducted, e.g., whether (i) the auction should be held solely when PJM determines that it is necessary, or (ii) when an auction is requested by loads or their agents located in the affected reliability area. PJM's choice between these options should be supported in its filing. Ideally, the refiled auction proposal would be developed in conjunction with the RTEP economic expansion process.

[58] PJM admits that its proposal was not complete, and had stated that it would develop a more complete proposal within 120 days of its September 30 filing.

D. Generator Obligations

1. PJM Filing

75. PJM proposes new sections 11.7 and 36.9 to be added to the Operating Agreement and the PJM Tariff, respectively,[59] to specify that owners of generation (and entities that lease with rights equivalent to ownership) located in the PJM Control Area and PJM West Region must become members of PJM or otherwise agree to abide by all rules and procedures pertaining to generation and transmission in the PJM region, including but not limited to the rules and procedures concerning the dispatch of generation or scheduling of transmission in the PJM OA, PJM Tariff, and PJM Manuals.

76. PJM states these provisions mirror the language in section 8 of the form of Interconnection Service Agreement (Attachment O to the PJM OATT) that all new generators must sign and which the Commission has approved.[60] It states the proposal ensures that existing generators are subject to the same requirements as new generators. PJM states that this section is also proposed to ensure that all generators located in the PJM region are subject to PJM rules in emergencies so that PJM can manage reliability during emergency conditions.

2. Protests and Comments

77. Several parties commented on the generator obligations proposal. AMP-Ohio argues that with this language, PJM seeks to arbitrarily terminate or modify interconnection and or operating agreements that are currently in place and take operating control of all generation in its region, even those units operated by municipal utilities to serve behind-the-meter load and irrespective of the use to which they are put. Many of these units are not and will not become network resources. AMP-Ohio argues that even assuming without conceding that the Commission has jurisdiction to modify all of these existing agreements, PJM, at most, should be required to seek such changes as it believes are necessary to its mission and subject to Commission jurisdiction. It should not be permitted simply to order them. Virginia SCC and DEMEC support the proposal.

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[59] First Revised Sheet No. 47, Schedule 1, PJM OA; First Revised Sheet No. 104, Attachment K--Appendix, PJM OATT.

[60] See Old Dominion Electric Cooperative v. PJM Interconnection, L.L.C., 99 FERC ¶ 61,189 (2002).

3. Commission Response

78. The Commission rejects without prejudice the proposed tariff revisions because PJM has not met its burden to demonstrate that the revisions are just and reasonable. It is unclear how PJM's proposal would apply to generators within the existing PJM and with respect to new PJM customers, in particular behind-the-meter generators of transmission dependent utilities such as AMP-Ohio. In addition, the Commission is also concerned about the impact of this proposal on existing interconnection agreements.

79. Although we reject PJM's tariff revisions on generator obligations, PJM can refile such provisions if it can address the applicability of its proposal to, and effect on, governmental entity generators as well as the issues raised by commenters as to how such a provision would affect existing interconnection agreements within and outside the existing PJM area, and behind-the-meter units of transmission dependent utilities.

E. Scarcity Pricing Provisions

1. PJM Filing

80. As discussed above, PJM recognized in its filing that some aspects of the existing PJM local market rules needed to be revised to address long-term scarcity.[61] The Local Market Auction is proposed in response to this recognition. According to PJM, "there is no long term local scarcity affecting reliability anywhere in PJM today."[62] The PJM Market Monitor argues that PJM's auction proposal is the correct means of addressing scarcity when it exists, and that scarcity pricing based on short-term scarcity is inappropriate for application in PJM. Further PJM states that:

> Any attempt to implement a scarcity price would require administrative price setting without any clear market referent and would not result from a competitive process. The scarcity pricing option includes significant regulatory risk as there will be political pressure to set the administrative price at specific levels, both high and low. Finally, the scarcity pricing

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[61] "The PJM Board has determined that some aspects of the existing PJM local market rules regarding offer price caps require modification to ensure that they are just and reasonable by providing a competitive market mechanism to address long term capacity, if it should arise in the PJM region." September 30 Filing Letter at Page 4

[62] PJM September 30 Filing Letter at Page 10

option will tend to result in relatively volatile prices or will result in non-optimal levels of investment.[63]

2. Protests and Comments

81. Because PJM's proposal is to address planning scarcity through long-term auctions, there were relatively few parties who commented directly on the need to implement short-term scarcity pricing or to use administrative scarcity pricing provisions in PJM. NRG argues for the use of market reforms that focus investment in the areas where it is most needed. NRG recommends market reforms that build on capacity market demand curves and locational capacity market concepts. NEM also does not fully support auctions and believes that the creation of local markets is the better approach to local market power and long-term scarcity. Reliant offers its System Surrogate Unit approach as an alternative to provide market-based prices in local areas.

3. Commission Response

82. As the Commission noted in its July 9 Order, PJM's current provisions "may not be the most appropriate mechanism for providing recovery to RMR units, particularly as they relate to scarcity pricing." Further, we also believe that recognizing short-term scarcity of operating reserves may be a valuable component of an overall market design. While we do not believe that the record of this proceeding shows that the existing PJM market design is not just and reasonable, we believe that consideration of the inclusion of pricing reflecting real-time shortages of operating reserves could add a useful feature to the PJM market design. The inclusion of such a feature could also in part reduce generator reliance upon unit specific agreements in situations where units needed for reliability are not recovering their costs and are eligible for a contract.

83. Therefore, PJM should consider the use of pricing or targeted revisions to its mitigation that recognizes operating reserve deficiencies in its market design. PJM's process should include stakeholder input and consideration of stakeholder proposals. PJM shall file a report on this investigation including any information regarding expected impacts on its overall market design of the adoption of such a pricing approach and the results of the stakeholder process within 180 days of this order.

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[63] Declaration of Joseph E. Bowring P 40, PJM Filing.

The Commission orders:

(A) PJM is directed to revise its tariff to provide the right to frequently mitigated units needed for reliability (i.e., units that are offer capped for 80% or more of their run hours, are needed for reliability, and are not recovering sufficient revenues to cover their costs) to receive higher offer caps or alternative compensation alternatives within 180 days of the issuance of this order.

(B) PJM is directed to develop a policy on retirement of generating units and file revised rules on retirement of generating units within 180 days of the issuance of this order.

(C) First Revised Sheet Nos. 131 and 131A, Schedule 1, PJM OA and First Revised Sheet No. 402, Attachment K--Appendix, PJM OATT (suspension of offer caps) are accepted subject to the modifications in the body of this order. PJM must file revised tariff sheets to include the modifications within 60 days of the issuance of this order.

(D) First Revised Sheet No. 129, Schedule 1, PJM OA and First Revised Sheet No. 399, Attachment K--Appendix, PJM OATT (removal of post-1996 exemption) are rejected.

(E) Second Revised Sheet No. 132 and Original Sheet No. 132.01, Schedule 1, PJM OA and Original Sheet Nos. 402A and 402B, Attachment K--Appendix, PJM OATT (Local Market Auction) are rejected.

(F) First Revised Sheet No. 47, Schedule 1, PJM OA and First Revised Sheet No. 104, Attachment K--Appendix, PJM OATT (generator obligations) are rejected.

(G) PJM is directed to consider the use of pricing that recognizes operating reserve deficiencies in its market design and to file a report on this investigation in accordance with the discussion in this order within 180 days of the issuance of this order.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.