

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Compensation for Generating Units
Subject to Local Market Power Mitigation
in Bid-Based Markets

Docket Nos. PL04-2-000

PJM Interconnection, L.L.C.

EL03-236-000

**Brief Overview of the PPL Parties' Comments on the PJM Offer-Capping
Proposal and the PPL Parties' Proposed Auction Alternative**

This paper summarizes the PPL Parties' position on the PJM proposal filed in this docket. Section One summarizes the PPL Parties' principal objections to PJM's Proposed Modification to Its Offer Capping Rules. These objections are fully set forth in the PPL Parties' Protest filed in Docket No. EL03-236. Section Two summarizes the salient points of the Auction Alternative that the PPL Parties propose. Section Two, first presented in the PPL Parties' Protest in its initial form, has been revised and updated.

February 5, 2004

SECTION ONE

THE PPL PARTIES' OBJECTIONS TO PJM'S PROPOSAL

Section One: The PPL Parties' Objections to PJM's Proposal

I. THERE IS NO LOGICAL OR THEORETICAL JUSTIFICATION FOR THE CONTINUATION OF PJM'S OFFER-CAPPING SYSTEM

- PJM argues that offer caps reduce bids below what they otherwise would have been; however, this argument fails to demonstrate that the market caps have actually been targeted so as to mitigate only market power.
- PJM has merely stated, but has not demonstrated, that units are offer capped only if they must be dispatched out of economic merit order. PJM's statement is inconsistent with evidence that offer capped units often receive an LMP that exceeds their bids. Thus, in fact, had these units not been offer capped by PJM, they may have been dispatched in economic order based on their bids.
- PJM's rules ignore the effect of new entry opportunities in curing local market power concerns. This is a fundamental flaw, as monopoly profits in a local load pocket would not persist for long if a new entrant could provide supply profitably at less than the incumbent generator's prices.
- PJM's rules are not appropriately targeted to address only generation subject to market power concerns. They instead cap all of the output from a generator even though market power concerns may exist as to only a portion of the generator's output. Thus, offer capped generators are denied the ability to earn compensatory returns on the portions of their capacity that are not needed for reliability.
- The offer-capping rules fail to provide any incentive for new entry into load pockets, because the rules curtail the operation of scarcity pricing, undermining the role of scarcity pricing in attracting new generation. Even more problematic, if the scarcity pricing is caused by a lack of real resources, the offer caps will "mask" the need for these needed resources and undermine the efficiency of generation location.
- PJM's proposal to allow only PJM to call an auction is unnecessary, because there is no reason to expect that a generator-instigated auction could "lock in" monopoly power.

II. PJM MUST DEMONSTRATE THAT ITS RATES ARE JUST AND REASONABLE AT ALL TIMES, NOT JUST DURING CONDITIONS OF SCARCITY

- PJM proposes an auction mechanism that it would only use when it believes that scarcity conditions are present, and not during other situations (*i.e.*, to resolve market power concerns). Since rates must be just and reasonable at all times, and not only if scarcity occurs, PJM's proposal is arbitrary and inconsistent with the Federal Power Act.
- Any system of compensation must cover costs, including capital costs and must be able to attract the capital required for new investment. The present system in PJM does not attract necessary capital.

A. PJM's Current Offer-Capping System Is Inconsistent with Cost-Based Ratemaking

- Nothing in the marginal cost plus 10% formula suggests that it will satisfy the Hope-Duquesne end result test – “that there is a rational nexus between the system of regulation chosen and the statutory standard it is proposing to satisfy.”
- There is no justification for concluding that 10% of marginal operating costs, which may vary dramatically over time, will equal the fixed and capital costs of a project, less other sources of revenue. Given that many of the RMR units in PJM are diesel combustion turbines, the degree that marginal cost plus 10% provides fixed cost recovery to those units will be determined in large part by the price of diesel fuel.
- PJM's offer-cap is generally inconsistent with others the Commission has permitted, which are based on a measure of costs or include a cost-based safety valve. Moreover, the Commission has permitted regulated companies subject to price caps to seek a cost-based pricing mechanism when the capped prices are insufficient to allow them an opportunity to earn a just and reasonable return.
- Although PJM's Operating Agreement (at 6.4.2) permits PJM to enter into negotiated compensation agreements with generators, PJM has expressed a reluctance to use this authority, and the MMU has taken the position that no additional compensation is required for any of the existing offer-capped units.

B. PJM's Current Offer-Capping System is Inconsistent With Market-Based Ratemaking

- PJM's current offer-capping system is inconsistent with market-based rulemaking, because it prevents market forces from providing offer-capped generators with an opportunity to earn a market-based return.
- PJM's marginal cost plus 10% system of offer-capping, has eliminated or minimized the incentive: 1) for new generation entry in load pockets; 2) for load response in load pockets; or 3) for transmission investment to relieve constraints that cause load pockets.
- The major flaw in PJM's offer-capping system is that it fails to distinguish between monopoly profits and competitive profits and simply bans all profits above marginal cost plus 10%. By denying offer-capped units the opportunity to recover long-run marginal costs, the PJM offer-capping rules exacerbate any market power problems that do exist by discouraging the very entry that can defeat market power
- PJM's offer-capping system reduces the incentive for generators to improve efficiency, because savings may reduce marginal ("CDTF") cost, which in turn reduces profits under the offer-capping system.

III. PJM APPLIES OFFER-CAPPING FAR TOO FREQUENTLY AND DOES SO WITHOUT REGARD TO THE SIGNIFICANCE AND SUSTAINABILITY OF A GENERATOR'S ABILITY TO OBTAIN SUPRA-COMPETITIVE PRICE

- PJM has inappropriately offer-capped on an automatic basis without exercising discretion, and has applied capping to a significant amount of MWs. PJM has not shown that it does not offer-cap when market power concerns are insignificant or only when supra-competitive returns would otherwise be earned. Thus, PJM has not shown that its offer-capping rules are limited to instances of market imperfections.
- PJM's Market Monitoring Unit ("MMU") claims that offer-capping does not cause units to be under compensated. The MMU bases this claim on his conclusion that most units bid into PJM's energy market at cost plus 10%. The MMU's logic is flawed because most units in PJM are infra-marginal. These units may logically bid their marginal cost plus 10% to assure that they will be dispatched and receive the market-clearing price set by the marginal generating unit. These units thus expect to be compensated in excess of their own marginal costs plus 10% even though that may be the amount

they bid. For the units that are actually marginal, compensation at marginal cost plus 10% would not be compensatory in many, or perhaps, any hours. To actually cover fixed costs, including a reasonable return on investment, these units would have to bid higher than marginal cost plus 10%.

- In MISO, the Commission agreed with the assessment of MISO's independent market monitor, David Patton, that using a cost plus 10% cap like that used in PJM would "upset the balance between the need to mitigate market power and the need to avoid unwarranted market intervention."

IV. PJM OFFER-CAPS GENERATORS THAT HAVE A LIMITED OPPORTUNITY TO RECOVER FIXED COSTS

- PJM offer-caps generators that generally are peaking units, which run infrequently and frequently face offer-caps in the few hours each year when they are called upon to run and have a chance to recover fixed costs.
- PJM's policy has capped some facilities located in load pockets at or near their fuel and variable operating and maintenance costs during a large portion of the hours that they run. If PJM precludes returns dictated by the competitive market, it must provide cost-of-service returns. PJM's offer-capping system precludes compensation consistent either with competition or traditional regulation.

V. PJM SHOULD NOT EXTEND ITS OFFER-CAPPING SYSTEM TO POST-1996 GENERATORS

- Although PJM's original offer-capping rules applied exclusively to generators whose construction began before July 9, 1996; PJM has proposed to extend offer-caps to all generators. This extension will provide a disincentive to the construction of new generation to eliminate market power concerns. It will also undermine the expected revenue streams that justified existing post-July 9, 1996 construction. Offer-capping these generators will result in sub-competitive market returns that interfere with long-run marginal cost recovery.

SECTION TWO

THE PPL PARTIES' PROPOSED AUCTION PRINCIPLES

Section Two: The PPL Parties' Proposed Auction Principles

THE PPL PARTIES PROPOSE THAT A PROPER AUCTION SHOULD INCLUDE THE FOLLOWING PRINCIPLES:

- 1. The auction would be open to new and existing generation, merchant transmission, and demand reduction, but not to regulated transmission.***

Participation in the auction should include both existing generators in the load pocket, potential new generators, merchant transmission developers and load reduction customers. Each will have an opportunity to bid in at the price that it believes reasonable to offer supply in that area. Incumbent generators should be allowed to bid since, if there is adequate supply in the market, they will underbid new entrants in order to retain their source of revenue.

To ensure proper pricing signals, only "at risk" investment should be permitted to participate in the auction. Thus, regulated transmission should not be permitted to compete in the auction.

- 2. The entire load in the load pocket would be offered under a single price auction design.***

As in energy markets, the single price auction would encourage bidders to bid at marginal cost (in this case, long-run marginal cost). Also, a single price auction would simplify the task of drafting and administering contracts with the winning bidders.

- 3. Either generation or load should be able trigger the auction, subject only to a limitation that some non-trivial amount of offer-capping must occur before the RTO is required to hold an auction.***

Either generation or load may request that the auction be held for a particular load pocket. Thus, the competitive auction may lead to either lower or

higher market clearing prices. If load perceives that prices are higher than the competitive level, *i.e.*, the reliability needs could be met by a more efficient generator or by a cheaper transmission project, it will have an incentive to request the auction. The number of potential auctions should be small and easily manageable.

4. *If a request for an auction in a load pocket is rejected by the RTO because offer capping is not sufficiently frequent, offer-capping shall be discontinued.*

Cost plus 10% offer capping without an auction should continue only in instances where there is no objection by the affected parties. Additionally, if an auction is requested, cost plus 10% offer capping should be continued only where an auction is held to determine the appropriate supplemental capacity payment, as discussed below.

5. *The bidders would bid a supplemental capacity payment or an economically equivalent alternative.*

Bids should be made in the form of a supplemental capacity payment. If a capacity payment does not work for all types of bidders, the RTO could convert the bid into an economically equivalent value for purposes of comparison. Bids would be evaluated economically based on a net present value basis.

6. *Bids should reflect the amount of revenue that the bidder is willing to accept, net of all other sources of revenue.*

In formulating their bids, bidders would take into account expected energy, capacity, and ancillary services revenue, as well as financial transmission rights.

7. Energy Bids Would Continue to be Based on Marginal Cost Plus 10% and Would Set LMP.

Winning generator bidders would continue to submit bids and set LMP at incremental cost plus 10%.

8. The bidders would offer either permanent or long-term solutions for relieving the constraint.

The term of the proposed agreement should be for the life of the proposed generation or transmission project, or some long-term period that would provide similar assurances to capital investors.

9. The auction would cover a forward period sufficiently in the future to permit entry by new generation.

In order to permit free and open entry, the auctions should establish the obligation to serve load in the load pocket for a period beginning at a point in the future when it is reasonable for new entrants, either generation, transmission or load reduction, to begin providing service.

10. No bid will be accepted that would have the affect of increasing LMP during periods in which offers are capped.

Concerns have been raised that the auction could be used by incumbent load pocket generators to increase LMP during periods when offers are capped. This would be accomplished by offering generation in the auction with very high operating costs, which, if taken, would set a very high LMP even if capped at cost plus 10%. The incumbent generators would ensure that this generation would be taken in the auction by submitting a highly discounted supplemental capacity payment bid. This strategy, if attempted can be thwarted by accepting offers only from units (or load reduction) that have a heat rate or variable operating cost that

is lower than the highest heat rate or variable operating cost of units currently operating in the load pocket.

11. During the period between the auction and the date that the winning bidders can begin providing the generation, transmission or load reduction offered, incumbent generators would not be permitted to exit and would receive the higher of the auction clearing price or their “to go” costs

The prices resulting from the auction process will immediately apply to incumbent generators. If the incumbent’s “to go” costs are higher than the auction clearing price, the incumbent should receive its “to go” costs. Both the payments and the obligation should last until the new entrants, if any, are up and running. If incumbents win the auction, their agreement could be implemented immediately.

12. The Auction would have to be coordinated and integrated into the PJM Regional Transmission Expansion Plan Protocol process for addressing economic expansion of the transmission system.

PJM recently amended its Regional Transmission Expansion Planning Protocol (“RTEPP”), as directed by the Commission, to incorporate expansion of the transmission system to address competitive and economic concerns, such as congestion. Under that process, once PJM identifies significant congestion that is not hedgeable, PJM waits one year to permit the market to address the need. If no market solution emerges PJM can direct that regulated transmission be constructed. If the RTEPP process is underway with respect to a load pocket, the auction should be conducted as part of the one-year market window.