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June 11, 2010

Howard Schneider, Esq.  
Chair, Board of Managers  
PJM Interconnection, L.L.C.  
955 Jefferson Avenue  
Norristown, PA 19403

**VIA EMAIL AND  
FEDERAL EXPRESS**

**RE: *Ex Parte* Communication on PJM Order No. 719 Compliance Filing on  
Shortage Pricing**

Dear Mr. Schneider:

As required by the Federal Energy Regulatory Commission ("FERC" or "Commission"), PJM, in consultation and coordination with PJM stakeholders, has worked to develop a mechanism to comply with FERC's Order No. 719 requirements relating to price formation during operating reserve shortages. PJM Industrial Customer Coalition ("PJMICC") and the following supporters of this letter,<sup>1</sup> representing a range of different interests, appreciate PJM's efforts in this regard: Arcelor Mittal, Castlebridge Energy Group LLC, Duquesne Light Company, Lehigh Cement Company, Maryland Office of People's Counsel, Office of the Ohio Consumers' Counsel, Pennsylvania Office of Consumer Advocate, Public Power Association of New Jersey, and Severstal Sparrows Point.

Our interest in offering this *ex parte* letter to the PJM Board is to identify discrete but critical concerns with PJM's shortage pricing proposal, namely with respect to: (1) PJM's proposed transition plan, (2) the need for a meaningful revenue reconciliation mechanism for PJM Capacity Resources that may earn shortage rents in the energy market; and (3) PJM's approach to emergency demand resources setting price. These concerns are meaningfully addressed and resolved through the Severstal proposal,<sup>2</sup> and we are aware of no logistical or operational reason that they could not be fully integrated into PJM's compliance filing to the Commission.

<sup>1</sup> Please be advised that certain supporters of this letter are not convinced that all-in energy prices above \$1,000 per MWh are necessary for reliability or are economically efficient.

<sup>2</sup> For your reference, Severstal's proposal received simple majority support in the stakeholder process, with a sector-weighted vote of 2.65 to 2.35. PJM's proposal received sector-weighted support of 2.59 to 2.41. Many of the supporters of this letter are also of the view that the PJM Independent Market Monitor's shortage pricing proposal addresses the concerns raised in this letter.

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We fully understand that, compared to some market rule development initiatives, PJM's expected filing relating to shortage pricing is being made in the context of a compliance filing obligation. For that reason, we encourage the Board to consider incorporating the following in PJM's shortage pricing compliance filing. Specifically, we respectfully request PJM adopt the following three enhancements to the PJM proposal:

- A measured transition plan that adjusts the administrative penalty factors based on actual experience with any new shortage pricing regime;
- A direct reconciliation of shortage pricing "rents" with revenues earned by PJM Capacity Resources; and,
- Improved accountability and recognition of comparability concerns with emergency demand resources ("DR") setting price.

Price formation during operating reserve shortages is a complex issue, marked by, among other things, market power risks, inelastic demand for which PJM must largely rely upon state regulatory actions to resolve, and interaction with other products designed to ensure reliability (*i.e.*, Reliability Pricing Model). To be clear, all supporters of this letter have an overriding interest in reliable electric service and, thus, support the need to consider market rule changes surgically designed to advance reliable operations. Operating reserve shortage conditions, however, do not obviate the Federal Power Act's overriding requirement for "just and reasonable rates." Escalating wholesale prices so that retail loads can respond to the wholesale price signal when those same retail loads are insulated by retail tariffs from the wholesale price signals can be neither "just" nor "reasonable."

#### **1. Transition Plan: The Need for Accountability and Experience with Administrative Penalty Factors**

PJM's proposal calls for a four-year transition plan that includes automatic annual increases in the administrative penalty factors. In the first year, the maximum energy price would be \$1,500/MWh (\$250/MWh penalty factors), increasing to \$2,700/MWh by the fourth year. Our view is that this automatic approach to escalating the penalty factors sacrifices the accountability necessary to ensure that the penalty factors are set appropriately to achieve Order No. 719's objectives.

An approach that includes rigorous evaluation of effect of the penalty factor in achieving Order No. 719's goals, such as that inherent in Severstal's proposal, allows market participants to have confidence that application of the administrative penalty factors affords commensurate value and is not merely increasing prices for the sake of increasing prices. To that end, Severstal's proposal would initiate the penalty factor at \$250/MWh for each reserve type, just like PJM has proposed, but then would require PJM and stakeholders to review actual performance data from

any scarcity events to determine if the value of the penalty factor needed to be changed prospectively.

Our interest in greater accountability in the transition period is driven, at least in part, by the fact that the assumptions upon which PJM's proposed administrative penalty factors were developed are based on the experience of only one scarcity pricing event, which occurred in 2007. In Order No. 719, the Commission required Regional Transmission Organizations ("RTOs") to provide a factual record that includes historical evidence regarding the interaction of supply and demand during period of scarcity. With only one experience with scarcity conditions (for which PJM should be commended), robust analysis of the actual effect of the administrative penalties in the context of PJM's market operations is vital. For example, as the penalty factors are phased in, we may learn that an administrative price less than \$2,700/MWh is sufficient to achieve Order No. 719's objectives. If that is the case, sound public policy, if not the Federal Power Act, requires that the penalty factor not exceed that level. Conversely, we may discover that the price may need to be higher, in which case, empirical evidence would then exist to support such an increase.<sup>3</sup> One good measure of the need to adjust the penalty factors might be the amount of uplift required to produce the energy and reserves necessary to resolve the shortage condition beyond what was afforded by the LMP plus the penalty factor. Only with such analysis as the phase-in occurs will stakeholders be assured that the administrative penalties are set at the appropriate level to "make it worthwhile for customers to invest in demand response technologies," "encourage existing generation and demand resources to continue to be relied upon during an operating reserve shortage," and "encourage new entry of new generation and demand resources."<sup>4</sup>

Severstal's proposed change to the PJM proposal builds in accountability and ensures that customers do not pay more than what is "just and reasonable." With penalty factors (and accordingly prices to customers) being set through administrative mechanisms and not competitive market forces, sound public policy requires such accountability.

## **2. Direct Reconciliation of Shortage Pricing "Rents" with Revenues Earned by PJM Capacity Resources**

At the outset of PJM stakeholder discussions on shortage pricing, PJM was committed to the development of a revenue offset mechanism for Reliability Pricing Model ("RPM") Capacity

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<sup>3</sup> Some supporters to this letter have in fact pointed out during the stakeholder process that eventually penalty factors of \$1,000 each might make the most sense, but those same supporters question the timing of when PJM might need such levels in order to achieve the dispatch and reliability benefits.

<sup>4</sup> *Wholesale Competition in Regions with Organized Electric Markets*, 125 FERC ¶ 61,071 at P 247 (Oct. 17, 2008)("Order 719"). For example, it may be several years before meaningful price responsive demand exists within PJM that is able to effectively respond to the penalty factor's price signal. If that is the case, the just and reasonableness of exposing customers to the higher penalty factors in the transition plan must be questioned when, practically speaking, the price responsive infrastructure may not yet have been realized to allow such demand response.

Resources that earn rents due to administrative shortage price setting. General consensus among stakeholders appeared to exist that resources, either demand or supply, should only be eligible to qualify for capacity revenues afforded through the RPM auctions or scarcity rents through shortage pricing, but not both. In fact, in its "Proposal for Price Formation During Operating Reserve Shortages," PJM recognized that the revenue offset is closely tied to the RPM capacity market design and, accordingly, indicated that the design of the revenue offset mechanism would be discussed by the Capacity Market Evolution Committee.<sup>5</sup>

Unfortunately, despite PJM's early recognition of the need for a revenue offset, PJM's current proposal fails to include any explicit reconciliation mechanism, instead relying only upon RPM's existing energy and ancillary services ("E&AS") offset employed in establishing the cost of new entry ("CONE"). As discussed below, not only does the E&AS offset fail to meaningfully reconcile shortage pricing rents with RPM revenues received by Capacity Resources, but it also risks creating perverse pricing signals in the RPM market. The Commission cautioned against this, advising that shortage pricing for an emergency condition and capacity markets for long-term resource adequacy assurance should not work at cross purposes and requiring each RTO to address in its compliance filing how its selected method of shortage pricing interacts with its existing market design.<sup>6</sup>

To satisfy this Order No. 719 requirement, we submit that PJM's proposal should incorporate Severstal's more direct and explicit reconciliation mechanism. Under Severstal's proposal, the shortage pricing penalty factors would be added to LMP and be paid by all real-time buyers in the market. All resources not committed as Capacity Resources would be paid the LMP plus the penalty factors. For Capacity Resources, however, the penalty factors would only be paid to the extent resources were to perform above their RPM commitment. All resources supplying power or reducing load consistent with their pre-existing RPM commitment would receive the LMP without the penalty factors. In the settlement process, the total payments associated with the penalty factor paid to resources in the zone would be calculated, and the difference between the actual money paid and the LMP plus penalty factor would be subtracted from the real-time market buyers' settlements for the event.<sup>7</sup> This elegant and direct reconciliation ensures that customers do not end up paying twice to Capacity Resources already committed to provide their capacity during system emergencies.

By way of contrast, PJM's proposal includes no explicit offset and merely employs the RPM E&AS mechanism used to establish the CONE. The E&AS offset does not effectively reconcile

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<sup>5</sup> Since that proposal, PJM's shortage pricing proposal has admittedly changed, but the fundamentals remain the same in that the shortage penalty factors are designed to encourage existing generation and demand resources to continue to be relied upon when needed for reliability.

<sup>6</sup> Order 719, at P 204.

<sup>7</sup> Another viable compromise approach discussed in the stakeholder process would allow scarcity rents to be paid to Capacity Resources but only to the extent that scarcity payments exceed the value of the RPM capacity payments for the year. Under this approach, resources would not have to risk making an unprofitable decision in seeking to become a PJM Capacity Resource.

the shortage pricing rents earned by PJM Capacity Resources, as PJM itself said was necessary at the outset of the shortage pricing stakeholder discussions. While certainly the shortage rents earned by Capacity Resources would flow through the E&AS offset, the E&AS offset is based on a three-year rolling average, so the mechanism is not a meaningful offset for the scarcity rents received by Capacity Resources in a particular year. At best, customers would see a benefit from just a small fraction of the scarcity rents and then only through the complex interaction of the demand curve and CONE. Moreover, given the forward nature of RPM, the time delay between the shortage pricing event and the RPM delivery year likely results in "generational issues," with the E&AS offset affecting different market participants than those who may have received both shortage pricing rents and RPM revenue streams.

To the extent, however, that there may be reduced RPM clearing prices as a result of shortage rents flowing through the E&AS offset, the use of the E&AS offset remain problematic. Any concomitant decrease in RPM prices due to shortage rents flowing through the E&AS offset sends perverse pricing signals to investors relative to the need for capacity investment in PJM. Whereas operating reserve shortage incidents would suggest that additional capacity may be needed within PJM, the shortage pricing rents, if flowing through the E&AS offset, would have the effect of depressing future RPM prices, suggesting paradoxically that such investment is not needed.<sup>8</sup> If RPM is being relied upon to encourage new generation entry and retain existing generation necessary for reliability, and customers are paying billions of dollars to that end, we should not be subverting the stability of RPM's forward price signal by relying upon the E&AS offset to reconcile RPM and scarcity pricing revenues. It is simply not an efficient result.

### **3. Ensuring Accountability and Comparability for Emergency DR Setting Price**

Under PJM's proposal, emergency demand response, if called upon, can set price. The price would be based upon an amorphous MW-weighted average zonal offer at a predefined bus that is closest to the load center of the zone. While this aspect of PJM's proposal may nominally appear to be supportive of Order No. 719's objective of encouraging demand response, we, including many of those very same demand resources, have serious reservations about its appropriateness for PJM's market structure and submit that it does not, in fact, serve Order No. 719's objectives.

As a threshold matter, PJM's proposal is inconsistent with the manner in which PJM's system is dispatched. Although some emergency DR could be dispatched economically, most will be dispatched as a group by zone. PJM's system dispatch, however, is more discrete and keyed to offer prices based on marginal costs submitted by dispatchable resources.

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<sup>8</sup> It has been suggested that the E&AS offset is the preferred approach to reconciling shortage rents with RPM revenues earned by Capacity Resources in order to ensure that Capacity Resources are available during periods of system stress; however, if that is the case, it would be more appropriate to revisit the RPM penalty structure and not attempt to apply a "band aid" and solve that RPM issue through the shortage pricing mechanism.

PJM mechanisms encourage resources to bid consistent with their marginal costs. Under PJM's proposal, the emergency DR's strike price may have little link to its marginal cost. Given the nature of DR, with varying operating conditions causing changeable costs for customers to curtail, it is very difficult to establish an accurate future marginal cost to curtail for DR at the single point in time that the DR resource is registered in PJM's load response system. As a result, emergency DR may likely set a very high strike price in order to take a conservative position. With little economic incentive to offer a low strike price, emergency DR setting price contravenes Order No. 719's guidance that demand resources should be utilized "to discipline bidding behavior to competitive levels during an operating reserve shortage."<sup>9</sup> Not only does emergency DR setting price not accomplish this Order No. 719 goal, it actually exacerbates the risks that it artificially causes prices to increase without the interaction of competitive forces. From a ratemaking perspective, the absence of a meaningful check that emergency DR is bidding consistent with its marginal costs at the time of an event is a serious concern, and, if this proposal is adopted, PJM would risk its prices being influenced by inefficiencies, if not market power, during periods of system stress.

Moreover, PJM's proposal would have the effect of injecting disparate rules for emergency DR and other resources. PJM has specific rules specifying the types of metering infrastructure, among other things, necessary for supply-side resources to set price. PJM's proposal with respect to emergency DR setting price does not require such infrastructure. To be clear, there are reasons why such infrastructure must be in place for supply-side resources to set price, including ensuring accountability given the impact on those paying the resulting LMP. It is curious that many market participants expressed concern about demand resources' measurement and verification in the context of the Economic Load Response Program with the prospect of DR reducing price, yet in the case of shortage pricing, when the effect would be demand resources setting very high LMPs, there is a troubling lack of concern about having safeguards in place. From a comparability perspective, all resources setting price must have the equivalent metering installed given the pricing ramifications.

Severstal's proposal addresses these shortcomings. Under Severstal's proposal, when emergency DR is dispatched by zone due to shortage conditions, it will be assigned the current zonal LMP at the time of dispatch as opposed to setting a new, higher price. Assigning the emergency DR, the current zonal LMP will establish a floor to keep prices elevated, which addresses PJM's initial concern that utilization of emergency DR may have the effect of reducing prices despite the continuing need to attract resources during the shortage condition. This approach also eliminates the concern that the price established by the emergency DR is not accurate nor does it artificially increase prices.

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With such potential price increases during shortage conditions, the undersigned are firmly of the view that the Federal Power Act's just and reasonable rate mandate, public interest and sound

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<sup>9</sup> Order 719, at P 196.


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decisionmaking require greater accountability in any shortage pricing regime implemented in PJM as well as that proposal including a meaningful reconciliation of scarcity rents and capacity revenues to avoid retail customers paying twice for Capacity Resources that are already committed, and receive compensation for, being available during times of system stress. Equally important is avoiding rules, such as emergency DR setting price, that contravene fundamental principles of PJM dispatch, subvert DR being used to discipline supply-side prices during periods of operating reserve shortages and are inconsistent with otherwise applicable rules governing price formation in PJM. Every change proposed above can readily be included within PJM's most recently proposed shortage mechanisms. In fact, all are consistent with that mechanism as last proposed and described by PJM and would not inhibit any of PJM's projected reliability or system dispatch benefits.

We appreciate the Board's consideration of our concerns as set forth herein. We stand ready to work with PJM Management, Staff and Members to resolve these concerns on an expeditious basis given the pending compliance filing requirements. Thank you for your consideration of our concerns as you deliberate on this important issue.

Very truly yours,

McNEES WALLACE & NURICK LLC

By 

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c: Mr. David A. Anders, P.E., PJM Interconnection, L.L.C. (via email)