

**Comments on The Brattle Group's *Triennial Review of RPM Draft Study Results*, April 29, 2014**

**May 8, 2014**

**Andrew L. Ott, Executive Vice President – Markets**  
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Dear Andy:

In behalf of the consumer advocate offices of Delaware, the District of Columbia, Illinois, Indiana, Maryland, New Jersey and Pennsylvania, I am submitting written comments regarding the Brattle recommendations and the direction we hope the stakeholder process will take. We appreciate the opportunity to provide early initial comments on The Brattle Group's draft study results for the 2014 Triennial Review of RPM.

For RPM to work well, it is important that the Net CONE value be accurate, stable, and predictable. So we generally support updating CONE, and will work actively as stakeholders consider possible changes to the CONE and Energy and Ancillary Services Offset ("E&AS Offset") calculations, as the Draft Study Results propose.

However, while we generally support consideration of the various draft recommendations regarding CONE and the E&AS Offset, we are surprised and disappointed that The Brattle Group is also recommending substantial changes to the VRR curve shape. The current shape was established through the RPM settlement almost a decade ago, and that process was very contentious; any stakeholder process to significantly change the VRR curve at this time will likely be very contentious.

We do not see a need to include in the stakeholder process consideration of changes to the VRR curve shape. There is no evidence that any change is needed to the shape of the VRR curve, and the Draft Study Results do not provide any evidence that change is needed. In its two prior triennial reviews – in 2008 and 2011 – The Brattle Group endorsed the current shape for both the RTO and LDAs and proposed no changes (2008) or a very minor change. "PJM has used this VRR curve shape now for ten different delivery years, to establish a total of 31 different clearing prices in several different zones as large as the RTO (169,160 MW) and as small as DPL South (3,160 MW)." Simply put, the VRR curve shape is not broken, and, therefore, does not need to be fixed. There are other, more important issues that need to be addressed and work on these can probably lead to considerable consensus.

The Brattle Group's recommendations regarding VRR curve shape will apparently be based on its new simulation model, not on the actual history of RPM performance. Under this novel approach, assumed random and independent supply and demand "shocks" buffet the system, and require that the VRR curve be shifted and changed in order to meet certain newly-adopted reliability criteria. The Brattle Group first applied this new approach in a New England stakeholder proceeding earlier this year, and it was criticized by New England stakeholders and their experts, including James Wilson, consultant to some of us, on behalf of the New England States Committee on Electricity. Ultimately, New England stakeholders and the ISO did not adopt The Brattle Group's recommendation for a "convex" capacity

demand curve, and came to consensus on a demand curve put forward by a stakeholder (electric distribution company). Thus, this new modeling approach must be considered new and unproven.

We also note that in its past triennial reviews, The Brattle Group has applied a model developed by Prof. Benjamin Hobbs to evaluate VRR curve shape. While many of us have concerns about the Hobbs model, The Brattle Group's new simulation approach is very different (much simpler), and lacks some of the realistic features included in the Hobbs model. For instance, the Hobbs model is dynamic, and attempts to model how risk-averse investors will react to past and anticipated energy and capacity prices over time; this new simulation approach has no such dynamics or interactions.

The Draft Study Results also introduce and apply some new criteria for evaluating candidate VRR curve shapes. In particular, The Brattle Group applies a criterion never before applied in evaluating PJM VRR curves: that the Loss of Load Expectation ("LOLE"), *according to the simulations*, should average 0.1 over time. While the "one day in ten years" criterion for resource adequacy is well accepted, its application in this particular manner within a probabilistic model of VRR curve shape is new and has not been vetted with stakeholders. For instance, this "average" LOLE concept suggests that an LOLE of 0.05 under one scenario and 0.15 under another scenario offset to meet the "average" criteria. This does not appear logical and consistent with the economics of resource adequacy. Moreover, there is no indication that stakeholders agree to adopt this notion. We also note that in its recent report to FERC, The Brattle Group suggested that "economically optimal" reserve margins are below the level based on "one day in ten years."

One of the key considerations around VRR curve shape is the market power incentives the shape may create to economically or physically withhold resources to raise prices. As is well known, a "steeper" VRR curve results in stronger incentives to exercise available flexibility in an attempt to raise prices. The Brattle Group proposes a much steeper VRR curve shape, especially at high prices, than the existing VRR curve, but includes no discussion of market power incentives in its Draft Study Results. Its summary of curve "performance" includes no statistics related to market power. In New England, stakeholders and the ISO ultimately reached consensus on a more gently-sloped capacity demand curve than the one The Brattle Group had recommended.

A rough estimate of the potential cost of the draft recommendations regarding VRR curve shape, based on PJM's sensitivity analyses of recent RPM auctions, is over a billion dollars per year. The cost could be much more than this in future auctions as a result of recent changes to RPM that will restrict imports and demand response in the auctions, among other new RPM rules.

We strongly encourage PJM to set aside the recommendations to change the VRR curve shape and postpone any plan to address that issue in a stakeholder process. Thank you for your attention, and we look forward to participating in the Triennial Review stakeholder process to improve the VRR curve parameters and make any other needed changes to RPM.

Sincerely,

Dan Griffiths