Howard Schneider  
PJM Interconnection, LLC  
955 Jefferson Avenue  
Norristown, PA 19403

Dear Mr. Schneider,

Re: Balancing Operating Reserve User Group

Executive Summary

In June of this year, Citigroup Energy, Inc.; DC Energy LLC; Dynegy Marketing and Trade LLC; Tenaska Power Services Co.; and Vitol Inc. formed the Balancing Operating Reserve User Group (“BOR User Group”) to discuss and recommend potential changes to allow netting of virtual transactions and the balancing operating reserve charges that should be assessed by PJM on such transactions.

The BOR User Group approved unanimously its recommendation to allow netting of virtual transactions within a zone in determining balancing operating reserve cost allocation; however, the PJM Members Committee did not support such recommendation. Unfortunately PJM members did not provide any feedback to the BOR User Group during the stakeholder process.

It is for this reason that the BOR User Group submits this summary and recommendation to the PJM Board of Directors, and requests the PJM Board (pursuant to its authority in the PJM Operating Agreement1) to direct PJM staff to prepare Tariff changes consistent with the BOR User Group recommendation and submit those changes to the Members Committee (MC) as soon as possible.

Background

The BOR User Group members are all active participants in PJM markets and activities and appreciate the User Group process that allows participants to bring recommendations to the PJM Board for the Board’s independent evaluation and action. The BOR User Group adhered to PJM Operating Agreement Section 8.7 concerning User Groups over the last six-month process.

PJM and its membership were informed of the creation of the BOR User Group at the June 28, 2012 Members Committee meeting, when the BOR User Group Charter was presented. The BOR User Group held meetings open to all interested parties on July 18, 2012, September 7, 2012 and September 19, 2012. Updates to the PJM membership were provided at the July 26, 2012 and September 27, 2012 PJM Members Committee (MC) meetings. At the September MC, the BOR User Group final recommendation was presented. At each of these meetings input was sought on the issue at hand, however almost no input was provided. Finally the BOR User Group recommendation (to allow netting of virtual transactions within a zone in determining balancing operating reserve

1 Section 7.7 (v)
cost allocation) was voted on at the October 25, 2012 Members Committee meeting but did not pass the sector weighted vote. While the vote was overwhelming against, this is an issue where the stakeholder process may not be relied upon to achieve a competitively neutral market design.

Discussion and Recommendation

During the period 2005 through 2008 PJM and its stakeholders discussed, among other things, how balancing operating reserve charges should be assessed to market participants. The package that ultimately culminated in a PJM 205 FERC filing contained the provisions, among other things, that described how market participants may net their exposures to balancing operating reserve charges. The appendix to this letter briefly shows the netting allowed under this Commission approved construct.

Briefly, deviations between Day-Ahead (“DA”) market bids and Real-time (“RT”) market activity create an imbalance (i.e., deviation). Under the PJM Tariff, these deviations are subject to charges. By netting their transactions, market participants may reduce (or even eliminate) their exposure to PJM’s deviation charges. Accordingly, it is critical that the netting procedures produce efficient outcomes and be designed and administered in a fair and non-discriminatory fashion.

Unlike certain other RTOs, however, PJM prohibits market participants from directly netting their DA market transactions, which are known in PJM as Increment Bids (“INC”) and Decrement Bids (“DEC”). Instead, PJM allows the netting to take place between INCs and DECs indirectly, through the creation of “real-time” transfers enabled by an internal bilateral transaction (“IBT”) eSchedule. As a result of PJM’s recent decision to preclude some market participants from using IBTs for netting purposes, PJM’s netting rules have become unfair, essentially allowing some market participants the ability, through netting provisions, to limit their exposure and others not. To be specific, those PJM members without physical assets who submit virtual energy bids are subject to substantially higher Balancing Operating Reserve (“BOR”) deviation charges solely because they are not permitted to net their INCs and DEC. In contrast, other PJM members, particularly those with physical assets, who submit virtual energy bids, are permitted to net their INCs and DEC (and consequently reduce their deviation charges) through IBTs. This results in a tremendous bias against virtual energy market

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2 “Increment bid” is defined as “an offer to sell energy at a specified location in the Day-ahead Energy Market.” OT Schedule 1 § 1.3.9A. “Decrement Bid” is defined as “a bid to purchase energy at a specified location in the Day-ahead Energy Market.” OT Schedule 1 § 1.3.1E.

3 See Tariff, Attachment K, § 1.7.10(a).

4 In summer 2011, however, PJM unexpectedly began to challenge the use of IBTs by virtual traders without physical assets to net their exposure. PJM took the position that such IBTs could not offset the deviation charges because they did not meet certain “physicality” requirements for IBTs. DC Energy filed a complaint with the Commission in October 2011, seeking to overturn PJM’s interpretation; however, the Commission denied the complaint and further restricted PJM’s view of the “physicality” requirement. While DC Energy is seeking rehearing of the Commission’s IBT Order, the status quo in the wake of that decision is such that no virtual traders without physical assets can use IBTs as a netting tool while it appears that PJM has determined that virtual traders with physical assets are allowed to continue the practice with respect to their virtual transactions.
participants without physical assets in violation of Commission policies encouraging virtual trading and prohibiting discrimination against virtual traders.

This issue was part of the FERC docket that addressed the last change of netting (per above). Back in 2008, the Commission acknowledged the concerns and suggested that these should be addressed through the stakeholder process. This is exactly what the BOR User Group sought to do.

Netting is widespread in the PJM markets. On November 14, 2011, the PJM Market Monitor published its 2011 Quarterly State of the Market Report for PJM covering the period from January through September, 2011. In Table 3-60 (reproduced below) it can be seen that about 75% of cleared virtual trades in the PJM market were offset or netted, both prior to and subsequent to the point in time at which PJM stopped allowing virtual energy market participants without physical assets to report IBTs to PJM.

Impact on Decrement Bids and Incremental Offers

<table>
<thead>
<tr>
<th>Month</th>
<th>Total Increment Offers (MWh)</th>
<th>Total Decrement Bids (MWh)</th>
<th>Adjusted Increment Offer Deviations (MWh)</th>
<th>Adjusted Decrement Bid Deviations (MWh)</th>
<th>Total Increment Offers (MWh)</th>
<th>Total Decrement Bids (MWh)</th>
<th>Adjusted Increment Offer Deviations (MWh)</th>
<th>Adjusted Decrement Bid Deviations (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan</td>
<td>8,291,432</td>
<td>13,029,515</td>
<td>2,459,852</td>
<td>3,452,047</td>
<td>6,094,214</td>
<td>8,284,819</td>
<td>1,548,295</td>
<td>3,182,642</td>
</tr>
<tr>
<td>Feb</td>
<td>8,323,844</td>
<td>11,829,861</td>
<td>2,904,162</td>
<td>2,394,045</td>
<td>5,732,202</td>
<td>7,446,032</td>
<td>1,378,811</td>
<td>2,271,323</td>
</tr>
<tr>
<td>Mar</td>
<td>8,032,429</td>
<td>11,169,933</td>
<td>2,150,868</td>
<td>2,594,926</td>
<td>5,372,008</td>
<td>7,753,379</td>
<td>1,152,805</td>
<td>2,548,787</td>
</tr>
<tr>
<td>Apr</td>
<td>7,568,471</td>
<td>9,969,951</td>
<td>2,244,314</td>
<td>2,066,270</td>
<td>5,200,154</td>
<td>7,351,587</td>
<td>937,164</td>
<td>2,936,911</td>
</tr>
<tr>
<td>May</td>
<td>8,356,597</td>
<td>11,570,314</td>
<td>2,250,271</td>
<td>3,437,786</td>
<td>5,537,880</td>
<td>7,019,887</td>
<td>1,174,272</td>
<td>2,137,048</td>
</tr>
<tr>
<td>Jun</td>
<td>8,304,139</td>
<td>12,735,819</td>
<td>2,223,246</td>
<td>4,058,044</td>
<td>6,367,269</td>
<td>8,938,219</td>
<td>1,200,432</td>
<td>2,709,247</td>
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<tr>
<td>Jul</td>
<td>8,239,094</td>
<td>12,631,573</td>
<td>1,840,017</td>
<td>3,553,722</td>
<td>6,330,392</td>
<td>9,072,394</td>
<td>1,120,229</td>
<td>2,734,062</td>
</tr>
<tr>
<td>Aug</td>
<td>7,662,123</td>
<td>11,648,289</td>
<td>1,485,333</td>
<td>2,676,901</td>
<td>5,622,087</td>
<td>8,164,829</td>
<td>969,703</td>
<td>2,032,437</td>
</tr>
<tr>
<td>Sep</td>
<td>8,188,967</td>
<td>11,532,284</td>
<td>2,103,152</td>
<td>3,105,498</td>
<td>5,287,621</td>
<td>8,956,589</td>
<td>1,157,069</td>
<td>3,242,434</td>
</tr>
<tr>
<td>Oct</td>
<td>7,777,616</td>
<td>10,423,935</td>
<td>1,564,871</td>
<td>2,613,717</td>
<td>5,198,835</td>
<td>7,358,727</td>
<td>10,598,850</td>
<td>22,944,092</td>
</tr>
<tr>
<td>Nov</td>
<td>8,027,852</td>
<td>11,041,950</td>
<td>1,408,786</td>
<td>2,467,942</td>
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<tr>
<td>Dec</td>
<td>9,416,187</td>
<td>12,329,692</td>
<td>1,920,956</td>
<td>3,451,929</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>98,488,750</td>
<td>140,097,307</td>
<td>22,809,817</td>
<td>35,212,727</td>
<td>51,598,835</td>
<td>73,585,727</td>
<td>10,598,850</td>
<td>22,944,092</td>
</tr>
</tbody>
</table>

The netting is clearly shown in the table as the difference between the “Total Incremental Offers” and “Total Decremental Bids,” which represent the total cleared virtual activity in the market, and the “Adjusted Increment Offer Deviations” and “Adjusted Decremental Bid Deviations,” which represent the remaining deviations relating to this virtual activity after netting is allowed to offset the deviations otherwise associated with virtual activity.7

5 PJM Interconnection, L.L.C., 125 FERC ¶ 61,244, at P 42.
6 The report is typically available for download at the PJM Market Monitor’s website. However, Table 3-60 and any data relating to the prevalence of the netting of virtual transactions has been removed from the currently available version of this report. For the Board’s convenience, we have attached the report that was originally issued on November 14, 2011 at Exhibit 2.
7 As seen in Table 3-60 above, the “Total Incremental Offers (MWh)” and “Total Decremental Bids (MWh)” are 98,488,750 MWh, and 140,097,307 MWh, respectively, for 2010, and 51,566,835 MWh and 73,585,727 MWh, respectively for 2011. The total “Adjusted Incremental Offer Deviations (MWh)” and “Adjusted Decremental Bid Deviations (MWh)” that pay balancing operating charges is 23,609,817 MWh and 35,121,727 MWh, respectively for 2010 and 10,596,850 MWh and 22,944,092 MWh for 2011. This shows that 75.4% of all virtual transactions are offset and incur no operating reserve charges for 2010 and 73.2% for the months of January through September of 2011.
Finally, the Commission has recognized the benefits of virtual trading on a number of occasions. It also sought to facilitate the netting of virtual transactions as a means to encourage virtual trading. The existing netting construct is inconsistent with these policy goals and operates to discourage virtual trading in PJM. In fact, this arbitrary construct may be a primary cause for the dramatic decline seen in submitted and cleared virtual transactions between 2010 and 2011.

Conclusion

Based on the discussion above, the BOR User Group respectfully requests the PJM Board to direct PJM staff to prepare Tariff changes that will allow the netting of virtual transactions by market participants that do not possess physical assets as set forth in the BOR Working Group recommendations attached hereto and submit such Tariff changes to the Members Committee.

Respectfully submitted.

BOR User Group Members

Cc: Terry Boston
PJM Board of Directors

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9 PJM State of the Market Report for 2011, Table 2-43. For Increment Offers, the Average Cleared MW by hour and the Average Submitted MW by hour was 11,208 and 21,101, respectively, for 2010, and 7,792 and 12,924, respectively, for 2011. This demonstrates an average hourly MW decline of 30.5% and 38.8% for cleared and submitted Incremental Offers, respectively. For Decrement Bids, the Average Cleared MW by hour and the Average Submitted MW by hour was 15,592 and 25,135, respectively, for 2010, and 11,109 and 16,507, respectively, for 2011. This demonstrates an average hourly MW decline of 28.8% and 34.3% for cleared and submitted Decrement Bids, respectively.
Appendix

In PJM’s documents and presentations, this method is often referred to as netting by “bucket” because of restrictions on which types transactions can net against each other. There are three buckets – the Demand Bucket, the Supply Bucket and the Generator Bucket – each including transactions that can net within that particular bucket. A PJM diagram reproduced below as Figure 1 illustrates how this netting system works:

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The diagram is an excerpt from PJM’s presentation at a December 20, 2005 Reserve Markets Working Group (“RMWG”) meeting, entitled “Balancing Operating Reserves Examples,” p. 2 (“December 2005 Presentation”).

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