Disclaimer: AEP Energy Supply’s views or opinions do not represent those of American Electric Power Service Corp. or its regulated operating companies.

AEP Energy Supply believes caution should be utilized when dealing with the allocation of operating reserves since drastic changes or arbitrary decisions could lead to millions of dollars of uplift being inappropriately or disproportionately allocated to certain participant classes. AEP Energy Supply has both generation and load within its portfolio and seeks a balanced approach to any modification of cost allocation.

The AEP Energy Supply proposal relies on the continuation of both day-ahead and real-time operating reserves. Eliminating day-ahead operating reserve is inappropriate at this time if we desire a day-ahead market that continues to commit actual physical generation and other physical supply to serve load. The elimination of day-ahead operating reserves and/or the inclusion of additional netting methodologies may also provide additional incentive for generation operators to simply operate to the market that maximizes overall revenue, as opposed to a simply following PJM dispatch and knowing that you will at least do as well as your day-ahead award.

There are two essential concepts that the AEP Energy proposal addresses.

1) Up-to Congestion Transactions (UTCs) should be charged operating reserves since it has been determined that these transactions cause transmission facilities to bind in the day-ahead market, impacting both unit commitment and dispatch. UTCs impact the overall LMP at the injection and withdrawal points/areas. AEP Energy proposes a cost of $0.15/MWh for each cleared MW of a UTC transaction. The $0.15/MWh is based on the eastern rate difference between energy uplift rates before and after September 8th as computed by the MMU in their report to the MC Webinar on November 17, 2014. We chose the higher of the eastern or western area uplift as a starting point for covering UTC

contribution to uplift in all areas. This payment will be collected and netted against day-ahead operating reserve charges in the applicable East, West, or RTO Region. UTCs sourcing and sinking entirely in the East or West will offset operating reserve charges in those respective areas prior to offsetting RTO operating reserves. UTCs that source and/or sink at hubs or interfaces which cross two or more transmission zones shall have their operating reserve payments first allocated RTO operating reserve charges, unless the transaction can be identified as being solely in the East or West regions.

2) A slightly larger hurdle when the costs of units that were committed solely for the purpose of reliability in the local area are spread to additional customers across the PJM footprint due to being economic for a several intervals. PJM dispatchers commit units either for economics or reliability. One could easily argue that if a unit is committed for reliability then just because it becomes economic for a few intervals does not mean it should be considered an economic decision for the duration of the unit commitment. The decision at the time of commitment did not change. However, given this type of change would likely garner little support, AEP Energy recommends slightly increasing the hurdles for a reliability unit to become economic depending on the minimum run-time of the unit.

For resources initially committed as needed for reliability, the hurdle to be reclassified as being operated for economics from an operating reserve allocation perspective shall be as follows:

<table>
<thead>
<tr>
<th>Minimum Run-time of Unit</th>
<th>Number of intervals necessary where LMP&gt;offer to be reclassified as economic and allocated towards deviations. There are twelve intervals in each hour.</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;= 3 hours</td>
<td>Six 5-minute intervals over commitment period</td>
</tr>
<tr>
<td>&gt;3 hours</td>
<td>Eighteen 5-minute intervals over commitment period</td>
</tr>
</tbody>
</table>

3) Includes concepts from other stakeholder packages such as excluding Internal Bilateral Transaction (IBT) purchases and sales