M-19 Updates

John Reynolds
Resource Adequacy Planning
Planning Committee
September 14, 2017
Summary of Changes

• Revision to the method used to forecast Price Responsive Demand, making it consistent with the current Demand Response forecast method.

• Conforming changes to clarify when load drop estimates are produced and the definitions of calculations used, stemming from transition to Capacity Performance.

• Miscellaneous revisions as a result of the periodic review of the Manual. None of these impact current processes.
For Demand Resources (DR), forecasted values for each zone are computed based on the following procedure. The forecast is based on the PJM final summer season Committed DR amount, where the Committed DR means all DR that has committed through RPM, Base Residual Auction and all Incremental Auctions, or a Fixed Resource Requirement plan.

1. Compute the final amount of Committed DR (by DR product) for each of the most recent three Delivery Years. Express the Committed DR amount (by DR product) as a percentage of the zone’s 50/50 forecast summer peak from the January Load Forecast Report immediately preceding the respective Delivery Year.

2. Compute the most recent three year average Committed DR percentage, by DR product, for each zone. For DR products with less than three years’ worth of Committed DR data, compute the most recent one or two-year average Committed DR percentage.

3. The DR forecast, by DR product, for each zone shall be equal to the zone’s 50/50 forecast summer peak multiplied by the corresponding result from Step 2 minus the PRD forecast (described below). This PRD subtraction is performed based on the assumption that the amount of Cleared PRD corresponds to load management resources that in previous years committed as a different DR product.
The impact of price responsive demand equals the amount subscribed through the RPM process. The amount subscribed for the last RPM auction year is held constant for the remainder of the forecast.

For Price Responsive Demand (PRD), forecasted values for each zone on or after Delivery Year 2020/21 are computed based on the procedure below. The forecast is based on the amount of Cleared PRD in Base Residual Auctions on or after Delivery Year 2020/21. The PRD forecast for Delivery Years prior to 2020/21 shall be equal to zero because no PRD has cleared in those years’ Base Residual Auctions.

1. Compute the final amount of Cleared PRD for the most recent three Base Residual Auctions targeting Delivery Years 2020/21 or afterwards. Express the Cleared PRD amount as a percentage of the zone’s 50/50 forecast summer peak for the corresponding Delivery Year from the most recent PJM Load Forecast Report.

2. Compute the most recent three year average Cleared PRD percentage for each zone. If there is less than three years’ worth of Cleared PRD data, compute the most recent one or two-year average Cleared PRD percentage.

3. The PRD forecast for each zone shall be equal to the zone’s 50/50 forecast summer peak multiplied by the corresponding result from Step 2.
<table>
<thead>
<tr>
<th>Reason for Load Drop</th>
<th>PJM-Initiated Emergency or Pre-Emergency Event or CSP-Initiated Test</th>
<th>Economic Event</th>
<th>EDC- or CSP-Initiated Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency/Pre-Emergency Full (DR) or Emergency/Pre-Emergency Capacity Only (DR)</td>
<td>Load Drop Estimates must be produced for any interruptions that occurs during a product-type registration's required availability window set forth in PJM Manual 18 or any interruption outside the required availability window for which such registration received bonus MWs in the Performance Assessment Hour from June 1 through September 30.</td>
<td>Load Drop Estimates must be produced for any settled interruptions from June 1 through September 30.</td>
<td>No Load Drop Estimates required.</td>
</tr>
<tr>
<td>Emergency Energy Only</td>
<td>Load Drop Estimates must be produced for any interruptions during Emergency/Pre-Emergency hours from June 1 through September 30.</td>
<td>No Load Drop Estimates required.</td>
<td>No Load Drop Estimates required.</td>
</tr>
<tr>
<td>Economic</td>
<td>No Load Drop Estimates required.</td>
<td>No Load Drop Estimates required.</td>
<td>No Load Drop Estimates required.</td>
</tr>
</tbody>
</table>
• PC First Read – 9/14/2017
• MRC First Read – 9/28/2017
• Request for PC Endorsement – 10/12/2017
• Request for MRC Endorsement – 10/26/2017