Determination of CBL used for DR CP non-summer capacity compliance

DRS
October 27th, 2015
• Summer capacity compliance calculation – no change, do same as today
  – Load Reduction = PLC − (load * losses)
• NEW: Non-summer capacity compliance calculation
  – Load Reduction = (CBL − load) * losses
• New CP DR rules leverage Economic CBL rules

Change made to ensure load reductions occur during non-summer month
• Tariff refers to Economic CBLs rules instead of use of Economic CBL with economic alternative CBL rules (this was the intention)

• All CP registrations (or potential substitutes) required to perform Relative Root Mean Square Error ("RRMSE") test
  – 60 days of load data (primarily provided to CSP by EDC with customer consent)
  – <20% RRMSE, otherwise alternative CBL process
    • Ultimately PJM determined CBL if no accurate CBL available
  – RRMSE must be done before start of Delivery Year

Significant administrative effort for limited value
• Current requirement will require ~7X increase in RRMSE tests and associated load data (EDC & CSP) activity
  – 18,000 location on Load Management registration
  – 2,500 locations on Economic registrations

• Prior CBL analysis indicated 3 daytype with SAA performs well for most customers
  – ~75% of all customers with RRMSE <20%
  – RRMSE non bias (just as likely to under forecast as over forecast the load)
  – 10 to 90 percentile (3% to 37% RRMSE) in winter.
    • This typically translates to a significantly lower Hourly Mean Absolute Percent Error (~2 to 25%)

• Summer events more prevalent than winter events
Proposed Solution

- Load Management default CBL for all registrations used for non-summer capacity compliance calculation will be default economic CBL
  - 3 day type with symmetric additive adjustment
- RRMSE test is not required for Load Management registrations
- If customer has both Economic and Load Management registration then use CBL on Economic registration (unless it is MBL type) for capacity compliance calculation
- CSP or PJM may still utilize alternative CBL process defined in tariff
  - RRMSE Test is required
  - Alternative to be finalized by 10/1 or as approved by PJM

Emergency energy CBL rules will stay the same ("wait and see" approach for EPSA outcome)
### Stakeholder Process proposed timeline

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DRS</td>
<td>Problem statement and proposed solution review</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIC</td>
<td>Problem statement approval, first read proposed solution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIC</td>
<td>First read proposed solution</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MIC</td>
<td>Proposed solution endorsement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRC</td>
<td>First read</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRC</td>
<td>Endorsement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MC</td>
<td>Endorsement</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FERC</td>
<td>File at FERC</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FERC</td>
<td>FERC Decision</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Try to resolve before start of 16/17 DY (CP registrations due).