



Coincident Peak Allocation Options

Load Analysis Subcommittee
July 25, 2011

- Itron noted in its Phase II review of PJM load forecasting models that PJM's current method of allocating the RTO monthly peaks to the zones is incorrect.
- Current methodology allocates the RTO monthly peaks to the zones based upon each zone's maximum CP over the season.
- Itron recommends allocating using the zones' contributions to the forecasted RTO seasonal peaks, pointing out that zones which are less coincident with the RTO will tend to be assigned a smaller share of the RTO total if their recommendation is adopted.

- Changing CP allocation method per Itron will improve forecast accuracy and consistency between RTO monthly peaks and zones' contributions to those monthly peaks.
- Currently zonal allocation of the RTO peak is used in assigning capacity obligations. There will be significant impacts to PJM's forward capacity market (RPM) if the change is made.
- While changing the CP allocation method will not impact the total amount of resources acquired through RPM, it will impact the share of costs borne by the zones.

- An allocation of the RTO peak for equitable RPM cost allocation may necessarily be different than for forecast accuracy and consistency.
- It may be appropriate to develop an allocation that is independent of the allocation for forecasting accuracy to address all issues associated with allocating the RTO seasonal peaks for RPM purposes.
- The development of a CP allocation of the RTO seasonal peak for use in RPM should be assigned to a group familiar with RPM philosophy and requirements.

- Itron Recommendation (will be used in planning studies):
 - Based on zones' contributions to the forecasted RTO seasonal peaks
- Current Peak Allocation (option for use in RPM):
 - Allocates the RTO monthly peaks to the zones based upon each zone's maximum CP over the season
 - Developed prior to RPM implementation; cost allocation impacts were not considered

- LOLE-based allocation (option for use in RPM):
 - Contribution to loss of load expectation: PJM would perform analysis to estimate the distribution of annual loss of load risk across individual days. Allocation could then be based on each zone’s average share of the RTO peak on a selected number of high risk days.

DAY	% Annual Risk	Cumulative Risk
1	34.3%	34.3%
2	29.0%	63.3%
3	6.6%	69.9%
4	6.1%	76.0%
5	4.1%	80.1%
6	3.7%	83.8%
7	3.0%	86.8%
8	3.0%	89.7%
9	2.6%	92.3%
10	2.0%	94.3%

80% of risk is captured in the five highest risk days, and 94% in the ten highest risk days.