Model-Based Weather Normalization

Load Analysis Subcommittee
July 18, 2018
The current weather normalization procedure provides an accurate portrayal of the growth pattern of peak load over time, but fails to give an accurate estimate of weather-normalized growth in the first year of the forecast.

PJM is considering a return to using the model to produce weather-normalized peaks, for the following reasons:

– The current model and test model do not suffer from the underlying accuracy issues as the pre-2016 model
– It will still give an accurate estimate of weather-normalized growth
– It should give a better estimate of first year weather-normalized growth
• Estimate model parameters on load history through most recent Summer

• Run 1994-2016 weather simulation (produces a distribution of potential peaks)
  – Select median as the weather normal peak
  – Zonal values are included in posted model stats spreadsheet (on the forecast tabs)
Summer WN

- Unrestricted Peak
- Current WN
- Current Model-Based WN
- Test Model-Based WN
Current WN to Current Forecast
Current Model (WN to Forecast)
Current WN to Test Model
Test Model (WN to Forecast)