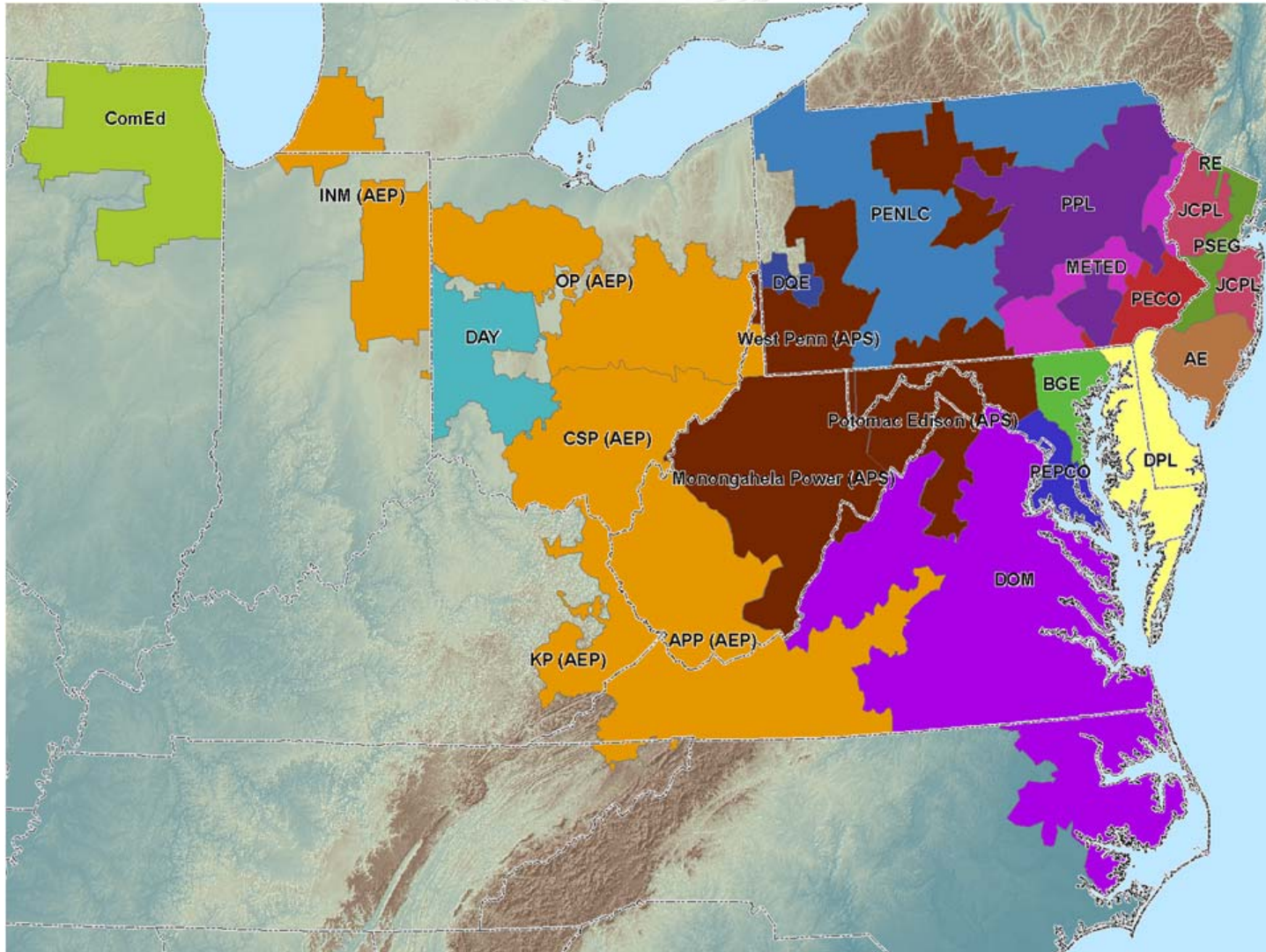




Michigan Planning Consortium PJM Load Forecasting Model February 27, 2009



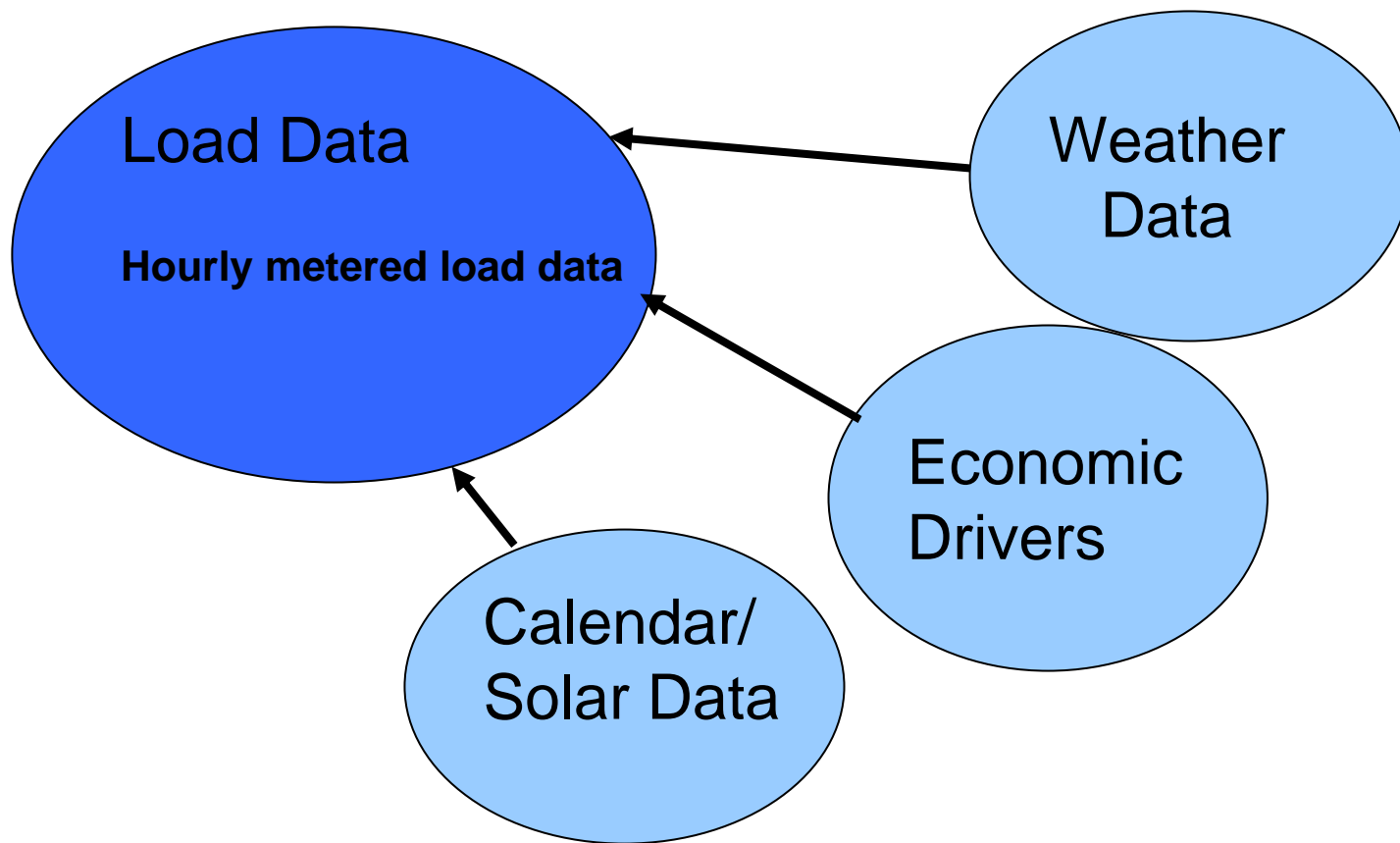
Load Forecast Supports:

- ❖ Regional Transmission Expansion Planning Process (RTEPP)
 - ❖ Load Deliverability

- ❖ Installed Reserve Margin (IRM) Study
 - ❖ Input to Reliability Pricing Model

- ❖ PJM has prepared an independent load forecast since 2006
 - ❖ Complies with stakeholder requests for forecast to be independent of Market Participants
- ❖ A load forecast report is published annually (in January)
 - ❖ Forecast is reviewed with stakeholders
- ❖ Monthly and seasonal peaks and energy are presented for each zone, region, and the RTO. Seasonal forecasts are presented for Load Management. Report includes extreme weather forecasts (90/10 loads). Planning horizon is 15 years.

<http://www.pjm.com/planning/res-adequacy/downloads/2009-load-report.pdf>

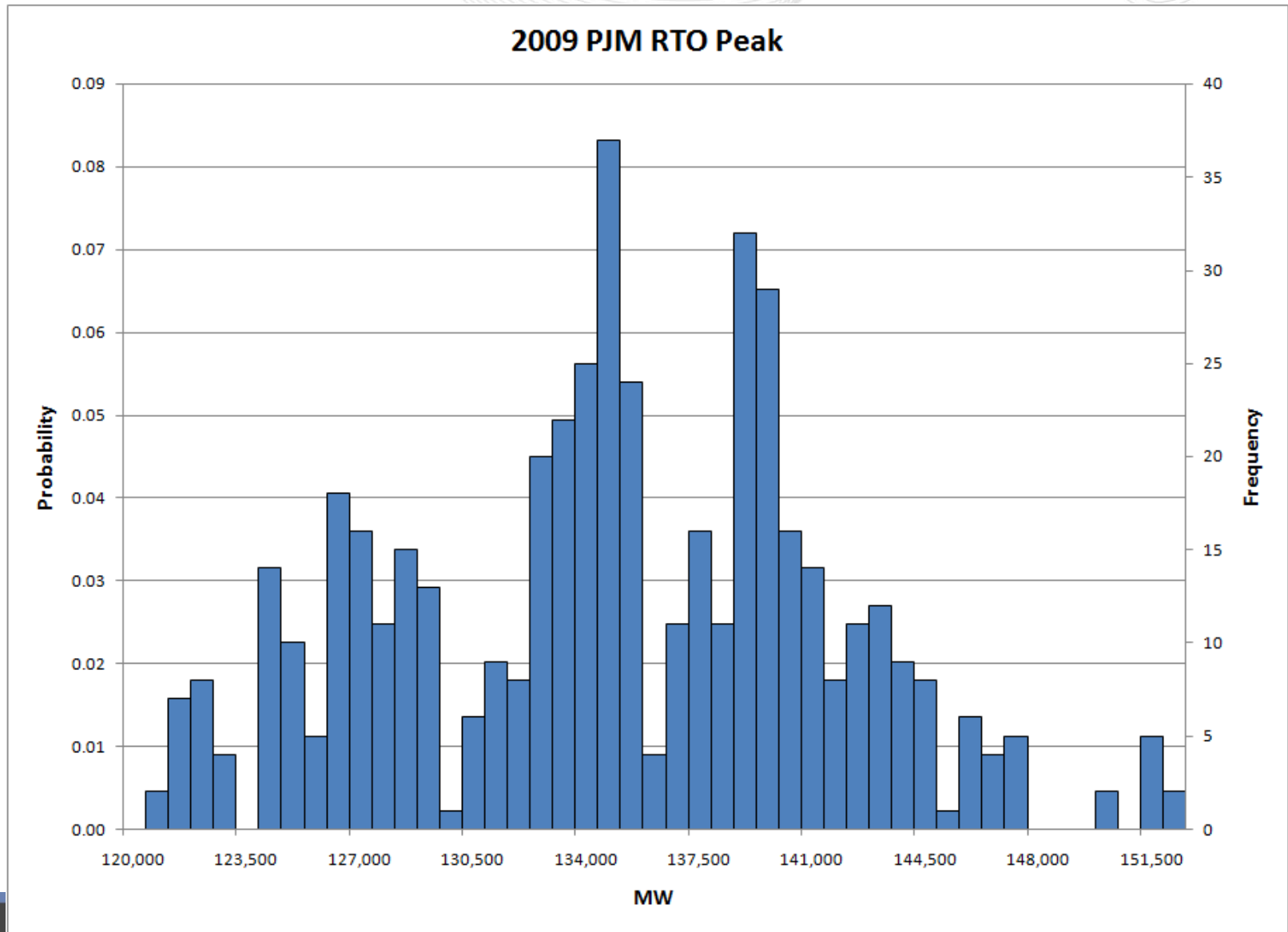


Economic conditions:

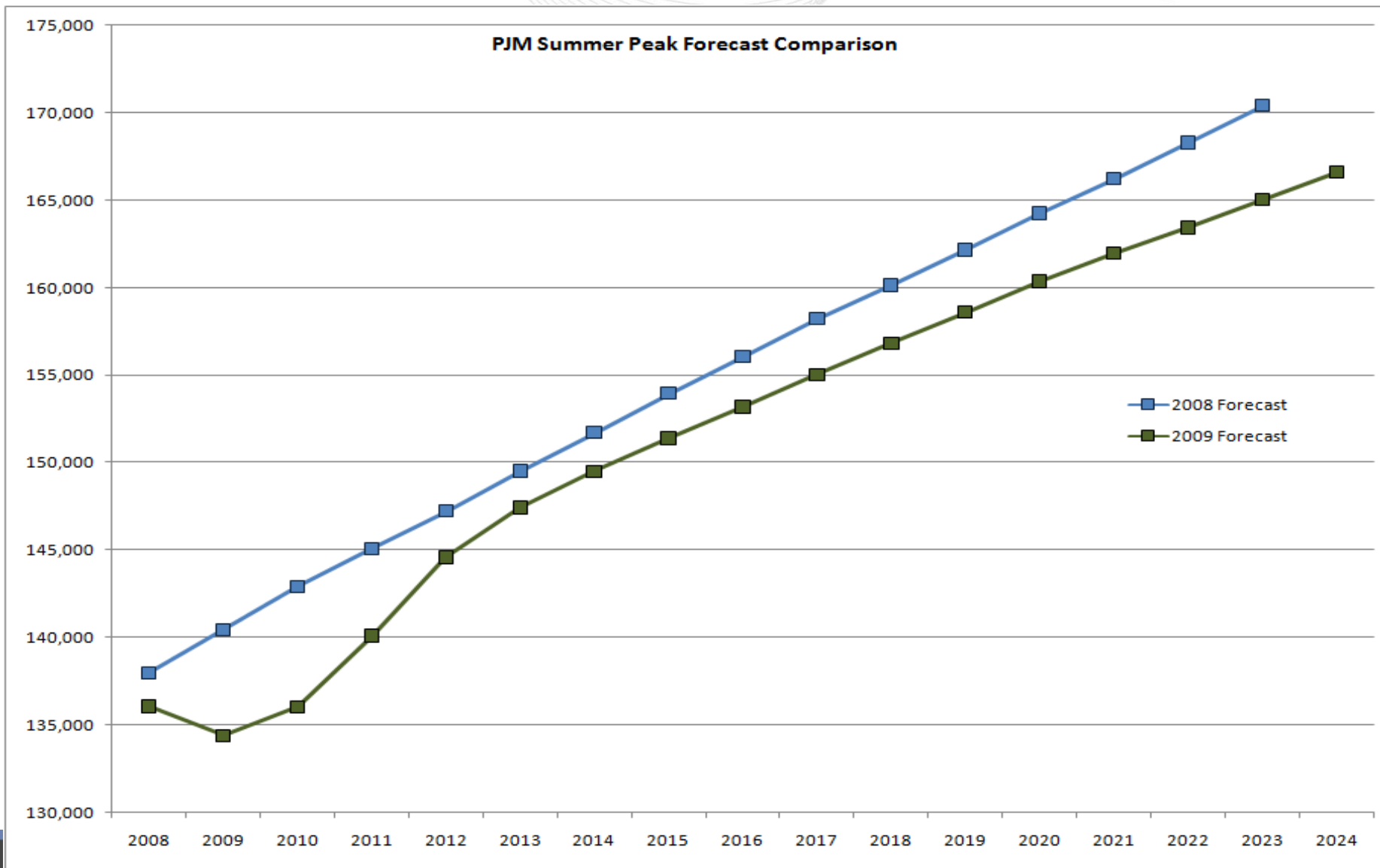
- ❖ Model employs Gross Metropolitan Product (GMP), which is the equivalent of U.S. GDP for a local metro area. GMP measures the value of goods and services produced in the area.
- ❖ PJM has contracted with Moody's Economy.com to provide economic forecasts for 36 metropolitan areas within the PJM footprint on an ongoing basis.

Weather conditions:

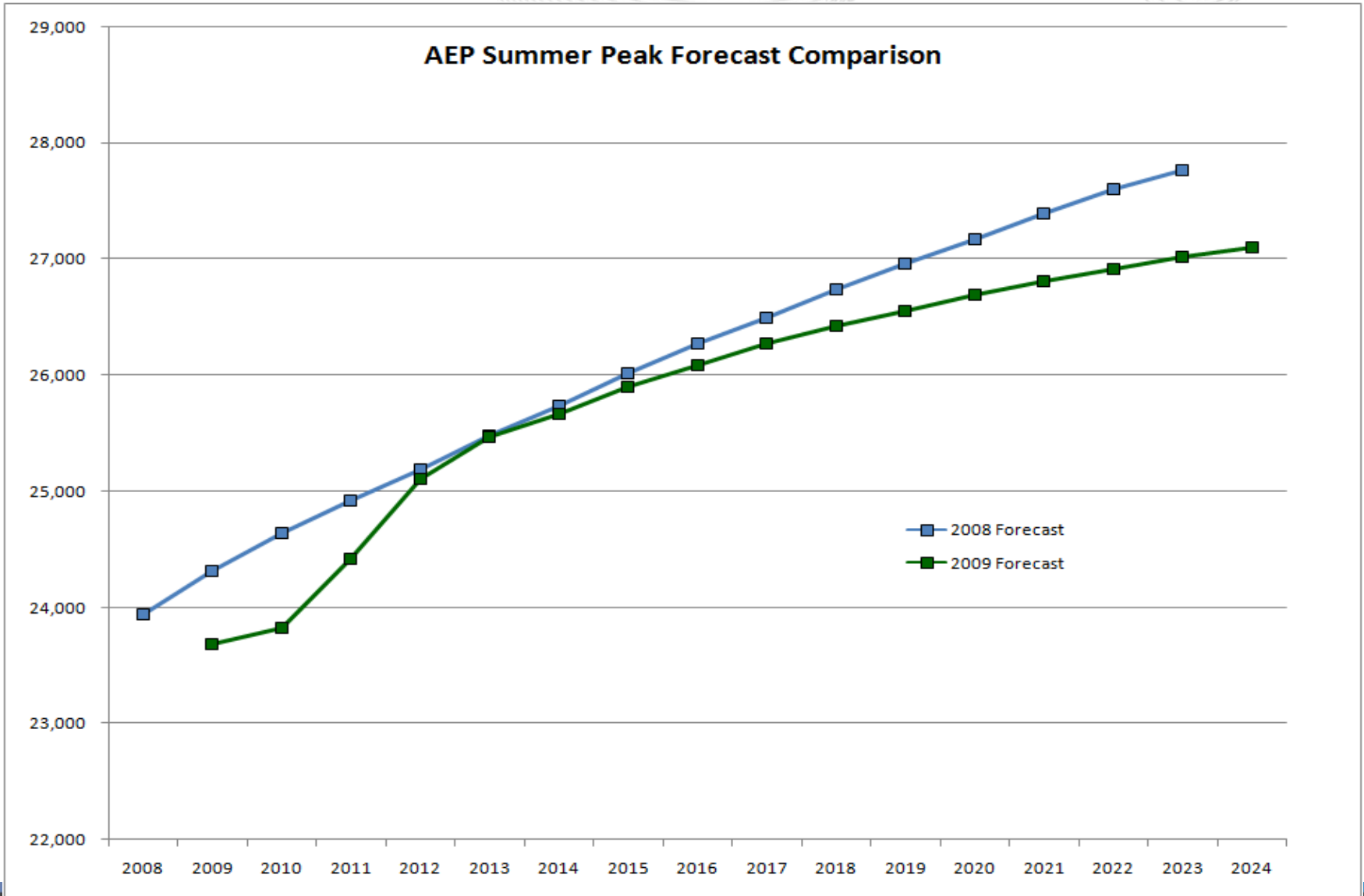
- ❖ The model accounts for weather conditions by using observations of temperature, humidity and wind speed to estimate the impact of weather conditions on load.
- ❖ The model lags weather data over several days, to account for “build-up” of load over cold/hot spells
- ❖ PJM has access to weather data from 30 weather stations across the PJM footprint.
- ❖ Monte Carlo simulations produce a range of weather scenarios with a range of resulting load forecasts



2009 vs. 2008 Load Forecast: PJM RTO



2009 vs. 2008 Load Forecast: AEP



Load Forecast Development Process

The processes for development and implementation of the PJM Forecasts are maintained in this section along with the PJM [Manual M-19](#), "Load Forecasting and Analysis (PDF) ." The normalized peak and allocations for the past several planning periods are also maintained here along with the current Load Forecast Report, PJM Entity Forecast and Load Management historical data.

Process Information

[PJM Load/Energy Forecasting Model White Paper](#)
[Brattle Group Report on PJM Load Forecast Model](#)
[PJM Manual 19: Load Forecasting and Analysis](#)

Forecasts & Reports

	Date
2009 Load Forecast Report (PDF)	01.22.2009
2009 Load Forecast Report - Data (XLS)	01.22.2009
PJM Normalized Peaks (5CPs) (PDF)	Summer 2008
PJM Normalized Peaks (5CPs) (PDF)	Summer 2007
PJM Normalized Peaks (5CPs) (PDF)	Summer 2006
Previous PJM Load Forecast Reports	

Data

	Posting Date
Hourly RTO Unrestricted Load 1998-2008 (XLS)	01.28.2009

Interruptible Load Resources

	Posting Date
Historical Load Management Events (PDF)	09.07.2007
Historical Load Management Summary by Zone (PDF)	07.10.2008