

Day-Ahead Load Forecasting

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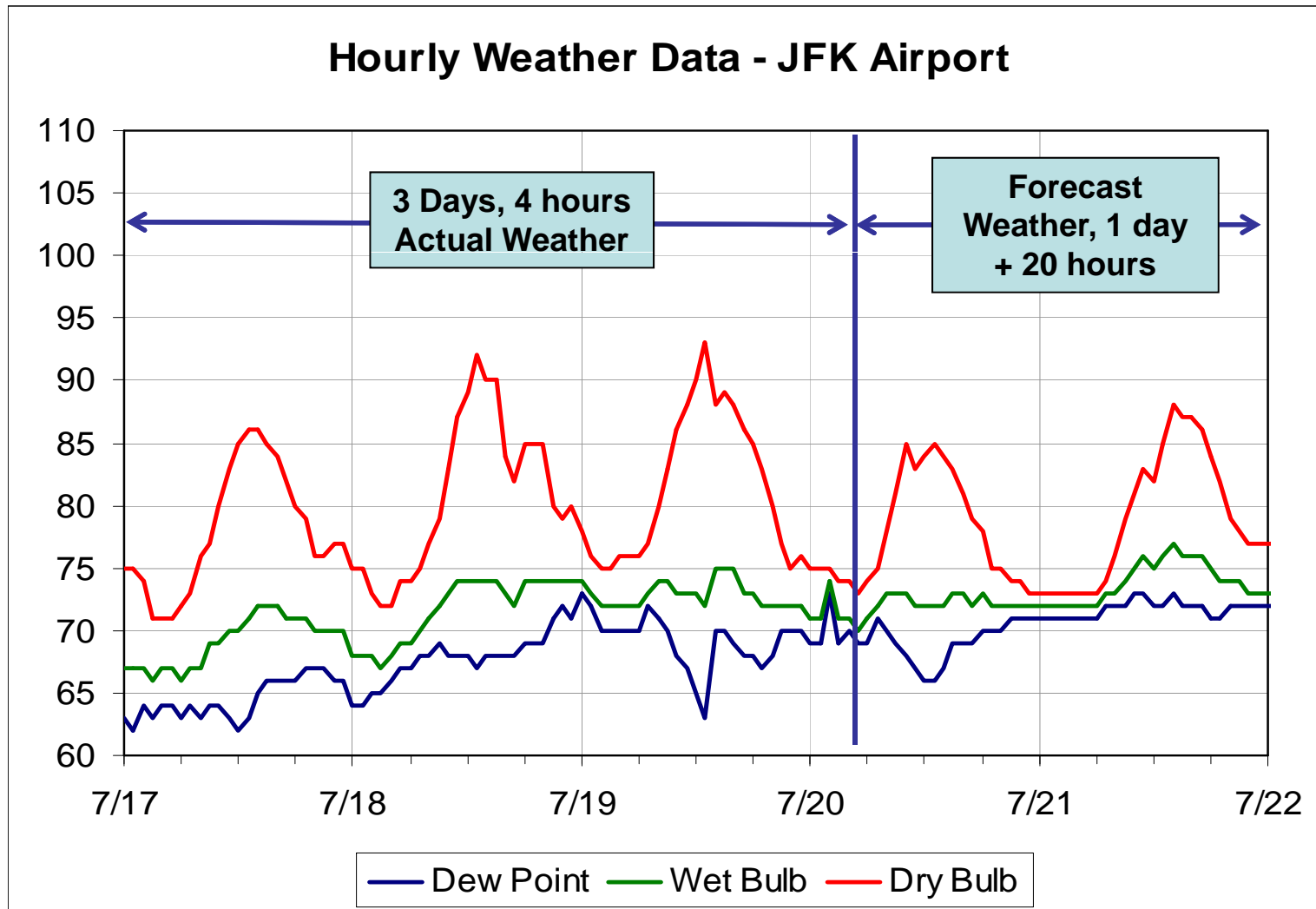
MIWG

October 27, 2011

Day-Ahead Market – Load Forecast

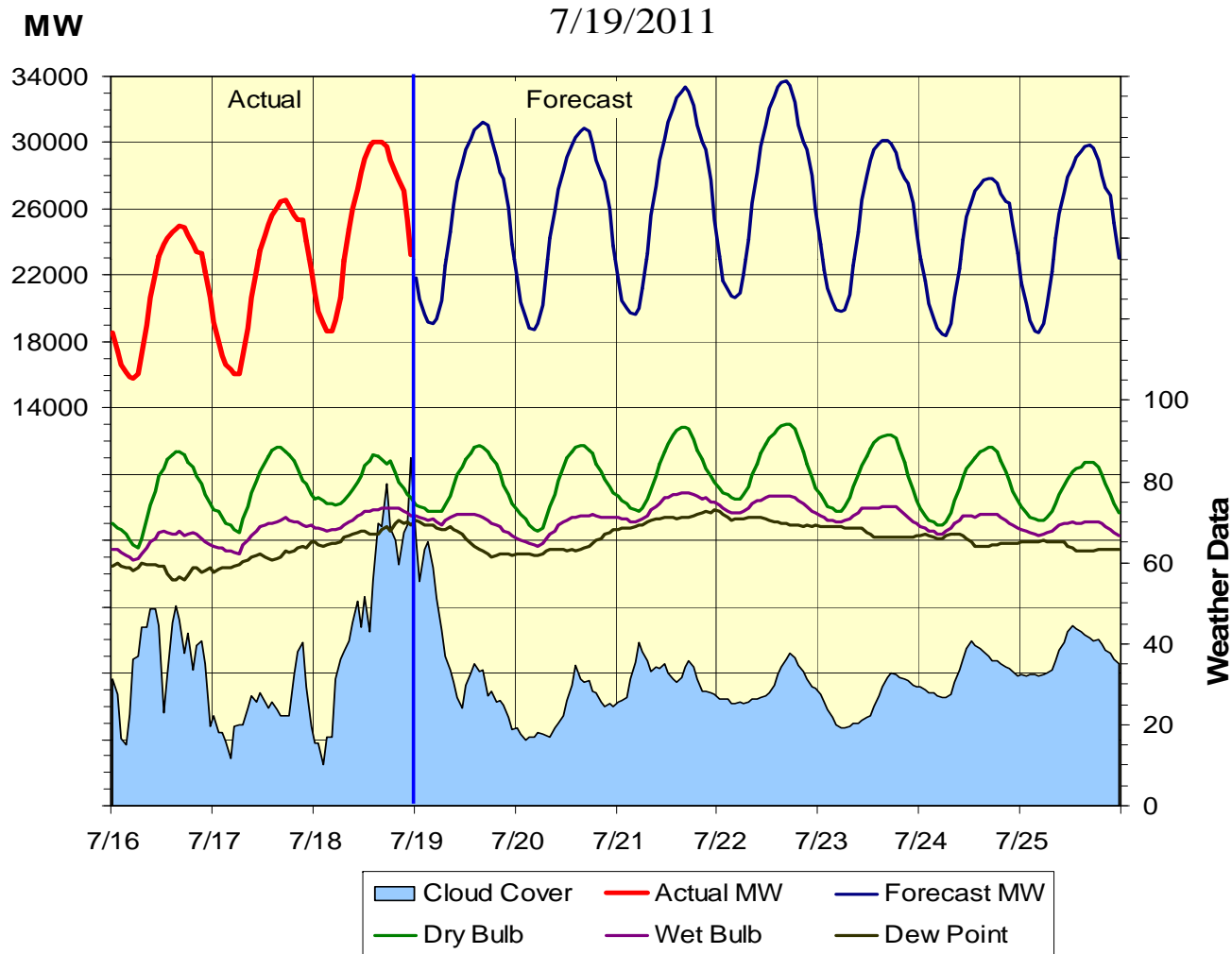
- ◆ NYISO Load Forecast is used during the Forecast Passes of the Day-Ahead Market
 - *Ensures sufficient resources are committed day-ahead to meet the forecasted load*
- ◆ NYISO Load Forecast does not include losses
 - *Losses are an output of the Day-Ahead Market*
 - *Losses are impacted by commitment and dispatch and are part of the optimization*
- ◆ NYISO Seven Day Load Forecast used in the Day-Ahead Market is posted daily by 8am
 - http://www.nyiso.com/public/markets_operations/market_data/load_data/index.jsp

Weather Data: 3 Days Prior, 2 Days Forecast



Load Forecast at 5 am for Next Day

7 Day Outlook for Load & Weather



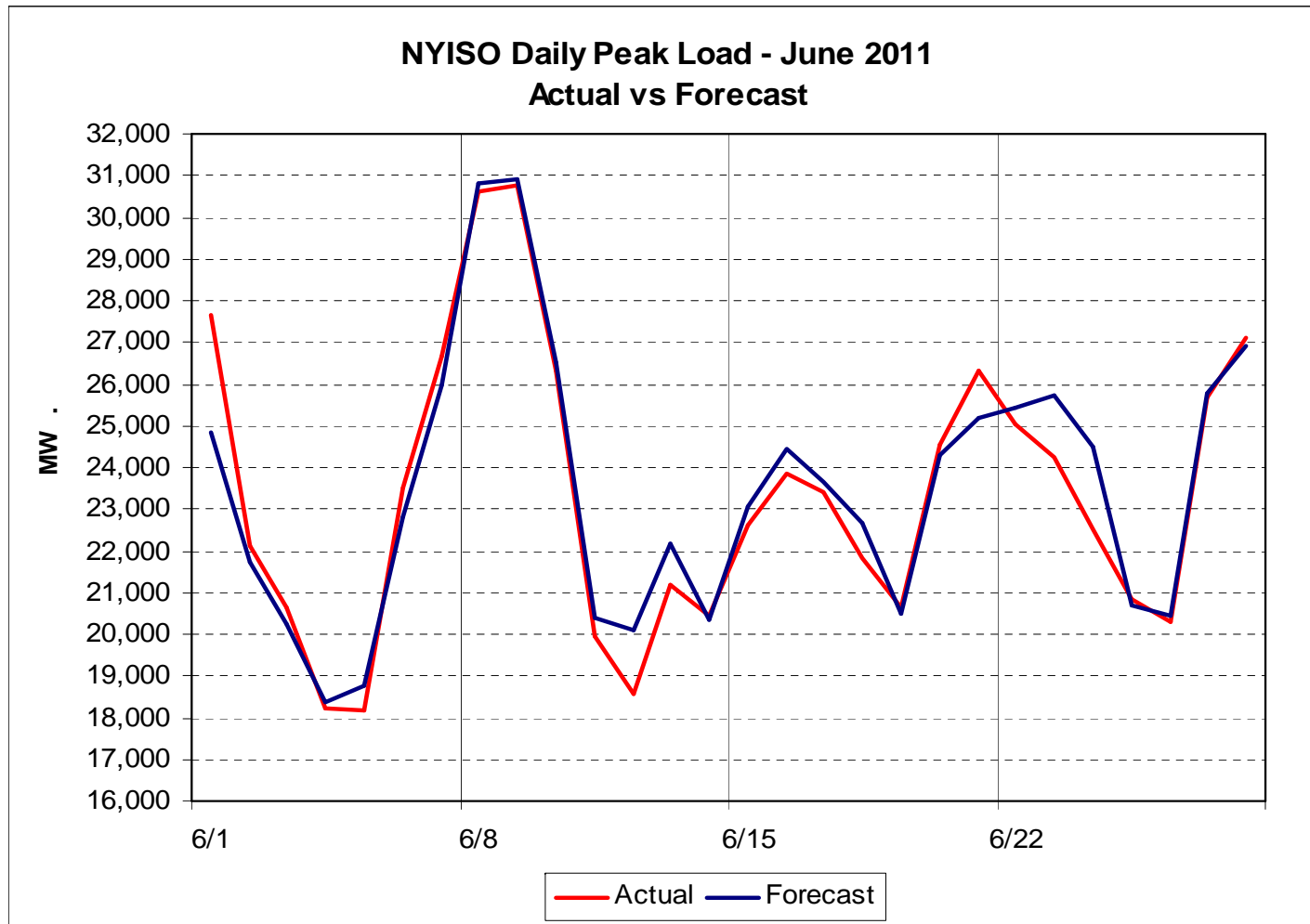
Forecast Loads vs Actual Loads

- ◆ Actual loads are posted *with losses.*
- ◆ Load forecasts are posted *without losses.*

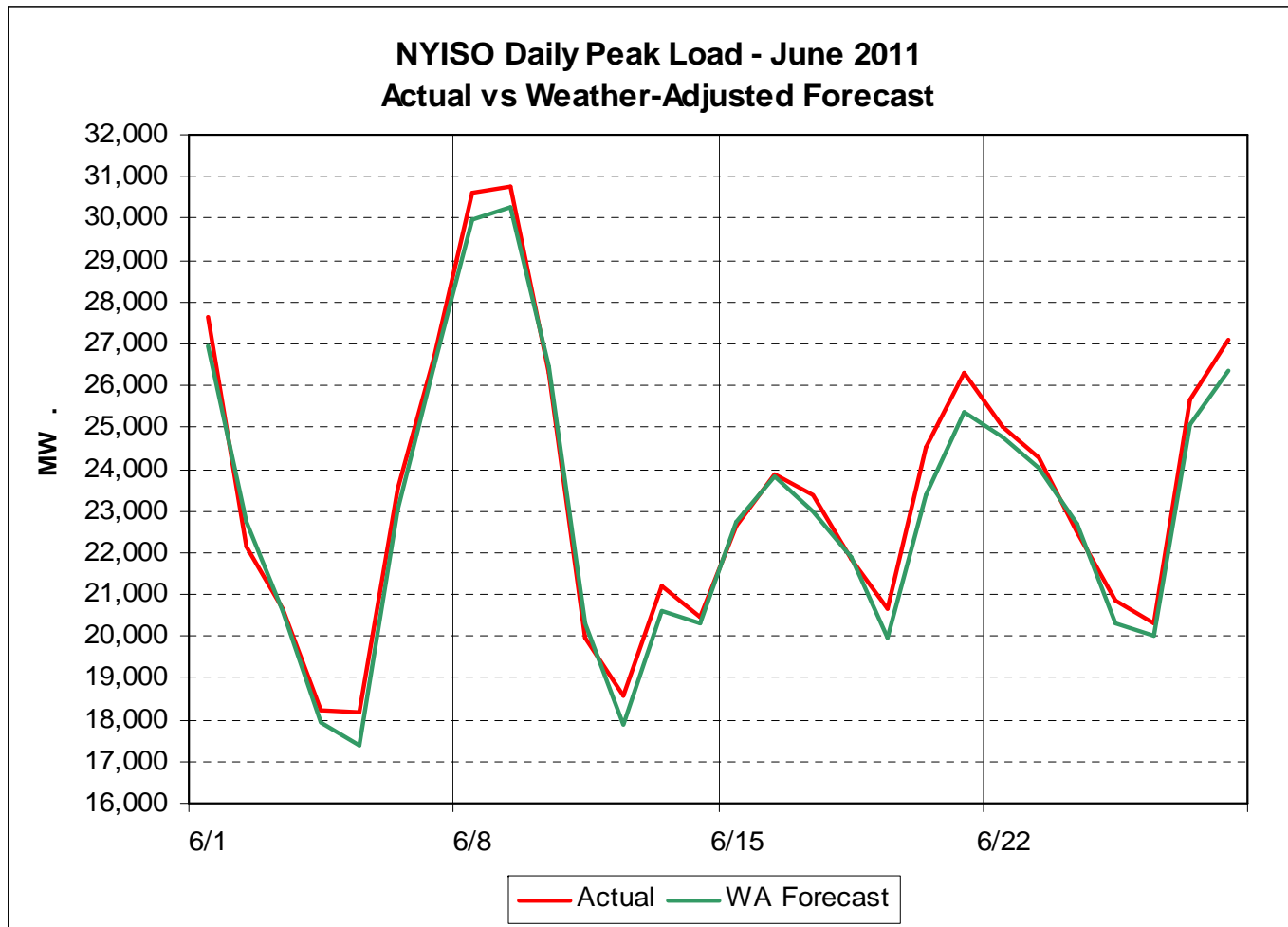
Day-Ahead Forecast Accuracy

- ◆ Two measures of forecast accuracy
 - ◆ Forecast accuracy when using forecast weather, compared to actual MW.
 - ◆ Forecast accuracy when using actual weather, compared to actual MW.
 - Day-ahead models are recalculated using actual weather.

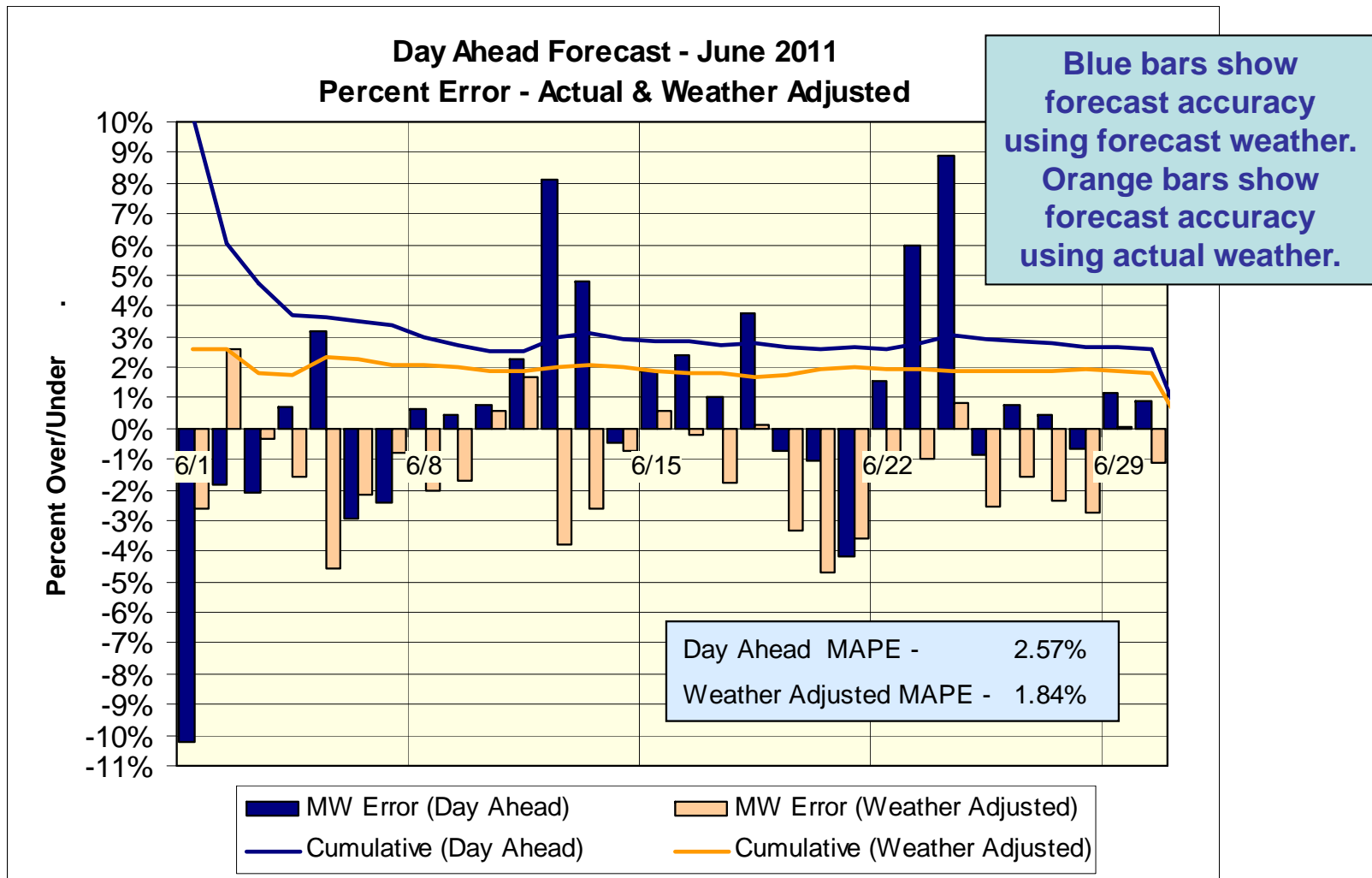
Forecast Accuracy of Daily Peak Load With Forecast Weather



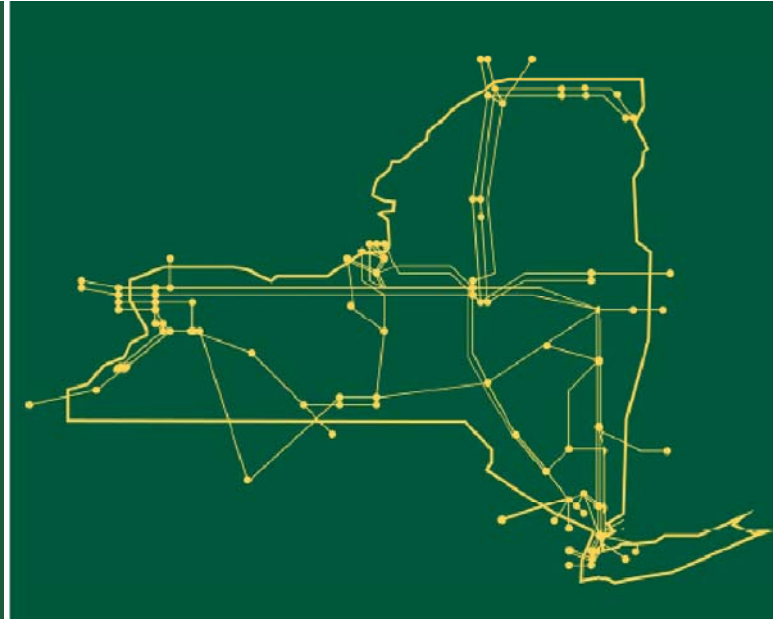
Forecast Accuracy of Daily Peak Load With Actual Weather



Daily & Monthly Accuracy



The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



www.nyiso.com