PJM Load Impacts & Analysis: COVID-19

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Markets & Reliability Committee
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• Review the analysis performed to date to determine the potential impacts the response to COVID-19 has had on PJM’s daily load.

• Provide information regarding the next steps in the continuing near term load impact analysis.

• Discuss next steps in long term forecast impact analysis
• All three sectors are impacted, but to what extent?
  – Reduction of commercial load will likely cause a natural increase in residential load as workers are
    • Lighting, laptops, heating/AC, etc.
  – Industrial will not shift to residential, but also may not be as impacted (state dependent)

5 Year Historical March Load Comparison

This comparison does not account for weather!
Mild Weather in March

Above 50% is warmer than usual
Actual Load vs Estimated Load*

*This forecast is based on an algorithm that uses actual temperature and load and is not actively accounting for the influence of COVID-19
Next steps in the near term load analysis

• Finalize the load analysis methodology and update the results on a weekly basis.
  – Results (underlying data and chart) will be posted to the Operating Committee main webpage each Monday.

• Report out at the SOS and OC monthly meetings

• Begin planning for the eventual ‘return to normal’
Moody’s Analytics has recently developed economic forecasts for three scenarios:
  – Pandemic
  – Severe Pandemic
  – Critical Pandemic

The scenarios differ by number of infections, mortality rates, hospitalization rates, duration of infection increases, etc.

When PJM receives these updated forecasts down to the metro level, we will produce an updated long-term load forecast(s).

Results will be shared with the Planning Committee.
Long-term Forecast Impacts (2020)

• For 2020, PJM will need to continue updating load models to incorporate load behavior for duration of economic shutdown and for a transition period back to “return to normal”.
• Will examine several scenarios
• Results will be shared with the Planning Committee.