

2017 Summer Outlook

PJM expects to have adequate generation resources for the forecasted peak summer conditions. In addition, PJM is not anticipating any transmission problems during the summer season. Preliminary forecasted peak conditions for the summer are:

Forecast Load (MW) Total	Demand Response (MW)	Forecast Load Less Demand Response (MW)	Installed Generation Capacity (MW)	Reserve Margin (MW)	Reserve Margin	Required Reserve Margin
152,999	9,120¹	143,879	185,804	41,925	29.1%	16.6%

¹DR estimate is based on methodology used in RTEP and described in PJM Manual 19.

The forecasted peak load is based on normal (so called, 50-50) peak day weather. PJM load growth has moderated in recent years due to the economic slowdown, increased penetration of more efficient electrical equipment and the installation of behind the meter generation such as solar panels. The installed generation capacity in the table above includes all PJM generators located within PJM and external generators with a commitment to serve PJM load. That total is then reduced by the generator retirements projected to occur prior to June 1, 2017 and by the amount of generation internal to PJM with a firm commitment to serve load outside of PJM. The projected reserve margin of 29.1 percent exceeds the required reserve margin of 16.6 percent.

Current Status

Based on preliminary results from the PJM Seasonal (OATF) Study, the PJM RTO bulk power transmission system can be operated reliably during the 2017 summer peak load period in accordance with the operating principles and guidelines contained within the PJM Manuals.

The PJM RTO bulk power transmission system was studied using power flow cases that simulated the expected system conditions for the 2017 summer peak load period. Projected reactive interface transfer limits were calculated for the PJM reactive interfaces. There is no significant system congestion expected during the 2017 summer peak load period. All thermal issues identified in the analysis were localized and controllable. Voltage studies also indicated that no significant issues are expected.

In the base case, normal and contingency thermal overloads were controlled with circuit switching and adjustments to phase angle regulators. Voltage violations were controlled with available generator reactive power, capacitors, reactors and tap adjustments on load tap changing transformers. Commitment of generation was required to alleviate any remaining constrained facilities and voltage violations encountered at peak load levels.

Additional sensitivity analysis is being conducted and will be available by May 1, 2017.

PJM also participates in inter-regional study groups that publish summer studies for the Regional Entities under the North American Electric Reliability Corporation (NERC). The ReliabilityFirst 2017 Summer Assessment report will be issued by May 31, 2017.

PJM Impact, Concerns and Position

PJM expects to have adequate resources and transmission system availability to be able to handle expected summer conditions. Since the 2016 summer, various transmission enhancements have been added to the PJM bulk system. The enhancements include a new 500 kV transmission line in Dominion, a new 345 kV line in ComEd, several new 230 kV lines, and a new substation in each of AEP, PPL and ATSI. In addition, new dynamic reactive devices were added in the Dominion, JCPL and APS zones to improve voltage control.

If PJM experiences abnormal equipment unavailability and/or unusual weather conditions, emergency procedures may be necessary. Likewise, if neighboring systems experience abnormal conditions, PJM may need to invoke emergency procedures to provide assistance to them.