



12.11: Northeastern Tennessee RTEP Overview

PJM operates the BES transmission facilities (and others monitored at lower voltages), within the northeastern Tennessee footprint shown on Map 12.52, including those of American Electric Power (AEP).

Customers are served by native generation resources and power transfers across tie-line facilities with adjoining systems.

Critical RTEP Issues and Upgrades

PJM’s annual RTEP process assesses transmission facilities in northeastern Tennessee for compliance with NERC reliability criteria violations. This can include identification of the need for new baseline enhancements and for network upgrades to accommodate the interconnection of new generating resources within the AEP TO zone. These and other key critical RTEP issues are summarized in Table 12.46 which also identifies the other sections of this report where additional discussion may be found.

Map 12.52: PJM Service Area in Northeastern Tennessee

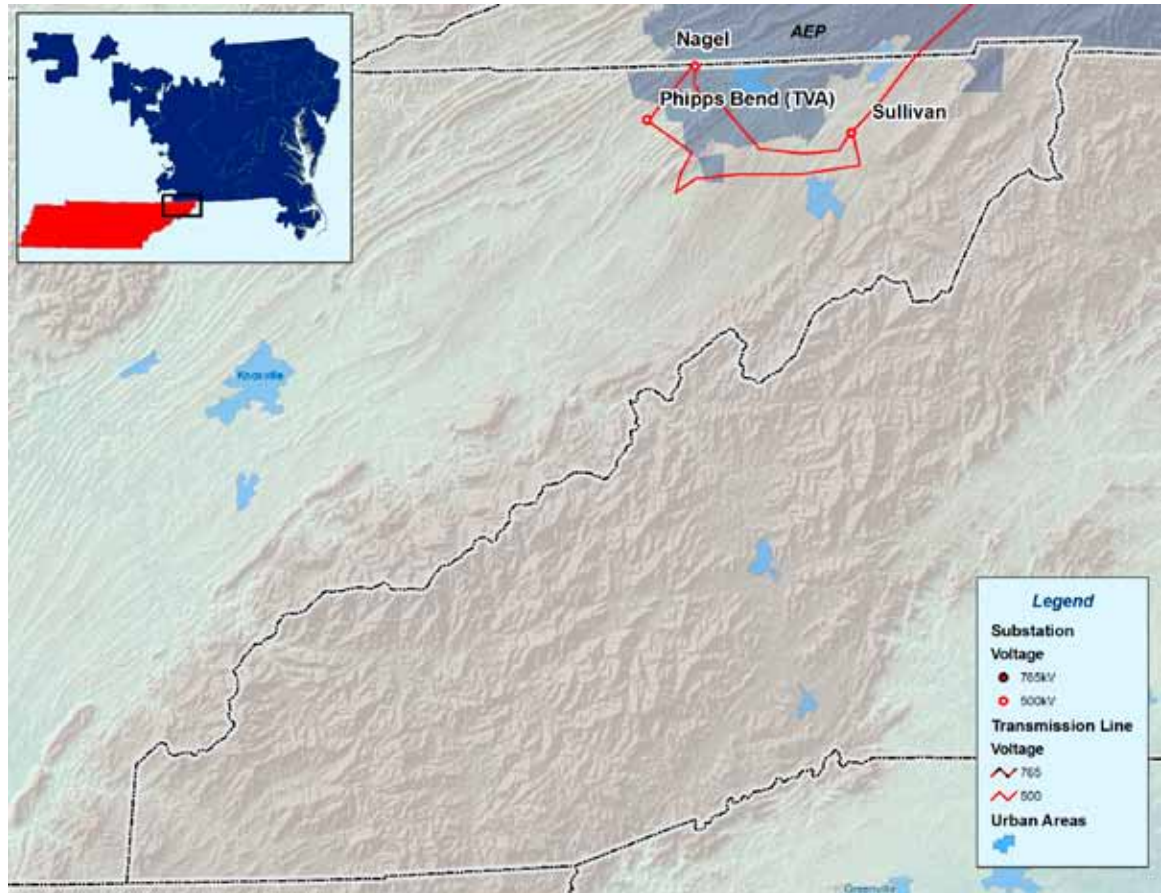


Table 12.46: Critical Issues in Northeastern Tennessee

RTEP Topic	Report Section	Importance
Load Growth Trends	2.1	10-year forecasted peak power demand for individual T0 zones
Load Management Trends	2.2	Impacts of Load Management as a capacity resource
Generator Interconnection Plans	2.3	New sources of electric power to meet customer demand
Wind and other renewable fuel sources	2.3.3, 2.3.4	Potential for wind and other renewable fuel generating resources to meet RPS requirements
Generator Deactivations	2.4	Impact on transmission requirements from generation removed from operation
Merchant Transmission Interconnection Plans	2.5	Impact of merchant transmission interconnection requests
2014 BES Upgrades Below Backbone 500 kV Level	8.4	Resolving zone-specific NERC-based reliability criteria violations
Market Efficiency Studies	10.2	Assessing RTEP upgrades for potential market efficiency benefits
Operational Performance	2.6, 8.5	Addressing transmission performance observed in actual operations
Long-term PJM Challenges	13.1, 13.2, 13.3, 13.4, 13.5, 13.6	Impacts of ATSI, new LDAs, PRD, smart grid, FERC policy, state policy, RPS
2010 RTEP Sensitivity Studies	13.7	Sensitivity tests related to load, generation and loop flow parameters

12.11.1 – Load Growth and Existing Generation

Internal Load Growth

Load Growth for summer and winter periods is shown in Section 12.0.2. The peak summer load growth rate for the AEP Transmission Owner zone within PJM is expected to be 1.2% on average over ten years through 2019. The peak winter load growth rate for AEP is expected to be 0.7% on average over ten years through 2018/19.

Forecasted loads are modeled in power flow studies used to develop PJM’s RTEP through December 2009. PJM’s RTEP includes baseline transmission upgrades to meet expected 2014 peak load conditions. PJM’s ongoing RTEP process continues to study anticipated needs for additional transmission expansion plans to meet load growth requirements beyond 2014 as well.

Existing Generating Capability

No existing generating resources are located in the portion of northeastern Tennessee served by PJM through AEP.

12.11.2 – Generator Interconnection Requests

PJM’s interconnection request queue contains no requests for new generating resources in northeastern Tennessee as of the close of Queue V4, January 31, 2010.

12.11.3 – Generation Deactivations

PJM has not received notice of any anticipated generator deactivations in northeastern Tennessee, through December 31, 2009.

12.11.4 – Merchant Transmission Interconnection Requests

PJM’s interconnection queues contained no requests for merchant transmission in northeastern Tennessee through the close of Queue V4 on January 31, 2010.

12.11.5 – Transmission Expansion Plans in Northeastern Tennessee

No new RTEP planned transmission upgrades greater in northeastern Tennessee than \$5 million were approved by the PJM Board during 2009 for Northeastern Tennessee. A complete listing of all PJM Board-approved BES reinforcements – baseline enhancements as well as network upgrades to accommodate interconnection requests - can be found on PJM’s Web site via the following URL: <http://www.pjm.com/planning/rtep-upgrades-status.aspx>.

12.11.6 – Interconnection Requests for Generation Powered by Renewable Fuel Sources

PJM has no queued interconnection requests – active or under construction – for new generating resources in northeastern Tennessee through the close of Queue V4 on January 31, 2010.