

NextEra Energy Transmission MidAtlantic, Inc. (NEET MidAtlantic)

Local Planning Assumptions, Models, and Criteria PJM Sub-Regional RTEP – Western Meeting

December 13, 2024

2025 Planning Assumptions will use PJM models as available

2025 Planning Assumptions

- Baseline Planning Assumptions and Criteria
 - RTEP Base Case
 - PJM Baseline Planning Criteria
 - NEET MidAtlantic FERC 715 Planning Criteria
- NEET MidAtlantic Interconnection Requirements
- NEET MidAtlantic Supplement Planning
- Planning Models utilized if available
 - PJM RTEP power flow models with 5,10,or 15 year forward looking system topology, load and generation projections
 - PJM RTEP short circuit models with 2 and 5 year forward looking system topology and generation projections
 - MMWG power flow models with 5, 10, or 15 year forward looking system topology, load and generation projections if PJM RTEP models not available
- Loads will be modeled consistently with the PJM Load Forecast Report



2025 Planning Assumptions will comply with PJM manuals and NEET MidAtlantic criteria

PJM Manuals and Posted Criteria

- NEET MidAtlantic plans all facilities in adherence with NERC TPL-001-4 and PJM Planning Criteria outlined in Manual 14B
- NEET MidAtlantic will conduct a yearly planning assessment in accordance with
 - FERC 715 planning criteria
 - Interconnection requirements
- In accordance with NERC Standard FAC-001-2, NEET MidAtlantic has requirements for interconnections of end-use customers, generators and transmission facilities



NEET MidAtlantic uses PJM Transmission Owner guidelines to plan Supplemental Projects

Supplemental Project Drivers

Supplemental Project primary drivers include

Customer Service

Equipment Material Condition,
Performance and Risk

Operational Flexibility and Efficiency

Infrastructure Resilience

Other

- Service to new and existing customers. Interconnect new customer load. Address distribution load growth, customer outage exposure, equipment loading, transmission load growth.
- Degraded equipment performance, material condition, obsolescence, including at the end of the useful life of equipment or a facility, equipment failure, employee and public safety and environment impact.
- Optimizing system configuration, equipment duty cycles and restoration capability, and minimize outages.
- Improve system ability to anticipate, absorb, adapt to, and/or rapidly recover from a potentially disruptive event, including severe weather, geo-magnetic disturbances, physical and cyber security challenges, critical infrastructure reduction.
- Meet objectives not included in other definitions such as, but not limited to, technological pilots, industry recommendations, environmental and safety impacts, governmental/utility commission regulations, etc.

Inputs from the factors below are collectively taken into consideration to support asset management decisions

Asset Management Decision Drivers

 Decision to replace or repair an asset is based on, but not limited to:

Current Condition,
Performance and Risk
Assessment

 Assessments, including but not limited to inspections may be based on technical OEM recommendations and industry best practices

Performance indicators, such as standard industry metrics, etc.

Component failure metrics and maintenance plans

Agency, Authorities,
Regulatory
Requirements, and Other
Consultations

 Discussions with, but not limited to, governmental agencies, PJM, etc. on criticality issues, and with consultants may also drive decision making

Service Life, Supplier Support, and Design Obsolescence

Asset Age and typical industry Service Life are factors

Service Life be impacted by geographical conditions or other factors

• Availability of replacement spare parts, manufacturer support, etc.

Good Utility Practice

• Good Utility Practice also includes, good engineering judgement, safety standards, environmental, and cost-effectiveness, etc.



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