

# **AMPT Transmission 2022 Local Planning Assumptions for PJM RTEP Projects**

***PJM Sub-Regional RTEP  
Western Meeting  
December 17, 2021***

# AMP Transmission (AMPT) Overview

- AMPT owns and operates PJM network transmission facilities in Ohio:
- AMPT has transmission facilities in the ATSI and AEP Zones
  - Two (2) 138 kV stations
  - Six (6) 69 kV stations
  - Approximately 23 miles of 69 kV transmission line

# AMPT Planning Assumptions

- AMP Transmission plans all facilities in accordance with North American Electric Reliability Council (NERC), ReliabilityFirst Corporation (RFC), and PJM planning requirements
  - AMPT follows PJM Reliability Planning Criteria as stated in Manual 14B
    - <https://www.pjm.com/library/manuals.aspx>
- AMP Transmission will conduct a yearly planning assessment in accordance with
  - AMPT FERC 715 planning criteria
    - <https://www.pjm.com/planning/planning-criteria/to-planning-criteria.aspx>
      - Updated documentation and presented to PJM's PC in June 2021
  - AMPT's interconnection requirements are available on PJM's website
    - <https://www.pjm.com/planning/design-engineering/to-tech-standards.aspx>
- All deviations from the above stated assumptions and models will be otherwise noted

# AMPT Planning Models

- AMPT participates in the development of PJM's RTEP base cases for power flow, short circuit, and stability models
  - Additional information on PJM's Process is described in [Manual 14B](#)
  - AMPT Planning studies utilize the latest available PJM RTEP base cases
    - 5-year assessment – 2027 PJM RTEP Case
    - Contingencies are updated as per NERC TPL 001-4 Standard
    - Loads will be modeled consistently with the PJM Load Forecast Report

# AMPT PJM Planning Criteria

- AMPT develops three different categories of PJM projects:
  - **Baseline projects** are developed to address planning criteria violations which originate from internal and/or PJM RTEP Planning analysis
  - **Supplemental projects** are not covered by baseline PJM Planning analysis and address internal AMPT drivers that will be covered in more detail
  - **Network upgrade projects** are developed in conjunction with PJM to provide facilities for connection of new generation facilities and/or upgrades in output of existing generation facilities

# Baseline Project Planning Process

- AMPT will:
  - Evaluate projected future system conditions identifying all potential reliability criteria violations
  - Develop associated system improvements to resolve any identified violations to ensure adherence with all related planning criteria
  - Coordinate with PJM to verify accuracy of modeling information and violations identified through PJM's and AMPT's planning analysis
  - Submit any Baseline violations to PJM in accordance with PJM's annual RTEP process
- PJM will review all validated violations at TEAC and/or Sub-regional RTEP Committees
- All Baseline violations and Baseline solutions will be presented and vetted through the PJM TEAC or Sub-regional RTEP Committees
  - All cases, analysis files and available results will be made accessible through PJM's CEI process

# Supplemental Project Criteria

AMPT will develop supplemental projects that are identified based on the following drivers:

- Customer Service
  - Operational Flexibility & Efficiency
  - Equipment Material Condition, Performance and Risk
  - Infrastructure Resilience
  - Other
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- All needs and solutions will be reviewed at the sub-regional TEAC meeting for stakeholder input as part of the PJM M-3 Process.

# Supplemental Project Planning Categories

- **Customer Service**
  - Service to new and existing customers, interconnect new customer load, address load growth, customer outage exposure, and equipment loading
  - Customer Service interconnections that follow the M3 process are based on:
    - AMPT's Transmission Facilities Interconnection Requirements Document
- **Operational Flexibility & Efficiency**
  - Optimize system reliability through improved system configuration and restoration capabilities
    - Improve system reliability and safety by reducing operator interventions and actions
    - Address safety hazards and reliability risks to system operations

# Supplemental Project Planning Categories

- **Equipment Material Condition, Performance and Risk**
  - 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
  - Enhance legacy facilities to modern engineering design standards
- **Infrastructure Resilience**
  - Improve the system's ability to anticipate, absorb, adapt to, and/or rapidly recover from a potentially disruptive event, including severe weather, geo-magnetic disturbances or physical and cyber security challenges, critical infrastructure reduction, optimize inventory of replacement facilities
- **Other**
  - Meet objectives not included in other definitions such as, but not limited to, technological pilots, good utility practice/industry recommendations, environmental and safety impacts, governmental/utility commission regulations, etc.

Questions?