2018 Local Planning Assumptions – Duquesne Light

1/30/2018

DUQUESNE LIGHT CO.

2018 RTEP Assumptions

- Duquesne uses MMWG developed power flow models
  - Perform near-term & long-term annual assessments
- Work with PJM to develop RTEP base case
  - Focus on accurate topology and load allocations
- Load modeled & load management consistent with the 2018 PJM Load Forecast Report
  - Model includes fixed (customer-specific) & scalable loads
  - Scalable load scaled to meet PJM forecast
  - 2023S 50/50 Forecast of 2,878 MW

Approach for Baseline Assessment

- Baseline Projects (bxxxx)
  - Resolve reliability criteria violations, market efficiency criteria, or operational performance issues
- NERC Transmission Planning Standards (TPL)
- PJM Criteria
  - Manual 14B
  - PJM Website (PJM Criteria): http://www.pjm.com/planning/planning-criteria.aspx

Approach for Baseline Assessment

- Duquesne Criteria
  - Transmission voltages: 345 kV, 138 kV, & 69 kV
  - FERC Form 715
  - PJM Website (TO Criteria): http://www.pjm.com/planning/planning-criteria.aspx
  - Facility Connection Standards: https://duquesnelight.com/docs/default-source/default-document-library/standards-for-connection.pdf?sfvrsn=5717a442_0 http://www.pjm.com/planning/design-engineering/to-tech-standards.aspx

Approach for Baseline Assessment

- Both PJM and Duquesne perform analyses on Duquesne's zone
  - Must satisfy NERC TPL standards
  - PJM's focus is to apply PJM criteria
  - Duquesne's focus is to apply Duquesne criteria
    - Includes sensitivity studies (i.e. generation dispatch, project delays, range of forecast demands)
- Validate with each other to assure a violation exists and requires an upgrade
- Mitigation/reinforcement is determined through the PJM expansion planning process

Approach for Baseline Assessment

- Present violations & reinforcements to TEAC and/or Sub-Regional RTEP Committees
- RTEP power flow cases available through PJM for stakeholders to propose solutions
  - Must follow PJM CEII guidelines to obtain power flow cases

Approach for Supplemental Assessment

- Supplemental Projects (sxxxx)
  - Non-criteria based upgrades
  - Projects may include transmission infrastructure necessary to:
    - Supply underlying distribution system
    - Address aged infrastructure
    - Interconnect new customers
  - Supplemental projects reviewed at sub-regional meetings to allow stakeholder input

Other Assumptions

- Duquesne-specific transmission assessment & results contained in its annual FERC Form 715
  - Must follow FERC CEII guidelines to access Form 715
- Duquesne will consider other assumptions and analyses suggested by stakeholders

Questions?