



Duquesne Light

Our Energy...Your Power

2016 RTEP Assumptions for Western Sub-Region

2016 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 2016 PJM Load Forecast Report
 - Model includes fixed (customer-specific) & scalable loads
 - Scalable load scaled to meet PJM forecast
 - 2021S 50/50 Forecast of 2,942 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://www.duquesnelight.com/forYourHome/saveEnergyAndSaveMoney/Customergeneration.cfm>

- <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 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 CEI guidelines to obtain power flow cases

- 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 CEI guidelines to access Form 715
- Duquesne will consider other assumptions and analyses suggested by stakeholders

Questions?