2015 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 2015 PJM Load Forecast Report
  – Model includes fixed (customer-specific) & scalable loads
  – Scalable load scaled to meet PJM forecast
  – 2020S 50/50 Forecast of 3,084 MW
Approach for Baseline Assessment

• Baseline Projects (bxxxx)
  – Resolve reliability criteria violations or operational performance issues

• NERC Transmission Planning Standards (TPL)

• PJM Criteria
  – Manual 14B
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 CEII 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 CEII guidelines to access Form 715
- Duquesne will consider other assumptions and analyses suggested by stakeholders
Questions?