# 2017 RTEP Assumptions for Western Sub-Region



# 2017 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 2017 PJM Load Forecast Report
  - Model includes fixed (customer-specific) & scalable loads
  - Scalable load scaled to meet PJM forecast
  - 2022S 50/50 Forecast of 2,879 MW\*



<sup>\*</sup>As stated in draft document on 12/16/16

- 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):
    <a href="http://www.pjm.com/planning/planning-criteria.aspx">http://www.pjm.com/planning/planning-criteria.aspx</a>



- Duquesne Criteria
  - Transmission voltages: 345 kV, 138 kV, & 69 kV
  - FERC Form 715
  - PJM Website (TO Criteria):<a href="http://www.pjm.com/planning/planning-criteria.aspx">http://www.pjm.com/planning/planning-criteria.aspx</a>
  - Facility Connection Standards:
    <a href="https://www.duquesnelight.com/forYourHome/saveEnergy">https://www.duquesnelight.com/forYourHome/saveEnergy</a>
    <a href="http://www.pim.com/customerGeneration.cfm">http://www.pim.com/customerGeneration.cfm</a>
    <a href="http://www.pjm.com/planning/design-engineering/to-tech-standards.aspx">http://www.pjm.com/planning/design-engineering/to-tech-standards.aspx</a>



- 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



- 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?**

