Reliability Analysis Update

 Transmission Expansion Advisory Committee
 October 17, 2019
Proposal Window Exclusion Definitions

- The following definitions explain the basis for excluding flowgates and/or projects from the competitive planning process and designating projects to the incumbent Transmission Owner.
- Flowgates/projects excluded from competition will include the underlined language on the corresponding slide.

  - **Immediate Need Exclusion**: Due to the immediate need of the violation (3 years or less), the timing required for an RTEP proposal window is infeasible. As a result, the local Transmission Owner will be the Designated Entity. - Operating Agreement, Schedule 6 § 1.5.8(m)

  - **Below 200kV Exclusion**: Due to the lower voltage level of the identified violation(s), the driver(s) for this project are excluded from the competitive proposal window process. As a result, the local Transmission Owner will be the Designated Entity - Operating Agreement, Schedule 6 § 1.5.8(n)

  - **Substation Equipment Exclusion**: Due to identification of the limiting element(s) as substation equipment, the driver(s) for this project are excluded from the competitive proposal window process. As a result, the local Transmission Owner will be the Designated Entity - Operating Agreement, Schedule 6 § 1.5.8(p)
2019 RTEP Analysis Update
Retool study in progress
- Required due to the reinstatements of Davis Besse 1 (896MW), Perry 1 (1247MW), and Sammis 5-7 (1491MW)

Scope of the study:
- Summer
  - Generator Deliverability, Baseline Analysis – Complete and reviewing
  - Load Deliverability, N-1-1 – In process
- Winter
  - Generator Deliverability, Baseline Analysis – Complete and reviewing
  - Load Deliverability, N-1-1 – In process
- Light Load
  - Generator Deliverability, Baseline Analysis – In process
• PJM performing initial analysis and evaluations
• Some issues may be linked to deactivation re-tool
  – Need to complete deactivation re-tool to determine violations which can be taken forward for further evaluation
First Review

Baseline Reliability Projects
ComEd Transmission Zone: Baseline
Wilton Center Breakers

**Process Stage:** First Review

**Criteria:** Winter Generator Deliverability

**Assumption Reference:** 2024 RTEP assumption

**Model Used for Analysis:** 2024 RTEP winter case

**Proposal Window Exclusion:** None

**Problem Statement:** Wilton Center 765/345kV transformers #93 and #94 are overloaded for the loss of the Wilton – Collin 765kV line with struck breaker of either 2-3 breaker or 5-6 breaker. (GD-W252, GD-W253, GD-W257, GD-W258)

**Existing Facility Rating:**
- Wilton Center 765/345kV transformer #93: 1200/1379/1200/1379 (SN/SE/WN/WE)
- Wilton Center 765/345kV transformer #94: 1200/1379/1200/1379 (SN/SE/WN/WE)

**Proposed Solution:**
- Proposal #2019_1-574: Add two 765 kV circuit Breakers at Wilton Center substation and move the Collins - Wilton Center 765 kV line to a new bus position on the ring.

**Estimated Cost:** $15.4M ($17.4M for in service year)

**Alternatives:** N/A

**Required In-Service:** 12/1/2024
2019 RTEP Next Steps

- Complete Deactivation re-tool
- Begin presenting window violation solutions
- Continue stability studies
- Continue other studies (e.g. 15 year analysis, outage analysis, etc.)
Questions?
Upcoming TEAC Meetings

2019

- TEAC meetings are the following Thursdays in 2019
  - 1/10, 2/7, 3/7, 4/11, 5/16, 6/13, 7/11, 8/8, 9/12, 10/17, 11/14, 12/12.
• V1 – 10/14/2019 – Original slides posted