



Reliability Analysis Update

Transmission Expansion Advisory
Committee

October 17, 2019

- 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)

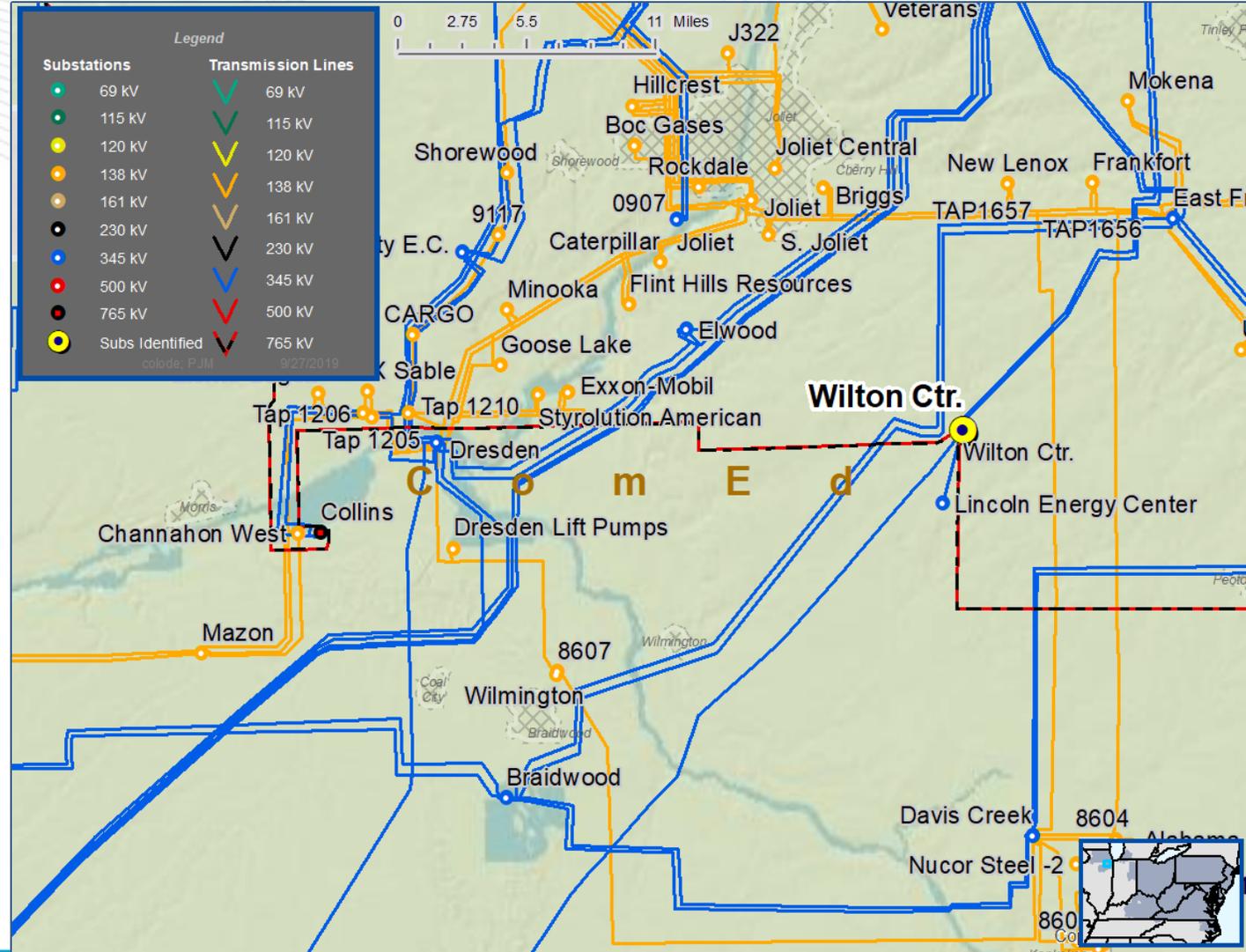
Proposed Solution:

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



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

Questions?



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