



ComEd 2015 Assumptions for Western Sub-Regional RTEP

March 5, 2015

Background

✓ ComEd Overhead Transmission System

- 765 kV: 90 Miles
- 345 kV: 2,621 Miles
- 138 kV: 2,616 Miles

✓ Underground Transmission

- 345 kV: 35 Miles
- 138 kV: 288 Miles

✓ Historical Peak Loads

- 23,753 MW Summer
- 16,514 MW Winter

Power Flow Models

- ✓ ComEd creates a detailed internal model for planning studies
 - 90/10 and 50/50 load levels, years 1-6 & 10.
 - Loads consistent with PJM Load Forecast Report
 - 2020 summer 50/50 load of 24,582 MW
 - Latest ERAG MMWG cases used for external
 - New generators included only if under construction or judged highly likely to enter construction in the next 2 years
 - Wind is not dispatched in peak cases
- ✓ ComEd provides updates to PJM for inclusion in the PJM 2019 RTEP model
- ✓ ComEd detailed model is submitted to RF for inclusion in ERAG MMWG cases

Planning Criteria

✓ ComEd Transmission Planning Criteria

- Major Differences from PJM Criteria
 - Double underground lines at 90/10 load
 - Transient voltage recovery
 - Voltage stability
- Included in FERC 715 filing
- Posted on PJM web site

✓ NERC TPL Standards

✓ PJM Criteria - Manual 14B

Baseline Analysis

- ✓ Both ComEd and PJM study our system to determine baseline reliability upgrades
 - PJM Focus is PJM criteria (Manual 14B)
 - ComEd focus is ComEd criteria
- ✓ ComEd works with PJM to analyze results and identify proposed solutions
- ✓ Proposed solutions are presented to TEAC or Sub-Regional RTEP and become baseline projects

Supplemental Projects

- ✓ Supplemental Projects
 - Material Condition
 - Projects needed to supply the distribution system
 - Ratings methodology changes
 - Interconnection of transmission customers
 - Operational flexibility issues
 - Proactive generation retirement mitigation
- ✓ Reviewed at PJM TEAC or Sub-Regional RTEP meetings to allow stakeholder input