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
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
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