CECONY's 2021 Local Transmission Plan (LTP)

ESPWG November 19th, 2021

CECONY's Overview

- Service Area encompasses New York City and Westchester County
 - 660 square miles
 - 9.3 million people
 - 3.4 million customers
- All time system peak:
 - **—** 13,322 (2013)



Study Assumptions – Load Forecast

- The projected peak load forecast for the next 10-years:
 - Forecast was developed prior to initiation of LTP in the Spring of 2021
 - Reflects impact of Covid-19

Year	Y2021	Y2022	Y2023	Y2024	Y2025	Y2026	Y2027	Y2028	Y2029	Y2030
Load (MW)	12,278	12,376	12,306	12,256	12,143	12,154	12,193	12,250	12,327	12,702
% Growth	-	8.0	-0.6	-0.4	-0.9	0.1	0.3	0.5	0.6	3.0

Study Assumptions – Transmission Reconfigurations

- The 2021 Local Transmission Plan (LTP) was based on the NYISO 2021 FERC 715 Filing / 2021 Load and Capacity Data ("Gold Book") database
- Highlights:
 - For all Study Years, tie Feeders B3402 and C3403 continue to be on long term outage.
 The flow assigned to tie feeder A2253 is based on the NYISO/PJM "Joint Operating Agreement"
 - Y2022: Vinegar Hill Distribution Switching Substation, connected to 138 kV Hudson
 Avenue East, will be installed to support Water Street and Plymouth Street Area Stations
 - Y2023: New transmission path: 2nd 345/138 kV PAR controlled Rainey Corona feeder
 - Y2025: New transmission path: 3rd 345/138 kV PAR controlled Gowanus Greenwood feeder
 - Y2025: New transmission path: 345/138 kV PAR controlled Goethals Fox Hills feeder, with Fox Hills substation reconfigured into a Ring Bus

Study Assumptions – Series Reactors Status

- The LTP adopted the status of Series Reactors in accordance with the Operating Protocol
 - **-** 2021-2023
 - Bypassed series reactors: 345 kV feeders 71, 72, M51, M52
 - In-service series reactors: 345 kV feeders 41, 42, Y49
 - Post 2023
 - In-service series reactors: 345 kV feeders 71, 72, M51, M52
 - Bypassed series reactors: 345 kV feeders 41, 42, Y49

Study Assumptions – Generation Retirements

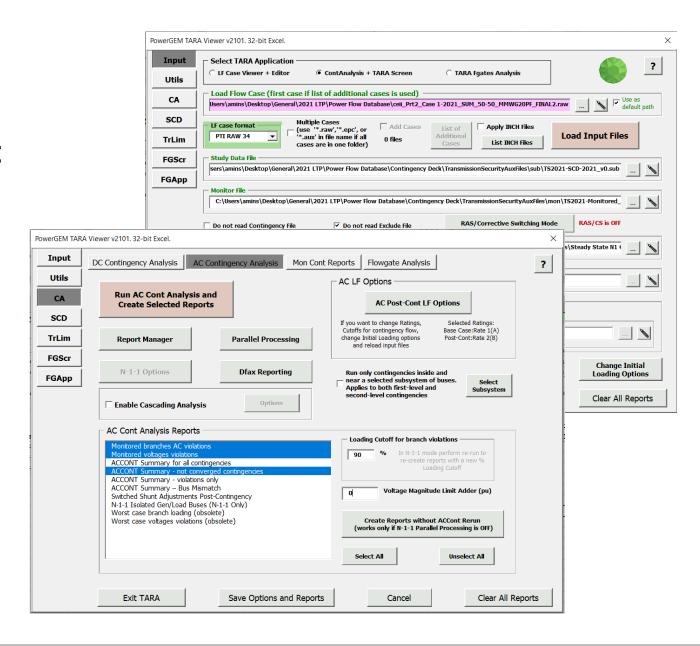
- In 2019, the New York State Department of Environmental Conservation (DEC) adopted a regulation to limit nitrogen oxides (NOx) emissions from simple-cycle and regenerative combustion turbines ("DEC NOx Emission Standard")
 - The DEC NOx Emission Standard required all impacted plant owners to file compliance plans
 - Compliance Plans were subsequently assessed within the NYISO 2020 Reliability Needs Assessment (RNA)
 - The database used in CECONY's LTP reflects the application of the generator compliance plans for the DEC NOx Emission Standard together with identified solutions to the transmission security criteria violations observed in the Con Edison service territory

Tools & Applications

- The analysis was evaluated using:
 - ASPEN One-Liner Application
 - Siemens PTI PSS®E v34
 - PowerGEM TARA Program







Findings

The 2021 CECONY's Local Transmission Plan (LTP) does not identify any transmission reliability needs in CECONY's Transmission District under the assumptions established for this assessment and for over the next 10-years planning horizon.

Next Steps

- In 2019, New York State passed the nation-leading Climate Leadership and Community Protection Act (CLCPA)
- Achieving the ambitious goals of CLCPA will mean transforming the way electricity is generated and used
 - Transmission system topology and generation mix will change
 - Load behavior and its associated forecast will change
- CECONY's LTP is expected to be updated more frequently
 - CECONY will update its LTP to add specific project(s) as they become firm with NYPSC approval

Next Steps

- The 2021 LTP includes discussion of CECONY's conceptual and/or non-FIRM projects as they relate to achieving CLCPA goals
 - Voltage support
 - ex. STATCOM
 - Expanding interconnections for renewable generation capacity
 - ex. Brooklyn Clean Energy Hub
 - Energy storage hubs
 - Additional feeders into NYC
 - Future load growth

Questions

- CECONY's Transmission Planning Criteria and the 2021 Local Transmission Plan (LTP) are posted on the Con Edison website at this link:
 - https://www.coned.com/en/business-partners/transmission-planning
- Interested parties may submit written comments on CECONY's LTP within 30 days (Dec 19, 2021) via email to:

Martin Paszek

Section Manager – System Performance

paszekm@coned.com