

CECONY's 2019 Local Transmission Plan (LTP)

ESPWG
November 18th, 2019
ESPWG
March 16th, 2020

Agenda

- Overview
- Assumptions
 - Load Forecast
 - Generator Retirements / Additions
 - Transmission Reconfigurations
- Assessment
 - Short Circuit
 - Thermal / Voltage
 - Other
- Findings

Overview

Overview

- NYC and Westchester
- 660 square miles
- 9.3 million people
- 3.4 million customers
- All time system peak
 - 13,322 MW (2013)



Assumptions

Assumptions

Load Forecast

- The projected load forecast for the next 10-years:

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
Load (MW)	13,270	13,320	13,370	13,380	13,270	13,260	13,280	13,280	13,260	13,250
% Growth	-	0.4	0.4	0.1	- 0.8	- 0.1	0.2	0	- 0.2	- 0.1

- The projected load forecast beyond 10-years:
(For Information Only)

Year	2029	2030	2031	2032	2033
Load (MW)	13,240	13,230	13,240	13,330	13,430
% Growth	- 0.1	- 0.1	0.1	0.7	0.8

Assumptions

Generator Retirements / Additions

- Generator Retirements:

- Y2020: Indian Point 2 (nameplate: 1,299 MW)
- Y2021: Indian Point 3 (nameplate: 1,012 MW)

- Generator Additions:

- Y2020: Cricket Valley Energy Center (CVEC) – 1,020 MW, with
 - New Cricket Valley 345 kV Substation
 - New Pleasant Valley – Cricket Valley 345 kV circuit

Assumptions

Transmission Reconfigurations

- Y2019:
 - Tie feeders B-3402 and C-3403 continue to be on a long term outage
 - Addition of a 345/138 kV PAR controlled Rainey – Corona feeder
 - Addition of a 345 kV breaker at the East 13th Street substation
 - Addition of a 138 kV breaker at the Jamaica substation
 - For the purposes of Distribution System, under peak load conditions, the 138 kV transmission feeder 32077 is operated radially from Farragut in order to supply Water Street Area Station through 138/27 kV Transformer #4

Assumptions

Transmission Reconfigurations

- Year 2024:
 - Hudson Avenue Distribution Substation (DSS) will be installed to support Water Street and Plymouth Area Stations under post-contingency conditions

Assumptions

Transmission Reconfigurations

- New projects since November 18th, 2019 ESPWG
 - Y2019: East 13th Street 345/138 kV Transformer Replacement
 - Y2019: Gowanus 345/138 kV Transformer Replacement
 - Y2024: Farragut 138 kV Breaker Replacement

Assessment

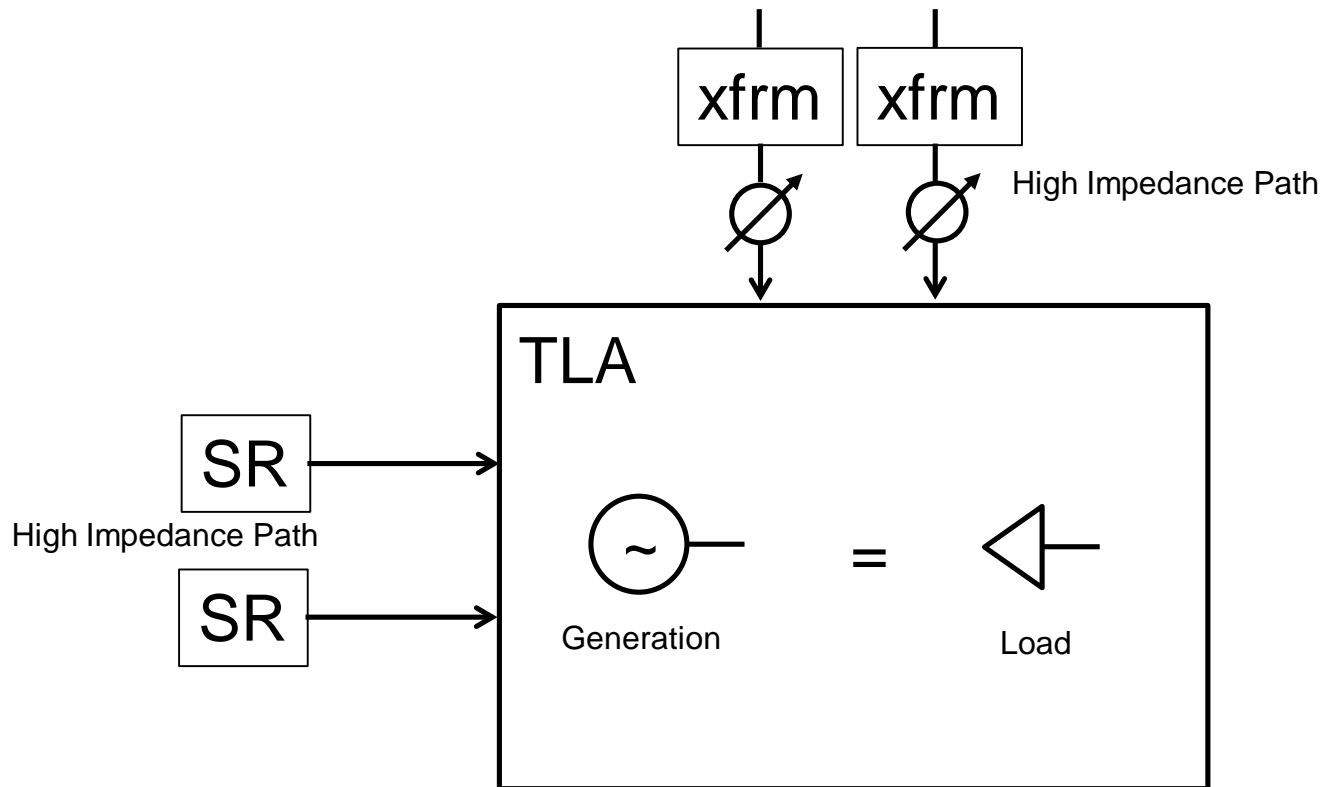
Assessment

Short Circuit

- For the 10-year planning horizon
 - The short circuit analysis did not identify any overduty condition in CECONY's Transmission District under the assumptions established for this assessment
 - There is no need for a Corrective Action Plan (CAP)

Assessment Voltage / Thermal

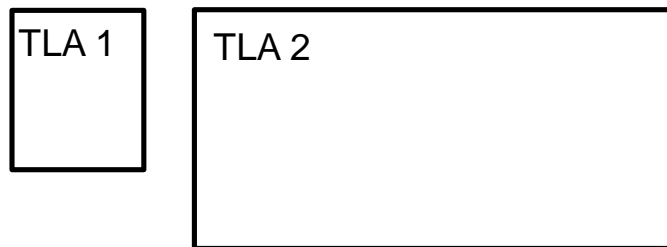
- Transmission Load Area (TLA)



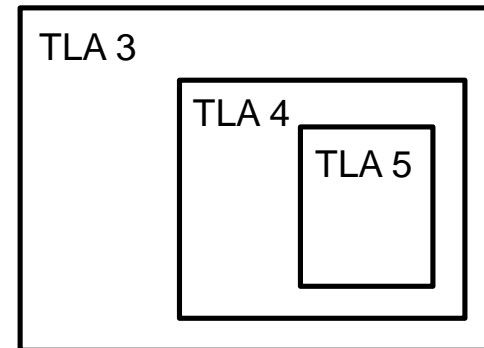
Assessment Voltage / Thermal

- Transmission Load Areas (TLAs)

Stand Alone TLAs



Imbedded TLAs



— Observation:

- The CECONY electrical system is compartmentalized
- Electrical Disturbances 'generally' do not propagate

Assessment List of CECONY's TLAs

#	Transmission Load Area	Design *
1	New York City 345 / 138 kV	Second
2	West 49 th Street 345 kV	Second
3	East 13 th Street 138 kV	Second
4	Astoria East/Corona 138 kV	Second
5	Astoria West/Queensbridge 138 kV	Second
6	Vernon/Queensbridge 138 kV	Second
7	East River 138 kV	First
8	Millwood/Buchanan 138 kV	First
9	Eastview 138 kV	First
10	Dunwoodie North/Sherman Creek 138 kV	First
11	Dunwoodie South 138 kV	First
12	The Bronx 138 kV	First
13	Eastern Queens 138 kV	First
14	Brooklyn/Queens 138 kV	First
15	Corona/Jamaica 138 kV	First
16	Greenwood/Fox Hills 138 kV	First
17	Staten Island 138 kV	First

* The design contingency level for each Transmission Load Area depends on its BPS or BES status.

Assessment

Thermal / Voltage

- For the 10-year planning horizon
 - The thermal and voltage analysis did not identify any transmission needs in CECONY's Transmission District under the assumptions established for this assessment
 - There is no need for a Corrective Action Plan (CAP)

Assessment Other

- For the 10-year planning horizon
 - Stability Assessment
 - No issues were identified
 - Extreme Contingency Assessment
 - No issues were identified
 - Transient Assessment
 - Not performed as part of the 2019 LTP

Findings

Findings

The 2019 CECONY's Local Transmission Plan (LTP) did not identify any transmission needs in CECONY's Transmission District under the assumptions established for this assessment and for over the next 10- years planning horizon (years 2019 through 2028)

Thank you !