CECONY's Updated Local Transmission Plan (LTP)



LTP Update - Agenda

- CECONY Overview
- DEC NOx Peaker Rule
- Solutions to local Non-BPTF Identified Needs
- Impact of the Solutions on the Transmission System



CECONY - Overview



Overview

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





DEC NOx Peaker Rule and Local Non-BPTF Impacts



DEC NOx Peaker Rule Causes Local Non-BPTF Needs

- In 2019, the New York State Department of Environmental Conservation (DEC) adopted a regulation to limit nitrogen oxides (NOx) emissions from simple-cycle combustion turbines during the summer operating "ozone" season
- Planned status change for "key local units" to comply with DEC Peaker Rule*

Owner / Operator	Plant Name	Zone	CRIS	Assumed Deactivation Date	Transmission Load Area (TLA)		
	Astoria GT 2-1, 2-2, 2-3, 2-4	J		2023	/		
NRG Power Marketing LLC	Astoria GT 3-1, 3-2, 3-3, 3-4	J	505.5	2023	Astoria East / Corona 138 kV TLA		
Marketing, LLO	Astoria GT 4-1, 4-2, 4-3, 4-4	J		2023			
Astoria Generating Company, L.P.	Gowanus 1-1 through 1-8	J	278.8	2023			
	Gowanus 4-1 through 4-8	J	270.0	Summer ONLY	Greenwood / Fox Hills 138 kV TLA		
	Gowanus 2-1 through 2-8	J					
	Gowanus 3-1 through 3-8	J	608.7	2025 Summer ONLY			
	Narrows 1-1 through 2-8	J					

* Full List of units affected by DEC Peaker Rule can be found in the Appendix of this presentation



Identified Local Needs - Astoria East / Corona 138 kV TLA

 Retirement of Astoria Gas Turbines would result in a Summer Operating Season ("ozone") deficiency starting in 2023

Year	2023	2024	2025	2026	2027	2028	2029	2030
N-1/-1/-0 Design Peak Deficiency (MW)	110	115	110	115	120	125	170	180

• A deficiency exists over a 10-hour period (2023) that expands to a 13-hour period (2030)





Identified Local Needs - Greenwood / Fox Hills 138 kV TLA

- Unavailability of Gowanus and Narrows Barges would result in a Summer Operating Season ("ozone") deficiency starting in 2025
 - Thermal and voltage violations in the steady state condition (N-0) result in a transmission overload of about 70 MW above *normal rating of* feeders

Year	2025	2026	2027	2028	2029	2030
N-1/-1 Design Peak Deficiency (MW)	360	350	360	360	370	370

 A deficiency exists over a 14-hour period





Solutions to local Non-BPTF Identified Needs



Solutions to local Non-BPTF Identified Needs

- CECONY firm solutions focus ONLY on addressing the local non-BPTF needs
 - As identified in the RNA/STAR studies
- CECONY firm solutions have minimal impact on BPTF needs*

* One of the proposed projects unbottles exiting Staten Island resources



SOLUTION: Astoria East / Corona & Jamaica Corona TLA

- A solution for year 2023 (in-service date):
 - A new 345/138 kV PAR controlled Rainey Corona feeder





SOLUTION: Greenwood / Fox Hills TLA

- A solution for year 2025 (in-service date):
 - A new 345/138 kV PAR controlled Gowanus Greenwood feeder
 - A new 345/138 kV PAR controlled Goethals Fox Hills feeder





Impact of the Solutions on the Transmission System



CECONY's Solutions Maintain Reliability of the Local System

With the three firm projects assumed in-service for the 10-year planning horizon:

- Previously identified local non-BPTF thermal needs are addressed
- Short circuit analysis did not identify any over-duty condition
- Thermal and voltage analysis did not identify any new local needs
- Stability analysis did not identify any new local needs



Thank you!



Appendix



RNA*: Status Change due to DEC Peaker Rule, Zone J (NYC)

Units	Nameplate MW	CRIS (MW)		Capability (MW)		2023 Ozone Season	2023 non-Ozone Season	2024 Ozone Season	2024 non-Ozone Season	2025 Ozone Season	2025 non-Ozone Season
		Summer	Winter	Summer	Winter	May 2023 - September 2023	October 2023 - April 2024	May 2024 - September 2024	October 2024 - April 2025	May 2025 - September 2025	October 2025 - April 2026
Astoria GT1	16	16	21	14	19	I/S	I/S	I/S	I/S	0/S	I/S
Gowanus 1&4 (1-1 through 1-8, and 4-1 through 4-4)	320	279	364	274	365	0/S	I/S	0/S	I/S	0/S	I/S
Gowanus 2&3 (2-1 through 2-8 and 3-1 through 3-8)	320	300	391	278	373	I/S	I/S	I/S	I/S	0/S	I/S
Narrows 1&2 (1-1 through 1-8, and 2-1 through 2-8)	352	309	404	287	380	I/S	I/S	I/S	I/S	0/S	I/S
Ravenswood GTs (01, 10, 11)	69	50	64	41	57	0/S	0/S	0/S	0/S	0/S	0/S
Arthur Kill GT1	20	17	22	12	15	I/S	I/S	I/S	I/S	0/S	0/S
Astoria GTs (2-1 through 2-4, 3-1 through 3-4, 4-1 through 4-4)	558	504	621	415	543	0/S	0/S	0/S	0/S	0/S	0/S
Con Ed 59th St	17	15	20	16	20	I/S	I/S	I/S	I/S	0/S	0/S
Con Ed 74th St	37	39	49	35	41	0/S	0/S	0/S	0/S	0/S	0/S
Con Ed Hudson Ave 5	16	15	20	14	20	0/S	0/S	0/S	0/S	0/S	0/S
Unavailable MW (Summer Capability)						779	506	779	506	1,385	533
Available MW (Summer Capability)						606	880	606	880	0	852
Impacted MW	1,725	1,544	1,975	1,385	1,834						

* Figure 8 (page 17)

I/S - In-service

