



2024 Interim Area Transmission Review of the New York State Bulk Power Transmission System (Study Year 2029)

A Report by the
New York Independent System Operator

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Introduction

The New York Independent System Operator (NYISO) conducts an annual Area Transmission Review (ATR) of the New York State Bulk Power System (BPS) as required by the Northeast Power Coordinating Council (NPCC)[1] and the New York State Reliability Council (NYSRC)[2]. The ATR is required to assess the BPS. However, the NYISO assesses the Bulk Power Transmission Facilities (BPTF), as defined in this review. Notably, the BPTF includes all the facilities designated by the NYISO to be part of the BPS as defined by NPCC and NYSRC, as well as certain additional non-BPS facilities. The purpose of this assessment is to demonstrate conformance with the applicable NPCC Transmission Design Criteria and NYSRC Reliability Rules.

The ATR is prepared in accordance with NPCC and NYSRC procedures that require the assessment to be performed annually, with a Comprehensive Area Transmission Review (CATR) performed at least every five years. Either an Interim or Intermediate Review can be conducted between CATRs, as appropriate. In an Interim Review, the planning coordinator summarizes the changes in planned facilities and forecasted system conditions since the last CATR and assesses the impact of those changes. No new analyses are required for an Interim Review. An Intermediate Review covers all the elements of a Comprehensive Review, but the analysis may be limited to addressing only significant issues, considering the extent of the system changes. The most recent NYISO CATR was performed in 2020[3] evaluating year 2025. The NYISO 2020 CATR was approved by the NPCC Reliability Coordinating Council (RCC) in May 2021 and NYSRC in June 2021. In 2023, the NYISO completed an Interim ATR evaluating year 2028. The NYISO 2023 Interim ATR was approved by NYSRC in October 2023 and by NPCC RCC in December 2023. This report comprises the fourth Interim ATR submitted by NYISO since the 2020 NYISO CATR[3].

This assessment is conducted in accordance with the requirements for an Interim Review as described in the NPCC Directory #1[1] - Appendix B “Guidelines and Procedures for NPCC Transmission Reviews” and the NYSRC “Procedure for New York Control Area Transmission Reviews”[2]. The 2024 Interim ATR assesses the reliability impacts of changes in forecasted system conditions and planned New York State BPTF since the 2020 NYISO CATR[3] in the reliability studies including and up to 2024 Quarter 3 Short-Term Assessment of Reliability[4] (STAR). This Interim ATR is conducted for the year 2029.

Forecasted System Conditions and Planned Facilities

The forecasted system conditions and planned generation and transmission facilities assessed in the NYISO 2020 CATR[3] were based on the 2020 NYISO Load and Capacity Data Report (“Gold Book”) for the year 2025. This Interim Review is based on the forecasted conditions and planned facilities from the 2024 Gold Book[5] for the year 2029. Figure 1 through Figure 5 summarize the forecasted conditions and planned facilities included in this Interim ATR and compares these assumptions with those used for the 2020 CATR[3]. Additional changes to transmission plans, generation additions/up-rates, or deactivations/re-ratings that occurred following the publication of the NYISO 2024 Gold Book[5] that were not captured in the 2024 Quarter 3 STAR[4] will be captured in future reviews.

Load & Capacity Forecast

Figure 1 provides a comparison of the statewide system margins under baseline normal weather expected load conditions from the 2020 CATR, as well as this 2024 Interim ATR. Statewide system margin is not an indicator of whether or not reliability is achieved (*i.e.*, it is not an evaluation of reliability criteria), but it is a leading indicator of the system’s ability to securely serve demand under normal operations while fully maintaining operating reserves. The statewide system margin is a measure of the amount of generation and net imports available to supply firm load within the BPTF within applicable normal ratings and limits (*i.e.*, normal transfer criteria) while maintaining 10-minute operating reserves. The calculation includes load plus losses, the largest loss-of-source contingency (*i.e.*, total capability requirement) against the NYCA generation, NYCA generation derates, temperature based generation derates, and external area interchanges (*i.e.*, total resources).¹ The NYCA generation (from line-item A) is comprised of the existing generation plus additions of future generation resources that meet the reliability planning process base case inclusion rules, the removal of generation that has completed a generator deactivation notice, removal of generating units subject to the New York State Department of Environmental Conservation (DEC) Peaker Rule that are anticipated to be unavailable during the summer capability period, and removal of generation resources subject to other New York State legislation. For the 2024 Interim ATR, the external area interchange increases by 1,250 MW (line-item D) starting summer

¹ The NYISO presented and discussed several enhancements to transmission security practices at the May 5, 2022 TPAS/ESPWG ([here](#)) and May 23, 2022 ESPWG/TPAS ([here](#)) meetings in order to plan the transmission security of the grid for (1) expected availability of intermittent generation and (2) increased unavailability of thermal generation in the future due to forced outages and permit-driven operation limitations. These enhancements were documented in the NYISO Reliability Planning Process Manual, which was approved by the Operating Committee at the July 23, 2022 meeting ([here](#)). These enhancements were incorporated into the 2022 Reliability Needs Assessment and the Short-Term Reliability Process beginning with the 2022 Quarter 3 Short-Term Assessment of Reliability.

2026 due to the inclusion of the Champlain Hudson Power Express (CHPE) project connecting Hydro Quebec to New York City (see Figure 6). For the year 2029, the statewide system margin is higher in this 2024 Interim ATR than from the 2020 CATR.

Due to economic development and in anticipation of electrification efforts over the next two decades, numerous new large loads are expected to interconnect to the New York system. These large loads are concentrated in upstate New York. Most of these new loads consist of manufacturing facilities and data centers, as well as hydrogen production operations (i.e., electrolysis).

Some large load projects, however, do not always require the entire amount of the load to be served for all hours, or during peak system demand. One key assumption used for this 2024 ATR, consistent with the 2024 RNA [6] and 2024 Q3 STAR [4], is that cryptocurrency mining and hydrogen production large loads are modeled as flexible during system peak demand conditions. This assumption results in up to approximately 1,200 MW of large load reduction during the summer and winter peak periods by 2027.

Figure 1: Comparison of NYCA Statewide System Margins

	Line	Item	Summer Peak - Baseline Expected Summer Weather, Normal Transfer Criteria (MW)									
			2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
2020 Comprehensive ATR	A	NYCA Generation (1)	37,653	38,200	37,473	37,473	36,867	36,867	36,867	36,867	36,867	36,867
	B	NYCA Generation Derates (2)	(4,160)	(5,156)	(5,177)	(5,178)	(5,116)	(5,116)	(5,116)	(5,116)	(5,116)	(5,117)
	C	Temperature Based Generation Derates	0	0	0	0	0	0	0	0	0	0
	D	External Area Interchanges (3)	1,844	1,844	1,844	1,844	1,844	1,844	1,844	1,844	1,844	1,844
	E	Total Resources (A+B+C+D)	34,887	34,887	34,140	34,139	33,595	33,595	33,595	33,595	33,595	33,594
	F	Load Forecast	(32,129)	(32,128)	(31,918)	(31,838)	(31,711)	(31,670)	(31,673)	(31,756)	(31,865)	(31,992)
	G	Largest Loss-of-Source Contingency	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)
	H	Total Capability Requirement (F+G)	(33,439)	(33,438)	(33,228)	(33,148)	(33,021)	(32,980)	(32,983)	(33,066)	(33,175)	(33,302)
	I	Statewide System Margin (E+H)	1,448	1,449	912	991	574	615	612	529	420	292
	2024 Interim ATR			Summer Peak - Baseline Expected Summer Weather, Normal Transfer Criteria (MW)								
			2025	2026	2027	2028	2029	2030	2031	2032	2033	2034
A		NYCA Generation (1a)	38,045	39,069	39,885	39,885	39,885	39,885	39,429	39,429	39,429	39,429
B		NYCA Generation Derates (2a)	(6,476)	(7,419)	(8,165)	(8,187)	(8,198)	(8,210)	(8,173)	(8,184)	(8,195)	(8,195)
C		Temperature Based Generation Derates	0	0	0	0	0	0	0	0	0	0
D		External Area Interchanges (3)	1,844	3,094	3,094	3,094	3,094	3,094	3,094	3,094	3,094	3,094
E		Total Resources (A+B+C+D)	33,413	34,743	34,814	34,791	34,780	34,769	34,351	34,339	34,328	34,328
F		Load Forecast (4)	(31,039)	(30,902)	(30,930)	(30,950)	(31,160)	(31,400)	(31,700)	(32,140)	(32,650)	(33,030)
G		Largest Loss-of-Source Contingency	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)	(1,310)
H		Total Capability Requirement (F+G)	(32,349)	(32,212)	(32,240)	(32,260)	(32,470)	(32,710)	(33,010)	(33,450)	(33,960)	(34,340)
I	Statewide System Margin (E+H)	1,064	2,531	2,574	2,531	2,310	2,059	1,341	889	368	(12)	

Notes:

1. Reflects the 2020 Gold Book existing summer capacity plus projected additions and deactivations.
 - 1a. Reflects the 2024 Gold Book existing summer capacity plus projected additions and deactivations.
2. Reflects the derates for generating resources. For this evaluation land-based wind generation is assumed to have a capability of 5% of the total nameplate, off-shore wind at 10% of the total nameplate, solar generation is based on the ratio of solar PV nameplate capacity (2020 Gold Book Table I-9a) and solar PV peak reductions (2020 Gold Book Table I-9c). Derates for run-of-river hydro are included as well as the Oswego Export limit for all lines in-service. Includes derates for thermal resources based on NERC five-year class average EFORD data published August 2019 (<https://www.nerc.com/pa/RAPA/gads/Pages/Reports.aspx>).
- 2a. Reflects the derates for generating resources. For this evaluation land-based wind generation is assumed to have a capability of 5% of the total nameplate, off-shore wind at 15% of the total nameplate, solar generation is based on the ratio of solar PV nameplate capacity (2024 Gold Book Table I-9a) and solar PV peak reductions (2024 Gold Book Table I-9c). Derates for run-of-river hydro are included as well as the Oswego Export limit for all lines in-service. Includes derates for thermal resources based on NERC five-year class average EFORD data published August 2023 (<https://www.nerc.com/pa/RAPA/gads/Pages/Reports.aspx>).
3. Interchanges are based on ERAG MMWG values.
4. Reflects the 2024 Goldbook coincident summer peak demand forecast with flexible large loads modeled offline.

Generation Facilities

Proposed future generation projects and up-rates to existing generating facilities are listed in Figure 2. Figure 3 and Figure 4 provide a summary of the shutdowns/de-rates in generation.

In 2019, the DEC adopted a regulation to limit nitrogen oxides (NO_x) emissions from simple-cycle combustion turbines (referred to as the “Peaker Rule”).² Combustion turbines known as “peakers” typically operate to maintain bulk power system reliability during the most stressful operating conditions, such as periods of peak electricity demand. Many of these units also maintain transmission security by supplying energy within certain constrained areas of New York City and Long Island – known as load pockets. The Peaker Rule, which phases in compliance obligations between 2023 and 2025, will impact turbines located mainly in the lower Hudson Valley, New York City, and Long Island. The Peaker Rule required all impacted plant owners to file compliance plans by March 2, 2020. The plans indicate approximately 1,600 MW of peaker capability would be unavailable during the summer by 2025 to comply with the emissions requirements.

Figure 5 provides a summary of the peaker units that are unavailable during the summer capability period. These changes were captured in the 2020 CATR.

Additional changes to generation additions/up-rates or shutdowns/de-ratings that occurred following the publication of the NYISO 2024 Gold Book[5] that were not captured in the 2024 Quarter 3 STAR[4] will be captured in future reviews.

Figure 2: Additions/Up-rates in Generation Facilities³

NYISO Interconnection Queue #	Project Name/(Owner)	Summer Peak MW	Zone	Type	2020 Comprehensive ATR	2024 Interim ATR
					Included/IS Date	Included/IS Date
387	Cassadaga Wind	126.5	A	W	Y/2021-12	Y/In-Service
396	Baron Winds (Baron Winds, LLC)	121.8	C	W	Y/2021-12	Y/In-Service
422	Eight Point Wind Energy Center (NextEra Energy Resources, LLC)	101.8	B	W	Y/2021-12	Y/In-Service
505	Ball Hill Wind (Ball Hill Wind Energy, LLC)	100.0	A	W	Y/2022-12	Y/In-Service

² [DEC Peaker Rule](#)

³ The values noted in this figure are from 2024 Q3 STAR Key Study Assumptions (found [here](#))

NYISO Interconnection Queue #	Project Name/(Owner)	Summer Peak MW	Zone	Type	2020 Comprehensive ATR	2024 Interim ATR
					Included/IS Date	Included/IS Date
531	Number 3 Wind Energy (Invenergy Wind Development, LLC)	103.9	E	W	N/A	Y/In-Service
545	Sky High Solar (Sky High Solar LLC)	20.0	C	S	N/A	Y/2023-06
546	Roaring Brook Wind	79.7	E	W	Y/2021-12	Y/In-Service
564	Rock District Solar (Rock District Solar, LLC)	20.0	F	S	N/A	Y/2024-07
565	Tayandenega Solar (Tayandenega Solar, LLC)	20.0	F	S	N/A	Y/2024-06
570	Albany County 1 (Hecate Energy Albany 1, LLC)	20.0	F	S	N/A	Y/In-Service
572	Greene County 1 (Hecate Energy Greene 1, LLC)	20.0	G	S	N/A	Y/2023-01
573	Greene County 2 (Hecate Energy Greene 2, LLC)	10.0	G	S	N/A	Y/2023-03
575	Little Pond Solar (Little Pond Solar, LLC)	20.0	G	S	N/A	Y/2025-01
579	Bluestone Wind (Bluestone Wind, LLC)	111.8	E	W	N/A	Y/In-Service
581	Hills Solar (SunEast Hills Solar LLC)	20.0	E	S	N/A	Y/2024-02
584	Dog Corners Solar (SunEast Dog Corners Solar LLC)	20.0	C	S	N/A	Y/2024-04
586	Watkins Road Solar (SunEast Watkins Road Solar LLC)	20.0	E	S	N/A	Y/2024-02
590	Scipio Solar (SunEast Scipio Solar LLC)	18.0	C	S	N/A	Y/2024-12
591	Highview Solar (SunEast Highview Solar LLC)	20.0	C	S	N/A	Y/2024-12
592	Niagara Solar (SunEast Niagara Solar LLC)	20.0	B	S	N/A	Y/2025-06
598	Albany County 2 (Hecate Energy Albany 2, LLC)	20.0	F	S	N/A	Y/In-Service
612	South Fork Wind Farm (South Fork Wind, LLC)	96.0	K	OSW	N/A	Y/2024-02
618	High River Solar (High River Energy Center, LLC)	90.0	F	S	N/A	Y/2024-06
619	East Point Solar (East Point Energy Center, LLC)	50.0	F	S	N/A	Y/2024-02

NYISO Interconnection Queue #	Project Name/(Owner)	Summer Peak MW	Zone	Type	2020 Comprehensive ATR	2024 Interim ATR
					Included/IS Date	Included/IS Date
637	Flint Mine Solar (Flint Mine Solar LLC)	100.0	G	S	N/A	Y/2024-10
638	Pattersonville (Pattersonville Solar Facility, LLC)	20.0	F	S	N/A	Y/In-Service
670	Skyline Solar (SunEast Skyline Solar LLC)	20.0	E	S	N/A	Y/2024-08
678	Calverton Solar Energy Center (LI Solar Generation, LLC)	22.9	K	S	Y/2021-12	Y/In-Service
682	Grissom Solar (Grissom Solar, LLC)	20.0	F	S	N/A	Y/In-Service
695	South Fork Wind Farm II (South Fork Wind, LLC)	40.0	K	OSW	N/A	Y/2024-02
717	Morris Ridge Solar Energy Center (Morris Ridge Solar Energy Center, LLC)	177.0	C	S	N/A	Y/2024-09
730	Darby Solar (Galt Power Inc.)	20.0	F	S	N/A	Y/In-Service
731	Branscomb Solar (Galt Power Inc.)	20.0	F	S	N/A	Y/In-Service
734	Ticonderoga Solar (ELP Ticonderoga Solar, LLC)	20.0	F	S	N/A	Y/2024-08
735	Stillwater Solar (Galt Power Inc.)	20.0	F	S	N/A	Y/In-Service
737	Empire Wind 1 (Empire Offshore Wind LLC)	816.0	J	OSW	N/A	Y/2026-12
744	Magruder Solar (Mitchell Energy Facility, LLC)	20.0	G	ES	N/A	Y/2024-01
748	Regan Solar (Galt Power Inc.)	20.0	F	S	N/A	Y/In-Service
758	Independence GS1 to GS4 {Dynergy Marketing and Trade, LLC}	+9	C	Gas	N/A	Y/In-Service
759	KCE NY6 (Galt Power Inc.)	20.0	A	ES	N/A	Y/In-Service
768	Janis Solar (Galt Power Inc.)	20.0	C	S	N/A	Y/In-Service
769	North County ESR (New York Power Authority)	20.0	D	ES	N/A	Y/In-Service
775	Puckett Solar (Galt Power Inc.)	20.0	E	S	N/A	Y/In-Service

NYISO Interconnection Queue #	Project Name/(Owner)	Summer Peak MW	Zone	Type	2020 Comprehensive ATR	2024 Interim ATR
					Included/IS Date	Included/IS Date
804	KCE NY 10 (KCE NY 10, LLC)	20.0	A	ES	N/A	Y/2024-11
807	Hilltop Solar (SunEast Hilltop Solar LLC)	20.0	E	S	N/A	Y/2024-07
828	Valley Solar (SunEast Valley Solar LLC)	20.0	C	S	N/A	Y/2024-11
832	CS Hawthorn Solar (Granada Solar, LLC)	20.0	F	S	N/A	Y/2024-08
833	Dolan Solar (Dolan Solar, LLC)	20.0	F	S	N/A	Y/2024-04
848	Fairway Solar (SunEast Fairway Solar LLC)	20.0	E	S	N/A	Y/2025-03
855	NY 13 Solar (Bald Mountain Solar LLC)	20.0	F	S	N/A	Y/2025-06
865	Flat Hill Solar (SunEast Flat Hill Solar LLC)	20.0	E	S	N/A	Y/2025-12
885	Grassy Knoll Solar (SunEast Grassy Knoll Solar LLC)	20.0	E	S	N/A	Y/2025-12
1003	Clear View Solar (Clear View LLC)	20.0	C	S	N/A	Y/2024-06
766/987	Sunrise Wind I + II (Sunrise Wind LLC)	880+44	K	OSW	N/A	Y/2026-03

Figure 3: Completed Generator Deactivations

Owner/ Operator	Plant Name	Zone	Nameplate (MW)	CRIS (MW)		Capability (MW)		Status	Deactivation Date (2)	STAR Evaluation (3)
				Summer	Winter	Summer	Winter			
International Paper Company	Ticonderoga (1)	F	9.0	7.6	7.5	9.5	9.8	I	5/1/2017	-
	Ravenswood 2-4	J	42.9	39.8	50.6	30.7	41.6	I	4/1/2018	-
Helix Ravenswood, LLC	Ravenswood 3-1	J	42.9	40.5	51.5	31.9	40.8	I	4/1/2018	-
	Ravenswood 3-2	J	42.9	38.1	48.5	29.4	40.3	I	4/1/2018	-
	Ravenswood 3-4	J	42.9	35.8	45.5	31.2	40.8	I	4/1/2018	-
Rockville Centre, Village of	Charles P Keller 07	K	2.0	2.0	2.0	1.9	1.9	R	3/1/2019	-
Exelon Generation Company LLC	Monroe Livingston	B	2.4	2.4	2.4	2.4	2.4	R	9/1/2019	-
Innovative Energy Systems, Inc.	Steuben County LF	C	3.2	3.2	3.2	3.2	3.2	R	9/1/2019	-
Consolidated Edison Co. of NY, Inc	Hudson Ave 4	J	16.3	13.9	18.2	14.0	16.3	R	9/10/2019	-
New York State Elec. & Gas Corp.	Auburn - State St	C	7.4	5.8	6.2	4.1	7.3	R	10/1/2019	-
Somerset Operating Company, LLC	Somerset	A	655.1	686.5	686.5	676.4	684.4	R	3/12/2020	-
Entergy Nuclear Power Marketing, LLC	Indian Point 2	H	1,299.0	1,026.5	1,026.5	1,011.5	1,029.4	R	4/30/2020	-
Cayuga Operating Company, LLC	Cayuga 1	C	155.3	154.1	154.1	151.0	152.0	R	6/4/2020	-
Entergy Nuclear Power Marketing, LLC	Indian Point 3	H	1,012.0	1,040.4	1,040.4	1,036.3	1,038.3	R	4/30/2021	-
Freeport Electric	Freeport 1-4	K	6.0	4.4	4.4	4.5	5.0	R	5/1/2022	-
Exelon Generation Company LLC	Madison County LF	E	1.6	1.6	1.6	1.6	1.6	I	4/1/2022	2022 Q2
Nassau Energy, LLC	Trigen CC	K	55.0	51.6	60.1	38.5	51.0	R	7/15/2022	2022 Q2
Consolidated Edison Co. of NY, Inc.	Hudson Ave 3	J	16.3	16.0	20.9	12.3	15.6	R	11/1/2022	2022 Q2
Consolidated Edison Co. of NY, Inc.	Hudson Ave 5	J	16.3	15.1	19.7	15.3	18.6	R	11/1/2022	2022 Q2
Astoria Generating Company, L.P.	Gowanus 1-1 through 1-8	J	160.0	138.7	181.1	133.1	182.2	R	11/1/2022	2022 Q2
Astoria Generating Company, L.P.	Gowanus 4-1 through 4-8	J	160.0	140.1	182.9	138.8	183.4	R	11/1/2022	2022 Q2
NRG Power Marketing LLC	Astoria GT 2-1	J	46.5	41.2	50.7	34.9	46.5	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 2-2	J	46.5	42.4	52.2	34.3	45.6	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 2-3	J	46.5	41.2	50.7	36.3	46.7	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 2-4	J	46.5	41.0	50.5	32.5	45.4	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 3-1	J	46.5	41.2	50.7	34.6	45.0	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 3-2	J	46.5	43.5	53.5	35.7	45.3	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 3-3	J	46.5	43.0	52.9	33.9	44.6	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 3-4	J	46.5	43.0	52.9	34.9	45.5	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 4-1	J	46.5	42.6	52.4	33.6	43.8	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 4-2	J	46.5	41.4	51.0	34.3	44.3	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 4-3	J	46.5	41.1	50.6	35.4	46.4	R	5/1/2023	2022 Q2
NRG Power Marketing LLC	Astoria GT 4-4	J	46.5	42.8	52.7	35.2	44.1	R	5/1/2023	2022 Q2
Helix Ravenswood, LLC	Ravenswood 10	J	25.0	21.2	27.0	16.1	20.3	R	5/1/2023	2022 Q3
Helix Ravenswood, LLC	Ravenswood 01	J	18.6	8.8	11.5	7.7	11.1	R	10/14/2023	2023 Q3
Helix Ravenswood, LLC	Ravenswood 11	J	25.0	20.2	25.7	16.1	22.4	R	10/14/2023	2023 Q3
Western New York Wind Corp	Western NY Wind Power	B	6.6	0.0	0.0	0.0	0.0	R	10/15/2023	2023 Q3
Central Hudson Gas & Electric Corp.	South Cairo GT	G	21.6	19.8	25.9	18.7	23.1	R	3/1/2024	2023 Q4
Cubit Power One Inc.	Arthur Kill Cogen	J	11.1	11.1	11.1	11.1	10.2	I	3/2/2024	2024 Q2
Total			4,414.4	4,049.6	4,335.8	3,862.9	4,196.2			

Notes

(1) Part of SCR program

(2) This table only includes units that have entered into IIFO or have completed the generator deactivation process.

(3) "-" denotes that the generator deactivation was assessed prior to the creation of the Short-Term Reliability Process

Figure 4: Additional Generator Deactivations

Owner/ Operator	Plant Name (1)	Zone	Nameplate (MW)	CRIS (MW)		Capability (MW)		Status	Deactivation date (2)	STAR Evaluation
				Summer	Winter	Summer	Winter			
Consolidated Edison Co. of NY, Inc.	74 St. GT 1 & 2	J	37	39.1	49.2	0.0	0.0	R	5/1/2023	2022 Q2
Central Hudson Gas & Electric Corp.	Coxsackie GT	G	21.6	21.6	26.0	19.7	22.7	R	12/31/2025 (3)	2024 Q1
Eastern Generation, LLC	Astoria GT 01	J	16	15.7	20.5	13.8	17.6	R	5/1/2025 (4)	2024 Q3
	Total		74.6	76.4	95.7	33.5	40.3			

Notes:

(1) This table includes units that have proposed to Retire or enter Mothball Outage and have a completed generator deactivation notice but have yet to complete the generator deactivation process.

(2) Date in which the generator proposed Retire (R) or enter Mothball Outage (MO)

(3) In March 2024, Central Hudson submitted an update to its DEC peaker compliance plan to extend the retirement date of Cocksackie GT until December 31, 2025 until a permanent transmission and distribution solution to local non-BPTF transmission security issues is completed.

(4) The initial proposed retirement was on or after May 1, 2023, and was studied in the 2022 Q4 STAR. However, the unit modified its Peaker Rule compliance plan to be available for operation through May 1, 2025. The unit has submitted a new generator deactivation notice with a new proposed retirement date by May 1, 2025.

Figure 5: Proposed Status Change to Comply with DEC Peaker Rule

Owner/Operator	Station	Zone	Nameplate (MW)	CRIS (MW) (1)		Capability (MW) (1)		Status Change Date (2)	STAR Evaluation or Other Assessment
				Summer	Winter	Summer	Winter		
National Grid	West Babylon 4 (6) (7)	K	52.4	49.0	64.0	41.2	63.4	12/12/2020 (R)	Other
National Grid	Glenwood GT 01 (4) (7)	K	16.0	14.6	19.1	13.0	15.3	2/28/2021 (R)	2020 Q3
Helix Ravenswood, LLC	Ravenswood 11 (12)	J	25	20.2	25.7	16.1	22.4	12/1/2021 (IIFO)	2022 Q1/2023 Q3
Helix Ravenswood, LLC	Ravenswood 01 (12)	J	18.6	8.8	11.5	7.7	11.1	1/1/2022 (IIFO)	2022 Q1/2023 Q3
Astoria Generating Company, L.P.	Gowanus 1-1 through 1-8	J	160.0	138.7	181.1	133.1	182.2	11/1/2022 (R)	2022 Q2
Astoria Generating Company, L.P.	Gowanus 4-1 through 4-8	J	160.0	140.1	182.9	138.8	183.4	11/1/2022 (R)	2022 Q2
Consolidated Edison Co. of NY, Inc.	Hudson Ave 3	J	16.3	16.0	20.9	12.3	15.6	11/1/2022 (R)	2022 Q2
Consolidated Edison Co. of NY, Inc.	Hudson Ave 5	J	16.3	15.1	19.7	15.3	18.6	11/1/2022 (R)	2022 Q2
Central Hudson Gas & Elec. Corp.	Coxsackie GT (8)	G	21.6	21.6	26.0	19.7	22.7	12/31/2025 (14)	
Central Hudson Gas & Elec. Corp.	South Cairo (8)	G	21.6	19.8	25.9	14.6	20.7	5/1/2023	
Consolidated Edison Co. of NY, Inc.	74 St. GT 1 & 2 (10)	J	37.0	39.1	49.2	37.8	43.6	5/1/2023	2022 Q2
NRG Power Marketing, LLC	Astoria GT 2-1, 2-2, 2-3, 2-4	J	186.0	165.8	204.1	138.0	184.2	5/1/2023 (R)	2022 Q2
NRG Power Marketing, LLC	Astoria GT 3-1, 3-2, 3-3, 3-4	J	186.0	170.7	210.0	139.1	180.4	5/1/2023 (R)	2022 Q2
NRG Power Marketing, LLC	Astoria GT 4-1, 4-2, 4-3, 4-4	J	186.0	167.9	206.7	138.5	178.6	5/1/2023 (R)	2022 Q2
Helix Ravenswood, LLC	Ravenswood 10	J	25.0	21.2	27.0	16.1	20.3	5/1/2023 (R)	2022 Q3
National Grid	Glenwood GT 03 (3) (4)	K	55.0	54.7	71.5	52.0	65.9	5/1/2023	
National Grid	Northport GT (9)	K	16.0	13.8	18.0	8.3	12.7	5/1/2023	
National Grid	Port Jefferson GT 01 (9)	K	16.0	14.1	18.4	13.0	15.3	5/1/2023	
National Grid	Shoreham 1 (3) (4)	K	52.9	48.9	63.9	42.0	63.0	5/1/2023	
National Grid	Shoreham 2 (3) (4)	K	18.6	18.5	23.5	17.4	21.5	5/1/2023	
Astoria Generating Company, L.P.	Astoria GT 01 (11)	J	16.0	15.7	20.5	13.8	17.6	5/1/2025	2022 Q4
Consolidated Edison Co. of NY, Inc.	59 St. GT 1	J	17.1	15.4	20.1	13.9	17.4	5/1/2025	
NRG Power Marketing, LLC	Arthur Kill GT 1	J	20.0	16.5	21.6	12.3	15.8	5/1/2025	
Astoria Generating Company, L.P.	Gowanus 2-1 through 2-8 (5) (13)	J	160.0	152.8	199.6	140.9	179.1	5/1/2025	
Astoria Generating Company, L.P.	Gowanus 3-1 through 3-8 (5) (13)	J	160.0	146.8	191.7	138.5	178.5	5/1/2025	
Astoria Generating Company, L.P.	Narrows 1-1 through 2-8 (5) (13)	J	352.0	309.1	403.6	284.3	365.7	5/1/2025	
			Prior to Summer 2022	112.0	92.6	120.3	78.0	112.2	
			Prior to Summer 2023	1,174.3	1,066.0	1,348.8	936.0	1,228.7	
			Prior to Summer 2025	725.1	656.3	857.1	603.7	774.1	
			Total	2,011.4	1,814.9	2,326.2	1,617.7	2,115.0	

Notes

- MW values are from the 2023 Load and Capacity Data Report except where the 2024 Load and Capacity Data Report lists 0 MW for CRIS and/or Capability. For those instances, previous Load and Capacity Data
- Dates identified by generators in their DEC Peaker Rule compliance plan submittals for transitioning the facility to Retired, Blackstart, or will be out-of-service in the summer ozone season or the date in which the generator entered (or proposed to enter) Retired (R) or Mothball Outage (MO) or the date on which the generator entered ICAP Ineligible Forced Outage (IIFO).
- Generator changed DEC peaker rule compliance plan as compared to the 2020 RNA and all STARS prior to 2021 Q3.
- Long Island Power Authority (LIPA) has submitted notifications to the DEC per part 227-3 of the peaker rule stating that these units are needed for reliability allowing these units to operate until at least May 1, 2025. Due to the future nature of these units being operated only as designated by the operator as an emergency operating procedure the NYISO will continue to plan for these units to be unavailable starting May 2023.
- These units have indicated they will be out-of-service during the ozone season (May through September) in their compliance plans in response to the DEC peaker rule.
- This unit was evaluated in a stand-alone generator deactivation assessment prior to the creation of the Short-Term Reliability Process.
- Unit operating as a load modifier.
- Central Hudson submitted notification to the DEC per part 227-3 of the peaker rule stating these units are needed for reliability. The most recent LTP update from Central Hudson notes the planned retirement of South Cairo and Coxsackie generators in December 2024. <https://www.nyiso.com/documents/20142/26630522/Local-Transmission-Plan-2021.pdf/>
- On May 24, 2023 National Grid notified the New York State Public Service Commission that these units have been classified as black-start only units and are no longer subject to NYISO dispatch.
- Unit no longer subject to NYISO dispatch and is used for local reliability only.
- The initial proposed retirement was on or after May 1, 2023, and was studied in the 2022 Q4 STAR. However, the unit modified its Peaker Rule compliance plan to be available for operation through May 1, 2025. The unit has submitted a new generator deactivation notice with a new proposed retirement date by May 1, 2025.
- The retirement for this unit was evaluated in the 2023 Q3 STAR.
- To address the Need identified in the 2023 Q2 STAR, the NYISO designated the generators on the Gowanus 2 & 3 and Narrows 1 & 2 barges to temporarily remain in operation after the DEC Peaker Rule compliance date (May 1, 2025) until permanent solutions to the Need are in place, for an initial period of up to two years (May 1, 2027).
- In March 2024, Central Hudson submitted an update to its DEC peaker compliance plan to extend the retirement date of Coxsackie GT until December 31, 2025 until a permanent Transmission and Distribution solution to local non-BPTF transmission security issues is completed.

Transmission Facilities

The transmission plans shown in Figure 6 reflect changes to the BPTF since the NYISO 2020 CATR[3]. Additional changes to transmission that occurred following the publication of the NYISO 2024 Gold Book[5] that were not captured in the 2024 Quarter 3 STAR[4] will be captured in future reviews.

Figure 6: Changes in the Bulk Power Transmission Facilities

NYISO Interconnection Queue #	Owner	Bulk Transmission	2020 Comprehensive ATR	2024 Interim ATR
			Included/IS Date	Included/IS Date (1)
N/A	Con Edison	B3402 and C3403 Cables	Out-of-Service	Out-of-Service
0430	HQ Energy Services US	Cedar Rapids Transmission Upgrade	N/A	Y/In-Service
N/A	National Grid	Clay – Dewitt 115 kV reconductoring	Y/2021S	Y/In-Service
N/A	National Grid	Clay – Teall 115 kV reconductoring	Y/2021S	Y/In-Service
0545A	NextEra Energy Transmission NY	Empire State Line (NextEra)	Y/2022S	Y/In-Service
N/A	NYSEG	Watercure 345/230 kV xfmr	Y/2020W	Y/In-Service
N/A	LIPA	Riverhead-Wildwood 69 kV to 138 kV conversion	N/A	Y/In-Service
N/A	RG&E	Rochester Transmission Reinforcement 345 kV Substation (Q#339)	Y/2020W	Y/In-Service
N/A	Central Hudson	Leeds-Hurley Series Compensation SDU	Y/2021S	Y/2024S
N/A	NYSEG	Wood St. 345/115 xfmr	Y/2023W	Y/2024W
N/A	Con Edison	Rainey-Corona 345/138 kV xfmr/PAR/feeder	N/A	Y/In-Service
566	NYPA	Moses - Adirondack 1 & 2 Replacement	N/A	Y/In-Service
0556	LS Power, National Grid, NYPA	Segment A Double Circuit (2)	Y/2023W	Y/Partially In-Service through 2029S
N/A	National Grid	Clay - Woodard 3% series reactor	N/A	Y/2024S
0543	National Grid, NY Transco, O&R, ConEdison	AC Transmission Project Segment B (2)	Y/2023W	Y/Partially In-Service through 2025S
580	NYPA	STAMP Substation	N/A	Y/2025S
N/A	NYSEG	Fraser 345/115 xfmr	Y/2022W	Y/2027W
N/A	O&R	Lovett 345 kV (New Station)	Y/2021S	Y/2024S
N/A	Con Edison	Gowanus-Greenwood 345/138 kV xfmr/PAR/feeder	N/A	Y/2025S

NYISO Interconnection Queue #	Owner	Bulk Transmission	2020 Comprehensive ATR	2024 Interim ATR
			Included/IS Date	Included/IS Date (1)
N/A	Con Edison	Goethals-Fox Hills 345/138 kV xfmr/PAR/feeder	N/A	Y/2025S
0631/0887	CHPE, LLC	NS Power Express	N/A	Y/2026S
1125	NYP&A, National Grid	Smart Path Connect Project	N/A	Y/2025W
N/A	NYSEG	Gardenville 230/115 kV xfmr	Y/2023W	N/2030W
N/A	NYSEG	Oakdale 345/115/34.5 xfmrs	N/2027S	Y/2028W
N/A	NYSEG	South Perry 230/115 kV xfmr	Y/2022W	Y/2028W
N/A	NYSEG	Coopers Corners 345/115 xfmr	N/2025W	N/Project on hold
1289	NYP&A	Propel NY Energy – Alternate Solution 5 (2)	N/A	Y/2029S through 2030S
N/A	Con Edison	Brooklyn Clean Energy Hub (BCEH)	N/A	Y/2028S
N/A	NYSEG	Meyer 230/115 xfmr	N/A	Y/2028W
N/A	Con Edison	Eastern Queens Clean Energy Hub	N/A	Y/2028S
N/A	NYSEG	Watercure 345/115 xfmr	N/A	Y/2028W

Notes:

1. Dates from 2024 Gold Book Section VII
2. This project includes several changes to transmission topology that have various in-service dates identified in the 2024 Gold Book Section VII.

Impact Assessments

Steady State, Stability, and Fault Current Assessments

The 2020 CATR[3] assessed and evaluated thermal, voltage, fault current, and stability performance of the New York State BPTF for design and extreme contingencies as required by NPCC Directory #1[1] and NYSRC Reliability Rules[2].

Consistent with the 2020 RNA [7], the NYISO identified in the 2020 CATR[3] dynamics stability issues within the Con Edison service territory. As reflected in Figure 6, Con Edison presented its Local Transmission Owner Plan (LTP) updates comprised of the following facilities and in-service dates (ISD):

- A new (2nd) 345/138 kV PAR controlled 138 kV Rainey – Corona feeder (currently in-service)

- A new (3rd) 345/138 kV PAR controlled 138 kV Gowanus – Greenwood feeder (ISD summer 2025)
- A new 345/138 kV PAR controlled 138 kV Goethals – Fox Hills feeder (ISD summer 2025)

Additionally, the NYISO identified in the 2020 Q3 STAR [8] a short-term reliability process need that would be addressed by changes in the planned operating status of existing series reactors, starting summer 2023 through 2030, as follows:

- In-service: series reactors on the following 345 kV cables: 71, 72, M51, M52
- Bypass: series reactors on the following 345 kV cables: 41, 42, Y49

Following these series reactor operating status updates, the transient voltage response issues continued to be observed on Con Edison’s non-BPTF system from 2025 through 2030, while the BPTF violations were observed starting in 2029.⁴ Con Edison provided an LTP update to address the non-BPTF dynamic findings, which also addressed the BPTF dynamics findings at the July 23, 2021 ESPWG/TPAS meeting.⁵

The NYISO studied the system changes noted in Figure 1, Figure 2, Figure 3, Figure 4, and Figure 5 in either the 2020 CATR[3], the 2022 Reliability Needs Assessment [9], the 2024 Reliability Needs Assessment [6], or pursuant to the NYISO Short-Term Reliability Process (STRP) and found no adverse impact on the reliability of the BPTF in years 4 through 6.⁶ In consideration of the Corrective Action Plans identified in the 2020 CATR[3] and the subsequent corrective action plans provided by Con Edison, as well as the analysis performed in the 2022 RNA [9], 2024 RNA [6], and subsequent STARs, the NYISO confirmed that the planned system continues to conform to the applicable criteria. As such, no additional Corrective Action Plans to address BPTF issues were required.

The 2023 Quarter 2 STAR [10] found a reliability need beginning in summer 2025 within New York City primarily driven by a combination of forecasted increases in peak demand and the assumed unavailability of certain generation in New York City affected by the DEC Peaker Rule. As of May 1, 2023, 1,027 MW of affected peakers have deactivated or limited their operation. An additional approximately 600 MW of peakers are expected to become unavailable beginning May 1, 2025, all of which are in New York City. With the additional peakers unavailable, the bulk power transmission system will not be able to securely and reliably serve the forecasted demand in New York City (Zone J). Specifically, the 2023 Q2

⁴ See 2020-2021 Reliability Planning Process: Post-RNA Base Case Updates presentation at the February 23, 2021 ESPWG/TPAS meeting ([here](#))

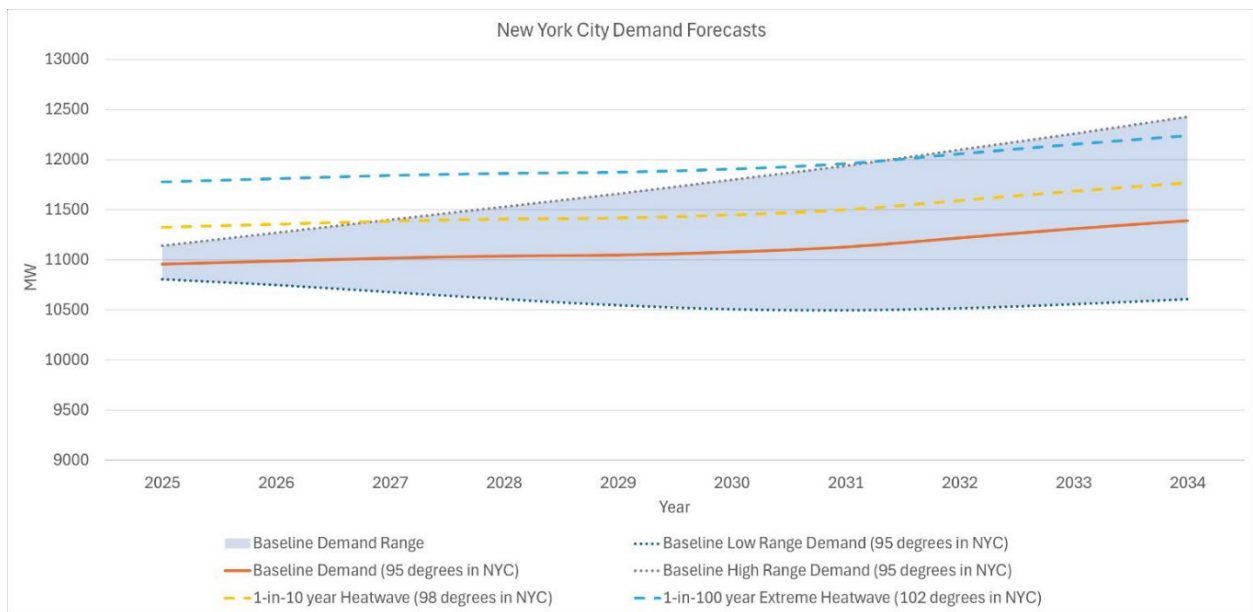
⁵ CECONY’s Updated Local Transmission Plan (LTP) from the July 23, 2021, meeting can be found [here](#)

⁶ See Quarterly Short-Term Assessments of Reliability (STAR) found [here](#).

STAR identified that the New York City zone is deficient by as much as 446 MW in 2025 for a duration of nine hours on the peak day during expected weather conditions when accounting for forecasted economic growth and policy-driven increases in demand. After accounting for the updated assumptions in the 2024 Quarter 3 STAR and 2024 RNA, which are consistent with this 2024 ATR, the New York City zone is deficient by as much as 461 MW for a duration of seven hours.

The 2025 New York City reliability need is based on a deficient transmission security margin that accounts for expected generator availability, transmission limitations, and updated demand forecasts using data published in the 2024 Gold Book. The transmission security margin represents the balance between demand for electricity and the power supply available from generation and transmission to serve that demand. This assessment recognizes that there is uncertainty in the demand forecast due to uncertainties in key assumptions including population and economic growth, the proliferation of energy efficiency, the installation of behind-the-meter renewable energy resources, and electric vehicle adoption and charging patterns (Figure 7). These risks are accounted for in the transmission security margin calculations by incorporating the lower and higher bounds as a range of forecasted conditions during expected weather, specified in the 2024 Gold Books. The lower and higher demand forecasts reflect achievement of policy targets through alternative pathways and assume the same weather factors as the baseline demand forecast.

Figure 7: New York City Demand Forecasts

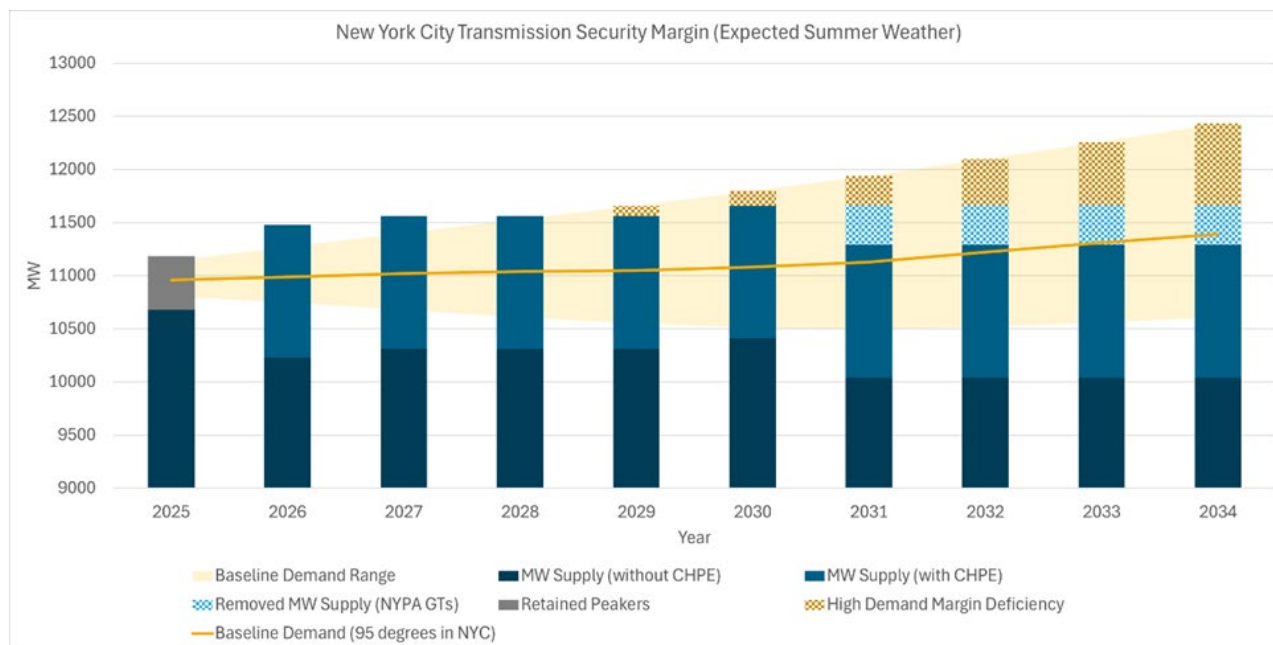


Under the baseline forecast for coincident summer peak demand, the New York City transmission security margin would be deficient by 281MW in 2025 for a duration of five hours. However, accounting for uncertainties in key demand forecast assumptions, the higher bound of expected demand under baseline weather conditions (95 degrees Fahrenheit) in 2025 results in a deficiency of 461 MW over seven hours. The deficiency would be significantly greater if New York City experiences a heatwave (98 degrees Fahrenheit) or an extreme heatwave (102 degrees Fahrenheit).

Overall, the New York City transmission security margin as shown in Figure 8 is expected to improve in 2026 if the CHPE HVDC cable connection from Hydro Quebec to New York City enters service on schedule in spring 2026. However, the margin gradually erodes through time thereafter as expected demand for electricity grows. Additionally, NYPA is required to publish a plan to phase out the production of electricity from its eleven simple cycle natural gas combustion turbines at seven plant sites in New York City and Suffolk County by December 31, 2030, with certain exceptions. A decrease in the margin is observed in 2031 which is due to the modeled removal of the New York Power Authority's small natural gas power plants. Beyond 2025, the forecasted reliability margins within New York City may not be sufficient if (i) the CHPE project experiences a significant delay, (ii) additional power plants become unavailable, or (iii) demand significantly exceeds current forecasts.

On November 20, 2023, following a solicitation for solutions, the NYISO issued a Short-Term Reliability Process Report [11] identifying the temporary and permanent solutions to the identified 2025 New York City need. The NYISO determined that temporarily retaining the peaker generators on the Gowanus 2 & 3 and Narrows 1 & 2 barges is necessary to address the need, and that the permanent solution is the Champlain Hudson Power Express ("CHPE") project, currently scheduled to enter service in spring 2026. With the continued operation of these peakers until the earlier of the date a permanent solution is in place (*i.e.*, CHPE) or May 2027, the Need for the currently forecasted demand is addressed if CHPE is not delayed beyond 2026. Without the retention of these generators, the New York City area would not meet the mandatory reliability criteria during expected summer weather peak demand periods.

Figure 8: New York City Transmission Security Margin



Taking into account the system changes that have occurred since the completion of the 2020 CATR, which have been included in subsequent reliability studies such as the 2022 RNA, 2024 RNA, and the quarterly STARS, there are no outstanding reliability needs to address in this ATR with no criteria violations observed in years 4-6 of the planning horizon.

Special Protection Systems/Remedial Action Schemes

Since the 2020 CATR[3], there have been no changes to the classification of remedial action schemes (RAS) within the NYCA for new RAS proposals. However, as reviewed in the 2023 Interim ATR there has been a retirement of an existing RAS,⁷ as well as a functional modification of another existing RAS,⁸ both of which have been reviewed through the NPCC process outlined in Directory #7 [12]. Details of the RAS retirement and functional modification are provided in Appendix D.

Review of Exclusions from NPCC Basic Criteria

NPCC Directory #1[1] contains a provision that allows a member to request an exclusion from criteria contingencies that are simultaneous permanent phase to ground faults on different phases of each of two adjacent transmission circuits on a multiple circuit tower, with normal fault clearing. Given that the NYCA

⁷ The retirement of this RAS was reviewed at the March 8, 2021 NPCC TFCP

⁸ The modification of this RAS was reviewed and approved by NPCC TFSS at the September 20, 2023 NPCC TFSS meeting

does not have any such exclusion at this time, none were reviewed. Furthermore, no requests for exclusions are anticipated in the near future.

System Restoration Assessment

NYSRC Reliability Rules B.2 R1.3[2] require the NYISO to evaluate the impact of system expansion or configuration facility plans on the NYCA System Restoration Plan. The list below outlines planned system expansion facilities which may have an impact on the NYCA System Restoration Plan:

- The NYSEG South Perry 230/115 kV transformer is an addition to the South Perry facility.
- The NYSEG Gardenville 230/115 kV transformer is an addition to the Gardenville facility. Additionally, the Gardenville 230/115 kV substation has reconfiguration plans and existing Gardenville 230/115 kV transformers TB#3 and TB#4 will be replaced.
- The NYSEG Oakdale 345/115/34.5 kV transformer is an addition to the exiting Oakdale facility. The Oakdale 345 kV substation has reconfiguration plans.
- The NYSEG Fraser 345/115 kV transformer is an addition to the existing Fraser facility. Additionally, the Fraser 345 kV substation has reconfiguration plans.
- The New York Power Authority (NYPA) Moses – Adirondack 230 kV project is a replacement of approximately 78 miles of the Moses to Adirondack 230 kV circuits 1 and 2.
- The NYPA Smart Path Connect Project (Q#1125) primarily adds of a new 345 kV substation (Haverstock), which loops in three existing 230 kV circuits from the Moses 230 kV substation (MA1, MA2, and MW2) via 230/345 kV transformers; rebuilds the existing Moses-Willis 230 kV lines (MW1 and MW2) to 345 kV; moves the connection from Moses 230 kV to Haverstock 345 kV; and connects to the new Willis 230 kV substation via 345/230 kV transformers. The new Willis 230 kV substation will connect to existing Willis 230 kV station with two very short 230 kV lines; rebuilds the existing Willis-Patnode (WPN-1) and Willis-Ryan (WRY-2)) to each accommodate two 230 kV circuits (total four 230 kV circuits in the Right-of-way WPN-1, WPN-2, WRY-1, WRY-2); replace the 230 kV Chases Lake substation with the Austin Road 345 kV substation; rebuild the exiting Adirondack-Porter and Adirondack-Chases Lake-Porter 230 kV lines to be 345 kV lines that connect to the existing Marcy and Edic 345 kV substations; and install series reactors on the Moses-Massena 230 kV lines.
- The NYPA STAMP project is a new 345 kV substation for load interconnection looping in the Dysinger-Henrietta 345 kV transmission lines.
- The Brooklyn Clean Energy Hub (BCEH) project is a new 345 kV load serving substation that will intercept the existing Farragut-Rainey 345 kV feeders including the Farragut-Rainey 62 transmission line.

The potential impacts of the system expansion plans listed above have been communicated to NYISO Operations Engineering for consideration in the annual review and update of the NYCA System Restoration Plan.

Consideration of NYSRC Local Rules G.1 through G.3 (B.2 R1.2)

NYSRC has adopted Local Reliability Rules that apply to the New York City and Long Island zones to protect the reliable delivery of electricity for specific electric system and load characteristics relative to these zones. The NYISO requests information from the Transmission Owners on changes in local system conditions that would impact the New York State transmission system at the beginning of every year. The base conditions are described earlier in this report which illustrate the application of the following local rules to the system models used for this year's assessments:

- *G.1(R1)*
 - The BPTF in Con Edison's service territory that are required to be planned and operated for the occurrence of a second contingency were evaluated in the 2020 CATR[3]. Additionally, this criterion is also considered in other reliability studies such as the STARS and RNA.
- *G.1(R2) Operating Reserves/Unit Commitment, G.1(R3) Locational Reserves (New York City)*
 - Local Operating Reserve rules are considered in the development of the base case used for all reliability assessments.
- *G.1(R4) Thunderstorm Watch (New York City)*
 - Proposed facilities[5] included in this assessment may impact the Thunderstorm Watch contingency list due to substation reconfiguration and facility additions. The contingencies impacted by system facility changes will be evaluated before the proposed facilities are in service.
- *G.2 Loss of Generator Gas Supply (New York City), G.3 Loss of Generator Gas Supply (Long Island)*
 - Specific loss of generator gas supply studies are performed by Con Edison and PSEG-Long Island and are reviewed by the NYISO. The planned system is expected to be compatible with local rules regarding loss of generator gas supply.

Conclusion

The annual assessment performed in this Interim ATR of the changes in forecasted NYCA system conditions and planned facilities indicate that the New York State BPTF, as planned through the year 2029, conform to the reliability criteria listed in NPCC Directory #1[1] and the NYSRC Reliability Rules[2].

References

- [1] Northeast Power Coordinating Council, "Regional Reliability Reference Directory # 1 Design and Operation of the Bulk Power System," 2 July 2024. [Online].
- [2] New York State Reliability Council, "Reliability Rules & Compliance Manual," 14 June 2024. [Online].
- [3] New York Independent System Operator, "2020 Comprehensive Area Transmission Review of the New York State Bulk Power Transmission System (Study Year 2025)," June 2021. [Online].
- [4] New York Independent System Operator, "Short-Term Assessment of Reliability: 2024 Quarter 3," 11 October 2024. [Online].
- [5] New York Independent System Operator, "2024 Load and Capacity Data Report," April 2024. [Online].
- [6] New York Independent System Operator, "2024 Reliability Needs Assessment," November 2024. [Online].
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- [11] New York Independent System Operator, "Short-Term Reliability Process Report: 2025 Near-Term Reliability Need," 20 November 2023. [Online].
- [12] Northeast Power Coordinating Council, "Regional Reliability Reference Directory #7: Remedial Action Schemes," 04 October 2023. [Online].