NYCA IRM Requirement Study 2026-2027 Final Base Case (FBC) Model Assumptions Matrix

Draft V1.2

NYSRC

Installed Capacity Subcommittee Meeting #310

November 11, 2025

Updated to correct the generator deactivations aggregate MW value (see Item 8 and Attachment B2)

Load Forecast

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
1a	Peak Load Forecast (Preliminary Base Case – Parametric & Sensitivities)	2024 Gold Book* NYCA: 31,832.2 MW NYC: 11,227.5 MY LI: 5077.9 MW G-J: 15,298.5 MW (Attachment A1-a)	2025 Gold Book* NYCA: 32,163.0 MW NYC: 11,048.2 MW LI: 5,111.2 MW G-J: 15,298.2 MW	Most recent Gold Book Forecast is used for Preliminary Base Case (PBC) parametric study and sensitivity cases	N
1b	Winter Peak Load Forecast (Preliminary Base Case – Parametric & Sensitivities)	N/A	2025 Gold Book* NYCA: 25,093.0 MW NYC: 7,648.2 MW LI: 3,328.2 MW G-J: 10,766.3 MW	New for 2026-2027 IRM study with the adoption of the Enhanced Load Modeling and Behind-the-Meter (BTM) Solar Modeling enhancements. Most recent Gold Book Forecast is used for Preliminary Base Case parametric study and sensitivity cases	Y
2a	Peak Load Forecast (Final Base Case)	October 2024 Fcst* NYCA: 31,649.7 MW NYC: 11,043.9 MW LI: 5,092.1 MW G-J: 15,205.1 MW	October 2025 Fcst* NYCA: 31,648.2 MW NYC: 11,088.8 MW LI: 5,127.8 MW G-J: 15,304.8 MW (Attachment A1-a)	Updated Load Forecast in October will be used for Final Base Case (FBC)	N
2b	Winter Peak Load Forecast (Final Base Case)	N/A	October 2025 Fcst* NYCA: 24,522.6 MW NYC: 7,647.4 MW LI: 3,327.4 MW G-J: 10,775.4 MW (Attachment A1-b)	New for 2026-2027 IRM study with the adoption of the Enhanced Load Modeling and Behind-the-Meter (BTM) Solar Modeling enhancements. Updated Load Forecast in October will be used for Final Base Case (FBC)	Y

* Behind-the-Meter Net Generation (BTM:NG) resource loads have been incorporated into these numbers.

Load Forecast

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
3	Load Shape (Multiple Load Shape)	Bin 1-2: 2013 Bin 3-4: 2018 Bin 5-7: 2017	Bin 1-2: 2013 Bin 3-4: 2018 Bin 5-7: 2017	ICS Recommendation	N
4a	Load Forecast Uncertainty (LFU)	Zonal Model to reflect current data with input from Con Ed and LIPA. (Attachment A2)	Zonal Model to reflect current data with input from Con Ed and LIPA. (Attachment A2)	Based on TO and NYISO data analysis	N
4b	LFU Winter	Attachment A3	Attachment A3	Based on TO and NYISO data analysis	N
5a	Annual Energy Forecast (Preliminary Base Case)	N/A	2025 Gold Book NYCA: 155,460 GWh NYC: 50,100 GWh LI: 20,040 GWh	New for 2026-2027 IRM study with the adoption of the Enhanced Load Modeling and BTM Solar Modeling enhancements. Production of load shapes are aligned with the annual energy forecast as per the Enhanced Load Modeling Whitepaper. Updated with most recent Gold Book Forecast.	Y
5b	Annual Energy Forecast (Final Base Case)	N/A	October 2025 Fcst* NYCA: 152,996.0 MW NYC: 50,252.4 MW LI: 20,376.3 MW (Attachment A4)	Updated Load Forecast in October will be used for Final Base Case (FBC)	Y

Generation Parameters

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
6	Existing Generating Unit Capacities	2024 Gold Book Values. Use min. (DMNC vs. CRIS) capacity value	2025 Gold Book Values. Use min. (DMNC vs. CRIS) capacity value	Latest Gold Book publication	N
7	Proposed New Units (Thermal) and re-ratings	47.0 MW summer re-rating for Thermal resources (Attachment B1)	0 MW new units or re-ratings for Thermal resources (Attachment B1)	NYISO recommendation based on documented process that includes the latest Gold Book publication, NYISO interconnection queue, and generation notifications	N
8	Deactivations and Removals	165.4 MW unit deactivations (Attachment B2)	851.9* MW generator deactivations and removals (Attachment B2)	Latest Gold Book publication and generator notifications	N
9	Forced and Partial Outage Rates	Five-year (2019-2023) GADS data for each unit represented. Those units with less than five years – use representative data. (Attachment C1)	Five-year (2020-2024) GADS data for each unit represented. Those units with less than five years – use representative data. (Attachment C1)	Transition rates representing the Equivalent Demand Forced Outage Rates (EFORd) during demand periods over the most recent five-year period	N
10	Planned Outages	Planned Outages are removed from the IRM study	Planned Outages are removed from the IRM study	Based on 2022-2023 IRM study FBC	N
11	Summer Maintenance	Nominal 50 MW – divided equally as 2 negative 25 MW units in Load Zones J and K	Nominal 50 MW – divided equally as 2 negative 25 MW units in Load Zones J and K	Review of most recent data Per NYSRC recommendation	N
12	Combustion Turbine Derates	Derate based on temperature correction curves provided	Derate based on temperature correction curves provided	Operational history indicates the derates are in line with manufacturer provided curves	N

*The 2026-2027 IRM FBC Assumptions Matrix as reviewed at the 10/01/2025 ICS meeting incorrectly stated the aggregate quantity of deactivations and removals as 903.3 MW due to a double-counting of the Gowanus and Narrows barge units in IIFO with the assumed deactivation of all Gowanus and Narrows barge units. The 2026-2027 IRM study has correctly assumed the deactivations and removals to be 851.9 MW in total. The Assumptions Matrix is being updated to reflect the correct value.

Generation Parameters

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
13	Existing and Proposed New Wind Units	0 MW of offshore wind capacity additions 2,566.20 MW of qualifying wind. (Attachments G and B3)	277.6 MW of land-based wind capacity additions. (Attachment B3) 2,828.3 MW of qualifying wind. (Attachment G)	ICAP based on clean energy standard (CES) agreements, interconnection queue and ICS input.	N
14a	Land-Based Wind Shape	Actual hourly plant output over the period 2019-2023. New units will use zonal hourly averages or nearby units.	Actual hourly plant output over the period 2020-2024. New units will use zonal hourly averages or nearby units.	Program randomly selects a wind shape of hourly production from the most recent five-year period for each model iteration.	N
14b	Offshore Wind Shape	Normalized offshore wind shapes as published by NYISO over the period 2017-2021	Normalized offshore wind shapes as published by NYISO over the period 2020-2024	Program randomly selects a wind shape of hourly production from the most recent five-year period for each model iteration.	N
15	Existing and Proposed New Solar Resources	267 MW of utility-scale solar capacity additions totaling 571.4 MW of qualifying solar capacity. (Attachment B3)	0 MW of utility-scale solar capacity additions totaling 573.4 MW of qualifying solar capacity. (Attachments B3 and G2)	ICAP based on CES agreements, interconnection queue and ICS input.	N
16	Solar Shape	Actual hourly plant output over the period 2019-2023. New units will use zonal hourly averages or nearby units.	Actual hourly plant output over the period 2020-2024. New units will use zonal hourly averages or nearby units.	Program randomly selects a solar shape of hourly production from the most recent five-year period for each model iteration.	N
17	BTM:NG Program	No new BTM:NG resources, total Net ICAP of 185.2 MW (367.3 MW Gen, 182.2 MW) Load (Attachment B5)	No new BTM:NG resources, total Net ICAP of 265.2 MW (361.8 MW Gen, 96.6 MW Load) (Attachment B5)	Both the generation of the participating resources and the full host loads are modeled	N

Generation Parameters

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
18	Small Hydro Resources	Actual hourly plant output over the period 2019-2023	Actual hourly plant output over the period 2020-2024	Program randomly selects a hydro shape of hourly production from the most recent five-year period for each model iteration.	N
19	Large Hydro	Probabilistic model based on five years of GADS data (2019-2023)	Probabilistic model based on five years of GADS data (2020-2024)	Transition rates representing the EFORd during demand periods over the most recent five-year period.	N
20	Landfill Gas (LFG)	Actual hourly plant output over the period 2019-2023	Actual hourly plant output over the period 2020-2024	Program randomly selects an LFG shape of hourly production from the most recent five-year period for each model iteration.	N
21	New Energy Storage Resources (ESRs)	0 MW of new battery storage scheduled. 20 MW of total battery storage modeled.	18 MW of new battery storage scheduled. (Attachment B4) 35 MW of total battery storage modeled. (Attachment G6)	ICAP based on NYSERDA/utility agreements, interconnection queue and ICS input.	N
22	Energy Limited Resources (ELRs)	Based upon elections made by August 1st, 2024 ES and small EL3 output limitations lifted at HB14	Based upon elections made by August 1st, 2025 ES and small EL3 output limitations lifted at HB14	Existing elections are made by August 1st and will be incorporated into the model	N
23	Distributed Energy Resources (DERs)	N/A	480.5 MW of total DERs (Attachment B6)	New for 2026-2027 IRM study. Modeled according to the modeling principles outlines in the Phase 1 (2024 Phase) DER Whitepaper. Modeled MW based on submitted enrollment by August and accounting for resources transitioning from SCR program and Demand Side Ancillary Services Program (DSASP).	Y

Transactions- Imports and Exports

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
24	Capacity Purchases	Existing Rights: PJM – 1,013 MW, HQ – 1,190 MW All contracts modeled as equivalent contracts.	Existing Rights: PJM – 1,080 MW, HQ – 1,190 MW in Summer, Varied (0 – 914 MW) in Winter. All contracts modeled as equivalent contracts.	Grandfathered Rights, Existing Transmission Capacity for Native Load (ETCNL), and other awarded long-term rights	N
25	Capacity Sales	Long Term firm sales Summer 266.6 MW	Long Term firm sales Summer 266.7 MW	Long term contracts	N
26	Forward Capacity Market (FCM) Sales from a Locality*	No sales modeled within study period	No sales modeled within study period	White paper, NYISO recommendation	N
27	Wheels through NYCA	300 MW HQ to ISO-NE equivalent contract	300 MW HQ to ISO-NE equivalent contract	HQ wheel has an ISO-NE capacity supply obligation for 2026-2027	N
28	New Unforced Capacity Deliverability Rights (UDRs)	No new UDRs identified	Champlain Hudson Power Express: 1,250 MW new UDR from HQ to Load Zone J**	ICS recommendation for inclusion UDR elections are made by August 1st and will be incorporated into the model for FBC	N
29	New External Deliverability Rights (EDRs)	No new EDRs identified	No new EDRs identified	Review of most recent data Per NYSRC recommendation	N

* Final FCM sales that will materialize are unknowable at the time of the IRM study. To reflect the impact these sales have on reliability, the NYISO applies a Locality Exchange Factor in the market.

** Preliminary assumption for PBC, subject to change/update for FBC.

Topology

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
30	Interface Limits	Updates to the Central East forward limits, and West-Central reverse limit	Updates to the Dysinger East forward limit, West Central reverse limit, Moses South forward limit, Central East forward limits, Sprain Brook Dunwoodie South forward limit, Long Island export limits, and Norwalk Harbor to Long Island import limit* (Attachment E1)	Based on the 2025 NYISO Summer Operating Study, 2023 Central-East Voltage Limit Study, and TO input	N
31	New Transmission	None Identified	Addition of Smart Path Connect project	Based on 2024 NYISO Reliability Needs Assessment (RNA) and recent NYISO Short Term Assessment of Reliability (STAR) studies	N
32	AC Cable Forced Outage Rates	All existing Cable EFORds for NYC and LI to reflect most recent ten - year history (2014-2023) (Attachment E4)	All existing Cable EFORds for NYC and LI to reflect most recent ten - year history (2015-2024) (Attachment E4)	TO provided transition rates with NYISO review Based upon NYSRC recommendation	N
33	UDR Line Unavailability	Ten-year history of forced outages (2014-2023)	Ten-year history of forced outages (2015-2024)**	NYISO/TO review Based upon NYSRC recommendation	N

*The updates to limit changes other than the Long Island export limits and Norwalk Harbor to Long Island import were reviewed at the 6/4/2025 ICS meeting. The updates for the Long Island export limits and Norwalk Harbor to Long Island import limit are as follows: (1) export limit for Y49/Y50 reduced from 460 MW to 385 MW; (2) export limit of the Jamaica Ties reduced from 505 MW to 485 MW; (3) export limit for ConEd-LIPA reduced from 170 MW to 120 MW; (4) export limit for Long Island West reduced from 84 MW to 34 MW; (5) export limit from Long Island to Norwalk Harbor reduced from 414 MW to 395 MW; and (6) the import limit from Norwalk Harbor to Long Island reduced from 404 MW to 395 MW.
**New UDR lines are assigned NYCA average cable outage rates as reflected in Attachment E4

Emergency Operating Procedures

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
34	Special Case Resources (SCRs)	July 2024 – 1,486.7 MW based on registrations and modeled with maximum capacity of 1,280.8 MW derated by hourly response rates. Utilize a new energy limited resource (ELR) functionality to model SCRs as duration limited resources with hourly response rates and limited to one call per day. Monthly variation based on historical experience.	July 2025 – 898.1 MW based on registrations and modeled with maximum capacity of 724.2 MW derated by hourly response rates. Output limitations will be lifted 3 hours prior to the preliminary base case weighted average summer peak net load hour for Load Zones A-F (HB16) and G-K (HB14).	Summer values calculated from July 2025 registrations accounting for updated historical performance. Also accounts for the transition of resources from the SCR program to the DER participation model. SCRs transitioning to the DER participation model and represented as DER for the 2026-2027 IRM study have been removed from the SCR values.	Y
35	Other Emergency Operating Procedures (EOPs)	400 MW of 10-min reserves maintained at load shedding Voluntary Curtailment and Public Appeals limited to 3 calls per year 804.6 MW of non-SCR/non-EDRP resources (Attachment D)	400 MW of 10-min reserves maintained at load shedding Voluntary Curtailment limited to 3 calls per month. Public Appeals limited to 3 calls per year. 866.8 MW of non-SCR/non-EDRP resources (Attachment D)	Based on Whitepaper and NYISO updated analysis recommendation Based on TO information, measured data, and NYISO forecasts	Y
36	EOP Structure	10 EOP steps modeled	10 EOP steps modeled	Based on agreement with ICS	N

External Control Areas

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
37	PJM	Load and capacity data will be provided by PJM/NPCC CP-8 Data may be adjusted per NYSRC Policy 5. (Attachment E)	PJM no longer updating their MARS model for NPCC. (Attachment E3)	NYISO to conduct Policy 5 updates using 2026 NERC reference levels	N
38	ISO-NE, Quebec, IESO	Load and capacity data will be provided by ISO-NE/NPCC CP-8 Data may be adjusted per NYSRC Policy 5. (Attachment E)	ISO-NE Updates: Orrington (BHE to ME) limit, Surowiec (ME to S-ME) limit, S-ME to NH limit, and West-to-East group limit (Attachment E2)	2024 NPCC Long Range Adequacy Overview (LRAO) transfer limits for 2025-2029	N
39	External Adjustments per Policy 5	If needed, add load to externals proportional to existing excess capacity.	If needed, add load to externals proportional to existing excess capacity.	Whitepaper on External Control Area adjustments	N
40	Reserve Sharing	All NPCC Control Areas indicate that they will initially share reserves equally among all members and then non-members.	All NPCC Control Areas indicate that they will initially share reserves equally among all members and then non-members.	Per NPCC CP-8 WG	N
41	Emergency Assistance	Statewide emergency assistance allowed from neighbors: Bin 1: 1,470 MW Bin 2: 2,600 MW Bin 3-7: 3,500 MW Individual interface limits and PJM cables are also reduced by Bin (Attachment E5)	Statewide emergency assistance allowed from neighbors: Bin 1: 1,470 MW Bin 2: 2,600 MW Bin 3-7: 3,500 MW Winter emergency assistance for HQ is 0 MW (Attachment E5)	Whitepaper on Modeling of Emergency Assistance for NYCA in IRM studies Based upon NYSRC recommendation	N

Miscellaneous

#	Parameter	2025 Model Assumptions	2026 Model Assumptions	Basis for Recommendation	Model Change
42	MARS Model Version	4.14.2179	5.8.3837	New MARS version completed testing by NYISO	N
43	Environmental Initiatives	No new rules for the 2025-2026 Capability Year	No new rules for the 2026-2027 Capability Year	Review of existing regulations and rules	N

Attachment A1-a

NYCA Summer Load Forecast Coincident and Non-Coincident Peak:
2025-2026 Final Base Case (FBC) and 2026-2027 Final Base Case (FBC)

2025-2026 FBC													
Area	A	B	C	D	E	F	G	H	I	J	K	NYCA	G_J
NCP - Forecast	3,089.2	1,971.1	2,675.8	721.3	1,326.2	2,293.8	2,286.2	614.2	1,352.7	11,043.9	5,092.1		
CP - Forecast	2,926.8	1,925.4	2,596.5	693.0	1,291.2	2,239.2	2,235.5	600.7	1,323.1	10,802.3	5,016.0	31,649.7	
G-J Peak - Forecast							2,271.8	610.5	1,344.7	10,978.1			15,205.1

2026-2027 FBC													
Area	A	B	C	D	E	F	G	H	I	J	K	NYCA	G_J
NCP - Forecast	3,018.1	1,944.3	2,671.1	671.3	1,313.6	2,330.1	2,350.1	614.6	1,353.6	11,088.8	5,127.8		
CP - Forecast	2,914.4	1,882.3	2,582.1	658.8	1,274.6	2,261.1	2,290.1	599.9	1,321.2	10,824.0	5,039.7	31,648.2	
G-J Peak - Forecast							2,331.3	610.6	1,345.0	11,017.9			15,304.8

Delta													
Area	A	B	C	D	E	F	G	H	I	J	K	NYCA	G_J
NCP - Forecast	-71.1	-26.8	-4.7	-50.0	-12.6	36.3	63.9	0.4	0.9	44.9	35.7		
CP - Forecast	-12.4	-43.1	-14.4	-34.2	-16.6	21.9	54.6	-0.8	-1.9	21.7	23.7	-1.5	
G-J Peak - Forecast							59.5	0.1	0.3	39.8			99.7

Attachment A1-b

NYCA Winter Load Forecast Coincident and Non-Coincident Peak: 2025-2026 FBC and 2026-2027 FBC

2025-2026 FBC*													
Area	A	B	C	D	E	F	G	H	I	J	K	NYCA	G_J
NCP - Forecast	2,308.5	1,647.5	2,548.6	1,043.0	1,316.3	1,934.0	1,535.0	519.0	895.0	7,498.3	3,349.4		
CP - Forecast	2,283.5	1,634.5	2,543.6	1,022.0	1,293.3	1,922.0	1,524.0	508.0	885.0	7,428.3	3,336.4	24,380.6	
G-J Peak - Forecast							1,521.0	506.0	885.0	7,472.3			10,384.3

2026-2027 IRM FBC													
Area	A	B	C	D	E	F	G	H	I	J	K	NYCA	G_J
NCP - Forecast	2,342.6	1,572.6	2,523.6	852.0	1,358.0	1,930.0	1,677.0	536.0	953.0	7,647.4	3,327.4		
CP - Forecast	2,314.6	1,561.6	2,513.6	827.0	1,333.0	1,917.0	1,672.0	525.0	947.0	7,597.4	3,314.4	24,522.6	
G-J Peak - Forecast							1,667.0	523.0	943.0	7,642.4			10,775.4

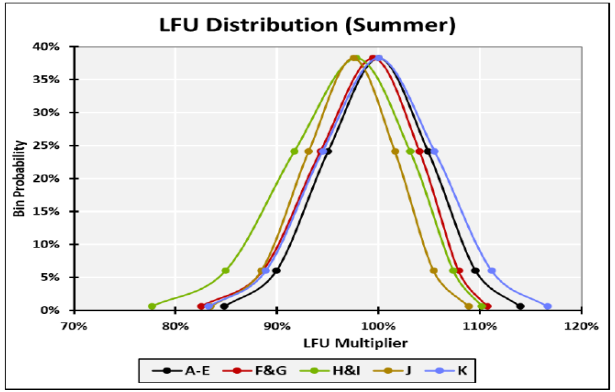
Delta													
Area	A	B	C	D	E	F	G	H	I	J	K	NYCA	G_J
NCP - Forecast	34.1	-74.9	-25.0	-191.0	41.7	-4.0	142.0	17.0	58.0	149.1	-22.0		
CP - Forecast	31.1	-72.9	-30.0	-195.0	39.7	-5.0	148.0	17.0	62.0	169.1	-22.0	142.0	
G-J Peak - Forecast							146.0	17.0	58.0	170.1			391.1

*With the proposed implementation of the Enhanced Load Modeling for the 2026-2027 IRM study, the winter forecast was not part of the 2025-2026 IRM study. The values are based on the information contained in the load forecast for the 2025-2026 FBC.

Attachment A2

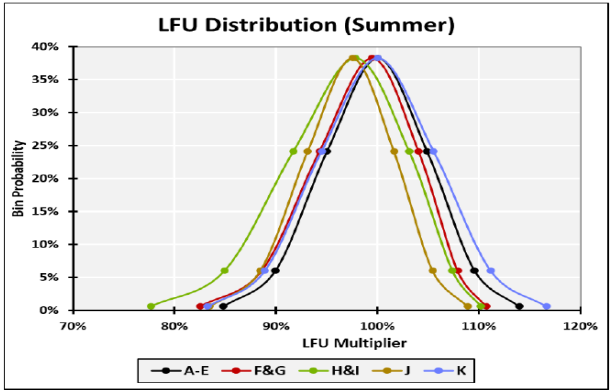
NYCA Summer Load Forecast Uncertainty Model: 2025 and 2026

Load Forecast 2025



Bin	Bin z	Bin Probability	A-E	F&G	H&I	J	K
Bin 1	2.74	0.62%	113.93%	110.69%	110.18%	108.88%	116.62%
Bin 2	1.79	6.06%	109.54%	107.86%	107.34%	105.42%	111.14%
Bin 3	0.89	24.17%	104.86%	104.04%	103.09%	101.61%	105.52%
Bin 4	0.00	38.29%	100.00%	99.46%	97.81%	97.51%	100.00%
Bin 5	-0.89	24.17%	95.00%	94.29%	91.70%	93.12%	94.48%
Bin 6	-1.79	6.06%	89.91%	88.61%	84.93%	88.45%	88.89%
Bin 7	-2.74	0.62%	84.79%	82.53%	77.65%	83.48%	83.27%

Load Forecast 2026



Bin	Bin z	Bin Probability	A-E	F&G	H&I	J	K
Bin 1	2.74	0.62%	113.93%	110.69%	110.18%	108.88%	116.62%
Bin 2	1.79	6.06%	109.54%	107.86%	107.34%	105.42%	111.14%
Bin 3	0.89	24.17%	104.86%	104.04%	103.09%	101.61%	105.52%
Bin 4	0.00	38.29%	100.00%	99.46%	97.81%	97.51%	100.00%
Bin 5	-0.89	24.17%	95.00%	94.29%	91.70%	93.12%	94.48%
Bin 6	-1.79	6.06%	89.91%	88.61%	84.93%	88.45%	88.89%
Bin 7	-2.74	0.62%	84.79%	82.53%	77.65%	83.48%	83.27%

Attachment A3

NYCA Winter Load Forecast Uncertainty Model: 2026

Bin	Bin z	Bin Probability	NYCA (2025-2026 IRM)	NYCA (2026-2027 IRM)	Difference
1	-2.74	0.62%	110.37%	110.48%	0.11%
2	-1.79	6.06%	106.37%	106.68%	0.31%
3	-0.89	24.17%	102.75%	103.22%	0.47%
4	0.00	38.29%	99.42%	100.00%	0.58%
5	0.89	24.17%	96.29%	96.96%	0.67%
6	1.79	6.06%	93.30%	94.02%	0.71%
7	2.74	0.62%	90.41%	91.16%	0.75%

Attachment A4

Annual Energy Forecast by Zone:

Annual Energy Forecast by Zone - GWh												
Area	A	B	C	D	E	F	G	H	I	J	K	NYCA
2025-2026 IRM*	15,960.0	10,000.0	14,590.0	5,850.0	7,010.0	11,030.0	9,230.0	2,740.0	5,530.0	49,210.0	19,870.0	151,020.0
2026-2027 IRM FBC	16,124.0	9,600.6	14,302.7	5,620.0	7,190.0	11,240.0	9,590.0	2,790.0	5,910.0	50,252.4	20,376.3	152,996.0
Delta	*164.0*	*-399.4*	*-287.3*	*-230.0*	*180.0*	*210.0*	*360.0*	*50.0*	*380.0*	*1,042.4*	*506.3*	*1,976.0*

*With the proposed implementation of the Enhanced Load Modeling for the 2026-2027 IRM study, the winter forecast was not part of the 2025-2026 IRM study. The values are based on the information contained in the load forecast for the 2025-2026 FBC.

Attachment B1

New Thermal Units and Unit Re-Ratings

New Thermal Units and Unit Re-ratings (summer ratings)					
Project or Generator Name	Zone	2025 Gold Book (MW) CRIS	2025 Gold Book (MW) DMNC	New or Incremental (MW)	2026 MARS Model (MW)
New Units					
Total New Units and Uprates (MW)					

Attachment B2

Deactivations and Removals

Unit Removal since 2025-2026 IRM Study			
Generator Name	**Type**	**Zone**	**SUMMER CRIS (MW)**
Hyland LFGE	IC	B	4.8
Madison Wind Power	WT	E	11.5
Warrensburg	HY	F	3.0
Coxsackie GT	GT	G	21.6
Gowanus 2-1 through 3-5 & 3-7 through 3-8**	GT	J	282.0
Gowanus 3-6*	GT	J	17.6
Narrows 1-1 through 1-8, 2-2 through 2-6 & 2-8**	GT	J	269.0
Narrows 2-1*	GT	J	19.4
Narrows 2-7*	GT	J	20.7
59 St. GT 1	GT	J	15.4
Far Rockaway GT1	JE	K	53.5
Far Rockaway GT2	JE	K	55.4
Pinelawn Power 1	CC	K	78.0
Total Removals			**851.9**

*ICAP Ineligible Forced Outage (IIFO)
** Related to Champlain Hudson Power Express (CHPE) modeling assumption

Attachment B3

New Intermittent Resources

New Intermittent Units				
Resource	**Zone**	**CRIS (MW)**	**Summer Capability (MW)**	**Lesser of Summer Capability vs. CRIS**
Wind				
Steel Wind	A	20	20	20
Erie Winds	A	15	15	15
Cassadaga	A	126	126	126
Baron Winds (Phase 2)	C	300*	116.6	116.6
Total Wind	-	**461**	**277.6**	**277.6**

Solar				
Total Solar				

*CRIS (MW) represents the combined value for Baron Winds (Phase 1 and Phase 2).

Attachment B4

New Energy Storage Resources

Energy Storage				
Resource	**Zone**	**CRIS (MW)**	**Summer Capability (MW)**	**Lesser of Summer Capability vs. CRIS**
New Battery Units				
Arthur Kill Energy Storage 1	J	15	15	15
Pomona ESR	G	3	3	3
Total New Energy Storage				**18**

Attachment B5

Resources in the Behind-the-Meter Net Generation (BTM:NG) Resource Program

Attachment B5 - Units in the Behind-the-Meter Net Generation Resource Program*			
Generator Name	**Zone**	**Resource Value (MW)****	**Peak Load Adjustment (MW)*****
Existing:			
Stony Brook	K	0.0	38.4
Greenidge 4	C	101.0	2.6
Lyons Falls Hydro	E	0.0	0.0
KIAC_JFK	J	128.0	17.4
Red Rochester	B	81.1	36.6
Oxbow (Fortistar - N.Tonawanda)	A	51.7	1.6
Total BTM-NG		**361.8**	**96.6**

* The IRM study independently models the generation and load components of BTM:NG Resources.
** Based on adjusted Dependable Maximum Gross Capability (DMGC) value.
*** Based on Average Coincident Host Load (ACHL).

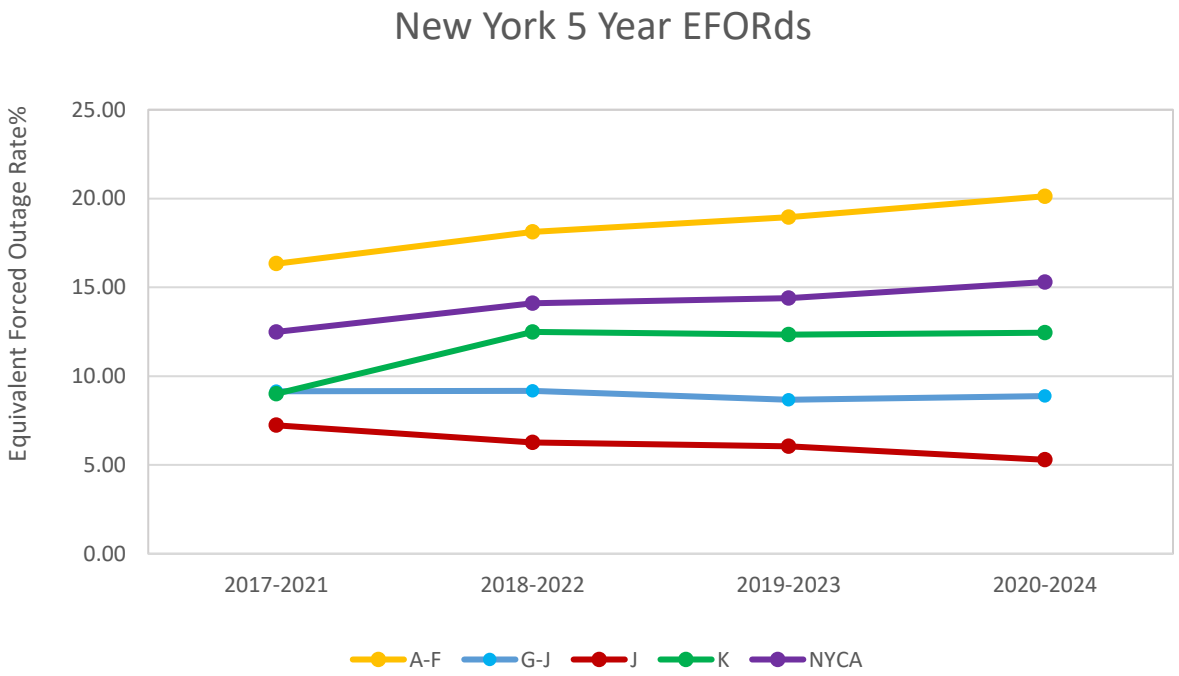
Attachment B6

Distributed Energy Resources

Distributed Energy Resources		
Capacity Region	**Aggregation Type(s)**	**ICAP (MW)**
A-E	Demand Side Resource (DSR)	480.4
F	-	0
G-I	Demand Side Resource (DSR)	0.1
J	-	0
K	-	0
Total Distributed Energy Resources		**480.5**

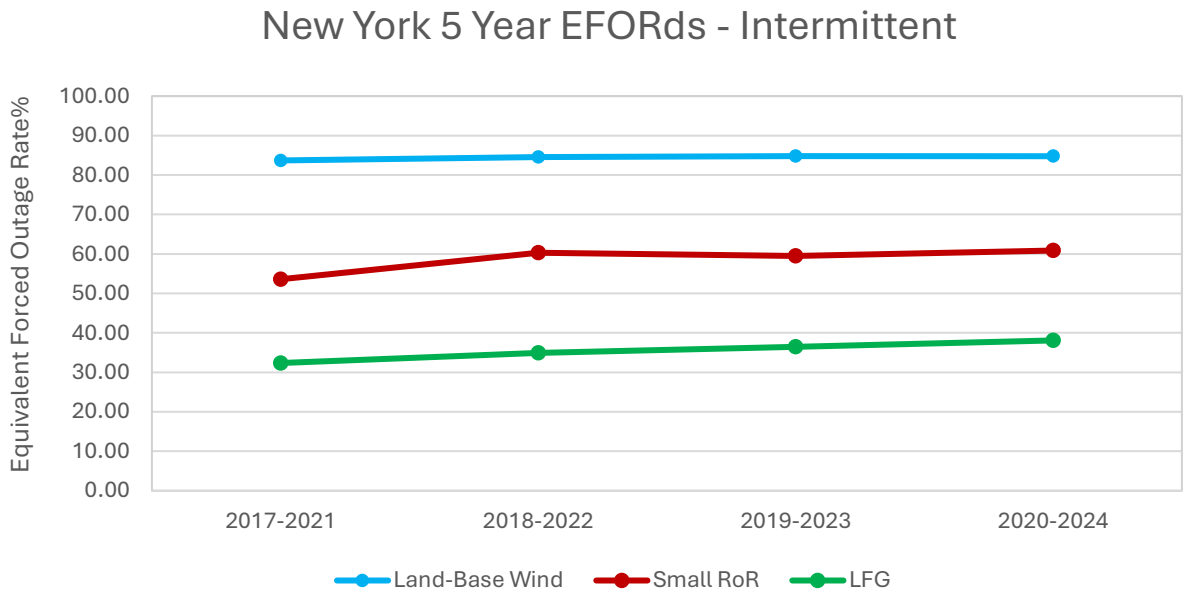
Attachment C1

NYCA Five Year Derating Factors – All Resources



Attachment C2

NYCA Five Year Derating Factors - Intermittent Power Resources*



* Solar will be added when there are at least 3 units using production data for all 5 years of the average

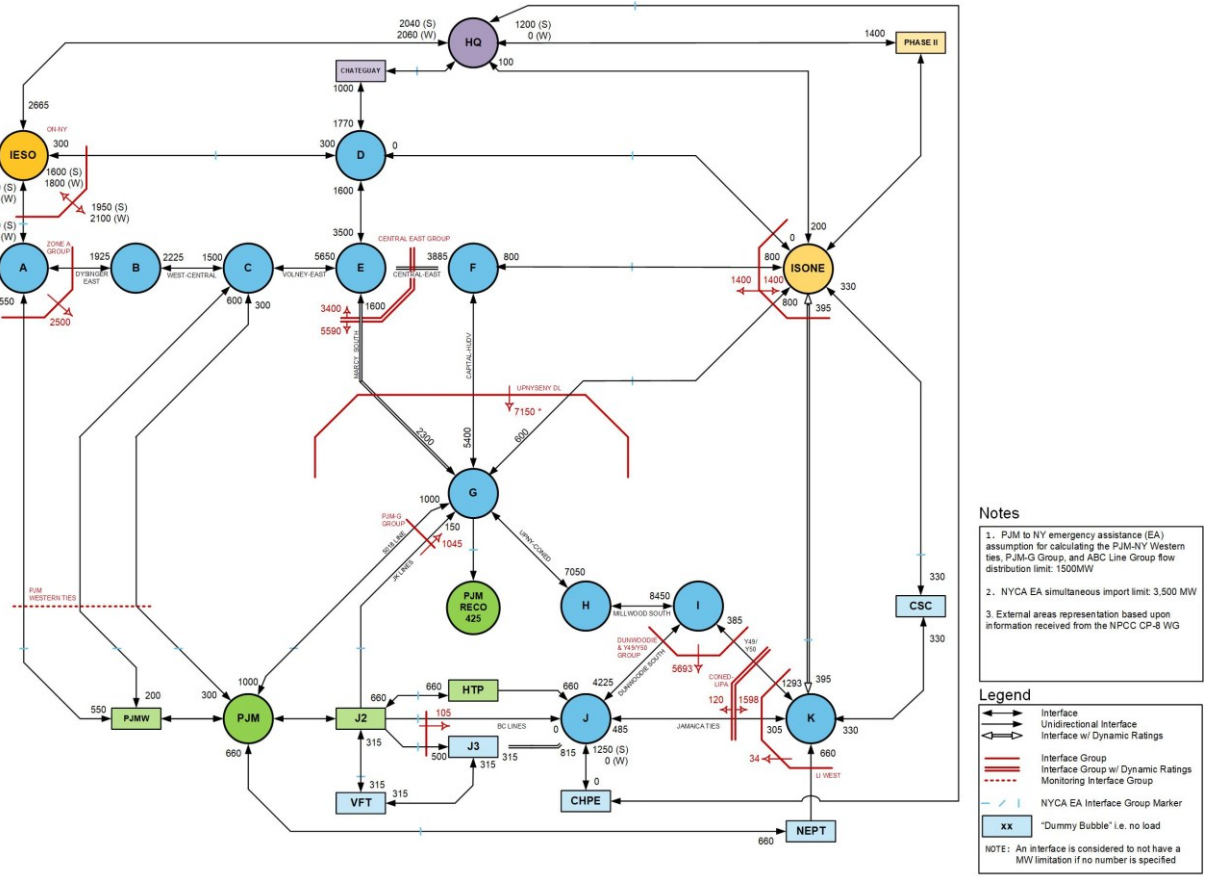
Attachment D

Emergency Operating Procedures

Step	Procedure	2025-2026 IRM MW Value	2026-2027 IRM MW Value
1	Special Case Resources – Load, Gen	1,486.7 MW Enrolled / 1,280.8 MW Modeled	898.1 MW Enrolled / 724.15 MW Modeled
2	5% manual voltage Reduction	63.38 MW	64.58 MW
3	Thirty-minute reserve to zero	655 MW	655 MW
4	Voluntary industrial curtailment	260.74 MW Limited to 3 calls per year	267.12 MW Limited to 3 calls per month
5	General Public Appeals	74 MW Limited to 3 calls per year	74 MW Limited to 3 calls per year
6	5% remote voltage reduction	406.49 MW	461.06 MW
7	Emergency Purchases	Varies	Varies
8	Ten-minute reserves to zero	910 MW (400 MW maintained at load shedding)	910 MW (400 MW maintained at load shedding)
9	Customer disconnections	As needed	As needed
10	Adjustment used if IRM is lower than technical study margin	As needed	As needed

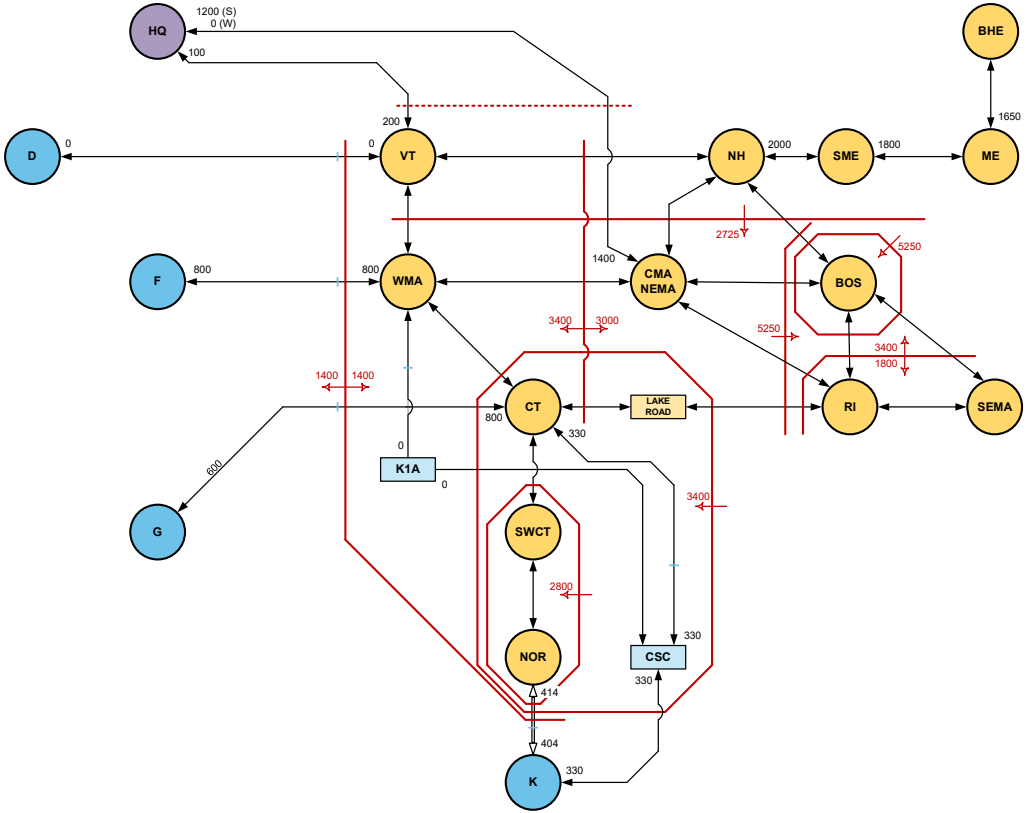
Attachment E1

IRM Topology



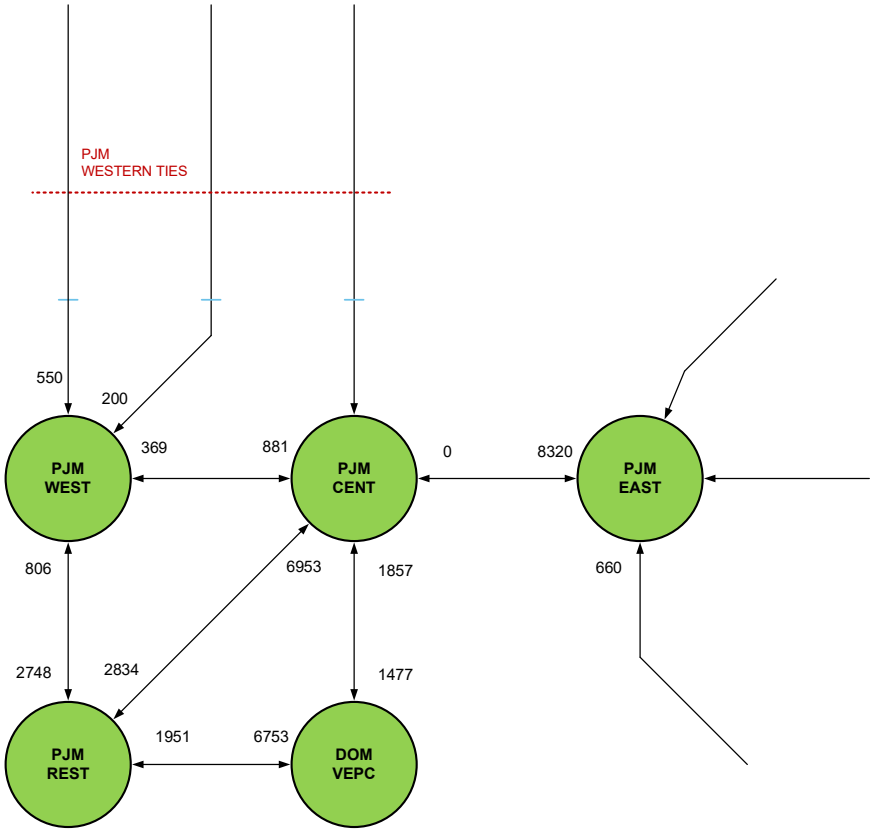
Attachment E2

ISO-NE 14 Bubble Model



Attachment E3

PJM Bubble Model



Attachment E4

10-year Cable Outage Rate	
2014-23	2015-24
5.31%	5.80%

The facilities included in these averages are VFT, HTP, Dunwoodie-South, Y49/Y50, CSC, Neptune, Norwalk-Northport, A-Line, and Champlain Hudson Power Express.*

*Inclusion of Champlain Hudson Power Express is a preliminary assumption for the PBC

Attachment E5

Dynamic Emergency Assistance (EA) Interface Group Limits (MW)							
Area	**Bin 1**	**Bin 2**	**Bin 3**	**Bin 4**	**Bin 5**	**Bin 6**	**Bin 7**
IESO	550	660	750	860	Maximum EA (1,950)		
ISONE	50	540	1,000	1,530	Maximum EA (1,804)		
PJM*	580	1,110	Maximum EA (1,415)				
HQ	280 Summer and 0 Winter						
Total EA**	1,470	2,600	Maximum EA (3,500)				

Dynamic EA PJM Cable Limits (MW)***							
Area	**Bin 1**	**Bin 2**	**Bin 3**	**Bin 4**	**Bin 5**	**Bin 6**	**Bin 7**
HTP	90	173	Maximum EA (660)				
Neptune	90	173	Maximum EA (660)				
VFT	43	83	Maximum EA (315)				
A Line	14	28	Maximum EA (105)				

* PJM ties limits are only applicable to A, C, and G ties, and individual cables are derated separately, in proportion to the Bin 1 and Bin 2 PJM interface group limits listed above

** The total EA limit from all ties are derived from a separate regression analysis and may not match the sum of all group tie limits in each LFU bin

*** Limiting EA, does not affect contract capacity over UDRs

Attachment F

SCR Determinations 2025-2026 and 2026-2027 IRM Studies

SCR Performance for 2026-2027 IRM Study								
Super Zones	SCR Enrollments (MW)	Response Rate (%) by Hour of SCR Activation						Superzonal ACL to CBL Translation Factor (%)
		Event Hour 1	Event Hour 2	Event Hour 3	Event Hour 4	Event Hour 5	Event Hour 6	Event Hour 7	
A - E	260.5	82.33%	85.85%	85.54%	79.20%	75.61%	0%	0%	91.85%
F	87.8	72.95%	79.54%	82.43%	83.29%	83.40%	70.40%	66.99%	89.18%
G - I	73.9	61.08%	69.85%	72.12%	73.52%	74.47%	71.50%	0%	83.46%
J	453.0	57.53%	62.61%	66.97%	70.70%	72.29%	66.09%	0%	72.92%
K	23.1	51.20%	57.99%	63.12%	65.49%	64.82%	63.35%	52.63%	75.13%
All Zones	898.1	66.77%	72.08%	74.61%	74.35%	73.83%	66.38%	58.14%	

SCR Performance for 2025-2026 IRM Study								
Super Zones	SCR Enrollments (MW)	Response Rate (%) by Hour of SCR Activation						Superzonal ACL to CBL Translation Factor (%)
		Event Hour 1	Event Hour 2	Event Hour 3	Event Hour 4	Event Hour 5	Event Hour 6	Event Hour 7	
A - E	783.4	77.85%	83.57%	82.28%	70.24%	69.18%	0%	0%	93.45%
F	103.5	75.94%	82.20%	85.24%	86.18%	85.54%	70.40%	66.99%	90.58%
G - I	90.6	58.45%	67.53%	70.20%	71.94%	73.63%	71.48%	0%	84.07%
J	478.7	55.04%	60.60%	65.47%	67.78%	68.80%	66.09%	0%	74.29%
K	30.6	49.71%	56.72%	62.12%	64.63%	64.66%	63.36%	52.65%	76.11%
All Zones	1,486.7	62.01%	68.39%	71.35%	69.61%	69.93%	66.38%	58.14%	

Attachment G

Wind Units Modeled

Wind				
Resource	Zone	CRIS (MW)	Summer Capability (MW)	Lesser of Summer Capability vs. CRIS
Arkwright Summit Wind Farm [WT]	A	78.4	78.4	78.4
Ball Hill Wind [WT]	A	100	107.5	100
Bliss Wind Power [WT]	A	100.5	100.5	100.5
Cassadaga Wind [WT]	A	126	126	126
Erie Wind [WT]	A	15	15	15
Steel Wind [WT]	A	20	20	20
Baron Winds (Phase 1 and 2) [WT]	C	300	238.4	238.4
Canandaigua Wind Power [WT]	C	125	125	125
Eight Point Wind Energy Center [WT]	C	101.2	111.2	101.2
High Sheldon Wind Farm [WT]	C	112.5	118.1	112.5
Howard Wind [WT]	C	57.4	55.4	55.4
Orangeville Wind Farm [WT]	C	94.4	93.9	93.9
Wethersfield Wind Power [WT]	C	126	126	126
Altona Wind Power [WT]	D	97.5	97.5	97.5
Chateaugay Wind Power [WT]	D	106.5	106.5	106.5
Clinton Wind Power [WT]	D	100.5	100.5	100.5
Ellenburg Wind Power [WT]	D	81	81	81
Jericho Rise Wind Farm [WT]	D	77.7	77.7	77.7
Marble River Wind [WT]	D	215.2	215.2	215.2
Bluestone Wind [WT]	E	124.2	111.8	111.8
Hardscrabble Wind [WT]	E	74	74	74
Maple Ridge Wind [WT01]	E	231	231	231
Maple Ridge Wind [WT02]	E	90.7	90.8	90.7
Munnsville Wind Power [WT]	E	34.5	34.5	34.5
Number 3 Wind Energy [WT]	E	105.8	103.9	103.9
Roaring Brook [WT]	E	79.7	79.7	79.7
South Fork Wind Farm (Offshore)	K	136	132	132
Total		**2,910.70**	**2,851.50**	**2,828.30**

Attachment G1

Wind Units Not Currently Participating in ICAP Market

Wind					
Resource	Zone	Nameplate (MW)	CRIS (MW)	Summer Capability (MW)	Lesser of Summer Capability vs. CRIS
Fenner Wind [WT]	C	30.0	30.0	0.0	0.0
Marsh Hill Wind Farm [WT]	C	16.2	0.0	0.0	0.0
Copenhagen Wind [WT]	E	79.9	79.9	0.0	0.0
Total		**126.1**	**109.9**	**0.0**	**0.0**

Attachment G2

Solar Units Modeled

Solar				
Resource	Zone	CRIS (MW)	Summer Capability (MW)	Lesser of Summer Capability vs. CRIS
Janis Solar [PV]	C	20.0	20.0	20.0
Morris Ridge Solar Energy Center	C	179.0	179.0	179.0
Puckett Solar [PV]	C	20.0	20.0	20.0
Albany County	F	20.0	20.0	20.0
Albany County II	F	20.0	20.0	20.0
Branscomb Solar [PV]	F	20.0	20.0	20.0
Darby Solar [PV]	F	20.0	20.0	20.0
East Point Solar	F	50.0	50.0	50.0
Grissom Solar [PV]	F	20.0	20.0	20.0
High River Solar	F	90.0	90.0	90.0
Pattersonville Solar [PV]	F	20.0	20.0	20.0
Regan Solar [PV]	F	20.0	20.0	20.0
ELP Stillwater Solar [PV]	F	20.0	20.0	20.0
Calverton Solar Energy Center [PV]	K	22.9	22.9	22.9
Long Island Solar Farm [PV]	K	31.5	31.5	31.5
Total		**573.4**	**573.4**	**573.4**

Attachment G3

Solar Units Not Modeled

Solar				
Resource	Zone	CRIS (MW)	Summer Capability (MW)	Lesser of Summer Capability vs. CRIS
Shoreham Solar [PV]*	K	25.0	0.0	0.0
Total		**25.0**	**0.0**	**0.0**

*Unit provides power at the distribution level rather than at the transmission level.

Attachment G4

Landfill Gas (LFG) Units Modeled

LFG				
Resource	**Zone**	**CRIS (MW)**	**Summer Capability (MW)**	**Lesser of Summer Capability vs. CRIS**
Chaffee [IC]	A	6.4	6.4	6.4
Model City Energy LFGE [IC]	A	5.6	5.6	5.6
Modern LFGE [IC]	A	6.4	6.4	6.4
Mill Seat [IC]	B	6.4	6.4	6.4
Broome 2 [IC]	C	2.0	2.1	2.0
Broome LFGE [IC]	C	2.1	2.4	2.1
High Acres Group [IC] (23767)	C	9.6	9.6	9.6
Ontario LFGE [IC]	C	11.2	11.2	11.2
Seneca Energy Group [IC] (23797)	C	17.6	17.6	17.6
Clinton LFGE [IC]	D	6.4	6.4	6.4
DANC LFGE [IC]	E	6.4	6.4	6.4
Oneida-Herkimer LFGE [IC]	E	3.2	3.2	3.2
Colonie LFGTE [IC]	F	6.4	6.4	6.4
Fulton County Landfill [IC]	F	3.2	3.2	3.2
Albany LFGE	F	4.5	5.6	4.5
Totals		**97.4**	**98.9**	**97.4**

Attachment G5

Landfill Gas (LFG) Units Not Modeled

LFG				
Resource	**Zone**	**CRIS (MW)**	**Summer Capability (MW)**	**Lesser of Summer Capability vs. CRIS**
Chautauqua LFGE	A	9.6	0.0	0.0
Synergy Biogas	B	2.0	0.0	0.0
Madison County LFGE [IC]	E	1.6	0.0	0.0
Total		**13.2**	**0.0**	**0.0**

Attachment G6

Energy Storage Resources

Energy Storage				
Resource	**Zone**	**CRIS (MW)**	**Summer Capability (MW)**	**Lesser of Summer Capability vs. CRIS**
New Battery Units				
KCE NY 6	A	20	17	17
Arthur Kill Energy Storage 1	J	15	15	15
Pomona ESR	G	3	3	3
Total Energy Storage				**35**

Attachment G7

Fuel Availability Constraints

Attachment G7 – Fuel Constraint Derate by Tier*						
Tier	**NYCA Load Conditions (MW)**	**Available Gas (MW)**	**Available Oil (MW)**	**Total Available Fuel (MW) (Gas + Oil)**	**Modeled UCAP (MW)**	**Derate (%)****
1	>26,000	288	11,400	11,688	19,100	39%
2	25,000 - 26,000	575		11,975		37%
3	24,000 - 25,000	2,550		13,950		27%
4	23,000 - 24,000	4,200		15,600		18%
5	22,000 - 23,000	5,550		16,950		11%
6	<22,000	No Constraint		No Constraint		No Constraint

* Assumed values for “available gas” and “available oil” reflect adjustments to address deactivations and resources not accounted for in developing the values presented to the NYSRC Executive Committee on 4/11/2025. https://www.nysrc.org/wp-content/uploads/2025/04/4.1.2-Fuel-Availability-Constraints-Modeling-Phase-2-r1-04112025-EC-Attachment-4.1.2.pdf

** Values represent aggregate level derate. Actual derate % applied on each unit may vary.

Assumption Matrix History

Date	Ver	Preliminary Base Case	Date	Ver	Final Base Case
02/05/2025	V0.0	Preliminary assumptions without attachments	09/03/2025	V0.0	Preliminary assumptions including the addition of item 23 (DERs) and Attachment B6
04/02/2025	V1.0	Preliminary assumptions (Items 8, 13, and Attachments B2 and G) and addition of Items 1a and 1b and Attachments A1-a and A1-b (pending approval of Enhanced Load Modeling improvements)	10/01/2025	V1.0	Updated Items 2a, 2b, 5b, 8, 13, 17, 23, 24, 30, 34, 35, and 42, as well as Attachments A1-a, A1-b, A3, A4, B2, B3, B5, B6, C1, C2, D, E1, F, G, G1, G4 and G7
04/29/2025	V2.0	Preliminary assumptions (Items 8, 14a, 16, 18, 20, 22, 33 and Attachments B2, D, and F)	10/03/2025	V1.1	Updated Item 30 and Attachment E1
06/04/2025	V3.0	Preliminary assumptions and addition of Attachment A4	10/23/2025	V1.2	Correction of Item 8 and Attachment B2
07/10/2025	V4.0	Preliminary assumptions and addition of Attachments G6 and G7			
08/06/2025	V4.1	Attachment G7 (corrections to prior version)			