

2023 Final ICAP Forecast

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Agenda

- **Summary of Updates since December 5 LFTF**
- **Proportional Loss Reallocation**
- **2022 Weather Normalized Peak Load**
- **2023 Final ICAP Forecast**
- **2023 ICAP Forecast Reference Tables**
- **Final ICAP Market Forecast Posting**

Summary of Updates since Dec 5 LFTF

■ National Grid Station Power Deduction

- Updated value of 15.4 MW yields a roughly 2 MW decrease in the National Grid and NYCA 2022 weather normalized peaks and 2023 ICAP Market and coincident peak forecasts

■ NYPA Large Load Forecast

- Updated large load growth of 27.1 MW yields a roughly 2 MW increase in the NYPA and NYCA 2022 weather normalized peaks and 2023 ICAP Market and coincident peak forecasts

■ Municipal Load Allocation

- Slight updates in NYPA & Greenport Load value and LIPA LSE load, and Green Island Load and National Grid LSE load. No change to the total LIPA and National Grid Transmission District load, or to the NYCA ICAP Market load.

Summary of Updates since Dec 5 LFTF

■ NCP to CP Ratios

- Zonal and Locality non-coincident to coincident peak ratio calculations updated with final DSS data for 2022 peaks
- Forecast utilizes Zone K ratio informed by LIPA analyses
- No resulting changes to Locality ratios or forecasts
- Increased Zone F ratio yields higher 2023 NCP forecast (no ICAP Market forecast impact)

■ BTM:NG Information

- Slight update in RG&E BTM:NG 2022 Peak Proxy Load and 2023 ACHL values (no ICAP Market forecast impact)

Proportional Loss Reallocation

- For the New York Control Area (NYCA) ICAP Market peak load forecast, bulk power system losses are reallocated among the Transmission Districts proportional to their weather normalized peak loads (less losses). This approach provides that for the NYCA ICAP Market, bulk power system losses are shared equitably among Transmission Owners according to their share of the total statewide peak load.
- For the ICAP Locality peak forecasts (Zone J, Zone K, and Zones G-to-J), there is no reallocation of bulk power system losses. These forecasts include local (i.e., Transmission District) bulk power system losses as found. This approach provides that the Locality peak forecasts accurately estimate the total load expected in the Locality during the Locality peak hour.
- As supporting material, the 2023 NYCA-Coincident peak load forecast by Transmission District is also presented. This forecast represents the expected coincident peak load by Transmission District and Zone during the hour of the NYCA peak, including local bulk power system losses as found (no loss reallocation). This forecast is analogous to that used for planning studies, the IRM study, and other purposes, and is typically the forecast presented in other NYISO materials (for example, the summer coincident peak forecast in the Gold Book).

2022 Weather Normalized Peak Load

2022 Load Reconciliation		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/20/2022, Hour Beginning 5 PM		NYISO DSS Actual MW Data					Transmission District Load Data					
V7 - 12/15/22		Actual Load	BPS Losses	Muni Gen	Load + Losses	Percent Losses	Actual Load Less Losses	Actual Losses	Actual Load With Losses	Weather Adjustments	Demand Response	TOs' W/N MW With DR
Consolidated Edison												
Con-Ed LSE Load							11,284.3	154.6	11,438.9	765.7	243.4	12,448.0
Transmission District Load Served							11,284.3	154.6	11,438.9	765.7	243.4	12,448.0
Deduction for BTM:NG							0.0	0.0	0.0			
Transmission District Total Load		11,284.3	154.6		11,438.9	1.4%	11,284.3	154.6	11,438.9			
Central Hudson												
Central Hudson LSE Load							1,011.8	28.6	1,040.4	-1.0	0.0	1,039.4
Transmission District Load Served							1,011.8	28.6	1,040.4	-1.0	0.0	1,039.4
Deduction for BTM:NG							0.0	0.0	0.0			
Transmission District Total Load		1,011.8	28.6		1,040.4	2.7%	1,011.8	28.6	1,040.4			
Long Island Power Authority												
LIPA LSE Load							4,849.5	49.1	4,898.6	-69.4	13.5	4,842.7
NYPA Load & Greenport Load							112.6	1.1	113.7	-1.6	0.0	112.1
Freeport & Rockville Centre Load		0.0					108.4	1.1	109.5	-1.5	0.0	108.0
Transmission District Load Served							5,070.5	51.3	5,121.8	-72.5	13.5	5,062.8
Deduction for BTM:NG							0.0	0.0	0.0			
Transmission District Total Load		5,071.2	51.3	0.0	5,122.5	1.0%	5,070.5	51.3	5,121.8			
National Grid												
National Grid LSE							6,015.5	341.0	6,356.5	-70.0	240.5	6,527.0
NYPA Load							37.3	2.1	39.4	-0.4	0.0	39.0
NYMPA Load							287.8	16.3	304.1	-3.4	0.0	300.7
Jamestown Load		59.8					65.9	3.7	69.6	-0.8	0.0	68.8
Green Island Load							5.6	0.3	5.9	-0.1	0.0	5.8
Transmission District Load Served							6,412.1	363.4	6,775.5	-74.7	240.5	6,941.3
Deduction for BTM:NG							0.0	0.0	0.0			
Transmission District Total Load		6,352.3	363.4	59.8	6,775.5	5.4%	6,412.1	363.4	6,775.5			
Totals		29,743.2	676.4	59.8	30,479.4	2.2%	29,799.1	676.4	30,475.5	687.1	562.1	31,724.7

2022 Load Reconciliation		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
7/20/2022, Hour Beginning 5 PM		NYISO DSS Actual MW Data					Transmission District Load Data					
V7 - 12/15/22		Actual Load	BPS Losses	Muni Gen	Load + Losses	Percent Losses	Actual Load Less Losses	Actual Losses	Actual Load With Losses	Weather Adjustments	Demand Response	TO's W/N MW With DR
New York Power Authority												
NYPA LSE Load							418.3	2.0	420.3	-0.4	0.0	419.9
NYMPA Load							54.1	0.3	54.4	0.4	0.0	54.8
Transmission District Load Served							472.4	2.3	474.7	0.0	0.0	474.7
Deduction for BTM:NG							0.0	0.0	0.0			
Transmission District Total Load		473.2	2.3	475.5	0.5%	472.4	2.3	474.7				
New York State Electric & Gas												
NYSEG LSE Load							2,912.4	52.7	2,965.1	6.2	58.0	3,029.3
NYPA Load							55.9	1.0	56.9	0.1	0.0	57.0
NYMPA Load							58.5	1.1	59.6	0.1	0.0	59.7
Transmission District Load Served							3,026.8	54.8	3,081.6	6.4	58.0	3,146.0
Deduction for BTM:NG							0.0	0.0	0.0			
Transmission District Total Load		3,026.8	54.8	3,081.6	1.8%	3,026.8	54.8	3,081.6				
Orange & Rockland Utilities												
O&R LSE Load							1,030.7	8.0	1,038.7	58.3	0.0	1,097.0
Transmission District Load Served							1,030.7	8.0	1,038.7	58.3	0.0	1,097.0
Deduction for BTM:NG							0.0	0.0	0.0			
Transmission District Total Load		1,030.7	8.0	1,038.7	0.8%	1,030.7	8.0	1,038.7				
Rochester Gas & Electric												
RG&E LSE Load							1,478.6	13.3	1,491.9	4.9	6.7	1,503.5
NYMPA Load							11.9	0.1	12.0	0.0	0.0	12.0
Transmission District Load Served							1,490.5	13.4	1,503.9	4.9	6.7	1,515.5
Deduction for BTM:NG							2.4	0.0	2.4			
Transmission District Total Load		1,492.9	13.4	1,506.3	0.9%	1,492.9	13.4	1,506.3				
Totals		29,743.2	676.4	59.8	30,479.4	2.2%	29,799.1	676.4	30,475.5	687.1	562.1	31,724.7

Note: The NYSEG load reconciliation reflects the transfer of municipal load from NYMPA to NYPA beginning in January 2023

2022 Load Reconciliation	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	7/20/2022, Hour Beginning 5 PM V7 - 12/15/22	TOs' W/N MW With DR	Reallocation of Losses			Proportional Allocation of Losses	Adj. W/N Load Less Losses	2022 Adjusted Actual Load (MW)	2022 BTM:NG (1 + WNF)	2022 Adj Load Prior to Loss Adjustment
			W/N Losses	Station Power	Adj. W/N Load Less Losses					
Consolidated Edison										
Con-Ed LSE Load	12,448.0	168.2		12,279.8	39.60%	277.0	12,279.8	12,556.8		
Transmission District Load Served	12,448.0	168.2		12,279.8	39.60%	277.0	12,279.8	12,556.8	1.0226	12,448.0
Deduction for BTM:NG										
Transmission District Total Load										
Central Hudson										
Central Hudson LSE Load	1,039.4	28.6		1,010.8	3.26%	22.8	1,010.8	1,033.6		
Transmission District Load Served	1,039.4	28.6		1,010.8	3.26%	22.8	1,010.8	1,033.6	1.0226	1,039.4
Deduction for BTM:NG										
Transmission District Total Load										
Long Island Power Authority										
LIPA LSE Load	4,842.7	48.5		4,794.2	15.46%	108.2	4,794.2	4,902.4		
NYPA Load & Greenport Load	112.1	1.1		111.0	0.36%	2.5	111.0	113.5		
Freeport & Rockville Centre Load	108.0	1.1		106.9	0.34%	2.4	106.9	109.3		
Transmission District Load Served	5,062.8	50.7		5,012.1	16.16%	113.1	5,012.1	5,125.2	1.0276	5,062.8
Deduction for BTM:NG										
Transmission District Total Load										
National Grid										
National Grid LSE	6,527.0	349.3	15.4	6,162.3	19.87%	139.1	6,162.3	6,301.4		
NYPA Load	39.0	2.2		36.8	0.12%	0.8	36.8	37.6		
NYMPA Load	300.7	16.7		284.0	0.92%	6.4	284.0	290.4		
Jamestown Load	68.8	3.8		65.0	0.21%	1.5	65.0	66.5		
Green Island Load	5.8	0.3		5.5	0.02%	0.1	5.5	5.6		
Transmission District Load Served	6,941.3	372.3	15.4	6,553.6	21.13%	147.9	6,553.6	6,701.5	1.0226	6,925.9
Deduction for BTM:NG										
Transmission District Total Load										
Totals	31,724.7	699.9	15.4	31,009.4	100.00%	699.9	31,009.4	31,709.3	1.0226	31,709.3

2022 Load Reconciliation	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	7/20/2022, Hour Beginning 5 PM V7 - 12/15/22	TOs' W/N MW With DR	Reallocation of Losses			Proportional Allocation of Losses	Adj. W/N Load Less Losses	2022 Adjusted Actual Load (MW)	2022 BTM:NG (1 + WNF)	2022 Adj Load Prior to Loss Adjustment
			W/N Losses	Station Power	Adj. W/N Load Less Losses					
New York Power Authority										
NYP&E LSE Load	419.9	2.0		417.9	1.35%	9.4	417.9	427.3		
NYMP&A Load	54.8	0.3		54.5	0.18%	1.3	54.5	55.8		
Transmission District Load Served	474.7	2.3		472.4	1.53%	10.7	472.4	483.1	1.0226	474.7
Deduction for BTM:NG										
Transmission District Total Load										
New York State Electric & Gas										
NYSEG LSE Load	3,029.3	53.8		2,975.5	9.60%	67.2	2,975.5	3,042.7		
NYP&A Load	57.0	1.0		56.0	0.18%	1.3	56.0	57.3		
NYMP&A Load	59.7	1.1		58.6	0.19%	1.3	58.6	59.9		
Transmission District Load Served	3,146.0	55.9		3,090.1	9.97%	69.8	3,090.1	3,159.9	1.0226	3,146.0
Deduction for BTM:NG										
Transmission District Total Load										
Orange & Rockland Utilities										
O&R LSE Load	1,097.0	8.4		1,088.6	3.51%	24.6	1,088.6	1,113.2		
Transmission District Load Served	1,097.0	8.4		1,088.6	3.51%	24.6	1,088.6	1,113.2	1.0226	1,097.0
Deduction for BTM:NG										
Transmission District Total Load										
Rochester Gas & Electric										
RG&E LSE Load	1,503.5	13.4		1,490.1	4.81%	33.7	1,490.1	1,523.8		
NYMP&A Load	12.0	0.1		11.9	0.04%	0.3	11.9	12.2		
Transmission District Load Served	1,515.5	13.5		1,502.0	4.84%	34.0	1,502.0	1,536.0	1.0286	1,515.5
Deduction for BTM:NG										
Transmission District Total Load										
Totals	31,724.7	699.9	15.4	31,009.4	100.00%	699.9	31,009.4	31,709.3	1.0226	31,709.3

2023 Final ICAP Forecast

2023 New York Control Area ICAP Market Peak Load Forecast (MW)

12/15/2022 V7 - Final	Transmission Districts	2022 Weather Normalized MW Load+ Losses MW *	(1 + Regional Load Growth Factor)	2023 NYCA Peak Load Before Adjustments *	2023 Large Load Adjustments	2023 ICAP Market Forecast *	2023 Locality Forecasts ^		
							J Locality	K Locality	G-J Locality
Consolidated Edison		12,556.8	1.02030	12,811.7	0.0	12,811.7	11,239.4		12,869.7
Central Hudson		1,033.6	0.99280	1,026.2	0.0	1,026.2			1,042.2
Long Island Power Authority		4,902.4	0.98740	4,840.6	0.0	4,840.6			
NYPA & Greenport		113.5	0.98740	112.1	0.0	112.1			
Freeport & Rockville Centre		109.3	0.98740	107.9	0.0	107.9			
LIPA Total		5,125.2	0.98740	5,060.6	0.0	5,060.6		5,081.8	
National Grid		6,301.4	1.00390	6,326.0	93.0	6,419.0			
NYPA		37.6	1.00390	37.7	0.0	37.7			
NYMPA		290.4	1.00390	291.5	0.0	291.5			
Jamestown		66.5	1.00390	66.8	0.0	66.8			
Green Island Power Authority		5.6	1.00390	5.6	0.0	5.6			
National Grid Total		6,701.5	1.00390	6,727.6	93.0	6,820.6			
New York Power Authority		427.3	1.00000	427.3	27.1	454.4			
NYMPA		55.8	1.03040	57.5	0.0	57.5			
NYPA Total		483.1	1.00352	484.8	27.1	511.9			
New York State Electric & Gas		3,042.7	0.99444	3,025.8	0.0	3,025.8			
NYPA		57.3	0.99444	57.0	0.0	57.0			
NYMPA		59.9	0.99444	59.6	0.0	59.6			
NYSEG Total		3,159.9	0.99444	3,142.4	0.0	3,142.4			365.2
Orange & Rockland Utilities		1,113.2	1.00360	1,117.2	0.0	1,117.2			1,115.6
Rochester Gas & Electric		1,523.8	1.01448	1,545.9	0.0	1,545.9			
NYMPA		12.2	1.01448	12.4	0.0	12.4			
RG&E Total		1,536.0	1.01448	1,558.3	0.0	1,558.3			
Total Load in NYCA or Locality		31,709.3	1.00692	31,928.8	120.1	32,048.9	11,239.4	5,081.8	15,392.7

Notes

* Including Reallocated Bulk Power System Losses

^ No Loss Reallocation

BTM:NG Resource loads are not included in these forecasts

2023 ICAP Forecast Reference Tables

(1) 2022 Actual Coincident Peak in G to J Locality

7/20/2022, HB 17

Transmission District	G	H	I	J	G-to-J Total
Con Edison		240.7	1,257.3	9,940.8	11,438.8
Cen Hudson	1,036.4				1,036.4
LIPA					
Nat. Grid					
NYPA					
NYSEG	19.2	350.3			369.5
O&R	1,038.7				1,038.7
RG&E					
Total	2,094.3	591.0	1,257.3	9,940.8	13,883.4

(2) 2022 Weather-Adjusted Coincident Peak in G to J Locality

Transmission District	G	H	I	J	G-to-J Total
Con Edison		275.1	1,369.3	10,803.6	12,448.0
Cen Hudson	1,036.0				1,036.0
LIPA					
Nat. Grid					
NYPA					
NYSEG	20.4	342.0			362.4
O&R	1,097.0				1,097.0
RG&E					
Total	2,153.4	617.1	1,369.3	10,803.6	14,943.4

(3) 2022 Weather-Adjusted Locality Peak for G-to-J

Transmission District	G	H	I	J	G-to-J Total
Con Edison		278.8	1,387.5	10,947.3	12,613.6
Cen Hudson	1,049.8				1,049.8
LIPA					
Nat. Grid					
NYPA					
NYSEG	20.7	346.5			367.2
O&R	1,111.6				1,111.6
RG&E					
Total	2,182.1	625.3	1,387.5	10,947.3	15,142.2
NCP/CP ratio	1.0133	1.0133	1.0133	1.0133	

(4) 2023 Peak Forecast for G-to-J Locality

Prior to BTM:NG Resources

Transmission District	G	H	I	J	G-to-J Total	RLGF
Con Edison		284.5	1,415.7	11,169.5	12,869.7	1.0203
Cen Hudson	1,042.2				1,042.2	0.9928
LIPA						
Nat. Grid						
NYPA						
NYSEG	20.6	344.6			365.2	0.9944
O&R	1,115.6				1,115.6	1.0036
RG&E						
Total	2,178.4	629.1	1,415.7	11,169.5	15,392.7	1.0165

No Loss Reallocation

Calculation of Zone J and Zone K Locality Peak Forecasts

Zone J and K Locality Peaks, Prior to BTM:NG Resources

Locality	2022 Locality Peak Actual Load	Municipal Self-Generation	Demand Response	2022 Locality Peak Total Load	2022 Weather Adjusted Coincident Peak	Locality NCP to CP Ratio	Locality Weather Adjustment	2022 Locality Weather Adjusted Peak	Regional Load Growth Factor	2023 Locality Forecast
Zone J Locality	10,753.1	0.0	162.0	10,915.1	10,803.6	1.0196	100.3	11,015.4	1.0203	11,239.4
Zone K Locality	5,213.9	14.1	13.4	5,241.4	5,062.8	1.0166	-94.8	5,146.6	0.9874	5,081.8

No Loss Reallocation

2023 New York Control Area Coincident Peak Load Forecast (MW)						
Reference Forecast Without Proportional Loss Reallocation						
12/15/2022 V7 - Final	Transmission Districts	2022 Weather Normalized MW Load + Losses MW ^	(1 + Regional Load Growth Factor)	2023 NYCA Peak Load Before Adjustments ^	2023 Large Load Adjustments	2023 NYCA Coincident Peak Forecast ^
Consolidated Edison		12,448.0	1.02030	12,700.7	0.0	12,700.7
Central Hudson		1,039.4	0.99280	1,031.9	0.0	1,031.9
Long Island Power Authority		4,842.7	0.98740	4,781.7	0.0	4,781.7
NYPA & Greenport		112.1	0.98740	110.7	0.0	110.7
Freeport & Rockville Centre		108.0	0.98740	106.6	0.0	106.6
LIPA Total		5,062.8	0.98740	4,999.0	0.0	4,999.0
National Grid		6,511.6	1.00390	6,537.0	93.0	6,630.0
NYPA		39.0	1.00390	39.2	0.0	39.2
NYMPA		300.7	1.00390	301.9	0.0	301.9
Jamestown		68.8	1.00390	69.1	0.0	69.1
Green Island Power Authority		5.8	1.00390	5.8	0.0	5.8
National Grid Total		6,925.9	1.00390	6,953.0	93.0	7,046.0
New York Power Authority		419.9	1.00000	419.9	27.1	447.0
NYMPA		54.8	1.03040	56.5	0.0	56.5
NYPA Total		474.7	1.00352	476.4	27.1	503.5
New York State Electric & Gas		3,029.3	0.99444	3,012.5	0.0	3,012.5
NYPA		57.0	0.99444	56.7	0.0	56.7
NYMPA		59.7	0.99444	59.4	0.0	59.4
NYSEG Total		3,146.0	0.99444	3,128.6	0.0	3,128.6
Orange & Rockland Utilities		1,097.0	1.00360	1,100.9	0.0	1,100.9
Rochester Gas & Electric		1,503.5	1.01448	1,525.3	0.0	1,525.3
NYMPA		12.0	1.01448	12.2	0.0	12.2
RG&E Total		1,515.5	1.01448	1,537.5	0.0	1,537.5
NYCA Coincident Peak Load		31,709.3	1.00690	31,928.0	120.1	32,048.1

Notes

^ No Loss Reallocation

BTM:NG Resource loads are not included in these forecasts

The NYCA Coincident Peak forecast differs from the NYCA ICAP Market forecast due to the application of Transmission District RLGs prior to proportional reallocation of bulk power system losses.

Calculation of G-to-J Locality NCP to CP Ratio

G-to-J Peak Ratio									
Year	G-to-J Date	G-to-J Hr Beg	NCP MW	NYCA Date	NYCA Hr Beg	CP MW	Delta	Ratio	Outlier
2008	7/18/2008	16	14,603	7/18/2008	15	14,538	65	1.0045	FALSE
2009	8/21/2009	14	14,585	8/17/2009	15	14,388	197	1.0137	FALSE
2010	7/6/2010	16	15,809	7/6/2010	16	15,809	0	1.0000	FALSE
2011	7/22/2011	15	15,972	7/22/2011	15	15,972	0	1.0000	FALSE
2012	7/18/2012	13	15,420	7/17/2012	16	14,993	427	1.0285	FALSE
2013	7/19/2013	16	15,981	7/19/2013	16	15,981	0	1.0000	FALSE
2014	7/8/2014	16	13,959	7/1/2014	16	13,374	585	1.0437	FALSE
2015	7/20/2015	16	14,708	7/29/2015	16	14,440	268	1.0186	FALSE
2016	8/11/2016	16	15,067	8/11/2016	16	15,067	0	1.0000	FALSE
2017	7/20/2017	16	14,678	7/19/2017	17	14,163	515	1.0364	FALSE
2018	8/29/2018	16	15,033	8/29/2018	16	15,033	0	1.0000	FALSE
2019	7/17/2019	15	14,602	7/29/2019	16	14,157	445	1.0314	FALSE
2020	7/28/2020	14	14,077	7/27/2020	17	13,911	166	1.0119	FALSE
2021	8/12/2021	16	14,081	8/26/2021	16	14,008	73	1.0052	FALSE
2022	8/9/2022	17	14,870	7/20/2022	17	13,883	987	1.0711	TRUE
Average			14,896			14,648	249	1.0170	
Std Dev								0.0202	
Average (Excluding Outliers)			14,898			14,702		1.0133	

Calculations based on DSS data for July and August non-holiday weekdays, excluding outliers.

Calculation of Zone J Locality NCP to CP Ratio

Zone J Locality Peak Ratio									
Year	Zone J Date	J Hr Beg	NCP MW	NYCA Date	NYCA Hr Beg	CP MW	Delta	Ratio	Outlier
2008	7/18/2008	16	10,476	7/18/2008	15	10,414	62	1.0060	FALSE
2009	8/21/2009	15	10,656	8/17/2009	15	10,387	269	1.0259	FALSE
2010	7/6/2010	16	11,213	7/6/2010	16	11,213	0	1.0000	FALSE
2011	7/22/2011	11	11,399	7/22/2011	15	11,319	80	1.0071	FALSE
2012	7/18/2012	12	11,138	7/17/2012	16	10,721	417	1.0389	FALSE
2013	7/19/2013	16	11,411	7/19/2013	16	11,411	0	1.0000	FALSE
2014	7/8/2014	16	10,094	7/1/2014	16	9,565	529	1.0553	FALSE
2015	7/20/2015	16	10,598	7/29/2015	16	10,386	212	1.0204	FALSE
2016	8/11/2016	16	10,966	8/11/2016	16	10,966	0	1.0000	FALSE
2017	7/20/2017	16	10,642	7/19/2017	17	10,224	418	1.0409	FALSE
2018	8/29/2018	16	10,878	8/29/2018	16	10,878	0	1.0000	FALSE
2019	7/17/2019	17	10,756	7/29/2019	16	10,199	557	1.0546	FALSE
2020	7/28/2020	14	10,106	7/27/2020	17	9,786	320	1.0327	FALSE
2021	8/27/2021	14	10,020	8/26/2021	16	9,995	25	1.0025	FALSE
2022	8/9/2022	16	10,753	7/20/2022	17	9,899	854	1.0863	TRUE
Average			10,740			10,491	250	1.0238	
Std Dev								0.0255	
Average (Excluding Outliers)			10,740			10,533		1.0196	

Calculations based on DSS data for July and August non-holiday weekdays, excluding outliers.

Calculation of Zone K Locality NCP to CP Ratio

Zone K Locality Peak Ratio									
Year	Zone K Date	K Hr Beg	NCP MW	NYCA Date	NYCA Hr Beg	CP MW	Delta	Ratio	Outlier
2008	7/18/2008	16	5,201	7/18/2008	15	5,181	20	1.0039	FALSE
2009	8/21/2009	15	5,191	8/17/2009	15	5,060	131	1.0259	FALSE
2010	7/6/2010	16	5,822	7/6/2010	16	5,822	0	1.0000	FALSE
2011	7/22/2011	15	5,914	7/22/2011	15	5,914	0	1.0000	FALSE
2012	7/18/2012	13	5,456	7/17/2012	16	5,111	345	1.0675	TRUE
2013	7/18/2013	16	5,764	7/19/2013	16	5,673	91	1.0160	FALSE
2014	7/3/2014	16	4,868	7/1/2014	16	4,579	289	1.0631	TRUE
2015	7/20/2015	16	5,247	7/29/2015	16	5,136	111	1.0216	FALSE
2016	8/12/2016	16	5,411	8/11/2016	16	5,190	221	1.0426	FALSE
2017	7/20/2017	16	5,137	7/19/2017	17	4,989	148	1.0297	FALSE
2018	8/29/2018	16	5,411	8/29/2018	16	5,411	0	1.0000	FALSE
2019	7/17/2019	16	5,057	7/29/2019	16	4,947	110	1.0222	FALSE
2020	7/20/2020	17	5,433	7/27/2020	17	5,344	89	1.0167	FALSE
2021	8/13/2021	17	5,138	8/26/2021	16	5,018	120	1.0239	FALSE
2022	8/9/2022	17	5,215	7/20/2022	17	5,122	93	1.0182	FALSE
Average			5,351			5,233	118	1.0225	
Std Dev								0.0202	
Average (Excluding Outliers)			5,380			5,293		1.0165	

Calculations based on DSS data for July and August non-holiday weekdays, excluding outliers.
Forecast utilizes Zone K ratio informed by LIPA analyses (1.0166).

Calculation of Upstate NCP to CP Ratios

Upstate Zonal NCP/CP Ratios							
Year	A	B	C	D	E	F	G
2008	1.0249	1.0553	1.0144	1.0412	1.0318	1.0000	1.0030
2009	1.0052	1.0000	1.0191	1.0110	1.0413	1.0049	1.0082
2010	1.0430	1.0423	1.0316	1.0237	1.0251	1.0094	1.0000
2011	1.1529	1.0787	1.0570	1.0104	1.0566	1.0904	1.0064
2012	1.0011	1.0045	1.0000	1.0353	1.0115	1.0000	1.0206
2013	1.1144	1.0297	1.0270	1.0901	1.0117	1.0111	1.0073
2014	1.0239	1.0079	1.0127	1.0253	1.0176	1.0451	1.0368
2015	1.0100	1.0000	1.0315	1.1097	1.0401	1.0008	1.0000
2016	1.0485	1.0075	1.0065	1.0188	1.0064	1.0076	1.0319
2017	1.0230	1.0022	1.0447	1.0409	1.1579	1.0779	1.0414
2018	1.1495	1.0493	1.0758	1.0439	1.0759	1.0167	1.0300
2019	1.0129	1.0132	1.0397	1.0124	1.0372	1.0393	1.0492
2020	1.0944	1.1176	1.0101	1.0000	1.0060	1.0023	1.0239
2021	1.0121	1.0151	1.0491	1.1485	1.0269	1.0451	1.0321
2022	1.0279	1.0000	1.0082	1.0090	1.0082	1.0427	1.0627
Ratio	1.0335	1.0220	1.0249	1.0293	1.0280	1.0170	1.0201

Notes

Annual values marked in red are outliers excluded from the final ratio calculation

For computational simplicity, Zones H&I NCP/CP ratios are set equal to the Zone J value

Calculations based on DSS data for July and August non-holiday weekdays, excluding outliers

Sub-Zonal Peak Load Shares

Zonal Peak Load Shares by TD

	A	B	C	D	E	F	G	H	I	J	K	Total
Con Edison								2.21%	11.00%	86.79%		100.00%
Cen Hudson					0.33%		99.67%					100.00%
LIPA											100.00%	100.00%
Nat. Grid	27.17%	6.54%	18.71%	1.31%	13.80%	32.47%						100.00%
NYPA				100.00%								100.00%
NYSEG	22.39%		44.45%	3.03%	13.46%	5.15%	0.65%	10.87%				100.00%
O&R							100.00%					100.00%
RG&E		100.00%										100.00%

Sub-zonal peak load shares used to calculate zonal contributions of Transmission District weather normalized peaks and forecasts.

Calculated using the top five NYCA daily peak load hours from each of the last five summers, a long with the demand response and municipal self-generation values from the 2022 NYCA peak hour.

2022 Weather Normalized Coincident Peak

2022 Weather-Normalized Coincident Peak Loads by Transmission District and Zone, Prior to Proportional Allocation of Losses

	A	B	C	D	E	F	G	H	I	J	K	Total
Con Edison								275.1	1,369.3	10,803.6		12,448.0
Cen Hudson					3.4		1,036.0					1,039.4
LIPA											5,062.8	5,062.8
Nat. Grid	1,886.0	454.0	1,298.7	90.9	957.9	2,238.4						6,925.9
NYPA				474.7								474.7
NYSEG	704.4		1,398.4	95.3	423.5	162.0	20.4	342.0				3,146.0
O&R							1,097.0					1,097.0
RG&E		1,515.5										1,515.5
Total	2,590.4	1,969.5	2,697.1	660.9	1,384.8	2,400.4	2,153.4	617.1	1,369.3	10,803.6	5,062.8	31,709.3

Includes station power deduction (National Grid Zone F).

Application of 2023 Regional Load Growth Factors

2023 Coincident Peak Forecast, Prior to Large Load Growth and BTM:NG Resources

	A	B	C	D	E	F	G	H	I	J	K	Total	RLGF
Con Edison								280.7	1,397.1	11,022.9		12,700.7	1.0203
Cen Hudson					3.4		1,028.5					1,031.9	0.9928
LIPA											4,999.0	4,999.0	0.9874
Nat. Grid	1,893.4	455.8	1,303.8	91.3	961.6	2,247.1						6,953.0	1.0039
NYPA				476.4								476.4	1.0035
NYSEG	700.5		1,390.7	94.8	421.1	161.1	20.3	340.1				3,128.6	0.9944
O&R							1,100.9					1,100.9	1.0036
RG&E		1,537.5										1,537.5	1.0145
Total	2,593.9	1,993.3	2,694.5	662.5	1,386.1	2,408.2	2,149.7	620.8	1,397.1	11,022.9	4,999.0	31,928.0	1.0069

No Loss Reallocation

2023 Coincident Peak Forecast

2023 Coincident Peak Forecast, Including Large Load Growth, Prior to BTM:NG Resources

	A	B	C	D	E	F	G	H	I	J	K	Total
Con Edison								280.7	1,397.1	11,022.9		12,700.7
Cen Hudson					3.4		1,028.5					1,031.9
LIPA											4,999.0	4,999.0
Nat. Grid	1,986.4	455.8	1,303.8	91.3	961.6	2,247.1						7,046.0
NYPA				503.5								503.5
NYSEG	700.5		1,390.7	94.8	421.1	161.1	20.3	340.1				3,128.6
O&R							1,100.9					1,100.9
RG&E		1,537.5										1,537.5
Total	2,686.9	1,993.3	2,694.5	689.6	1,386.1	2,408.2	2,149.7	620.8	1,397.1	11,022.9	4,999.0	32,048.1
Large Loads	93.0			27.1								120.1

No Loss Reallocation. This forecast is analogous to the Gold Book coincident peak forecast.

The NYCA Coincident Peak forecast of 32,048.1 MW differs from the ICAP Market forecast of 32,048.9 MW due to the application of Transmission District RLGs prior to proportional reallocation of bulk power system losses.

BTM:NG Resource Load Forecast

2023 Transmission District Forecast of BTM:NG Resources

	Transmission District	2022 Peak Proxy Load	(1 + WNF)	(1 + RLGf)	2023 Average Coincident Host Load
Row	(a)	(b)	(c)	(d)	(e)=(b)*(c)*(d)
1	Con Edison	22.0	1.0226	1.0203	23.0
2	Central Hudson				
3	LIPA	40.5	1.0276	0.9874	41.1
4	National Grid	1.9	1.0226	1.0039	2.0
5	NYPA				
6	NYSEG	51.4	1.0226	0.9944	52.3
7	O&R				
8	RG&E	50.9	1.0286	1.0145	53.1
	Total	166.7			171.5

2023 Coincident Peak Forecast Including BTM:NG Resource Load

2023 Coincident Peak Forecast, Including Large Load Growth and BTM:NG Resources

	A	B	C	D	E	F	G	H	I	J	K	Total
Con Edison								280.7	1,397.1	11,045.9		12,723.7
Cen Hudson					3.4		1,028.5					1,031.9
LIPA											5,040.1	5,040.1
Nat. Grid	1,986.4	455.8	1,303.8	91.3	963.6	2,247.1						7,048.0
NYPA				503.5								503.5
NYSEG	700.5		1,443.0	94.8	421.1	161.1	20.3	340.1				3,180.9
O&R							1,100.9					1,100.9
RG&E		1,590.6										1,590.6
Total	2,686.9	2,046.4	2,746.8	689.6	1,388.1	2,408.2	2,149.7	620.8	1,397.1	11,045.9	5,040.1	32,219.6

BTM:NG Resource Load	53.1	52.3			2.0					23.0	41.1	171.5
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These BTM:NG values are included in the table above.

No Loss Reallocation

G-to-J Locality Peak Forecast

2023 G-to-J Locality Peak Forecast, Prior to BTM:NG Resources												
	A	B	C	D	E	F	G	H	I	J	K	Total
G-to-J Peak							2,178.4	629.1	1,415.7	11,169.5		15,392.7
BTM:NG Resources												
	A	B	C	D	E	F	G	H	I	J	K	Total
BTM:NG							0.0	0.0	0.0	23.0		23.0
2023 G-to-J Locality Peak Forecast, Including BTM:NG Resources												
	A	B	C	D	E	F	G	H	I	J	K	Total
G-to-J Peak							2,178.4	629.1	1,415.7	11,192.5		15,415.7
NCP Ratio							1.0133	1.0133	1.0133	1.0133		1.0133

No Loss Reallocation. The G-to-J Locality Peak Forecast prior to BTM:NG Resources is analogous to the Gold Book forecast.

Zonal Non-Coincident Peak Forecasts

2023 Non-Coincident Zonal Peak Forecasts, Prior to Large Loads and BTM:NG Resources											
	A	B	C	D	E	F	G	H	I	J	K
NC Peaks	2,680.8	2,037.2	2,761.6	681.9	1,424.9	2,449.1	2,192.9	633.0	1,424.4	11,239.4	5,081.8
2023 Large Load Forecast											
	A	B	C	D	E	F	G	H	I	J	K
Large Loads	93.0	0.0	0.0	27.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2023 Non-Coincident Zonal Peak Forecasts, Including Large Load Growth, Prior to BTM:NG Resources											
	A	B	C	D	E	F	G	H	I	J	K
NC Peaks	2,773.8	2,037.2	2,761.6	709.0	1,424.9	2,449.1	2,192.9	633.0	1,424.4	11,239.4	5,081.8
BTM:NG Resources											
	A	B	C	D	E	F	G	H	I	J	K
BTM:NG	0.0	53.1	52.3	0.0	2.0	0.0	0.0	0.0	0.0	23.0	41.1
2023 Non-Coincident Zonal Peak Forecasts, Including Large Load Growth and BTM:NG Resources											
	A	B	C	D	E	F	G	H	I	J	K
NC Peaks	2,773.8	2,090.3	2,813.9	709.0	1,426.9	2,449.1	2,192.9	633.0	1,424.4	11,262.4	5,122.9
NCP Ratios	1.0335	1.0220	1.0249	1.0293	1.0280	1.0170	1.0201	1.0196	1.0196	1.0196	1.0166

No Loss Reallocation. NCP forecasts prior to BTM:NG Resources are analogous to the Gold Book forecast.

Final ICAP Market Forecast Posting

- The final 2023 ICAP Market Forecast will be posted on the **ICAP Market** page of the NYISO website:

<https://www.nyiso.com/installed-capacity-market>

Installed Capacity Data > Announcements > Information and Announcements

Questions?

Our Mission & Vision



Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation