

2020 Final ICAP Forecast

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Demand Forecasting & Analysis

Load Forecasting Task Force

December 20, 2019



Changes From Preliminary Forecast

- Updated NYSEG and RG&E RLGs, with resultant forecast changes
- Updated NYPA weather-normalized load and forecast values
- Minor updates to G-to-J and J Locality forecasts based on weather-normalized Zonal peak load shares
- (1 + WNF) updated for use with BTM:NG units
- 2020 LCR forecast added, including BTM:NG impacts
- All calculations checked and results rounded to nearest 0.1 MW

2019 Load Reconciliation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	NYISO DSS Actual MW Data					Transmission District Load Data					
	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
7/20/2019, Hour Beginning 4 PM											
V8 - 12/20/19											
Consolidated Edison											
Con-Ed LSE Load						11,438.8	165.5	11,604.3	1,387.1	45.5	13,036.9
Transmission District Load Served						11,438.8	165.5	11,604.3	1,387.1	45.5	13,036.9
Deduction for BTM:NG						0.0	0.0	0.0			
Transmission District Total Load	11,438.8	165.5		11,604.3	1.4%	11,438.8	165.5	11,604.3			
Central Hudson											
Central Hudson LSE Load						1,093.0	32.1	1,125.1	-28.0	0.0	1,097.1
Transmission District Load Served						1,093.0	32.1	1,125.1	-28.0	0.0	1,097.1
Deduction for BTM:NG						0.0	0.0	0.0			
Transmission District Total Load	1,093.0	32.1		1,125.1	2.9%	1,093.0	32.1	1,125.1			
Long Island Power Authority											
LIPA LSE Load						5,077.9	68.9	5,146.8	-131.3	3.0	5,018.5
NYPA Load & Greenport Load						70.9	1.0	71.9	-1.8	0.0	70.1
Freeport & Rockville Centre Load			6.0			102.5	1.4	103.9	-2.6	0.0	101.3
Transmission District Load Served			6.0			5,251.3	71.3	5,322.6	-135.7	3.0	5,189.9
Deduction for BTM:NG						0.0	0.0	0.0			
Transmission District Total Load	5,251.5	71.3	6.0	5,328.8	1.3%	5,251.3	71.3	5,322.6			
National Grid											
National Grid LSE						5,826.0	369.0	6,195.0	332.0	0.0	6,527.0
NYPA Load						36.6	2.3	38.9	2.1	0.0	41.0
NYMPA Load						264.7	16.8	281.5	15.1	0.0	296.6
Jamestown Load			48.3			55.8	3.5	59.3	3.2	0.0	62.5
Green Island Load						6.2	0.4	6.6	0.4	0.0	7.0
Transmission District Load Served			48.3			6,189.3	392.0	6,581.3	352.8	0.0	6,934.1
Deduction for BTM:NG						0.0	0.0	0.0			
Transmission District Total Load	6,141.0	392.0	48.30	6,581.3	6.0%	6,189.3	392.0	6,581.3			

*Note: Column 9 includes weather adjustment and weekend to weekday adjustment.

2019 Load Reconciliation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	NYISO DSS Actual MW Data					Transmission District Load Data						
	7/20/2019, Hour Beginning 4 PM	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
V8 - 12/20/19												
New York Power Authority												
NYPA LSE Load						302.1	3.2	305.3	-0.7	0.0	304.6	
NYMPA Load						55.2	0.6	55.8	1.8	0.0	57.6	
Transmission District Load Served						357.3	3.8	361.1	1.1	0.0	362.2	
Deduction for BTM:NG						0.0	0.0	0.0				
Transmission District Total Load		357.3	3.8	361.1	1.1%	357.3	3.8	361.1				
New York State Electric & Gas												
NYSEG LSE Load						2,845.4	57.5	2,902.9	128.8	28.2	3,059.9	
NYPA Load						44.8	0.9	45.7	2.0	0.0	47.7	
NYMPA Load						61.5	1.2	62.7	2.8	0.0	65.5	
Transmission District Load Served						2,951.7	59.6	3,011.3	133.6	28.2	3,173.1	
Deduction for BTM:NG						0.0	0.0	0.0				
Transmission District Total Load		2,951.7	59.6	3,011.3	2.0%	2,951.7	59.6	3,011.3				
Orange & Rockland Utilities												
O&R LSE Load						1,000.6	8.4	1,009.0	41.0	0.0	1,050.0	
Transmission District Load Served						1,000.6	8.4	1,009.0	41.0	0.0	1,050.0	
Deduction for BTM:NG						0.0	0.0	0.0				
Transmission District Total Load		996.0	8.4	1,004.4	0.8%	1,000.6	8.4	1,009.0				
Rochester Gas & Electric												
RG&E LSE Load						1,426.6	14.0	1,440.6	74.7	0.1	1,515.4	
NYMPA Load						10.9	0.1	11.0	0.6	0.0	11.6	
Transmission District Load Served						1,437.5	14.1	1,451.6	75.3	0.1	1,527.0	
Deduction for BTM:NG						0.0	0.0	0.0				
Transmission District Total Load		1,437.5	14.1	1,451.6	1.0%	1,437.5	14.1	1,451.6				
Totals		29,666.8	746.8	54.3	30,467.9	2.5%	29,719.5	746.8	30,466.3	1,827.2	76.8	32,370.3

*Note: Column 9 includes weather adjustment and weekend to weekday adjustment.

2019 Load Reconciliation	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	7/20/2019, Hour Beginning 4 PM V8 - 12/20/19	TOs' W/N MW With DR	Reallocation of Losses			Proportional	Adj. W/N	2019	2019	2019 Adj Load
			W/N Losses	Station Power	Adj. W/N Load Less Losses	Percent Loss Allocation	Allocation of Losses	Load Less Losses	Adjusted Actual Load (MW)	BTM:NG (1 + WNF)
Consolidated Edison										
Con-Ed LSE Load	13,036.9	185.9		12,851.0	40.72%	321.6	12,851.0	13,172.6		
Transmission District Load Served	13,036.9	185.9		12,851.0	40.72%	321.6	12,851.0	13,172.6	1.0250	13,036.9
Deduction for BTM:NG										
Transmission District Total Load										
Central Hudson										
Central Hudson LSE Load	1,097.1	31.3		1,065.8	3.38%	26.7	1,065.8	1,092.5		
Transmission District Load Served	1,097.1	31.3		1,065.8	3.38%	26.7	1,065.8	1,092.5	1.0250	1,097.1
Deduction for BTM:NG										
Transmission District Total Load										
Long Island Power Authority										
LIPA LSE Load	5,018.5	67.2		4,951.3	15.69%	123.90	4,951.30	5,075.2		
NYPA Load & Greenport Load	70.1	0.9		69.2	0.22%	1.70	69.20	70.9		
Freeport & Rockville Centre Load	101.3	1.4		99.9	0.32%	2.50	99.90	102.4		
Transmission District Load Served	5,189.9	69.5		5,120.4	16.22%	128.1	5,120.4	5,248.5	1.1181	5,189.9
Deduction for BTM:NG										
Transmission District Total Load										
National Grid										
National Grid LSE	6,527.0	388.8	13.7	6,124.5	19.40%	153.2	6,124.5	6,277.7		
NYPA Load	41.0	2.4		38.6	0.12%	0.9	38.6	39.5		
NYMPA Load	296.6	17.7		278.9	0.88%	7.0	278.9	285.9		
Jamestown Load	62.5	3.7		58.8	0.19%	1.5	58.8	60.3		
Green Island Load	7.0	0.4		6.6	0.02%	0.2	6.6	6.8		
Transmission District Load Served	6,934.1	413.0	13.7	6,507.4	20.61%	162.8	6,507.4	6,670.2	1.0250	6,920.4
Deduction for BTM:NG										
Transmission District Total Load										

2019 Load Reconciliation	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	7/20/2019, Hour Beginning 4 PM V8 - 12/20/19	Reallocation of Losses				Proportional	Adj. W/N	2019	2019	2019 Adj Load
		TOs' W/N MW With DR	W/N Losses	Station Power	Adj. W/N Load Less Losses	Percent Loss Allocation	Allocation of Losses	Load Less Losses	Adjusted Actual Load (MW)	BTM:NG (1 + WNF)
New York Power Authority										
NYPA LSE Load	304.6	3.2		301.4	0.95%	7.5	301.4	308.9		
NYMPA Load	57.6	0.6		57.0	0.18%	1.4	57.0	58.4		
Transmission District Load Served	362.2	3.8		358.4	1.13%	8.9	358.4	367.3	1.0250	362.2
Deduction for BTM:NG										
Transmission District Total Load										
New York State Electric & Gas										
NYSEG LSE Load	3,059.9	60.5		2,999.4	9.50%	75.0	2,999.4	3,074.4		
NYPA Load	47.7	1.0		46.7	0.15%	1.2	46.7	47.9		
NYMPA Load	65.5	1.3		64.2	0.20%	1.6	64.2	65.8		
Transmission District Load Served	3,173.1	62.8		3,110.3	9.85%	77.8	3,110.3	3,188.1	1.0250	3,173.1
Deduction for BTM:NG										
Transmission District Total Load										
Orange & Rockland Utilities										
O&R LSE Load	1,050.0	8.7		1,041.3	3.30%	26.1	1,041.3	1,067.4		
Transmission District Load Served	1,050.0	8.7		1,041.3	3.30%	26.1	1,041.3	1,067.4	1.0250	1,050.0
Deduction for BTM:NG										
Transmission District Total Load										
Rochester Gas & Electric										
RG&E LSE Load	1,515.4	14.7		1,500.7	4.75%	37.5	1,500.7	1,538.2		
NYMPA Load	11.6	0.1		11.5	0.04%	0.3	11.5	11.8		
Transmission District Load Served	1,527.0	14.8		1,512.2	4.79%	37.8	1,512.2	1,550.0	1.0250	1,527.0
Deduction for BTM:NG										
Transmission District Total Load										
Totals	32,370.3	789.80	13.7	31,566.80	100.00%	789.80	31,566.80	32,356.6	1.0250	32,356.6

2020 New York Control Area Peak Load Forecast (MW)

12/20/2019 V8	Transmission Districts	2019 Weather Normalized MW Load + Losses MW	(1 + Regional Load Growth Factor)	2020 Load At Time of NYCA Peak	2020 Deductions	2020 ICAP Market Forecast	2020 Locality Forecasts		
							J Locality	K Locality	G-J Locality
Consolidated Edison		13,172.6	0.99980	13,170.0	0.0	13,170.0	11,477.1		13,147.5
Central Hudson		1,092.5	0.99100	1,082.7	0.0	1,082.7			1,093.7
Long Island Power Authority		5,075.2	0.98560	5,002.1	0.0	5,002.1			
NYP&G		70.9	0.98560	69.9	0.0	69.9			
F&R		102.4	0.98560	100.9	0.0	100.9			
LIPA Total		5,248.5	0.98560	5,172.9	0.0	5,172.9		5,227.5	
National Grid		6,277.7	1.00000	6,277.7	0.0	6,277.7			
NYP&G		39.5	1.00000	39.5	0.0	39.5			
NYMPA		285.9	1.00000	285.9	0.0	285.9			
Jamestown		60.3	1.00000	60.3	0.0	60.3			
Green Island Power Authority		6.8	1.00000	6.8	0.0	6.8			
National Grid Total		6,670.2	1.00000	6,670.2	0.0	6,670.2			
New York Power Authority		308.9	1.08190	334.2	0.0	334.2			
NYMPA		58.4	1.00100	58.5	0.0	58.5			
NYPA Total		367.3	1.06920	392.7	0.0	392.7			
New York State Electric & Gas		3,074.4	1.00010	3,074.7	0.0	3,074.7			
NYP&G		47.9	1.00010	47.9	0.0	47.9			
NYMPA		65.8	1.00010	65.8	0.0	65.8			
NYSEG Total		3,188.1	1.00010	3,188.4	0.0	3,188.4			386.5
Orange & Rockland Utilities		1,067.4	1.00800	1,075.9	0.0	1,075.9			1,067.6
Rochester Gas & Electric		1,538.2	0.99570	1,531.6	0.0	1,531.6			
NYMPA		11.8	0.99570	11.7	0.0	11.7			
RG&E Total		1,550.0	0.99570	1,543.3	0.0	1,543.3			
Total Load in NYCA or Locality		32,356.6	0.99813	32,296.1	0.0	32,296.1	11,477.1	5,227.5	15,695.3

(1) 2019 Actual Coincident Peak in G to J Locality

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Transmission District	G	H	I	J	G-to-J Total
Con Edison		263.2	1,312.0	10,029.1	11,604.3
Cen Hudson	1,121.1				1,121.1
LIPA					
Nat. Grid					
NYPA					
NYSEG	24.1	359.7			383.8
O&R	1,004.4				1,004.4
RG&E					
Total	2,149.6	622.9	1,312.0	10,029.1	14,113.6

(2) 2019 Weather-Adjusted Coincident Peak in G to J Locality

Transmission District	G	H	I	J	G-to-J Total
Con Edison		287.7	1,430.5	11,318.7	13,036.9
Cen Hudson	1,094.1				1,094.1
LIPA					
Nat. Grid					
NYPA					
NYSEG	23.8	359.4			383.2
O&R	1,050.0				1,050.0
RG&E					
Total	2,167.9	647.1	1,430.5	11,318.7	15,564.2

(3) 2019 Weather-Adjusted Locality Peak for G-to-J

Transmission District	G	H	I	J	G-to-J Total
Con Edison		290.1	1,442.9	11,417.2	13,150.2
Cen Hudson	1,103.6				1,103.6
LIPA					
Nat. Grid					
NYPA					
NYSEG	24.0	362.5			386.5
O&R	1,059.1				1,059.1
RG&E					
Total	2,186.7	652.6	1,442.9	11,417.2	15,699.4
NCP/CP ratio	1.0087	1.0087	1.0087	1.0087	

(4) 2020 Peak Forecast for G-to-J Locality

Transmission District	G	H	I	J	G-to-J Total	RLGF
Con Edison		290.0	1,442.6	11,414.9	13,147.5	0.9998
Cen Hudson	1,093.7				1,093.7	0.9910
LIPA						
Nat. Grid						
NYPA						
NYSEG	24.0	362.5			386.5	1.0001
O&R	1,067.6				1,067.6	1.0080
RG&E						
Total	2,185.3	652.5	1,442.6	11,414.9	15,695.3	0.9997

Zone J and K Locality Peaks

Locality	2019 Actual Load	Municipal Generation	Weather Adjustment	Demand Response	2019 Weather Adjusted Load	Regional Load Growth Factor	2020 Locality Forecast
Zone J Locality	10,756.0	0.0	719.8	3.6	11,479.4	0.9998	11,477.1
Zone K Locality	5,411.4	41.4	-152.9	4.0	5,303.9	0.9856	5,227.5

2019 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								287.7	1,430.5	11,318.7		13,036.9
Cen Hudson					3.0		1,094.1					1,097.1
LIPA											5,189.9	5,189.9
Nat. Grid	1,961.9	427.6	1,325.5	91.6	911.7	2,202.1						6,920.4
NYPA				362.2								362.2
NYSEG	699.3		1,402.5	104.7	433.5	149.9	23.8	359.4				3,173.1
O&R							1,050.0					1,050.0
RG&E		1,527.0										1,527.0
Total	2,661.2	1,954.6	2,728.0	558.5	1,348.2	2,352.0	2,167.9	647.1	1,430.5	11,318.7	5,189.9	32,356.6

Includes station power deduction.

2020 Coincident Peak Forecast, Prior to BTM:NG Resources

	A	B	C	D	E	F	G	H	I	J	K	Total	RLGF
Con Edison								287.6	1,430.2	11,316.4		13,034.2	0.9998
Gen Hudson					3.0		1,084.3					1,087.3	0.9910
LIPA											5,115.2	5,115.2	0.9856
Nat. Grid	1,961.9	427.6	1,325.5	91.6	911.7	2,202.1						6,920.4	1.0000
NYPA				387.0								387.0	1.0692
NYSEG	699.4		1,402.6	104.7	433.5	149.9	23.8	359.4				3,173.3	1.0001
O&R							1,058.4					1,058.4	1.0080
RG&E		1,520.3										1,520.3	0.9957
Total	2,661.3	1,947.9	2,728.1	583.3	1,348.2	2,352.0	2,166.5	647.0	1,430.2	11,316.4	5,115.2	32,296.1	0.9981

2020 Transmission District Forecast of BTM:NG Resources

	Transmission District	2019 Peak Proxy Load	(1 + WNF)	(1 + RLGF)	2020 Average Coincident Host Load
Row	(a)	(b)	(c)	(d)	(e)=(b)*(c)*(d)
1	Con-Ed				
2	Central Hudson				
3	LIPA	38.1	1.1181	0.9856	42.0
4	National Grid				
5	NYPA				
6	NYSEG	10.0	1.0250	1.0001	10.3
7	O&R				
8	RG&E				
	Total	48.1			52.3

2020 Coincident Peak Forecast for LCR Study, Including BTM:NG Resources

	A	B	C	D	E	F	G	H	I	J	K	Total
Con Edison								287.6	1,430.2	11,316.4		13,034.2
Gen Hudson					3.0		1,084.3					1,087.3
LIPA											5,157.2	5,157.2
Nat. Grid	1,961.9	427.6	1,325.5	91.6	911.7	2,202.1						6,920.4
NYPA				387.0								387.0
NYSEG	699.4		1,412.9	104.7	433.5	149.9	23.8	359.4				3,183.6
O&R							1,058.4					1,058.4
RG&E		1,520.3										1,520.3
Total	2,661.3	1,947.9	2,738.4	583.3	1,348.2	2,352.0	2,166.5	647.0	1,430.2	11,316.4	5,157.2	32,348.4

BTM:NG & Load Modifiers			10.3								42.0	52.3
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These BTM:NG values are included in the table above.

2020 G-to-J Locality Peaks

	A	B	C	D	E	F	G	H	I	J	K	Total
G-to-J Peaks							2,185.3	652.5	1,442.6	11,414.9		15,695.3

2020 Non-Coincident Zonal Peaks

	A	B	C	D	E	F	G	H	I	J	K
NC Peaks	2,843.1	2,026.2	2,856.7	617.2	1,413.0	2,428.4	2,204.4	657.5	1,454.4	11,477.1	5,269.5

Questions?

Our mission, in collaboration with our stakeholders, is to serve the public interest and provide benefit to consumers by:

- Maintaining and enhancing regional reliability
- Operating open, fair and competitive wholesale electricity markets
- Planning the power system for the future
- Providing factual information to policymakers, stakeholders and investors in the power system

