

2020 Preliminary ICAP Forecast

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Demand Forecasting & Analysis

Load Forecasting Task Force

December 9, 2019



Agenda

1. 2019 Weather-Normalized Peak Load
2. 2020 Preliminary ICAP Forecast

2019 Weather-Normalized Peak Load

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
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
V5 - 12/6/19												
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	1.9	0.0	57.7	
Transmission District Load Served						357.3	3.8	361.1	1.2	0.0	362.3	
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	1,827.3	76.8	32,370.4

*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 V5 - 12/6/19	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)
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	1.0250	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	Reallocation of Losses				Proportional	Adj. W/N	2019	2019	2019 Adj Load
		TOs' W/N MW	W/N	Station	Adj. W/N Load	Percent Loss	Allocation	Load Less	Adjusted Actual	BTM:NG
V5 - 12/6/19	With DR	Losses	Power	Less Losses	Allocation	of Losses	Losses	Load (MW)	(1 + WNF)	Loss Adjustment
New York Power Authority										
NYP&E LSE Load	304.6	3.2		301.4	0.95%	7.5	301.4	308.9		
NYM&E Load	57.7	0.6		57.1	0.18%	1.4	57.1	58.5		
Transmission District Load Served	362.3	3.8		358.5	1.13%	8.9	358.5	367.4	1.0250	362.3
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		
NYP&E Load	47.7	1.0		46.7	0.15%	1.2	46.7	47.9		
NYM&E 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		
NYM&E 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	32,370.4	789.80	13.7	31,566.90	100.00%	789.80	31,566.90	32,356.7	1.0250	32,356.7

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	2,215.8						6,934.1
NYPA				362.3								362.3
NYSEG	705.4		1,438.4	108.2	413.2	148.8	22.3	336.8				3,173.1
O&R							1,050.0					1,050.0
RG&E		1,527.0										1,527.0
Total	2,667.3	1,954.6	2,763.9	562.1	1,327.9	2,364.6	2,166.4	624.5	1,430.5	11,318.7	5,189.9	32,370.4

2020 Preliminary ICAP Forecast

2020 New York Control Area Peak Load Forecast (MW)

12/4/2019 VI	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	11,487.6		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			
NYPA & Greenport		70.9	0.98560	69.9	0.0	69.9			
Freeport & Rockville Centre		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			
NYPA		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	1.18300	365.4	0.0	365.4			
NYMPA		58.5	1.00100	58.6	0.0	58.6			
NYPA Total		367.4	1.15410	424.0	0.0	424.0			
New York State Electric & Gas		3,074.4	0.99560	3,060.9	0.0	3,060.9			
NYPA		47.9	0.99560	47.7	0.0	47.7			
NYMPA		65.8	0.99560	65.5	0.0	65.5			
NYSEG Total		3,188.1	0.99560	3,174.1	0.0	3,174.1			360.6
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	0.99400	1,529.0	0.0	1,529.0			
NYMPA		11.8	0.99400	11.7	0.0	11.7			
RG&E Total		1,550.0	0.99400	1,540.7	0.0	1,540.7			
Total Load in NYCA or Locality		32,356.7	0.99857	32,310.5	0.0	32,310.5	11,487.6	5,227.5	15,669.4

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

7/20/2019 HB 16

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	22.3	336.8			359.1
O&R	1,050.0				1,050.0
RG&E					
Total	2,166.4	624.5	1,430.5	11,318.7	15,540.1

(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	22.5	339.7			362.2
O&R	1,059.1				1,059.1
RG&E					
Total	2,185.2	629.8	1,442.9	11,417.2	15,675.1
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	22.4	338.2			360.6	0.9956
O&R	1,067.6				1,067.6	1.0080
RG&E						
Total	2,183.7	628.2	1,442.6	11,414.9	15,669.4	0.9996

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	730.3	3.6	11,489.9	0.9998	11,487.6
Zone K Locality	5,411.4	41.4	-152.9	4.0	5,303.9	0.9856	5,227.5

G-to-J Locality Peak Ratio

Year	G-to-J Date	G-to-J Hr Beg	NCP MW	NYCA Date	NYCA Hr Beg	CP MW	Delta	Ratio
2010	7/6/2010	17	16,186	7/6/2010	17	16,186	-	1.0000
2011	7/22/2011	16	16,546	7/22/2011	16	16,546	-	1.0000
2012	7/18/2012	13	15,783	7/17/2012	14	15,769	14	1.0009
2013	7/19/2013	17	16,373	7/19/2013	17	16,373	-	1.0000
2014	9/2/2014	17	14,551	9/2/2014	16	14,520	32	1.0022
2015	7/20/2015	16	14,730	7/29/2015	16	14,455	275	1.0190
2016	8/11/2016	16	15,068	8/11/2016	16	15,068	-	1.0000
2017	7/20/2017	16	14,704	7/19/2017	17	14,158	546	1.0385
2018	8/29/2018	16	15,192	8/29/2018	16	15,192	-	1.0000
2019	7/17/2019	17	14,572	7/20/2019	16	14,114	458	1.0325
Average			15,371			15,238		
Ratio of G-to-J Locality Peak to G-to-J Coincident Peak:								1.0087

DSS Load Data

Zone J Locality Peak Ratio

Year	Zone J Date	Zone J Hr Beg	NCP MW	NYCA Date	NYCA Hr Beg	CP MW	Delta	Ratio
2010	7/6/2010	17	11,600	7/6/2010	17	11,600	-	1.0000
2011	7/22/2011	12	11,876	7/22/2011	16	11,826	50	1.0042
2012	7/18/2012	15	11,438	7/17/2012	14	11,405	33	1.0028
2013	7/19/2013	17	11,736	7/19/2013	17	11,736	-	1.0000
2014	9/2/2014	17	10,572	9/2/2014	16	10,567	5	1.0005
2015	7/20/2015	16	10,675	7/29/2015	16	10,455	220	1.0210
2016	8/11/2016	16	11,006	8/11/2016	16	11,006	-	1.0000
2017	7/20/2017	17	10,722	7/19/2017	17	10,249	473	1.0461
2018	8/29/2018	16	11,037	8/29/2018	16	11,037	-	1.0000
2019	7/17/2019	17	10,756	7/20/2019	16	9,980	776	1.0778
Average			11,142			10,986		
Ratio of Zone J Locality Peak to Zone J Coincident Peak:								1.0142

DSS Load Data

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

