

# 2019 Preliminary ICAP Forecast

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**Load Forecasting Task Force**

December 11, 2018 Rensselaer, NY



2018 Load Reconciliation		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
8/29/18, Hour Beginning 4 PM		NYISO DSS Actual MW Data					Transmission Owner Load Data						
V3. 12/11/18		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	
<b>Consolidated Edison</b>													
Con-Ed LSE Load							12,565.2	120.8	12,686.0	121.6	295.3		13,102.9
<b>Transmission District Load Served</b>							12,565.2	120.8	12,686.0	121.6	295.3		13,102.9
Deduction for BTM:NG							0.0	0.0	0.0				
<b>Transmission District Total Load</b>		12,565.2	120.8		12,686.0	1.0%	12,565.2	120.8	12,686.0				
<b>Central Hudson</b>													
Central Hudson LSE Load							1,076.4	25.0	1,101.4	-5.0	1.9		1,098.3
<b>Transmission District Load Served</b>							1,076.4	25.0	1,101.4	-5.0	1.9		1,098.3
Deduction for BTM:NG							0.0	0.0	0.0				
<b>Transmission District Total Load</b>		1,076.4	25.0		1,101.4	2.3%	1,076.4	25.0	1,101.4				
<b>Long Island Power Authority</b>													
LIPA LSE Load							5,136.2	70.0	5,206.2	-136.4	10.0		5,079.8
NYPA Load & Greenport Load							98.8	1.3	100.1	-2.6	0.0		97.5
Freeport & Rockville Centre Load							114.1	1.6	115.7	-3.0	0.0		112.7
<b>Transmission District Load Served</b>							5,349.1	72.9	5,422.0	-142.0	10.0		5,290.0
Deduction for BTM:NG							0.0	0.0	0.0				
<b>Transmission District Total Load</b>		5,338.4	72.9	7.0	5,418.3	1.3%	5,349.1	72.9	5,422.0				
<b>National Grid</b>													
National Grid LSE							5,969.5	319.8	6,289.3	-94.3	231.4		6,426.4
NYPA Load							35.4	1.9	37.3	-0.6	0.0		36.7
NYMPA Load							279.8	15.0	294.8	-4.4	0.0		290.4
Jamestown Load							68.2	3.7	71.9	-1.1	0.0		70.8
Green Island Load							6.2	0.3	6.5	-0.1	0.0		6.4
<b>Transmission District Load Served</b>							6,359.1	340.7	6,699.8	-100.5	231.4		6,830.7
Deduction for BTM:NG							0.0	0.0	0.0				
<b>Transmission District Total Load</b>		6,330.1	340.7	53.1	6,723.9	5.1%	6,359.1	340.7	6,699.8				

2018 Load Reconciliation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	NYISO DSS Actual MW Data					Transmission Owner 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
8/29/18, Hour Beginning 4 PM											
V3. 12/11/18											
<b>New York Power Authority</b>											
NYPA LSE Load						272.2	3.4	275.6	0.0	0.0	275.6
NYMPA Load						89.4	1.1	90.5	1.1	0.0	91.6
<b>Transmission District Load Served</b>						<b>361.6</b>	<b>4.5</b>	<b>366.1</b>	<b>1.1</b>	<b>0.0</b>	<b>367.2</b>
Deduction for BTM:NG						0.0	0.0	0.0			
<b>Transmission District Total Load</b>	361.6	4.5		366.1	1.2%	361.6	4.5	366.1			
<b>New York State Electric &amp; Gas</b>											
NYSEG LSE Load						2,927.7	75.0	3,002.7	1.9	44.8	3,049.4
NYPA Load						45.8	1.2	47.0	0.0	0.0	47.0
NYMPA Load						71.7	1.8	73.5	0.0	0.0	73.5
<b>Transmission District Load Served</b>						<b>3,045.2</b>	<b>78.0</b>	<b>3,123.2</b>	<b>1.9</b>	<b>44.8</b>	<b>3,169.9</b>
Deduction for BTM:NG						0.0	0.0	0.0			
<b>Transmission District Total Load</b>	3,045.2	78.0		3,123.2	2.5%	3,045.2	78.0	3,123.2			
<b>Orange &amp; Rockland Utilities</b>											
O&R LSE Load						1,025.8	9.3	1,035.1	68.0	19.0	1,122.1
<b>Transmission District Load Served</b>						<b>1,025.8</b>	<b>9.3</b>	<b>1,035.1</b>	<b>68.0</b>	<b>19.0</b>	<b>1,122.1</b>
Deduction for BTM:NG						0.0	0.0	0.0			
<b>Transmission District Total Load</b>	1,025.8	9.3		1,035.1	0.9%	1,025.8	9.3	1,035.1			
<b>Rochester Gas &amp; Electric</b>											
RG&E LSE Load						1,503.1	17.4	1,520.5	-55.6	23.6	1,488.5
NYMPA Load						11.8	0.1	11.9	-0.4	0.0	11.5
<b>Transmission District Load Served</b>						<b>1,514.9</b>	<b>17.5</b>	<b>1,532.4</b>	<b>-56.0</b>	<b>23.6</b>	<b>1,500.0</b>
Deduction for BTM:NG						0.0	0.0	0.0			
<b>Transmission District Total Load</b>	1,513.7	17.5		1,531.2	1.1%	1,514.9	17.5	1,532.4			
<b>Totals</b>	<b>31,256.4</b>	<b>668.7</b>	<b>60.1</b>	<b>31,985.2</b>	<b>2.1%</b>	<b>31,297.3</b>	<b>668.7</b>	<b>31,966.0</b>	<b>-110.9</b>	<b>626.0</b>	<b>32,481.1</b>

2018 Load Reconciliation	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	Reallocation of Losses					Proportional	Adj. W/N	2018	2018	2018 Adj Load
	8/29/18, Hour Beginning 4 PM	TOs' W/N MW	W/N	Station	Adj. W/N Load	Percent Loss	Allocation	Load Less	Adjusted Actual	(1 + WNF)
V3. 12/11/18	With DR	Losses	Power	Less Losses	Allocation	of Losses	Losses	Load (MW)		Loss Adjustment
<b>Consolidated Edison</b>										
Con-Ed LSE Load	13,102.9	124.8		12,978.1	40.83%	277.2	12,978.1	13,255.3		
<b>Transmission District Load Served</b>	<b>13,102.9</b>	124.8		12,978.1	40.83%	<b>277.2</b>	12,978.1	<b>13,255.3</b>	<b>1.0096</b>	<b>13,102.9</b>
Deduction for BTM:NG										
<b>Transmission District Total Load</b>										
<b>Central Hudson</b>										
Central Hudson LSE Load	1,098.3	24.9		1,073.4	3.38%	23.0	1,073.4	1,096.4		
<b>Transmission District Load Served</b>	<b>1,098.3</b>	24.9		1,073.4	3.38%	<b>23.0</b>	1,073.4	<b>1,096.4</b>	<b>0.9955</b>	<b>1,098.3</b>
Deduction for BTM:NG										
<b>Transmission District Total Load</b>										
<b>Long Island Power Authority</b>										
LIPA LSE Load	5,079.8	68.3		5,011.5	15.77%	107.10	5,011.50	5,118.6		
NYPA Load & Greenport Load	97.5	1.3		96.2	0.30%	2.00	96.20	98.2		
Freeport & Rockville Centre Load	112.7	1.5		111.2	0.35%	2.40	111.20	113.6		
<b>Transmission District Load Served</b>	<b>5,290.0</b>	71.1		5,218.9	16.42%	<b>111.5</b>	5,218.9	<b>5,330.4</b>	<b>0.9738</b>	<b>5,290.0</b>
Deduction for BTM:NG										
<b>Transmission District Total Load</b>										
<b>National Grid</b>										
National Grid LSE	6,426.4	326.2	13.7	6,086.5	19.15%	130.0	6,086.5	6,216.5		
NYPA Load	36.7	1.9		34.8	0.11%	0.7	34.8	35.5		
NYMPA Load	290.4	15.3		275.1	0.87%	5.9	275.1	281.0		
Jamestown Load	70.8	3.7		67.1	0.21%	1.4	67.1	68.5		
Green Island Load	6.4	0.3		6.1	0.02%	0.1	6.1	6.2		
<b>Transmission District Load Served</b>	<b>6,830.7</b>	347.4	13.7	6,469.6	20.35%	<b>138.1</b>	6,469.6	<b>6,607.7</b>	<b>0.9850</b>	<b>6,817.0</b>
Deduction for BTM:NG										
<b>Transmission District Total Load</b>										

2018 Load Reconciliation	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	
	8/29/18, Hour Beginning 4 PM V3. 12/11/18	TOs' W/N MW With DR	Reallocation of Losses				Proportional	Adj. W/N	2018	2018	2018 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)	(1 + WNF)	Prior to Loss Adjustment
<b>New York Power Authority</b>											
NYPA LSE Load	275.6	3.4		272.2	0.86%	5.8	272.2	278.0			
NYMPA Load	91.6	1.1		90.5	0.28%	1.9	90.5	92.4			
<b>Transmission District Load Served</b>	<b>367.2</b>	<b>4.5</b>		<b>362.7</b>	<b>1.14%</b>	<b>7.7</b>	<b>362.7</b>	<b>370.4</b>	<b>1.0030</b>	<b>367.2</b>	
Deduction for BTM:NG											
<b>Transmission District Total Load</b>											
<b>New York State Electric &amp; Gas</b>											
NYSEGLSE Load	3,049.4	76.1		2,973.3	9.35%	63.5	2,973.3	3,036.8			
NYPA Load	47.0	1.2		45.8	0.14%	1.0	45.8	46.8			
NYMPA Load	73.5	1.9		71.6	0.23%	1.6	71.6	73.2			
<b>Transmission District Load Served</b>	<b>3,169.9</b>	<b>79.2</b>		<b>3,090.7</b>	<b>9.72%</b>	<b>66.1</b>	<b>3,090.7</b>	<b>3,156.8</b>	<b>1.0006</b>	<b>3,169.9</b>	
Deduction for BTM:NG											
<b>Transmission District Total Load</b>											
<b>Orange &amp; Rockland Utilities</b>											
O&R LSE Load	1,122.1	10.1		1,112.0	3.50%	23.8	1,112.0	1,135.8			
<b>Transmission District Load Served</b>	<b>1,122.1</b>	<b>10.1</b>		<b>1,112.0</b>	<b>3.50%</b>	<b>23.8</b>	<b>1,112.0</b>	<b>1,135.8</b>	<b>1.0657</b>	<b>1,122.1</b>	
Deduction for BTM:NG											
<b>Transmission District Total Load</b>											
<b>Rochester Gas &amp; Electric</b>											
RG&E LSE Load	1,488.5	17.0		1,471.5	4.63%	31.4	1,471.5	1,502.9			
NYMPA Load	11.5	0.1		11.4	0.04%	0.3	11.4	11.7			
<b>Transmission District Load Served</b>	<b>1,500.0</b>	<b>17.1</b>		<b>1,482.9</b>	<b>4.66%</b>	<b>31.7</b>	<b>1,482.9</b>	<b>1,514.6</b>	<b>0.9635</b>	<b>1,500.0</b>	
Deduction for BTM:NG											
<b>Transmission District Total Load</b>											
<b>Totals</b>	<b>32,481.1</b>	<b>679.10</b>	<b>13.7</b>	<b>31,788.30</b>	<b>100.00%</b>	<b>679.10</b>	<b>31,788.30</b>	<b>32,467.4</b>	<b>1.0</b>	<b>32,467.4</b>	

**2018 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								268.6	1,382.4	11,451.9		13,102.9
Cen Hudson					3.0		1,095.3					1,098.3
LIPA											5,290.0	5,290.0
Nat. Grid	1,924.1	425.6	1,257.3	83.6	908.8	2,231.3						6,830.7
NYPA				367.2								367.2
NYSEG	664.1		1,491.3	103.1	384.5	141.2	24.6	361.1				3,169.9
O&R							1,122.1					1,122.1
RG&E		1,500.0										1,500.0
<b>Total</b>	<b>2,588.2</b>	<b>1,925.6</b>	<b>2,748.6</b>	<b>553.9</b>	<b>1,296.3</b>	<b>2,372.5</b>	<b>2,242.0</b>	<b>629.7</b>	<b>1,382.4</b>	<b>11,451.9</b>	<b>5,290.0</b>	<b>32,481.1</b>

## 2019 New York Control Area Peak Load Forecast (MW)

12/11/2018 VI	Transmission Districts	2018 Weather Normalized MW Load + Losses MW	(1 + Regional Load Growth Factor)	2019 Load At Time of NYCA Peak	2019 Deductions	2019 ICAP Market Forecast	2019 Locality Forecasts												
							J Locality	K Locality	G-J Locality										
<b>Consolidated Edison</b>		13,255.3	1.00380	13,305.7	0.0	13,305.7	11,606.9		13,250.0										
<b>Central Hudson</b>		1,096.4	0.99500	1,090.9	0.0	1,090.9			1,097.9										
<b>Long Island Power Authority</b>		5,118.6	0.98610	5,047.5	0.0	5,047.5			5,253.0										
NYPA & Greenport		98.2	0.98610	96.8	0.0	96.8													
Freeport & Rockville Centre		113.6	0.98610	112.0	0.0	112.0													
<b>LIPA Total</b>		5,330.4	0.98610	5,256.3	0.0	5,256.3													
<b>National Grid</b>		6,216.5	0.99200	6,166.8	0.0	6,166.8					6,555.0								
NYPA		35.5	0.99200	35.2	0.0	35.2													
NYMPA		281.0	0.99200	278.8	0.0	278.8													
Jamestown		68.5	0.99200	68.0	0.0	68.0													
Green Island Power Authority		6.2	0.99200	6.2	0.0	6.2													
<b>National Grid Total</b>		6,607.7	0.99200	6,555.0	0.0	6,555.0													
<b>New York Power Authority</b>		278.0	1.00000	278.0	0.0	278.0							374.8						
NYMPA		92.4	1.04730	96.8	0.0	96.8													
<b>NYPA Total</b>		370.4	1.01100	374.8	0.0	374.8													
<b>New York State Electric &amp; Gas</b>		3,036.8	0.99680	3,027.1	0.0	3,027.1									3,146.8				
NYPA		46.8	0.99680	46.7	0.0	46.7													
NYMPA		73.2	0.99680	73.0	0.0	73.0													
<b>NYSEG Total</b>		3,156.8	0.99680	3,146.8	0.0	3,146.8													
<b>Orange &amp; Rockland Utilities</b>		1,135.8	0.98220	1,115.6	0.0	1,115.6											1,115.6		1,110.3
<b>Rochester Gas &amp; Electric</b>		1,502.9	0.99400	1,493.9	0.0	1,493.9													
NYMPA		11.7	0.99400	11.6	0.0	11.6													
<b>RG&amp;E Total</b>		1,514.6	0.99400	1,505.5	0.0	1,505.5													
<b>Total Load in NYCA or Locality</b>		<b>32,467.4</b>	<b>0.99640</b>	<b>32,350.6</b>	<b>0.0</b>	<b>32,350.6</b>	<b>11,606.9</b>	<b>5,253.0</b>											<b>15,845.5</b>

**(1) 2018 Actual Coincident Peak in G to J Locality**

9/6/2018, HB 3 PM

(1)	(2)	(3)	(4)	(5)	(6)
Transmission District	G	H	I	J	G-to-J Total
Con Edison		261.3	1,355.5	11,069.2	12,686.0
Cen Hudson	1,098.4				1,098.4
LIPA					
Nat. Grid					
NYPA					
NYSEG	23.8	349.2			373.0
O&R	1,035.0				1,035.0
RG&E					
<b>Grand Total</b>	<b>2,157</b>	<b>611</b>	<b>1,356</b>	<b>11,069</b>	<b>15,192.4</b>

**(3) 2018 Weather-Adjusted Locality Peak for G-to-J**

(1)	(2)	(3)	(4)	(5)	(6)
Transmission District	G	H	I	J	G-to-J Total
Con Edison		270.7	1,392.6	11,536.6	13,199.9
Cen Hudson	1,103.4				1,103.4
LIPA					
Nat. Grid					
NYPA					
NYSEG	24.8	363.8			388.6
O&R	1,130.4				1,130.4
RG&E					
<b>Grand Total</b>	<b>2,259</b>	<b>634</b>	<b>1,393</b>	<b>11,537</b>	<b>15,822.3</b>
<b>NCP/CP ratio</b>	<b>1.0074</b>	<b>1.0074</b>	<b>1.0074</b>	<b>1.0074</b>	

**(2) 2018 Weather-Adjusted Coincident Peak in G to J Locality**

(1)	(2)	(3)	(4)	(5)	(6)
Transmission District	G	H	I	J	G-to-J Total
Con Edison		268.6	1,382.4	11,451.9	13,102.9
Cen Hudson	1,095.3				1,095.3
LIPA					
Nat. Grid					
NYPA					
NYSEG	24.6	361.1			385.7
O&R	1,122.1				1,122.1
RG&E					
<b>Grand Total</b>	<b>2,242</b>	<b>630</b>	<b>1,382</b>	<b>11,452</b>	<b>15,706.0</b>

**(4) 2019 Peak Forecast for G-to-J Locality**

(1)	(8)	(9)	(10)	(11)	(12)	
Transmission District	G	H	I	J	G-to-J Total	RLGF
Con Edison		271.7	1,397.9	11,580.4	13,250.0	<b>1.00380</b>
Cen Hudson	1,097.9				1,097.9	<b>0.99500</b>
LIPA						
Nat. Grid						
NYPA						
NYSEG	24.7	362.6			387.3	<b>0.99680</b>
O&R	1,110.3				1,110.3	<b>0.98220</b>
RG&E						
<b>Grand Total</b>	<b>2,233</b>	<b>634</b>	<b>1,398</b>	<b>11,580</b>	<b>15,845.5</b>	<b>1.00147</b>



### Zone J and Zone K Locality Peaks

Locality	2018 Actual Load	Municipal Generation	Weather Adjustment	Demand Response	2018 Weather Adjusted Load	Regional Load Growth Factor	2019 Locality Forecast
Zone J Locality	11,018.0	0.0	447.6	97.4	11,563.0	1.0038	11,606.9
Zone K Locality	5,422.0	10.0	-115.0	10.0	5,327.0	0.9861	5,253.0

**NYCA Coincident Peak Dates & Times & Zonal MW (DSS)**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	NYCA Peak Date	Hr Beg	Zone G	Zones H+I	Zone J	G-to-J CP
2009	8/17/2009	16	2,159	1,875	10,366	14,400
2010	7/6/2010	17	2,399	2,187	11,600	16,186
2011	7/22/2011	16	2,482	2,239	11,826	16,546
2012	7/17/2012	14	2,282	2,082	11,405	15,769
2013	7/19/2013	17	2,384	2,253	11,736	16,373
2014	9/2/2014	16	2,036	1,917	10,567	14,520
2015	7/29/2015	16	2,070	1,930	10,455	14,455
2016	8/11/2016	16	2,069	1,993	11,006	15,068
2017	7/19/2017	17	2,011	1,898	10,249	14,158
2018	8/29/2018	16	2,189	1,966	11,037	15,192
<b>Average</b>						<b>15,267</b>

**NYCA Coincident Peak Dates & Times & Zonal MW (DSS)**

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	NYCA Peak Date	Hr Beg	Zone G	Zones H+I	Zone J	G-to-J CP
2009	8/17/2009	16	2,159	1,875	10,366	14,400
2010	7/6/2010	17	2,399	2,187	11,600	16,186
2011	7/22/2011	16	2,482	2,239	11,826	16,546
2012	7/17/2012	14	2,282	2,082	11,405	15,769
2013	7/19/2013	17	2,384	2,253	11,736	16,373
2014	9/2/2014	16	2,036	1,917	10,567	14,520
2015	7/29/2015	16	2,070	1,930	10,455	14,455
2016	8/11/2016	16	2,069	1,993	11,006	15,068
2017	7/19/2017	17	2,011	1,898	10,249	14,158
2018	8/29/2018	16	2,189	1,966	11,037	15,192
<b>Average</b>					<b>11,025</b>	

**G-to-J Locality Peak Dates & Times & Zonal MW (DSS)**

(8)	(9)	(10)	(11)	(12)	(13)	(14)
Year	G-to-J Peak Date	Hr Beg	Zone G	Zones H+I	Zone J	G-J NCP
2009	8/21/2009	15	2,117	1,879	10,661	14,657
2010	7/6/2010	17	2,399	2,187	11,600	16,186
2011	7/22/2011	16	2,482	2,239	11,826	16,546
2012	7/18/2012	13	2,288	2,071	11,424	15,783
2013	7/19/2013	17	2,384	2,253	11,736	16,373
2014	9/2/2014	17	2,046	1,933	10,572	14,551
2015	7/20/2015	16	2,059	1,996	10,675	14,730
2016	8/11/2016	16	2,069	1,993	11,006	15,068
2017	7/20/2017	16	2,046	1,936	10,722	14,704
2018	8/29/2018	16	2,189	1,966	11,037	15,192
<b>Average</b>						<b>15,379</b>

Ratio of G-to-J Locality Peak to G-to-J Coincident Peak

**Zone J Locality Peak Dates & Times & Zonal MW (DSS)**

(8)	(9)	(10)	(11)	(12)	(13)	(14)
Year	Zone J Peak Date	Hr Beg	Zone G	Zones H+I	Zone J	G-to-J, Coin. with J
2009	8/21/2009	15	2,117	1,879	10,661	14,657
2010	7/6/2010	17	2,399	2,187	11,600	16,186
2011	7/22/2011	12	2,375	2,107	11,876	16,358
2012	7/18/2012	15	2,115	2,002	11,438	15,554
2013	7/19/2013	17	2,384	2,253	11,736	16,373
2014	9/2/2014	17	2,046	1,933	10,572	14,551
2015	7/20/2015	16	2,059	1,996	10,675	14,730
2016	8/11/2016	16	2,069	1,993	11,006	15,068
2017	7/20/2017	17	2,046	1,936	10,722	14,704
2018	8/29/2018	16	2,189	1,966	11,037	15,192
<b>Average</b>					<b>11,132</b>	

Ratio of J Locality Peak to J Coincident Peak

(15) = (14-7)
G-to-J Delta
257
-
-
14
-
32
275
-
546
-
<b>112</b>
<b>1.0074</b>

(15) = (13-6)
Zone J Delta
294
-
50
33
-
5
220
-
473
-
<b>107</b>
<b>1.0097</b>

# The Mission of the New York Independent System Operator, in collaboration with its stakeholders, is to serve the public interest and provide benefits 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 policy makers, stakeholders and investors in the power system



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# Questions?

We are here to help. Let us know if we can add anything.