

2015 Final Weather Normalized MW and 2016 ICAP Forecast

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Rensselaer, NY

2015 Summer Peak MW Data	NYISO DSS Actual MW Data				Transmission Owner Data			
7/29/2015, Hour Beginning 4 PM	Actual Load	Losses	Load + Losses	Percent Losses	Actual Load Data	Weather Adjustments	Demand Response	TOs' W/N MW With DR
Version 5 12/21/2015								
Central Hudson	1,019.0	29.0	1,048.0	2.77%	1,044.6	62.0	0.0	1,106.6
Consolidated Edison	11,928.6	110.2	12,038.8	0.92%	12,050.2	1436.5	0.0	13,486.7
Long Island Power Authority	5,076.3	59.6	5,142.8	1.16%	4,927.8	287.3	0.0	5,215.1
Full Requirement Customers					99.5	5.8	0.0	105.3
Other Municipal Load					110.6	6.4	0.0	117.0
Other Municipal Generation	6.9					-	-	0.0
					5,137.9	299.5	0.0	5,437.4
New York Power Authority	327.7	2.3	330.7	0.91%	248.7	0.0	0.0	248.7
Partial Requirement Customers		0.7			82.0	1.3	-	83.3
					330.7	1.3	0.0	332.0
New York State Electric & Gas	2,978.3	54.5	3,035.3	1.88%	2,865.9	114.1	13.7	3,048.2
Losses					57.0			
Full Requirement Customers		0.8			41.7	1.7	0.0	44.2
Partial Requirement Customers		1.7			70.7	2.8	-	75.2
					3,035.3	118.6	13.7	3,167.6
National Grid	6,500.6	376.3	6,949.3	5.63%	6,148.8	57.2	2.6	6,584.9
Losses					391.0			
Full Requirement Customers		6.3			106.0	1.0	0.0	113.3
Partial Requirement Customers		3.0			212.7	1.9	0.0	217.6
Jamestown	57.7	5.0			84.1	0.8	0.0	89.9
Other Municipal Load		0.4			6.7	0.1	-	7.2
					6,949.3	61.0	2.6	7,012.9
Orange & Rockland Utilities	986.0	14.0	1,000.0	1.40%	1,000.0	145.0	0.0	1,145.0
Rochester Gas & Electric	1,509.3	16.7	1,526.3	1.11%	1,514.9	26.1	10.8	1,551.8
Partial Requirement Customers		0.3			11.4	0.2	-	11.6
					1,526.3	26.3	10.8	1,563.4
Totals	30,390.4	680.8	31,071.2	2.19%	31,074.3	2,150.2	27.1	33,251.6

2015 Summer Peak MW Data		Reallocation of Losses				Proportional	Adj. W/N	2015	
7/29/2015, Hour Beginning 4 PM		TOs' W/N MW With DR	W/N	Station	Adj. W/N Load	Percent Loss	Allocation	Load Less	Adjusted W/N MW
Version 5 12/21/2015			Losses	Power	Less Losses	Allocation	of Losses	Losses	
Central Hudson	1,106.6	30.7		1,075.9	3.31%	23.4	1,075.9	1,099.3	
Consolidated Edison	13,486.7	123.3	0.0	13,363.4	41.10%	290.7	13,363.4	13,654.1	
Long Island Power Authority	5,215.1	60.5		5,154.6	15.85%	112.2	5,154.6	5,266.8	
Full Requirement Customers	105.3	1.2		104.1	0.32%	2.3	104.1	106.4	
Other Municipal Load	117.0	1.4		115.6	0.36%	2.5	115.6	118.1	
Other Municipal Generation	<u>0.0</u>	<u>0.0</u>		<u>0.0</u>	<u>0.00%</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	
	5,437.4	63.1		5,374.3	16.53%	117.0	5,374.3	5,491.3	
New York Power Authority	248.7	2.2		246.5	0.76%	5.4	246.5	251.9	
Partial Requirement Customers	<u>83.3</u>	<u>0.8</u>		<u>82.5</u>	<u>0.25%</u>	<u>1.8</u>	<u>82.5</u>	<u>84.3</u>	
	332.0	3.0		329.0	1.01%	7.2	329.0	336.2	
New York State Electric & Gas	3,048.2	57.3		2,990.9	9.20%	65.1	2,990.9	3,056.0	
Losses				0.0				0.0	
Full Requirement Customers	44.2	0.8		43.4	0.13%	0.9	43.4	44.3	
Partial Requirement Customers	<u>75.2</u>	<u>1.4</u>		<u>73.8</u>	<u>0.23%</u>	<u>1.6</u>	<u>73.8</u>	<u>75.4</u>	
	3,167.6	59.5		3,108.1	9.56%	67.6	3,108.1	3,175.7	
National Grid	6,584.9	370.5	26.1	6,188.3	19.03%	134.7	6,188.3	6,323.0	
Losses				0.0					
Full Requirement Customers	113.3	6.4		106.9	0.33%	2.3	106.9	109.2	
Partial Requirement Customers	217.6	12.2		205.4	0.63%	4.5	205.4	209.9	
Jamestown	89.9	5.1		84.8	0.26%	1.8	84.8	86.6	
Other Municipal Load	<u>7.2</u>	<u>0.4</u>		<u>6.8</u>	<u>0.02%</u>	<u>0.1</u>	<u>6.8</u>	<u>6.9</u>	
	7,012.9	394.6		6,592.2	20.27%	143.4	6,592.2	6,735.6	
Orange & Rockland Utilities	1,145.0	16.0		1,129.0	3.47%	24.6	1,129.0	1,153.6	
Rochester Gas & Electric	1,551.8	17.3		1,534.5	4.72%	33.4	1,534.5	1,567.9	
Partial Requirement Customers	<u>11.6</u>	<u>0.1</u>		<u>11.5</u>	<u>0.04%</u>	<u>0.3</u>	<u>11.5</u>	<u>11.8</u>	
	1,563.4	17.4		1,546.0	4.75%	33.7	1,546.0	1,579.7	
Totals	33,251.6	707.6	26.1	32,517.9	100.00%	707.6	32,517.9	33,225.5	

2016 Locality Peak Forecasts (Non-Coincident)

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Locality	2015 Actual MW	Demand Response MW	Weather Adjustment MW	2015 Weather Normalized MW	Regional Load Growth Factors	2016 ICAP Forecast
Zone J - NYC	10,586.0	1.8	1,162.2	11,750.0	1.0037	11,793.5
Zone K - LI	5,261.6	1.6	215.3	5,478.5	1.0000	5,478.5
Zone GHIJ	14,778.0	1.8	1,461.7	16,241.5	1.0042	16,309.4

2016 G-to-J Locality Peak Forecast - Details

(1) 2015 Actual Coincident Peak MW for G-to-J Locality

(1)	(2)	(3)	(4)	(5)	(6)
Transmission District	Zone G	Zone H	Zone I	Zone J	Total, GHJ
Cen. Hud. Con Ed	1,044.6	263.5	1,331.7	10,455.0	1,044.6 12,050.2
NYSEG O&R	21.5 1,000.0	335.1			356.6 1,000.0
Total	2,066.1	598.6	1,331.7	10,455.0	14,451.4

(2) 2015 Weather Normalized Coincident Peak for G-to-J Locality

(1)	(2)	(3)	(4)	(5)	(6)
Transmission District	Zone G	Zone H	Zone I	Zone J	Total, GHJ
Cen. Hud. Con Ed	1,106.6	304.0	1,531.0	11,652.0	1,106.6 13,487.0
NYSEG O&R	23.1 1,145.0	360.5			383.6 1,145.0
Total	2,274.7	664.5	1,531.0	11,652.0	16,122.2

(3) 2015 Weather Normalized Locality Peak for Zones G, H, I and J

(1)	(2)	(3)	(4)	(5)	(6)
Transmission District	Zone G	Zone H	Zone I	Zone J	Total, GHJ
Cen. Hud. Con Ed	1,114.80	306.20	1,542.30	11,738.20	1,114.80 13,586.70
NYSEG O&R	23.30 1,153.50	363.20			386.50 1,153.50
Total	2,291.60	669.40	1,542.30	11,738.20	16,241.50

(4) 2016 Non-Coincident Peak Forecast for Zones G, H, I and J

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Transmission District	Zone G	Zone H	Zone I	Zone J	Total, GHJ	Growth Factors
Cen. Hud. Con Ed	1,119.8	307.3	1,548.0	11,781.6	1,119.8 13,636.9	1.0045 1.0037
NYSEG O&R	23.4 1,164.2	365.1			388.5 1,164.2	1.0050 1.0093
Total	2,307.4	672.4	1,548.0	11,781.6	16,309.4	1.0042

NCP/CP Ratio	1.0074	1.0074	1.0074	1.0074	1.0074
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2016 New York Control Area Peak Load Forecast (MW)

Final 12/21/2015 Version 2	Transmission Districts	2015 Weather Normalized MW Load + Losses MW	Regional Load Growth Factor	2016 Forecast At Time of NYCA Peak	2016 Locality Forecasts		
					J Locality	K Locality	G-J Locality
	Central Hudson	1,099.3	1.0045	1,104.2			1,119.8
	Consolidated Edison	13,654.1	1.0037	13,704.6	11,793.5		13,636.9
	Long Island Power Authority	5,266.8	1.0000	5,266.8			
	Full Requirements Customers	106.4	1.0000	106.4			
	Other LSEs	118.1	1.0000	118.1			
	LIPA Total	5,491.3	1.0000	5,491.3		5,478.5	
	New York Power Authority	251.9	0.9963	251.0			
	Partial Requirements Customers	84.3	1.0084	85.0			
	NYPA Total	336.2	0.9994	336.0			
	New York State Electric & Gas	3,056.0	1.0050	3,071.3			388.5
	Full Requirements Customers	44.3	1.0050	44.5			
	Partial Requirements Customers	75.4	1.0050	75.8			
	NYSEG Total	3,175.7	1.0050	3,191.6			
	National Grid	6,323.0	1.0060	6,360.9			
	Full Requirements Customers	109.2	1.0060	109.9			
	Partial Requirements Customers	209.9	1.0060	211.2			
	Jamestown	86.6	1.0060	87.1			
	Other Municipal Load	6.9	1.0060	6.9			
	N-Grid Total	6,735.6	1.0060	6,776.0			
	Orange & Rockland Utilities	1,153.6	1.0093	1,164.3			1,164.2
	Rochester Gas & Electric	1,567.9	1.0070	1,578.9			
	Partial Requirements Customers	11.8	1.0070	11.9			
	RG&E Total	1,579.7	1.0070	1,590.8			
	Total Load in NYCA or Locality	33,225.5	1.0040	33,358.8	11,793.5	5,478.5	16,309.4

2016 Coincident Peak Forecast – By Zone & TD

(Based On Weather-Normalized Losses, Before Proportional Allocation of Losses)

2016 Coincident Peak Forecast by Zone & Transmission District												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Transmission District	A	B	C	D	E	F	G	H	I	J	K	NYCA Forecast
Cen. Hud.							1,112					1,112
Con Ed								305	1,536	11,695		13,537
LIPA											5,437	5,437
NGrid	1,962	417	1,386	88	943	2,232						7,029
NYPA				332								332
NYSEG	719		1,422	115	410	144	23	351				3,183
O&R							1,156					1,156
RG&E		1,574										1,574
Total	2,680	1,992	2,809	535	1,353	2,376	2,290	656	1,536	11,695	5,437	33,360

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

G-to-J Coincident Peak Dates & Times & Zonal MW

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	NYCA Peak Date	Hr Beg	Zone G	Zones H+I	Zone J	G-to-J CP
2006	8/2/2006	14	2,436	2,063	11,604	16,103
2007	8/8/2007	17	2,316	2,033	10,971	15,320
2008	6/9/2008	17	2,277	2,056	10,979	15,311
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
Average						15,498

G-to-J Locality Peak Dates & Times & Zonal MW

(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) = (14-7)
Year	G-to-J Peak Date	Hr Beg	Zone G	Zones H+I	Zone J	G-J NCP	Delta
2006	8/2/2006	17	2,497	2,133	11,660	16,290	187
2007	8/8/2007	17	2,316	2,033	10,971	15,320	-
2008	6/10/2008	17	2,338	2,101	11,262	15,701	390
2009	8/21/2009	15	2,117	1,879	10,661	14,657	257
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	14
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	32
2015	7/20/2015	16	2,059	1,996	10,675	14,730	275
Average						15,614	115
Ratio of G-to-J Locality Peak to G-to-J Coincident Peak (15,614/15,498)							1.0074

Determination of Zone J Locality Ratio of Non-Coincident Peak to Coincident Peak

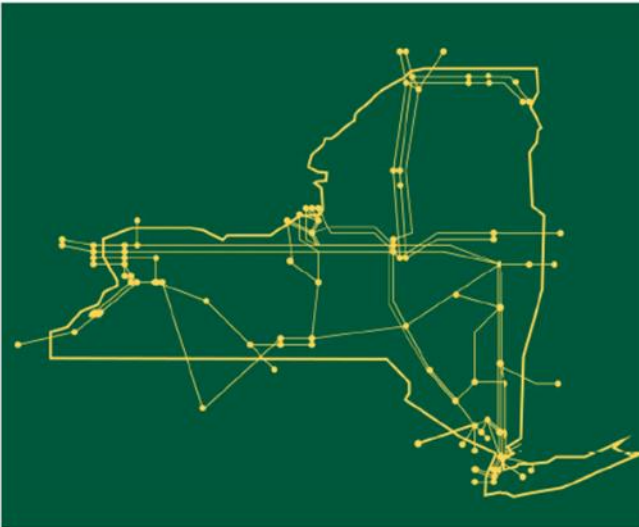
NYCA Coincident Peak Dates & Times & Zonal MW

(1)	(2)	(3)	(4)	(5)	(6)	(7)
Year	NYCA Peak Date	Hr Beg	Zone G	Zones H+I	Zone J	G-to-J CP
2006	8/2/2006	14	2,436	2,063	11,604	16,103
2007	8/8/2007	17	2,316	2,033	10,971	15,320
2008	6/9/2008	17	2,277	2,056	10,979	15,311
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
Average					11,151	

Zone J Locality Peak Dates & Times & Zonal MW

(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15) = (13-6)
Year	Zone J Peak Date	Hr Beg	Zone G	Zones H+I	Zone J	G-to-J, Coin. with J	Delta
2006	8/2/2006	17	2,497	2,133	11,660	16,290	56
2007	8/8/2007	17	2,316	2,033	10,971	15,320	-
2008	6/10/2008	17	2,338	2,101	11,262	15,701	283
2009	8/21/2009	15	2,117	1,879	10,661	14,657	294
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	50
2012	7/18/2012	15	2,115	2,002	11,438	15,554	33
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	5
2015	7/20/2015	16	2,059	1,996	10,675	14,730	220
Average					11,245		94
Ratio of J Locality Peak to J Coincident Peak (11,245/11,151)							1.0084

The New York Independent System Operator (NYISO) is a not-for-profit corporation responsible for operating the state's bulk electricity grid, administering New York's competitive wholesale electricity markets, conducting comprehensive long-term planning for the state's electric power system, and advancing the technological infrastructure of the electric system serving the Empire State.



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