



NYSRC Fall Forecast Update – Final 2018 IRM Forecast

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NYSRC – Installed Capacity Subcommittee

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Overview

1. 2017 Weather Normalized Peaks
2. 2018 IRM Forecast
 - Includes 39 MW in Zone K for Behind-The Meter Net Generation
3. Supporting Details & Calculations

1. 2017 Weather Adjusted Peaks

2017 Coincident Peak Weather Normalization by Transmission District for NYSRC

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)=(7)-(6)	(9)=(8)/(7)	(10)	(11)	(12)=(10)+(11)
Transmission District	2017 Actual MW, 7/19/2017 HB 17	Estimated Muni Self-Gen	Demand Response Estimate MW	Weather Adjustment MW	2017 Weather Normalized MW	2017 ICAP Forecast, Without Reallocation of Losses	TO Forecast, Over /Under MW	TO Forecast Error, Percent Over /Under	Loss Reallocation MW	2017 WN MW, With Reallocated Losses	2017 ICAP Market Forecast MW
Con Edison	11,864	0	0	1,245	13,109	13,360	251	1.9%	149	13,258	13,534
Cen Hudson	1,000	0	0	96	1,096	1,050	-46	-4.4%	-10	1,086	1,043
LIPA	4,989	10	0	374	5,373	5,384	11	0.2%	43	5,416	5,427
Nat. Grid	6,202	56	0	749	7,007	7,108	101	1.4%	-213	6,794	6,891
NYPA	322	0	0	4	326	301	-25	-8.2%	4	330	305
NYSEG	2,878	0	0	354	3,232	3,241	9	0.3%	0	3,232	3,223
O&R	975	0	0	152	1,127	1,167	40	3.4%	13	1,140	1,177
RG&E	1,413	0	0	174	1,587	1,567	-21	-1.3%	14	1,601	1,577
Grand Total	29,643	66	0	3,148	32,857	33,178	322	1.0%	0	32,857	33,179

2017 Locality Peak Weather Normalization by Transmission District for NYSRC

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Locality	Date and Time (Hr Beginning)	2017 Actual MW	Estimated Muni Self-Gen	Demand Response Estimate MW	Locality Weather Adjustment MW	2017 Adjusted MW	2017 ICAP Market Forecast MW	Over/Under MW	Percent Over/Under
Zone J - NYC	7/20/17 HB 16	10,668	0	0	848	11,516	11,670	154	1.3%
Zone K - LI	7/20/17 HB 16	5,137	10	0	282	5,429	5,427	-2	0.0%
Zone GHIJ	7/20/17 HB 16	14,704	0	0	1,176	15,880	16,061	181	1.1%

2. 2018 IRM Forecast



2018 IRM Coincident Peak Forecast by Transmission District for NYSRC

(1)	(2)	(3)	(4)	(5)	(6)=(2+3+4+5)	(7)	(8)	(9)	(10)=(8)*(9)	(11)	(12)=(10)+(11)
Transmission District	2017 Actual MW	2017 Estimated SCR & Muni Self-Gen	SCR/EDRP Estimate MW	Weather Adjustment MW	2017 Weather Normalized MW	No Loss Reallocation	2017 Weather Normalized MW	Regional Load Growth Factors	2018 ICAP Forecast, Before Adjustments	BTM:NG and Other Adjustments to Load	2018 IRM Final Forecast
Con Edison	11,864	0	0	1,245	13,109		13,109.0	1.0022	13,138		13,138
Cen Hudson	1,000	0	0	96	1,096		1,096.0	0.9820	1,076		1,076
LIPA	4,989	10	0	374	5,373		5,373.0	0.9952	5,347	39	5,386
Nat. Grid	6,202	56	0	749	7,007		7,007.0	1.0030	7,028		7,028
NYPA	322	0	0	4	326		326.0	0.9603	313		313
NYSEG	2,878	0	0	354	3,232		3,232.0	0.9980	3,226		3,226
O&R	975	0	0	152	1,127		1,127.0	1.0017	1,129		1,129
RG&E	1,413	0	0	174	1,587		1,587.0	0.9905	1,572		1,572
Grand Total	29,643	66	0	3,148	32,857	0	32,857	0.9991	32,829	39	32,868
									2018 Forecast from 2017 Gold Book		33,078
									Change from Gold book		-210



2018 IRM Locality Peak Forecast by Transmission District for NYSRC											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)=(8)*(9)	(11)	(12)
Locality	2017 Actual MW	2017 Estimated Muni Self-Gen	SCR/EDRP Estimate MW	Weather Adjustment MW	2017 Weather Normalized MW	No Loss Reallocation	2017 Weather Normalized MW	Regional Load Growth Factors	2018 ICAP Forecast, Before Adjustments	BTM:NG and Other Adjustments to Load	2018 IRM Final Forecast
Zone J - NYC	10,668	0	0	848	11,516		11,516	1.0022	11,541	0	11,541
Zone K - LI	5,137	10	0	285	5,432		5,432	0.9952	5,406	39	5,445
Zone GHIJ	14,704	0	0	1,176	15,880		15,880	1.0007	15,890	0	15,890

(1)	(12)	(13)	(14)
Locality	2018 IRM Final Forecast	2018 Forecast from 2017 Gold Book	Change from 2018 Gold Book Forecast
Zone J - NYC	11,541	11,707	-166
Zone K - LI	5,445	5,305	140
Zone GHIJ	15,890	16,070	-180



2018 IRM Coincident Peak Forecast by Transmission District and Zone

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Row Labels	A	B	C	D	E	F	G	H	I	J	K	Grand Total
Con Edison								284.5	1,451.7	11,401.8		13,138.0
Cen Hudson					3.2		1,072.8					1,076.0
LIPA											5,386.0	5,386.0
Nat. Grid	2,041.2	437.6	1,402.0	90.0	880.2	2,177.0						7,028.0
NYPA				313.0								313.0
NYSEG	705.6		1,452.1	108.3	418.2	147.2	24.2	370.4				3,226.0
O&R							1,129.0					1,129.0
RG&E		1,572.0										1,572.0
Grand Total	2,746.8	2,009.6	2,854.1	511.3	1,301.6	2,324.2	2,226.0	654.9	1,451.7	11,401.8	5,386.0	32,868.0

3. Supporting Details

2017 Weather Adjustment Summary for NYSRC Fall Forecast Update

Row	Description	Con Ed	Cen Hud	LIPA	N Grid	NYPA	NYSEG	O&R	RG&E	NYCA
1	Actual Coincident Peak	11,864	1,000	4,989	6,202	322	2,878	975	1,413	29,643
2	Design Weather (Coincident)	85.55	85.38	85.21	82.08	81.90	82.21	84.55	83.31	84.01
3	Actual Weather	82.00	81.83	82.22	77.83	77.52	78.00	79.90	79.22	80.79
4=(2-3)	Temperature Change	3.55	3.55	2.99	4.25	4.38	4.21	4.65	4.09	3.22
5	MW / degree	350.70	27.00	125.08	176.24	1.00	84.00	32.47	42.50	977.23
6=(4*5)	Weather Adjustment	1,245.0	95.9	374.0	749.0	4.4	353.6	151.0	173.8	3,146.7
7	Demand Response	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	Municipal Generation (Estimate)	0.0	0.0	10.0	56.0	0.0	0.0	0.0	0.0	66.0
9=(6+7+8)	Weather Adjusted Coincident Peak	13,109	1,096	5,373	7,007	326	3,232	1,126	1,587	32,856

Reallocation of 2017 Losses						
(1)	(2)	(3)	(4)=(2)-(3)	(5)=(4x)/(4tot)	(6)=(5x)*(3tot)	(7)=(6)-(3)
TO	Load	Losses	Load Less Loss	Load Share	Prorated Losses	Reallocation of Losses
Con Edison	11,864.4	108.5	11,755.9	0.4053	257.3	148.8
Cen Hudson	999.7	31.1	968.6	0.0334	21.2	-9.9
LIPA	4,989.2	65.1	4,924.1	0.1698	107.8	42.7
Nat. Grid	6,201.8	340.9	5,860.9	0.2020	128.3	-212.6
NYPA	321.5	3.4	318.1	0.0110	7.0	3.6
NYSEG	2,878.0	61.8	2,816.2	0.0971	61.6	-0.2
O&R	974.9	7.7	967.2	0.0333	21.2	13.4
RG&E	1,413.2	16.4	1,396.8	0.0482	30.6	14.2
NYCA	29,642.7	634.9	29,007.8	1.0000	634.9	0.0
(x) denotes a row for a specific column.						
Losses are reallocated so that we can compare the 2017 forecast with the 2017 Weather Adjusted Peak with and without reallocation of losses.						

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