

2014 Preliminary Weather Normalization

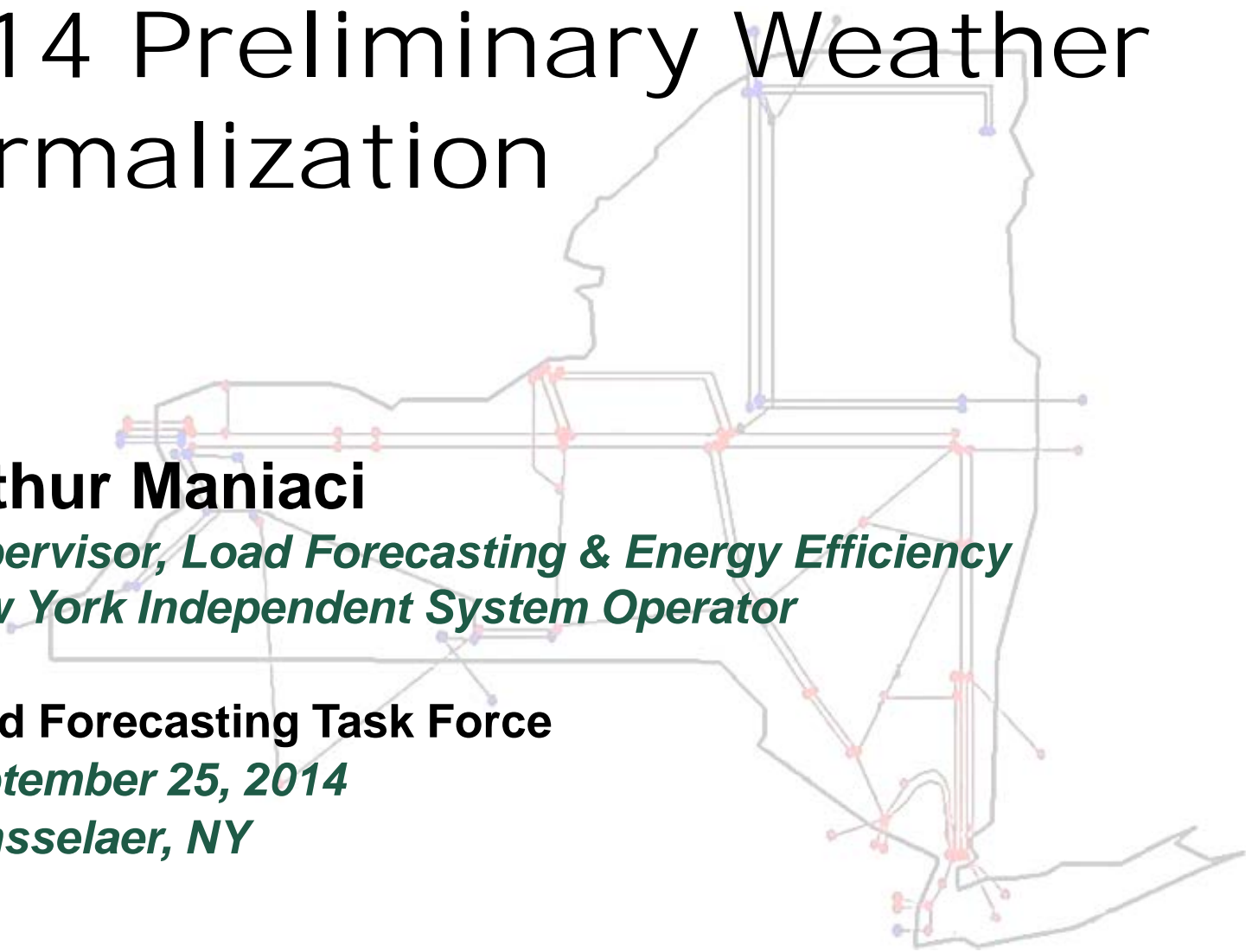
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New York Independent System Operator*

Load Forecasting Task Force

September 25, 2014

Rensselaer, NY



Actual and 20-Year Normal Peak-Producing CTHI Statistics – 1995 to 2014

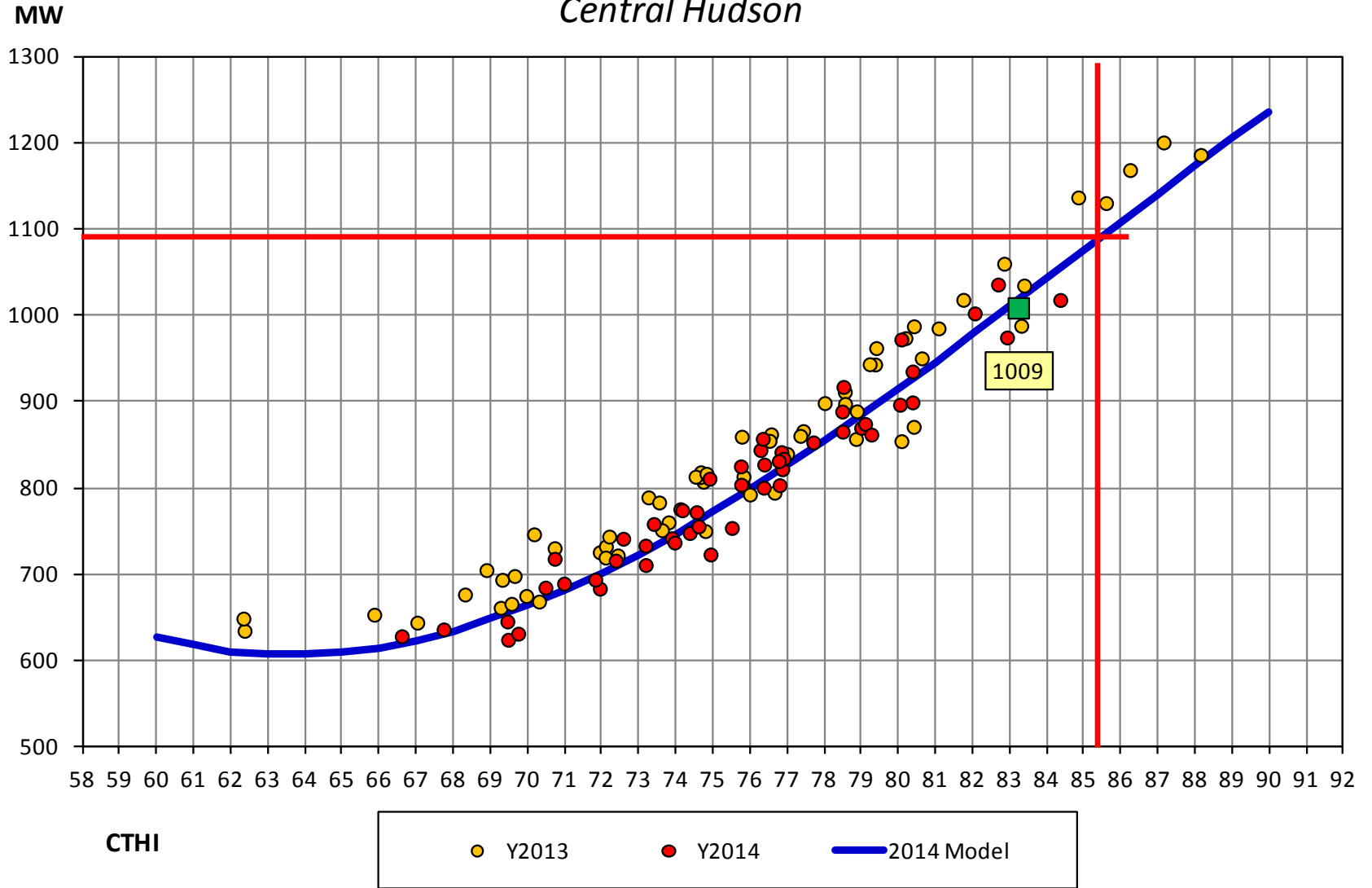
Statistic	CE	CH	LI	NM	NYPA	NYSEG	OR	RGE	NYCA
Max	91.58	90.45	91.70	86.47	87.74	87.46	90.45	88.32	88.26
20-Yr Avg	86.18	85.68	85.52	82.13	81.21	82.33	85.68	83.29	84.08
Min	81.10	80.74	78.98	77.37	75.00	78.01	80.74	78.39	79.19
Std	2.89	2.84	3.48	2.80	3.39	2.83	2.84	2.76	2.78
50th	86.18	85.68	85.52	82.13	81.21	82.33	85.68	83.29	84.08
67th: CE, OR	87.43	86.91	87.02	83.34	82.67	83.55	86.91	84.48	85.27
90th	89.89	89.32	89.97	85.73	85.56	85.95	89.32	86.82	87.64
2014	83.42	82.97	81.90	77.37	78.79	78.20	82.97	78.39	80.50
Percentile	17%	17%	15%	4%	24%	7%	17%	4%	10%
z(2014)	-0.95	-0.95	-1.04	-1.70	-0.71	-1.46	-0.95	-1.78	-1.29
CTHI Delta	-2.76	-2.71	-3.62	-4.77	-2.42	-4.13	-2.71	-4.90	-3.58

$$Z = \frac{(\text{CTHI} - \text{Avg})}{\text{Std Dev}}$$

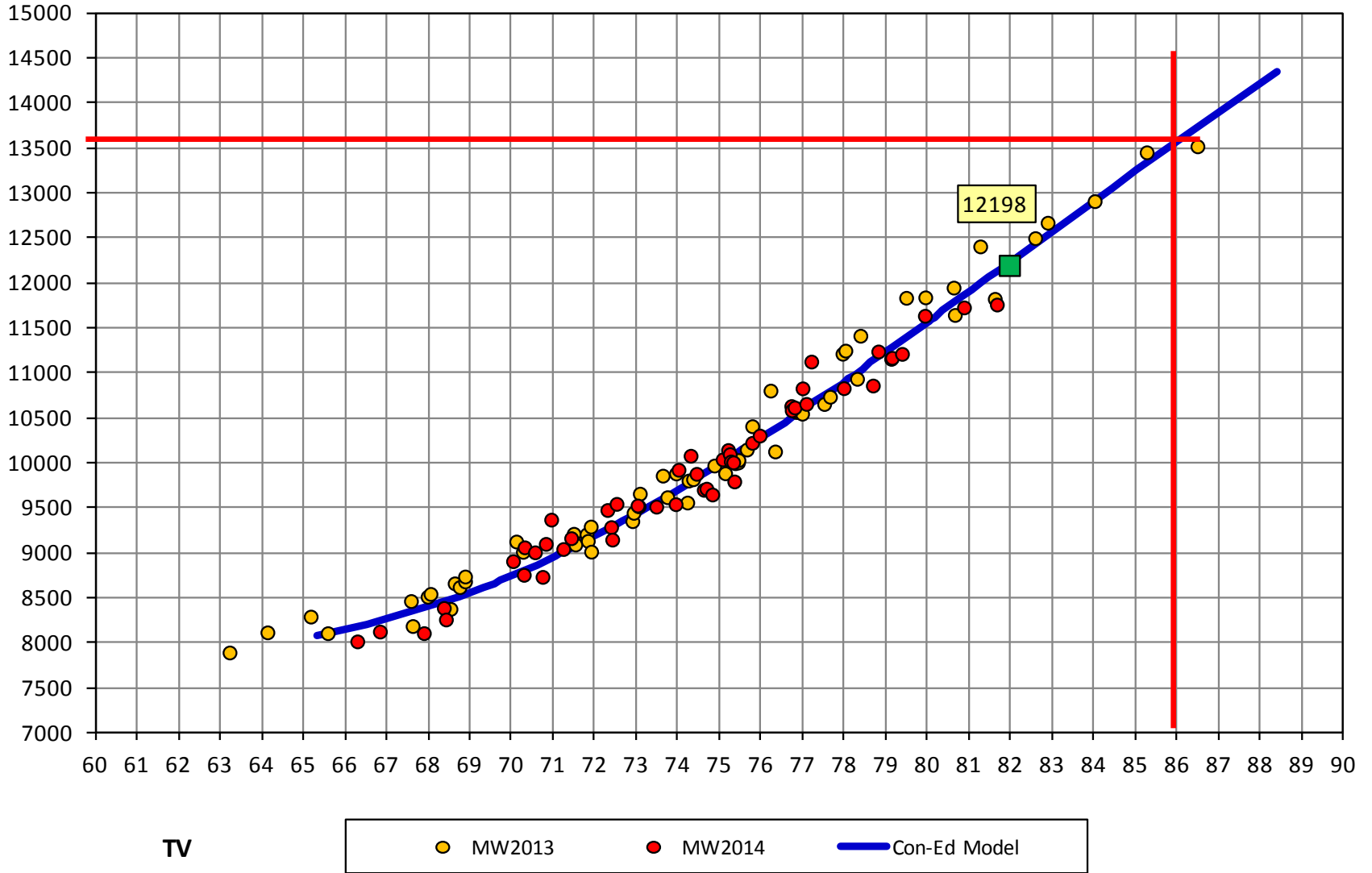
Con-Ed and O&R use the 67th percentile for design conditions. All others use the 50th percentile.

Peak-producing CTHI is the Cumulative Temperature-Humidity Index that occurs on the day of the NYCA peak each year.

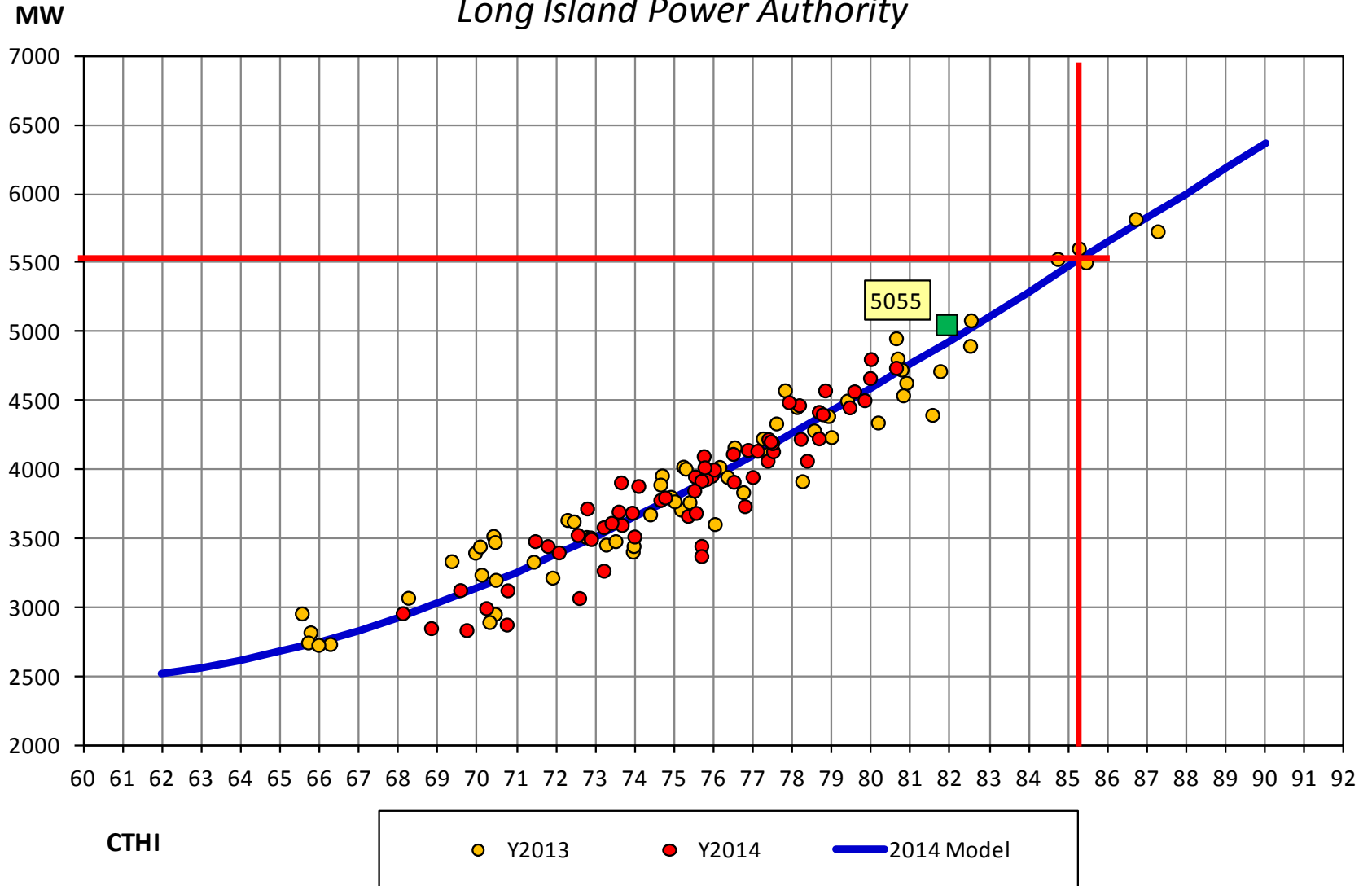
Preliminary 2014 Weather Normalization Model *Central Hudson*



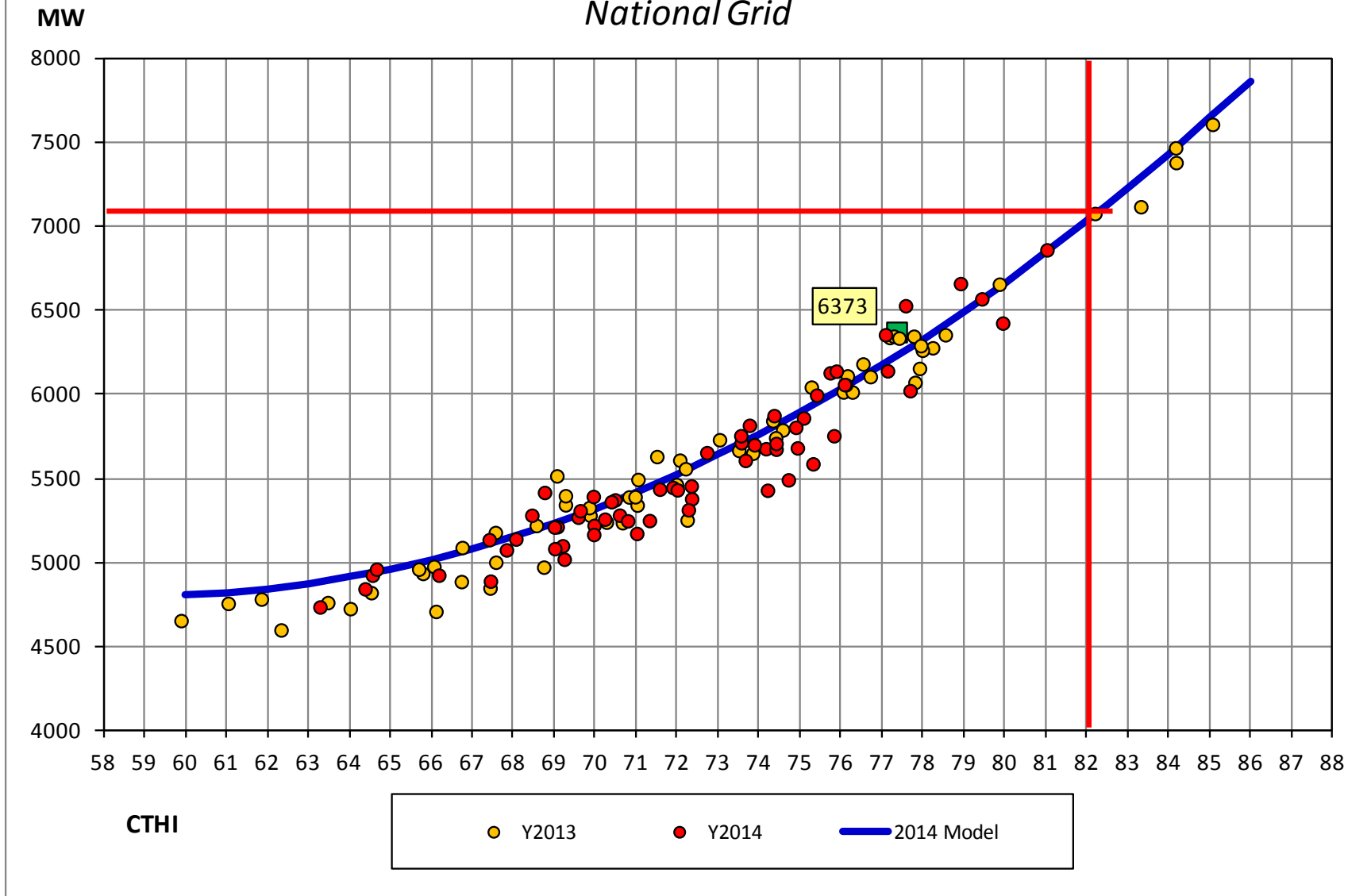
Preliminary Weather Normalization Model *Consolidated Edison*



Preliminary 2014 Weather Normalization Model Long Island Power Authority

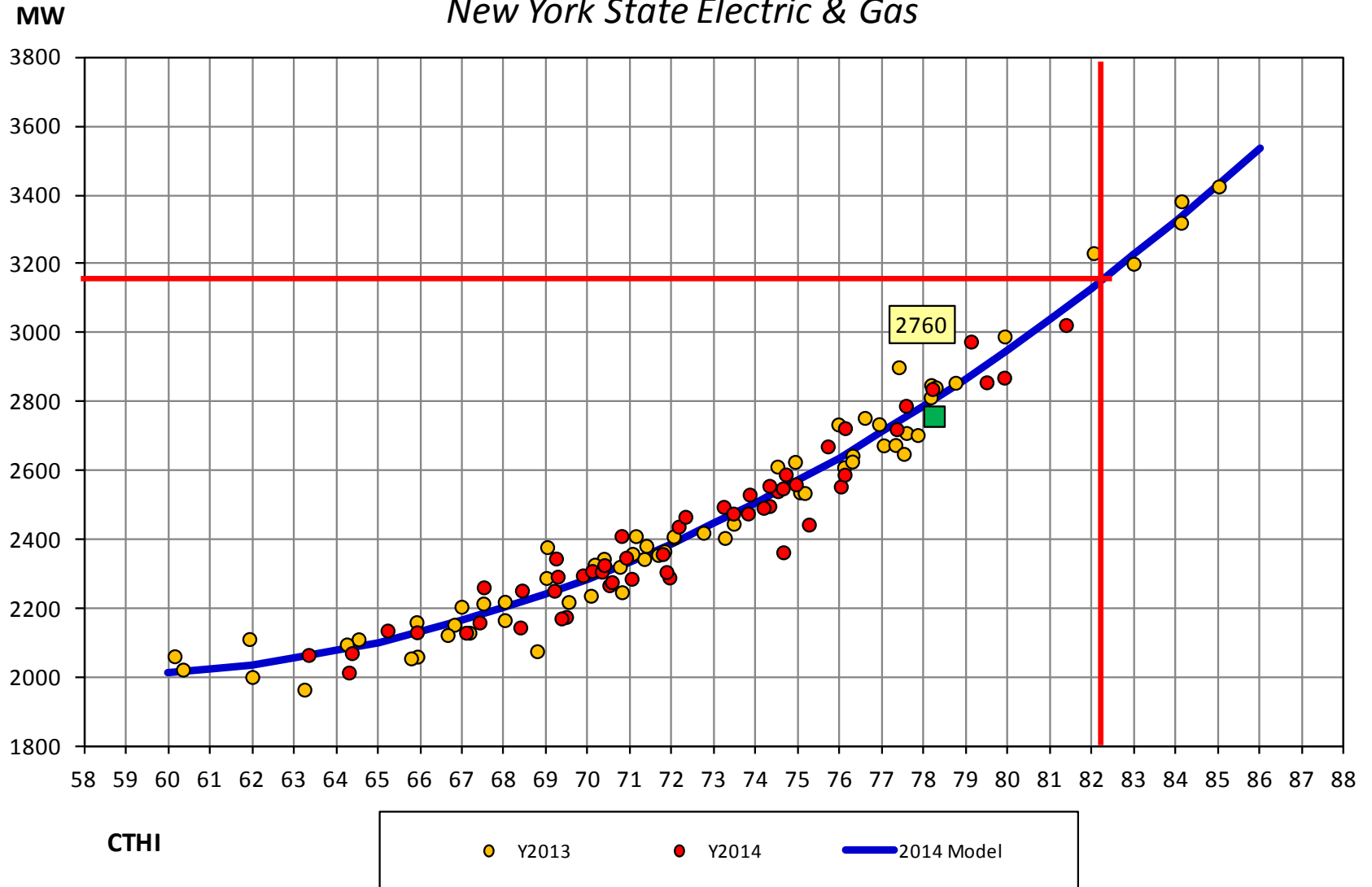


Preliminary 2014 Weather Normalization Model *National Grid*

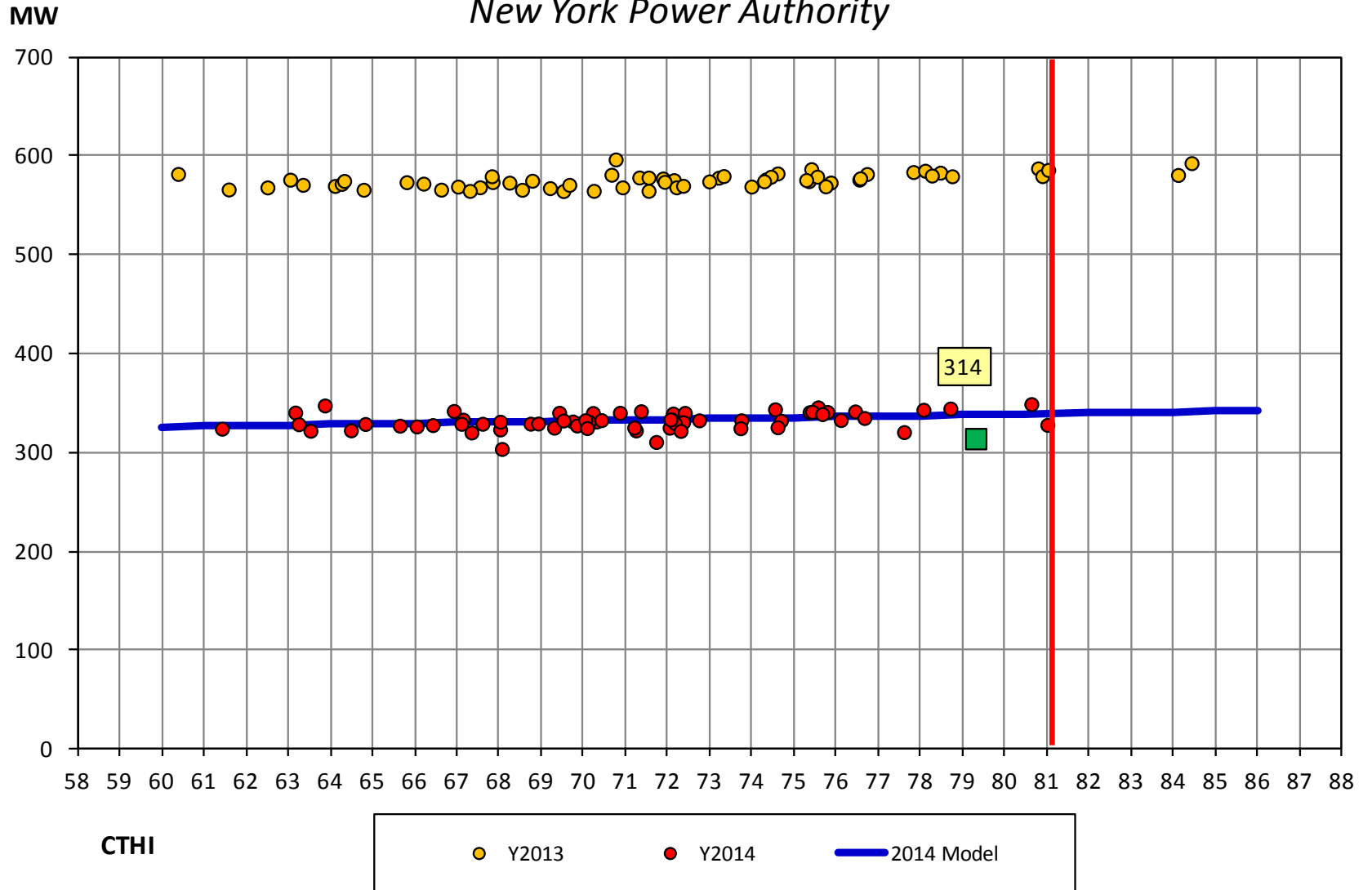


Preliminary 2014 Weather Normalization Model

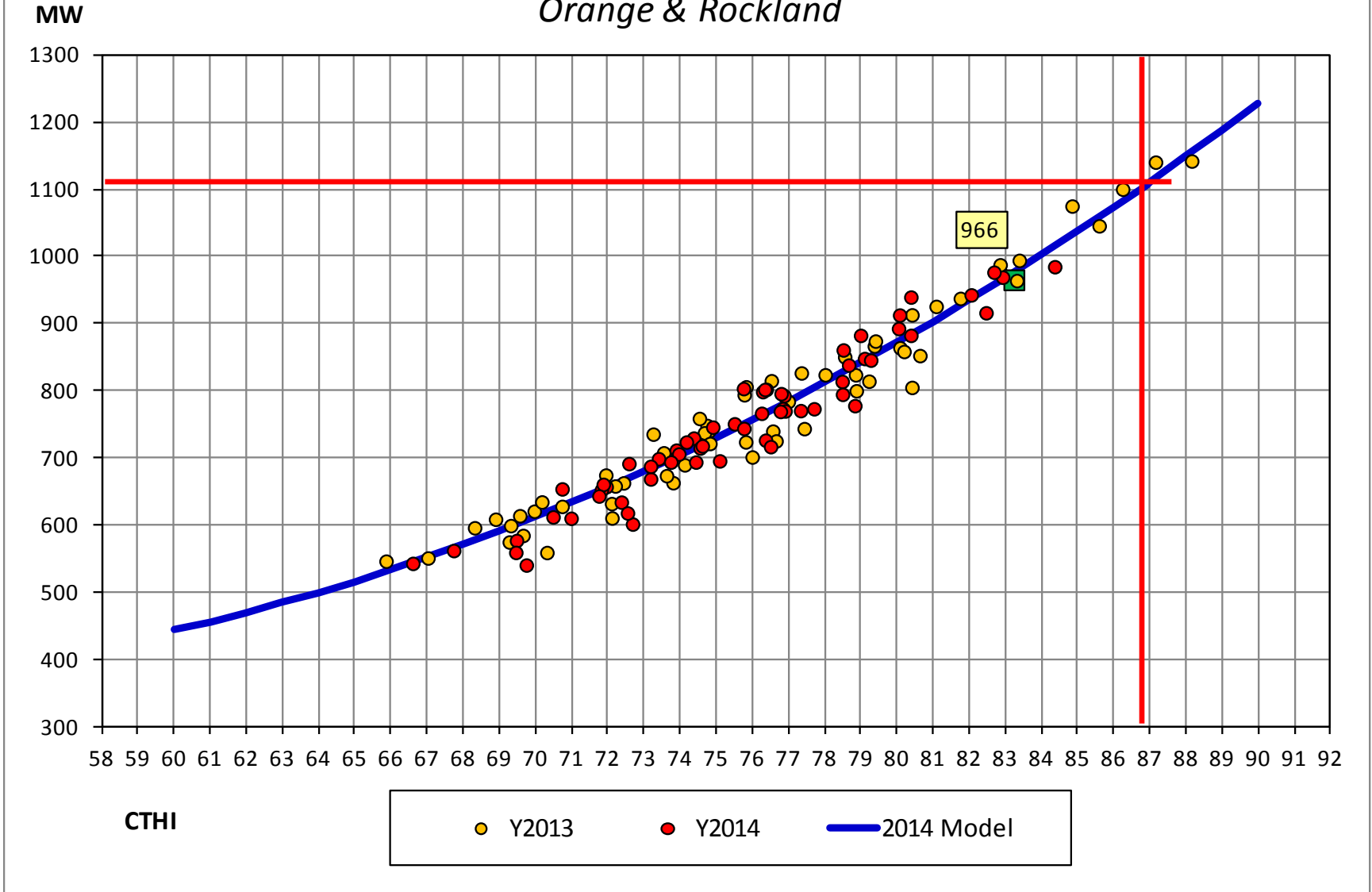
New York State Electric & Gas



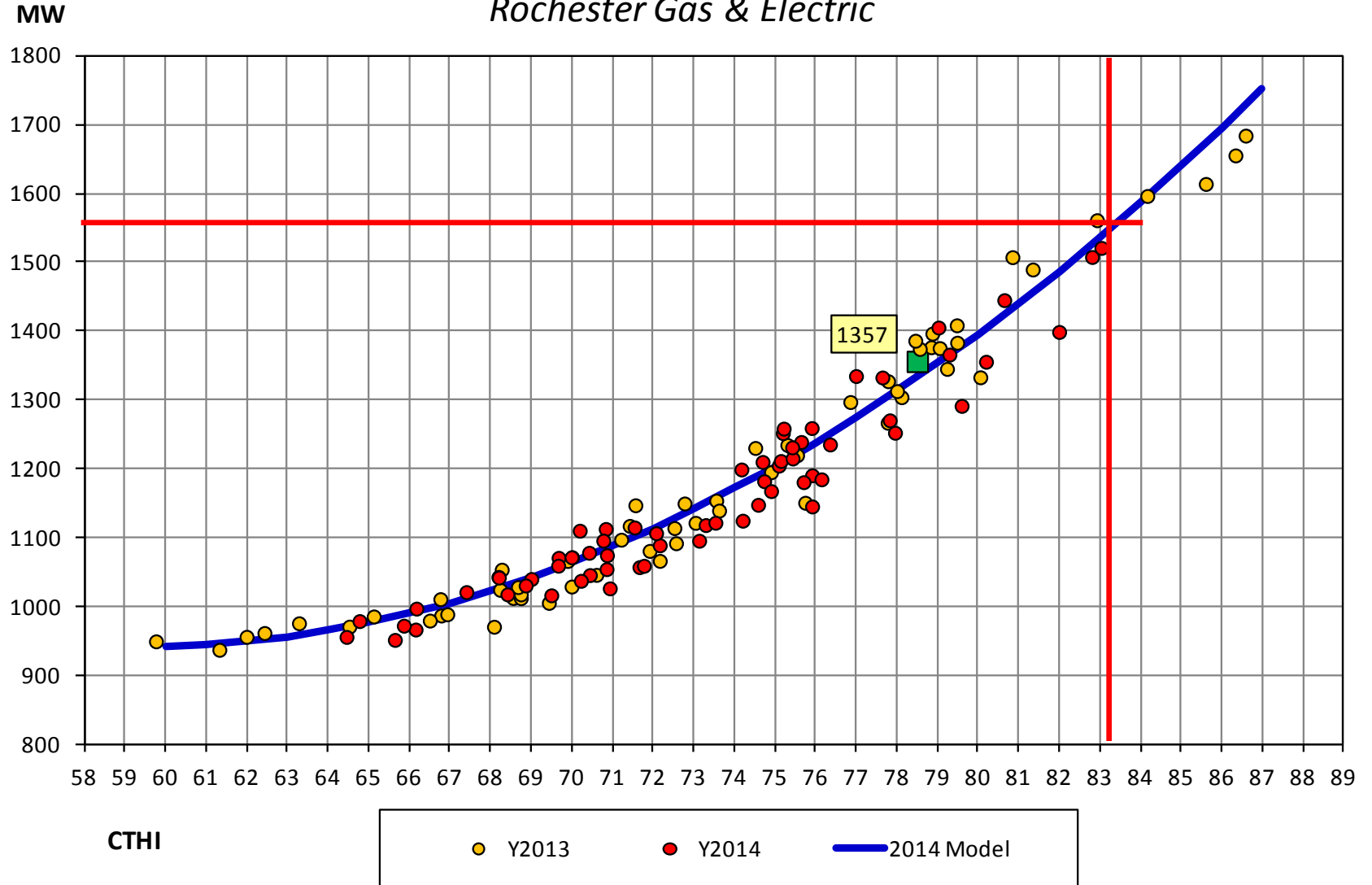
Preliminary 2014 Weather Normalization Model New York Power Authority



Preliminary 2014 Weather Normalization Model *Orange & Rockland*



Preliminary 2014 Weather Normalization Model Rochester Gas & Electric



Preliminary 2014 Weather Normalized Peaks

Transmission Districts

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Transmission District	2014 Actual MW, 9/2/2014 HB 15	Adjustments to Load	SCR/EDRP Estimate MW	Weather Adjustment MW	2014 Weather Normalized MW	Loss Reallocation MW	2014 WN MW, Adj for Losses	2014 ICAP Forecast MW	Over/Under MW	Percent Over/Under
Cen. Hudson	1,000	0	0	85	1,085	-5	1,080	1,089	-9	-0.9%
Con Ed	12,150	0	0	1,300	13,450	234	13,684	13,719	-35	-0.3%
LIPA	5,035	25	0	335	5,395	76	5,471	5,470	1	0.0%
NGrid	6,286	25	0	864	7,175	-331	6,844	6,862	-18	-0.3%
NYPA	313	0	0	27	340	4	344	506	-162	-47.2%
NYSEG	2,738	-13	0	442	3,167	-21	3,146	3,229	-83	-2.6%
O&R	960	0	0	150	1,110	16	1,126	1,191	-65	-5.8%
RG&E	1,259	0	0	311	1,570	27	1,597	1,600	-3	-0.2%
Grand Total	29,741	37	0	3,514	33,292	0	33,292	33,666	-374	-1.1%

Localities

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Locality	2014 Actual MW	Other Changes	SCR/EDRP Estimate MW	Locality Weather Adjustment MW	2014 Adjusted MW	2014 ICAP Forecast MW	Over/Under MW	Percent Over/Under
Zone J - NYC	10,572	0	0	1,262	11,834	11,783	-51	-0.4%
Zone K - LI	5,055	25	0	410	5,490	5,496	6	0.1%
Zone GHIJ	14,479	0	0	1,716	16,195	16,291	96	0.6%

Loss Reallocation Detail

Used to Align 2014 Weather Normalized Loads to ICAP Forecast

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Transmission District	2014 Actual MW	2014 Adjusted MW	Actual Losses	WN Losses	WN Load Less Losses	Proportion of LLL	WN Losses, Proportional	2014 Adjusted Actual MW	Loss Reallocation
Central Hudson	1,000	1,085	30.0	33.0	1,052	0.032	28.0	1,080	-5.0
Con Ed	12,150	13,450	113.0	125.0	13,325	0.411	359.0	13,684	234.0
LIPA	5,035	5,395	63.0	68.0	5,327	0.164	144.0	5,471	76.0
NGrid	6,286	7,175	448.0	511.0	6,664	0.206	180.0	6,844	-331.0
NYPA	313	340	5.0	5.0	335	0.010	9.0	344	4.0
NYSEG	2,738	3,167	90.0	104.0	3,063	0.094	83.0	3,146	-21.0
O&R	960	1,110	12.0	14.0	1,096	0.034	30.0	1,126	16.0
RG&E	1,259	1,570	12.0	15.0	1,555	0.048	42.0	1,597	27.0
Total	29,741	33,292	773.0	875.0	32,417	1.000	875.0	33,292	0.0

Description of Data in Columns

- (4) Actual losses were 773 MW.
- (5) Weather-normalized losses were 875 MW.
- (8) Losses in Col. (5) are reallocated proportional to MW share of TD Loads less Losses in Col (6), as shown in Col. (7)
- (10) Net change in losses for each TD

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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