



NYSRC Fall Forecast Update: 2023 IRM Forecast

Revised posting

Max Schuler

Demand Forecasting & Analysis

NYSRC Installed Capacity Subcommittee

October 5, 2022

Revised Posting

- Revised presentation – all O&R, G-to-J, and Zone G weather adjusted peaks and forecast values are increased by approximately 4 MW relative to the original ICS posting on 9/29, based upon final Orange & Rockland updates

Agenda

- **Summary and Background**
- **2022 Weather Normalized Peaks**
- **2023 IRM Forecast**
- **Appendix - Coincident Peak Weather Normalization Models**

Summary and Background

■ 2022 Weather Normalized Coincident Peak

- Actual 2022 coincident peak hour load (7/20/22 hour beginning 17)
- Coincident peak weather adjustment
- Estimated demand response and municipal self-generation impacts
- The sum of these components yields the final 2022 weather normalized coincident peak by Transmission District

■ 2023 IRM Coincident Peak Forecast

- Transmission District Regional Load Growth Factors (1+RLGF)
- Large Load growth, i.e., projected 2023 forecast for large load projects relative to 2022 actual coincident load
- BTM:NG forecast: projected BTM:NG resource load based primarily upon actual load during the 2022 NYCA peak
- Transmission District IRM coincident peak forecasts are the product of the 2022 weather normalized peak and the 1+RLGF, plus large load growth and BTM:NG load
- The NYCA coincident peak forecast is the sum of Transmission District forecasts

Summary and Background (cont.)

■ 2023 IRM Locality Peak Forecasts

- Zonal shares are applied to Transmission District values to calculate Locality coincident peaks
- Locality non-coincident peak forecasts are calculated by multiplying the coincident peak forecast by the non-coincident to coincident peak (NCP to CP) ratio

■ 2023 IRM Zonal Peak Forecasts

- Zonal shares are applied to Transmission District values to calculate Zonal coincident peaks
- Zonal non-coincident peak forecasts are calculated by multiplying the coincident peak forecast by the NCP to CP ratio
- Zonal forecasts are presented in two forms:
 - Before BTM:NG adjustments – these forecasts are analogous to the Gold Book forecast
 - After BTM:NG load adjustments – these forecasts are used for IRM modeling, as BTM:NG generation is modeled as a resource

Summary and Background (cont.)

- **The NYISO first performed independent analyses**
 - Weather adjusted coincident Transmission District peaks
 - NCP/CP ratios and weather adjusted Locality peaks
 - Preliminary 1+RLGFs based upon the 2022 Gold Book forecast

- **Information submitted by the Transmission Owners was incorporated into the 2023 IRM forecast as appropriate**
 - Actual coincident peak load values
 - Coincident and/or non-coincident weather adjustments
 - Coincident and/or non-coincident weather adjusted peaks
 - Updated Regional Load Growth Factors (RLGFs)

Summary and Background (cont.)

- **Changes since the 9/27 LFTF meeting – informed by T0 updates**
 - Updated Con Edison Regional Load Growth Factor
 - 1+RLGF increased from 1.0082 to 1.0219
 - 171 MW increase in the 2023 Con Ed coincident peak forecast
 - Proportional increases in the Zone J and G-to-J Locality forecasts, and Zones H&I forecasts
 - The increased RLGf (reflecting growth in the 2023 forecast peak relative to the 2022 weather adjusted peak) is driven by increased electric vehicle and appliance electrification drivers, decreased energy efficiency and storage peak reduction impacts, strong commercial and residential load growth, and a continued load recovery from the COVID-19 pandemic
 - Updated National Grid weather adjusted peak
 - 37 MW decrease in the 2022 National Grid weather normalized coincident peak and 2023 IRM forecast
 - Proportional changes filter through to the Zones A through F forecasts
 - Updated Orange & Rockland RLGf
 - 1+RLGF increased from 0.9964 to 1.0037
 - Increase of approximately 7 MW to the O&R, G-to-J Locality, and Zone G forecasts
 - *Change relative to the original ICS posting on 9/29*
- **Additional detail is available from the 9/16 and 9/27 LFTF meetings**
 - [September 16th Load Forecasting Task Force](#)
 - [September 27th Load Forecasting Task Force](#)

2022 Weather Normalized Peaks

Summary of 2022 Transmission District Weather Normalization NYCA Coincident Peak

2022 Weather Normalized Coincident Peak Load									
(1)	(2)	(3)	(4)	(5) = (2) + (3) + (4)	(6)	(7) = (5) + (6)	(8)	(9) = (8) - (7)	(10) = (9) / (8) * 100%
Transmission District	2022 Actual MW, 7/20/2022 HB 17	Demand Response Estimate MW	Estimated Muni Self-Gen MW	2022 Actual MW, with Estimated DR and Muni Self Gen MW	Weather Adjustment MW	2022 Weather Normalized MW	2022 ICAP Forecast, Prior to BTM:NG Resources MW	TO Forecast, Over / Under MW	TO Forecast Delta, Percent Over / Under
Con Edison	11,457.1	241.0	0.0	11,698.1	749.9	12,448.0	12,401.7	-46.3	-0.37%
Cen Hudson	1,020.0	0.0	0.0	1,020.0	-1.0	1,019.0	1,077.3	58.3	5.41%
LIPA	5,121.6	16.0	0.0	5,137.6	-74.9	5,062.7	5,056.1	-6.6	-0.13%
Nat. Grid	6,789.3	243.0	39.0	7,071.3	-74.7	6,996.6	6,990.6	-6.0	-0.09%
NYPA	474.6	0.0	0.0	474.6	-0.4	474.2	459.8	-14.4	-3.13%
NYSEG	3,084.7	53.0	0.0	3,137.7	44.1	3,181.8	3,102.8	-79.0	-2.55%
O&R	1,038.7	0.0	0.0	1,038.7	29.7	1,068.4	1,111.2	42.8	3.85%
RG&E	1,506.3	7.0	0.0	1,513.3	10.6	1,523.9	1,566.0	42.1	2.69%
NYCA	30,492.3	560.0	39.0	31,091.3	683.3	31,774.6	31,765.5	-9.1	-0.03%

Notes: NYCA peak load hour is defined by measurements from the NYISO EMS system (PI Historian).

Actual load data is from DSS/TO.

Demand Response and Muni Self-Gen impacts are estimates; and may be revised for the ICAP Market forecast.

Summary of 2022 Weather Normalized Locality Peaks

2022 Weather Normalized Locality Peaks												
(1)	(2)	(3)	(4)	(5)	(6) = (3) + (4) + (5)	(7)	(8)	(9) = (7) * (8)	(10) = (9) - (6)	(11)	(12) = (11) - (9)	(13) = (12) / (11) * 100%
2022 Locality Peak Information						2022 Locality Weather Normalization Calculation						
Locality	Locality Peak Date and Time	Actual Load at Locality Peak Date and Time MW	DR Estimate at Locality Peak Date and Time MW	Estimated Muni Self-Gen MW	2022 Actual MW, with Estimated DR and Muni Self-Gen MW	2022 Weather Normalized Coincident Peak Demand MW	NCP to CP Ratio (15 year avg. with outliers removed)	2022 Locality Weather Normalized MW	Locality Weather Adjustment MW	2022 ICAP Market Forecast MW	Forecast Over /Under MW	Forecast Delta, Percent Over /Under
Zone J - NYC	8/9/2022 HB 16	10,766.9	233.0	0.0	10,999.9	10,808.4	1.0196	11,020.2	20.3	10,906.0	-114.2	-1.0%
Zone K - LIPA	8/9/2022 HB 17	5,214.6	16.0	0.0	5,230.6	5,062.7	1.0166	5,146.5	-84.1	5,137.5	-9.0	-0.2%
Zones G-to-J	8/9/2022 HB 17	14,884.0	258.0	0.0	15,142.0	14,915.2	1.0133	15,113.6	-28.4	15,125.2	11.6	0.1%

Notes: Locality peak load hours are defined by measurements from the NYISO EMS system (PI Historian).

Actual load data is from DSS/TO.

Demand Response and Muni Self-Gen impacts are estimates; and may be revised for the ICAP Market forecast.

2023 IRM Forecast

2023 IRM Forecast - NYCA Coincident Peak

2023 IRM Coincident Peak Forecast									
(1)	(2)	(3)	(4) = (2) + (3)	(5)	(6) = (4) * (5)	(7)	(8) = (6) + (7)	(9)	(10) = (8) + (9)
Transmission District	2022 Actual MW, 7/20/2022 HB 17	Total Adjustment (Demand Response + Muni Self-Gen + Wthr Adjustment) MW	2022 Weather Normalized Coincident Peak MW	Regional Load Growth Factor	2023 Forecast, Before Adjustments MW	Large Load Forecast MW	2023 IRM Forecast, With Large Load Growth, Before BTM:NG Adjustments MW	BTM:NG Forecast MW	TO Forecast, With Large Load Growth and BTM:NG Adjustments MW
Con Edison	11,457.1	990.9	12,448.0	1.0219	12,720.6	0.0	12,720.6	23.4	12,744.0
Cen Hudson	1,020.0	-1.0	1,019.0	0.9963	1,015.2	0.0	1,015.2	0.0	1,015.2
LIPA	5,121.6	-58.9	5,062.7	0.9896	5,010.0	0.0	5,010.0	40.3	5,050.3
Nat. Grid	6,789.3	207.3	6,996.6	1.0000	6,996.6	93.0	7,089.6	1.7	7,091.3
NYPA	474.6	-0.4	474.2	1.0000	474.2	24.7	498.9	0.0	498.9
NYSEG	3,084.7	97.1	3,181.8	0.9831	3,127.9	30.0	3,157.9	39.6	3,197.5
O&R	1,038.7	29.7	1,068.4	1.0037	1,072.4	0.0	1,072.4	0.0	1,072.4
RG&E	1,506.3	17.6	1,523.9	1.0000	1,523.9	0.0	1,523.9	52.5	1,576.4
NYCA	30,492.3	1,282.3	31,774.6	1.0052	31,940.8	147.7	32,088.5	157.5	32,246.0
2023 Forecast from 2022 Gold Book							32,018.0		
Change from 2022 Gold Book							70.5		
Percent Change							0.2%		

2023 IRM Forecast - Locality Peaks

2023 IRM Locality Peak Forecasts									
(1)	(2)	(3)	(4)	(5) = (3) * (4)	(6)	(7) = (6) - (5)	(8) = (7) / (6)	(9)	(10) = (8) + (9)
Locality	2022 Locality Peak MW	2022 Weather Normalized Locality Peak MW	Regional Load Growth Factor	2023 IRM Locality Peak Forecast Before BTM:NG Adjustments MW	2023 Forecast from 2022 Gold Book MW	Change from Gold Book Forecast MW	Percent Change from Gold Book Forecast	BTM:NG Forecast MW	Locality Peak Forecast, Including BTM:NG Adjustments MW
Zone J - NYC	10,766.9	11,020.2	1.0219	11,261.6	11,001.0	260.6	2.4%	23.4	11,285.0
Zone K - LIPA	5,214.6	5,146.5	0.9896	5,093.0	5,031.0	62.0	1.2%	40.3	5,133.3
Zones G-to-J	14,884.0	15,113.6	1.0179	15,383.4	15,223.0	160.4	1.1%	23.4	15,406.8

2022 Weather Adjusted Coincident Peak by Subzone

2022 Weather-Adjusted Coincident Peak, Including Demand Response and Muni Self-Gen												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	A	B	C	D	E	F	G	H	I	J	K	Total
Con Ed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	272.5	1,367.1	10,808.4	0.0	12,448.0
Cen Hud	0.0	0.0	0.0	0.0	3.4	0.0	1,015.6	0.0	0.0	0.0	0.0	1,019.0
LIPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,062.7	5,062.7
Nat Grid	1,977.3	413.7	1,305.2	90.4	928.6	2,281.4	0.0	0.0	0.0	0.0	0.0	6,996.6
NYPA	0.0	0.0	0.0	474.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	474.2
NYSEG	674.1	0.0	1,424.8	107.5	429.3	162.9	21.7	361.5	0.0	0.0	0.0	3,181.8
O&R	0.0	0.0	0.0	0.0	0.0	0.0	1,068.4	0.0	0.0	0.0	0.0	1,068.4
RG&E	0.0	1,523.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,523.9
Total	2,651.4	1,937.6	2,730.0	672.1	1,361.3	2,444.3	2,105.7	634.0	1,367.1	10,808.4	5,062.7	31,774.6

Notes: Con Edison Zone G losses moved to Zone J.

Transmission District actual loads and weather adjustments apportioned to zones using sub-zonal shares presented at 9/16 LFTF.

Sub-zonal demand response and Muni self-gen estimates are applied independently.

2023 Forecast With Large Load Growth, Before BTM:NG Adjustments

NYCA Coincident Peak

2023 IRM Coincident Peak Forecast by Transmission District and Zone, With Large Load Growth, Before BTM:NG Adjustments													
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
	A	B	C	D	E	F	G	H	I	J	K	Total	RLGF
Con Ed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	278.5	1,397.0	11,045.1	0.0	12,720.6	1.0219
Cen Hud	0.0	0.0	0.0	0.0	3.4	0.0	1,011.8	0.0	0.0	0.0	0.0	1,015.2	0.9963
LIPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,010.0	5,010.0	0.9896
Nat Grid	2,070.3	413.7	1,305.2	90.4	928.6	2,281.4	0.0	0.0	0.0	0.0	0.0	7,089.6	1.0000
NYPA	0.0	0.0	0.0	498.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	498.9	1.0000
NYSEG	662.7	0.0	1,430.7	105.7	422.0	160.1	21.3	355.4	0.0	0.0	0.0	3,157.9	0.9831
O&R	0.0	0.0	0.0	0.0	0.0	0.0	1,072.4	0.0	0.0	0.0	0.0	1,072.4	1.0037
RG&E	0.0	1,523.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,523.9	1.0000
Total	2,733.0	1,937.6	2,735.9	695.0	1,354.0	2,441.5	2,105.5	633.9	1,397.0	11,045.1	5,010.0	32,088.5	
Large Loads	93.0	0.0	30.0	24.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

Note: Sub-zonal coincident peak forecasts are calculated by multiplying the 2022 weather adjusted coincident peak by the Transmission District RLGf; and adding projected large load growth.

2023 Forecast With Large Load Growth, Before BTM:NG Adjustments

Non-Coincident Peaks

2023 IRM Non-Coincident Peak Forecast by Transmission District and Zone, With Large Load Growth, Before BTM:NG Adjustments											
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	A	B	C	D	E	F	G	H	I	J	K
Con Ed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	284.0	1,424.4	11,261.6	0.0
Cen Hud	0.0	0.0	0.0	0.0	3.5	0.0	1,032.1	0.0	0.0	0.0	0.0
LIPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,093.0
Nat Grid	2,139.7	422.8	1,337.7	93.1	954.6	2,314.7	0.0	0.0	0.0	0.0	0.0
NYPA	0.0	0.0	0.0	513.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NYSEG	684.9	0.0	1,466.3	108.8	433.8	162.4	21.7	362.3	0.0	0.0	0.0
O&R	0.0	0.0	0.0	0.0	0.0	0.0	1,094.0	0.0	0.0	0.0	0.0
RG&E	0.0	1,557.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	2,824.6	1,980.2	2,804.0	715.4	1,391.9	2,477.1	2,147.8	646.3	1,424.4	11,261.6	5,093.0
NCP/CP Ratio	1.0335	1.0220	1.0249	1.0294	1.0280	1.0146	1.0201	1.0196	1.0196	1.0196	1.0166

Notes: NCP/CP calculations shown in 9/16 LTF materials.
Updated Zone K ratio, informed by LIPA TO analyses.

2023 Forecast With Large Load Growth and BTM:NG Adjustments

NYCA Coincident Peak

2023 IRM Coincident Peak Forecast by Transmission District and Zone, With Large Load Growth and BTM:NG Adjustments

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	A	B	C	D	E	F	G	H	I	J	K	Total
Con Ed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	278.5	1,397.0	11,068.5	0.0	12,744.0
Cen Hud	0.0	0.0	0.0	0.0	3.4	0.0	1,011.8	0.0	0.0	0.0	0.0	1,015.2
LIPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5,050.3	5,050.3
Nat Grid	2,070.3	413.7	1,305.2	90.4	930.3	2,281.4	0.0	0.0	0.0	0.0	0.0	7,091.3
NYPA	0.0	0.0	0.0	498.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	498.9
NYSEG	662.7	0.0	1,470.3	105.7	422.0	160.1	21.3	355.4	0.0	0.0	0.0	3,197.5
O&R	0.0	0.0	0.0	0.0	0.0	0.0	1,072.4	0.0	0.0	0.0	0.0	1,072.4
RG&E	0.0	1,576.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,576.4
Total	2,733.0	1,990.1	2,775.5	695.0	1,355.7	2,441.5	2,105.5	633.9	1,397.0	11,068.5	5,050.3	32,246.0
BTM:NG	0.0	52.5	39.6	0.0	1.7	0.0	0.0	0.0	0.0	23.4	40.3	

G-to-J Locality Weather Normalized Peak and 2023 Forecast

2022 Weather-Adjusted G-to-J Locality Peak					
(1)	(2)	(3)	(4)	(5)	(6)
	G	H	I	J	G-to-J Total
Con Ed	0.0	276.1	1,385.3	10,952.2	12,613.6
Cen Hud	1,029.1	0.0	0.0	0.0	1,029.1
LIPA	0.0	0.0	0.0	0.0	0.0
Nat Grid	0.0	0.0	0.0	0.0	0.0
NYPA	0.0	0.0	0.0	0.0	0.0
NYSEG	22.0	366.3	0.0	0.0	388.3
O&R	1,082.6	0.0	0.0	0.0	1,082.6
RG&E	0.0	0.0	0.0	0.0	0.0
Total	2,133.7	642.4	1,385.3	10,952.2	15,113.6
<i>NCP/CP Ratio</i>	<i>1.0133</i>	<i>1.0133</i>	<i>1.0133</i>	<i>1.0133</i>	

2023 G-to-J Locality Peak Forecast With BTM:NG Adjustments							
(1)	(2)	(3)	(4)	(5)	(7)	(8)	(9)
	G	H	I	J	G-to-J Total	RLGF	BTM:NG Forecast
Con Ed	0.0	282.1	1,415.6	11,215.5	12,913.2	1.0219	23.4
Cen Hud	1,025.3	0.0	0.0	0.0	1,025.3	0.9963	0.0
LIPA	0.0	0.0	0.0	0.0	0.0	0.9896	0.0
Nat Grid	0.0	0.0	0.0	0.0	0.0	1.0000	0.0
NYPA	0.0	0.0	0.0	0.0	0.0	1.0000	0.0
NYSEG	21.6	360.1	0.0	0.0	381.7	0.9831	0.0
O&R	1,086.6	0.0	0.0	0.0	1,086.6	1.0037	0.0
RG&E	0.0	0.0	0.0	0.0	0.0	1.0000	0.0
Total	2,133.5	642.2	1,415.6	11,215.5	15,406.8	1.0179	23.4

Note: The G-to-J Locality weather adjusted zonal peaks are obtained by multiplying the weather adjusted coincident peaks (slide 14) by the G-J NCP/CP ratio shown above.

2023 IRM Zonal Forecast

2023 IRM Zonal Peak Forecasts Before BTM:NG Adjustments

Zonal Coincident Peak Forecast Before BTM:NG Adjustments

A	B	C	D	E	F	G	H	I	J	K	NYCA
2,733.0	1,937.6	2,735.9	695.0	1,354.0	2,441.5	2,105.5	633.9	1,397.0	11,045.1	5,010.0	32,088.5

Zonal Non-Coincident Peak Forecasts Before BTM:NG Adjustments

A	B	C	D	E	F	G	H	I	J	K
2,824.6	1,980.2	2,804.0	715.4	1,391.9	2,477.1	2,147.8	646.3	1,424.4	11,261.6	5,093.0

G-to-J Locality Peak Forecast Before BTM:NG Adjustments

A	B	C	D	E	F	G	H	I	J	K	G-to-J
						2,133.5	642.2	1,415.6	11,192.1		15,383.4

Note: All forecast values include impacts of large load growth

2023 IRM Zonal Forecast (cont.)

2023 IRM Zonal Peak Forecasts With BTM:NG Adjustments

BTM:NG Adjustments to Load

A	B	C	D	E	F	G	H	I	J	K	NYCA
	52.5	39.6		1.7					23.4	40.3	157.5

Zonal Coincident Peak Forecast With BTM:NG Adjustments

A	B	C	D	E	F	G	H	I	J	K	NYCA
2,733.0	1,990.1	2,775.5	695.0	1,355.7	2,441.5	2,105.5	633.9	1,397.0	11,068.5	5,050.3	32,246.0

Zonal Non-Coincident Peak Forecasts With BTM:NG Adjustments

A	B	C	D	E	F	G	H	I	J	K
2,824.6	2,032.7	2,843.6	715.4	1,393.6	2,477.1	2,147.8	646.3	1,424.4	11,285.0	5,133.3

G-to-J Locality Peak Forecast With BTM:NG Adjustments

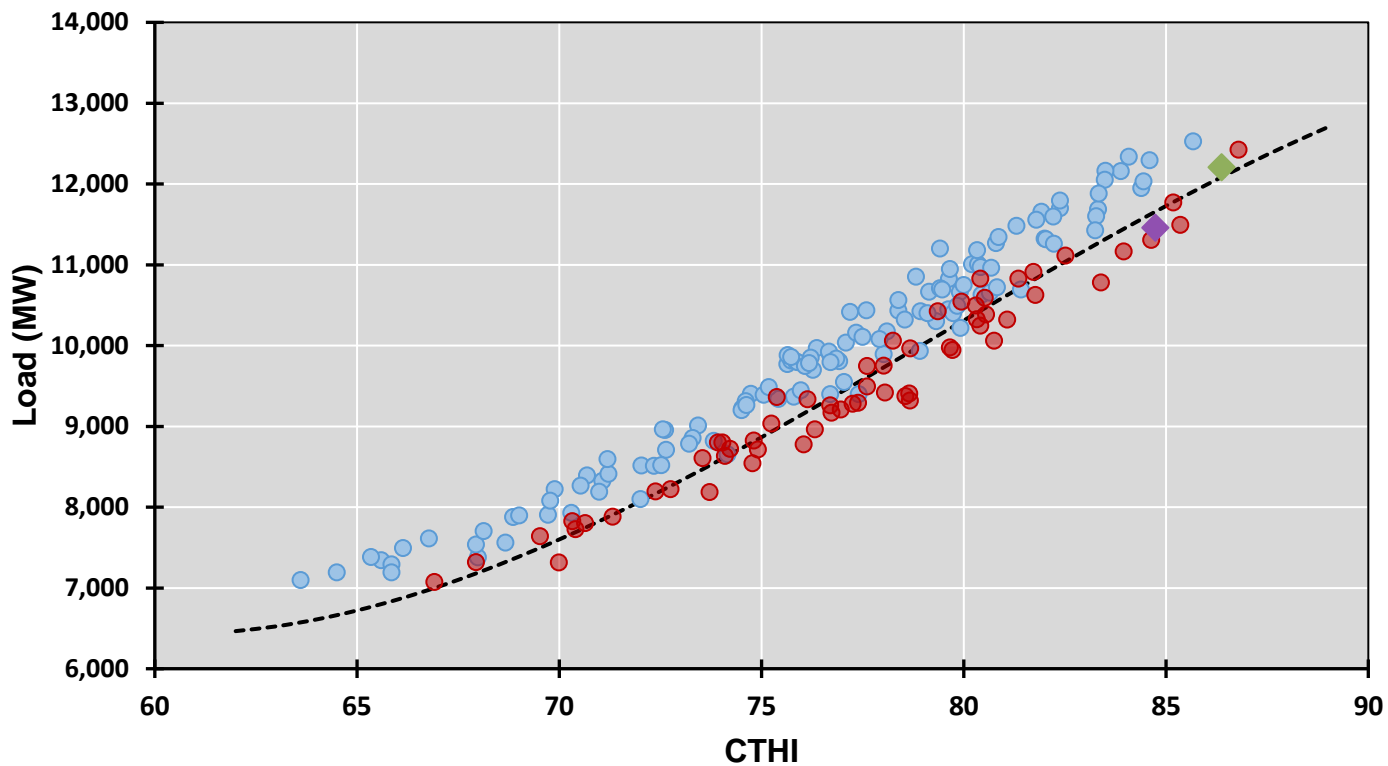
A	B	C	D	E	F	G	H	I	J	K	G-to-J
						2,133.5	642.2	1,415.6	11,215.5		15,406.8

Note: All forecast values include impacts of large load growth

Questions?

Appendix: Coincident Peak Weather Normalization Models

Con Ed Pooled Model



----- Regression Line (2022) ● Actual 2018_2019 ● Actual 2022 ◆ CP 2022 ◆ WN 2022

Design condition is 67th percentile.

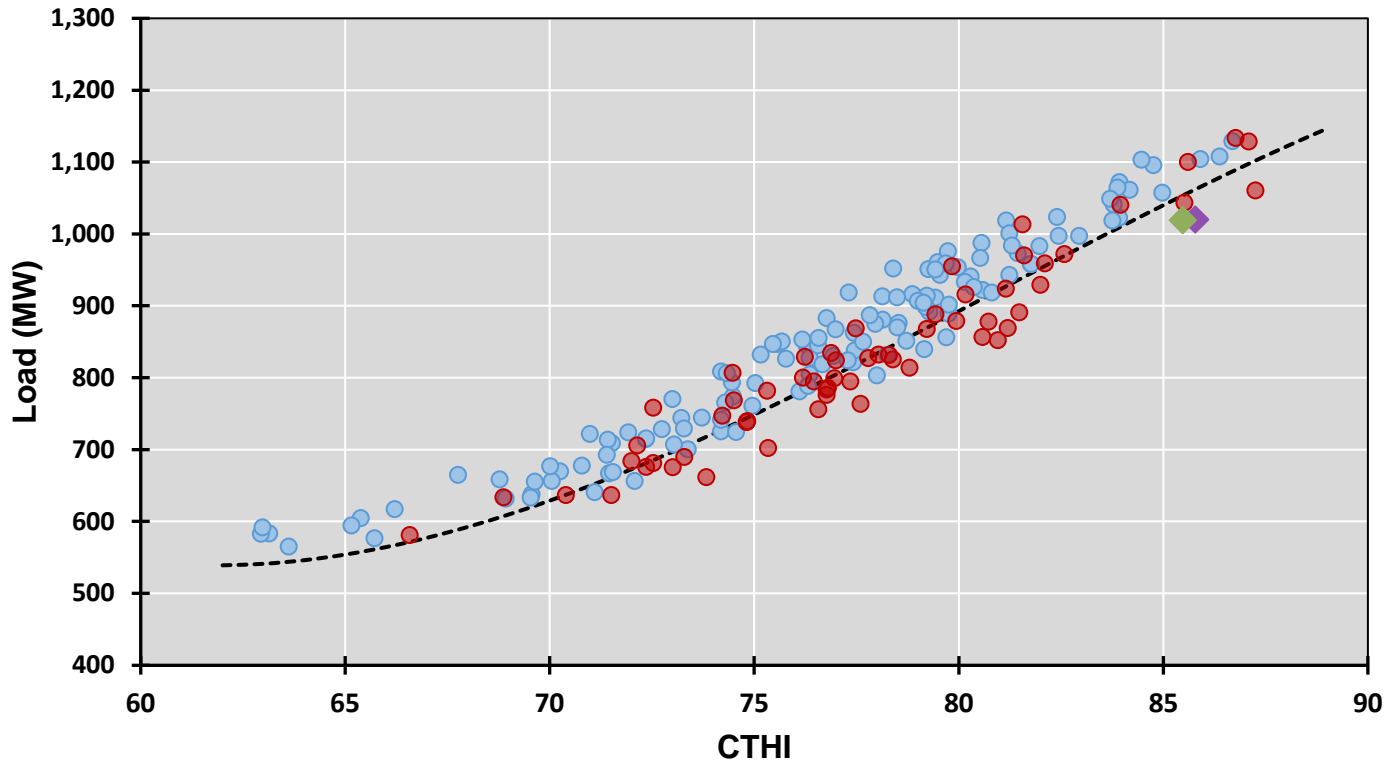
Purple dot shows 2022 coincident peak.

Green dot shows 2022 weather normalized coincident peak.

Dotted black line shows model fit during 2022 July-Aug design conditions.

2022 CP	11,457.1
Weather Adj	749.9
2022 WN CP (before adj)	12,207.0
Demand Response	241.0
2022 Final WN CP	12,448.0

Central Hudson Pooled Model



Design condition is 50th percentile.

Purple dot shows 2022 coincident peak.

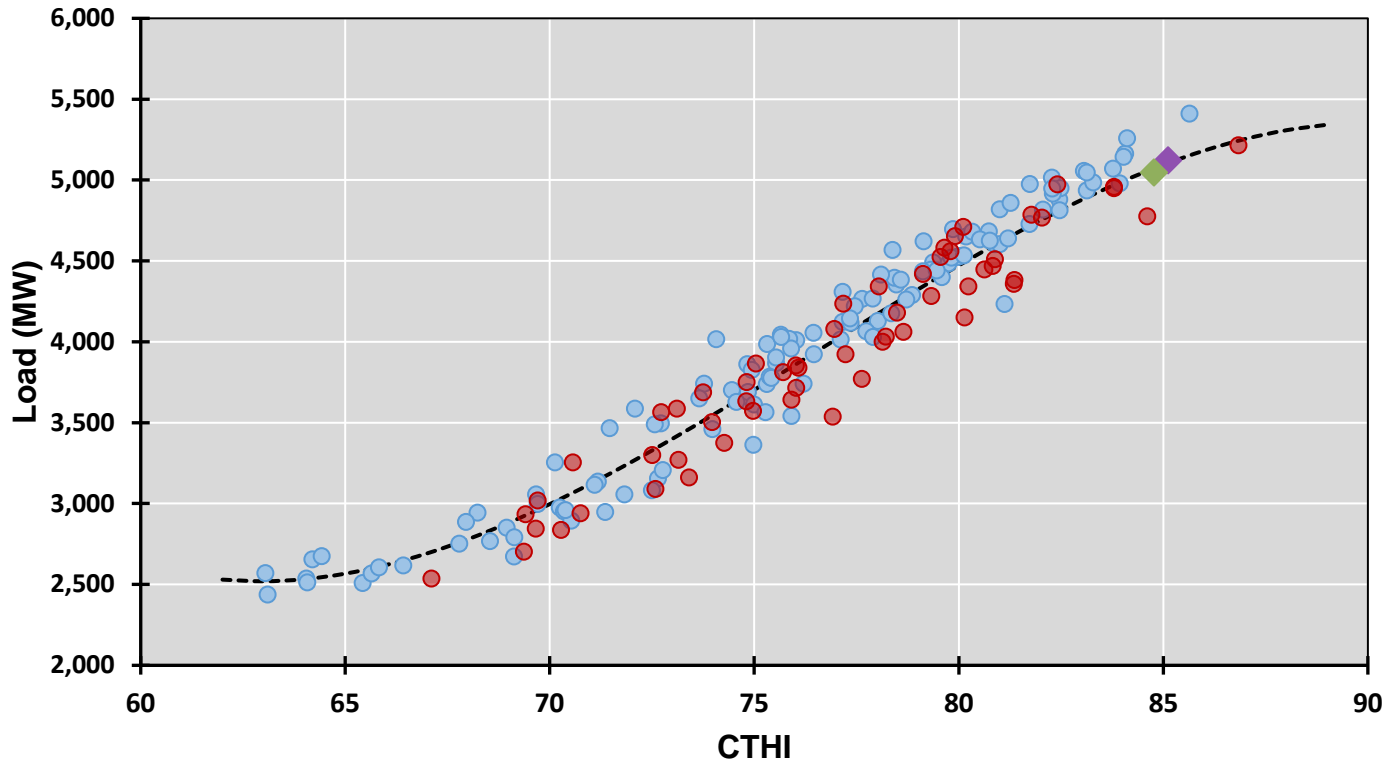
Green dot shows 2022 weather normalized coincident peak.

Dotted black line shows model fit during 2022 July-Aug design conditions.

2022 CP	1,020.0
Weather Adj	-1.0
2022 WN CP (before adj)	1,019.0
Demand Response	0.0
2022 Final WN CP	1,019.0

----- Regression Line (2022) ● Actual 2018_2019 ● Actual 2022 ◆ CP 2022 ◆ WN 2022

LIPA Pooled Model



----- Regression Line (2022) ● Actual 2018_2019 ● Actual 2022 ◆ CP 2022 ◆ WN 2022

Design condition is 50th percentile.

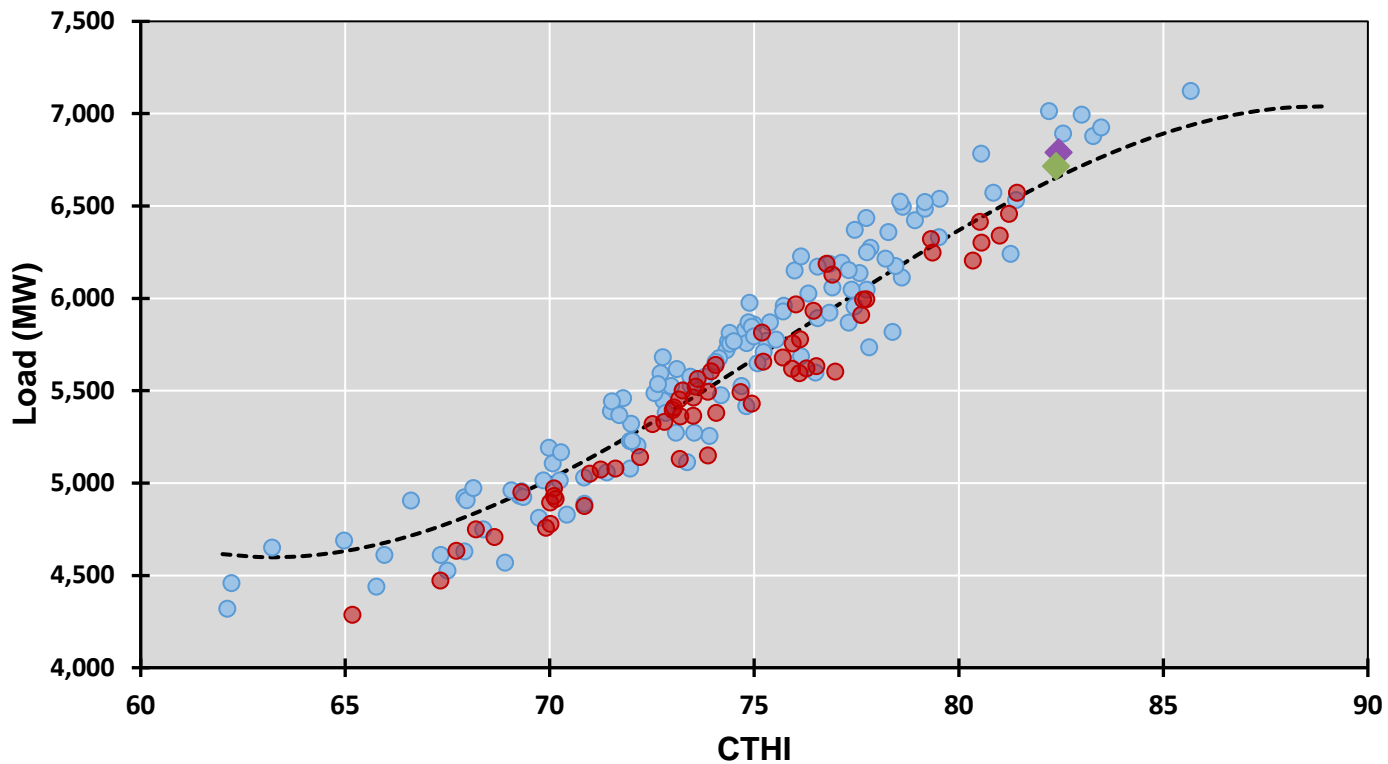
Purple dot shows 2022 coincident peak.

Green dot shows 2022 weather normalized coincident peak.

Dotted black line shows model fit during 2022 July-Aug design conditions.

2022 CP	5,121.6
Weather Adj	-74.9
2022 WN CP (before adj)	5,046.7
Demand Response	16.0
2022 Final WN CP	5,062.7

Nat Grid Pooled Model



----- Regression Line (2022) ● Actual 2018_2019 ● Actual 2022 ◆ CP 2022 ◆ WN 2022

Design condition is 50th percentile.

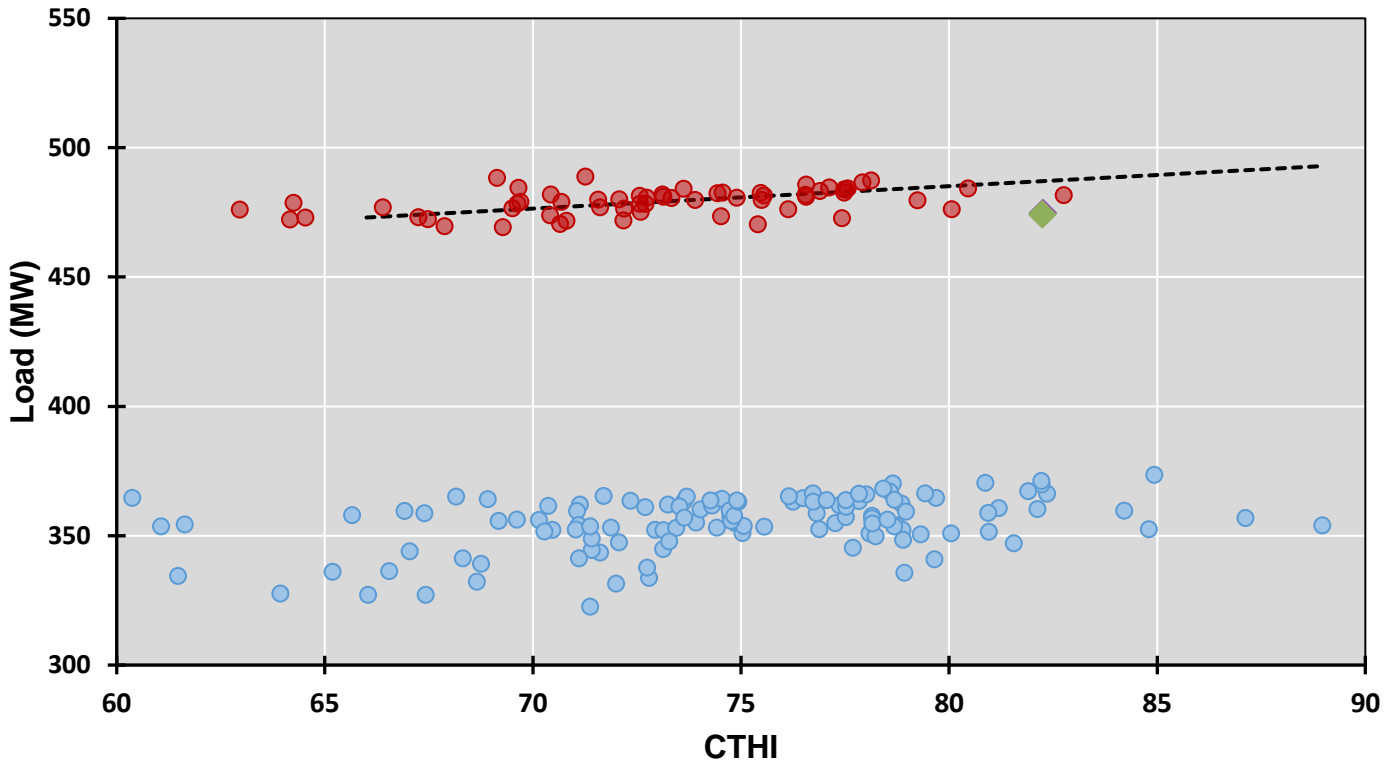
Purple dot shows 2022 coincident peak.

Green dot shows 2022 weather normalized coincident peak.

Dotted black line shows model fit during 2022 July-Aug design conditions.

2022 CP	6,789.3
Weather Adj	-74.7
2022 WN CP (before adj)	6,714.6
Demand Response	243.0
Muni Self Gen (est.)	39.0
2022 Final WN CP	6,996.6

NYPA Pooled Model



----- Regression Line (2022) ● Actual 2018_2019 ● Actual 2022 ◆ CP 2022 ◆ WN 2022

Design condition is 50th percentile.

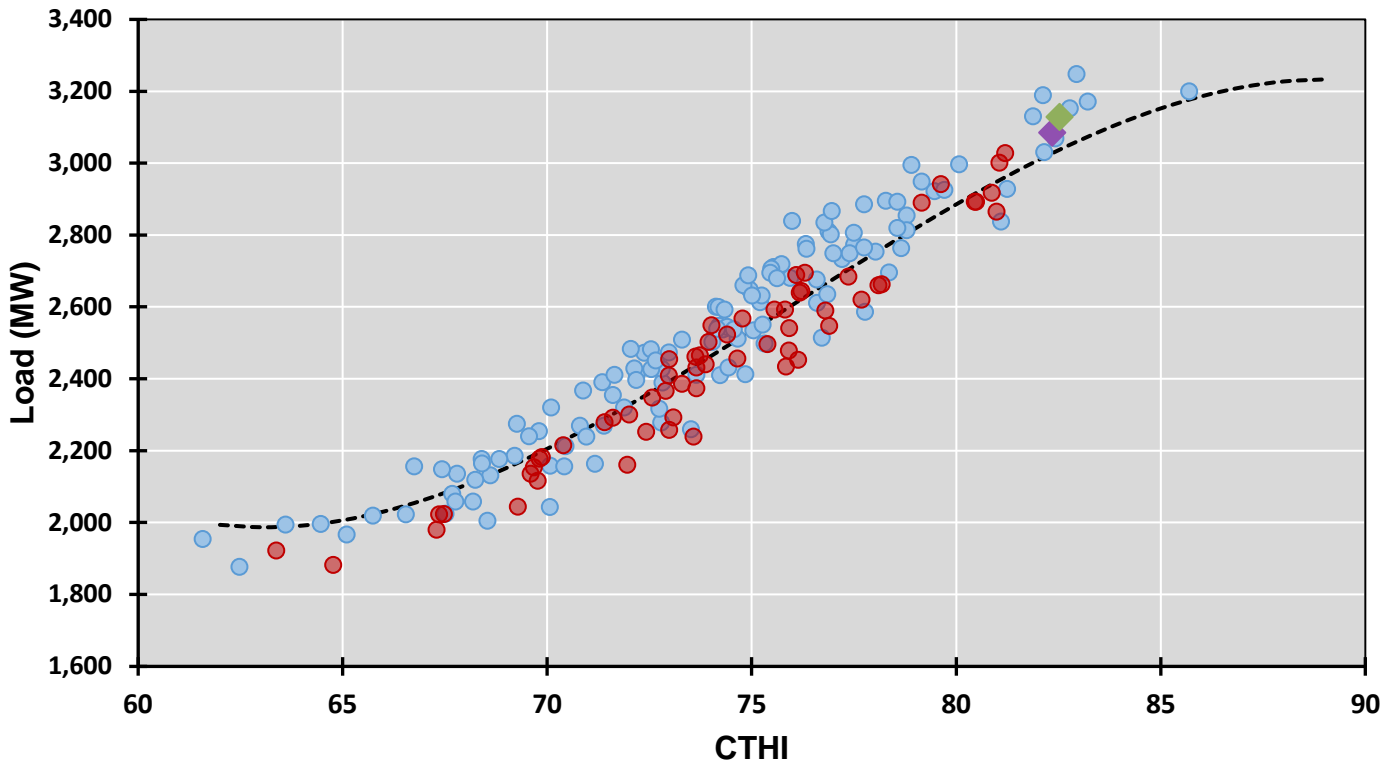
Purple dot shows 2022 coincident peak.

Green dot shows 2022 weather normalized coincident peak.

Dotted black line shows model fit during 2022 July-Aug design conditions.

2022 CP	474.6
Weather Adj	-0.4
2022 WN CP (before adj)	474.2
Demand Response	0.0
2022 Final WN CP	474.2

NYSEG Pooled Model



Design condition is 50th percentile.

Purple dot shows 2022 coincident peak.

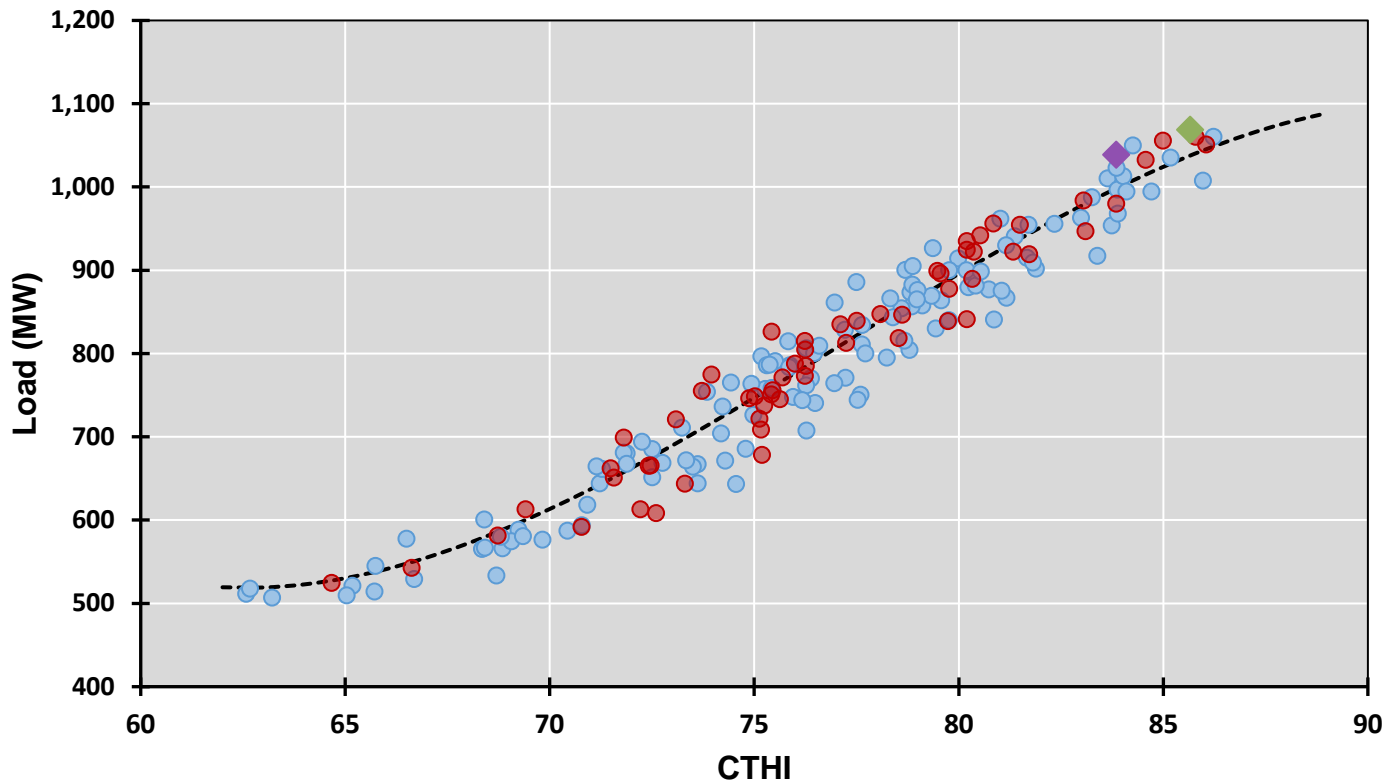
Green dot shows 2022 weather normalized coincident peak.

Dotted black line shows model fit during 2022 July-Aug design conditions.

2022 CP	3,084.7
Weather Adj	44.1
2022 WN CP (before adj)	3,128.8
Demand Response	53.0
2022 Final WN CP	3,181.8

----- Regression Line (2022) ● Actual 2018_2019 ● Actual 2022 ◆ CP 2022 ◆ WN 2022

O&R Pooled Model



----- Regression Line (2022) ● Actual 2018_2019 ● Actual 2022 ◆ CP 2022 MW ◆ WN 2022 MW

Design condition is 67th percentile.

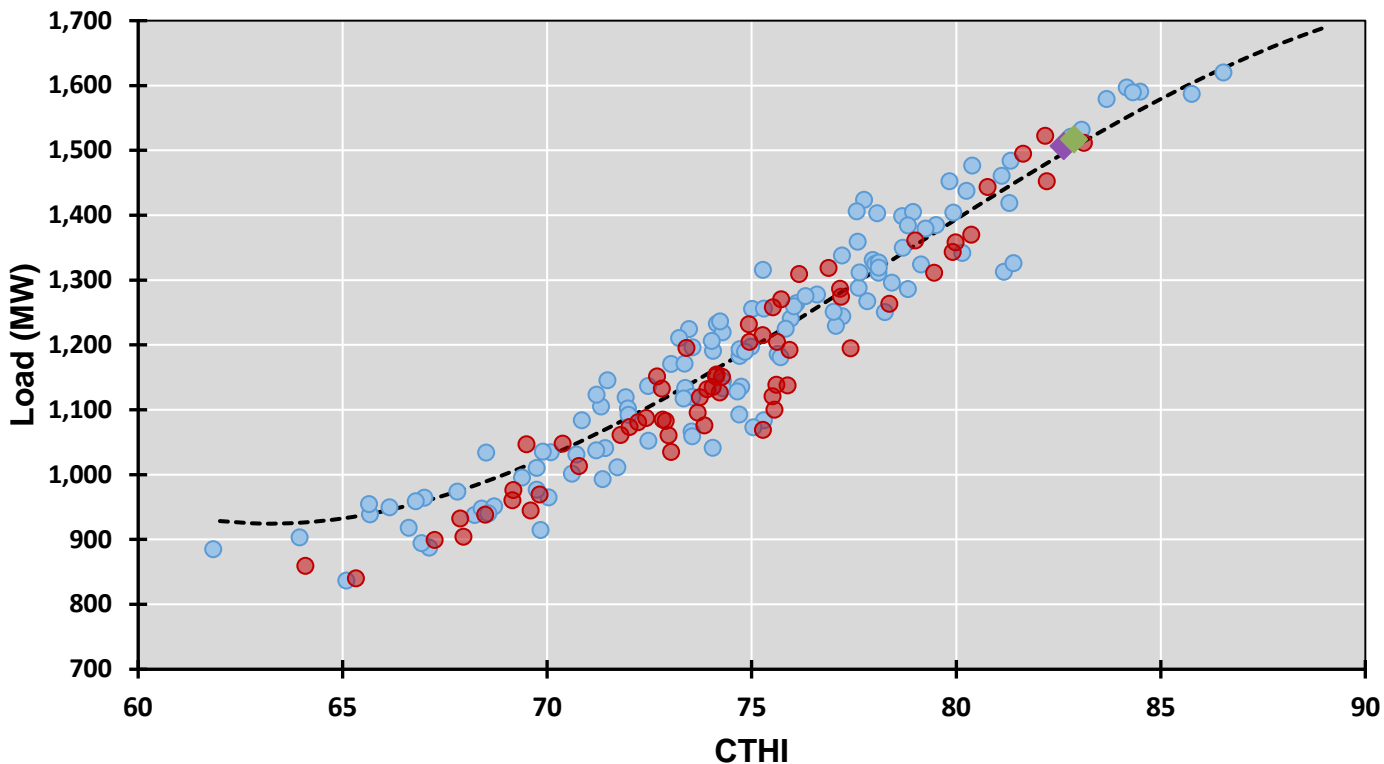
Purple dot shows 2022 coincident peak.

Green dot shows 2022 weather normalized coincident peak.

Dotted black line shows model fit during 2022 July-Aug design conditions.

2022 CP	1,038.7
Weather Adj	29.7
2022 WN CP (before adj)	1,068.4
Demand Response	0.0
2022 Final WN CP	1,068.4

RG&E Pooled Model



----- Regression Line (2022) ● Actual 2018_2019 ● Actual 2022 ◆ CP 2022 ◆ WN 2022

Design condition is 50th percentile.

Purple dot shows 2022 coincident peak.

Green dot shows 2022 weather normalized coincident peak.

Dotted black line shows model fit during 2022 July-Aug design conditions.

2022 CP	1,506.3
Weather Adj	10.6
2022 WN CP (before adj)	1,516.9
Demand Response	7.0
2022 Final WN CP	1,523.9



Our Mission & Vision



Mission

Ensure power system reliability and competitive markets for New York in a clean energy future



Vision

Working together with stakeholders to build the cleanest, most reliable electric system in the nation