



# **NYSRC Fall Forecast Update – Updated 2022 Weather Normalization and Proposed 2023 IRM Forecast**

---

**Max Schuler**

Demand Forecasting & Analysis

**Load Forecasting Task Force**

September 27, 2022

# Agenda

- **Summary of updates since 9/16 LFTF**
- **2022 Weather Normalized Peaks**
- **Coincident Peak Weather Normalization Models**
  - Include updated weather normalized coincident peaks
- **Proposed 2023 IRM Forecast**

# Summary of Updates Since 9/16 LFTF

# Summary of Updates

- **NYISO performed additional coincident peak weather normalization analyses for certain Transmission Districts as appropriate**
  - Additional focus on near or above design condition daily peaks if the coincident peak was significantly below design conditions
  - Calculation of expected load at design conditions as estimated by the regression curve
- **NYISO evaluated non-coincident peak load and weather adjustments for certain Transmission Districts as appropriate, for purposes of informing weather normalized Locality peaks**
- **NYISO evaluated the inclusion of Demand Response impacts in the non-coincident to coincident peak (NCP to CP) ratios**
  - Minor differences across Localities relative to typical ratio calculation (absolute deviations  $<0.004$ )
  - No consistent year-to-year difference in ratio calculation (not consistently greater or smaller than typical method)
  - Zone J (1.0196) and G-to-J (1.0133) Locality ratios are retained
  - Updated Zone K ratio (1.0166) informed by LIPA analyses (previously 1.0165)

# Summary of Updates (cont.)

- **Information submitted by Transmission Owners has been incorporated into the 2022 weather normalized peaks and preliminary 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)

# 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	-37.3	7,034.0	6,990.6	-43.4	-0.62%
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	30.3	1,069.0	1,111.2	42.2	3.80%
RG&E	1,506.3	7.0	0.0	1,513.3	10.6	1,523.9	1,566.0	42.1	2.69%
<b>NYCA</b>	<b>30,492.3</b>	<b>560.0</b>	<b>39.0</b>	<b>31,091.3</b>	<b>721.3</b>	<b>31,812.6</b>	<b>31,765.5</b>	<b>-47.1</b>	<b>-0.15%</b>

Notes: 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.

# Summary of 2022 Transmission District Weather Normalization 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	14,915.8	1.0133	15,114.2	-27.8	15,125.2	11.0	0.1%

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

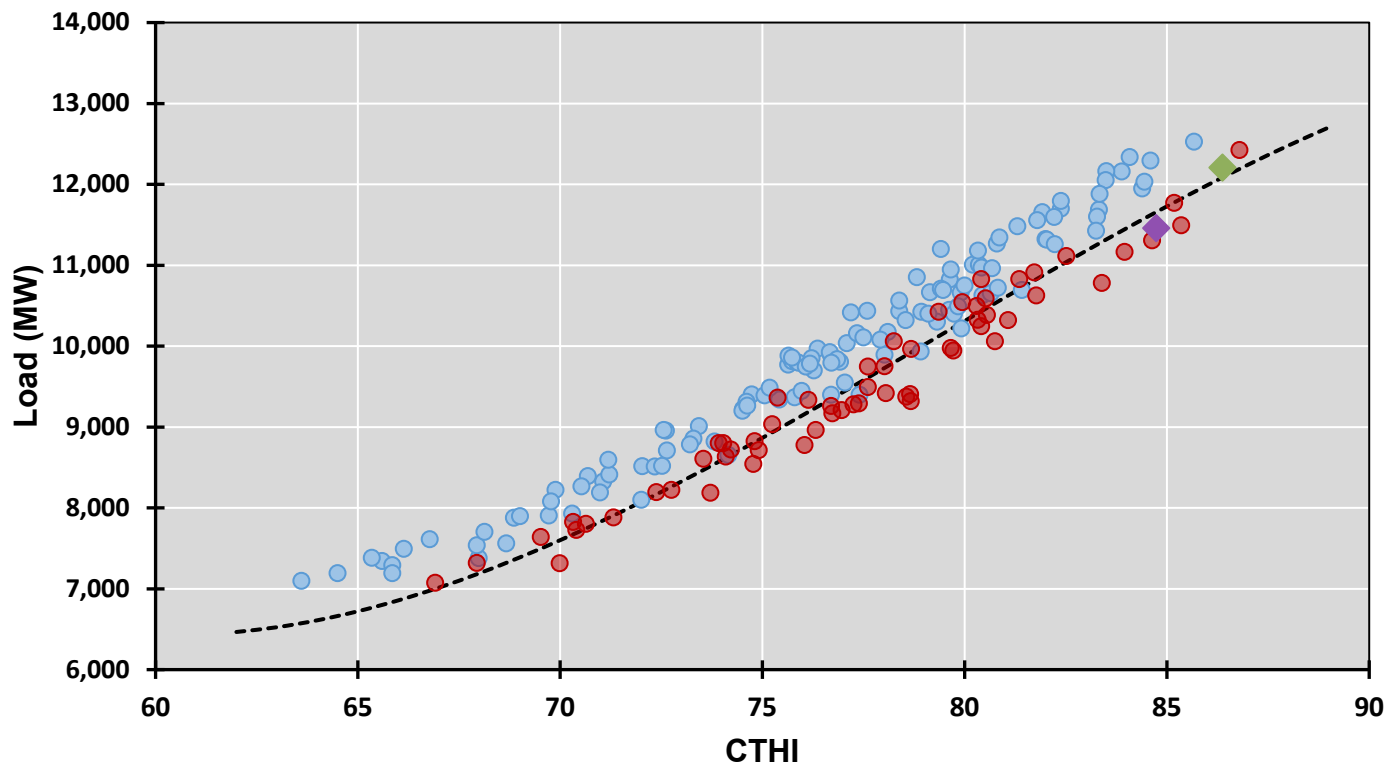
Actual load data is from DSS/TO.

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



# Coincident Peak Weather Normalization Models

# Con Ed Pooled Model



Design condition is 67<sup>th</sup> percentile.

**Purple dot** shows 2022 coincident peak.

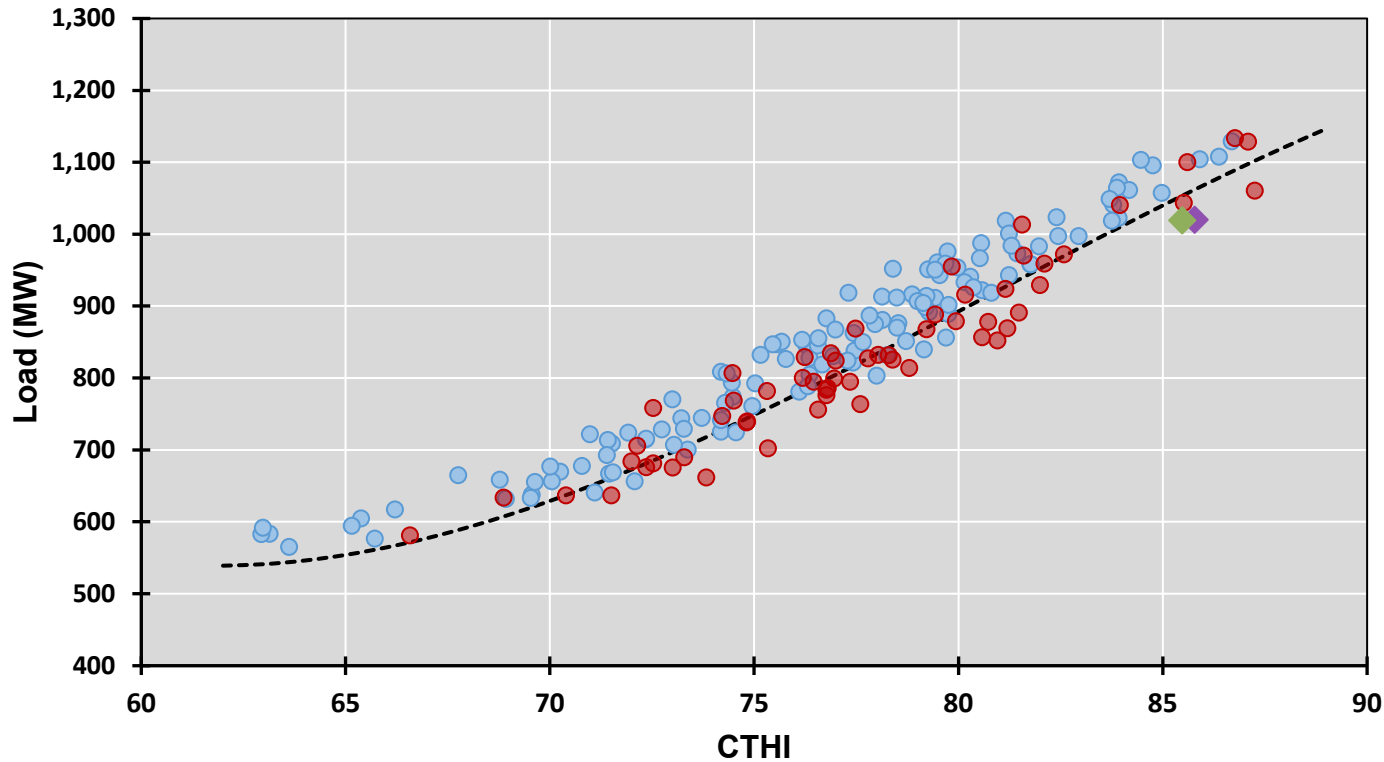
**Green dot** shows 2022 weather normalized coincident peak.

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

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

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

# Central Hudson Pooled Model



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

Design condition is 50<sup>th</sup> percentile.

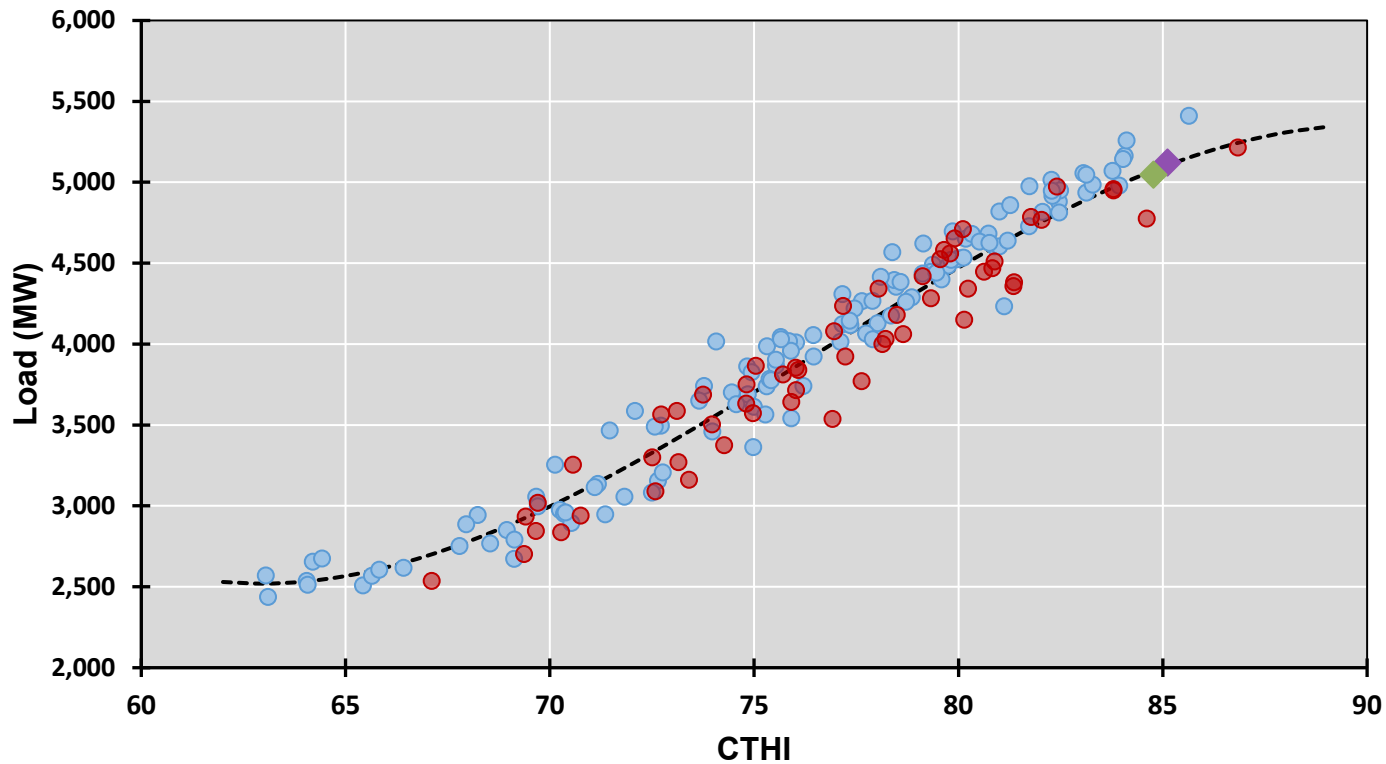
**Purple dot** shows 2022 coincident peak.

**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
<b>2022 WN CP (before adj)</b>	<b>1,019.0</b>
Demand Response	0.0
2022 Final WN CP	<b>1,019.0</b>

# LIPA Pooled Model



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

Design condition is 50<sup>th</sup> percentile.

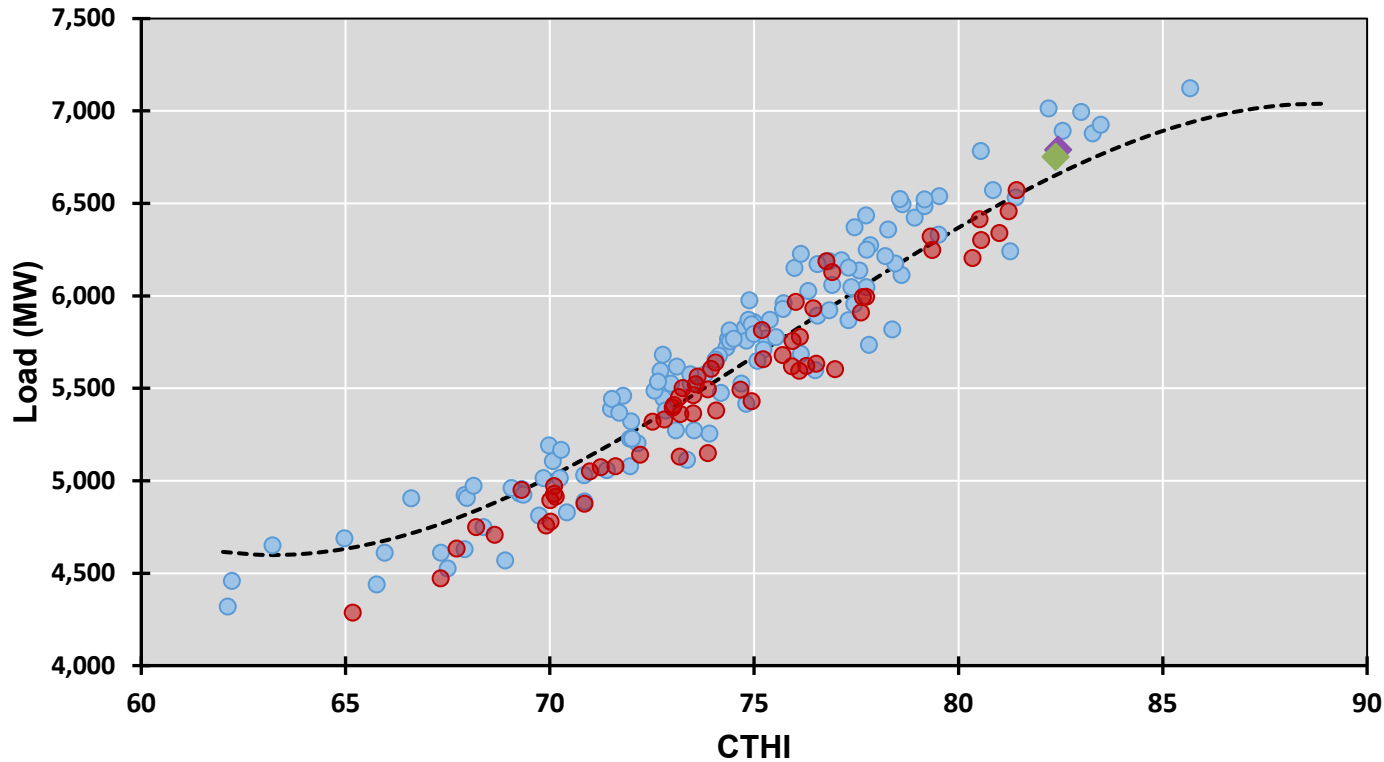
**Purple dot** shows 2022 coincident peak.

**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
<b>2022 WN CP (before adj)</b>	<b>5,046.7</b>
Demand Response	16.0
2022 Final WN CP	<b>5,062.7</b>

# Nat Grid Pooled Model



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

Design condition is 50<sup>th</sup> percentile.

**Purple dot** shows 2022 coincident peak.

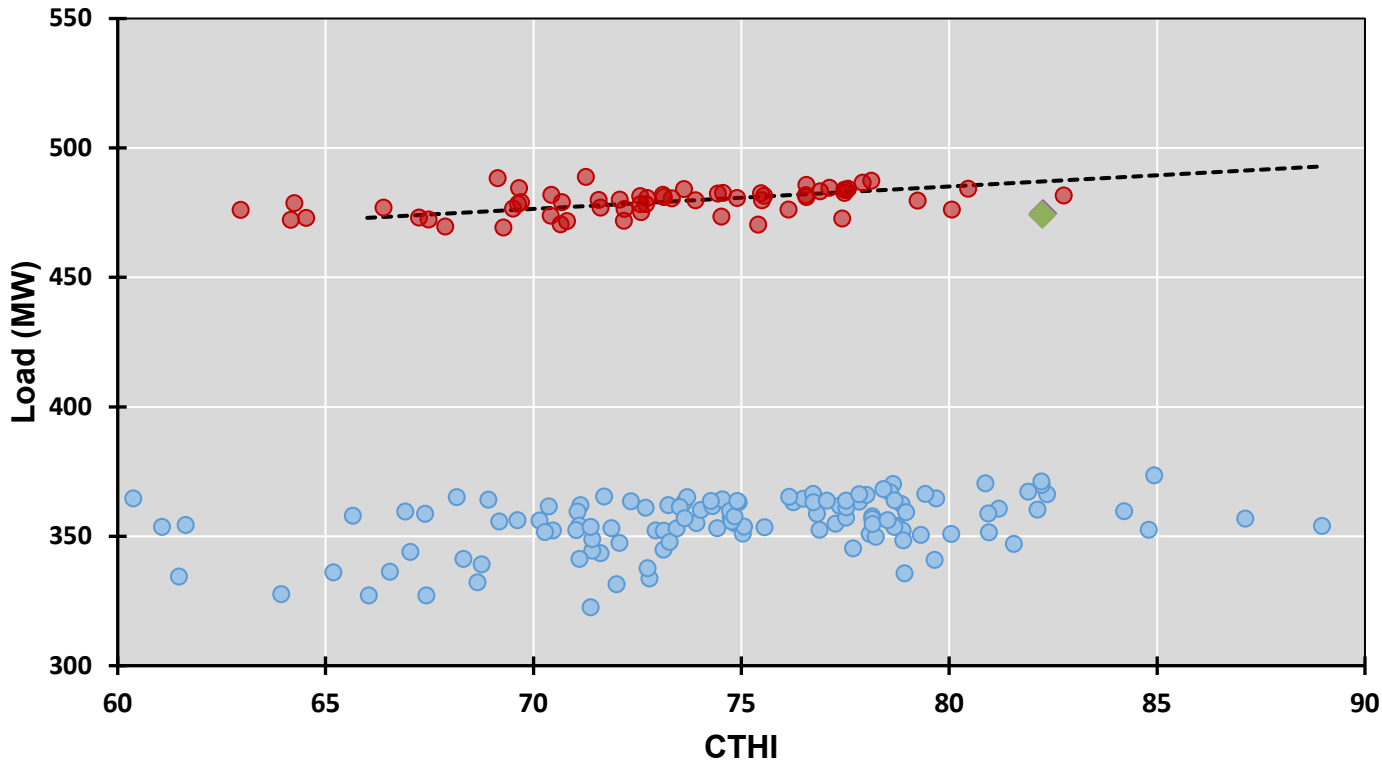
**Green dot** shows 2022 weather normalized coincident peak.

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

2022 CP	6,789.3
Weather Adj	-37.3
<b>2022 WN CP (before adj)</b>	<b>6,752.0</b>
Demand Response	243.0
Muni Self Gen (est.)	39.0
2022 Final WN CP	<b>7,034.0</b>



# NYPA Pooled Model



Design condition is 50<sup>th</sup> percentile.

**Purple dot** shows 2022 coincident peak.

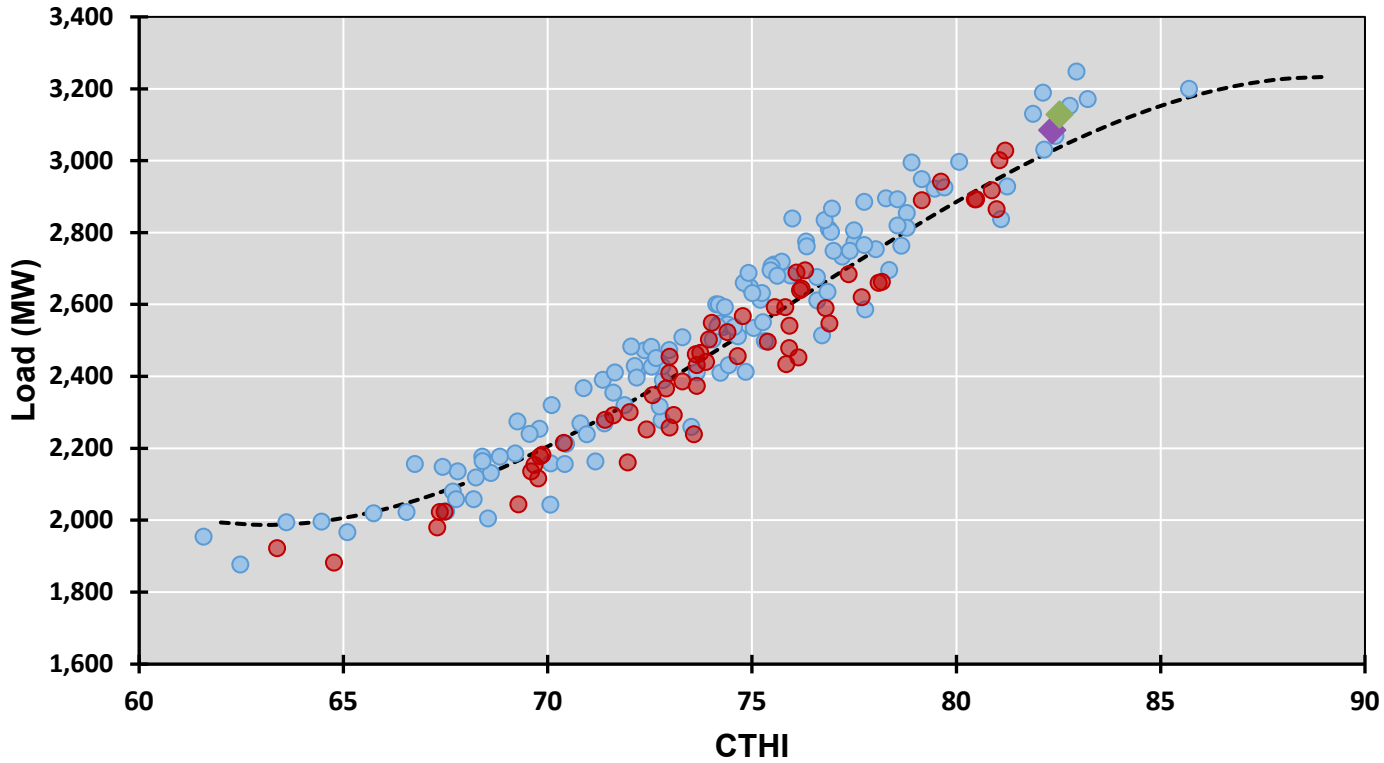
**Green dot** shows 2022 weather normalized coincident peak.

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

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

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

# NYSEG Pooled Model



Design condition is 50<sup>th</sup> percentile.

**Purple dot** shows 2022 coincident peak.

**Green dot** shows 2022 weather normalized coincident peak.

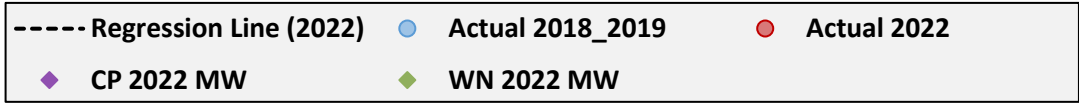
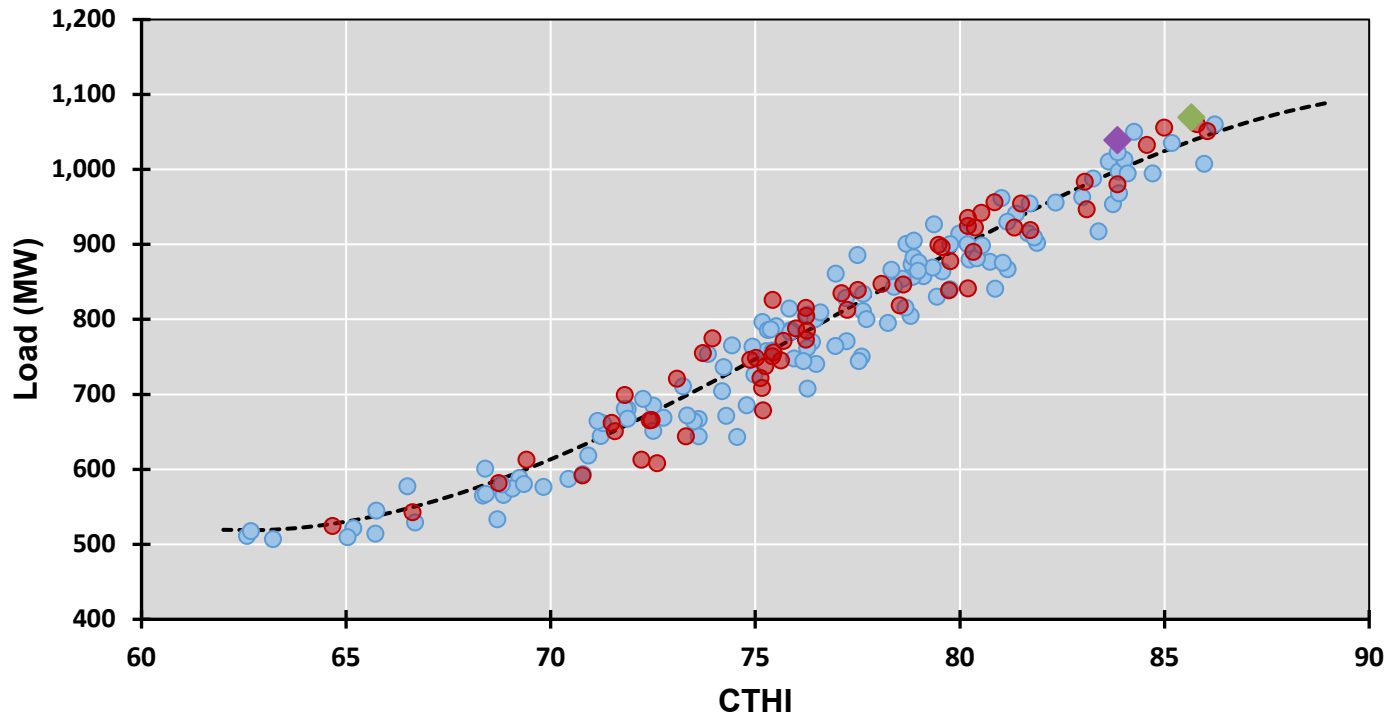
**Dotted black line** shows model fit during 2022 July-Aug design conditions.

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

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



# O&R Pooled Model



Design condition is 67<sup>th</sup> percentile.

**Purple dot** shows 2022 coincident peak.

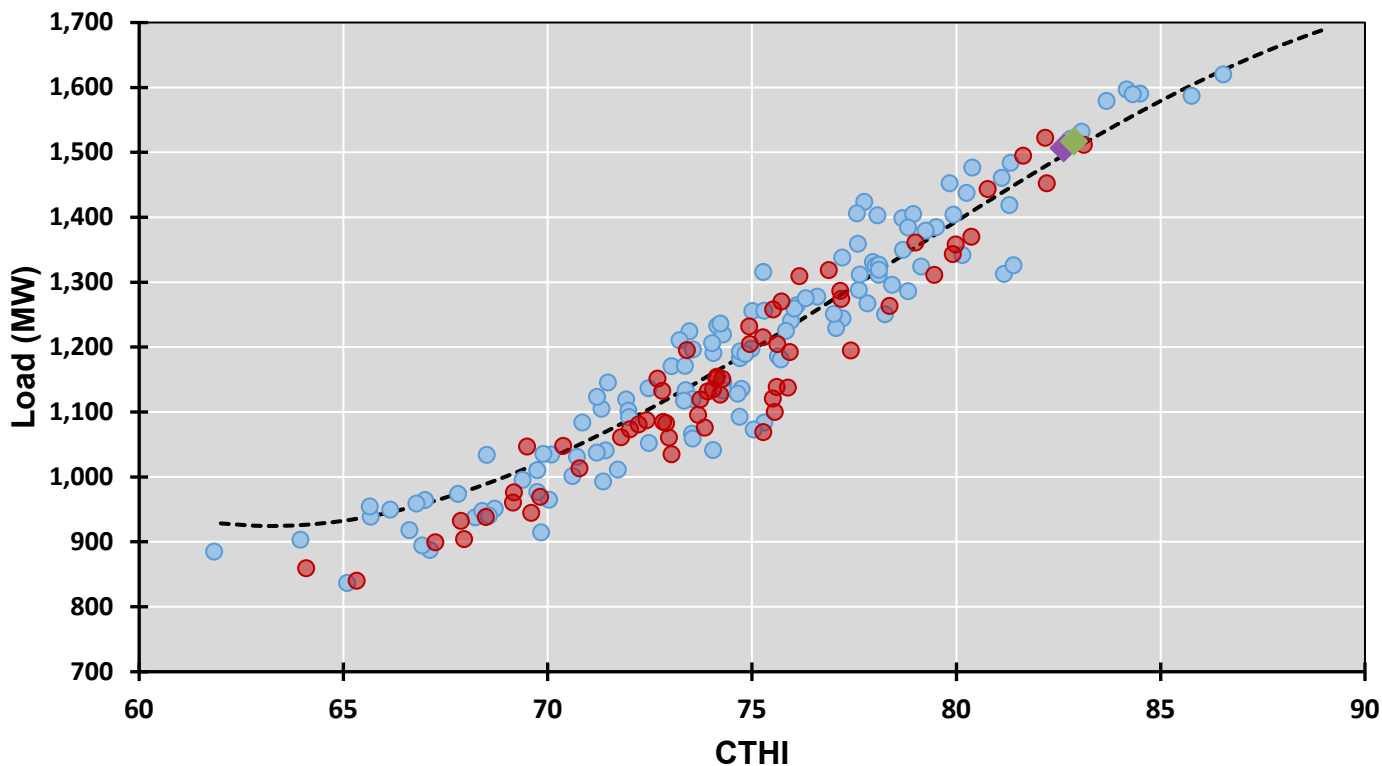
**Green dot** shows 2022 weather normalized coincident peak.

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

2022 CP	1,038.7
Weather Adj	30.3
<b>2022 WN CP (before adj)</b>	<b>1,069.0</b>
Demand Response	0.0
2022 Final WN CP	<b>1,069.0</b>



# RG&E Pooled Model



Design condition is 50<sup>th</sup> 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
<b>2022 WN CP (before adj)</b>	<b>1,516.9</b>
Demand Response	7.0
2022 Final WN CP	<b>1,523.9</b>

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

# Proposed 2023 IRM Forecast

# Proposed 2023 IRM Forecast - NYCA Coincident Peak

2023 Preliminary 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 + Self Gen + Muni + 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	1.0082	12,550.0	0.0	12,550.0	23.1	12,573.1
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	244.7	7,034.0	1.0000	7,034.0	93.0	7,127.0	1.7	7,128.7
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	30.3	1,069.0	0.9964	1,065.2	0.0	1,065.2	0.0	1,065.2
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
<b>NYCA</b>	<b>30,436.1</b>	<b>1,320.3</b>	<b>31,812.6</b>	<b>0.9996</b>	<b>31,800.5</b>	<b>147.7</b>	<b>31,948.1</b>	<b>157.2</b>	<b>32,105.3</b>
2023 Forecast from 2022 Gold Book							<b>32,018.0</b>		
Change from 2022 Gold Book							<b>-69.9</b>		
Percent Change							<b>-0.2%</b>		

# Proposed 2023 IRM Forecast - Locality Peaks

2023 Preliminary 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	1.0082	11,110.6	11,001.0	109.6	1.0%	23.1	11,133.7
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	15,114.2	1.0059	15,203.3	15,223.0	-19.7	-0.1%	23.1	15,226.4

## 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	1,987.5	416.0	1,312.4	90.9	933.7	2,293.5	0.0	0.0	0.0	0.0	0.0	7,034.0
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	1,069.0	0.0	0.0	0.0	0.0	1,069.0
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
<b>Total</b>	<b>2,661.6</b>	<b>1,939.9</b>	<b>2,737.2</b>	<b>672.6</b>	<b>1,366.4</b>	<b>2,456.4</b>	<b>2,106.3</b>	<b>634.0</b>	<b>1,367.1</b>	<b>10,808.4</b>	<b>5,062.7</b>	<b>31,812.6</b>

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 Before Large Load Growth

2023 IRM Coincident Peak Forecast by Transmission District and Zone, Before 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	RLGF
Con Ed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	274.7	1,378.3	10,897.0	0.0	12,550.1	1.0082
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	1,987.5	416.0	1,312.4	90.9	933.7	2,293.5	0.0	0.0	0.0	0.0	0.0	7,034.0	1.0000
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	1.0000
NYSEG	662.7	0.0	1,400.7	105.7	422.0	160.1	21.3	355.4	0.0	0.0	0.0	3,127.9	0.9831
O&R	0.0	0.0	0.0	0.0	0.0	0.0	1,065.2	0.0	0.0	0.0	0.0	1,065.2	0.9964
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
<b>Total</b>	<b>2,650.2</b>	<b>1,939.9</b>	<b>2,713.1</b>	<b>670.8</b>	<b>1,359.1</b>	<b>2,453.6</b>	<b>2,098.3</b>	<b>630.1</b>	<b>1,378.3</b>	<b>10,897.0</b>	<b>5,010.0</b>	<b>31,800.5</b>	

# Large Load Growth Forecast

Large Load Growth Forecast by Transmission District and Zone												
(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	0.0	0.0	0.0	0.0	0.0
Cen Hud	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	0.0	0.0
Nat Grid	93.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	93.0
NYPA	0.0	0.0	0.0	24.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.7
NYSEG	0.0	0.0	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.0
O&R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RG&E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>93.0</b>	<b>0.0</b>	<b>30.0</b>	<b>24.7</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>147.7</b>

Note: Large Load growth forecast reflects forecasted 2023 peak load level relative to 2022 actual coincident load.  
 These forecasts may be updated for purposes of the ICAP Market forecast.

# 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
Con Ed	0.0	0.0	0.0	0.0	0.0	0.0	0.0	274.7	1,378.3	10,897.0	0.0	12,550.0
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	5,010.0	5,010.0
Nat Grid	2,080.5	416.0	1,312.4	90.9	933.7	2,293.5	0.0	0.0	0.0	0.0	0.0	7,127.0
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	1,430.7	105.7	422.0	160.1	21.3	355.4	0.0	0.0	0.0	3,157.9
O&R	0.0	0.0	0.0	0.0	0.0	0.0	1,065.2	0.0	0.0	0.0	0.0	1,065.2
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
<b>Total</b>	<b>2,743.2</b>	<b>1,939.9</b>	<b>2,743.1</b>	<b>695.5</b>	<b>1,359.1</b>	<b>2,453.6</b>	<b>2,098.3</b>	<b>630.1</b>	<b>1,378.3</b>	<b>10,897.0</b>	<b>5,010.0</b>	<b>31,948.1</b>



# 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	280.1	1,405.3	11,110.6	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	2,150.2	425.2	1,345.1	93.6	959.8	2,327.0	0.0	0.0	0.0	0.0	0.0
NYPA	0.0	0.0	0.0	513.6	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	362.4	0.0	0.0	0.0
O&R	0.0	0.0	0.0	0.0	0.0	0.0	1,086.6	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
<b>Total</b>	<b>2,835.1</b>	<b>1,982.6</b>	<b>2,811.4</b>	<b>715.9</b>	<b>1,397.2</b>	<b>2,489.4</b>	<b>2,140.5</b>	<b>642.4</b>	<b>1,405.3</b>	<b>11,110.6</b>	<b>5,093.0</b>
<b>NCP/CP Ratio</b>	<b>1.0335</b>	<b>1.0220</b>	<b>1.0249</b>	<b>1.0294</b>	<b>1.0280</b>	<b>1.0146</b>	<b>1.0201</b>	<b>1.0196</b>	<b>1.0196</b>	<b>1.0196</b>	<b>1.0166</b>

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

# BTM:NG Resources Forecast

2023 IRM BTM:NG Adjustments to Load												
(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	0.0	0.0	23.1	0.0	23.1
Cen Hud	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	40.3	40.3
Nat Grid	0.0	0.0	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	0.0	1.7
NYPA	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
NYSEG	0.0	0.0	39.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	39.6
O&R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
RG&E	0.0	52.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	52.5
<b>Total</b>	0.0	52.5	39.6	0.0	1.7	0.0	0.0	0.0	0.0	23.1	40.3	157.2

Notes: Further updates to BTM:NG forecast including weather normalization of summer 2022 resource loads will be made for purposes of the ICAP Market forecast.

# 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	274.7	1,378.3	10,920.1	0.0	12,573.1
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	2,080.5	416.0	1,312.4	90.9	935.4	2,293.5	0.0	0.0	0.0	0.0	0.0	7,128.7
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	1,065.2	0.0	0.0	0.0	0.0	1,065.2
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
<b>Total</b>	<b>2,743.2</b>	<b>1,992.4</b>	<b>2,782.7</b>	<b>695.5</b>	<b>1,360.8</b>	<b>2,453.6</b>	<b>2,098.3</b>	<b>630.1</b>	<b>1,378.3</b>	<b>10,920.1</b>	<b>5,050.3</b>	<b>32,105.3</b>

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

2022 Weather-Adjusted G-to-J Locality Peak					
(1)	(2)	(3)	(4)	(5)	(7)
	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	1,083.2	0.0	0.0	0.0	1,083.2
RG&E	0.0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>2,134.3</b>	<b>642.4</b>	<b>1,385.3</b>	<b>10,952.2</b>	<b>15,114.2</b>
<b>NCP/CP Ratio</b>	<b>1.0133</b>	<b>1.0133</b>	<b>1.0133</b>	<b>1.0133</b>	

2023 Peak Forecast for G-to-J Locality Before BTM:NG Adjustments						
(1)	(2)	(3)	(4)	(5)	(7)	(8)
	G	H	I	J	G-to-J Total	RLGF
Con Ed	0.0	278.4	1,396.7	11,041.9	12,717.0	1.0082
Cen Hud	1,025.3	0.0	0.0	0.0	1,025.3	0.9963
LIPA	0.0	0.0	0.0	0.0	0.0	0.9896
Nat Grid	0.0	0.0	0.0	0.0	0.0	1.0000
NYPA	0.0	0.0	0.0	0.0	0.0	1.0000
NYSEG	21.6	360.1	0.0	0.0	381.7	0.9831
O&R	1,079.3	0.0	0.0	0.0	1,079.3	0.9964
RG&E	0.0	0.0	0.0	0.0	0.0	1.0000
<b>Total</b>	<b>2,126.2</b>	<b>638.5</b>	<b>1,396.7</b>	<b>11,041.9</b>	<b>15,203.3</b>	<b>1.0059</b>

Note: The G-to-J Locality weather adjusted zonal peaks are obtained by multiplying the weather adjusted coincident peaks (slide 21) by the G-J NCP/CP ratio shown above.

# Proposed 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
2,743.2	1,939.9	2,743.1	695.5	1,359.1	2,453.6	2,098.3	630.1	1,378.3	10,897.0	5,010.0	31,948.1

### Zonal Non-Coincident Peak Forecasts Before BTM:NG Adjustments

A	B	C	D	E	F	G	H	I	J	K
2,835.1	1,982.6	2,811.4	715.9	1,397.2	2,489.4	2,140.5	642.4	1,405.3	11,110.6	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
						2,126.2	638.5	1,396.7	11,041.9		15,203.3

*Note: All forecast values include impacts of large load growth*

# Proposed 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					23.1	40.3	157.2

### Zonal Coincident Peak Forecast With BTM:NG Adjustments

A	B	C	D	E	F	G	H	I	J	K	NYCA
2,743.2	1,992.4	2,782.7	695.5	1,360.8	2,453.6	2,098.3	630.1	1,378.3	10,920.1	5,050.3	32,105.3

### Zonal Non-Coincident Peak Forecasts With BTM:NG Adjustments

A	B	C	D	E	F	G	H	I	J	K
2,835.1	2,035.1	2,851.0	715.9	1,398.9	2,489.4	2,140.5	642.4	1,405.3	11,133.7	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
						2,126.2	638.5	1,396.7	11,065.0		15,226.4

*Note: All forecast values include impacts of large load growth*

# Questions?

# 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