

## 2024 Preliminary Weather Normalized Peak for the 2025 ICAP Forecast

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Load Forecasting Task Force

November 22, 2024

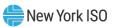
## Agenda

- Summary of Updates relative to the 2025-2026 Installed Reserve Margin (IRM) Forecast
- Proportional Loss Reallocation
- 2024 Preliminary Weather Normalized Peak Load
- Regional Load Growth Factor (RLGF) Updates
- 2024 Economic Data



#### Summary of Updates relative to the 2025-2026 IRM Forecast

- Updated New York Control Area (NYCA) Decision Support System (DSS) peak hour load values (July 8, 2024, Hour Beginning 17)
- Updated fixed load, municipal load, and self generation values
- Updated weather adjustments from Transmission Owners
- Updated Transmission District 2024 weather normalized coincident peak values relative to the 2025-2026 IRM forecast:
  - Increases: Long Island Power Authority (LIPA) (15 MW)
  - Decreases: National Grid (17 MW); New York Power Authority (NYPA) (3 MW); New York State Electric & Gas (NYSEG) (14 MW); Orange & Rockland Utilities (0&R) (4 MW); and Rochester Gas & Electric (RG&E) (11 MW)
  - NYCA Aggregate Decrease: 34 MW
- Updated Preliminary Transmission Owner 2025 RLGFs relative to the 2025-2026 IRM forecast:
  - Increases: NYPA, NYSEG, and O&R
  - Decreases: Consolidated Edison and RG&E



## **Proportional Loss Reallocation**

- For the statewide Installed Capacity (ICAP) market peak load forecast, bulk power system losses are reallocated among the Transmission Districts proportional to their weather normalized peak loads (less losses). Under this approach, bulk power system losses are shared equitably among Transmission Owners according to their share of the total statewide peak load.
  - Reallocation of losses is shown in the 2024 Preliminary Weather Normalized Peak Load data
    presented today
- For the ICAP Locality peak forecasts (Load Zone J, Load Zone K, and Load Zones G-to-J), there is no reallocation of bulk power system losses. These forecasts include local (i.e., Transmission District) bulk power system losses as found. This approach provides that the Locality peak forecasts accurately estimate the total load expected in the Locality during the Locality peak hour.
  - 2025 NYCA, Locality, and Zonal forecasts will be reviewed during the 12/9/2024 and 12/20/2024 Load Forecasting Task Force (LFTF) meetings



# 2024 Preliminary Weather Normalized Peak Load



2024 Load Reconciliation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2024 Load Reconcination		NYISO DS	S Actual M	IW Data			Transmi	ission District L	oad Data		
7/8/2024, Hour Beginning 5 PM	Actual	BPS	Muni	Load +	Percent	Actual Load	Actual	Actual Load	Weather	Demand	TOs' W/N MW
V2 - 11/14/2024	Load	Losses	Gen	Losses	Losses	Less Losses	Losses	With Losses	Adjustments	Response	With DR
Consolidated Edison											
Con-Ed LSE Load						11,342.0	157.0	11,499.0	727.8	38.5	12,265.3
Transmission District Load Served						11,342.0	157.0	11,499.0	727.8	38.5	12,265.3
Deduction for BTM:NG				-	_	0.0	0.0	0.0			
Transmission District Total Load	11,342.0	157.0		11,499.0	1.4%	11,342.0	157.0	11,499.0			
Central Hudson											
Central Hudson LSE Load						1,005.5	30.5	1,036.0	52.7	3.2	1,091.9
Transmission District Load Served						1,005.5	30.5	1,036.0	52.7	3.2	1,091.9
Deduction for BTM:NG						0.0	0.0	0.0			
Transmission District Total Load	1,005.1	30.5		1,035.6	2.9%	1,005.5	30.5	1,036.0			
Long Island Power Authority											
LIPA LSE Load						4,612.8	45.7	4,658.5	178.8	0.0	4,837.3
NYPA Load & Greenport Load						127.7	1.3	129.0	5.0	0.0	134.0
Freeport & Rockville Centre Load			15.1			102.0	1.0	103.0	4.0	0.0	107.0
Transmission District Load Served						4,842.5	48.0	4,890.5	187.8	0.0	5,078.3
Deduction for BTM:NG						0.0	0.0	0.0			
Transmission District Total Load	4,831.9	48.0	15.1	4,895.0	1.0%	4,842.5	48.0	4,890.5			
National Grid											
National Grid LSE Load						5,284.1	288.9	5,573.0	449.6	339.1	6,361.7
NYPA Load NYMPA Load						43.2 267.4	2.4	45.6 282.0	3.7 22.8	0.0	49.3 304.8
Jamestown Load			38.4			267.4 61.7	14.6 3.4	282.0 65.1	22.8 5.3	0.0 0.0	304.8 70.4
Transmission District Load Served			50.4			5,656.4	309.3	5,965.7	481.4	339.1	6,786.2
Deduction for BTM:NG						0.0	0.0	0.0	101.1	557.1	0,700.2
Transmission District Total Load	5,618.0	309.3	38.4	5,965.7	5.2%	5,656.4	309.3	5,965.7			
Totals	28,282.7	612.0	53.5	28,948.2	2.1%	28,332.1	612.0	28,944.1	1,967.8	380.8	31,292.7

2024 Load Reconciliation	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
2024 Load Reconcination		NYISO DS	S Actual M	IW Data			Transmi	ission District L	oad Data		
7/8/2024, Hour Beginning 5 PM	Actual	BPS	Muni	Load +	Percent	Actual Load	Actual	Actual Load	Weather	Demand	TOs' W/N MW
V2 - 11/14/2024	Load	Losses	Gen	Losses	Losses	Less Losses	Losses	With Losses	Adjustments	Response	With DR
New York Power Authority											
NYPA LSE Load						283.9	1.4	285.3	156.2	0.0	441.5
NYMPA Load						60.2	0.3	60.5	3.1	0.0	63.6
Transmission District Load Served						344.1	1.7	345.8	159.3	0.0	505.1
Deduction for BTM:NG						0.0	0.0	0.0			
Transmission District Total Load	344.1	1.7		345.8	0.5%	344.1	1.7	345.8			
New York State Electric & Gas											
NYSEG LSE Load						2,701.4	44.6	2,746.0	129.0	0.0	2,875.0
NYPA Load						55.9	0.9	56.8	2.7	0.0	59.5
NYMPA Load						56.7	0.9	57.6	2.7	0.0	60.3
Transmission District Load Served						2,814.0	46.4	2,860.4	134.4	0.0	2,994.8
Deduction for BTM:NG						0.0	0.0	0.0			
Transmission District Total Load	2,814.0	46.4		2,860.4	1.6%	2,814.0	46.4	2,860.4			
Orange & Rockland Utilities											
O&R LSE Load						1,010.7	8.1	1,018.8	74.5	0.0	1,093.3
Transmission District Load Served						1,010.7	8.1	1,018.8	74.5	0.0	1,093.3
Deduction for BTM:NG						0.0	0.0	0.0			
Transmission District Total Load	1,010.7	8.1		1,018.8	0.8%	1,010.7	8.1	1,018.8			
Rochester Gas & Electric											
RG&E LSE Load						1,305.8	10.9	1,316.7	148.6	0.0	1,465.3
NYMPA Load						11.1	0.1	11.2	1.3	0.0	12.5
Transmission District Load Served						1,316.9	11.0	1,327.9	149.9	0.0	1,477.8
Deduction for BTM:NG				-	_	0.0	0.0	0.0			
Transmission District Total Load	1,316.9	11.0		1,327.9	0.8%	1,316.9	11.0	1,327.9			
Totals	28,282.7	612.0	53.5	28,948.2	2.1%	28,332.1	612.0	28,944.1	1,967.8	380.8	31,292.7

2024 Load Reconciliation	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
2024 Load Reconciliation			Realloc	ation of Losse	s	Proportional	Adj. W/N	2024	2024	2024 Adj Load	2024 Adj Load
7/8/2024, Hour Beginning 5 PM	TOs' W/N MW	W/N	Station	Adj. W/N Load	Percent Loss	Allocation	Load Less	Adjusted Actual	BTM:NG	Prior to	Prior to
V2 - 11/14/2024	With DR	Losses	Power	Less Losses	Allocation	of Losses	Losses	Load (MW)	(1 + WNF)	Loss Adjustment	WN Large Loads
Consolidated Edison											
Con-Ed LSE Load	12,265.3	167.5		12,097.8	39.52%	266.0	12,097.8	12,363.8			
Transmission District Load Served	12,265.3	167.5		12,097.8	39.52%	266.0	12,097.8	12,363.8	1.0216	12,265.3	12,363.8
Deduction for BTM:NG											
Transmission District Total Load											
Central Hudson											
Central Hudson LSE Load	1,091.9	32.1		1,059.8	3.46%	23.3	1,059.8	1,083.1			
Transmission District Load Served	1,091.9	32.1		1,059.8	3.46%	23.3	1,059.8	1,083.1	1.0216	1,091.9	1,083.1
Deduction for BTM:NG											
Transmission District Total Load											
Long Island Power Authority											
LIPA LSE Load	4,837.3	47.5		4,789.8	15.65%	105.4	4,789.8	4,895.2			
NYPA Load & Greenport Load	134.0	1.3		132.7	0.43%	2.9	132.7	135.6			
Freeport & Rockville Centre Load	107.0	1.0		106.0	0.35%	2.4	106.0	108.4			
Transmission District Load Served	5,078.3	49.8		5,028.5	16.43%	110.7	5,028.5	5,139.2	1.0216	5,078.3	5,139.2
Deduction for BTM:NG											
Transmission District Total Load											
National Grid	1										
National Grid LSE Load	6,361.7	328.7	11.4	6,021.6	19.67%	132.4	6,021.6	6,154.0			
NYPA Load	49.3	2.7		46.6	0.15%	1.0	46.6	47.6			
NYMPA Load Jamestown Load	304.8 70.4	16.6 3.8		288.2 66.6	0.94% 0.22%	6.3 1.5	288.2 66.6	294.5 68.1			
Transmission District Load Served	6,786.2	351.8	11.4	6,423.0	20.98%	141.2	6,423.0	6,564.2	1.0216	6,774.8	6,411.8
Deduction for BTM:NG							.,			.,	
Transmission District Total Load											
Totals	31,292.7	673.2	11.4	30,608.1	100.00%	673.2	30,608.1	31,281.3	1.0216	31,281.3	30,955.4

2024 Load Reconciliation	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
2024 Load Reconcination			Reallo	cation of Losse	s	Proportional	Adj. W/N	2024	2024	2024 Adj Load	2024 Adj Load
7/8/2024, Hour Beginning 5 PM	TOs' W/N MW	W/N	Station	Adj. W/N Load	Percent Loss	Allocation	Load Less	Adjusted Actual	BTM:NG	Prior to	Prior to
V2 - 11/14/2024	With DR	Losses	Power	Less Losses	Allocation	of Losses	Losses	Load (MW)	(1 + WNF)	Loss Adjustment	WN Large Loads
New York Power Authority											
NYPA LSE Load	441.5	2.1		439.4	1.44%	9.7	439.4	449.1			
NYMPA Load	63.6	0.4		63.2	0.21%	1.4	63.2	64.6			
Transmission District Load Served	505.1	2.5		502.6	1.65%	11.1	502.6	513.7	1.0216	505.1	348.2
Deduction for BTM:NG			1	-							
Transmission District Total Load											
New York State Electric & Gas											
NYSEG LSE Load	2,875.0	46.6		2,828.4	9.24%	62.2	2,828.4	2,890.6			
NYPA Load	59.5	1.0		58.5	0.19%	1.3	58.5	59.8			
NYMPA Load	60.3	1.0	-	59.3	0.19%	1.3	59.3	60.6			
Transmission District Load Served	2,994.8	48.6	-	2,946.2	9.63%	64.8	2,946.2	3,011.0	1.0216	2,994.8	3,011.0
Deduction for BTM:NG											
Transmission District Total Load											
Orange & Rockland Utilities											
O&R LSE Load	1,093.3	8.7		1,084.6	3.54%	23.8	1,084.6	1,108.4			
Transmission District Load Served	1,093.3	8.7		1,084.6	3.54%	23.8	1,084.6	1,108.4	1.0216	1,093.3	1,100.4
Deduction for BTM:NG											
Transmission District Total Load											
Rochester Gas & Electric											
RG&E LSE Load	1,465.3	12.1		1,453.2	4.75%	32.0	1,453.2	1,485.2			
NYMPA Load	12.5	0.1	-	12.4	0.04%	0.3	12.4	12.7			
Transmission District Load Served	1,477.8	12.2	ł	1,465.6	4.79%	32.3	1,465.6	1,497.9	1.0216	1,477.8	1,497.9
Deduction for BTM:NG	41 1										
Transmission District Total Load	-11										
Tatala	21 202 7	(72.2	11.4	20 (09 1	100.00%	(72.2	20 (00 1	21 201 2	1.0216	21 201 2	20.055.4
Totals	31,292.7	673.2	11.4	30,608.1	100.00%	673.2	30,608.1	31,281.3	1.0210	31,281.3	30,955.4

# **Regional Load Growth Factor Updates**



## **2025 Regional Load Growth Factor Updates**

Transmission		Preliminary 1+RLGF
District	IRM 1+RLGF	Update
Con Edison	1.0080	1.0056
Central Hudson	1.0090	
LIPA	0.9833	
National Grid	1.0000	
NYPA	1.0000	1.0133
NYSEG	0.9850	0.9978
O&R	1.0090	1.0260
RG&E	1.0020	0.9893

Note: RLGFs exclude large load growth

Final Transmission Owner RLGFs to be considered for the ICAP forecast are due by 11/26/2024.



## **2024 Economic Data**



### Summary of Economic Data (1 of 2)

Variable & TD	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Con-Ed_Employment	4,733	4,822	4,917	4,995	5,185	4,462	4,667	4,976	5,066	5,133	5,163	5,156
Con-Ed_GDP	912,250	930,769	954,019	981,590	1,018,953	971,585	1,026,314	1,065,772	1,072,280	1,087,948	1,099,184	1,113,661
Con-Ed_Households	3,724	3,772	3,794	3,822	3,812	3,713	3,575	3,641	3,615	3,614	3,620	3,619
Con-Ed_Income-Real	628,185	647,859	696,911	702,327	709,456	708,878	757,778	668,006	683,080	691,126	700,458	710,020
Con-Ed_Population	9,670	9,751	9,792	9,819	9,846	9,770	9,441	9,409	9,354	9,350	9,345	9,336
Cen-Hud_Employment	193	195	196	198	200	176	184	189	191	195	196	196
Cen-Hud_GDP	25,658	25,759	26,444	27,199	27,835	25,749	27,566	27,173	27,431	28,180	28,606	29,190
Cen-Hud_Households	201	202	203	205	204	204	207	209	209	208	208	208
Cen-Hud_Income-Real	25,402	25,695	26,714	26,682	28,453	30,747	31,388	29,424	30,103	30,754	31,342	31,939
Cen-Hud_Population	517	516	517	518	517	524	530	525	523	522	521	520
LIPA_Employment	1,313	1,333	1,347	1,349	1,367	1,190	1,283	1,328	1,345	1,367	1,377	1,378
LIPA_GDP	200,985	201,399	205,583	206,947	211,529	198,700	215,059	213,634	212,070	216,179	220,216	224,539
LIPA_Households	967	972	976	982	976	967	970	984	981	980	981	980
LIPA_Income-Real	201,321	205,772	213,320	216,237	224,501	237,348	240,673	228,158	233,032	234,890	238,181	240,887
LIPA_Population	2,858	2,864	2,873	2,882	2,884	2,914	2,923	2,901	2,890	2,886	2,880	2,873
N-Grid_Employment	1,831	1,850	1,859	1,866	1,884	1,674	1,752	1,803	1,831	1,860	1,870	1,870
N-Grid_GDP	262,050	264,081	269,494	273,130	283,491	267,442	283,593	278,927	280,167	286,916	291,560	296,828
N-Grid_Households	1,654	1,663	1,672	1,685	1,675	1,664	1,666	1,687	1,679	1,678	1,679	1,676
N-Grid_Income-Real	181,794	181,686	189,928	189,351	194,097	211,384	214,858	195,616	202,151	204,147	206,537	208,760
N-Grid Population	3,987	3,983	3,991	3,996	3,987	4,021	4,027	3,989	3,971	3,963	3,954	3,943

Variable	Unit
Employment	1,000
GDP-Real	\$ Million (2017)
Households	1,000
Income-Real	\$ Million (2017)
Population	1,000

Values are derived from the Moody's Analytics August 2024 data delivery. Values listed are for July of a given year.

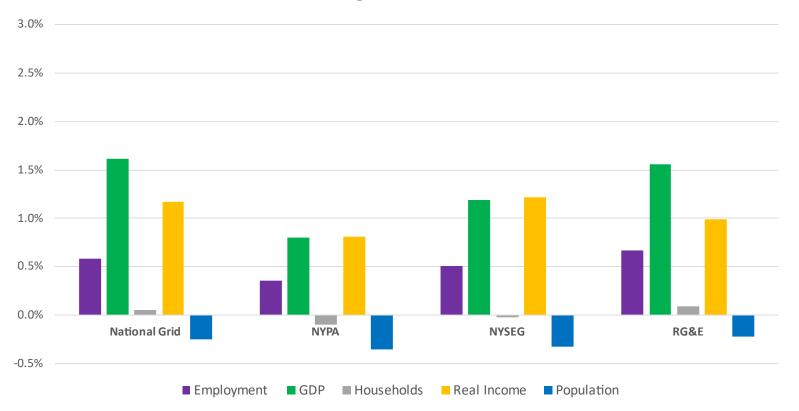
### Summary of Economic Data (2 of 2)

Variable & TD	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
NYPA_Employment	33	34	35	35	35	31	32	34	34	35	35	35
NYPA_GDP	4,001	4,097	4,254	4,375	4,455	4,033	4,289	4,224	4,290	4,386	4,421	4,459
NYPA_Households	32	32	33	33	33	32	33	33	32	32	32	32
NYPA_Income-Real	3,377	3,318	3,460	3,372	3,435	3,725	3,760	3,436	3,454	3,531	3,560	3,592
NYPA_Population	80	80	80	80	79	80	80	78	78	78	77	77
NYSEG_Employment	416	419	421	424	426	376	394	405	410	416	418	417
NYSEG_GDP	53,823	53,807	54,883	56,348	58,042	53,452	57,169	56,310	56,573	57,965	58,654	59,555
NYSEG_Households	418	419	419	421	418	414	415	418	416	415	415	414
NYSEG_Income-Real	43,862	43,457	45,413	45,504	46,787	50,684	51,264	46,700	48,008	48,399	48,989	49,511
NYSEG_Population	1,034	1,029	1,027	1,025	1,020	1,028	1,029	1,016	1,009	1,007	1,003	1,000
OR_Employment	271	275	281	286	297	263	286	307	317	325	331	335
OR_GDP	37,554	38,175	38,919	40,386	42,860	40,474	44,084	45,344	46,240	47,494	48,747	50,069
OR_Households	232	234	236	239	239	238	238	245	247	250	253	256
OR_Income-Real	36,412	36,490	37,658	38,025	39,337	42,161	42,427	39,852	40,604	41,553	42,339	43,088
OR_Population	703	708	715	721	727	739	745	747	752	760	769	778
RGE_Employment	507	513	513	517	522	464	486	500	505	514	518	518
RGE_GDP	71,166	72,489	72,589	74,352	76,627	71,181	75,564	75,099	75,123	77,068	78,268	79,922
RGE_Households	431	434	436	441	439	436	436	442	441	440	441	440
RGE_Income-Real	48,960	48,608	50,758	50,586	51,739	55,947	56,145	51,084	52,759	53,302	53,829	54,352
RGE_Population	1,048	1,047	1,048	1,050	1,049	1,058	1,057	1,048	1,044	1,042	1,040	1,037
Employment_NYCA	9,298	9,441	9,570	9,671	9,916	8,635	9,083	9,541	9,700	9,844	9,908	9,905
GDP_NYCA	1,567,486	1,590,576	1,626,183	1,664,327	1,723,791	1,632,616	1,733,638	1,766,484	1,774,174	1,806,137	1,829,655	1,858,223
Households_NYCA	7,658	7,728	7,769	7,828	7,795	7,669	7,539	7,661	7,619	7,618	7,630	7,625
Income_NYCA	1,169,313	1,192,884	1,264,161	1,272,084	1,297,804	1,340,873	1,398,293	1,262,277	1,293,190	1,307,702	1,325,234	1,342,149
Population_NYCA	19,897	19,978	20,043	20,090	20,109	20,133	19,832	19,713	19,621	19,609	19,590	19,564

Values are derived from the Moody's Analytics August 2024 data delivery. Values listed are for July of a given year.

#### **Transmission District Economic Indicators (1 of 2)**

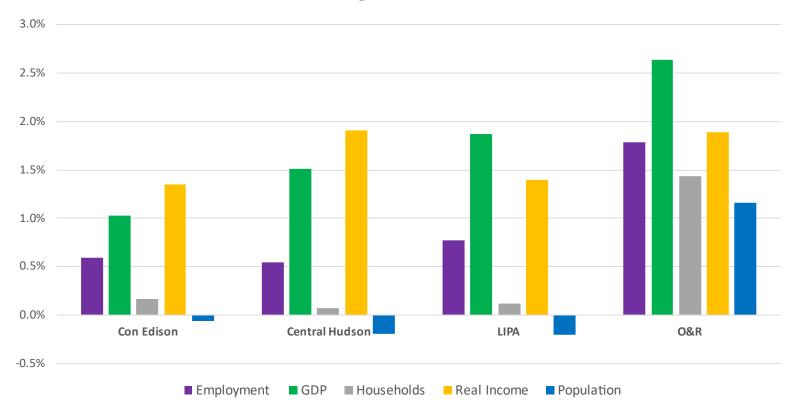
Forecasted percent growth – July 2024 to July 2025



Derived from the August 2024 Moody's Analytics data delivery.

#### **Transmission District Economic Indicators (2 of 2)**

Forecasted percent growth – July 2024 to July 2025



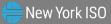
Derived from the August 2024 Moody's Analytics data delivery.

## **Next Steps**

- NYISO updates to demand response and Behind the Meter: Net Generation data
- Transmission Owner updates to actual load, demand response, weather adjustments, and station power values will be reviewed and incorporated as appropriate
- Transmission Owner large load facility forecasts, RLGFs, and model documentation are due by 11/26/2024
- Results from the NYISO Criteria evaluation of Transmission District RLGFs will be reviewed during the 12/9/2024 LFTF meeting
- 2025 NYCA, Locality, and Zonal forecasts will be reviewed during the 12/9/2024 and 12/20/2024 LFTF meetings



# **Questions?**



## **Our Mission & Vision**

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#### 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

