# NYISO Installed Capacity & Load Maintenance Survey

Summer 2023 NYISO Energy Market Operations Department

# **Installed Capacity and Load Maintenance Survey**

### **Load Forecast**

The Installed Capacity and Load Maintenance Survey uses an updated load forecast for the Summer and Winter peak loads. The Peak Summer 2023 Load Forecast is 32,049 MW and the Peak Winter Load Forecast for 2023 is 24,287 MW.

This forecast is based on the forecasts provided by the Transmission Owners and Municipals in accordance with NYISO ICAP procedures.

It is assumed that the forecast peak loads can be experienced at any time during the Summer and Winter Peak Load Exposure Intervals. The weekly forecast load curve between exposure intervals is determined by historical weekly peak actual load data.

In the weeks preceding the Summer Peak Load Exposure interval, unusual weather patterns have resulted in significantly higher than expected New York Control Area loads. The forecast load curve for 2023 reflects the NYCA's exposure to the potential occurrence of early season high load levels.

## **Installed Capacity (ICAP) Contracts**

Capacity Contracts represents the amount of Installed Capacity required to meet 120% of the NYCA peak load forecast for the summer peak load. For the summer of 2023, 38,459 MW is required based on the 32,049 MW Peak Summer Load Forecast.

## **ICAP Generator Maintenance**

#### **Planned Generator Outages**

Generating resources intending to supply Installed Capacity must notify the NYISO of their proposed maintenance schedule. This information is used to determine the Known Maintenance for each week and is based on DMNC rating for each generator that submits a proposed maintenance schedule.

#### **Unplanned Generator Outages**

Generation resources are assumed to suffer unplanned outages at the rate of 3.79% of the total Installed Capacity Contracts for the NYCA. In addition to the average unplanned outage amount, a 1,965 MW value is included to ensure sufficient ICAP resources are available if the largest ICAP resource becomes unavailable. This results in an unplanned outage amount of 3,423 MW based on the 32,049 MW Peak Summer Load Forecast.

#### Loss of Gas

During the winter peak period, December – February, a 6,484 MW value is included to account for cold weather operations. This reflects loss of gas due to heating load, fuel delivery issues, and cold weather equipment issues related to extreme temperatures while accounting for firm gas supply purchases.

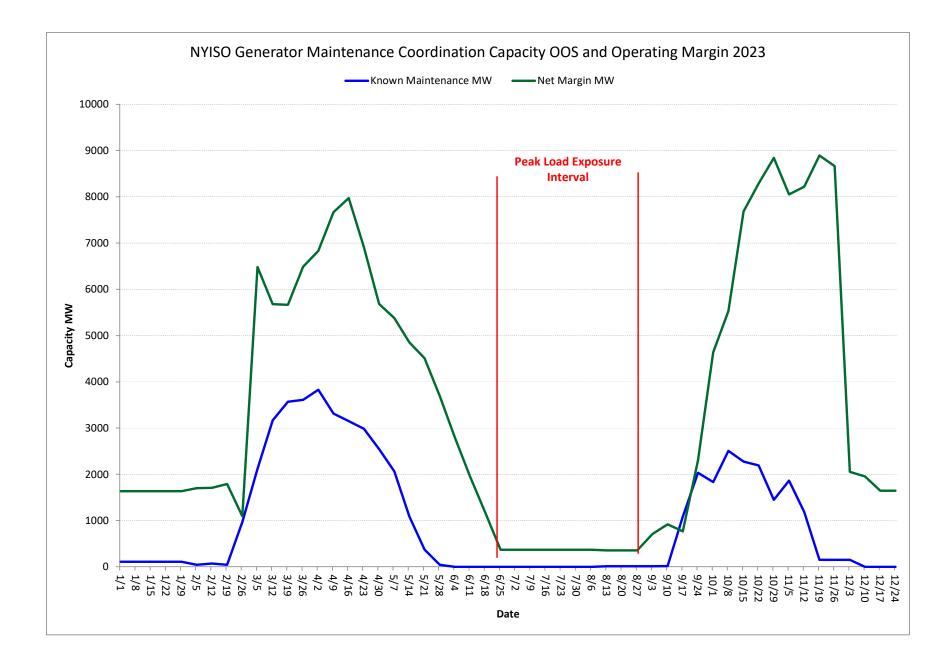
#### Reserve

Reserve requirements are based on an amount equal to two times the operating capability loss caused by the most severe contingency observed under normal transfer criteria.

# **Net ICAP Margin**

Net ICAP Margin represents the value of remaining capacity after the Forecasted Load, Known Maintenance, Unplanned Outages, Loss of Gas and Reserve requirements are subtracted. During the summer exposure period, it is projected that the Net Margin for the NYCA will meet reserve requirements by 355 MW.

		Load		Known	Unplanned	1			
Week	Capability	Forecast	Available	Maintenance		Gen at	Net Reserve	Required	Net Margin
Beginning	Contracts	MW	Reserve MW	MW	MW	Risk MW	MW	Reserve MW	MW
01/01/2023	38,340	24,065	14,275	109	3,608	6,304	4,255	2,620	1,635
01/08/2023	38,340	24,065	14,275	109	3,608	6,304	4,255	2,620	1,635
01/15/2023	38,340	24,065	14,275	109	3,608	6,304	4,255	2,620	1,635
01/22/2023	38,340	24,065	14,275	109	3,608	6,304	4,255	2,620	1,635
01/29/2023	38,340	24,065	14,275	109	3,608	6,304	4,255	2,620	1,635
02/05/2023	38,340	24,065	14,275	43	3,608	6,304	4,321	2,620	1,701
02/12/2023	38,340	24,032	14,308	71	3,608	6,304	4,326	2,620	1,706
02/19/2023	38,340	23,974	14,367	43	3,608	6,304	4,412	2,620	1,792
02/26/2023	38,340	23,745	14,595	969	3,608	6,304	3,715	2,620	1,095
03/05/2023	38,340	23,513	14,828	2,121	3,608	0	9,100	2,620	6,480
03/12/2023	38,340	23,266	15,074	3,169	3,608	0	8,298	2,620	5,678
03/19/2023	38,340	22,878	15,463	3,569	3,608	0	8,286	2,620	5,666
03/26/2023	38,340	22,012	16,328	3,611	3,608	0	9,110	2,620	6,490
04/02/2023	38,340	21,454	16,886	3,829	3,608	0	9,450	2,620	6,830
04/09/2023	38,340	21,129	17,211	3,314	3,608	0	10,289	2,620	7,669
04/16/2023	38,340	20,991	17,349	3,150	3,608	0	10,592	2,620	7,972
04/23/2023	38,340	22,220	16,120	2,982	3,608	0	9,531	2,620	6,911
04/30/2023	38,340	23,883	14,457	2,545	3,608	0	8,305	2,620	5,685
05/07/2023	38,459	24,976	13,482	2,063	3,423	0	7,997	2,620	5,377
05/14/2023	38,459	26,479	11,980	1,087	3,423	0	7,471	2,620	4,851
05/21/2023	38,459	27,534	10,925	373	3,423	0	7,129	2,620	4,509
05/28/2023	38,459	28,678	9,781	43	3,423	0	6,315	2,620	3,695
06/04/2023	38,459	29,626	8,833	0	3,423	0	5,410	2,620	2,790
06/11/2023	38,459	30,469	7,989	0	3,423	0	4,567	2,620	1,947
06/18/2023	38,459	31,250	7,209	0	3,423	0	3,786	2,620	1,166
06/25/2023	38,459	32,049	6,410	0	3,423	0	2,987	2,620	367
07/02/2023	38,459	32,049	6,410	0	3,423	0	2,987	2,620	367
07/09/2023	38,459	32,049	6,410	0	3,423	0	2,987	2,620	367
07/16/2023	38,459	32,049	6,410	0	3,423	0	2,987	2,620	367
07/23/2023	38,459	32,049	6,410	0	3,423	0	2,987	2,620	367
07/30/2023	38,459	32,049	6,410	0	3,423	0	2,987	2,620	367
08/06/2023	38,459	32,049	6,410	0	3,423	0	2,987	2,620	367
08/13/2023	38,459	32,049	6,410	12	3,423	0	2,975	2,620	355
08/20/2023	38,459	32,049	6,410	12	3,423	0	2,975	2,620	355
08/27/2023	38,459	32,049	6,410	12	3,423	0	2,975	2,620	355
09/03/2023	38,459	31,698	6,761	12	3,423	0	3,326	2,620	706
09/10/2023	38,459	31,485	6,974	16	3,423	0	3,536	2,620	916
09/17/2023	38,459	30,567	7,892	1,084	3,423	0	3,386	2,620	766
09/24/2023	38,459	28,082	10,377	2,032	3,423	0	4,922	2,620	2,302
10/01/2023	38,459	25,947	12,511	1,832	3,423	0	7,257	2,620	4,637
10/08/2023	38,459	24,379	14,079	2,507	3,423	0	8,150	2,620	5,530
10/15/2023	38,459	22,456	16,003	2,275	3,423	0	10,305	2,620	7,685
10/22/2023	38,459	21,936	16,523	2,192	3,423	0	10,908	2,620	8,288
10/29/2023	38,459	22,127	16,332	1,447	3,423	0	11,462	2,620	8,842
11/05/2023	38,459	22,502	15,957	1,861	3,423	0	10,674	2,620	8,054
11/12/2023	38,459	23,012	15,446	1,184	3,423	0	10,839	2,620	8,219
11/19/2023	38,459	23,373	15,086	150	3,423	0	11,513	2,620	8,893
11/26/2023	38,459	23,602	14,857	150	3,423	0	11,284	2,620	8,664
12/03/2023	38,459	23,730	14,729	150	3,423	6,484	4,672	2,620	2,052
12/10/2023	38,459	23,978	14,481	0	3,423	6,484	4,574	2,620	1,954
12/17/2023	38,459	24,287	14,172	0	3,423	6,484	4,265	2,620	1,645
12/24/2023	38,459	24,287	14,172	0	3,423	6,484	4,265	2,620	1,645



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Week	1 Year Ahead
Beginning	Net Margin
01/07/2024	1,645
01/14/2024	1,645
01/21/2024	1,645
01/28/2024	1,645
02/04/2024	1,645
02/11/2024	1,839
02/18/2024	1,898
02/25/2024	2,127
03/03/2024	6,621
03/10/2024	6,209
03/17/2024	7,524
03/24/2024	9,689
03/31/2024	8,393
04/07/2024	8,618
04/14/2024	9,346
04/21/2024	8,867
04/28/2024	8,473
05/05/2024	6,741
05/12/2024	5,234
05/19/2024	4,500
05/26/2024	3,352
06/02/2024	2,402
06/09/2024	964
06/16/2024	212
06/23/2024	325
06/30/2024	325
07/07/2024	325
07/14/2024	325
07/21/2024	325
07/28/2024	325
08/04/2024	325
08/11/2024	325
08/18/2024	325
08/25/2024	325
09/01/2024	325
09/08/2024	217
09/15/2024	816
09/22/2024	2,213
09/29/2024	4,347
10/06/2024	5,417
10/13/2024	7,353
10/20/2024	8,961
10/27/2024	8,765
11/03/2024	8,215
11/10/2024	8,362
11/17/2024	8,671
11/24/2024	8,442
12/01/2024	1,829
12/08/2024	1,580
12/15/2024	1,138
40/00/0004	1,138
12/22/2024 12/29/2024	1,138