JUNE 20, 2024 | WEBEX

Summer 2024 Outlook

Electric/Gas Operations Committee

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MANAGER, OPERATIONS FORECAST AND SCHEDULING

Key Takeaways

- ISO New England is prepared to meet peak electricity and energy demands this summer
- NOAA is projecting warmer than normal conditions for all of New England with normal to above-normal precipitation
- ISO System Operations monitors regional pipeline conditions and coordinates with gas control when risks are detected

Summer 2024 Preparedness

ISO new england

PRESS RELEASE

ISO New England Outlines Power Grid Preparedness for Summer Season

Holyoke, MA—June 3, 2024—New England's power system is prepared to meet the peak demand for electricity this summer, according to ISO New England (ISO-NE), operator of the region's electric grid.

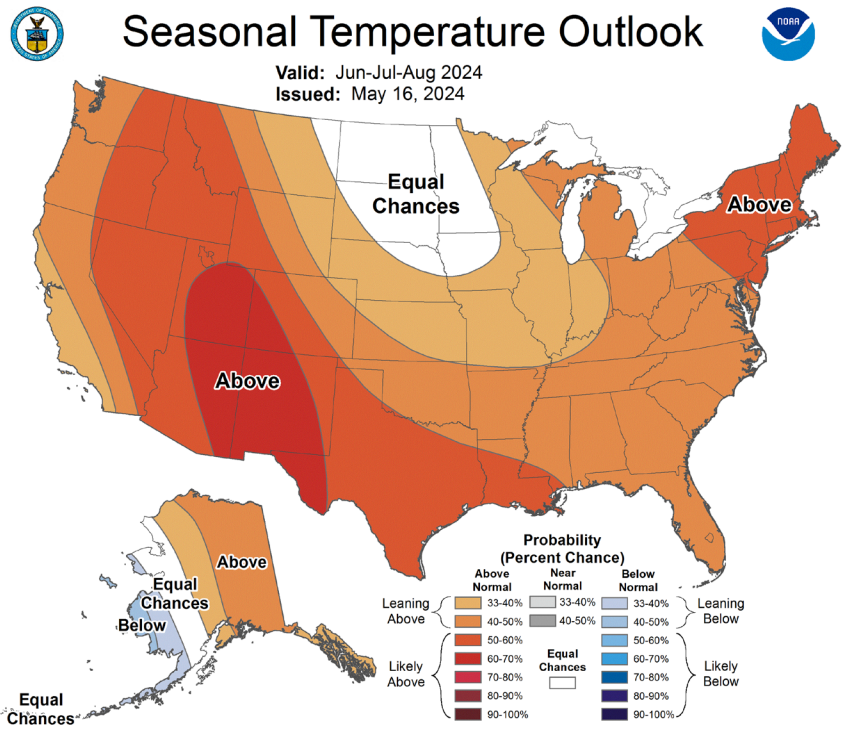
This summer, assuming typical weather conditions, ISO-NE predicts electricity demand will reach 24,553 megawatts (MW). However, above-average summer weather, such as an extended heat wave coupled with high humidity, could push demand up to 26,383 MW, tightening supply margins. ISO-NE is prepared to take steps to maintain the region's power system reliability if needed.

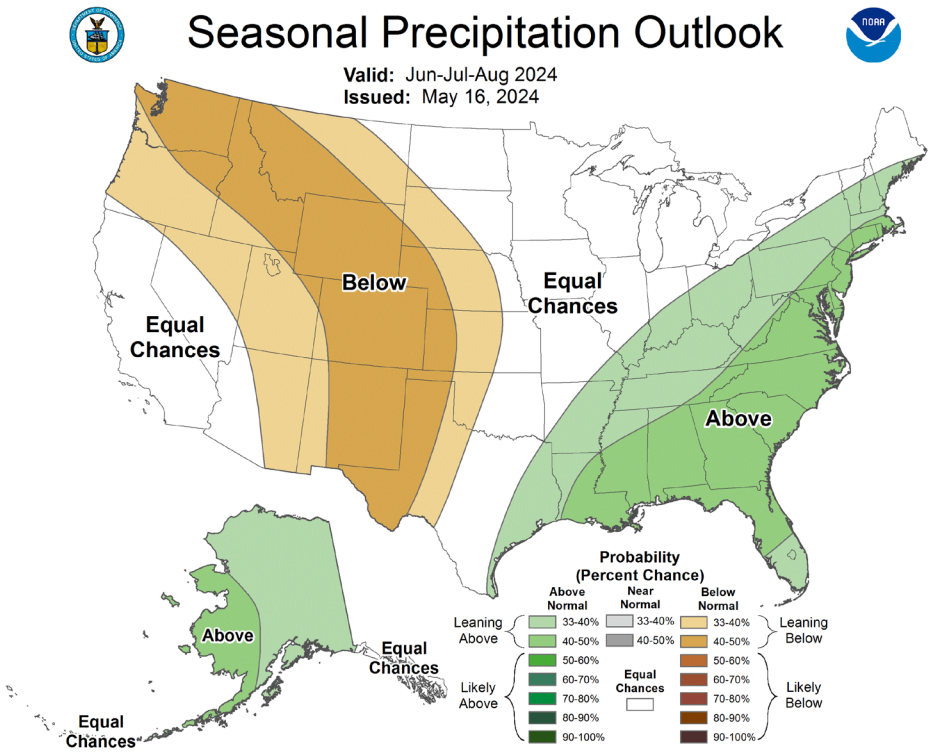
Summer 2024 Outlook Highlights

- The NOAA seasonal temperature outlook for the summer months of June - August, 2024 indicates a 50%-60% probability of above normal temperatures for most of New England and above-normal precipitation in southern New England
- Based on Capacity Supply Obligations (CSO), the lowest capacity margin of -1,032 MW is projected for the week beginning June 22; adequate relief is expected based on the following:
  - Additional resource capacity made available above resource CSO values
  - Conservative import assumptions
  - Resource outage estimates that may be less than forecast
  - Other actions under ISO-NE OP-4 if needed
- Cost-of-service to retain the Mystic 8 & 9 units ended on May 31, 2024
- Regional pipeline maintenance has been evaluated and it is not expected to have impact to the operation of the power system, as posted

SUMMER 2024 OUTLOOK DETAILS

NOAA Summer 2024 Outlook





Summer 2024 Operable Capacity Analysis

50/50 Load Forecast (Reference)	June - 2024[2] CSO (MW)	June - 2024[2] SCC (MW)
Operable Capacity MW [1]	27,204	27,747
Active Demand Capacity Resource (+) [5]	396	369
External Node Available Net Capacity, CSO imports minus firm capacity exports (+)	1,188	1,188
Non Commercial Capacity (+)	255	255
Non Gas-fired Planned Outage MW (-)	417	502
Gas Generator Outages MW (-)	0	0
Allowance for Unplanned Outages (-) [4]	2,800	2,800
Generation at Risk Due to Gas Supply (-) [3]	0	0
Net Capacity (NET OPCAP SUPPLY MW)	25,826	26,257
Peak Load Forecast MW(adjusted for Other Demand Resources) [2]	24,553	24,553
Operating Reserve Requirement MW	2,305	2,305
Operable Capacity Required (NET LOAD OBLIGATION MW)	26,858	26,858
Operable Capacity Margin	-1,032	-601

[1]Operable Capacity is based on data as of **June 3, 2024** and does not include Capacity associated with Settlement Only Generators, Passive and Active Demand Response, and external capacity. The Capacity Supply Obligation (CSO) and Seasonal Claim Capability (SCC) values are based on data as of **June 3, 2024.**

[2] Load forecast that is based on the 2024 CELT report and represents the week with the lowest Operable Capacity Margin, week beginning **June 22, 2024.**

[3] Total of (Gas at Risk MW) – (Gas Gen Outages MW).

[4] Allowance For Unplanned Outage MW is based on the month corresponding to the day with the lowest Operable Capacity Margin for the week.

[5] Active Demand Capacity Resources (ADCRs) can participate in the Forward Capacity Market (FCM), have the ability to obtain a CSO and also participate in the Day-Ahead and Real-Time Energy Markets.

Questions

SUPPLEMENTAL INFORMATION

Also available in the ISO-NE COO NPC Report

Summer 2024 Operable Capacity Analysis 50/50 Forecast (Reference)

ISO-NE OPERABLE CAPACITY ANALYSIS

June 3, 2024 - 50-50 FORECAST using CSO MW

This analysis is a tabulation of weekly assessments shown in one single table. The information shows the operable capacity situation under assumed conditions for each week. It is not expected that the system peak will occur every week in June through mid September.

Report created: 6/3/2024

Study Week (Week Beginning, Saturday)	CSO Supply Resource Capacity MW	CSO Demand Resource Capacity MW	External Node Capacity MW	Non-Commercial Capacity MW	CSO Non Gas-Only Generator Planned Outages MW	CSO Gas-Only Generator Planned Outages MW	Unplanned Outages Allowance MW	CSO Generation at Risk Due to Gas Supply 50-50PLE MW	CSO Net Available Capacity MW	Peak Load Forecast 50-50PLE MW	Operating Reserve Requirement MW	CSO Net Required Capacity MW	CSO Operable Capacity Margin MW	Season Min Opcap Margin Flag	Season_Label
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
6/22/2024	27204	396	1188	255	417	0	2800	0	25826	24553	2305	26858	-1032	Y	Summer 2024
6/29/2024	27186	390	1274	173	293	0	2100	0	26630	24553	2305	26858	-228	N	Summer 2024
7/6/2024	27186	390	1274	173	421	0	2100	0	26502	24553	2305	26858	-356	N	Summer 2024
7/13/2024	27186	390	1274	173	430	0	2100	0	26493	24553	2305	26858	-365	N	Summer 2024
7/20/2024	27186	390	1274	173	421	0	2100	0	26502	24553	2305	26858	-356	N	Summer 2024
7/27/2024	27186	390	1274	173	269	0	2100	0	26654	24553	2305	26858	-204	N	Summer 2024
8/3/2024	27303	419	1194	313	400	0	2100	0	26729	24553	2305	26858	-129	N	Summer 2024
8/10/2024	27303	419	1194	313	339	0	2100	0	26790	24553	2305	26858	-68	N	Summer 2024
8/17/2024	27303	419	1194	313	330	0	2100	0	26799	24553	2305	26858	-59	N	Summer 2024
8/24/2024	27303	419	1194	313	338	0	2100	0	26791	24553	2305	26858	-67	N	Summer 2024
8/31/2024	27303	419	1194	313	312	31	2100	0	26786	24553	2305	26858	-72	N	Summer 2024
9/7/2024	27303	419	1194	313	351	41	2100	0	26737	24553	2305	26858	-121	N	Summer 2024
9/14/2024	27303	419	1194	313	368	10	2100	0	26751	24553	2305	26858	-107	N	Summer 2024

Column Definitions

1. CSO Supply Resource Capacity MW: Summation of all resource Capacity supply Obligations (CSO). Does not include Settlement Only Generators (SOG).

2. CSO Demand Resource Capacity MW: Demand resources known as Real-Time Demand Response (RTDR) will become Active Demand Capacity Resources (ADCRs) and can participate in the Forward Capacity market (FCM). These resources will have the ability to obtain a CSO and also particpate in the Day-Ahead and Real-Time Energy Markets.

3. External Node Capacity MW: Sum of external Capacity Supply Obligations (CSO) imports and exports.

4. Non-Commercial capacity MW: New resources and generator improvements that have acquired a CSO but have not become commercial.

5. CSO Non Gas-Only Generator Planned Outages MW: All Non-Gas Planned Outages is the total of Non Gas-fired Generator/DARD Outages for the period. This value would also include any known long-term Non Gas-fired Forced Outages.Outages.

6. CSO Gas-Only Generator Planned Outages MW: All Planned Gas-fired generation outage for the period. This value would also include any known long-term Gas-fired Forced Outages.

7. Unplanned Outage Allowance MW: Forced Outages and Maintenance Outages scheduled less than 14 days in advance per ISO New England Operating Procedure No. 5 Appendix A.

8. CSO Generation at Risk Due to Gas Supply Mw: Gas fired capacity expected to be at risk during cold weather conditions or gas pipeline maintenance outages.

9. CSO Net Available Capacity MW: the summation of columns (1+2+3+4-5-6-7-8=9)

10. Peak Load Forecast MW: Provided in the annual 2024 CELT Report and adjusted for Passive Demand Resources assumes Peak Load Exposure (PLE) and does include credit of Passive Demand Response (PDR) and behind-the-meter PV (BTM PV).

11. Operating Reserve Requirement MW: 120% of first largest contingency plus 50% of the second largest contingency.

12. CSO Net Required Capacity MW: (Net Load Obligation) (10+11=12)

13. CSO Operable Capacity Margin MW: CSO Net Available Capacity MW minus CSO Net Required Capacity MW (9-12=13)

14. Operable Capacity Season Label: Applicable season and year.

15. Season Minimum Operable Capacity Flag: this column indicates whether or not a week has the lowest capacity margin for its applicable season.

Possible Relief Under OP4: Appendix A

OP 4 Action Number	Page 1 of 2 Action Description	Amount Assumed Obtainable Under OP 4 (MW)
1	Implement Power Caution and advise Resources with a CSO to prepare to provide capacity and notify "Settlement Only" generators with a CSO to monitor reserve pricing to meet those obligations. Begin to allow the depletion of 30-minute reserve.	0 [1] 600
2	Declare Energy Emergency Alert (EEA) Level 1[4]	0
3	Voluntary Load Curtailment of Market Participants' facilities.	40 [2]
4	Implement Power Watch	0
5	Schedule Emergency Energy Transactions and arrange to purchase Control Area-to-Control Area Emergency	1,000
6	Voltage Reduction requiring > 10 minutes	125 [3]

NOTES:
1. Based on Summer Ratings. Assumes 25% of total MW Settlement Only units <5 MW will be available and respond.
2. The actual load relief obtained is highly dependent on circumstances surrounding the appeals, including timing and the amount of advanced notice that can be given.
3. The MW values are based on a 25,000 MW system load and verified by the most recent voltage reduction test.
4. EEA Levels are described in Attachment 1 to NERC Reliability Standard EOP-011 - Emergency Operations

Possible Relief Under OP4: Appendix A

OP 4 Action Number	Page 2 of 2 Action Description	Amount Assumed Obtainable Under OP 4 (MW)
7	Request generating resources not subject to a Capacity Supply Obligation to voluntary provide energy for reliability purposes	0
8	5% Voltage Reduction requiring 10 minutes or less	250 [3]
9	Transmission Customer Generation Not Contractually Available to Market Participants during a Capacity Deficiency. Voluntary Load Curtailment by Large Industrial and Commercial Customers.	5 200 [2]
10	Radio and TV Appeals for Voluntary Load Curtailment Implement Power Warning	200 [2]
11	Request State Governors to Reinforce Power Warning Appeals.	100 [2]
Total		**2,520**

NOTES:
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