



**Ingrid Canaday**  
Outage Coordination

To: NEPOOL Participants

From: Ingrid Canaday

**Subject: 2013 Current Year Annual Maintenance Schedule**

Date: April 30, 2013

Following this transmittal letter, you will find the 2013 Annual Maintenance Schedule (AMS) dated April 30, 2013 with an Operable Capacity Analysis (with forecasted external transactions) for May 4, 2013 - May 31, 2013. This schedule covers the third Forward Capacity Market procurement period. A subsequent schedule will be published in June 2013 covering the fourth Forward Capacity Market procurement period from June 1, 2013 through May 31, 2014.

Periodically, individual Participants will receive a copy of the AMS that depicts only the maintenance requests that they submitted to ISO New England. Participants that own entitlements in units must contact the Lead Participant to obtain the maintenance schedule for each unit.

**2013 AMS- DATED April 30, 2013**

The 2013 AMS - dated April 30, 2013 reflects all planned maintenance requests and also includes any known long-term Forced Outages for May 4, 2013 - May 31, 2013 that have been submitted to the ISO through April 29, 2013. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2013 are encouraged to do so.

**2013 OPERABLE CAPACITY ANALYSIS**

The Operable Capacity Analysis for April 30, 2013 - May 31, 2013 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 2,211MW for week beginning May 4<sup>th</sup>. The overall margin has become less positive since resources have been removed since the last publication.

**Peak Load Exposures (PLE)**

After being adjusted for Other Demand Resources, ODR, the Peak Load Exposure (PLE) for the summer and winter of 2013-14 is 26,690 MW and 21,299 MW respectively, and reflects the seasonal peak load based on the 2013 CELT Report.

**Generating Unit Capabilities**

Resource Capacity Supply Obligations, CSO, are based upon data as of April 29, 2013 and include Energy Management System (EMS) assets. New unit additions are factored into the New Generation column at the appropriate points in time.



Interchange

Only external resources with a Capacity Supply Obligation, CSO, are represented in the analysis.

Unplanned Outage Allotment

Allowances for unplanned outages, as documented in ISO New England SOP-OUTSCH.0030.0040 range from 2,700 MW to 3,400 MW during the winter and summer months.

External Transmission

Maintenance outages of Hydro-Quebec Phase II and Highgate are included in the analysis when the Capacity Supply Obligation (CSO) is impacted.

Weekly Operating Reserve

The weekly operating reserve is equal to one hundred twenty five percent (125%) of the largest contingency plus one-half (50%) of the second-largest contingency.

Generation at Risk Due to Gas Supply Issues

A column has been included in the Operable Capacity Analysis to reflect natural gas-fired generating capability that may not be available due to the unavailability of gas.

If you have any questions or comments concerning this edition of the 2013 AMS or Operable Capacity Analysis, or if you have any comments or suggestions please feel free to contact Rachel Wilkins-Thurman at (413) 540-4261, Joanne Bialas (413) 535-4162, or Ingrid Canaday (413) 535-4329, or by email at [opamreq@iso-ne.com](mailto:opamreq@iso-ne.com).

# ISO-NE 2013 OPERABLE CAPACITY ANALYSIS

**April 30, 2013 - 50/50- FORECAST - CSO**

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 during June, July, and August and Mid September.

STUDY WEEK (Week Beginning, Saturday)	OPCAP SUPPLY							LOAD OBLIGATIONS			OPCAP MARGINS				
	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMMERCIAL CAPACITY MW	PLANNED OUTAGES CSO MW	ALLOWANCE FOR UNPLANNED OUTAGES MW	GAS AT RISK MW	NET OPCAP SUPPLY MW	PEAK LOAD FORECAST MW	OPER RESERVE REQUIREMENT MW	NET LOAD OBLIGATION MW	OPCAP MARGIN MW	OPCAP FROM OP4 ACTIVE REAL-TIME DR MW	OPCAP MARGIN w/ OP4 actions through OP4 Step 2 MW	OPCAP FROM OP4 REAL-TIME EMER. GEN MW	OPCAP MARGIN w/ OP4 actions through OP4 Step 6 MW
	[1]	[2]	[3]	[4]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
5/4/2013	30,498	362	50	7,291	3,400	0	20,219	20,055	2,375	22,430	(2,211)	547	(1,664)	369	(1,295)
5/11/2013	30,498	362	50	5,952	3,400	0	21,558	21,032	2,375	23,407	(1,849)	547	(1,302)	369	(933)
5/18/2013	30,498	362	50	3,538	3,400	500	23,472	21,940	2,375	24,315	(843)	547	(296)	369	73
5/25/2013	30,498	168	50	3,290	3,400	500	23,526	22,937	2,375	25,312	(1,786)	547	(1,239)	369	(870)

1. Available OPCAP MW based on resource Capacity Supply Obligations, CSO. Does not include Settlement Only Generators.
2. External Node Available Capacity MW based on external Capacity Supply Obligations, CSO .
3. New resources that have acquired a CSO but have not become commercial.
4. Planned Outages is the total of Generator/DARD Outages for the period. This value would also include any known long-term Forced Outages.
5. Allowance for Unplanned Outages includes forced outages and maintenance outages scheduled less than 14 days in advance per ISO New England Operating Procedure No. 5 Appendix A.
7. Generation at Risk due to Gas Supply pertains to gas fired capacity expected to be at risk during cold weather conditions or gas pipeline maintenance outages.
8. Net OpCap Supply MW Available (1 + 2 + 3 - 4 - 5 - 6 - 7 = 8)
9. Peak Load Forecast per data included in the 2013 CELT Report adjusted for Other Demand Resources.
10. Operating Reserve Requirement based on 125% of first largest contingency plus 50% the second largest contingency.
11. Total Net Load Obligation per the formula(9 + 10 = 11)
12. Net OPCAP Margin MW = Net Op Cap Supply MW minus Net Load Obligation (8 - 11 = 12)
13. OP 4 Action 2 Real-time Demand Response. Reserve Margins and Distribution Loss Factor Gross Ups are Included.
14. OPCAP Margin taking into account Real Time Demand Response through OP4 Step 2 (12 + 13 = 14)
15. OP 4 Action 6 Emergency Generation Response without the Voltage Reduction requiring > 10 Minutes. Real Time Emergency Generation is capped at 600MW. Reserve Margins and Distribution Loss Factor Gross Ups are Included.
16. OPCAP Margin taking into account Real Time Demand Response and Real Time Emergency Generation through OP4 Step 6 (14 + 15 = 16); This does not include Emergency Energy Transactions (EETs).

New England Operable Capacity Margins - CSO -  
50/50 FORECAST

