



**Ingrid Canaday**  
Outage Coordination

To: NEPOOL Participants

From: Ingrid Canaday

**Subject: 2013-14 Current Year Annual Maintenance Schedule**

Date: September 6, 2013

Following this transmittal letter, you will find the 2013-14 Annual Maintenance Schedule (AMS) dated September 6, 2013 with an Operable Capacity Analysis (with forecasted external transactions) for September 14, 2013 - May 31, 2014. This schedule covers the fourth Forward Capacity Market procurement period.

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.

**2013-14 AMS- DATED September 6, 2013**

The 2013-14 AMS - dated September 6, 2013 reflects all planned maintenance requests and also includes any known long-term Forced Outages for September 14, 2013 - May 31, 2014 that have been submitted to the ISO through August 30, 2013. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2013-14 are encouraged to do so.

**2013-14 OPERABLE CAPACITY ANALYSIS**

The Operable Capacity Analysis for September 14, 2013 - May 31, 2014 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 169 MW during the fall for week beginning September 21<sup>th</sup> and for the winter week beginning January 18<sup>th</sup> a negative 581 MW.

**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 September 5, 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 2,100 MW to 3,600 MW throughout the year.

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 2013-14 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 [opamoreq@iso-ne.com](mailto:opamoreq@iso-ne.com).

# ISO-NE 2013-2014 OPERABLE CAPACITY ANALYSIS

**September 6, 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]
9/14/2013	29,866	537	0	3,026	2,100	0	25,277	22,687	2,375	25,062	215	353	568	166	734
<b>9/21/2013</b>	<b>29,866</b>	<b>917</b>	<b>0</b>	<b>3,868</b>	<b>2,100</b>	<b>0</b>	<b>24,815</b>	<b>22,609</b>	<b>2,375</b>	<b>24,984</b>	<b>(169)</b>	<b>353</b>	<b>184</b>	<b>166</b>	<b>350</b>
9/28/2013	30,074	858	38	7,501	2,800	0	20,669	16,499	2,375	18,874	1,795	341	2,136	160	2,296
10/5/2013	30,074	858	38	7,823	2,800	0	20,347	16,534	2,375	18,909	1,438	341	1,779	160	1,939
10/12/2013	30,074	858	38	7,187	2,800	0	20,983	17,468	2,375	19,843	1,140	341	1,481	160	1,641
10/19/2013	30,074	858	38	6,213	2,800	0	21,957	17,836	2,375	20,211	1,746	341	2,087	160	2,247
10/26/2013	30,074	664	114	5,837	3,600	0	21,415	18,045	2,375	20,420	995	341	1,336	160	1,496
11/2/2013	29,560	1,183	114	6,086	3,600	0	21,171	18,162	2,375	20,537	634	461	1,095	234	1,329
11/9/2013	29,560	1,183	114	4,621	3,600	0	22,636	18,510	2,375	20,885	1,751	461	2,212	234	2,446
11/16/2013	29,560	1,183	114	3,801	3,600	0	23,456	19,255	2,375	21,630	1,826	461	2,287	234	2,521
11/23/2013	29,560	1,183	114	2,153	3,600	0	25,104	19,982	2,375	22,357	2,747	461	3,208	234	3,442
11/30/2013	29,714	1,183	114	3,579	3,200	164	24,068	20,188	2,375	22,563	1,505	398	1,903	168	2,071
12/7/2013	29,714	1,183	114	3,252	3,200	609	23,950	20,480	2,375	22,855	1,095	398	1,493	168	1,661
12/14/2013	29,714	1,183	114	2,028	3,200	1,597	24,186	20,491	2,375	22,866	1,320	398	1,718	168	1,886
12/21/2013	29,714	1,183	114	1,357	3,200	2,384	24,070	20,554	2,375	22,929	1,141	398	1,539	168	1,707
12/28/2013	29,714	1,183	122	1,351	3,200	2,590	23,878	20,554	2,375	22,929	949	398	1,347	168	1,515
1/4/2014	29,714	1,183	122	1,538	2,800	3,078	23,603	20,830	2,375	23,205	398	398	796	168	964
1/11/2014	29,714	1,183	122	1,716	2,800	3,409	23,094	21,299	2,375	23,674	(580)	398	(182)	168	(14)
<b>1/18/2014</b>	<b>29,714</b>	<b>1,183</b>	<b>122</b>	<b>1,991</b>	<b>2,800</b>	<b>3,135</b>	<b>23,093</b>	<b>21,299</b>	<b>2,375</b>	<b>23,674</b>	<b>(581)</b>	<b>398</b>	<b>(183)</b>	<b>168</b>	<b>(15)</b>
1/25/2014	29,714	1,183	122	990	2,800	3,928	23,301	21,299	2,375	23,674	(373)	398	25	168	193
2/1/2014	29,714	1,183	122	990	3,100	3,308	23,621	21,075	2,375	23,450	171	398	569	168	737
2/8/2014	29,714	1,183	122	1,035	3,100	2,895	23,989	20,805	2,375	23,180	809	398	1,207	168	1,375
2/15/2014	29,714	1,183	122	1,297	3,100	2,208	24,414	20,776	2,375	23,151	1,263	398	1,661	168	1,829
2/22/2014	29,714	1,183	122	1,129	3,100	1,588	25,202	20,511	2,375	22,886	2,316	398	2,714	168	2,882
3/1/2014	29,714	1,183	122	2,469	2,200	0	26,350	19,515	2,375	21,890	4,460	398	4,858	168	5,026
3/8/2014	29,714	1,183	122	2,762	2,200	0	26,057	19,162	2,375	21,537	4,520	398	4,918	168	5,086
3/15/2014	29,714	1,183	122	2,696	2,200	0	26,123	18,965	2,375	21,340	4,783	398	5,181	168	5,349
3/22/2014	29,714	1,183	122	3,669	2,200	0	25,150	18,597	2,375	20,972	4,178	398	4,576	168	4,744
3/29/2014	29,560	1,183	122	6,234	2,700	0	21,931	18,023	2,375	20,398	1,533	461	1,994	234	2,228
4/5/2014	29,560	1,183	122	5,910	2,700	0	22,255	17,524	2,375	19,899	2,356	461	2,817	234	3,051
4/12/2014	29,560	1,183	122	5,534	2,700	0	22,631	17,271	2,375	19,646	2,985	461	3,446	234	3,680
4/19/2014	29,560	1,183	122	5,960	2,700	0	22,205	16,757	2,375	19,132	3,073	461	3,534	234	3,768
4/26/2014	29,560	1,183	122	6,437	3,400	0	21,028	16,490	2,375	18,865	2,163	461	2,624	234	2,858
5/3/2014	29,560	1,183	122	5,312	3,400	0	22,153	16,463	2,375	18,838	3,315	461	3,776	234	4,010
5/10/2014	29,560	1,183	122	4,094	3,400	0	23,371	20,223	2,375	22,598	773	461	1,234	234	1,468
5/17/2014	29,560	1,183	122	2,672	3,400	0	24,793	21,216	2,375	23,591	1,202	461	1,663	234	1,897
5/24/2014	29,560	1,183	122	1,409	3,400	0	26,056	22,138	2,375	24,513	1,543	461	2,004	234	2,238

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

