



**Ingrid Canaday**  
Outage Coordination

To: NEPOOL Participants

From: Ingrid Canaday

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

Date: December 5, 2013

Following this transmittal letter, you will find the 2013-14 Annual Maintenance Schedule (AMS) dated December 5, 2013 with an Operable Capacity Analysis (with forecasted external transactions) for December 2013 through May 2014. This schedule covers the fourth Forward Capacity Market procurement period.

**2013-14 AMS- DATED DECEMBER 5, 2013**

The 2013-14 AMS - dated December 5, 2013 reflects all planned maintenance requests and also includes any known long duration Forced Outages for December 7, 2013 – May 31, 2014 that have been submitted to the ISO through November 18<sup>th</sup>. 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 December 7, 2013 – May 31, 2014 presently forecasts the lowest Winter Long Term Operable Capacity Margin (LTOCM) of -212 MW for week beginning January 18, 2014. The lowest LTOCM for the Spring is for week beginning May 10, 2014 at -215 MW.

**Peak Load Exposures (PLE)**

After being adjusted for Passive Demand Resources (PDR) 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**

Generator Capacity Supply Obligations (CSO) are based upon data as of November 18, 2013 and include Energy Management System (EMS) assets. New unit additions are factored into the Non-Commercial Capacity MW respecting forecasted in-service dates.

**Interchange**

External Node Available Capacity MW is based on the sum of external import and export CSO.



External Transmission

Transmission outages of NYISO, NBSO, and Hydro-Quebec are included in the analysis when the 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.

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.

Generation at Risk Due to Gas Supply Issues

A column has been included in the Operable Capacity Analysis to reflect natural gas-fired capacity that may be unavailable due to cold weather conditions or gas pipeline outages.

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

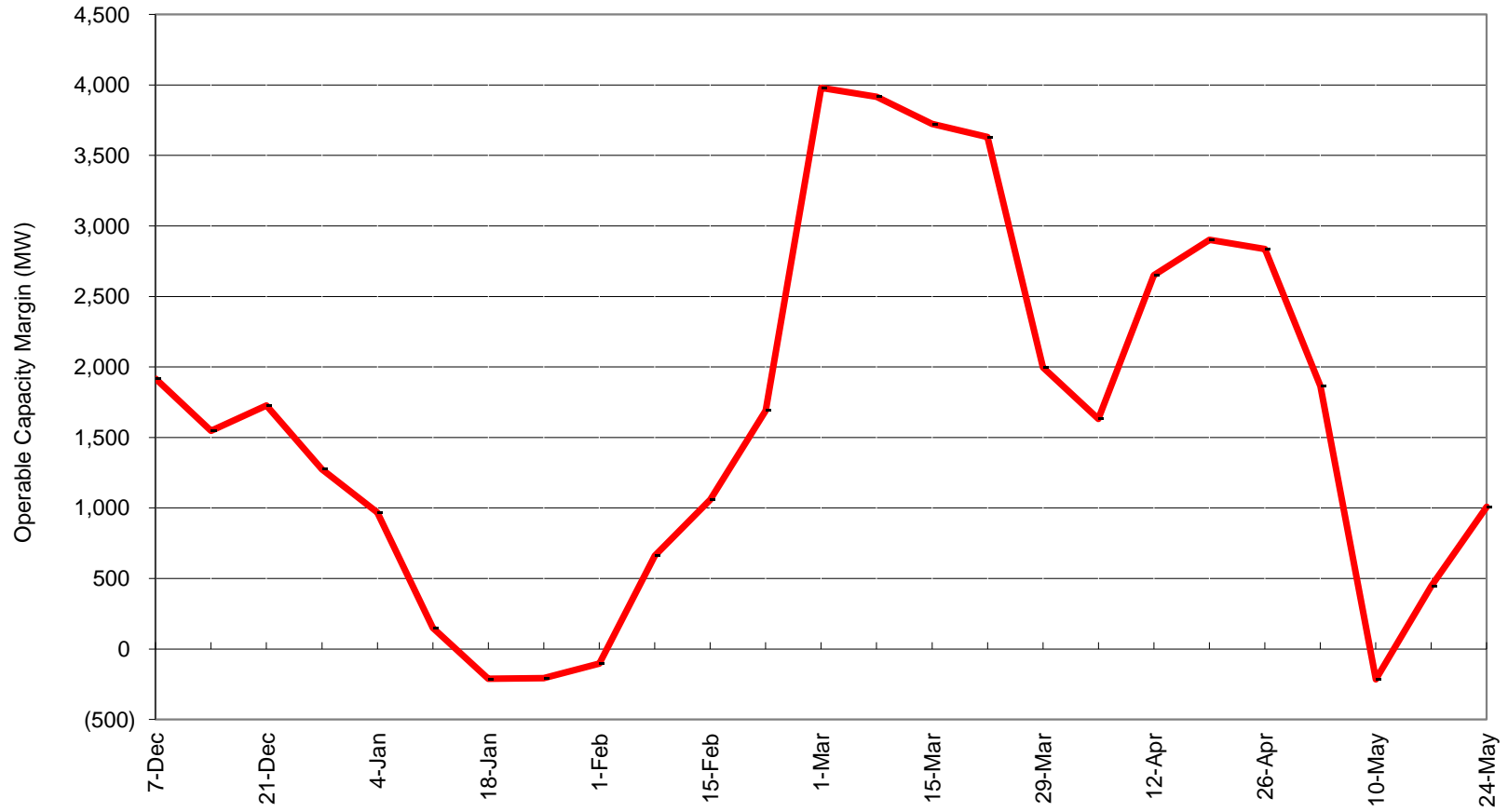
**December 5, 2013 - 50/50- FORECAST - CSO**

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]
12/7/2013	30,498	452	114	2,785	3,200	308	24,771	20,480	2,375	22,855	1,916	268	2,184	127	2,311
12/14/2013	30,498	452	114	2,008	3,200	1,443	24,413	20,491	2,375	22,866	1,547	268	1,815	127	1,942
12/21/2013	30,498	452	114	1,049	3,200	2,159	24,656	20,554	2,375	22,929	1,727	268	1,995	127	2,122
12/28/2013	29,714	1,083	114	988	3,200	2,519	24,204	20,554	2,375	22,929	1,275	398	1,673	168	1,841
1/4/2014	29,714	1,083	122	1,872	2,800	2,073	24,174	20,830	2,375	23,205	969	398	1,367	168	1,535
1/11/2014	29,714	1,083	122	1,939	2,800	2,356	23,824	21,299	2,375	23,674	150	398	548	168	716
<b>1/18/2014</b>	<b>29,714</b>	<b>1,083</b>	<b>122</b>	<b>2,461</b>	<b>2,800</b>	<b>2,196</b>	<b>23,462</b>	<b>21,299</b>	<b>2,375</b>	<b>23,674</b>	<b>(212)</b>	<b>398</b>	<b>186</b>	<b>168</b>	<b>354</b>
1/25/2014	29,714	1,083	122	1,216	2,800	3,436	23,467	21,299	2,375	23,674	(207)	398	191	168	359
2/1/2014	29,714	1,083	122	1,216	3,100	3,256	23,347	21,075	2,375	23,450	(103)	398	295	168	463
2/8/2014	29,714	1,083	122	1,261	3,100	2,717	23,841	20,805	2,375	23,180	661	398	1,059	168	1,227
2/15/2014	29,714	1,083	122	1,524	3,100	2,085	24,210	20,776	2,375	23,151	1,059	398	1,457	168	1,625
2/22/2014	29,714	1,083	122	1,356	3,100	1,886	24,577	20,511	2,375	22,886	1,691	398	2,089	168	2,257
3/1/2014	29,714	1,083	122	2,628	2,200	222	25,869	19,515	2,375	21,890	3,979	398	4,377	168	4,545
3/8/2014	29,714	1,083	122	3,265	2,200	0	25,454	19,162	2,375	21,537	3,917	398	4,315	168	4,483
3/15/2014	29,714	1,083	122	3,656	2,200	0	25,063	18,965	2,375	21,340	3,723	398	4,121	168	4,289
3/22/2014	29,714	1,083	122	4,117	2,200	0	24,602	18,597	2,375	20,972	3,630	398	4,028	168	4,196
3/29/2014	29,560	1,083	122	5,670	2,700	0	22,395	18,023	2,375	20,398	1,997	461	2,458	234	2,692
4/5/2014	29,560	1,083	122	6,534	2,700	0	21,531	17,524	2,375	19,899	1,632	461	2,093	234	2,327
4/12/2014	29,560	1,083	122	5,768	2,700	0	22,297	17,271	2,375	19,646	2,651	461	3,112	234	3,346
4/19/2014	29,560	1,083	122	6,032	2,700	0	22,033	16,757	2,375	19,132	2,901	461	3,362	234	3,596
4/26/2014	29,560	1,083	122	5,664	3,400	0	21,701	16,490	2,375	18,865	2,836	461	3,297	234	3,531
5/3/2014	29,560	1,083	122	6,663	3,400	0	20,702	16,463	2,375	18,838	1,864	461	2,325	234	2,559
<b>5/10/2014</b>	<b>29,560</b>	<b>1,083</b>	<b>122</b>	<b>4,982</b>	<b>3,400</b>	<b>0</b>	<b>22,383</b>	<b>20,223</b>	<b>2,375</b>	<b>22,598</b>	<b>(215)</b>	<b>461</b>	<b>246</b>	<b>234</b>	<b>480</b>
5/17/2014	29,560	889	122	3,134	3,400	0	24,037	21,216	2,375	23,591	446	461	907	234	1,141
5/24/2014	29,560	1,083	122	1,844	3,400	0	25,521	22,138	2,375	24,513	1,008	461	1,469	234	1,703

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



December 7, 2013 - May 24, 2014, W/B Saturday