



**Joanne Bialas**  
Outage Coordination

To: NEPOOL Participants

From: Joanne Bialas

**Subject: 2012-13 First Future Year Annual Maintenance Schedule – Draft #2**

Date: April 13, 2012

Following this transmittal letter, you will find the 2012-13 First Future Year Annual Maintenance Schedule (AMS) – Draft #2 dated April 13, 2012, with planned outage totals, and a rounded weekly Operable Capacity Analysis for June 1, 2012 through May 31, 2013. This schedule covers the third Forward Capacity Market procurement period. Periodically, individual Market 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.

**2012-13 AMS – DRAFT #2 - DATED APRIL 13, 2012**

Draft #2 of the 2012-13 AMS - dated April 13, 2012 reflects all planned maintenance requests for June 2012- May 2013 that have been submitted to the ISO through April 10, 2012. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2012-13 are encouraged to do so.

**2012-13 OPERABLE CAPACITY ANALYSIS**

The Operable Capacity Analysis for June 1, 2012 through May 31, 2013 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 1,980 MW for week beginning June 16<sup>th</sup>. *Please note that there may be generation outages due to gas pipeline outages that are currently tentatively scheduled for some weeks in late-spring, summer, and early-fall that may further decrease the operable capacity margin.*

**Peak Load Exposures (PLE)**

After being adjusted for Other Demand Resources, ODR, the Peak Load Exposure (PLE) for the summer and winter of 2012-13 are 26,480 MW and 21,431 MW respectively, and reflects the seasonal peak load based on the 2012 CELT Report.

**Generating Unit Capabilities**

Resource Capacity Supply Obligations, CSO, are based upon data as of April 11, 2012 and includes Energy Management System (EMS) assets. New unit additions are factored into the New Generation column at the appropriate points in time.

**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 during the winter and summer months.

External Transmission

No maintenance of Hydro-Quebec Phase II or Highgate has been included in the analysis.

Weekly Operating Reserve

The weekly operating reserve is equal to one hundred percent (100%) 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 2012-13 AMS or Operable Capacity Analysis, or if you have any comments or suggestions please feel free to contact Joanne Bialas at (413) 535-4162 , Patrick Boughan at (413) 540-4712 or Rachel Wilkins-Thurman at (413) 540-4261 or by email at [opamoreq@iso-ne.com](mailto:opamoreq@iso-ne.com).

# ISO-NE 2012-13 OPERABLE CAPACITY ANALYSIS

April 13 , 2012 - 50/50 FORECAST

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	ALLOWANCE FOR UNPLANNED OUTAGES MW	GEN AT RISK DUE TO GAS SUP MW	NET OPCAP SUPPLY MW	PEAK LOAD FORECAST MW	OPER RESERVE REQUIREMEN T 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]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
06/02/2012	29,542	756	200	172	2,800	0	27,330	26,480	2,000	28,480	(1,150)	500	(650)	350	(300)
06/09/2012	29,556	756	200	869	2,800	0	26,640	26,480	2,000	28,480	(1,840)	500	(1,340)	350	(990)
06/16/2012	29,555	756	200	868	2,800	140	26,500	26,480	2,000	28,480	(1,980)	500	(1,480)	350	(1,130)
06/23/2012	29,555	756	200	162	2,800	0	27,350	26,480	2,000	28,480	(1,130)	500	(630)	350	(280)
06/30/2012	29,550	756	200	158	2,100	0	28,050	26,480	2,000	28,480	(430)	500	70	350	420
07/07/2012	29,550	756	200	204	2,100	0	28,000	26,480	2,000	28,480	(480)	500	20	350	370
07/14/2012	29,556	756	200	193	2,100	0	28,020	26,480	2,000	28,480	(460)	500	40	350	390
07/21/2012	29,564	756	200	205	2,100	0	28,010	26,480	2,000	28,480	(470)	500	30	350	380
07/28/2012	29,553	756	200	193	2,100	0	28,020	26,480	2,000	28,480	(460)	500	40	350	390
08/04/2012	29,560	756	200	166	2,100	0	28,050	26,480	2,000	28,480	(430)	500	70	350	420
08/11/2012	29,556	756	200	168	2,100	0	28,040	26,480	2,000	28,480	(440)	500	60	350	410
08/18/2012	29,554	756	200	168	2,100	0	28,040	26,480	2,000	28,480	(440)	500	60	350	410
08/25/2012	29,569	756	200	183	2,100	0	28,040	26,480	2,000	28,480	(440)	500	60	350	410
09/01/2012	29,566	756	200	183	2,100	0	28,040	26,480	2,000	28,480	(440)	500	60	350	410
09/08/2012	29,568	756	200	302	2,100	0	27,920	26,480	2,000	28,480	(560)	500	(60)	350	290
09/15/2012	29,796	756	200	2,474	2,100	0	25,980	22,548	2,000	24,548	1,430	500	1,930	350	2,280
09/22/2012	29,679	756	200	2,869	2,100	0	25,470	22,457	2,000	24,457	1,010	500	1,510	350	1,860
09/29/2012	30,128	555	300	3,440	2,800	0	24,440	16,633	2,000	18,633	5,810	500	6,310	350	6,660
10/06/2012	30,834	555	300	5,609	2,800	0	22,980	16,669	2,000	18,669	4,310	500	4,810	350	5,160
10/13/2012	30,609	555	300	7,273	2,800	0	21,090	17,600	2,000	19,600	1,490	500	1,990	350	2,340
10/20/2012	31,317	555	300	6,837	2,800	0	22,240	17,967	2,000	19,967	2,270	500	2,770	350	3,120
10/27/2012	30,196	555	300	3,869	3,600	0	23,280	18,175	2,000	20,175	3,100	500	3,600	350	3,950
11/03/2012	30,458	555	300	4,029	3,600	0	23,380	18,291	2,000	20,291	3,090	500	3,590	350	3,940
11/10/2012	30,181	555	300	2,723	3,600	0	24,410	18,638	2,000	20,638	3,770	500	4,270	350	4,620
11/17/2012	30,250	555	300	1,135	3,600	0	26,070	19,381	2,000	21,381	4,690	500	5,190	350	5,540
11/24/2012	30,109	555	300	1,699	3,600	0	25,370	20,106	2,000	22,106	3,260	500	3,760	350	4,110
12/01/2012	30,107	555	400	379	3,200	0	27,080	20,323	2,000	22,323	4,760	500	5,260	350	5,610
12/08/2012	30,078	555	400	421	3,200	0	27,010	20,614	2,000	22,614	4,400	500	4,900	350	5,250
12/15/2012	30,078	555	400	421	3,200	0	27,010	20,626	2,000	22,626	4,380	500	4,880	350	5,230
12/22/2012	30,078	555	400	421	3,200	0	27,010	20,688	2,000	22,688	4,320	500	4,820	350	5,170
12/29/2012	30,078	555	400	321	3,200	0	27,110	20,963	2,000	22,963	4,150	500	4,650	350	5,000
01/05/2013	30,078	555	400	311	2,800	2,000	25,520	21,431	2,000	23,431	2,090	500	2,590	350	2,940
01/12/2013	30,078	555	400	311	2,800	2,000	25,520	21,431	2,000	23,431	2,090	500	2,590	350	2,940
01/19/2013	30,078	555	400	311	2,800	2,000	25,520	21,431	2,000	23,431	2,090	500	2,590	350	2,940
01/26/2013	30,078	555	400	311	3,100	2,000	25,220	21,207	2,000	23,207	2,010	500	2,510	350	2,860
02/02/2013	30,078	555	400	311	3,100	2,000	25,220	20,939	2,000	22,939	2,280	500	2,780	350	3,130
02/09/2013	30,084	555	400	748	3,100	2,000	24,790	20,910	2,000	22,910	1,880	500	2,380	350	2,730
02/16/2013	30,084	555	400	748	3,100	2,000	24,790	20,646	2,000	22,646	2,140	500	2,640	350	2,990
02/23/2013	30,084	555	400	748	3,100	0	26,790	19,652	2,000	21,652	5,140	500	5,640	350	5,990
03/02/2013	30,084	555	400	748	2,200	0	27,690	19,301	2,000	21,301	6,390	500	6,890	350	7,240
03/09/2013	30,232	555	400	1,079	2,200	0	27,510	19,104	2,000	21,104	6,410	500	6,910	350	7,260

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April 13 , 2012 - 50/50 FORECAST

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STUDY WEEK (Week Beginning)	OPCAP SUPPLY							LOAD OBLIGATIONS			OPCAP MARGINS				
	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMMERCIAL CAPACITY MW	PLANNED OUTAGES	ALLOWANCE FOR UNPLANNED OUTAGES MW	GEN AT RISK DUE TO GAS SUP MW	NET OPCAP SUPPLY MW	PEAK LOAD FORECAST MW	OPER RESERVE REQUIREMEN T 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
03/16/2013	30,231	555	400	1,268	2,200	0	27,320	18,737	2,000	20,737	6,580	500	7,080	350	7,430
03/23/2013	30,208	555	400	1,019	2,200	0	27,540	18,169	2,000	20,169	7,370	500	7,870	350	8,220
03/30/2013	30,335	555	400	2,526	2,700	0	25,660	17,656	2,000	19,656	6,000	500	6,500	350	6,850
04/06/2013	30,131	555	400	1,969	2,700	0	26,020	17,403	2,000	19,403	6,620	500	7,120	350	7,470
04/13/2013	30,203	555	400	3,200	2,700	0	24,860	16,891	2,000	18,891	5,970	500	6,470	350	6,820
04/20/2013	30,235	555	400	2,325	2,700	0	25,770	16,625	2,000	18,625	7,140	500	7,640	350	7,990
04/27/2013	29,926	555	400	1,287	3,400	0	25,790	16,598	2,000	18,598	7,190	500	7,690	350	8,040
05/04/2013	29,944	555	400	1,533	3,400	0	25,570	20,016	2,000	22,016	3,550	500	4,050	350	4,400
05/11/2013	29,926	555	400	1,330	3,400	0	25,750	20,991	2,000	22,991	2,760	500	3,260	350	3,610
05/18/2013	30,219	555	400	669	3,400	0	26,710	21,896	2,000	23,896	2,810	500	3,310	350	3,660
05/25/2013	29,926	555	400	206	3,400	0	26,880	22,890	2,000	24,890	1,990	500	2,490	350	2,840

1. Available OPCAP MW based on resource Capacity Supply Obligations, CSO, from Forward Capacity Tracking System, FCTS . Does not include Settlement Only Generators.  
( LTOCM application Case Output-System Results-column PreOutage CSO MW)
2. External Node Available Capacity MW based on external Capacity Supply Obligations, CSO. (LTOCM application Case Output-System Results-(EXTERNAL NODE AVAIL OPCAP MW+ ZONAL EXPORT LIMITATIONS MW)
3. New resources that have not yet acquired a CSO but will become commercial in the future. This capacity is rounded to the nearest one hundred.
4. Planned Outages includes outages scheduled greater than or equal to 15 days in advance.
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.  
(LTOCM application Case Output-System Results-UNPLANNED OUTAGES MW)
6. Generation at Risk due to Gas Supply pertains to gas fired capacity expected to be at risk during cold weather conditions. (LTOCM application Case Output-System Results-GEN RISK DUE TO GAS SUP MW)
7. Total OpCap Supply Available per the formula (1 + 2 + 3 - 4 - 5 - 6 = 7)
8. Peak Load Forecast per data included in the 2011 CELT Report adjusted for Other Demand Resources. (LTOCM application-Case Output-System Results-LOAD FORECAST MW)
9. Operating Reserve Requirement based on first largest contingency plus 1/2 the second largest contingency. (LTOCM application Case Output-System Results-OPER RESERVE REQUIREMENT MW)
10. Total Load Obligation per the formula (8 + 9 = 10)
11. Net OPCAP Supply minus Net Load Obligation (7 - 10 = 11)
12. OP 4 Action 2 Real-time Demand Response based on OP4 Appendix A. Reserve Margins and Distribution Loss Factor Gross Ups are Included.
13. OPCAP Margin taking into account Real Time Demand Response through OP4 Step 2 (11 + 12 = 13).
14. OP 4 Action 6 Emergency Generation Response without the Voltage Reduction requiring > 10 Minutes based on OP4 Appendix A. Real Time Emergency Generation is capped at 600MW.  
Reserve Margins and Distribution Loss Factor Gross Ups are Included.
15. OPCAP Margin taking into account Real Time Demand Response and Real Time Emergency Generation through OP4 Step 6 (13 + 14 = 15). This does not include Emergency Energy Transactions (EETs).

New England Operable Capacity Margins  
50/50 FORECAST

