



**Rachel Wilkins-Thurman**  
Outage Coordination

To: NEPOOL Participants

From: Rachel Wilkins-Thurman

**Subject: 2012-13 Current Year Annual Maintenance Schedule**

Date: July 31, 2012

Following this transmittal letter, you will find the 2012-13 Annual Maintenance Schedule (AMS) dated July 31, 2012, with rounded weekly planned outage totals only and an Operable Capacity Analysis (with forecasted external transactions) for August 2012- May 31, 2013. This schedule covers the third Forward Capacity Market procurement period.

*Please note that there may be generation outages due to gas pipeline outages that are currently tentatively scheduled for some weeks in summer and early-fall of 2012 that may further decrease the operable capacity margin.*

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.

**2012-13 AMS - DATED July 31, 2012**

The 2012 AMS - dated July 31, 2012 reflects all planned maintenance requests for August 2012- May 31, 2013 that have been submitted to the ISO through July 26, 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 August 2012 - May 31, 2013 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of -1,820 MW for week beginning September 22<sup>nd</sup>. The overall margin has become less positive since resources have been removed or repositioned since the last publication.

**Peak Load Exposures (PLE)**

After being adjusted for Other Demand Resources, ODR, the Peak Load Exposure (PLE) for the winter was 21,412 MW and summer of 2012 is 26,462 MW, 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 July 26, 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 2,700 MW to 3,400 MW during the winter and summer months.

External Transmission

Maintenance 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 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 2012 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, Patrick Boughan at (413) 540-4712 or by email at [opamoreq@iso-ne.com](mailto:opamoreq@iso-ne.com).

# ISO-NE 2012-2013 OPERABLE CAPACITY ANALYSIS

**July 31, 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 REQUIREME NT MW	NET LOAD OBLIGATION MW	OPCAP MARGIN MW	OPCAP FROM OP4 ACTIVE REAL-TIME DR	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]
8/4/2012	29,938	658	0	626	2,100	0	27,870	26,462	2,375	28,837	(970)	500	(470)	350	(120)
8/11/2012	29,934	658	0	802	2,100	0	27,690	26,462	2,375	28,837	(1,150)	500	(650)	350	(300)
8/18/2012	29,933	658	0	812	2,100	0	27,680	26,462	2,375	28,837	(1,160)	500	(660)	350	(310)
8/25/2012	29,941	658	0	650	2,100	0	27,850	26,462	2,375	28,837	(990)	500	(490)	350	(140)
9/1/2012	29,840	676	27	679	2,100	0	27,760	26,462	2,375	28,837	(1,080)	500	(580)	350	(230)
9/8/2012	29,840	424	27	723	2,100	0	27,470	26,462	2,375	28,837	(1,370)	500	(870)	350	(520)
9/15/2012	30,029	676	27	3,110	2,100	2,348	23,170	22,530	2,375	24,905	(1,740)	500	(1,240)	350	(890)
9/22/2012	30,006	676	27	3,272	2,100	2,348	22,990	22,439	2,375	24,814	(1,820)	500	(1,320)	350	(970)
9/29/2012	30,449	555	72	4,296	2,100	419	24,260	16,615	2,375	18,990	5,270	500	5,770	350	6,120
10/6/2012	30,789	362	72	6,084	2,100	0	23,040	16,651	2,375	19,026	4,010	500	4,510	350	4,860
10/13/2012	31,246	362	72	8,524	2,100	0	21,060	17,582	2,375	19,957	1,100	500	1,600	350	1,950
10/20/2012	31,858	362	72	9,422	2,100	0	20,700	17,949	2,375	20,324	380	500	880	350	1,230
10/27/2012	30,499	362	140	5,269	2,800	0	22,790	18,157	2,375	20,532	2,260	500	2,760	350	3,110
11/3/2012	30,840	555	140	6,042	2,800	0	22,550	18,273	2,375	20,648	1,900	500	2,400	350	2,750
11/10/2012	30,462	555	140	3,897	2,800	0	24,320	18,620	2,375	20,995	3,330	500	3,830	350	4,180
11/17/2012	30,149	555	140	1,831	2,800	0	26,070	19,363	2,375	21,738	4,330	500	4,830	350	5,180
11/24/2012	30,273	555	140	2,068	3,600	0	25,160	20,088	2,375	22,463	2,700	500	3,200	350	3,550
12/1/2012	30,236	555	150	753	3,600	0	26,440	20,304	2,375	22,679	3,760	500	4,260	350	4,610
12/8/2012	30,290	555	150	830	3,600	0	26,420	20,595	2,375	22,970	3,450	500	3,950	350	4,300
12/15/2012	30,294	555	150	774	3,600	0	26,480	20,607	2,375	22,982	3,500	500	4,000	350	4,350
12/22/2012	30,259	555	150	704	3,600	1,000	25,510	20,669	2,375	23,044	2,470	500	2,970	350	3,320
12/29/2012	30,202	555	150	604	3,200	1,000	25,950	20,944	2,375	23,319	2,630	500	3,130	350	3,480
1/5/2013	30,201	555	291	311	3,200	2,000	25,250	21,412	2,375	23,787	1,460	500	1,960	350	2,310
1/12/2013	30,201	555	291	311	3,200	2,000	25,250	21,412	2,375	23,787	1,460	500	1,960	350	2,310
1/19/2013	30,201	555	291	331	3,200	2,000	25,230	21,412	2,375	23,787	1,440	500	1,940	350	2,290
1/26/2013	30,201	555	291	331	3,200	2,000	25,230	21,188	2,375	23,563	1,670	500	2,170	350	2,520
2/2/2013	30,201	555	291	311	2,800	2,000	25,650	20,920	2,375	23,295	2,360	500	2,860	350	3,210
2/9/2013	30,401	555	291	1,590	2,800	2,000	24,570	20,891	2,375	23,266	1,300	500	1,800	350	2,150
2/16/2013	30,401	555	291	1,649	2,800	2,000	24,510	20,627	2,375	23,002	1,510	500	2,010	350	2,360
2/23/2013	30,401	555	291	1,590	3,100	0	26,270	19,633	2,375	22,008	4,260	500	4,760	350	5,110
3/2/2013	30,401	555	291	1,590	3,100	0	26,270	19,282	2,375	21,657	4,610	500	5,110	350	5,460
3/9/2013	30,550	555	291	1,921	3,100	0	26,080	19,085	2,375	21,460	4,620	500	5,120	350	5,470
3/16/2013	30,355	555	291	1,268	3,100	0	26,540	18,718	2,375	21,093	5,450	500	5,950	350	6,300
3/23/2013	30,337	555	291	1,031	3,100	0	26,760	18,150	2,375	20,525	6,240	500	6,740	350	7,090
3/30/2013	30,464	555	291	2,558	2,200	0	26,260	17,638	2,375	20,013	6,250	500	6,750	350	7,100
4/6/2013	30,340	555	291	2,566	2,200	0	26,130	17,385	2,375	19,760	6,370	500	6,870	350	7,220
4/13/2013	30,570	555	291	5,048	2,200	0	23,880	16,873	2,375	19,248	4,630	500	5,130	350	5,480
4/20/2013	30,523	555	291	3,614	2,200	0	25,260	16,607	2,375	18,982	6,280	500	6,780	350	7,130
4/27/2013	30,212	555	291	2,522	2,700	0	25,550	16,580	2,375	18,955	6,600	500	7,100	350	7,450
5/4/2013	30,231	555	291	2,768	2,700	0	25,320	19,998	2,375	22,373	2,950	500	3,450	350	3,800
5/11/2013	30,596	555	291	4,260	2,700	0	24,190	20,973	2,375	23,348	840	500	1,340	350	1,690
5/18/2013	30,505	555	291	1,904	2,700	0	26,460	21,878	2,375	24,253	2,210	500	2,710	350	3,060
5/25/2013	30,050	555	291	206	3,400	0	27,000	22,872	2,375	25,247	1,750	500	2,250	350	2,600

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.

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.

# ISO-NE 2012-2013 OPERABLE CAPACITY ANALYSIS

**July 31, 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 <small>(Week Beginning,</small>	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 REQUIREME NT 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
<p>(LTOCM application Case Output-System Results-UNPLANNED OUTAGES MW)</p> <p>6. 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. (LTOCM application Case Output-System Results-GEN RISK DUE TO G)</p> <p>7. Total OpCap Supply Available per the formula (1 + 2 + 3 - 4 - 5 - 6 = 7)</p> <p>8. Peak Load Forecast per data included in the 2012 CELT Report adjusted for Other Demand Resources. (LTOCM application-Case Output-System Results-LOAD FORECAST MW)</p> <p>9. Operating Reserve Requirement based on 125% of first largest contingency plus 1/2 the second largest contingency. (LTOCM application Case Output-System Results-OPER RESERVE REQUIREMENT MW)</p> <p>10. Total Load Obligation per the formula (8 + 9 = 10)</p> <p>11. Net OPCAP Supply minus Net Load Obligation (7 - 10 = 11)</p> <p>12. OP 4 Action 2 Real-time Demand Response based on OP4 Appendix A. Reserve Margins and Distribution Loss Factor Gross Ups are Included.</p> <p>13. OPCAP Margin taking into account Real Time Demand Response through OP4 Step 2 (11 + 12 = 13).</p> <p>14. OP 4 Action 6 Emergency Generation Response without the Voltage Reduction requiring &gt; 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.</p> <p>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).</p>															

### New England Operable Capacity Margins 50/50 FORECAST

