Patrick Boughan
Outage Coordination

To: NEPOOL Participants

From: Patrick Boughan

Subject: 2012 Current Year Annual Maintenance Schedule

Date: April 9, 2012

Following this transmittal letter, you will find the 2012 Annual Maintenance Schedule (AMS) dated April 9, 2012, with rounded weekly planned outage totals only and an Operable Capacity Analysis (with forecasted external transactions) for April 2012 through May 31, 2012. This schedule covers the second Forward Capacity Market procurement period. The second draft of the first future year AMS report will be published in April 2012 covering the third Forward Capacity Market procurement period from June 1, 2012 through May 31, 2013. *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 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 AMS - DATED April 9, 2012

The 2012 AMS - dated April 9, 2012 reflects all planned maintenance requests for April 2012- May 31, 2012 that have been submitted to the ISO through April 3, 2012. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2012 are encouraged to do so.

2012 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for April 2012 through May 31, 2012 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of 1,160 MW for week beginning May 5th. 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 summer of 2011 was 26,776 MW and winter 2012 is 21,495 MW, and reflects the seasonal peak load based on the 2011 CELT Report.

Generating Unit Capabilities

Resource Capacity Supply Obligations, CSO, are based upon data as of April 3, 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
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 AMS or Operable Capacity Analysis, or if you have any comments or suggestions please feel free to contact Patrick Boughan at (413) 540-4712 or Rachel Wilkins-Thurman at (413) 540-4261 or by email at opamoreq@iso-ne.com.

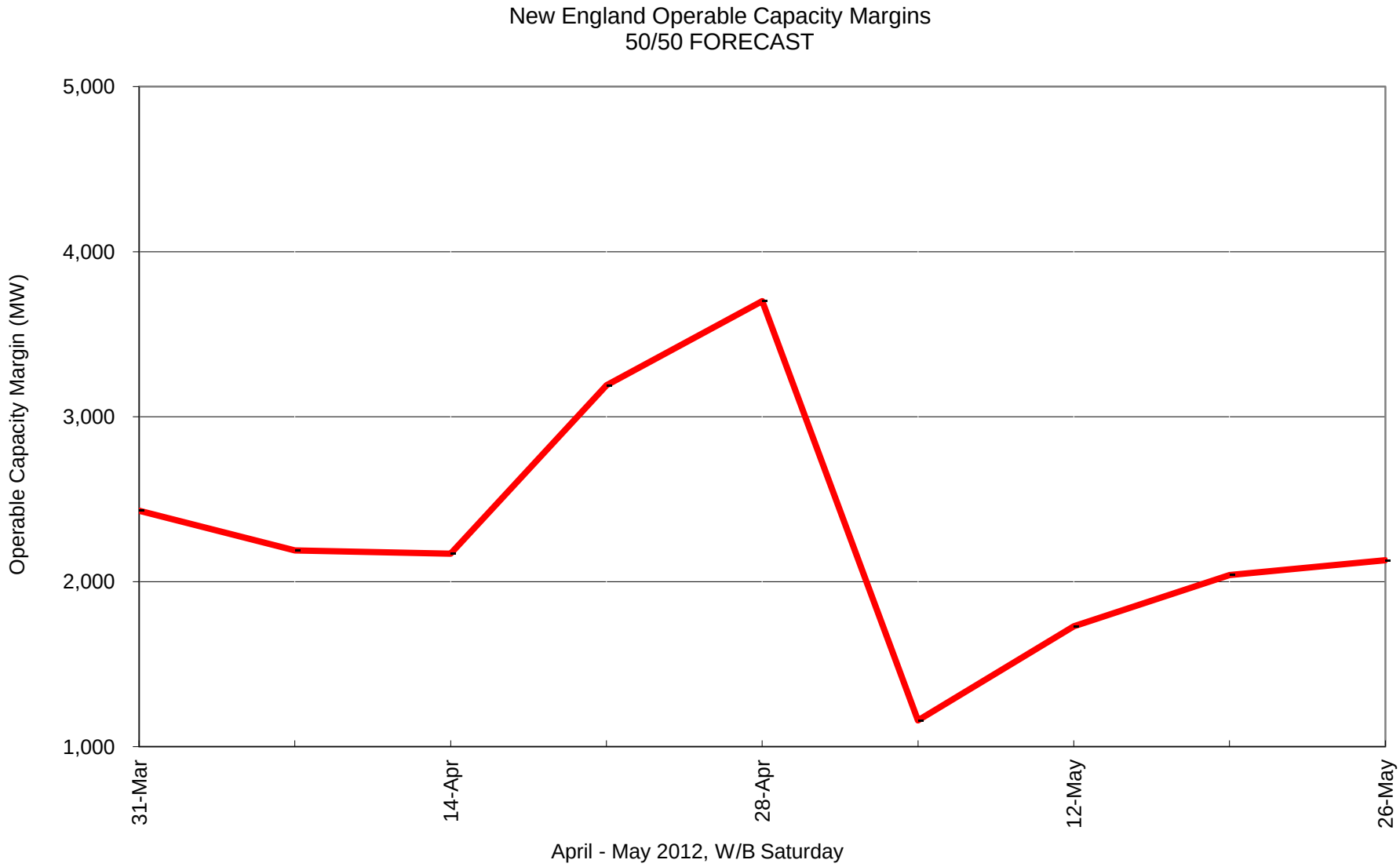
ISO-NE 2012 OPERABLE CAPACITY ANALYSIS

April 9, 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.

	OPCAP SUPPLY							LOAD OBLIGATIONS			OPCAP MARGINS				
STUDY WEEK (Week Beginning, Saturday)	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 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]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
3/31/2012	31,889	492	0	7,514	2,700	0	22,170	17,742	2,000	19,742	2,430	500	2,930	350	3,280
4/7/2012	32,355	492	0	8,463	2,700	0	21,680	17,491	2,000	19,491	2,190	500	2,690	350	3,040
4/14/2012	32,600	492	0	9,237	2,700	0	21,150	16,981	2,000	18,981	2,170	500	2,670	350	3,020
4/21/2012	31,857	492	0	7,741	2,700	0	21,910	16,716	2,000	18,716	3,190	500	3,690	350	4,040
4/28/2012	31,259	368	0	4,959	3,400	880	22,390	16,690	2,000	18,690	3,700	500	4,200	350	4,550
5/5/2012	**31,140**	**368**	**0**	**4,501**	**3,400**	**0**	**23,610**	**20,452**	**2,000**	**22,452**	**1,160**	**500**	**1,660**	**350**	2,010
5/12/2012	30,994	368	0	2,619	3,400	170	25,170	21,438	2,000	23,438	1,730	500	2,230	350	2,580
5/19/2012	31,220	368	0	1,799	3,400	0	26,390	22,354	2,000	24,354	2,040	500	2,540	350	2,890
5/26/2012	30,773	368	0	849	2,800	0	27,490	23,360	2,000	25,360	2,130	500	2,630	350	2,980

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.
(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
Operable Capacity Margin (MW)
5,000
4,000
3,000
2,000
1,000
31-Mar
14-Apr
28-Apr
12-May
26-May
April - May 2012, W/B Saturday