

### **Rachel Wilkins-Thurman**

**Outage Coordination** 

To: NEPOOL Participants

From: Rachel Wilkins-Thurman

Subject: 2011-12 Current Year Annual Maintenance Schedule

Date: October 7, 2011

Following this transmittal letter, you will find the 2011-12 Annual Maintenance Schedule (AMS) – dated October 7, 2011, with rounded weekly planned outage totals only, and an Operable Capacity Analysis (with forecasted external transactions) for October 2011 through May 31, 2012. This schedule covers the second 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.

### 2011-12 AMS - DATED October 7, 2011

The 2011-12 AMS - dated October 7, 2011 reflects all planned maintenance requests for October 2011-May 31, 2012 that have been submitted to the ISO through October 4, 2011. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2011-12 are encouraged to do so.

### 2011-12 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for October 2011 through May 31, 2012 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 100 MW for week beginning October 15<sup>th</sup>. The overall margin has become less negative 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 October 4, 2011 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.

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### **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 around the time of the winter peak load due to the unavailability of gas.

If you have any questions or comments concerning this edition of the 2011-12 AMS or Operable Capacity Analysis, or If you have any comments or suggestions please feel free to contact Rachel Wilkins-Thurman (413) 540-4261 or Richard Boughton at (413) 540-4752 or by email at opamoreq@iso-ne.com.

### **ISO-NE 2011-12 OPERABLE CAPACITY ANALYSIS**

October 7, 2011 - 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.

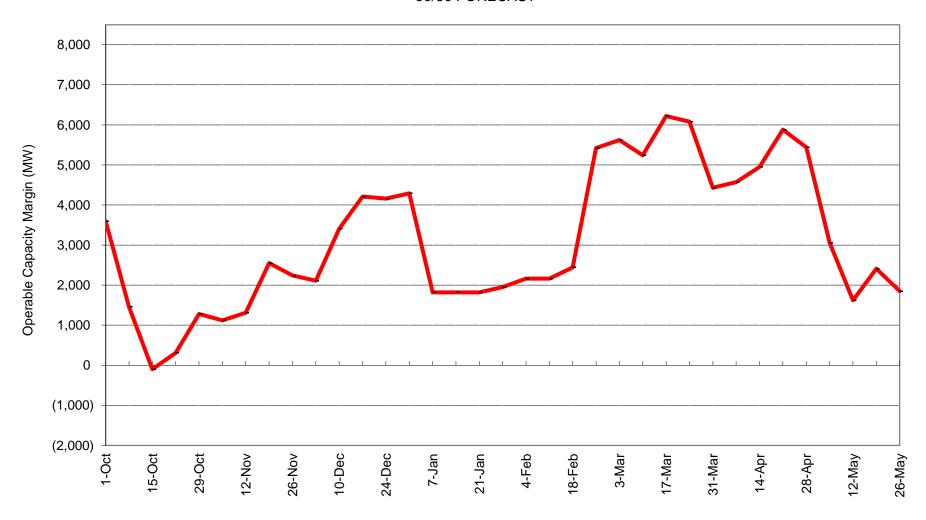
	OPCAP SUPPLY								LOAD OBLIGATIONS			OPCAP MARGINS				
STUDY WEEK (Week Beginning.	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMMERCIAL CAPACITY MW	PLANNED OUTAGES	ALLOWANCE FOR UNPLANNED OUTAGES MW	GEN AT RISK DUE TO GAS SUP MW	NET OPCAP SUPPLY MW	PEAK LOAD FORECAST MW	OPER RESERVE REQUIREME NT MW	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	
10/1/2011	31,732	517	0	7,115	2,800	0	22,330	16,725	2,000	18,725	3,600	550	4,150	375	4,525	
10/8/2011	31,922	517	0	9,420	2,800	0	20,220	16,761	2,000	18,761	1,460	550	2,010	375	2,385	
10/15/2011	32,499	517	0	10,623	2,800	0	19,590	17,687	2,000	19,687	(100)	550	450	375	825	
10/22/2011	32,244	517	0	9,600	2,800	0	20,360	18,052	2,000	20,052	310	550	860	375	1,235	
10/29/2011	31,966	368	0	7,190	3,600	0	21,540	18,258	2,000	20,258	1,280	550	1,830	375	2,205	
11/5/2011	31,157	368	0	6,437	3,600	0	21,490	18,374	2,000	20,374	1,120	550	1,670	375	2,045	
11/12/2011	31,022	368	0	5,761	3,600	0	22,030	18,719	2,000	20,719	1,310	550	1,860	375	2,235	
11/19/2011	31,083	368	0	3,841	3,600	0	24,010	19,458	2,000	21,458	2,550	550	3,100	375	3,475	
11/26/2011	31,010	368	0	3,354	3,600	0	24,420	20,179	2,000	22,179	2,240	550	2,790	375	3,165	
12/3/2011	30,708	493	0	3,498	3,200	0	24,500	20,393	2,000	22,393	2,110	550	2,660	375	3,035	
12/10/2011	30,680	493	0	1,880	3,200	0	26,090	20,683	2,000	22,683	3,410	550	3,960	375	4,335	
12/17/2011	30,494	493	0	886	3,200	0	26,900	20,694	2,000	22,694	4,210	550	4,760	375	5,135	
12/24/2011	30,489	493	0	864	3,200	0	26,920	20,756	2,000	22,756	4,160	550	4,710	375	5,085	
12/31/2011	30,489	493	0	864	2,800	0	27,320	21,030	2,000	23,030	4,290	550	4,840	375	5,215	
1/7/2012	30,494	493	0	870	2,800	2,000	25,320	21,495	2,000	23,495	1,820	550	2,370	375	2,745	
1/14/2012	30,805	493	0	1,181	2,800	2,000	25,320	21,495	2,000	23,495	1,820	550	2,370	375	2,745	
1/21/2012	30,497	493	0	873	2,800	2,000	25,320	21,495	2,000	23,495	1,820	550	2,370	375	2,745	
1/28/2012	30,435	493	0	610	3,100	2,000	25,220	21,272	2,000	23,272	1,950	550	2,500	375	2,875	
2/4/2012	30,662	493	0	884	3,100	2,000	25,170	21,005	2,000	23,005	2,160	550	2,710	375	3,085	
2/11/2012	30,395	493	0	643	3,100	2,000	25,140	20,976	2,000	22,976	2,160	550	2,710	375	3,085	
2/18/2012	30,373	493	0	617	3,100	2,000	25,150	20,714	2,000	22,714	2,440	550	2,990	375	3,365	
2/25/2012	30,368	493	0	614	3,100	0	27,150	19,726	2,000	21,726	5,420	550	5,970	375	6,345	
3/3/2012	30,744	493	0	2,032	2,200	0	27,000	19,376	2,000	21,376	5,620	550	6,170	375	6,545	
3/10/2012	30,770	493	0	2,639	2,200	0	26,420	19,180	2,000	21,180	5,240	550	5,790	375	6,165	
3/17/2012	30,668	493	0	1,917	2,200	0	27,040	18,816	2,000	20,816	6,220	550	6,770	375	7,145	
3/24/2012	30,482	493	0	2,443	2,200	0	26,330	18,250	2,000	20,250	6,080	550	6,630	375	7,005	
3/31/2012	30,507	493	0	4,130	2,700	0	24,170	17,742	2,000	19,742	4,430	550	4,980	375	5,355	
4/7/2012	30,651	493	0	4,388	2,700	0	24,060	17,491	2,000	19,491	4,570	550	5,120	375	5,495	
4/14/2012	30,620	493	0	4,479	2,700	0	23,930	16,981	2,000	18,981	4,950	550	5,500	375	5,875	
4/21/2012	30,877	493	0	4,072	2,700	0	24,600	16,716	2,000	18,716	5,880	550	6,430	375	6,805	
4/28/2012	30,530	493	0	3,496	3,400	0	24,130	16,690	2,000	18,690	5,440	550	5,990	375	6,365	
5/5/2012	30,412	493	0	1,994	3,400	0	25,510	20,452	2,000	22,452	3,060	550	3,610	375	3,985	
5/12/2012	30,310	493	0	2,343	3,400	0	25,060	21,438	2,000	23,438	1,620	550	2,170	375	2,545	
5/19/2012	30,548	493	0	881	3,400	0	26,760	22,354	2,000	24,354	2,410	550	2,960	375	3,335	
5/26/2012	30,121	493	0	5	3,400	0	27,210	23,360	2,000	25,360	1,850	550	2,400	375	2,775	
1. Available OPG	CAP MW based	d on resource	Capacity Supply	Obligations, C	SO. from Forwa	rd Capacit	v Tracking Syste	m. FCTS . Do	es not include	Settlement C	Only Generators.	·				

( LTOCM application Case Output-System Results-column PreOutage CSO MW)

- 2. External Node Available Capacify 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)
- (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



October 2011 - May 2012, W/B Saturday