

#### **Richard Boughton**

Outage Coordination

To: NEPOOL Participants

From: Richard Boughton

Subject: 2011 Annual Maintenance Schedule – February Edition

Date: February 7, 2011

Following this transmittal letter, you will find the 2011 Annual Maintenance Schedule (AMS) – February Edition dated February 7, 2011, with rounded weekly planned outage totals only, and an Operable Capacity Analysis for February 2011 through May 2011. This schedule covers the remainder of the first 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 AMS – FEBRUARY EDITION - DATED FEBRUARY 7, 2011

February Edition of the 2011 AMS - dated February 7, 2011 reflects all planned maintenance requests for February 2011- May 2011 that have been submitted to the ISO through February 3, 2011. Those generator owners who have not yet submitted their anticipated maintenance schedules for the AMS covering the Procurement Period 2011 are encouraged to do so.

<u>Special Note:</u> All Outages are now required to be submitted through ISO-NEs generation outage scheduling software known as CROW. Outages will only be accepted through <u>opamoreq@iso-ne.com</u> that requires an outage to be shortened in duration. Please contact customer service with any questions in regards to this new process.

#### 2011 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for February 2011 through May 2011 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 580 MW for week beginning May 7<sup>th</sup>. However, it is possible that additional maintenance that may be added in upcoming editions of the 2011 AMS will reduce those margins.

### Peak Load Exposures (PLE)

After being adjusted for Other Demand Resources, ODR, the Peak Load Exposure (PLE) for the winter/spring of the 2011 procurement period is 22,976 MW and reflects the seasonal peak load based on the 2010 CELT Report.

#### Generating Unit Capabilities

Resource Capacity Supply Obligations, CSO, are based upon data as of January 28, 2011 and includes Energy Management System (EMS) assets. New unit additions are factored into the New Generation column at the appropriate points in time.

ISO New England Inc. www.iso-ne.com

2011 Annual Maintenance Schedule – February Edition Page 2 of 2

#### Miscellaneous Assumptions

The weekly Total Known Maintenance values include all generation scheduled out-of-service as reflected within this edition of the 2011 AMS.

#### **Unplanned Outage Allotment**

Allowances for unplanned outages, as documented in ISO New England OP-5, range from 2,100 MW during the summer months to 3,600 MW.

#### **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 AMS or Operable Capacity Analysis, If you have any comments or suggestions please feel free to contact Rachel Wilkins-Thurman (413) 540-4261, Richard Boughton at (413) 540-4752 or Joanne Bialas at (413) 535-4162 or by email at opamoreq@iso-ne.com

ISO New England Inc. www.iso-ne.com

## ISO-NE 2010 OPERABLE CAPACITY ANALYSIS

#### February 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	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	
Saturday)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	
2/19/2011	30,738	387	0	3,692	3,100	2,000	22,330	20,751	1,800	22,551	(220)	670	450	520	970	
2/26/2011	30,900	387	0	3,958	3,100	0	24,230	19,770	1,800	21,570	2,660	670	3,330	520	3,850	
3/5/2011	30,931	467	0	5,524	2,200	0	23,670	19,424	1,800	21,224	2,450	670	3,120	520	3,640	
3/12/2011	30,881	467	0	4,898	2,200	0	24,250	19,229	1,800	21,029	3,220	670	3,890	520	4,410	
3/19/2011	31,028	467	0	5,496	2,200	0	23,800	18,867	1,800	20,667	3,130	670	3,800	520	4,320	
3/26/2011	30,557	300	0	5,534	2,700	0	22,620	18,306	1,800	20,106	2,510	670	3,180	520	3,700	
4/2/2011	30,396	300	0	6,216	2,700	0	21,780	17,803	1,800	19,603	2,180	670	2,850	520	3,370	
4/9/2011	30,713	300	0	6,307	2,700	0	22,000	17,553	1,800	19,353	2,650	670	3,320	520	3,840	
4/16/2011	30,900	300	0	7,508	2,700	0	20,990	17,047	1,800	18,847	2,140	670	2,810	520	3,330	
4/23/2011	30,883	300	0	6,609	2,700	0	21,870	16,785	1,800	18,585	3,280	670	3,950	520	4,470	
4/30/2011	30,938	300	0	7,044	3,400	0	20,790	16,758	1,800	18,558	2,230	670	2,900	520	3,420	
5/7/2011	30,618	300	0	5,971	3,400	0	21,550	20,325	1,800	22,125	(580)	670	90	520	610	
5/14/2011	30,526	300	0	2,934	3,400	0	24,490	21,296	1,800	23,096	1,390	670	2,060	520	2,580	
5/21/2011	30,257	300	0	1,379	3,400	0	25,780	22,198	1,800	23,998	1,780	670	2,450	520	2,970	
5/28/2011	30,183	300	0	696	3,400	0	26,390	22,976	1,800	24,776	1,610	670	2,280	520	2,800	

1. Available OPCAP MW based on resource Capacity Supply Obligations, CSO, from Forward Capacity Tracking System, FCTS. Does not include Settlement Only Generators.

(separate LTOCM run without any generator outages, tab Case Output-System Results-column LZ EXPORT LTD AVAIL OPCAP 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)

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 2010 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).

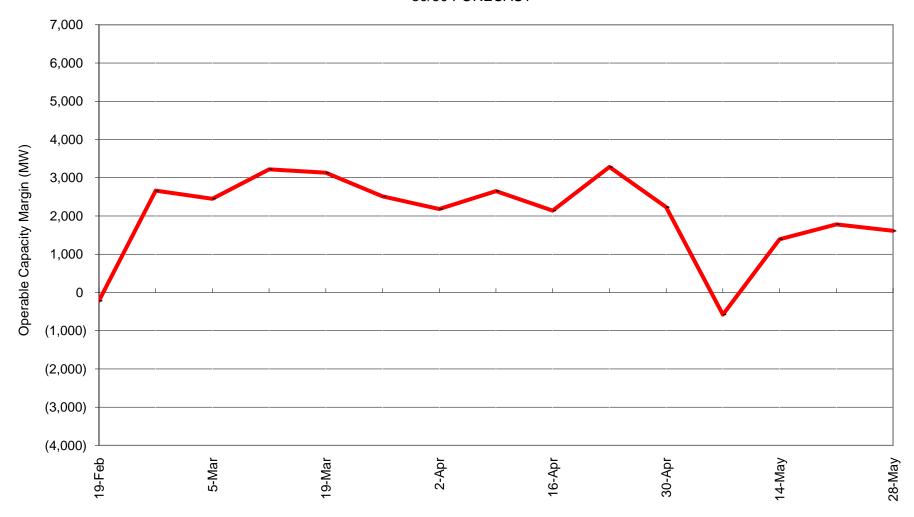
14. OP 4 Action 6 Emergency Generation Response without the Voltage Reduction requiring > 10 Minutes based on OP4 Appendix A. Real Time Emergency Generation is capped at 600MW.

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).

1 OF 1 2/4/2011 2:15 PM

# New England Operable Capacity Margins 50/50 FORECAST



February - May 2011, W/B Saturday