

#### Joanne Bialas

**Outage Coordination** 

To: NEPOOL Participants

From: Joanne Bialas

## **Subject: 2013 Current Year Annual Maintenance Schedule**

Date: March 1, 2013

Following this transmittal letter, you will find the 2013 Annual Maintenance Schedule (AMS) dated March 1, 2013 with an Operable Capacity Analysis (with forecasted external transactions) for March 2, 2013 - May 31, 2013. This schedule covers the third Forward Capacity Market procurement period. A subsequent schedule will be published in April 2013 covering the fourth Forward Capacity Market procurement period from June 1, 2013 through May 31, 2014.

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.

#### 2013 AMS- DATED March 1, 2013

The 2013 AMS - dated March 1, 2013 reflects all planned maintenance requests and also includes any known long-term Forced Outages for March 2, 2013 - May 31, 2013 that have been submitted to the ISO through February 19, 2013. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2013 are encouraged to do so.

#### 2013 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for March 2, 2013 - May 31, 2013 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 1,044 MW for week beginning May 11<sup>th</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 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 February 19, 2013 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 outages 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 twenty five 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 2013 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 or by email at opamoreq@iso-ne.com.

# **ISO-NE 2013 OPERABLE CAPACITY ANALYSIS**

February 25 2013 - 50/50- FORECAST - CSO Reduced LNG Available

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.

	OPCAP SUPPLY								LOAD OBLIGATIONS			OPCAP MARGINS				
STUDY WEEK (Week Beginning,	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMMERCIAL CAPACITY MW	PLANNED OUTAGES CSO MW	ALLOWANCE FOR UNPLANNED OUTAGES MW	GAS AT RISK 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	
Saturday)	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	
03/02/2013	30,754	337	41	3,649	2,200	1,164	24,119	19,282	2,375	21,657	2,462	600	3,062	400	3,462	
03/09/2013	30,396	337	41	3,792	2,200	927	23,855	19,085	2,375	21,460	2,395	600	2,995	400	3,395	
03/16/2013	30,396	337	41	3,334	2,200	515	24,724	18,718	2,375	21,093	3,631	600	4,231	400	4,631	
03/23/2013	30,396	337	41	4,765	2,200	0	23,809	18,150	2,375	20,525	3,284	600	3,884	400	4,284	
03/30/2013	30,125	555	41	5,081	2,700	0	22,941	17,638	2,375	20,013	2,928	600	3,528	400	3,928	
04/06/2013	30,125	555	41	5,908	2,700	0	22,113	17,385	2,375	19,760	2,353	600	2,953	400	3,353	
04/13/2013	30,125	555	41	8,501	2,700	0	19,520	16,873	2,375	19,248	272	600	872	400	1,272	
04/20/2013	30,125	555	41	7,278	2,700	0	20,744	16,607	2,375	18,982	1,762	600	2,362	400	2,762	
04/27/2013	30,125	555	41	6,952	3,400	0	20,369	16,580	2,375	18,955	1,414	600	2,014	400	2,414	
05/04/2013	30,125	555	41	4,457	3,400	0	22,865	19,998	2,375	22,373	492	600	1,092	400	1,492	
05/11/2013	30,125	555	41	5,018	3,400	0	22,304	20,973	2,375	23,348	(1,044)	600	(444)	400	(44)	
05/18/2013	30,125	555	41	2,972	3,400	62	24,287	21,878	2,375	24,253	34	600	634	400	1,034	
05/25/2013	30,125	365	41	2,601	3,400	0	24,530	22,872	2,375	25,247	(717)	600	(117)	400	283	

- 1. Available OPCAP MW based on resource Capacity Supply Obligations, CSO. Does not include Settlement Only Generators.
- 2. External Node Available Capacity MW based on external Capacity Supply Obligations, CSO.
- 3. New resources that have acquired a CSO but have not become commercial.
- 4. Planned Outages is the total of Generator/DARD Outages for the period. This value would also include any known long-term Forced Outages.
- 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.
- 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.
- 7. Net OpCap Supply MW Available (1 + 2 + 3 4 5 6 = 7)
- 8. Peak Load Forecast per data included in the 2012 CELT Report adjusted for Other Demand Resources.
- 9. Operating Reserve Requirement based on 125% of first largest contingency plus 50% the second largest contingency.
- 10. Total Net Load Obligation per the formula(8 + 9 = 10)
- 11. Net OPCAP Margin MW = Net Op Cap Supply MW 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 - CSO - 50/50 FORECAST reduced LNG imports



March, 2013 - May 31, 2013, W/B Saturday