Rachel Wilkins-Thurman
Outage Coordination

To: Master/LCC Heads

From: Rachel Wilkins-Thurman

Subject: 2013 Current Year Annual Maintenance Schedule

Date: January 29, 2013

Following this transmittal letter, you will find the 2013 Annual Maintenance Schedule (AMS) dated January 29, 2013 which reflects all planned maintenance requests and also includes any known long-term Forced Outages outage requests submitted through January 24, 2013. This schedule covers the third Forward Capacity Market procurement period from February 9, 2013 - May 31, 2013.

A subsequent schedule will be published in February 2013 covering the fourth Forward Capacity Market procurement period from June 1, 2013 through May 31, 2014.

Please keep in mind that the 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. As requested by each company submitting maintenance requests, the data is to be considered market sensitive and the distribution is in accordance with the ISO New England Information Policy. Please keep the confidentiality of the AMS in mind and do not distribute it to people outside of your organization**.**

2013 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for February 9, 2013 - May 31, 2013 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 830 MW for week beginning May 11th. 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 January 24, 2013 and includes Energy Management System (EMS) assets. New unit additions are factored into the New Generation column at the appropriate points in time.

Interchange

Only external resources with a Capacity Supply Obligation, CSO, are represented in the analysis.

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

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 spring and summer months.

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

January 29 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, Saturday)	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
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
2/9/2013	30,754	337	41	3,184	3,100	2,092	22,756	20,891	2,375	23,266	(510)	600	90	400	490
2/16/2013	30,754	337	41	2,760	3,100	1,930	23,342	20,627	2,375	23,002	340	600	940	400	1,340
2/23/2013	30,754	337	41	2,533	3,100	1,467	24,032	19,633	2,375	22,008	2,024	600	2,624	400	3,024
3/2/2013	30,754	485	41	3,373	2,200	750	24,957	19,282	2,375	21,657	3,300	600	3,900	400	4,300
3/9/2013	30,396	485	41	3,573	2,200	514	24,635	19,085	2,375	21,460	3,175	600	3,775	400	4,175
3/16/2013	30,396	485	41	3,348	2,200	100	25,274	18,718	2,375	21,093	4,181	600	4,781	400	5,181
3/23/2013	30,396	485	41	4,384	2,200	0	24,338	18,150	2,375	20,525	3,813	600	4,413	400	4,813
3/30/2013	30,125	555	41	4,852	2,700	0	23,169	17,638	2,375	20,013	3,156	600	3,756	400	4,156
4/6/2013	30,125	555	41	5,487	2,700	0	22,534	17,385	2,375	19,760	2,774	600	3,374	400	3,774
4/13/2013	30,125	555	41	7,421	2,700	0	20,600	16,873	2,375	19,248	1,352	600	1,952	400	2,352
4/20/2013	30,125	555	41	8,091	2,700	0	19,930	16,607	2,375	18,982	948	600	1,548	400	1,948
4/27/2013	30,125	555	41	6,578	3,400	0	20,743	16,580	2,375	18,955	1,788	600	2,388	400	2,788
5/4/2013	30,125	555	41	5,076	3,400	0	22,245	19,998	2,375	22,373	(128)	600	472	400	872
5/11/2013	**30,125**	**555**	**41**	**4,803**	**3,400**	**0**	**22,518**	**20,973**	**2,375**	**23,348**	**(830)**	**600**	**(230)**	**400**	**170**
5/18/2013	30,125	555	41	3,072	3,400	249	24,000	21,878	2,375	24,253	(253)	600	347	400	747
5/25/2013	30,125	362	41	2,361	3,400	0	24,767	22,872	2,375	25,247	(480)	600	120	400	520

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)

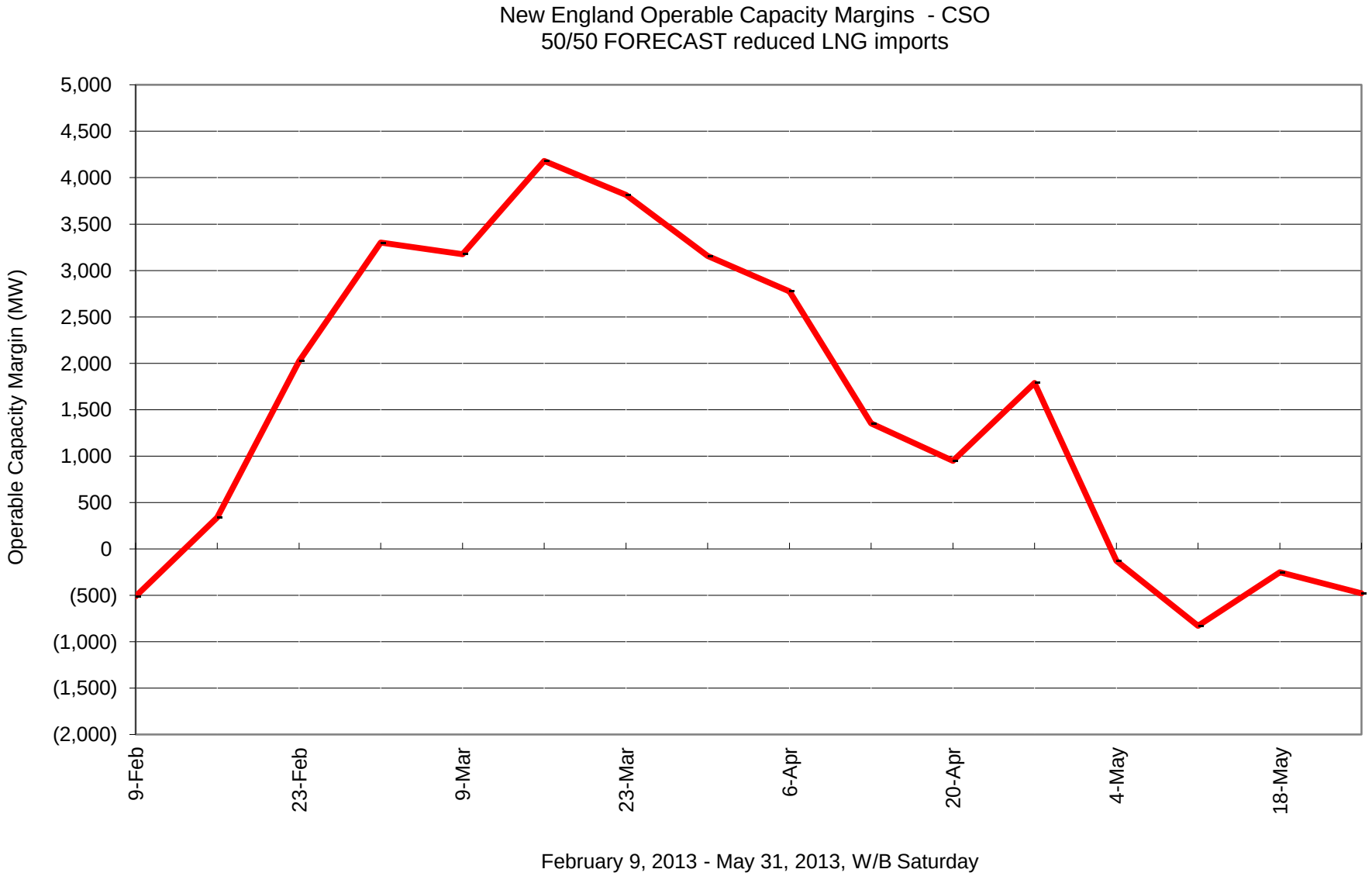
11. Net OPCAP Margin MW = Net Op Cap Supply MW minus Net Load Obligation (7 - 10 = 11)

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
Operable Capacity Margin (MW)
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
(500)
(1,000)
(1,500)
(2,000)
9-Feb
23-Feb
9-Mar
23-Mar
6-Apr
20-Apr
4-May
18-May
February 9, 2013 - May 31, 2013, W/B Saturday