



Rachel Wilkins-Thurman
Outage Coordination

To: NEPOOL Participants

From: Rachel Wilkins-Thurman

Subject: 2013-14 First Future Year Annual Maintenance Schedule – Draft #1

Date: February 15, 2013

Following this transmittal letter, you will find the 2013-14 First Future Year Annual Maintenance Schedule (AMS) – Draft #1 dated February 15, 2013 which reflects all planned maintenance requests and also includes any known long-term Forced Outages outage requests submitted through February 14, 2013. This schedule covers the fourth Forward Capacity Market procurement period from June 1, 2013 through May 31, 2014. Participants that own entitlements in units must contact the Lead Participant to obtain the maintenance schedule for each unit.

2013-14 AMS – DRAFT #1 - DATED FEBRUARY 15, 2013

Draft #1 of the 2013-14 AMS - dated February 15, 2013 reflects all planned maintenance requests for June 1, 2013- May 31, 2014 that have been submitted to the ISO through February 14, 2013. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2013-14 are encouraged to do so.

2013-14 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for June 1, 2013 through May 31, 2014 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 2, 706 MW for week beginning June 1st. *Please note that there may be generation outages due to gas pipeline outages that are currently tentatively scheduled for some weeks in, summer, and early-fall that may further decrease the operable capacity margin.*

Peak Load Exposures (PLE)

After being adjusted for Other Demand Resources, ODR, the Peak Load Exposure (PLE) for the summer and winter of 2013-14 are 26,629 MW and 21,403 MW respectively, 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 14, 2013 and includes Energy Management System (EMS) assets only. 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.

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.

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 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 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 2013-14 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 or Joanne Bialas at (413) 535-4162 or by email at opamoreq@iso-ne.com.

ISO-NE 2013 OPERABLE CAPACITY ANALYSIS

February 15, 2013 - 50/50- FORECAST - CSO_Reduced LNG Available

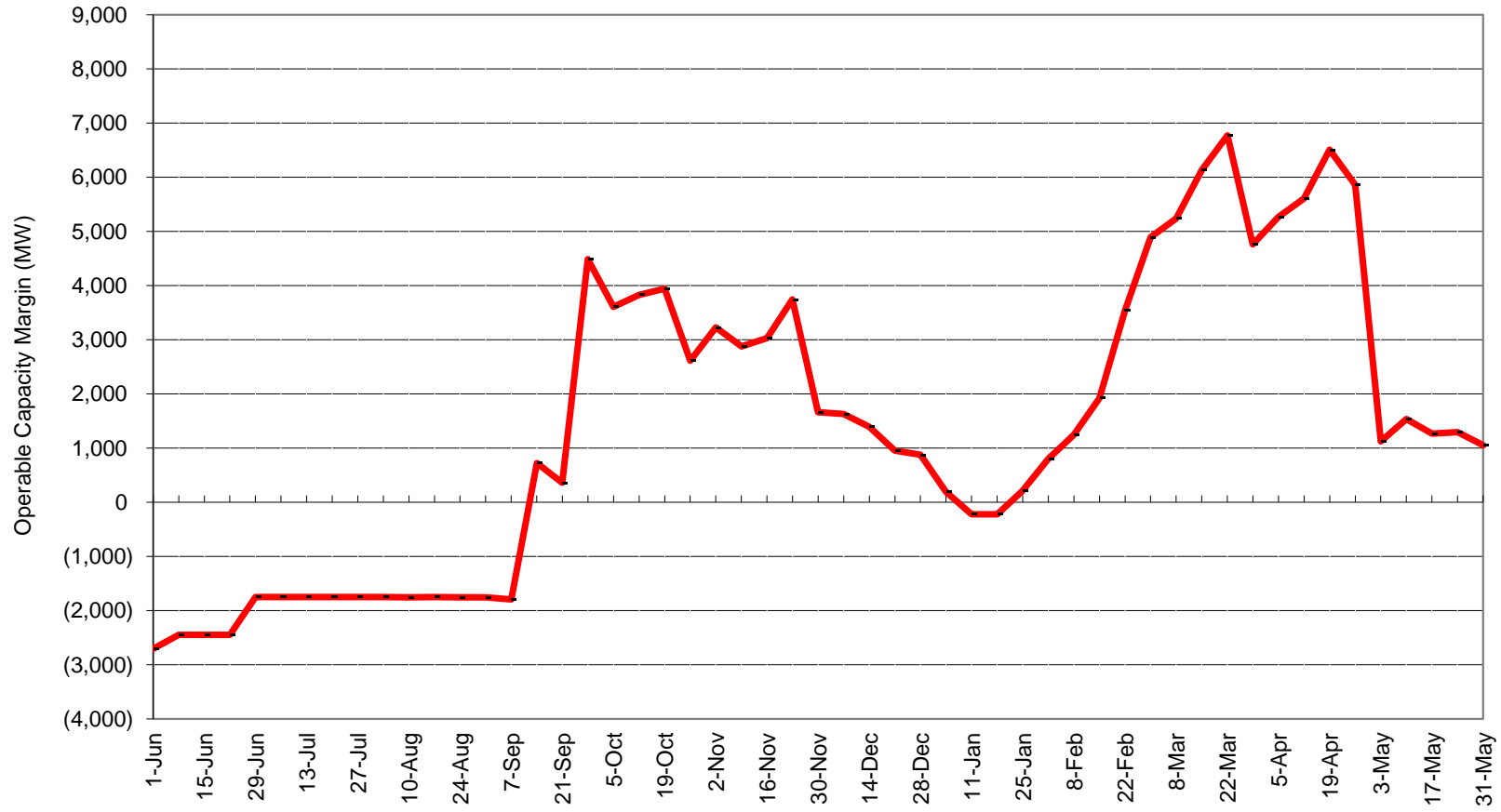
This analysis is a tabulation of weekly assessments shown in one single table. The information shows the operable capacity situation under assumed conditions for each week. It is not expected that the system peak will occur every week during June, July, and August and Mid September.

STUDY WEEK (Week Beginning, Saturday)	OPCAP SUPPLY							LOAD OBLIGATIONS			OPCAP MARGINS				
	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 REQUIREMEN T 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]
6/1/2013	29,003	1,102	41	1,048	2,800	0	26,298	26,629	2,375	29,004	(2,706)	600	(2,106)	400	(1,706)
6/8/2013	29,003	1,296	41	986	2,800	0	26,554	26,629	2,375	29,004	(2,450)	600	(1,850)	400	(1,450)
6/15/2013	29,003	1,296	41	986	2,800	0	26,554	26,629	2,375	29,004	(2,450)	600	(1,850)	400	(1,450)
6/22/2013	29,003	1,296	41	986	2,800	0	26,554	26,629	2,375	29,004	(2,450)	600	(1,850)	400	(1,450)
6/29/2013	29,003	1,296	41	986	2,100	0	27,254	26,629	2,375	29,004	(1,750)	600	(1,150)	400	(750)
7/6/2013	29,003	1,296	41	986	2,100	0	27,254	26,629	2,375	29,004	(1,750)	600	(1,150)	400	(750)
7/13/2013	29,003	1,296	41	986	2,100	0	27,254	26,629	2,375	29,004	(1,750)	600	(1,150)	400	(750)
7/20/2013	29,003	1,296	41	986	2,100	0	27,254	26,629	2,375	29,004	(1,750)	600	(1,150)	400	(750)
7/27/2013	29,003	1,296	41	989	2,100	0	27,251	26,629	2,375	29,004	(1,753)	600	(1,153)	400	(753)
8/3/2013	29,003	1,296	41	989	2,100	0	27,251	26,629	2,375	29,004	(1,753)	600	(1,153)	400	(753)
8/10/2013	29,003	1,296	41	991	2,100	0	27,249	26,629	2,375	29,004	(1,755)	600	(1,155)	400	(755)
8/17/2013	29,003	1,296	41	987	2,100	0	27,253	26,629	2,375	29,004	(1,751)	600	(1,151)	400	(751)
8/24/2013	29,003	1,296	41	993	2,100	0	27,247	26,629	2,375	29,004	(1,757)	600	(1,157)	400	(757)
8/31/2013	29,003	1,296	41	993	2,100	0	27,247	26,629	2,375	29,004	(1,757)	600	(1,157)	400	(757)
9/7/2013	29,003	1,296	41	1,030	2,100	0	27,210	26,629	2,375	29,004	(1,794)	600	(1,194)	400	(794)
9/14/2013	29,003	1,296	41	2,494	2,100	0	25,746	22,650	2,375	25,025	721	600	1,321	400	1,721
9/21/2013	29,003	1,296	41	2,950	2,100	0	25,290	22,559	2,375	24,934	356	600	956	400	1,356
9/28/2013	29,147	1,296	135	4,339	2,800	0	23,439	16,579	2,375	18,954	4,485	600	5,085	400	5,485
10/5/2013	29,147	1,296	135	5,182	2,800	0	22,596	16,615	2,375	18,990	3,606	600	4,206	400	4,606
10/12/2013	29,147	1,296	135	4,023	2,800	0	23,755	17,553	2,375	19,928	3,827	600	4,427	400	4,827
10/19/2013	29,147	1,296	135	3,542	2,800	0	24,236	17,922	2,375	20,297	3,939	600	4,539	400	4,939
10/26/2013	29,147	1,102	135	3,666	3,600	0	23,118	18,132	2,375	20,507	2,611	600	3,211	400	3,611
11/2/2013	29,147	1,296	135	3,129	3,600	0	23,849	18,249	2,375	20,624	3,225	600	3,825	400	4,225
11/9/2013	29,147	1,296	135	3,132	3,600	0	23,846	18,598	2,375	20,973	2,873	600	3,473	400	3,873
11/16/2013	29,147	1,296	135	2,226	3,600	36	24,752	19,346	2,375	21,721	3,031	600	3,631	400	4,031
11/23/2013	29,147	1,296	135	787	3,600	390	26,191	20,076	2,375	22,451	3,740	600	4,340	400	4,740
11/30/2013	29,301	1,296	135	3,207	3,200	1,654	24,325	20,288	2,375	22,663	1,662	600	2,262	400	2,662
12/7/2013	29,301	1,296	135	2,951	3,200	2,274	24,581	20,581	2,375	22,956	1,625	600	2,225	400	2,625
12/14/2013	29,301	1,296	135	3,176	3,200	2,481	24,356	20,592	2,375	22,967	1,389	600	1,989	400	2,389
12/21/2013	29,301	1,296	135	3,548	3,200	2,895	23,984	20,655	2,375	23,030	954	600	1,554	400	1,954
12/28/2013	29,301	1,296	135	3,353	3,200	3,101	24,179	20,932	2,375	23,307	872	600	1,472	400	1,872
1/4/2014	29,301	1,296	135	3,965	2,800	2,959	23,967	21,403	2,375	23,778	189	600	789	400	1,189
1/11/2014	29,301	1,296	135	4,379	2,800	3,624	23,553	21,403	2,375	23,778	(225)	600	375	400	775
1/18/2014	29,301	1,296	135	4,379	2,800	3,624	23,553	21,403	2,375	23,778	(225)	600	375	400	775
1/25/2014	29,301	1,296	135	4,172	2,800	3,776	23,760	21,178	2,375	23,553	207	600	807	400	1,207
2/1/2014	29,301	1,296	135	3,551	3,100	3,155	24,081	20,907	2,375	23,282	799	600	1,399	400	1,799
2/8/2014	29,301	1,296	135	3,138	3,100	2,742	24,494	20,878	2,375	23,253	1,241	600	1,841	400	2,241
2/15/2014	29,301	1,296	135	2,724	3,100	2,328	24,908	20,612	2,375	22,987	1,921	600	2,521	400	2,921

2/22/2014	29,301	1,296	135	2,104	3,100	1,861	25,528	19,612	2,375	21,987	3,541	600	4,141	400	4,541
3/1/2014	29,301	1,296	135	2,010	2,200	967	26,522	19,258	2,375	21,633	4,889	600	5,489	400	5,889
3/8/2014	29,301	1,296	135	1,860	2,200	554	26,672	19,060	2,375	21,435	5,237	600	5,837	400	6,237
3/15/2014	29,301	1,296	135	1,335	2,200	139	27,197	18,690	2,375	21,065	6,132	600	6,732	400	7,132
3/22/2014	29,301	1,296	135	1,268	2,200	0	27,264	18,118	2,375	20,493	6,771	600	7,371	400	7,771
3/29/2014	29,147	1,296	135	3,137	2,700	0	24,741	17,609	2,375	19,984	4,757	600	5,357	400	5,757
4/5/2014	29,147	1,296	135	2,882	2,700	0	24,996	17,354	2,375	19,729	5,267	600	5,867	400	6,267
4/12/2014	29,147	1,296	135	3,061	2,700	0	24,817	16,838	2,375	19,213	5,604	600	6,204	400	6,604
4/19/2014	29,147	1,296	135	2,429	2,700	0	25,449	16,570	2,375	18,945	6,504	600	7,104	400	7,504
4/26/2014	29,147	1,296	135	2,400	3,400	0	24,778	16,543	2,375	18,918	5,860	600	6,460	400	6,860
5/3/2014	29,147	1,296	135	3,458	3,400	0	23,720	20,226	2,375	22,601	1,119	600	1,719	400	2,119
5/10/2014	29,147	1,296	135	2,051	3,400	0	25,127	21,218	2,375	23,593	1,534	600	2,134	400	2,534
5/17/2014	29,147	1,296	135	1,400	3,400	0	25,778	22,140	2,375	24,515	1,263	600	1,863	400	2,263
5/24/2014	29,147	1,296	135	359	3,400	0	26,819	23,152	2,375	25,527	1,292	600	1,892	400	2,292
5/31/2014	28,241	1,296	135	0	3,400	0	26,272	22,845	2,375	25,220	1,052	600	1,652	400	2,052

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 Non Gas-fired Generator/DARD Outages for the period. This value would also include any known long-term Non Gas-fired 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



June 1, 2013 - May 31, 2014, W/B Saturday