

Joanne Bialas Outage Coordination

To: NEPOOL Participants

From: Joanne Bialas

Subject: 2013-14 Current Year Annual Maintenance Schedule

Date: November 7, 2013

Following this transmittal letter, you will find the 2013-14 Annual Maintenance Schedule (AMS) dated November 7, 2013 with an Operable Capacity Analysis (with forecasted external transactions) for November 9, 2013 - May 31, 2014. This schedule covers the fourth Forward Capacity Market procurement period.

2013-14 AMS- DATED NOVEMBER 7, 2013

The 2013-14 AMS - dated November 7, 2013 reflects all planned maintenance requests and also includes any known long-term Forced Outages for November 9, 2013 - May 31, 2014 that have been submitted to the ISO through October 21st. 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 November 9, 2013 - May 31, 2014 presently forecasts the lowest fall Long Term Operable Capacity Margin, LTOCM, of positive 454 MW for week beginning November 16th. The lowest LTOCM for the winter is for week beginning January 18th with a negative 41 MW, and for the spring during week beginning May 10th with positive 32 MW.

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 is 26,690 MW and 21,299 MW respectively, and reflects the seasonal peak load based on the 2013 CELT Report.

Generating Unit Capabilities

Resource Capacity Supply Obligations, CSO, are based upon data as of October 21, 2013 and include Energy Management System (EMS) assets. New unit additions are factored into the New Generation column at the appropriate points in time.

Interchange

External Node Available Capacity MW is based on the sum of external Capacity Supply Obligations (CSO) minus firm capacity exports.



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 2,100 MW to 3,600 MW throughout the year.

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 2013-14 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, Joanne Bialas (413) 535-4162, or Ingrid Canaday (413) 535-4329, or by email at opamoreq@iso-ne.com.

ISO-NE 2013-2014 OPERABLE CAPACITY ANALYSIS																
	November 7, 2013 - 50/50- FORECAST - CSO															
This analysis is	e a tabulation of w	ookly assessmen	ts shown in one sin	ale table. The infor							etem neak will	occur every week	during lune July (and August and M	id September	
This analysis is	ysis is a tabulation of weekly assessments shown in one single table. The information shows the operable capacity situation under assume OPCAP SUPPLY								LOAD OBLIGATIONS OPCAP MARGINS							
├ ───┦									LOAD OBLICATIONS							
STUDY WEEK (Week Beginning,	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMMERCIAL CAPACITY MW	PLANNED OUTAGES CSO MW	OUTAGES MW	GAS AT RISK MW	SUPPLY MW	PEAK LOAD FORECAST MW	OPER RESERVE REQUIREMENT MW	MW	OPCAP MARGIN MW	OPCAP FROM OP4 ACTIVE REAL-TIME DR MW	OPCAP MARGIN w/ OP4 actions through OP4 Step 2 MW	REAL-TIME EMER. GEN MW	MW	
Saturday)	[1]	[2]	[3]	[4]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	
11/09/2013	30,104	758	114	4,967	3,600	0	22,409	18,510	2,375	20,885	1,524	303	1,827	162	1,989	
11/16/2013	30,104	758	114	5,292	3,600	0	22,084	19,255	2,375	21,630	454	303	757	162	919	
11/23/2013	30,104	758	114	3,196	3,600	0	24,180	19,982	2,375	22,357	1,823	303	2,126	162	2,288	
11/30/2013	29,751	1,083	114	3,465	3,200	479	23,804	20,188	2,375	22,563	1,241	358	1,599	168	1,767	
12/07/2013	29,751	1,083	114	2,560	3,200	484	24,704	20,480	2,375	22,855	1,849	358	2,207	168	2,375	
12/14/2013	29,751	1,083	114	1,958	3,200	1,443	24,347	20,491	2,375	22,866	1,481	358	1,839	168	2,007	
12/21/2013	29,751	1,083	114	1,007	3,200	2,159	24,582	20,554	2,375	22,929	1,653	358	2,011	168	2,179	
12/28/2013	29,714	1,083	114	998	3,200	2,519	24,194	20,554	2,375	22,929	1,265	398	1,663	168	1,831	
01/04/2014	29,714	1,083	122	1,701	2,800	2,073	24,345	20,830	2,375	23,205	1,140	398	1,538	168	1,706	
01/11/2014	29,714	1,083	122	1,774	2,800	2,351	23,994	21,299	2,375	23,674	320	398	718	168	886	
01/18/2014	29,714	1,083	122	2,049	2,800	2,437	23,633	21,299	2,375	23,674	(41)	398	357	168	525	
01/25/2014	29,714	1,083	122	1,047	2,800	3,436	23,636	21,299	2,375	23,674	(38)	398	360	168	528	
02/01/2014	29,714	1,083	122	1,047	3,100	3,256	23,516	21,075	2,375	23,450	66	398	464	168	632	
02/08/2014	29,714	1,083	122	1,092	3,100	2,717	24,010	20,805	2,375	23,180	830	398	1,228	168	1,396	
02/15/2014	29,714	1,083	122	1,355	3,100	2,085	24,379	20,776	2,375	23,151	1,228	398	1,626	168	1,794	
02/22/2014	29,714	1,083	122	1,187	3,100	1,886	24,746	20,511	2,375	22,886	1,860	398	2,258	168	2,426	
03/01/2014	29,714	1,083	122	2,527	2,200	222	25,970	19,515	2,375	21,890	4,080	398	4,478	168	4,646	
03/08/2014	29,714	1,083	122	2,895	2,200	0	25,824	19,162	2,375	21,537	4,287	398	4,685	168	4,853	
03/15/2014	29,714	1,083	122	3,285	2,200	0	25,434	18,965	2,375	21,340	4,094	398	4,492	168	4,660	
03/22/2014	29,714	1,083	122	3,747	2,200	0	24,972	18,597	2,375	20,972	4,000	398	4,398	168	4,566	
03/29/2014	29,560	1,083	122	5,801	2,700	0	22,264	18,023	2,375	20,398	1,866	461	2,327	234	2,561	
04/05/2014	29,560	1,083	122	6,664	2,700	0	21,401	17,524	2,375	19,899	1,502	461	1,963	234	2,197	
04/12/2014	29,560	1,083	122	5,744	2,700	0	22,321	17,271	2,375	19,646	2,675	461	3,136	234	3,370	
04/19/2014	29,560	1,083	122	6,169	2,700	0	21,896	16,757	2,375	19,132	2,764	461	3,225	234	3,459	
04/26/2014	29,560	1,083	122	5,802	3,400	0	21,563	16,490	2,375	18,865	2,698	461	3,159	234	3,393	
05/03/2014	29,560	1,083	122	6,368	3,400	0	20,997	16,463	2,375	18,838	2,159	461	2,620	234	2,854	
05/10/2014	29,560	1,083	122	4,735	3,400	0	22,630	20,223	2,375	22,598	32	461	493	234	727	
05/17/2014	29,560	889	122	2,728	3,400	0	24,443	21,216	2,375	23,591	852	461	1,313	234	1,547	
05/24/2014	29,560	1,083	122	1,465	3,400	0	25,900	22,138	2,375	24,513	1,387	461	1,848	234	2,082	

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 the sum of external Capacity Supply Obligations (CSO) minus firm capacity exports.

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.

7. 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.

8. Net OpCap Supply MW Available (1 + 2 + 3 - 4 - 5 - 6 - 7 = 8)

9. Peak Load Forecast per data included in the 2013 CELT Report adjusted for Other Demand Resources.

10. Operating Reserve Requirement based on 125% of first largest contingency plus 50% the second largest contingency.

11. Total Net Load Obligation per the formula(9 + 10 = 11)

12. Net OPCAP Margin MW = Net Op Cap Supply MW minus Net Load Obligation (8 - 11 = 12)

13. OP 4 Action 2 Real-time Demand Response based on OP4 Appendix A. Reserve Margins and Distribution Loss Factor Gross Ups are Included.

14. OPCAP Margin taking into account Real Time Demand Response through OP4 Step 2 (12 + 13 = 14)

15. 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.

16. OPCAP Margin taking into account Real Time Demand Response and Real Time Emergency Generation through OP4 Step 6 (14 + 15 = 16);

This does not include Emergency Energy Transactions (EETs).



New England Operable Capacity Margins - CSO - 50/50 FORECAST

November 9, 2013 - May 24, 2014, W/B Saturday