

Joanne Bialas Outage Coordination

To: NEPOOL Participants

From: Joanne Bialas

## Subject: 2013-14 Current Year Annual Maintenance Schedule

Date: February 4, 2014

Following this transmittal letter, you will find the 2013-14 Annual Maintenance Schedule (AMS) dated February 4, 2014 with an Operable Capacity Analysis (with forecasted external transactions) for February 8, 2014 – May 31, 2014. This schedule covers the fourth Forward Capacity Market procurement period.

#### 2013-14 AMS- DATED FEBRUARY 4, 2014

The 2013-14 AMS - dated February 4, 2014 reflects all planned maintenance requests and also includes any known long duration Forced Outages for February 8, 2014 - May 31, 2014 that have been submitted to the ISO through January  $21^{st}$ . Those generator owners who have not yet submitted their anticipated maintenance schedules for Current Year 2013-14 or First Future Year 2014-15 are encouraged to do so.

#### **2013-14 OPERABLE CAPACITY ANALYSIS**

The Operable Capacity Analysis for February 8, 2014 – May 31, 2014 presently forecasts the lowest Winter Long Term Operable Capacity Margin (LTOCM) of 531 MW for week beginning February 8, 2014. The lowest LTOCM for the Spring is for week beginning April 5, 2014 at 161 MW.

#### Peak Load Exposures (PLE)

After being adjusted for Passive Demand Resources (PDR) 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

Generator Capacity Supply Obligations (CSO) are based upon data as of January 14, 2014 and include Energy Management System (EMS) assets. New unit additions are factored into the Non-Commercial Capacity MW respecting forecasted in-service dates.

#### Interchange

External Node Available Capacity MW is based on the sum of external import and export CSO.

#### External Transmission

Transmission outages of NYISO, NBSO, and Hydro-Quebec are included in the analysis when the 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 capacity that may be unavailable due to cold weather conditions or gas pipeline outages.

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 2014 OPERABLE CAPACITY ANALYSIS**

# February 4, 2014 - 50/50- FORECAST - CSO

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]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	
2/8/2014	30,790	217	0	1,564	3,100	2,632	23,711	20,805	2,375	23,180	531	127	658	127	209	
2/15/2014	30,790	217	0	2,073	3,100	1,722	24,112	20,776	2,375	23,151	961	127	1,088	127	209	
2/22/2014	30,790	217	0	1,842	3,100	1,621	24,444	20,511	2,375	22,886	1,558	127	1,685	127	209	
3/1/2014	29,714	1,083	0	3,713	2,200	0	24,884	19,515	2,375	21,890	2,994	168	3,162	168	398	
3/8/2014	29,714	1,083	0	2,641	2,200	11	25,945	19,162	2,375	21,537	4,408	168	4,576	168	398	
3/15/2014	29,714	1,083	68	4,242	2,200	0	24,423	18,965	2,375	21,340	3,083	168	3,251	168	398	
3/22/2014	29,714	1,083	68	4,948	2,200	0	23,717	18,597	2,375	20,972	2,745	168	2,913	168	398	
3/29/2014	29,560	1,083	68	5,850	2,700	0	22,161	18,023	2,375	20,398	1,763	461	2,224	461	234	
4/5/2014	29,560	1,083	68	7,951	2,700	0	20,060	17,524	2,375	19,899	161	461	622	461	234	
4/12/2014	29,560	1,083	68	7,357	2,700	0	20,654	17,271	2,375	19,646	1,008	461	1,469	461	234	
4/19/2014	29,560	1,083	68	8,145	2,700	0	19,866	16,757	2,375	19,132	734	461	1,195	461	234	
4/26/2014	29,560	1,083	68	7,288	3,400	0	20,023	16,490	2,375	18,865	1,158	461	1,619	461	234	
5/3/2014	29,560	1,083	68	7,729	3,400	0	19,582	16,463	2,375	18,838	744	461	1,205	461	234	
5/10/2014	29,560	889	68	4,002	3,400	0	23,115	20,223	2,375	22,598	517	461	978	461	234	
5/17/2014	29,560	1,083	68	3,210	3,400	0	24,101	21,216	2,375	23,591	510	461	971	461	234	
5/24/2014	29,560	1,083	68	2,328	3,400	0	24,983	22,138	2,375	24,513	470	461	931	461	234	

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) imports and 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 as provided in the 2013 CELT Report and adjusted for Passive 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

February 8, 2014 - May 31, 2014, W/B Saturday