

#### **Rachel Wilkins-Thurman**

Outage Coordination

To: NEPOOL Participants

From: Rachel Wilkins-Thurman

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

Date: March 31, 2014

Following this transmittal letter, you will find the 2013-14 Annual Maintenance Schedule (AMS) dated March 31, 2014 with an Operable Capacity Analysis (with forecasted external transactions) for April 5, 2014 – May 30, 2014. This schedule covers the fourth Forward Capacity Market procurement period. A subsequent schedule will be published in mid April 2014 covering the First Future Year Draft#2 which is the fifth Forward Capacity Market procurement period from June 1, 2014 through May 31, 2015.

#### 2013-14 AMS- DATED March 31, 2014

The 2013-14 AMS - dated March 31, 2014 reflects all planned maintenance requests and also includes any known long duration Forced Outages for April 5, 2014 – May 30, 2014 that have been submitted to the ISO through March 18, 2014 . 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 April 5, 2014 – May 30, 2014 presently forecasts the lowest Spring Long Term Operable Capacity Margin (LTOCM) of -500 MW for week beginning May 17, 2014.

#### 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 March 18, 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**

March 31, 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.

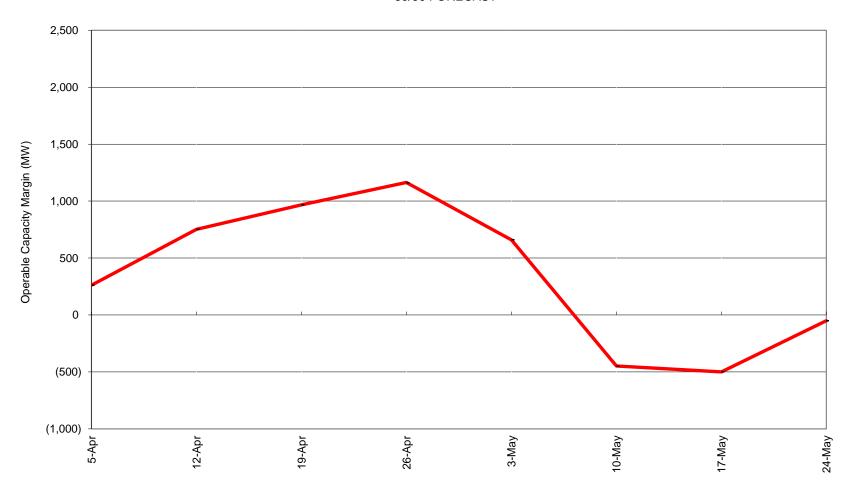
	OPCAP SUPPLY								LOAD OBLIGATIONS			OPCAP MARGINS				
STUDY WEEK (Week Beginning,	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMMERCIAL CAPACITY MW	PLANNED OUTAGES CSO MW	ALLOWANCE FOR UNPLANNED OUTAGES MW	GAS AT RISK MW	NET OPCAP SUPPLY MW	PEAK LOAD FORECAST MW	OPER RESERVE REQUIREMENT 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 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]	
4/5/2014	30,121	757	68	8,086	2,700	0	20,160	17,524	2,375	19,899	261	314	575	163	738	
4/12/2014	30,121	757	68	7,848	2,700	0	20,398	17,271	2,375	19,646	752	314	1,066	163	1,229	
4/19/2014	30,121	757	68	8,147	2,700	0	20,099	16,757	2,375	19,132	967	314	1,281	163	1,444	
4/26/2014	29,627	1,083	68	7,350	3,400	0	20,028	16,490	2,375	18,865	1,163	418	1,581	234	1,815	
5/3/2014	29,627	1,183	68	7,981	3,400	0	19,497	16,463	2,375	18,838	659	418	1,077	234	1,311	
5/10/2014	29,627	889	68	5,035	3,400	0	22,149	20,223	2,375	22,598	(449)	418	(31)	234	203	
5/17/2014	29,627	1,083	68	4,287	3,400	0	23,091	21,216	2,375	23,591	(500)	418	(82)	234	152	
5/24/2014	29,627	1,083	68	2,916	3,400	0	24,462	22,138	2,375	24,513	(51)	418	367	234	601	

- 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.
- 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 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. 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. 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



April 5, 2014 - May 24, 2014, W/B Saturday