

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

Outage Coordination

To: NEPOOL Participants

From: Rachel Wilkins-Thurman

# Subject: 2012-13 Current Year Annual Maintenance Schedule

Date: December 3, 2012

Following this transmittal letter, you will find the 2012-13 Annual Maintenance Schedule (AMS) dated December 3, 2012, with an Operable Capacity Analysis (with forecasted external transactions) for December 2012- May 31, 2013. This schedule covers the third Forward Capacity Market procurement period.

Periodically, 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.

#### 2012-13 AMS - DATED December 3, 2012

The 2012 AMS - dated December 3, 2012 reflects all planned maintenance requests for December 2012- May 31, 2013 that have been submitted to the ISO through November 27, 2012. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2012-13 are encouraged to do so.

#### 2012-13 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for December 2012 - May 31, 2013 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 1,510 MW for weeks beginning January 12<sup>th</sup> and 19<sup>th</sup>. 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 summer of 2012 is 26,462 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 November 27, 2012 and includes Energy Management System (EMS) assets. New unit additions are factored into the New Generation column at the appropriate points in time.



#### **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 winter and summer months.

#### **External Transmission**

Maintenance 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.

## 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 2012 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 2012-2013 OPERABLE CAPACITY ANALYSIS FINAL

December 3, 2012 - 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 JARGIN V **OPCAP** OP4 OPCAP **EXTERNAL ALLOWANCE** NFT ROM OP FROM OP4 actions OPCAP NODE AVAIL NON PLANNED FOR **OPCAP** PEAK LOAD OPER RESERVE **NET LOAD** ACTIVE **REAL-TIME** OPCAP MARGIN w/ through **GAS AT RISK** AVAILABLE COMMERCIAL OUTAGES UNPLANNED SUPPLY REQUIREMENT **OBLIGATION** CAPACITY **FORECAS MARGIN** REAL-TIME OP4 Step EMER. GEN OP4 actions through STUDY WEEK OP4 Step 6 MW OPCAP MW CAPACITY MW CSO MW **OUTAGES MW** MW MW MW MW DR MW MW MW MW MW MW (Week Beginning [2] [3] [4] [6] [7] [8] [9] [10] [11] [12] [13] [14] [15] Saturday) [5] 12/1/2012 30.709 337 216 6.356 3.200 537 21.169 20.304 2.375 22.679 (1.510) 643 (867) 300 (567) 337 216 3,200 1,408 20,595 2,375 22,970 643 (182)12/8/2012 30,709 4,809 21,845 (1,125)(482)300 12/15/2012 30.709 337 216 2.734 3.200 2.429 22.899 20.607 2.375 22.982 (83)643 560 300 860 643 12/22/2012 30,709 337 216 1,410 3,200 2,895 23,757 20,669 2,375 23,044 713 1,356 300 1,656 12/29/2012 30,310 337 216 1,306 3,200 3,101 23,256 20,944 2,375 23,319 (63)643 580 300 880 1/5/2013 30,310 555 216 2,233 2,800 3,218 21,412 2,375 23,787 613 14 22.830 (957)(344)358 1/12/2013 30,310 555 216 1,661 2,800 3,878 22,742 21,412 2,375 23,787 (1.045)613 (432)358 (74)1/19/2013 30,310 555 216 1,409 2,800 4,136 21,412 2,375 23,787 613 (438) 358 22,736 (1,051)(80) 1/26/2013 30,310 555 216 1,063 3,100 3,929 22,989 21,188 2,375 23,563 (574)613 39 358 397 2/2/2013 30.310 555 216 1,053 3,100 3.308 23.620 20,920 2,375 23,295 325 613 938 358 1,296 30,310 2/9/2013 555 216 1,823 3,100 2,895 23,263 20,891 2,375 23,266 (3) 613 610 358 968 2/16/2013 30,310 555 216 2.072 3,100 2,280 23,629 20.627 2,375 23.002 627 613 1,240 358 1,598 30.310 555 216 2.114 3,100 1.602 19.633 2.375 22.008 2.257 613 2.870 358 2/23/2013 24.265 3.228 3/2/2013 30,310 555 216 1,895 2,200 1,198 25,788 19,282 2,375 21,657 4,131 613 4,744 358 5,102 2.200 30,310 555 216 2,379 597 19,085 2,375 21.460 613 5.058 358 5.416 3/9/2013 25.905 4.445 3/16/2013 30,310 555 216 1.833 2,200 336 26,712 18.718 2,375 21.093 5,619 613 6,232 358 6,590 3/23/2013 30,310 555 216 2,654 2,200 18,150 2,375 20,525 613 358 6,673 0 26,227 5,702 6,315 3/30/2013 30,125 555 216 3,097 2,700 0 25,099 17,638 2,375 20,013 5,086 613 5,699 358 6,057 4/6/2013 30,125 555 216 3,924 2,700 17,385 2,375 613 358 5,483 0 24,272 19,760 4,512 5,125 4/13/2013 30.125 216 6.039 3.880 555 2.700 0 22.157 16.873 2,375 19.248 2.909 613 3.522 358 4/20/2013 30,125 555 216 4,538 2,700 23,658 2,375 18,982 4,676 613 5,289 358 5,647 0 16,607 4/27/2013 30.125 555 216 3.543 3.400 23.953 2.375 18.955 4.998 613 5.611 358 5.969 0 16.580 5/4/2013 30,125 555 216 3,268 3,400 24,228 19,998 2,375 613 0 22,373 1,855 2,468 358 2,826 5/11/2013 30,125 555 216 3,942 3,400 0 23,554 20,973 2,375 23,348 206 613 819 358 1,177 5/18/2013 30,125 555 216 1,436 3,400 26,060 21,878 2,375 24,253 1,807 613 2,420 358 2,778 0 5/25/2013 30,125 555 216 726 3,400 0 26,770 22,872 2,375 25,247 1,523 613 2,136 358 2,494

- I. 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



December 2012 - May 2013, W/B Saturday