



**Joanne Bialas**  
Outage Coordination

To: NEPOOL Participants

From: Joanne Bialas

**Subject: 2010-11 Annual Maintenance Schedule – August Edition**

Date: July 30, 2010

Following this transmittal letter, you will find the 2010-11 Annual Maintenance Schedule (AMS) – August Edition dated July 30, 2010, with rounded weekly planned outage totals only, and an Operable Capacity Analysis for August 2010 through May 2011. This schedule covers the remainder of the first 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.

**2010-11 AMS – AUGUST EDITION - DATED JULY 30, 2010**

August Edition of the 2010-11 AMS - dated July 30, 2010 reflects all planned maintenance requests for August 2010- May 2011 that have been submitted to the ISO through July 28, 2010. Those generator owners who have not yet submitted their anticipated maintenance schedules for the AMS covering the Procurement Period 2010-11 are encouraged to do so.

**2010-11 OPERABLE CAPACITY ANALYSIS**

The Operable Capacity Analysis for August 2010 through May 2011 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 1,680 MW for week beginning September 11<sup>th</sup>. However, it is possible that additional maintenance that may be added in upcoming editions of the 2010-11 AMS will reduce those margins.

**Peak Load Exposures (PLE)**

After being adjusted for Other Demand Resources, ODR, the Peak Load Exposure (PLE) for the summer and winter of 2010-11 procurement period is 26,618 MW and 21,526 MW respectively, and reflects the seasonal peak load based on the 2010 CELT Report.

**Generating Unit Capabilities**

Resource Capacity Supply Obligations, CSO, are based upon data as of July 28, 2010 and includes Energy Management System (EMS) assets. New unit additions are factored into the New Generation column at the appropriate points in time.

**Miscellaneous Assumptions**

The weekly Total Known Maintenance values include all generation scheduled out-of-service as reflected within this draft of the 2010-11 AMS.

Unplanned Outage Allotment

Allowances for unplanned outages, as documented in ISO New England OP-5, range from 2,100 MW during the summer months to 3,600 MW.

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 percent (100%) 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 2009 AMS or Operable Capacity Analysis, please feel free to contact me at (413) 535-4162 or by email at [opamoreq@iso-ne.com](mailto:opamoreq@iso-ne.com).

# ISO-NE 2010 OPERABLE CAPACITY ANALYSIS

July 30, 2010 - 50/50 FORECAST

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.

| STUDY WEEK<br>(Week Beginning,<br>Saturday) | OPCAP SUPPLY          |                                    |                                  |                  |                         |                                     |                        | LOAD OBLIGATIONS            |                                       |                              | OPCAP MARGINS      |  |   |   |   |
|---|-----------------------|------------------------------------|----------------------------------|------------------|-------------------------|-------------------------------------|------------------------|-----------------------------|---------------------------------------|------------------------------|--------------------|--|---|---|---|
|   | AVAILABLE<br>OPCAP MW | EXTERNAL<br>NODE AVAIL<br>OPCAP MW | NON<br>COMMERCIAL<br>CAPACITY MW | KNOWN<br>OUTAGES | UNPLANNED<br>OUTAGES MW | GEN RISK<br>DUE TO<br>GAS SUP<br>MW | NET OPCAP<br>SUPPLY MW | PEAK LOAD<br>FORECAST<br>MW | OPER<br>RESERVE<br>REQUIREME<br>NT MW | NET LOAD<br>OBLIGATION<br>MW | OPCAP MARGIN<br>MW | OPCAP FROM<br>OP4 ACTIVE<br>REAL-TIME DR<br>MW | OPCAP<br>MARGIN w/<br>OP4 actions<br>through OP4<br>Step 2 MW | OPCAP FROM<br>OP4 REAL-<br>TIME EMER.<br>GEN MW | OPCAP<br>MARGIN w/<br>OP4<br>actions<br>through<br>OP4 Step 6<br>MW |
|   | [1]                   | [2]                                | [3]                              | [4]              | [5]                     | [6]                                 | [7]                    | [8]                         | [9]                                   | [10]                         | [11]               | [12]   | [13]  | [14]  | [15]  |
| 07/31/2010                                  | 30,046                | 323                                | 0                                | 1,100            | 2,100                   | 0                                   | 27,123                 | 26,618                      | 1,800                                 | 28,418                       | (1,290)            | 520  | (770)   | 640   | (130)   |
| 08/07/2010                                  | 30,046                | 323                                | 0                                | 1,100            | 2,100                   | 0                                   | 27,123                 | 26,618                      | 1,800                                 | 28,418                       | (1,290)            | 520  | (770)   | 640   | (130)   |
| 08/14/2010                                  | 30,046                | 323                                | 0                                | 1,100            | 2,100                   | 0                                   | 27,123                 | 26,618                      | 1,800                                 | 28,418                       | (1,290)            | 520  | (770)   | 640   | (130)   |
| 08/21/2010                                  | 30,046                | 323                                | 0                                | 1,100            | 2,100                   | 0                                   | 27,123                 | 26,618                      | 1,800                                 | 28,418                       | (1,290)            | 520  | (770)   | 640   | (130)   |
| 08/28/2010                                  | 30,046                | 323                                | 0                                | 1,100            | 2,100                   | 0                                   | 27,123                 | 26,618                      | 1,800                                 | 28,418                       | (1,290)            | 520  | (770)   | 640   | (130)   |
| 09/04/2010                                  | 30,042                | 342                                | 0                                | 1,400            | 2,100                   | 0                                   | 26,842                 | 26,618                      | 1,800                                 | 28,418                       | (1,580)            | 520  | (1,060)   | 640   | (420)   |
| 09/11/2010                                  | 30,042                | 342                                | 0                                | 1,500            | 2,100                   | 0                                   | 26,742                 | 26,618                      | 1,800                                 | 28,418                       | (1,680)            | 520  | (1,160)   | 640   | (520)   |
| 09/18/2010                                  | 30,042                | 342                                | 0                                | 3,800            | 2,100                   | 0                                   | 24,442                 | 22,722                      | 1,800                                 | 24,522                       | (80)               | 520  | 440   | 640   | 1,080   |
| 09/25/2010                                  | 30,196                | 300                                | 0                                | 4,200            | 2,800                   | 0                                   | 23,500                 | 22,632                      | 1,800                                 | 24,432                       | (930)              | 520  | (410)   | 640   | 230   |
| 10/02/2010                                  | 30,196                | 300                                | 0                                | 5,000            | 2,800                   | 0                                   | 22,700                 | 16,793                      | 1,800                                 | 18,593                       | 4,110              | 520  | 4,630   | 640   | 5,270   |
| 10/09/2010                                  | 30,196                | 300                                | 0                                | 4,100            | 2,800                   | 0                                   | 23,600                 | 16,829                      | 1,800                                 | 18,629                       | 4,970              | 520  | 5,490   | 640   | 6,130   |
| 10/16/2010                                  | 30,196                | 300                                | 0                                | 4,600            | 2,800                   | 0                                   | 23,100                 | 17,748                      | 1,800                                 | 19,548                       | 3,550              | 520  | 4,070   | 640   | 4,710   |
| 10/23/2010                                  | 30,196                | 300                                | 0                                | 4,400            | 2,800                   | 0                                   | 23,300                 | 18,110                      | 1,800                                 | 19,910                       | 3,390              | 520  | 3,910   | 640   | 400   |
| 10/30/2010                                  | 30,196                | 300                                | 0                                | 3,400            | 3,600                   | 0                                   | 23,500                 | 18,315                      | 1,800                                 | 20,115                       | 3,380              | 520  | 3,900   | 640   | 400   |
| 11/06/2010                                  | 30,196                | 300                                | 0                                | 3,600            | 3,600                   | 0                                   | 23,300                 | 18,430                      | 1,800                                 | 20,230                       | 3,070              | 520  | 3,590   | 640   | 400   |
| 11/13/2010                                  | 30,196                | 300                                | 0                                | 3,300            | 3,600                   | 0                                   | 23,600                 | 18,772                      | 1,800                                 | 20,572                       | 3,030              | 520  | 3,550   | 640   | 400   |
| 11/20/2010                                  | 30,196                | 300                                | 0                                | 3,000            | 3,600                   | 0                                   | 23,900                 | 17,555                      | 1,800                                 | 19,355                       | 4,540              | 520  | 5,060   | 640   | 400   |
| 11/27/2010                                  | 30,196                | 300                                | 0                                | 700              | 3,600                   | 0                                   | 26,200                 | 20,234                      | 1,800                                 | 22,034                       | 4,170              | 520  | 4,690   | 640   | 400   |
| 12/04/2010                                  | 30,394                | 300                                | 0                                | 900              | 3,200                   | 0                                   | 26,600                 | 20,433                      | 1,800                                 | 22,233                       | 4,370              | 520  | 4,890   | 640   | 400   |
| 12/11/2010                                  | 30,394                | 300                                | 0                                | 600              | 3,200                   | 0                                   | 26,900                 | 20,720                      | 1,800                                 | 22,520                       | 4,380              | 520  | 4,900   | 640   | 400   |
| 12/18/2010                                  | 30,394                | 300                                | 0                                | 600              | 3,200                   | 0                                   | 26,900                 | 20,731                      | 1,800                                 | 22,531                       | 4,370              | 520  | 4,890   | 640   | 400   |
| 12/25/2010                                  | 30,394                | 300                                | 0                                | 600              | 3,200                   | 0                                   | 26,900                 | 20,793                      | 1,800                                 | 22,593                       | 4,310              | 520  | 4,830   | 640   | 400   |
| 01/01/2011                                  | 30,394                | 300                                | 0                                | 600              | 2,800                   | 0                                   | 27,300                 | 21,064                      | 1,800                                 | 22,864                       | 4,440              | 520  | 4,960   | 640   | 400   |
| 01/08/2011                                  | 30,394                | 300                                | 0                                | 600              | 2,800                   | 2,000                               | 25,300                 | 21,526                      | 1,800                                 | 23,326                       | 1,970              | 520  | 2,490   | 640   | 400   |
| 01/15/2011                                  | 30,394                | 300                                | 0                                | 300              | 2,800                   | 2,000                               | 25,600                 | 21,526                      | 1,800                                 | 23,326                       | 2,270              | 520  | 2,790   | 640   | 400   |
| 01/22/2011                                  | 30,394                | 300                                | 0                                | 300              | 2,800                   | 2,000                               | 25,600                 | 21,526                      | 1,800                                 | 23,326                       | 2,270              | 520  | 2,790   | 640   | 400   |
| 01/29/2011                                  | 30,394                | 300                                | 0                                | 500              | 3,100                   | 2,000                               | 25,100                 | 21,305                      | 1,800                                 | 23,105                       | 1,990              | 520  | 2,510   | 640   | 400   |
| 02/05/2011                                  | 30,394                | 300                                | 0                                | 900              | 3,100                   | 2,000                               | 24,700                 | 21,040                      | 1,800                                 | 22,840                       | 1,860              | 520  | 2,380   | 640   | 400   |
| 02/12/2011                                  | 30,394                | 300                                | 0                                | 1,400            | 3,100                   | 2,000                               | 24,200                 | 21,011                      | 1,800                                 | 22,811                       | 1,390              | 520  | 1,910   | 640   | 400   |
| 02/19/2011                                  | 30,394                | 300                                | 0                                | 1,600            | 3,100                   | 2,000                               | 24,000                 | 20,751                      | 1,800                                 | 22,551                       | 1,450              | 520  | 1,970   | 640   | 400   |
| 02/26/2011                                  | 30,394                | 300                                | 0                                | 1,900            | 3,100                   | 0                                   | 25,700                 | 19,770                      | 1,800                                 | 21,570                       | 4,130              | 520  | 4,650   | 640   | 400   |
| 03/05/2011                                  | 30,394                | 300                                | 0                                | 2,300            | 2,200                   | 0                                   | 26,200                 | 19,424                      | 1,800                                 | 21,224                       | 4,980              | 520  | 5,500   | 640   | 400   |
| 03/12/2011                                  | 30,394                | 300                                | 0                                | 2,100            | 2,200                   | 0                                   | 26,400                 | 19,229                      | 1,800                                 | 21,029                       | 5,370              | 520  | 5,890   | 640   | 400   |
| 03/19/2011                                  | 30,394                | 300                                | 0                                | 1,700            | 2,200                   | 0                                   | 26,800                 | 18,867                      | 1,800                                 | 20,667                       | 6,130              | 520  | 6,650   | 640   | 400   |
| 03/26/2011                                  | 30,196                | 300                                | 0                                | 3,100            | 2,700                   | 0                                   | 24,700                 | 18,306                      | 1,800                                 | 20,106                       | 4,590              | 520  | 5,110   | 640   | 400   |
| 04/02/2011                                  | 30,196                | 300                                | 0                                | 4,000            | 2,700                   | 0                                   | 23,800                 | 17,803                      | 1,800                                 | 19,603                       | 4,200              | 520  | 4,720   | 640   | 400   |
| 04/09/2011                                  | 30,196                | 300                                | 0                                | 4,100            | 2,700                   | 0                                   | 23,700                 | 17,553                      | 1,800                                 | 19,353                       | 4,350              | 520  | 4,870   | 640   | 400   |
| 04/16/2011                                  | 30,196                | 300                                | 0                                | 4,400            | 2,700                   | 0                                   | 23,400                 | 17,047                      | 1,800                                 | 18,847                       | 4,550              | 520  | 5,070   | 640   | 400   |
| 04/23/2011                                  | 30,196                | 300                                | 0                                | 3,800            | 2,700                   | 0                                   | 24,000                 | 16,785                      | 1,800                                 | 18,585                       | 5,410              | 520  | 5,930   | 640   | 400   |
| 04/30/2011                                  | 30,196                | 300                                | 0                                | 3,600            | 3,400                   | 0                                   | 23,500                 | 16,758                      | 1,800                                 | 18,558                       | 4,940              | 520  | 5,460   | 640   | 400   |
| 05/07/2011                                  | 30,196                | 300                                | 0                                | 3,800            | 3,400                   | 0                                   | 23,300                 | 20,325                      | 1,800                                 | 22,125                       | 1,170              | 520  | 1,690   | 640   | 400   |
| 05/14/2011                                  | 30,196                | 300                                | 0                                | 1,600            | 3,400                   | 0                                   | 25,500                 | 21,296                      | 1,800                                 | 23,096                       | 2,400              | 520  | 2,920   | 640   | 400   |
| 05/21/2011                                  | 30,196                | 300                                | 0                                | 400              | 3,400                   | 0                                   | 26,700                 | 22,198                      | 1,800                                 | 23,998                       | 2,700              | 520  | 3,220   | 640   | 400   |
| 05/28/2011                                  | 30,196                | 300                                | 0                                | 0                | 3,400                   | 0                                   | 27,100                 | 22,976                      | 1,800                                 | 24,776                       | 2,320              | 520  | 2,840   | 640   | 400   |

1. Available OPCAP MW based on resource Capacity Supply Obligations, CSO, during the Forward Capacity Market procurement period from June 2010 through May 2011. Does not include Settlement Only Generators.
2. External Node Available OPCAP MW based on external Capacity Supply Obligations, CSO, during the Forward Capacity Market procurement period from June 2010 through May 2011
3. New resources that have not yet acquired a CSO but will become commercial in the future.
4. Allowance for Planned Outages includes planned outages scheduled greater than or equal to 15 days in advance.
5. Allowance for Unplanned Outages includes forced outages and maintenance outages scheduled less than 14 days in advance.
6. Generation at Risk due to Gas Supply pertains to gas fired capacity expected to be at risk during cold weather conditions.
7. Total OpCap Supply Available per the formula  $(1 + 2 + 3 - 4 - 5 - 6 = 7)$
8. Peak Load Exposure per data included in the 2010 CELT Report.
9. Operating Reserve Requirement based on first largest contingency plus 1/2 the second largest contingency.
10. Total Load Obligation per the formula  $(8 + 9 = 10)$
11. Net OPCAP Supply minus Net Load Obligation  $(7 - 10 = 11)$
12. OP 4 Action 2 Real-time Demand Response not including reserve margin gross-ups and derate applied.
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. Real Time Emergency Generation is capped at 600MW.
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  
50/50 FORECAST

