**Joanne Bialas**
Outage Coordination

To: NEPOOL Participants

From: Joanne Bialas

**Subject: 2010 Annual Maintenance Schedule – Draft #3**

Date: October 15, 2009

Following this transmittal letter, you will find the 2010 Annual Maintenance Schedule (AMS) – Draft #3 dated October 15, 2009, with rounded weekly planned outage totals only, and an Operable Capacity Analysis (with forecasted external transactions) for January through May 2010. This schedule is being published as part of the transition to the Forward Capacity Market. A subsequent schedule will be published in February 2010 covering the first Forward Capacity Market procurement period from June 1, 2010 through May 31, 2011. 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 AMS – DRAFT #3 - DATED OCTOBER 15, 2009

Draft #3 of the 2010 AMS - dated October 15, 2009 reflects all planned maintenance requests for 2010 that have been submitted to the ISO through October 13, 2009. Those generator owners who have not yet submitted their anticipated maintenance schedules for 2010 are encouraged to do so.

## 2010 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for January through May 2010 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of positive 4,360 MW for week beginning May 22nd. However, it is possible that additional maintenance that may be added in upcoming editions of the 2010 AMS will reduce those margins.

### Peak Load Exposures (PLE)

The Peak Load Exposure (PLE) for the winter of 2010 is 22,100 MW, and reflects the seasonal peak load based on the 2009 CELT Report. After being adjusted for Other Demand Resources, ODR, the highest winter peak load exposure is 21,549 MW.

### Generating Unit Capabilities

Generating unit capabilities are based upon the October 1, 2009 Seasonal Claimed Capabilities report and includes assets receiving credit as part of the Energy Management System (EMS). 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 AMS.

Only known capacity-backed (ICAP) contracts have been included in the Interchange column of the 2010 Operable Capacity Analysis. This column combines monthly data, as it becomes available, with contract totals recorded in the 2009 CELT Report.

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.

# 2010 ANNUAL MAINTENANCE SCHEDULE

*Edition: Draft #3-October 15, 2009*



*Information Received through October 13, 2009* **Dates indicate Saturday week beginning**

Sorted by Area and Local Control Center

| Plant Name | Asset ID | S. Name | RSP | LCC | Current Lead Participant | Type | WCC | SCC | 2010 | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | January | | | | February | | | | March | | | | April | | | | | May | | | |
| | | | | | | round | planned | TOTAL | 2 | 9 | 16 | 23 | 30 | 6 | 13 | 20 | 27 | 6 | 13 | 20 | 27 | 3 | 10 | 17 | 24 | 1 | 8 | 15 | 22 |
| | | | | | | | | | 100 | 100 | 100 | 200 | 200 | 300 | 100 | 0 | 600 | 1100 | 1200 | 1400 | 1800 | 5500 | 5700 | 4700 | 5500 | 3800 | 3300 | 2600 | 1700 |

# ISO-NE 2010 OPERABLE CAPACITY ANALYSIS

## October 15, 2009 - WITH KNOWN EXTERNAL CONTRACTS - 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.

*Week Beginning, Saturday*

| Year | Month | Day | Installed Seasonal Claimed Capability (SCC) [Note 1] | Net Interchange (NYPP, NB, HQ, Highgate) [Note 2] | Note | New Generation [Note 3] | De-listed ICAP resources [Note 4] | Net Capacity [Note 5] | Peak Load Exposure [Note 6] | Operating Reserve Requirement [Note 7] | Total Known Maintenance | Allowance for Unplanned Outages [Note 8] | Generation at Risk Due to Gas Supply [Note 9] | Total Capacity | Operable Capacity Margin (+/-) | *Extent of OP 4 Actions That May be Necessary (OP 4 Actions up to and including)* [Note 10] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | *(MW)* | *(MW)* | | *(MW)* | *(MW)* | *(MW)* | *(MW)* | *(MW)* | *(MW)* | *(MW)* | *(MW)* | *(MW)* | *(MW)* | |
| 2010 | January | 2 | 33,285 | 58 | | 300 | 290 | 33,648 | 21,549 | 1,800 | 100 | 3,200 | 0 | 30,348 | 7,000 | |
| | | 9 | 33,285 | 58 | | 300 | 290 | 33,648 | 21,549 | 1,800 | 100 | 2,800 | 2,000 | 28,748 | 5,400 | |
| | | 16 | 33,285 | 58 | | 300 | 290 | 33,648 | 21,549 | 1,800 | 100 | 2,800 | 2,000 | 28,748 | 5,400 | |
| | | 23 | 33,285 | 58 | | 300 | 290 | 33,648 | 21,549 | 1,800 | 200 | 2,800 | 2,000 | 28,648 | 5,300 | |
| 2010 | February | 30 | 33,285 | 58 | | 300 | 290 | 33,648 | 21,318 | 1,800 | 200 | 2,800 | 2,000 | 28,648 | 5,530 | |
| | | 6 | 33,285 | 58 | | 300 | 290 | 33,648 | 21,053 | 1,800 | 300 | 2,800 | 2,000 | 28,548 | 5,700 | |
| | | 13 | 33,347 | 58 | | 300 | 290 | 33,708 | 21,024 | 1,800 | 100 | 3,100 | 2,000 | 28,508 | 5,680 | |
| | | 20 | 33,347 | 58 | | 300 | 290 | 33,708 | 20,763 | 1,800 | 0 | 3,100 | 2,000 | 28,608 | 6,050 | |
| 2010 | March | 27 | 33,347 | 58 | | 300 | 290 | 33,708 | 19,771 | 1,800 | 600 | 3,100 | 0 | 30,008 | 8,440 | |
| | | 6 | 33,347 | 58 | | 300 | 290 | 33,708 | 19,424 | 1,800 | 1,100 | 3,100 | 0 | 29,508 | 8,280 | |
| | | 13 | 33,376 | 58 | | 300 | 290 | 33,738 | 19,230 | 1,800 | 1,200 | 2,200 | 0 | 30,338 | 9,310 | |
| | | 20 | 33,376 | 58 | | 300 | 290 | 33,738 | 18,867 | 1,800 | 1,400 | 2,200 | 0 | 30,138 | 9,470 | |
| 2010 | April | 27 | 33,376 | 58 | | 300 | 290 | 33,738 | 18,306 | 1,800 | 1,800 | 2,200 | 0 | 29,738 | 9,630 | |
| | | 3 | 33,376 | 58 | | 400 | 290 | 33,838 | 17,804 | 1,800 | 5,500 | 2,200 | 0 | 26,138 | 6,530 | |
| | | 10 | 33,386 | 58 | | 400 | 290 | 33,848 | 17,554 | 1,800 | 5,700 | 2,700 | 0 | 25,448 | 6,090 | |
| | | 17 | 33,386 | 58 | | 400 | 290 | 33,848 | 17,048 | 1,800 | 4,700 | 2,700 | 0 | 26,448 | 7,600 | |
| 2010 | May | 24 | 33,386 | 58 | | 400 | 290 | 33,848 | 16,785 | 1,800 | 5,500 | 2,700 | 0 | 25,648 | 7,060 | |
| | | 1 | 33,386 | 58 | | 400 | 290 | 33,848 | 16,748 | 1,800 | 3,800 | 2,700 | 0 | 27,348 | 8,800 | |
| | | 8 | 33,386 | 58 | | 400 | 290 | 33,848 | 20,681 | 1,800 | 3,300 | 3,400 | 0 | 27,148 | 4,670 | |
| | | 15 | 33,394 | 58 | | 400 | 290 | 33,848 | 21,669 | 1,800 | 2,600 | 3,400 | 0 | 27,848 | 4,380 | |
| | | 22 | 33,394 | 58 | | 400 | 290 | 33,848 | 22,587 | 1,800 | 1,700 | 3,400 | 0 | 28,748 | 4,360 | |

*Notes: Please note that the information contained within the Capacity Analysis is a deterministic projection of system conditions which could materialize during any given week of the year*

1. Installed Capability per the October 1, 2009 SCC report, Energy Management System units, with an adjustment for capability increases and decreases expected during the analysis period (SCC = Seasonal Claimed Capability). The Operable Capability does not reflect possible transmission constraints within the ISO New England system.
2. Net Interchange is based on known capacity-backed (ICAP) contracts. This column combines monthly data, as it becomes available, with preliminary contract totals recorded in the 2009 Capacity, Energy, Loads, and Transmission - CELT Report.
3. New Generation information includes a) generation recently commercial but not yet reflected in the ISO New England SCC Report totals used in the Installed Capability Column, and b) future generation as assumed by ISO-NE System Planning Department. This value is rounded to the nearest hundred.
4. Delisted capacity is only known for the current month. Projections are based on known delisted capacity sales.
5. Net Capacity = (SCC) + (Interchange) + (New Generation) - (Delisted ICAP Sold) In this equation, values for SCC, Interchange and De-listed ICAP sold are rounded to the nearest ten (SCC = Seasonal Claimed Capability).
6. Peak Load Exposure per data included in the 2009 CELT Report with an adjustment for Other Demand Resources.
7. Operating Reserve Requirement based on first largest contingency plus 1/2 the second largest contingency.
8. Allowance for Unplanned Outages includes forced outages and maintenance outages scheduled less than 14 days in advance.
9. Generation at Risk due to Gas Supply pertains to gas fired capacity expected to be at risk during cold weather conditions.
10. Relief from certain OP 4 Actions varies depending on system conditions.

New England Operable Capacity Margins
WITH KNOWN EXTERNAL TRANSACTIONS - 50/50 FORECAST