

#### Joanne Bialas

**Outage Coordination** 

To: NEPOOL Participants

From: Joanne Bialas

Subject: 2008 Annual Maintenance Schedule – Draft #4

Date: December 13, 2007

Following this transmittal letter, you will find the 2008 Annual Maintenance Schedule (AMS) – Draft #4 dated December 13, 2007, with rounded weekly planned outage totals only, and an Operable Capacity Analysis (with forecasted external transactions) for 2008. 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.

#### 2008 AMS – DRAFT #4 - DATED DECEMBER 13, 2007

Draft #4 of the 2008 AMS - dated December 13, 2007 reflects all planned maintenance requests for 2008 that have been submitted to the ISO through December 12, 2007. Those generator owners who have not yet submitted their anticipated maintenance schedules for 2008 are encouraged to do so.

## 2008 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for 2008 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 2,150 MW for weeks beginning May 31<sup>st</sup>, June 7<sup>th</sup>, 14<sup>th</sup>, and 21<sup>st</sup>. Negative capacity margins are also being forecasted for all remaining weeks in June, July and August, with positive capacity margins for most the remaining weeks of the year. However, it is possible that additional maintenance that may be added in upcoming editions of the 2008 AMS will reduce those margins. Presently, a negative capacity margin is also being forecast for weeks beginning May 3<sup>rd</sup> and 17<sup>th</sup>.

# Peak Load Exposures (PLE)

The Peak Load Exposures (PLE) for the winter and summer of 2008 are 23,070 MW and 27,885 MW respectively, and reflect the seasonal peak loads based on the 2007 CELT Report.

### **Generating Unit Capabilities**

Generating unit capabilities are based upon the December 1, 2007 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 2008 AMS.

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2008 Annual Maintenance Schedule – Draft #4 Page 2 of 2

Only known capacity-backed (ICAP) contracts have been included in the Interchange column of the 2008 Operable Capacity Analysis. This column combines monthly data, as it becomes available, with contract totals recorded in the 2007 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**

Known maintenance of Hydro-Quebec Phase II and 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 2008 AMS or Operable Capacity Analysis, please feel free to contact me at (413) 535-4162 or by email at opamoreq@iso-ne.com.

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#### 2008 ANNUAL MAINTENANCE SCHEDULE

Edition: Draft #4 dated December 13, 2007
Information Received through December 12, 2007
Dates indicate Saturday week beginning

Sorted by Local Control Center and RSP Sub-Area

2008

			Dec	January	February	March	April	May	June	July	August	September	October	November	December
Plant Name	Asset ID S. Name RSP	LCC Company Blackstart Type WCC SC	29	5 12 19 26	2 9 16 23	1 8 15 22 29	5 12 19 26	3 10 17 24	31 7 14 21	28 5 12 19 26	2 9 16 23	30 6 13 20	27 4 11 18 25	1 8 15 22	29 6 13 20 27
- <del>-</del>						-									
		round planned TOT	AL 100	300 600 600 600	600 900 900 500	2000 2100 3700 3800 460	00 6300 6300 6000 5700	6500 5300 5600 3000	0 0 0 0	0 0 0 0 0	0 0 0 0	0 1100 1000 1300	2300 4500 4800 5500 4500	3700 2900 1500 1100	2000 500 500 100 100

Page 1 of 1

# **ISO-NE 2008 OPERABLE CAPACITY ANALYSIS**

#### December 13, 2007 - 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 (MW)	Allowance for Unplanned Outages [Note 8]	Generation at Risk Due to Gas Supply [Note 9]	Total Capacity (MW)	Operable Capacity Margin (+/-)	Extent of OP 4 Actions That May be Necessary (OP 4 Actions up to and including) [Note 10]
2008	Danashaa	20	32,760		+		290	32,818	22,588	1,800	100	3,600		29,118	4,730	
2008	December	29		58	_	0							0			
-	January	5	32,760	58	+	0	290	32,818	23,070	1,800	100	3,600	3,900	25,218	350	
-		12	32,760	58	_	0	290	32,818	23,070	1,800	600	3,100	3,900	25,218	350	
		19	32,760	58	╀	0	290 290	32,818	23,070	1,800	600	3,110	3,900	25,208	340	
2008	February	26	32,760 32,763	58 58	+	0	290	32,818 32.818	22,839 22,562	1,800 1.800	600 600	3,110 3,400	3,900 3,900	25,208 24,918	570 560	
2006	rebruary	9	32,763	58	+	0	290	32,818	22,582	1,800	900	3,400	3,900	24,618	290	
		16	32,763	58	⊢	0	290	32,818	22,332	1,800	900	3,400	3,900	24,618	560	
		23	32,763	58	⊢	0	290	32,818	21,236	1,800	500	3,900	0	28,418	5,380	
2008	March	1	32,786	58	╁	0	290	32,848	20,874	1,800	2,000	2,400	0	28,448	5,770	
	IVIGIOII	8	32,786	58	H	0	290	32,848	20,671	1,800	2,100	2,400	0	28,348	5,880	
1		15	32,786	58	H	0	290	32,848	20,292	1,800	3,700	2,400	0	26,748	4,660	
		22	32,786	58	Г	0	290	32,848	19,706	1,800	3,800	2,400	0	26,648	5,140	İ
		29	32,787	58	Г	0	290	32,848	19,194	1,800	4,600	2,400	0	25,848	4,850	
2008	April	5	32,787	58	L	0	290	32,848	18,934	1,800	6,300	2,400	0	24,148	3,410	
		12	32,787	58		0	290	32,848	18,405	1,800	6,300	2,400	0	24,148	3,940	
		19	32,787	58		0	290	32,848	18,131	1,800	6,000	2,400	0	24,448	4,520	
		26	32,787	58		0	290	32,848	18,103	1,800	5,700	2,900	0	24,248	4,350	
2008	May	3	32,787	58		0	290	32,848	21,067	1,800	6,500	3,600	0	22,748	(120)	Action 3
		10	32,787	58	L	0	290	32,848	22,046	1,800	5,300	3,600	0	23,948	100	
		17	32,787	58	L	0	290	32,848	22,955	1,800	5,600	3,600	0	23,648	(1,110)	Action 9
		24	32,787	58	L	0	290	32,848	23,953	1,800	3,000	3,600	0	26,248	500	
2008		31	30,476	58	Ļ	0	290	30,538	27,885	1,800	0	3,000	0	27,538	(2,150)	Action 11
	June	7	30,476	58	L	0	290	30,538	27,885	1,800	0	3,000	0	27,538	(2,150)	Action 11
		14 21	30,476	58	╀	0	290 290	30,538	27,885	1,800	0	3,000	0	27,538	(2,150)	Action 11
		28	30,476 30,429	58 58	⊢	0	290	30,538 30,488	27,885 27,885	1,800 1,800	0	3,000 2,300	0	27,538 28,188	(2,150) (1,500)	Action 11 Action 11
2008	July	5	30,429	58	⊢	0	290	30,488	27,885	1,800	0	2,300	0	28,188	(1,500)	Action 11
2000	July	12	30,429	58	╁	0	290	30,488	27,885	1,800	0	2,300	0	28,188	(1,500)	Action 11
		19	30,429	58	H	0	290	30,488	27,885	1,800	0	2,300	0	28,188	(1,500)	Action 11
		26	30,429	58	t	0	290	30,488	27,885	1,800	0	2,300	0	28,188	(1,500)	Action 11
2008	August	2	30,414	58	H	0	290	30,468	27,885	1,800	0	2,300	0	28,168	(1,520)	Action 11
		9	30,414	58	T	0	290	30,468	27,885	1,800	0	2,300	0	28,168	(1,520)	Action 11
		16	30,414	58	Г	0	290	30,468	27,885	1,800	0	2,300	0	28,168	(1,520)	Action 11
		23	30,414	58	Г	0	290	30,468	27,885	1,800	0	2,300	0	28,168	(1,520)	Action 11
		30	30,409	58		0	290	30,468	25,643	1,800	0	2,300	0	28,168	730	
2008	September	6	30,409	58		0	290	30,468	24,257	1,800	1,100	2,300	0	27,068	1,010	
		13	30,409	58		0	290	30,468	23,889	1,800	1,000	2,300	0	27,168	1,480	
		20	30,409	58		0	290	30,468	23,797	1,800	1,300	2,300	0	26,868	1,270	
		27	32,747	58	L	0	290	32,808	18,380	1,800	2,300	3,000	0	27,508	7,330	
2008	October	4	32,747	58	L	0	290	32,808	18,417	1,800	4,500	3,000	0	25,308	5,090	
		11	32,747	58	<u> </u>	0	290	32,808	19,390	1,800	4,800	3,000	0	25,008	3,820	
		18	32,747	58	<u> </u>	0	290	32,808	19,773	1,800	5,500	3,000	0	24,308	2,740	
2002	Manager	25	32,747	58	╄	0	290	32,808	19,990	1,800	4,500	3,000	0	25,308	3,520	
2008	November	1	32,777	58	⊢	0	290	32,838	20,112	1,800	3,700	3,800	0	25,338	3,430	
		8 15	32,777 32,777	58 58	╀	0	290 290	32,838 32,838	20,474 21,250	1,800 1,800	2,900 1,500	3,800 3,800	0	26,138 27,538	3,860 4,490	<b>-</b>
$\vdash$		22	32,777	58	۰	0	290			1,800	1,500		0		4,490	-
-		29	32,777	58	╁	0	290	32,838 32.828	22,008 22,218	1,800	2,000	3,800 3,400	0	27,938 27,428	3,410	-
2008	December	6	32,774	58	╁	0	290	32,828	22,522	1,800	500	3,400	0	28,928	4.610	1
	DOCUME	13	32,774	58	H	0	290	32,828	22,522	1,800	500	3,400	0	28,928	4,590	
		20	32,774	58	H	0	290	32,828	22,599	1,800	100	3,400	0	29,328	4,930	<del> </del>
		27	32,774	58	T	0	290	32,828	22,599	1,800	100	3,400	0	29,328	4,930	İ
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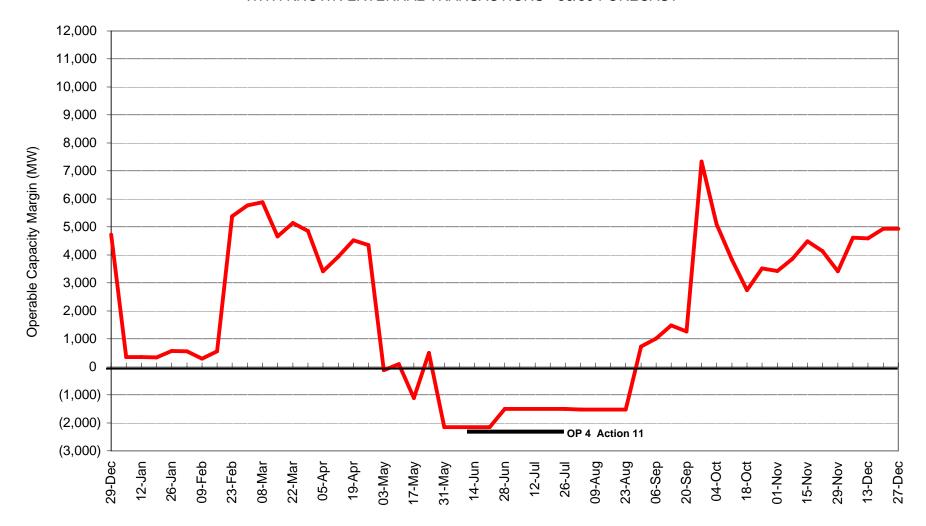
Notes: Please note that the information contained within the Capacity Analysis is a deterministic projection of system conditions which could materialize during any given week of the yea

- 1. Installed Capability per December 1, 2007 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 contract totals recorded in the
- 2007 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) tuture 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 April 2007 CELT Report.
- Operating Reserve Requirement based on first largest contingency plus 1/2 the second largest contingency.
   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 reflects dual fuel conversions scheduled to be complete prior to the upcoming winter.
- 10. Relief from certain OP 4 Actions varies depending on system conditions.

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



January - December 2008, W/B Saturday