

#### Joanne Bialas

**Outage Coordination** 

To: NEPOOL Participants

From: Joanne Bialas

Subject: 2009 Annual Maintenance Schedule – Draft #1

Date: June 16, 2008

Following this transmittal letter, you will find the 2009 Annual Maintenance Schedule (AMS) – Draft #1 dated June 16, 2008, with rounded weekly planned outage totals only, and an Operable Capacity Analysis (with forecasted external transactions) for 2009. 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.

## 2009 AMS – DRAFT #1 - DATED JUNE 16, 2008

Draft #1 of the 2009 AMS - dated June 16, 2008 reflects all planned maintenance requests for 2009 that have been submitted to the ISO through June 13, 2008. Those generator owners who have not yet submitted their anticipated maintenance schedules for 2009 are encouraged to do so.

## 2009 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for 2009 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 2,470 MW for weeks beginning May 30<sup>th</sup>, June 6<sup>th</sup>, 13<sup>th</sup>, and 20<sup>st</sup>. Negative capacity margins are also being forecasted for all remaining weeks in June, July and August, with positive capacity margins for the remaining weeks of the year. However, it is possible that additional maintenance that may be added in upcoming editions of the 2009 AMS will reduce those margins.

### Peak Load Exposures (PLE)

The Peak Load Exposures (PLE) for the winter and summer of 2009 are 23,030 MW and 28,480 MW respectively, and reflect the seasonal peak loads based on the 2008 CELT Report.

## **Generating Unit Capabilities**

Generating unit capabilities are based upon the June 1, 2008 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 2009 AMS.

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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 2008 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 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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### 2009 ANNUAL MAINTENANCE SCHEDULE

Edition: Draft #1

Information Received through June 13, 2008

Dates indicate Saturday week beginning

Sorted by Area and Local Control Center

2009

Softed by Area and Local Control Center					20	2009																
					De	ec ec	January	February	March	l		April	May	June		July	August	September	October	November	December	
Plant Name	Asset ID S. Name	RSP	LCC Compar	y Blackstart Type WCC	SCC 2	7 3	10 17 24	31 7 14	21 28	7 14 21	28	4 11 18 25	2 9 16	23 30 6 13	20	27 4 11 18 25	1 8 15 22	29 5 12 19	26 3 10 17 24	31 7 14 21	28 5 12 19	26
				round planned	TOTAL	0 (	0 0 0 (	200 200 200	200 400	400 100 300	300 1	1300 1000 200 1200	900 300 1000	700 0 0 0	0 0	0 0 0 0 0	0 0 0	0 0 100 400 50	1100 2400 1800 1800 1100	1100 500 500 500	0 0 0 0	0
													I								4	

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# ISO-NE 2009 OPERABLE CAPACITY ANALYSIS

#### June 16, 2008 - 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.

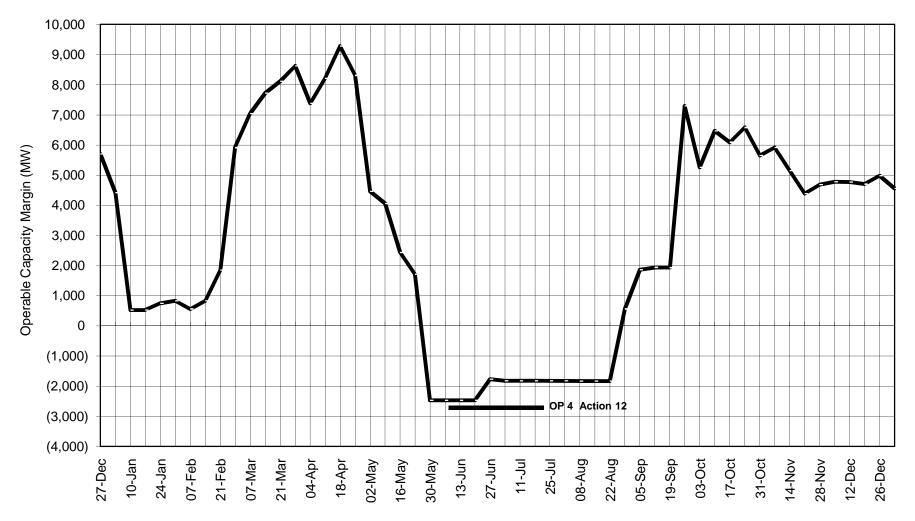
						it is not ex	pected that	tne system pea	ak wiii occur	every week au	ring June, July	, and Augus	τ.			
Week B	eginning, Saturda	ay														
_ <del></del>			Installed Seasonal	Net Interchange								Allowance				Extent of OP 4 Actions That May be
			Claimed Capability	(NYPP, NB, HQ,		New	De-listed ICAP		Peak Load	Operating Reserve		for Unplanned	Generation at Risk Due to		Operable	Necessary (OP 4 Actions up to
			(SCC)	Highgate)	>	Generation	resources	Net Capacity	Exposure	Requirement	Total Known	Outages	Gas Supply	Total	Capacity	and including)
Year	Month	Day	[Note 1]	[Note 2]	lote	[Note 3]	[Note 4]	[Note 5]	[Note 6]	[Note 7]	Maintenance	[Note 8]	[Note 9]	Capacity	Margin (+/-)	[Note 10]
			(MW)	(MW)		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2008		27	32,001	48		0	290	32,048	22,549	1,800	0	2,000	0	30,048	5,700	
2009	January	3	32,001	48	L	0	290	32,048	23,030	1,800	0	2,800	0	29,248	4,420	
		10	32,001	48	L	0	290	32,048	23,030	1,800	0	2,800	3,900	25,348	520	
		17 24	32,001 32,001	48 48	⊢	0	290 290	32,048 32,048	23,030 22,800	1,800 1,800	0	2,800 2,800	3,900 3,900	25,348 25,348	520 750	
	-	31	32,001	48	╁	0	290	32,048	22,523	1,800	200	2,800	3,900	25,348	830	
2009	February	7	32,004	48	H	0	290	32,048	22,493	1,800	200	3,100	3,900	24,848	560	
	1 Cordary	14	32,004	48	t	0	290	32,048	22,222	1,800	200	3,100	3,900	24,848	830	
		21	32,004	48	T	0	290	32,048	21,199	1,800	200	3,100	3,900	24,848	1,850	
		28	32,004	48	Г	0	290	32,048	20,838	1,800	400	3,100	0	28,548	5,910	
2009	March	7	32,027	48	L	0	290	32,078	20,635	1,800	400	2,200	0	29,478	7,040	
		14	32,027	48	Γ	0	290	32,078	20,257	1,800	100	2,200	0	29,778	7,720	
		21	32,027	48	Ļ	0	290	32,078	19,672	1,800	300	2,200	0	29,578	8,110	
		28	32,027	48	L	0	290	32,078	19,161	1,800	300	2,200	0	29,578	8,620	
2009	April	4	32,028	48 48	⊢	0	290 290	32,078	18,901	1,800	1,300	2,700	0	28,078	7,380	
		11 18	32,028 32,028	48	⊢	0	290	32,078 32,078	18,373 18,099	1,800 1,800	1,000 200	2,700 2,700	0	28,378 29,178	8,210 9,280	
		25	32,028	48	H	0	290	32,078	18,072	1,800	1,200	2,700	0	28,178	8,310	
2009	Mav	2	32,028	48	H	0	290	32,078	21,517	1,800	900	3,400	0	27,778	4.460	
2000	iviay	9	32,028	48	H	0	290	32,078	22,516	1,800	300	3,400	0	28,378	4,060	
		16	32.028	48	t	0	290	32,078	23,445	1,800	1,000	3,400	0	27,678	2,430	
		23	32,028	48	t	0	290	32,078	24,464	1,800	700	3,400	0	27,978	1,710	
		30	30,559	48	T	0	290	30,608	28,480	1,800	0	2,800	0	27,808	(2,470)	Action 12
2009	June	6	30,559	48		0	290	30,608	28,480	1,800	0	2,800	0	27,808	(2,470)	Action 12
		13	30,559	48		0	290	30,608	28,480	1,800	0	2,800	0	27,808	(2,470)	Action 12
		20	30,559	48		0	290	30,608	28,480	1,800	0	2,800	0	27,808	(2,470)	Action 12
		27	30,559	48	L	0	290	30,608	28,480	1,800	0	2,100	0	28,508	(1,770)	Action 11
2009	July	4	30,513	48	Ļ	0	290	30,558	28,480	1,800	0	2,100	0	28,458	(1,820)	Action 11
		11	30,513	48	⊢	0	290	30,558	28,480	1,800	0	2,100	0	28,458	(1,820)	Action 11
		18 25	30,513	48 48	╀	0	290	30,558	28,480	1,800	0	2,100	0	28,458	(1,820)	Action 11
	August	1	30,513 30,513	48	╁	0	290 290	30,558 30,558	28,480 28,480	1,800 1.800	0	2,100 2.100	0	28,458 28,458	(1,820) (1,820)	Action 11 Action 11
	August	8	30,498	48	H	0	290	30,538	28,480	1,800	0	2,100	0	28,448	(1,830)	Action 11
		15	30,498	48	H	0	290	30,548	28,480	1,800	0	2,100	0	28,448	(1,830)	Action 11
		22	30,498	48	T	0	290	30,548	28,480	1,800	0	2,100	0	28,448	(1,830)	Action 11
		29	30,498	48	T	100	290	30,648	26,190	1,800	0	2,100	0	28,548	560	
2009	September	5	30,493	48	L	100	290	30,638	24,775	1,800	100	2,100	0	28,438	1,860	
		12	30,493	48	Г	100	290	30,638	24,399	1,800	400	2,100	0	28,138	1,940	
		19	30,493	48	Ľ	100	290	30,638	24,305	1,800	500	2,100	0	28,038	1,930	
	<u></u>	26	30,493	48	L	100	290	30,638	18,337	1,800	1,100	2,100	0	27,438	7,300	
2009	October	3	30,493	48	╄	100	290	30,638	18,374	1,800	2,400	2,800	0	25,438	5,260	
		10	32,070	48	1	100	290	32,218	19,344	1,800	1,800	2,800	0	27,618	6,470	
		17 24	32,070 32,070	48 48	⊢	100 100	290 290	32,218 32,218	19,726 19,943	1,800 1,800	1,800 1,100	2,800 2,800	0	27,618 28,318	6,090 6,580	
		31	32,070	48	╁	100	290	32,218	20,065	1,800	1,100	3,600	0	28,318	5,650	
2009	November	7	32,070	48	۲	100	290	32,218	20,065	1,800	500	3,600	0	28,148	5,920	
_003		14	32,099	48	H	100	290	32,248	21,200	1,800	500	3,600	0	28,148	5,150	
	1	21	32,099	48	H	100	290	32,248	21,200	1,800	500	3,600	0	28,148	4.390	
		28	32,099	48	t	100	290	32,248	22,166	1,800	0	3,600	0	28,648	4,680	
2009	December	5	32,097	48	T	100	290	32,248	22,469	1,800	0	3,200	0	29,048	4,780	
		12	32,097	48	Г	100	290	32,248	22,480	1,800	0	3,200	0	29,048	4,770	
		19	32,097	48		100	290	32,248	22,546	1,800	0	3,200	0	29,048	4,700	
		26	32 097	48	Г	100	290	32 248	22 265	1 800	0	3 200	0	29 048	4 980	

26 32,097 48 100 290 32,248 22,265 1,800 0 3,200 0 29,048 4,980

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

- Installed Capability per the June 1, 2008 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 2008 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).
- Peak Load Exposure per data to be included in the 2008 CELT Report.
- 7. 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.
   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 2009, W/B Saturday