



Richard Boughton
Outage Coordination

To: NEPOOL Participants

From: Richard Boughton

Subject: 2011-12 First Future Year Annual Maintenance Schedule – Draft #1

Date: February 17, 2011

Following this transmittal letter, you will find the 2011-12 Annual Maintenance Schedule (AMS) – Draft #1 dated February 17, 2011, with rounded weekly planned outage totals only, and an Operable Capacity Analysis (with forecasted external transactions) for June 2011 through May 2012. This schedule covers 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.

2011-12 AMS – DRAFT #1 - DATED FEBRUARY 17, 2011

Draft #1 of the 2011-12 AMS - dated February 17, 2011 reflects all planned maintenance requests for June 2011- May 2012 that have been submitted to the ISO through February 16, 2011. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2011-12 are encouraged to do so.

2011-12 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for June 2011 through May 2012 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 3,070 MW for weeks beginning June 4th. However, it is possible that additional maintenance that may be added in upcoming editions of the 2011-12 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 2011-12 is 26,876 MW, 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 February 16, 2011 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 2011-12 AMS.

Unplanned Outage Allotment

Allowances for unplanned outages, as documented in ISO New England SOP-OUTSCH.0030.0040 range from 2,100 MW to 3,600 MW during the winter and summer months.

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 2011 AMS or Operable Capacity Analysis, If you have any comments or suggestions please feel free to contact Richard Boughton at (413) 540-4752 or Joanne Bialas at (413) 535-4162 or Rachel Wilkins-Thurman (413) 540-4261 or by email at opamoreq@iso-ne.com.

ISO-NE 2010 OPERABLE CAPACITY ANALYSIS

February 17, 2011 - 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 (Week Beginning, Saturday)	OPCAP SUPPLY							LOAD OBLIGATIONS			OPCAP MARGINS				
	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMM.CA PACITY MW	PLANNED OUTAGES	ALLOWANCE FOR UNPLANNED OUTAGES MW	GEN AT RISK DUE TO GAS SUP MW	NET OPCAP SUPPLY MW	PEAK LOAD FORECAST MW	OPER RESERVE REQUIREME NT MW	NET LOAD OBLIGATIO N MW	OPCAP MARGIN MW	OPCAP FROM OP4 ACTIVE REAL-TIME DR MW	OPCAP MARGIN w/ OP4 actions through OP4 Step 2 MW	OPCAP FROM OP4 REAL-TIME EMERG. GEN MW	OPCAP MARGIN w/ OP4 actions through OP4 Step 6 MW
05/28/2011	28,039	1,098	0	476	2,800	0	25,860	26,876	2,000	28,876	(3,020)	670	(2,350)	520	(1,830)
06/04/2011	28,043	1,098	0	528	2,800	0	25,810	26,876	2,000	28,876	(3,070)	670	(2,400)	520	(1,880)
06/11/2011	28,042	1,098	0	501	2,800	0	25,840	26,876	2,000	28,876	(3,040)	670	(2,370)	520	(1,850)
06/18/2011	28,042	1,098	0	487	2,800	0	25,850	26,876	2,000	28,876	(3,030)	670	(2,360)	520	(1,840)
06/25/2011	27,886	1,098	0	237	2,800	0	25,950	26,876	2,000	28,876	(2,930)	670	(2,260)	520	(1,740)
07/02/2011	27,891	1,098	0	193	2,100	0	26,700	26,876	2,000	28,876	(2,180)	670	(1,510)	520	(990)
07/09/2011	27,894	1,098	0	225	2,100	0	26,670	26,876	2,000	28,876	(2,210)	670	(1,540)	520	(1,020)
07/16/2011	27,899	1,098	0	213	2,100	0	26,680	26,876	2,000	28,876	(2,200)	670	(1,530)	520	(1,010)
07/23/2011	27,889	1,098	0	229	2,100	0	26,660	26,876	2,000	28,876	(2,220)	670	(1,550)	520	(1,030)
07/30/2011	27,898	1,098	0	209	2,100	0	26,690	26,876	2,000	28,876	(2,190)	670	(1,520)	520	(1,000)
08/06/2011	27,892	1,098	0	198	2,100	0	26,690	26,876	2,000	28,876	(2,190)	670	(1,520)	520	(1,000)
08/13/2011	27,892	1,098	0	198	2,100	0	26,690	26,876	2,000	28,876	(2,190)	670	(1,520)	520	(1,000)
08/20/2011	27,894	1,098	0	220	2,100	0	26,670	26,876	2,000	28,876	(2,210)	670	(1,540)	520	(1,020)
08/27/2011	27,899	1,098	0	216	2,100	0	26,680	26,876	2,000	28,876	(2,200)	670	(1,530)	520	(1,010)
09/03/2011	27,908	1,098	0	279	2,100	0	26,630	26,876	2,000	28,876	(2,250)	670	(1,580)	520	(1,060)
09/10/2011	27,919	1,098	0	870	2,100	0	26,050	26,876	2,000	28,876	(2,830)	670	(2,160)	520	(1,640)
09/17/2011	28,179	1,098	0	2,397	2,100	0	24,780	22,912	2,000	24,912	(130)	670	540	520	1,060
09/24/2011	28,337	1,098	0	3,519	2,100	0	23,820	22,821	2,000	24,821	(1,000)	670	(330)	520	190
10/01/2011	30,504	368	0	7,212	2,800	0	20,860	16,692	2,000	18,692	2,170	670	2,840	520	3,360
10/08/2011	30,270	368	0	7,163	2,800	0	20,680	16,727	2,000	18,727	1,950	670	2,620	520	3,140
10/15/2011	30,497	368	0	8,093	2,800	0	19,970	17,652	2,000	19,652	320	670	990	520	1,510
10/22/2011	30,425	368	0	7,099	2,800	0	20,890	18,016	2,000	20,016	870	670	1,540	520	2,060
10/29/2011	30,141	368	0	5,306	3,600	0	21,600	18,223	2,000	20,223	1,380	670	2,050	520	2,570
11/05/2011	30,015	368	0	4,253	3,600	0	22,530	18,338	2,000	20,338	2,190	670	2,860	520	3,380
11/12/2011	30,108	368	0	3,756	3,600	0	23,120	18,683	2,000	20,683	2,440	670	3,110	520	3,630
11/19/2011	29,671	368	0	1,788	3,600	0	24,650	19,421	2,000	21,421	3,230	670	3,900	520	4,420
11/26/2011	29,540	368	0	1,483	3,600	0	24,820	20,141	2,000	22,141	2,680	670	3,350	520	3,870
12/03/2011	29,739	368	0	1,425	3,200	0	25,480	20,355	2,000	22,355	3,120	670	3,790	520	4,310
12/10/2011	29,635	368	0	778	3,200	0	26,020	20,644	2,000	22,644	3,380	670	4,050	520	4,570
12/17/2011	29,645	368	0	758	3,200	0	26,050	20,655	2,000	22,655	3,390	670	4,060	520	4,580
12/24/2011	29,645	368	0	758	3,200	0	26,050	20,717	2,000	22,717	3,330	670	4,000	520	4,520
12/31/2011	29,615	368	0	564	2,800	0	26,620	20,991	2,000	22,991	3,630	670	4,300	520	4,820
01/07/2012	29,615	368	0	564	2,800	0	26,620	21,455	2,000	23,455	3,160	670	3,830	520	4,350
01/14/2012	29,613	368	0	562	2,800	0	26,620	21,455	2,000	23,455	3,160	670	3,830	520	4,350
01/21/2012	29,613	368	0	562	2,800	0	26,620	21,455	2,000	23,455	3,160	670	3,830	520	4,350
01/28/2012	29,491	368	0	270	3,100	0	26,490	21,233	2,000	23,233	3,260	670	3,930	520	4,450
02/04/2012	29,529	368	0	519	3,100	0	26,280	20,966	2,000	22,966	3,310	670	3,980	520	4,500
02/11/2012	29,529	368	0	519	3,100	0	26,280	20,937	2,000	22,937	3,340	670	4,010	520	4,530
02/18/2012	29,529	368	0	519	3,100	0	26,280	20,675	2,000	22,675	3,600	670	4,270	520	4,790
02/25/2012	29,529	368	0	519	3,100	0	26,280	19,688	2,000	21,688	4,590	670	5,260	520	5,780
03/03/2012	29,555	368	0	683	2,200	0	27,040	19,688	2,000	21,688	5,350	670	6,020	520	6,540
03/10/2012	29,560	368	0	1,121	2,200	0	26,610	19,339	2,000	21,339	5,270	670	5,940	520	6,460
03/17/2012	29,534	368	0	957	2,200	0	26,750	19,144	2,000	21,144	5,610	670	6,280	520	6,800
03/24/2012	29,532	368	0	954	2,200	0	26,750	18,779	2,000	20,779	5,970	670	6,640	520	7,160
03/31/2012	29,457	368	0	1,656	2,700	0	25,470	17,707	2,000	19,707	5,760	670	6,430	520	6,950
04/07/2012	29,363	368	0	1,118	2,700	0	25,910	17,707	2,000	19,707	6,200	670	6,870	520	7,390
04/14/2012	29,328	368	0	517	2,700	0	26,480	17,456	2,000	19,456	7,020	670	7,690	520	8,210
04/21/2012	29,512	368	0	1,370	2,700	0	25,810	16,947	2,000	18,947	6,860	670	7,530	520	8,050
04/28/2012	29,405	368	0	1,078	3,400	0	25,290	16,656	2,000	18,656	6,630	670	7,300	520	7,820
05/05/2012	29,330	368	0	537	3,400	0	25,760	20,495	2,000	22,495	3,260	670	3,930	520	4,450
05/12/2012	29,337	368	0	667	3,400	0	25,640	21,483	2,000	23,483	2,160	670	2,830	520	3,350
05/19/2012	29,305	368	0	173	3,400	0	26,100	22,401	2,000	24,401	1,700	670	2,370	520	2,890
05/26/2012	29,292	368	0	0	3,400	0	26,260	23,410	2,000	25,410	850	670	1,520	520	2,040

1. Available OPCAP MW based on resource Capacity Supply Obligations, CSO, from Forward Capacity Tracking System, FCTS. Does not include Settlement Only Generators. (separate LTOCM run without any generator outages, tab Case Output-System Results-column LZ EXPORT LTD AVAIL OPCAP MW)
2. External Node Available Capacity MW based on external Capacity Supply Obligations, CSO. (LTOCM application Case Output-System Results-EXTERNAL NODE AVAIL OPCAP MW)
3. New resources that have not yet acquired a CSO but will become commercial in the future.
4. Planned Outages includes 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 per ISO New England System Operating Procedure OUTSCH.0030.0040, Perform Generation Outage Coordination - Long Term (LTOCM application Case Output-System Results-UNPLANNED OUTAGES MW)
6. Generation at Risk due to Gas Supply pertains to gas fired capacity expected to be at risk during cold weather conditions. (LTOCM application Case Output-System Results-GEN RISK DUE TO GAS SUP MW)
7. Total OpCap Supply Available per the formula (1 + 2 + 3 - 4 - 5 - 6 = 7)
8. Peak Load Forecast per data included in the 2010 CELT Report adjusted for Other Demand Resources. (LTOCM application-Case Output-System Results-LOAD FORECAST MW)
9. Operating Reserve Requirement based on first largest contingency plus 1/2 the second largest contingency. (LTOCM application Case Output-System Results-OPER RESERVE REQUIREMENT MW)
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 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.
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

