



Patrick Boughan
Outage Coordination

To: NEPOOL Participants

From: Patrick Boughan

Subject: 2012-13 First Future Year Annual Maintenance Schedule – Draft #1

Date: February 15, 2012

Following this transmittal letter, you will find the 2012-13 First Future Year Annual Maintenance Schedule (AMS) – Draft #1 dated February 15, 2012, with planned outage totals, and a rounded weekly Operable Capacity Analysis for June 1, 2012 through May 31, 2013. This schedule covers the third Forward Capacity Market procurement period. Periodically, individual Market 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.

2012-13 AMS – DRAFT #1 - DATED FEBRUARY 15, 2012

Draft #1 of the 2012-13 AMS - dated February 15, 2012 reflects all planned maintenance requests for June 2012- May 2013 that have been submitted to the ISO through February 13, 2011. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2012-13 are encouraged to do so.

2012-13 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for June 1, 2012 through May 31, 2013 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of negative 2,140 MW for week beginning June 16th. *Please note that there may be generation outages due to gas pipeline outages that are currently tentatively scheduled for some weeks in late-spring, summer, and early-fall of 2012 that may further decrease the operable capacity margin.*

Peak Load Exposures (PLE)

After being adjusted for Other Demand Resources, ODR, the Peak Load Exposure (PLE) for the summer and winter of 2012-13 are 27,135 MW and 21,421 MW respectively, and reflects the seasonal peak load based on the 2011 CELT Report.

Generating Unit Capabilities

Resource Capacity Supply Obligations, CSO, are based upon data as of February 13, 2012 and includes Energy Management System (EMS) assets. New unit additions are factored into the New Generation column at the appropriate points in time.

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 2012-13 AMS or Operable Capacity Analysis, or if you have any comments or suggestions please feel free to contact Patrick Boughan at (413) 540-4712 or Rachel Wilkins-Thurman at (413) 540-4261 or Richard Boughton at (413) 540-4752 or by email at opamoreq@iso-ne.com.

ISO-NE 2012-13 OPERABLE CAPACITY ANALYSIS

February 15 , 2012 - 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 and Mid September.

STUDY WEEK (Week Beginning, Saturday)	OPCAP SUPPLY							LOAD OBLIGATIONS			OPCAP MARGINS				
	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMMERCIAL CAPACITY 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 OBLIGATION 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 EMER. GEN MW	OPCAP MARGIN w/ OP4 actions through OP4 Step 6 MW
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]
5/26/2012	29,110	857	0	142	2,800	0	27,020	27,135	2,000	29,135	(2,120)	500	(1,620)	350	(1,270)
6/2/2012	29,110	857	0	152	2,800	0	27,020	27,135	2,000	29,135	(2,120)	500	(1,620)	350	(1,270)
6/9/2012	29,110	857	0	146	2,800	0	27,020	27,135	2,000	29,135	(2,120)	500	(1,620)	350	(1,270)
6/16/2012	29,109	857	0	165	2,800	0	27,000	27,135	2,000	29,135	(2,140)	500	(1,640)	350	(1,290)
6/23/2012	29,109	857	0	145	2,800	0	27,020	27,135	2,000	29,135	(2,120)	500	(1,620)	350	(1,270)
6/30/2012	29,105	857	0	142	2,100	0	27,720	27,135	2,000	29,135	(1,420)	500	(920)	350	(570)
7/7/2012	29,109	857	0	188	2,100	0	27,680	27,135	2,000	29,135	(1,460)	500	(960)	350	(610)
7/14/2012	29,116	857	0	177	2,100	0	27,700	27,135	2,000	29,135	(1,440)	500	(940)	350	(590)
7/21/2012	29,122	857	0	185	2,100	0	27,690	27,135	2,000	29,135	(1,450)	500	(950)	350	(600)
7/28/2012	29,110	857	0	172	2,100	0	27,690	27,135	2,000	29,135	(1,450)	500	(950)	350	(600)
8/4/2012	29,113	857	0	144	2,100	0	27,730	27,135	2,000	29,135	(1,410)	500	(910)	350	(560)
8/11/2012	29,115	857	0	150	2,100	0	27,720	27,135	2,000	29,135	(1,420)	500	(920)	350	(570)
8/18/2012	29,115	857	0	152	2,100	0	27,720	27,135	2,000	29,135	(1,420)	500	(920)	350	(570)
8/25/2012	29,128	857	0	166	2,100	0	27,720	27,135	2,000	29,135	(1,420)	500	(920)	350	(570)
9/1/2012	29,129	857	0	196	2,100	0	27,690	27,135	2,000	29,135	(1,450)	500	(950)	350	(600)
9/8/2012	29,138	857	0	290	2,100	0	27,600	27,135	2,000	29,135	(1,540)	500	(1,040)	350	(690)
9/15/2012	29,284	857	0	1,892	2,100	0	26,150	23,109	2,000	25,109	1,040	500	1,540	350	1,890
9/22/2012	29,314	857	0	2,729	2,100	0	25,340	23,016	2,000	25,016	320	500	820	350	1,170
9/29/2012	29,796	657	0	4,408	2,800	0	23,240	16,626	2,000	18,626	4,610	500	5,110	350	5,460
10/6/2012	29,953	657	0	5,193	2,800	0	22,620	16,661	2,000	18,661	3,960	500	4,460	350	4,810
10/13/2012	30,166	657	0	6,532	2,800	0	21,490	17,592	2,000	19,592	1,900	500	2,400	350	2,750
10/20/2012	30,374	657	0	5,964	2,800	0	22,270	17,959	2,000	19,959	2,310	500	2,810	350	3,160
10/27/2012	29,795	657	0	4,619	3,600	0	22,230	18,167	2,000	20,167	2,060	500	2,560	350	2,910
11/3/2012	30,030	657	0	5,012	3,600	0	22,080	18,283	2,000	20,283	1,800	500	2,300	350	2,650
11/10/2012	29,653	657	0	1,908	3,600	0	24,800	18,630	2,000	20,630	4,170	500	4,670	350	5,020
11/17/2012	29,725	657	0	425	3,600	0	26,360	19,372	2,000	21,372	4,990	500	5,490	350	5,840
11/24/2012	29,638	657	0	1,254	3,600	0	25,440	20,097	2,000	22,097	3,340	500	3,840	350	4,190
12/1/2012	29,653	657	0	350	3,200	0	26,760	20,314	2,000	22,314	4,450	500	4,950	350	5,300
12/8/2012	29,624	657	0	321	3,200	0	26,760	20,605	2,000	22,605	4,150	500	4,650	350	5,000
12/15/2012	29,624	657	0	321	3,200	0	26,760	20,616	2,000	22,616	4,140	500	4,640	350	4,990
12/22/2012	29,624	657	0	321	3,200	0	26,760	20,678	2,000	22,678	4,080	500	4,580	350	4,930
12/29/2012	29,624	657	0	321	3,200	0	26,760	20,954	2,000	22,954	3,810	500	4,310	350	4,660
1/5/2013	29,621	657	0	311	2,800	2,000	25,170	21,421	2,000	23,421	1,750	500	2,250	350	2,600
1/12/2013	29,621	657	0	311	2,800	2,000	25,170	21,421	2,000	23,421	1,750	500	2,250	350	2,600
1/19/2013	29,621	657	0	311	2,800	2,000	25,170	21,421	2,000	23,421	1,750	500	2,250	350	2,600
1/26/2013	29,621	657	0	311	3,100	2,000	24,870	21,197	2,000	23,197	1,670	500	2,170	350	2,520
2/2/2013	29,621	657	0	311	3,100	2,000	24,870	20,929	2,000	22,929	1,940	500	2,440	350	2,790
2/9/2013	29,627	657	0	748	3,100	2,000	24,440	20,900	2,000	22,900	1,540	500	2,040	350	2,390
2/16/2013	29,627	657	0	748	3,100	2,000	24,440	20,636	2,000	22,636	1,800	500	2,300	350	2,650
2/23/2013	29,627	657	0	748	3,100	0	26,440	19,643	2,000	21,643	4,800	500	5,300	350	5,650
3/2/2013	29,627	657	0	748	2,200	0	27,340	19,292	2,000	21,292	6,050	500	6,550	350	6,900
3/9/2013	29,650	657	0	481	2,200	0	27,630	19,095	2,000	21,095	6,530	500	7,030	350	7,380
3/16/2013	29,650	657	0	670	2,200	0	27,440	18,728	2,000	20,728	6,710	500	7,210	350	7,560
3/23/2013	29,626	657	0	421	2,200	0	27,660	18,160	2,000	20,160	7,500	500	8,000	350	8,350
3/30/2013	29,771	657	0	1,929	2,700	0	25,800	17,648	2,000	19,648	6,150	500	6,650	350	7,000
4/6/2013	29,689	657	0	1,969	2,700	0	25,680	17,395	2,000	19,395	6,280	500	6,780	350	7,130
4/13/2013	29,761	657	0	3,201	2,700	0	24,520	16,883	2,000	18,883	5,640	500	6,140	350	6,490
4/20/2013	29,793	657	0	2,326	2,700	0	25,420	16,617	2,000	18,617	6,800	500	7,300	350	7,650
4/27/2013	29,485	657	0	1,288	3,400	0	25,450	16,590	2,000	18,590	6,860	500	7,360	350	7,710

ISO-NE 2012-13 OPERABLE CAPACITY ANALYSIS

February 15 , 2012 - 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 and Mid September.

STUDY WEEK (Week Beginning)	OPCAP SUPPLY							LOAD OBLIGATIONS			OPCAP MARGINS				
	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMMERCIAL CAPACITY 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 OBLIGATION 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 EMER. GEN MW	OPCAP MARGIN w/ OP4 actions through OP4 Step 6 MW
5/4/2013	29,503	657	0	1,535	3,400	0	25,220	20,591	2,000	22,591	2,630	500	3,130	350	3,480
5/11/2013	29,485	657	0	1,331	3,400	0	25,410	21,592	2,000	23,592	1,820	500	2,320	350	2,670
5/18/2013	29,743	657	0	669	3,400	0	26,330	22,522	2,000	24,522	1,810	500	2,310	350	2,660
5/25/2013	29,451	657	0	206	3,400	0	26,500	23,543	2,000	25,543	960	500	1,460	350	1,810

1. Available OPCAP MW based on resource Capacity Supply Obligations, CSO, from Forward Capacity Tracking System, FCTS . Does not include Settlement Only Generators.
(LTOCM application Case Output-System Results-column PreOutage CSO 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+ ZONAL EXPORT LIMITATIONS 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 Operating Procedure No. 5 Appendix A.
(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 2011 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.
Reserve Margins and Distribution Loss Factor Gross Ups are Included.
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

