

Rachel Wilkins-Thurman Outage Coordination

To: NEPOOL Participants

From: Rachel Wilkins-Thurman

Subject: 2013-14 Current Year Annual Maintenance Schedule

Date: September 27, 2013

Following this transmittal letter, you will find the 2013-14 Annual Maintenance Schedule (AMS) dated September 27, 2013 with an Operable Capacity Analysis (with forecasted external transactions) for October 5, 2013 - May 31, 2014. This schedule covers the fourth 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.

2013-14 AMS- DATED SEPTEMBER 27, 2013

The 2013-14 AMS - dated September 27, 2013 reflects all planned maintenance requests and also includes any known long-term Forced Outages for October 5, 2013 - May 31, 2014 that have been submitted to the ISO through September 18th. Those generator owners who have not yet submitted their anticipated maintenance schedules for Procurement Period 2013-14 are encouraged to do so.

2013-14 OPERABLE CAPACITY ANALYSIS

The Operable Capacity Analysis for October 5, 2013 - May 31, 2014 presently forecasts the lowest Long Term Operable Capacity Margin, LTOCM, of positive 492 MW during the fall for week beginning November 2nd and for the winter week beginning January 18th a negative 640 MW.

Peak Load Exposures (PLE)

After being adjusted for Other Demand Resources, ODR, the Peak Load Exposure (PLE) for the summer and winter of 2013-14 is 26,690 MW and 21,299 MW respectively, and reflects the seasonal peak load based on the 2013 CELT Report.

Generating Unit Capabilities

Resource Capacity Supply Obligations, CSO, are based upon data as of September 18, 2013 and include Energy Management System (EMS) assets. New unit additions are factored into the New Generation column at the appropriate points in time.

Interchange

Only external resources with a Capacity Supply Obligation, CSO, are represented in the analysis.



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 throughout the year.

External Transmission

Maintenance outages of Hydro-Quebec Phase II and Highgate are included in the analysis when the Capacity Supply Obligation (CSO) is impacted.

Weekly Operating Reserve

The weekly operating reserve is equal to one hundred twenty five percent (125%) 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 due to the unavailability of gas.

If you have any questions or comments concerning this edition of the 2013-14 AMS or Operable Capacity Analysis or if you have any comments or suggestions please feel free to contact Rachel Wilkins-Thurman at (413) 540-4261, Joanne Bialas (413) 535-4162, or Ingrid Canaday (413) 535-4329, or by email at opamoreq@iso-ne.com.

ISO-NE 2013-2014 OPERABLE CAPACITY ANALYSIS

September 27, 2013 - 50/50- FORECAST - CSO

This analysis is		skiy assessments	Shown in one singi			nable capacity situa	auon under assume				ystem peak will occur every week during June, July, and August and Mid September.				
	OPCAP SUPPLY							LOAD OBLIGATIONS			OPCAP MARGINS				
STUDY WEEK (Week Beginning,	AVAILABLE OPCAP MW	EXTERNAL NODE AVAIL CAPACITY MW	NON COMMERCIAL CAPACITY MW	PLANNED OUTAGES CSO MW	ALLOWANCE FOR UNPLANNED OUTAGES MW	GAS AT RISK MW	NET OPCAP SUPPLY MW	PEAK LOAD FORECAST MW	OPER RESERVE REQUIREMENT 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
Saturday)	[1]	[2]	[3]	[4]	[5]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]
10/5/2013	30,074	858	38	8,397	2,800	0	19,773	16,534	2,375	18,909	864	341	1,205	160	1,365
10/12/2013	30,074	858	38	7,293	2,800	0	20,877	17,468	2,375	19,843	1,034	341	1,375	160	1,535
10/19/2013	30,074	858	38	5,882	2,800	0	22,288	17,836	2,375	20,211	2,077	341	2,418	160	2,578
10/26/2013	30,074	989	114	6,249	3,600	0	21,328	18,045	2,375	20,420	908	341	1,249	160	1,409
11/2/2013	29,560	1,183	114	6,228	3,600	0	21,029	18,162	2,375	20,537	492	461	953	234	1,187
11/9/2013	29,560	1,183	114	4,547	3,600	0	22,710	18,510	2,375	20,885	1,825	461	2,286	234	2,520
11/16/2013	29,560	1,183	114	3,726	3,600	5	23,526	19,255	2,375	21,630	1,896	461	2,357	234	2,591
11/23/2013	29,560	1,183	114	2,059	3,600	0	25,198	19,982	2,375	22,357	2,841	461	3,302	234	3,536
11/30/2013	29,714	1,183	114	3,485	3,200	445	23,881	20,188	2,375	22,563	1,318	398	1,716	168	1,884
12/7/2013	29,714	1,183	114	3,206	3,200	889	23,716	20,480	2,375	22,855	861	398	1,259	168	1,427
12/14/2013	29,714	1,183	114	2,145	3,200	1,876	23,790	20,491	2,375	22,866	924	398	1,322	168	1,490
12/21/2013	29,714	1,183	114	1,136	3,200	2,663	24,012	20,554	2,375	22,929	1,083	398	1,481	168	1,649
12/28/2013	29,714	1,183	114	1,131	3,200	2,869	23,811	20,554	2,375	22,929	882	398	1,280	168	1,448
1/4/2014	29,714	1,183	122	1,596	2,800	3,078	23,545	20,830	2,375	23,205	340	398	738	168	906
1/11/2014	29,714	1,183	122	1,774	2,800	3,410	23,035	21,299	2,375	23,674	(639)	398	(241)	168	(73)
1/18/2014	29,714	1,183	122	2,049	2,800	3,136	23,034	21,299	2,375	23,674	(640)	398	(242)	168	(74)
1/25/2014	29,714	1,183	122	1,048	2,800	3,929	23,242	21,299	2,375	23,674	(432)	398	(34)	168	134
2/1/2014	29,714	1,183	122	1,048	3,100	3,308	23,563	21,075	2,375	23,450	113	398	511	168	679
2/8/2014	29,714	1,183	122	1,093	3,100	2,895	23,931	20,805	2,375	23,180	751	398	1,149	168	1,317
2/15/2014	29,714	1,183	122	1,355	3,100	2,208	24,356	20,776	2,375	23,151	1,205	398	1,603	168	1,771
2/22/2014	29,714	1,183	122	1,187	3,100	1,588	25,144	20,511	2,375	22,886	2,258	398	2,656	168	2,824
3/1/2014	29,714	1,183	122	2,527	2,200	0	26,292	19,515	2,375	21,890	4,402	398	4,800	168	4,968
3/8/2014	29,714	1,183	122	2,820	2,200	0	25,999	19,162	2,375	21,537	4,462	398	4,860	168	5,028
3/15/2014	29,714	1,183	122	3,265	2,200	0	25,554	18,965	2,375	21,340	4,214	398	4,612	168	4,780
3/22/2014	29,714	1,183	122	3,727	2,200	0	25,092	18,597	2,375	20,972	4,120	398	4,518	168	4,686
3/29/2014	29,560	1,183	122	6,146	2,700	0	22,019	18,023	2,375	20,398	1,621	461	2,082	234	2,316
4/5/2014	29,560	1,183	122	6,333	2,700	0	21,832	17,524	2,375	19,899	1,933	461	2,394	234	2,628
4/12/2014	29,560	1,183	122	5,592	2,700	0	22,573	17,271	2,375	19,646	2,927	461	3,388	234	3,622
4/19/2014	29,560	1,183	122	6,520	2,700	0	21,645	16,757	2,375	19,132	2,513	461	2,974	234	3,208
4/26/2014	29,560	1,183	122	6,784	3,400	0	20,681	16,490	2,375	18,865	1,816	461	2,277	234	2,511
5/3/2014	29,560	1,183	122	5,628	3,400	0	21,837	16,463	2,375	18,838	2,999	461	3,460	234	3,694
5/10/2014	29,560	1,183	122	4,152	3,400	0	23,313	20,223	2,375	22,598	715	461	1,176	234	1,410
5/17/2014	29,560	1,183	122	2,728	3,400	0	24,737	21,216	2,375	23,591	1,146	461	1,607	234	1,841
5/24/2014	29,560	1,183	122	1,465	3,400	0	26,000	22,138	2,375	24,513	1,487	461	1,948	234	2,182

1. Available OPCAP MW based on resource Capacity Supply Obligations, CSO. Does not include Settlement Only Generators.

2. External Node Available Capacity MW based on external Capacity Supply Obligations, CSO .

3. New resources that have acquired a CSO but have not become commercial.

4. Planned Outages is the total of Generator/DARD Outages for the period. This value would also include any known long-term Forced Outages.

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.

7. Generation at Risk due to Gas Supply pertains to gas fired capacity expected to be at risk during cold weather conditions or gas pipeline maintenance outages.

8. Net OpCap Supply MW Available (1 + 2 + 3 - 4 - 5 - 7 = 8)

9. Peak Load Forecast per data included in the 2013 CELT Report adjusted for Other Demand Resources.

10. Operating Reserve Requirement based on 125% of first largest contingency plus 50% the second largest contingency.

11. Total Net Load Obligation per the formula(9 + 10 = 11)

12. Net OPCAP Margin MW = Net Op Cap Supply MW minus Net Load Obligation (8 - 11 = 12)

13. OP 4 Action 2 Real-time Demand Response. Reserve Margins and Distribution Loss Factor Gross Ups are Included.

14. OPCAP Margin taking into account Real Time Demand Response through OP4 Step 2 (12 + 13 = 14)

15. OP 4 Action 6 Emergency Generation Response without the Voltage Reduction requiring > 10 Minutes. Real Time Emergency Generation is capped at 600MW.

Reserve Margins and Distribution Loss Factor Gross Ups are Included.

16. OPCAP Margin taking into account Real Time Demand Response and Real Time Emergency Generation through OP4 Step 6 (14 + 15 = 16); This does not include Emergency Energy Transactions (EETs).



New England Operable Capacity Margins - CSO - 50/50 FORECAST

October 5, 2013 - May 24, 2014, W/B Saturday