Weekly Market Summary

April 14-20, 2014

About this Report

This report contains seven sections. They are:

1) The ***Weekly Highlights*** section provides brief explanations of notable events that occurred during the week. The tables provided show market results for the current week, prior week, the same week a year ago, and the percentage change this week vs. the prior week and prior year. The highlights also include a detailed explanation of the day-ahead and real-time price separation for the current week, along with any real-time price corrections.

2) The ***Pricing*** section contains various graphs presenting information about Locational Marginal Prices (LMPs) and its components for the Hub, load zones, and external nodes. A table showing descriptive LMP statistics for these locations is also provided.

3) The ***Weekly Demand*** section contains a table describing total day-ahead and real-time load obligation (DALO & RTLO) for the current week, last week, the percentage change from last week, last year, and the percentage change from last year. In addition, there are graphs showing day-ahead demand bids and cleared volumes by type. Also included are tables for daily demand bid and virtual volumes and peak load by day with associated real-time pricing.

4) The ***Weekly Supply*** section contains tables and graphs of day-ahead generation obligation accumulated from generation, virtual supply, and imports. Information on real-time supply including, metered generation by fuel type, self scheduled MW, real-time reliability MW, marginal price settings, and external interface imports.

5) The ***Net Commitment Period Compensation (NCPC)*** section includes tables for day-ahead and real-time payments by day and second contingency payment by load zone.

6) The ***Reserves*** section contains tables for payment and charges of reserve markets by reserve zone and load zone. Real-Time Reserve Clearing Prices, Forward Reserve Daily Threshold Prices and, real-time reserve bias implementation are also provided.

7) The last section of the report, the ***Glossary and Links*** section, contains additional information concerning each section listed above, including links to relevant pages on the ISO New England web site.

Note: A supplemental Excel file 'WE YYYY MM DD Market Data 53 Weeks.XLSX', located here, contains the past 53 weeks of data of various concepts including market prices, payments, charges, and MW values.

Click this icon in the section header to navigate to the glossary section, where definitions are described in more detail, with links to the ISO New England web site.

1. Weekly Highlights: April 14-20, 2014

Notable Events

- A Minimum Generation Emergency was declared on Monday, April 14, from 3:00 a.m. until 5:30 a.m., resulting in one hour with $0/MWh LMPs system-wide during that time period.
- A Minimum Generation Emergency was declared on Sunday, April 20, from 5:00 p.m. until 8:00 p.m., and from 11:00 p.m. until 5:00 a.m. on Monday, April 21, resulting in 7 hours with $0/MWh LMPs system-wide during those time periods.

Locational Marginal Pricing (LMPs) New England Hub; $/MWh; Average	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Day-Ahead Energy Market; All Hours	$44.55	$44.46	0.2%	$42.08	5.9%
Real-Time Energy Market; All Hours	$38.40	$41.06	-6.5%	$40.36	-4.9%

Weekly Demand Statistics (MWh)	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Peak Load (MW - Preliminary)	15,791	15,987	-1.2%	15,019	5.1%
DA Load Obligation (All Zones)	-2,168,557	-2,162,757	0.3%	-2,080,351	4.2%
RT Load Obligation (All Zones)	-2,186,513	-2,187,956	-0.1%	-2,138,459	2.2%
DA Cleared Exports (All Interfaces)	-61,356	-57,682	6.4%	-87,998	-30.3%
RT Scheduled Exports (All Interfaces)	-87,280	-78,282	11.5%	-109,383	-20.2%

Weekly Supply Statistics	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Input Fuel Price (Natural Gas, $/MMBtu)	$4.69	$4.64	1.1%	$5.80	-19.1%
Mass Average Input Fuel Price (Natural Gas, $/MMBtu)	$4.96	$4.72	5.1%	$7.08	-29.9%
Metered Generation (MWh)	1,869,157	1,809,199	3.3%	1,859,668	0.5%
Generation Obligation (MWh)	2,308,266	2,291,204	0.7%	2,287,914	0.9%
Self-Scheduled Generation (MWh)	1,413,482	1,359,876	3.9%	1,379,779	2.4%
DA Cleared Imports (MWh - All Interfaces)	427,006	433,569	-1.5%	386,869	10.4%
RT Scheduled Imports (MWh - All Interfaces)	439,109	482,005	-8.9%	428,246	2.5%

Weekly Reliability Costs (NCPC)	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Total NCPC ($)	$2,940,861	$447,906	Large	$2,815,777	4.4%

Reserve Market Payments	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Forward Reserve Market Payments ($)	$2,232,254	$2,386,924	-6.5%	$103,142	Large
Real-Time Reserve Market Payments ($)	$11,719	$350,888	-96.7%	$59,022	-80.1%

Underlying natural gas data furnished by:

ICE Global markets in clear view

Day-Ahead Price Separation

- On Tuesday, April 15, depressed pricing in the Maine (ME) Load Zone was caused by a binding constraint on the Orrington-South Interface due to a planned equipment outage. The equipment is expected to be restored on May 4.
- On Wednesday, April 16, depressed pricing in the Rhode Island (RI) Load Zone was caused by a binding constraint on the Q143S-5 (Franklin Square-Admiral) line due to a planned equipment outage. The equipment was restored on April 21.
- On Thursday, April 17, elevated pricing in the Connecticut (CT) Load Zone and depressed pricing in the Western/Central Massachusetts (WCMA) Load Zone was caused by a binding constraint on the Western Connecticut Import Interface due to the planned outage of the 364 (Montville-Haddam Neck) line. The 364 line is expected to be restored on April 25.

Real-Time Price Separation

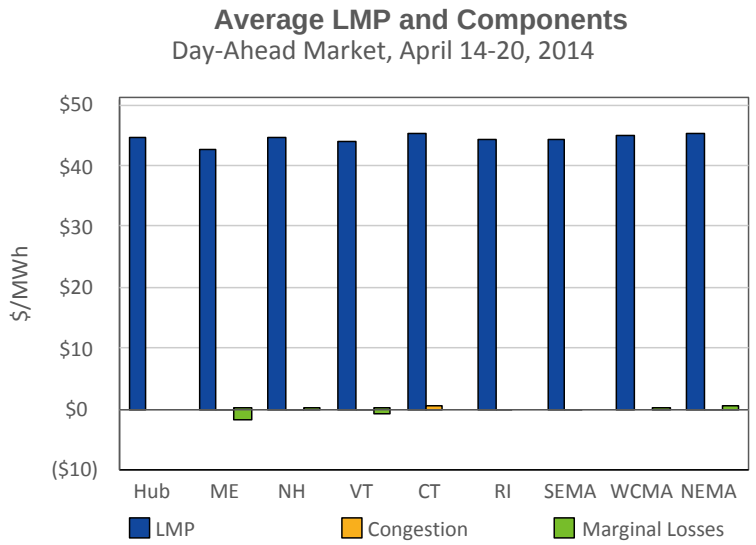
- On Monday and Tuesday, April 14 and 15, depressed pricing in the ME Load Zone was caused by a binding constraint on the Orrington-South Interface due to the aforementioned equipment outage. The equipment is expected to be restored on May 4.
- On Wednesday and Thursday, April 16 and 17, depressed pricing in the RI Load Zone was caused by a binding constraint on the Q143S-5 (Franklin Square-Admiral) line due to the aforementioned equipment outage.
- On Thursday, April 17, elevated pricing in the CT Load Zone and depressed pricing in the WCMA Load Zone was caused by a binding constraint on the Western Connecticut Import Interface due to the aforementioned outage of the 364 line, in addition to the forced outage of the 348 (Millstone-Beseck) line. The 348 line was restored on April 21.

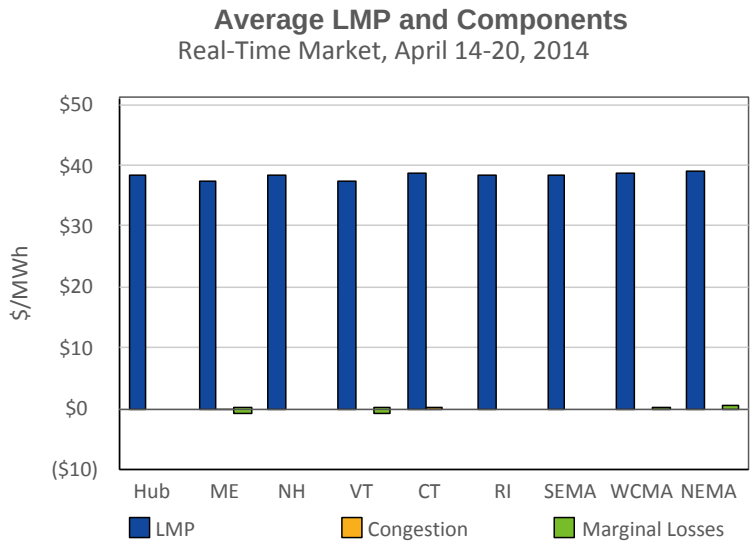
Real-Time Price Corrections

- None

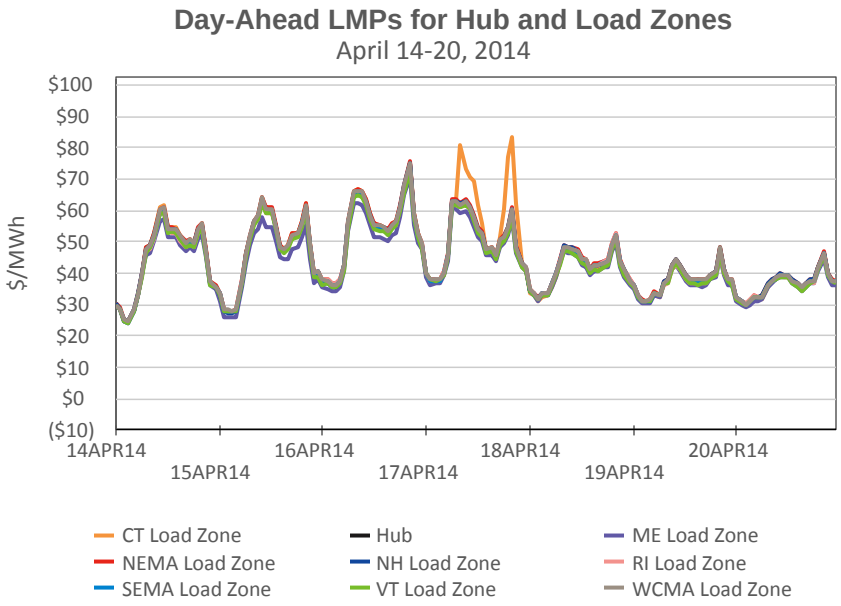
2. Pricing

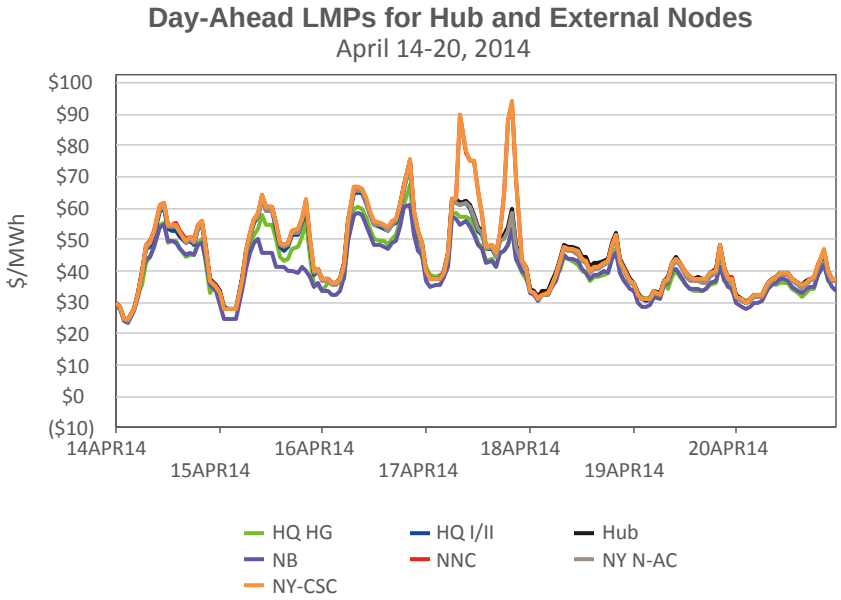
The two graphs below show the weekly average LMPs, congestion, and marginal loss components at the Hub and load zones for both the Day-Ahead and Real-Time Energy Markets.



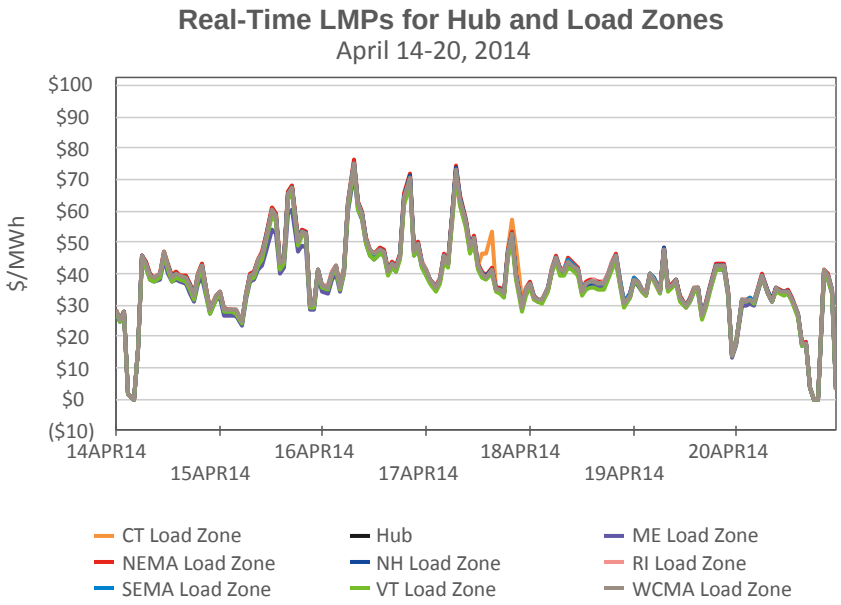


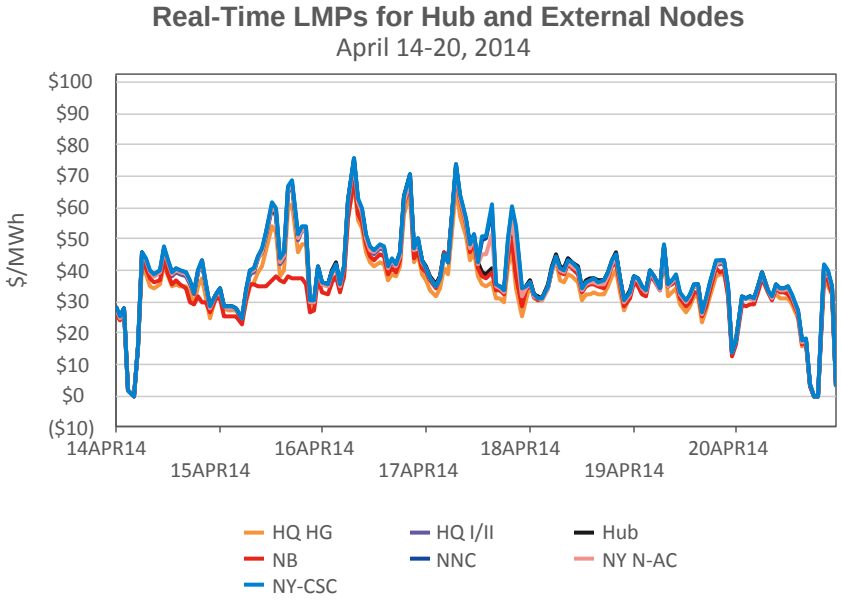
The following two graphs show hourly day-ahead LMPs for the Hub, the eight load zones, and the five external nodes. In cases where there is little or no price separation, the lines for multiple locations may be indistinguishable from each other.


Day-Ahead LMPs for Hub and Load Zones
April 14-20, 2014
$/MWh
$100
$90
$80
$70
$60
$50
$40
$30
$20
$10
$0
($10)
14APR14
15APR14
16APR14
17APR14
18APR14
19APR14
20APR14
CT Load Zone
Hub
ME Load Zone
NEMA Load Zone
NH Load Zone
RI Load Zone
SEMA Load Zone
VT Load Zone
WCMA Load Zone


Day-Ahead LMPs for Hub and External Nodes
April 14-20, 2014
$/MWh
$100
$90
$80
$70
$60
$50
$40
$30
$20
$10
$0
($10)
14APR14
15APR14
16APR14
17APR14
18APR14
19APR14
20APR14
HQ HG
HQ I/II
Hub
NB
NNC
NY N-AC
NY-CSC

The following two graphs show hourly real-time LMPs for the Hub, the eight load zones, and the five external nodes. In cases where there is little or no price separation, the lines for multiple locations may be indistinguishable from each other.

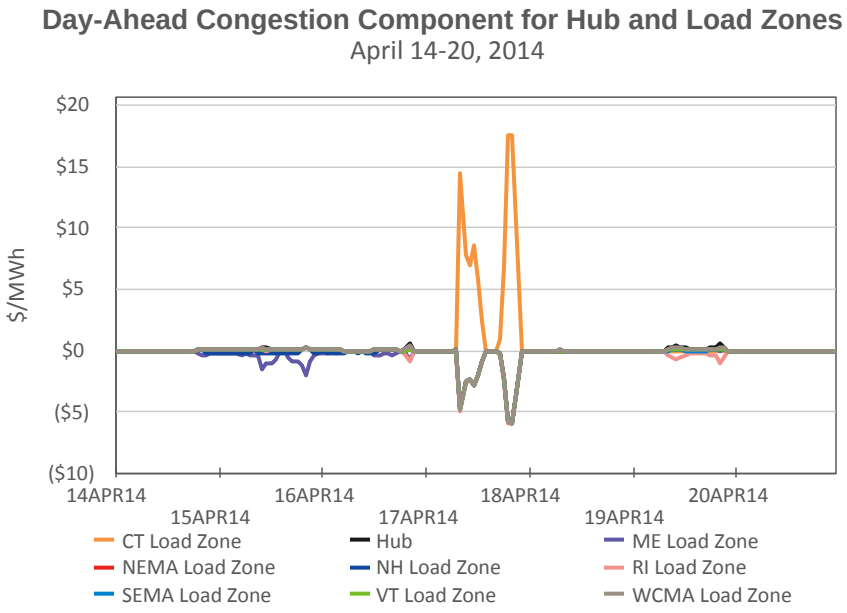


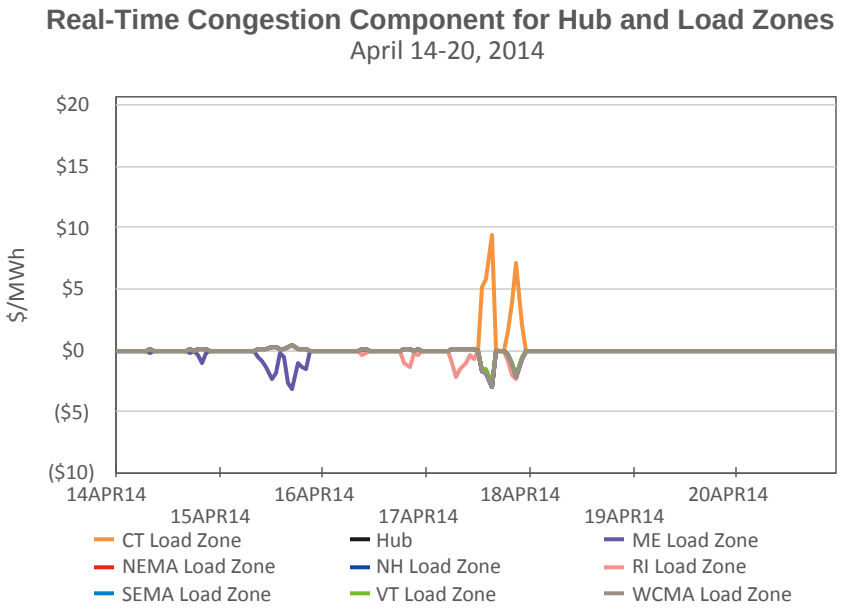


LMP Summary Statistics, April 14-20, 2014

Hub/Zone/ Ext. Node	Avg DA LMP ($/MWh)	Avg RT LMP ($/MWh)	Min DA LMP ($/MWh)	Min RT LMP ($/MWh)	Max DA LMP ($/MWh)	Max RT LMP ($/MWh)	DA as % of Hub	RT as % of Hub	RT as % of DA	DA Std Dev	RT Std Dev	RT Std/DA Std
Hub	$44.55	$38.40	$24.43	$0.00	$75.15	$75.11	1.00	1.00	0.86	10.39	12.44	1.20
ME	$42.56	$37.22	$24.34	$0.00	$70.39	$72.76	0.96	0.97	0.87	9.48	11.93	1.26
NH	$44.55	$38.35	$24.54	$0.00	$74.91	$75.28	1.00	1.00	0.86	10.41	12.49	1.20
VT	$43.70	$37.35	$24.20	$0.00	$72.86	$73.55	0.98	0.97	0.85	10.10	12.11	1.20
CT	$45.24	$38.57	$24.41	$0.00	$83.19	$75.54	1.02	1.00	0.85	12.06	12.64	1.05
RI	$44.22	$38.23	$24.31	$0.00	$72.96	$75.17	0.99	1.00	0.86	10.11	12.21	1.21
SEMA	$44.30	$38.34	$24.30	$0.00	$74.19	$75.16	0.99	1.00	0.87	10.26	12.42	1.21
WCMA	$44.73	$38.49	$24.52	$0.00	$75.34	$75.26	1.00	1.00	0.86	10.48	12.48	1.19
NEMA	$44.99	$38.93	$24.56	$0.00	$75.65	$76.32	1.01	1.01	0.87	10.54	12.67	1.20
NB Ext	$39.95	$35.19	$23.62	$0.00	$60.79	$71.07	0.90	0.92	0.88	8.33	11.08	1.33
NY-N AC Ext	$43.90	$38.19	$24.21	$0.00	$73.66	$74.71	0.99	0.99	0.87	10.41	12.43	1.19
HQ Ext	$43.95	$38.08	$24.22	$0.00	$73.69	$74.44	0.99	0.99	0.87	10.17	12.32	1.21
HG Ext	$41.27	$35.11	$23.97	$0.00	$67.56	$68.37	0.93	0.91	0.85	8.78	11.12	1.27
CSC Ext	$45.72	$39.02	$24.41	$0.00	$94.02	$76.05	1.03	1.02	0.85	12.99	12.89	0.99
NNC Ext	$45.69	$38.75	$24.43	$0.00	$93.65	$75.68	1.03	1.01	0.85	12.96	12.76	0.98

The next two graphs show hourly day-ahead and real-time congestion components for the Hub and each of the eight load zones. In cases where there is little or no price separation, the lines for multiple locations may be indistinguishable from each other.





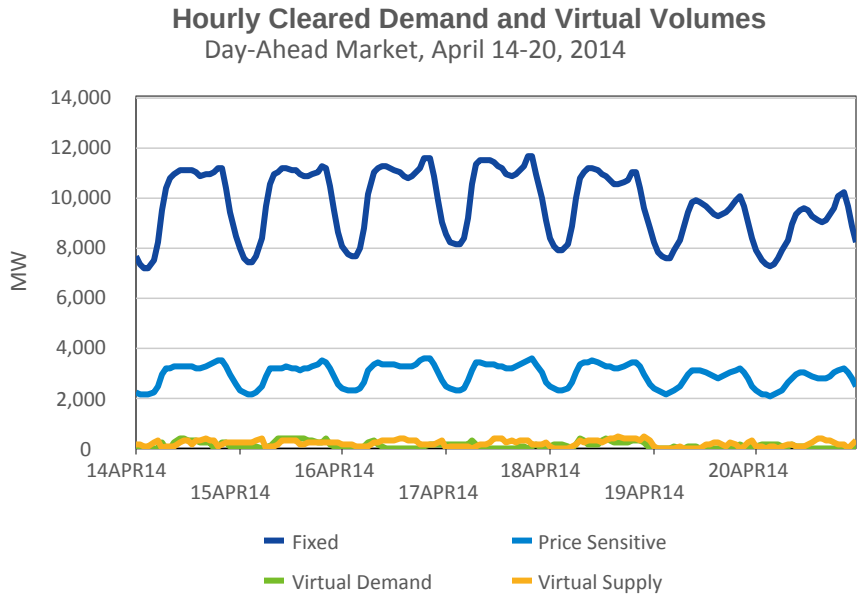
3. Energy Market Demand

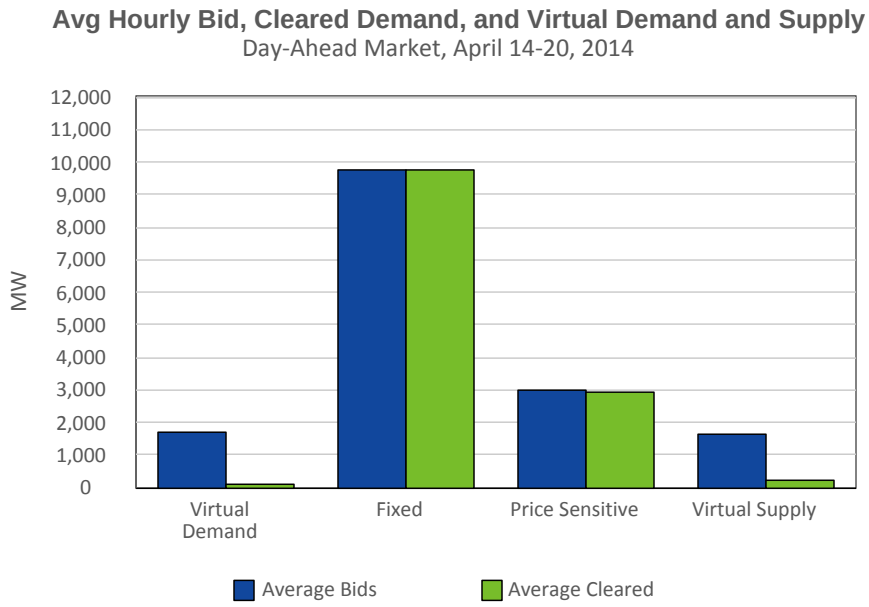
3.1 Day-Ahead Demand

The following table displays the day-ahead load obligation at the Hub, load zones, and external nodes for this week, last week, the same week a year ago and the percent change for each.

Location	This Week (MWh)	Last Week (MWh)	% Chg vs. Prior Week	Last Year (MWh)	% Chg vs. Prior Year
Hub	8,304	6,110	35.9%	11,049	-24.8%
ME	195,208	198,711	-1.8%	184,852	5.6%
NH	201,885	203,940	-1.0%	198,638	1.6%
VT	98,318	99,256	-0.9%	84,914	15.8%
CT	526,767	524,470	0.4%	502,586	4.8%
RI	143,358	142,145	0.9%	136,422	5.1%
SEMA	237,304	237,325	-0.0%	231,924	2.3%
WCMA	322,547	318,674	1.2%	307,763	4.8%
NEMA	434,867	432,125	0.6%	422,203	3.0%
NB Ext	690	13,063	-94.7%	2,385	-71.1%
NY-N AC Ext	12,707	3,450	Large	20,928	-39.3%
HQ Ext	0	0	0.0%	0	0.0%
HG Ext	80	0	Large	0	Large
CSC Ext	36,120	31,550	14.5%	49,507	-27.0%
NNC Ext	11,899	9,650	23.3%	15,188	-21.7%

Participants can bid fixed and price sensitive demand as well as submit virtual demand bids and virtual supply offers into the Day-Ahead Energy Market. The first graph below shows hourly cleared values for these four categories of bids and offers. The second graph shows average hourly values for the week.





The following table summarizes day-ahead demand bid volumes submitted and cleared at the Hub and in the eight load zones (including nodal locations within each load zone) along with virtual demand (decrement or 'decs') bids and supply (increment or 'incs') offers on the same basis.

Daily Demand Bid and Virtual Volumes by Zone (MWh)
April 14-20, 2014

Location	Date	Fixed Demand Bids	Price Sens. Bids	Dec Bids	Inc Offers	Cleared Fixed Demand	Cleared Price Sens. Demand	Cleared Decs	Cleared Incs	Total DA Demand
Hub	14APR14	0	0	1,262	1,812	0	0	1,262	532	1,262
Hub	15APR14	0	0	1,782	1,668	0	0	1,517	248	1,517
Hub	16APR14	0	0	1,224	4,704	0	0	624	2,017	624
Hub	17APR14	0	0	849	1,935	0	0	559	565	559
Hub	18APR14	0	0	5,458	2,815	0	0	3,482	1,395	3,482
Hub	19APR14	0	0	541	1,900	0	0	302	190	302
Hub	20APR14	0	0	768	2,103	0	0	558	681	558
ME	14APR14	22,150	6,671	8,471	7,885	22,150	6,339	179	1,091	28,668
ME	15APR14	22,225	5,606	8,899	10,283	22,225	5,422	481	1,282	28,128
ME	16APR14	22,827	5,698	11,456	10,201	22,827	5,436	571	1,477	28,833
ME	17APR14	23,052	5,885	11,497	10,353	23,052	5,629	67	1,093	28,748
ME	18APR14	22,119	5,990	10,978	10,426	22,119	5,922	40	1,042	28,081
ME	19APR14	20,558	5,800	10,444	10,722	20,558	5,366	21	980	25,945
ME	20APR14	21,002	6,162	10,705	12,085	21,002	5,796	6	996	26,804
NH	14APR14	15,970	12,698	3,156	3,149	15,970	12,658	1,021	1,134	29,649
NH	15APR14	16,136	12,931	4,296	3,813	16,136	12,886	1,418	1,330	30,439
NH	16APR14	16,819	13,095	3,015	3,638	16,819	13,091	223	447	30,133
NH	17APR14	16,949	13,294	2,372	3,769	16,949	13,271	137	244	30,357
NH	18APR14	16,403	12,807	2,688	3,216	16,403	12,806	546	8	29,754
NH	19APR14	14,525	11,995	2,863	3,600	14,525	11,994	24	30	26,543
NH	20APR14	14,044	10,967	2,354	4,368	14,044	10,966	0	176	25,010
VT	14APR14	1,019	13,008	909	3,308	1,019	13,008	141	1,363	14,167
VT	15APR14	954	13,200	1,089	3,343	954	13,200	201	1,685	14,354
VT	16APR14	789	13,599	1,152	3,009	789	13,599	10	624	14,397
VT	17APR14	933	13,943	1,374	2,860	933	13,943	177	619	15,053
VT	18APR14	944	13,432	1,153	2,761	944	13,432	51	900	14,428
VT	19APR14	899	12,282	946	2,846	899	12,282	34	804	13,215
VT	20APR14	998	11,704	1,009	2,780	998	11,704	1	508	12,703
CT	14APR14	58,045	16,478	2,780	5,279	58,045	16,454	580	578	75,079
CT	15APR14	59,353	16,602	6,223	6,412	59,353	16,578	838	833	76,768
CT	16APR14	61,203	17,534	3,850	6,180	61,203	17,510	275	589	78,988
CT	17APR14	62,484	17,602	3,841	6,221	62,484	17,578	468	1,518	80,531
CT	18APR14	60,113	17,210	4,130	10,621	60,113	17,186	720	3,070	78,019
CT	19APR14	53,964	15,282	3,492	7,163	53,964	15,258	272	320	69,495
CT	20APR14	52,462	15,004	4,462	8,265	52,462	14,980	444	659	67,886
RI	14APR14	18,488	2,464	1,458	3,193	18,488	2,464	0	110	20,952
RI	15APR14	18,144	2,502	2,188	3,756	18,144	2,502	0	320	20,646
RI	16APR14	18,475	2,728	2,242	3,808	18,475	2,728	4	384	21,207
RI	17APR14	18,755	2,754	2,431	4,358	18,755	2,754	36	515	21,546
RI	18APR14	18,441	2,772	3,144	4,115	18,441	2,772	339	272	21,551
RI	19APR14	16,545	2,443	2,874	4,372	16,545	2,443	62	297	19,051
RI	20APR14	15,886	2,496	3,928	5,147	15,886	2,496	24	508	18,406

Location	Date	Fixed Demand Bids	Price Sens. Bids	Dec Bids	Inc Offers	Cleared Fixed Demand	Cleared Price Sens. Demand	Cleared Decs	Cleared Incs	Total DA Demand
SEMA	14APR14	32,099	2,546	80	1,392	32,099	2,009	80	0	34,188
SEMA	15APR14	32,400	2,542	0	1,860	32,400	1,954	0	132	34,354
SEMA	16APR14	32,820	2,622	314	1,977	32,820	2,583	58	279	35,461
SEMA	17APR14	33,735	2,628	318	1,906	33,735	2,418	33	198	36,187
SEMA	18APR14	32,230	2,872	240	1,708	32,230	2,761	30	0	35,021
SEMA	19APR14	29,126	2,541	0	1,708	29,126	2,517	0	20	31,643
SEMA	20APR14	28,061	2,425	0	2,098	28,061	2,390	0	352	30,451
WCMA	14APR14	33,661	9,976	1,743	3,810	33,661	9,952	208	222	43,821
WCMA	15APR14	34,073	9,892	2,620	4,168	34,073	9,868	572	0	44,513
WCMA	16APR14	35,337	10,591	2,575	4,176	35,337	10,567	272	8	46,176
WCMA	17APR14	36,258	10,127	2,568	4,312	36,258	10,103	99	0	46,461
WCMA	18APR14	34,526	10,226	2,622	4,312	34,526	10,202	248	0	44,976
WCMA	19APR14	30,808	8,949	2,415	4,312	30,808	8,925	231	20	39,964
WCMA	20APR14	29,499	8,907	3,038	4,888	29,499	8,883	308	0	38,690
NEMA	14APR14	55,160	8,410	2,538	1,224	55,160	8,386	391	0	63,937
NEMA	15APR14	55,543	8,326	1,342	1,480	55,543	8,302	462	0	64,307
NEMA	16APR14	55,611	8,495	880	1,502	55,611	8,471	10	22	64,092
NEMA	17APR14	57,181	8,248	1,005	1,510	57,181	8,224	230	30	65,635
NEMA	18APR14	55,507	8,312	925	1,480	55,507	8,288	100	0	63,894
NEMA	19APR14	49,634	7,527	655	1,480	49,634	7,503	10	20	57,147
NEMA	20APR14	48,382	7,398	1,153	1,480	48,382	7,374	99	0	55,855

3.2 Real-Time Demand

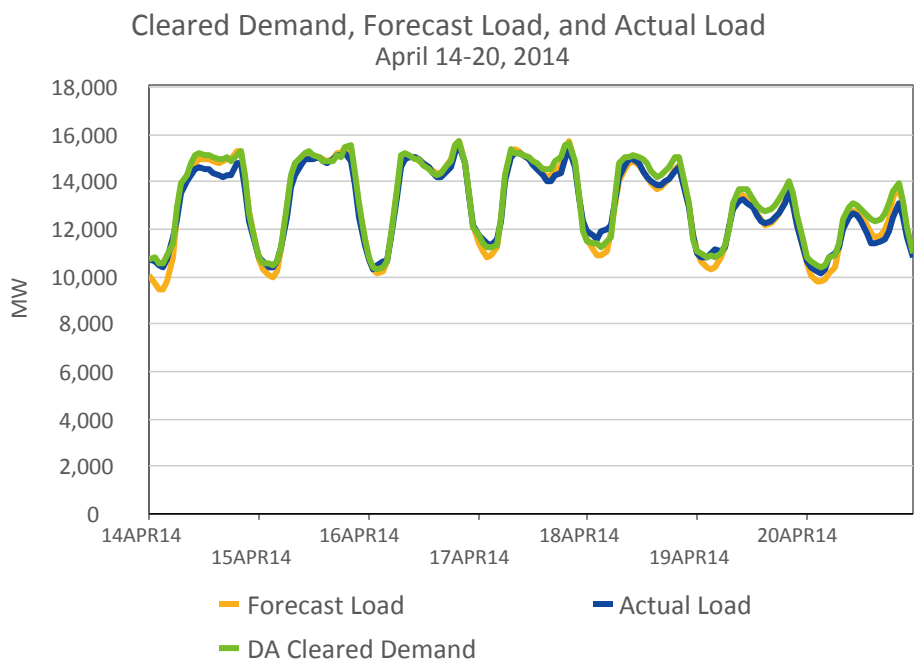
The following table displays the real-time load obligation at each load zone and external nodes for this week, last week, the same week a year ago, and the percent change for each.

Location	This Week (MWh)	Last Week (MWh)	% Chg vs. Prior Week	Last Year (MWh)	% Chg vs. Prior Year
ME	213,351	218,277	-2.3%	208,888	2.1%
NH	204,280	203,354	0.5%	198,556	2.9%
VT	102,208	102,837	-0.6%	102,018	0.2%
CT	512,829	516,512	-0.7%	506,296	1.3%
RI	139,081	138,094	0.7%	135,690	2.5%
SEMA	249,679	246,802	1.2%	244,106	2.3%
WCMA	325,707	326,718	-0.3%	317,404	2.6%
NEMA	439,378	435,362	0.9%	425,501	3.3%
NB Ext	9,229	22,698	-59.3%	9,800	-5.8%
NY-N AC Ext	28,238	13,129	115.1%	32,822	-14.0%
HQ Ext	0	0	0.0%	0	0.0%
HG Ext	0	0	0.0%	0	0.0%
CSC Ext	36,100	31,305	15.3%	49,507	-27.1%
NNC Ext	13,713	11,150	23.0%	17,254	-20.5%

Real-Time Peak Hour System Load and Associated Hourly LMPs

Day	Hour	System Load (MW)	Hub	Maine Load Zone	NH Load Zone	VT Load Zone	CT Load Zone	RI Load Zone	SEMA Load Zone	WCMA Load Zone	NEMA Load Zone
14APR14	21	15,038	$42.69	$39.00	$42.36	$41.13	$42.95	$42.26	$42.50	$42.87	$43.24
15APR14	20	15,494	$53.22	$49.05	$53.28	$52.07	$53.44	$52.82	$53.21	$53.33	$54.15
16APR14	21	15,791	$70.54	$69.31	$71.18	$68.86	$69.97	$69.00	$70.84	$70.56	$72.23
17APR14	21	15,620	$52.43	$51.33	$52.46	$50.47	$56.96	$51.22	$52.47	$52.54	$53.47
18APR14	10	15,168	$44.06	$43.34	$44.05	$42.23	$43.20	$44.33	$44.22	$44.06	$44.95
19APR14	21	13,760	$42.56	$41.10	$42.62	$41.58	$42.68	$42.11	$42.40	$42.70	$43.10
20APR14	21	13,315	$40.96	$38.99	$40.74	$39.91	$41.28	$40.76	$40.86	$41.08	$41.41

The graph below compares the hourly quantities of cleared day-ahead demand with the forecast and actual load. Cleared demand is the total of cleared fixed demand bids; cleared price sensitive demand bids, and cleared decrement bids.



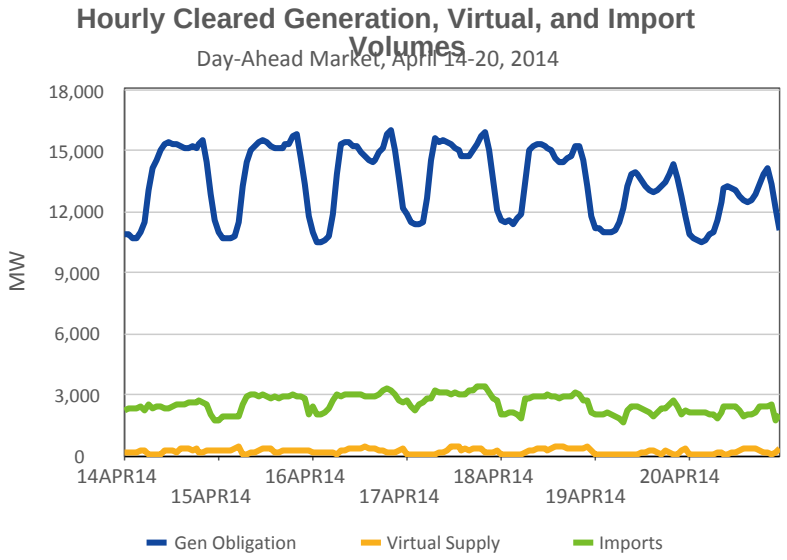
The table below compares the total quantities (MWh) of day-ahead load obligation with the real-time load obligation for each Load Zone (including nodal locations within each Load Zone) for the week. Day-ahead load obligation is composed of day-ahead cleared demand bids and cleared decrement bids. Real-time load obligation is comprised of metered load and internal bilateral contracts for load.

Zone	DA Load Obligation (MWh)	RT Load Obligation (MWh)	DA Delta (MWh)	DA % of RT
ME	195,208	213,351	-18,143	91.5%
NH	201,885	204,280	-2,395	98.8%
VT	98,318	102,208	-3,890	96.2%
CT	526,767	512,829	13,938	102.7%
RI	143,358	139,081	4,277	103.1%
SEMA	237,304	249,679	-12,375	95.0%
WCMA	322,547	325,707	-3,161	99.0%
NEMA	434,867	439,378	-4,511	99.0%

4. Energy Market Supply

4.1 Day-Ahead Supply

The following graph displays hourly day-ahead generation obligation, along with cleared day-ahead increment offers and day-ahead imports.



The following table displays the average hourly day-ahead generation obligation, along with cleared day-ahead increment offers and day-ahead imports, for this week, last week, the same week a year ago, and the percent change for each.

Type	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Day-Ahead Generation Obligation	13,479	13,398	0.6%	13,085	3.0%
Day-Ahead Cleared Increments	208	224	-7.3%	256	-18.8%
Day-Ahead Imports	2,542	2,581	-1.5%	2,303	10.4%

The following table provides the total Day-Ahead Imports by Interface for This Week, Last Week, the same week a year ago and the percent change for each.

Location	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
NB Ext	77,550	56,607	37.0%	42,265	83.5%
NY-N AC Ext	110,252	133,492	-17.4%	83,596	31.9%
HQ Ext	212,450	213,555	-0.5%	226,427	-6.2%
HG Ext	26,754	29,196	-8.4%	34,581	-22.6%
CSC Ext	0	0	0.0%	0	0.0%
NNC Ext	0	718	-100.0%	0	0.0%

4.2 Real-Time Supply

The ISO reports daily metered generation by registered type of fuel on a weekly basis in the "Weekly Market Performance Report." The table below shows the relationship between the detailed fuel types registered with ISO New England (shown on the right) and the categories (on the left) into which they have been aggregated for reporting. The ISO aggregates the detailed fuel types to avoid disclosing information that could affect market competitiveness. Multiple fuel types shown, such as 'Coal/Oil,' denote dual-fuel capability. In the case of dual-fuel capable units, tabulations here will reflect the primary fuel as registered with the ISO which may not necessarily be the actual fuel used by the unit on a given day.

Category	Fuel Types
Coal	Coal
	Coal/Oil
Gas	Natural Gas
	Gas/Oil
Hydro	Pondage
	Pumped Storage
	Reservoir
	Run of River
Nuclear	Nuclear
Oil	Diesel Oil
	Jet Fuel Oil
	Oil
Refuse	Landfill Gas
	Methane/Refuse
	Refuse
	Steam
	Steam/Refuse
	Wood/Refuse
Solar	Solar
Wind	Wind

The following table provides daily and weekly totals, in megawatt-hours (MWh), of the amount of electricity produced by each fuel type (as registered) during the week. The data provided are for the full system, including "settlement only" generators that do not offer their output into the wholesale markets. Annual files of Daily Generation by Fuel Type may be found on the ISO's web site here.

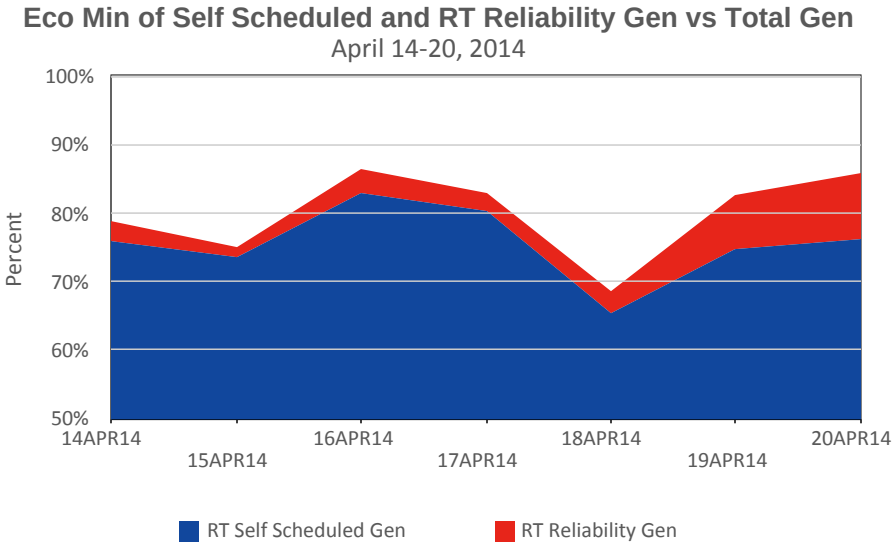
Category	Metered Generation (Megawatt hours)							
	14APR14	15APR14	16APR14	17APR14	18APR14	19APR14	20APR14	Total
Coal	14,537	17,960	16,692	16,989	16,014	12,753	3,608	98,552
Gas	137,424	139,457	139,410	146,422	139,207	127,703	127,060	956,683
Hydro	31,096	30,720	33,177	33,314	31,312	30,185	28,120	217,924
Nuclear	60,911	60,780	60,890	60,773	60,736	59,944	60,836	424,870
Oil	102	96	207	925	253	266	0	1,849
Refuse	14,578	14,697	16,846	17,115	17,791	17,761	18,277	117,064

Category	Metered Generation (Megawatt hours)							
	14APR14	15APR14	16APR14	17APR14	18APR14	19APR14	20APR14	Total
Solar	981	268	1,311	1,464	841	1,511	1,590	7,966
Wind	8,973	10,647	8,091	3,127	3,313	7,549	2,534	44,234
Total	268,602	274,625	276,624	280,129	269,466	257,672	242,025	1,869,143

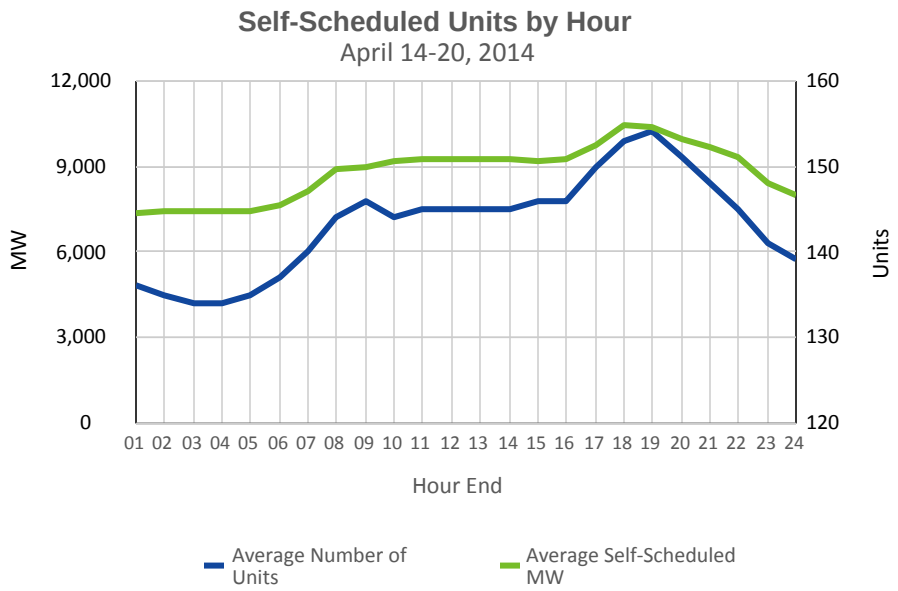
Online generators that are at their Economic Minimum output level are not eligible to set the clearing price. Real-Time Self-Scheduled Generation shown below reflects output by self-scheduled generation and by (non-dispatchable) Settlement Only Generators (SOGs). Real-Time Reliability Generation represents the aggregate economic minimum output level of generation committed for reliability reasons. The following table shows the sum of generation self scheduled (and SOGs), and that of real-time reliability committed units, and, for reference, the total daily generation in megawatts by day for the current week.

Day	Self Scheduled MWh	Real-Time Reliability MWh	Total Generation MWh
14APR14	203,974	7,893	268,611
15APR14	202,402	4,114	274,629
16APR14	229,633	9,713	276,624
17APR14	224,718	7,873	280,129
18APR14	175,971	8,940	269,466
19APR14	192,292	20,425	257,672
20APR14	184,493	23,531	242,025

The following graph shows the total economic minimum MWh of self-scheduled generation and generation committed for reliability as a percentage of total generation.



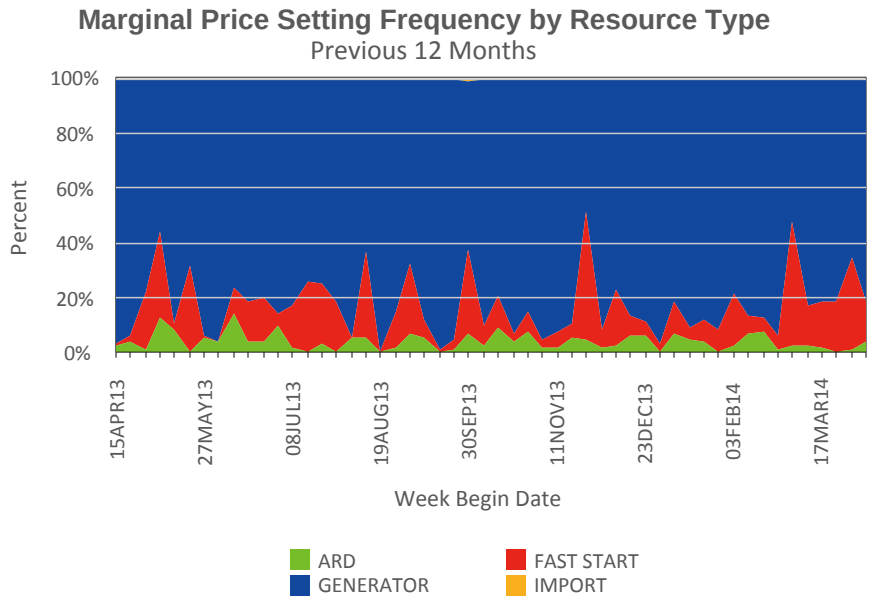
The following graph shows the average number of self-scheduled generating units and MWh for each hour of the last week.



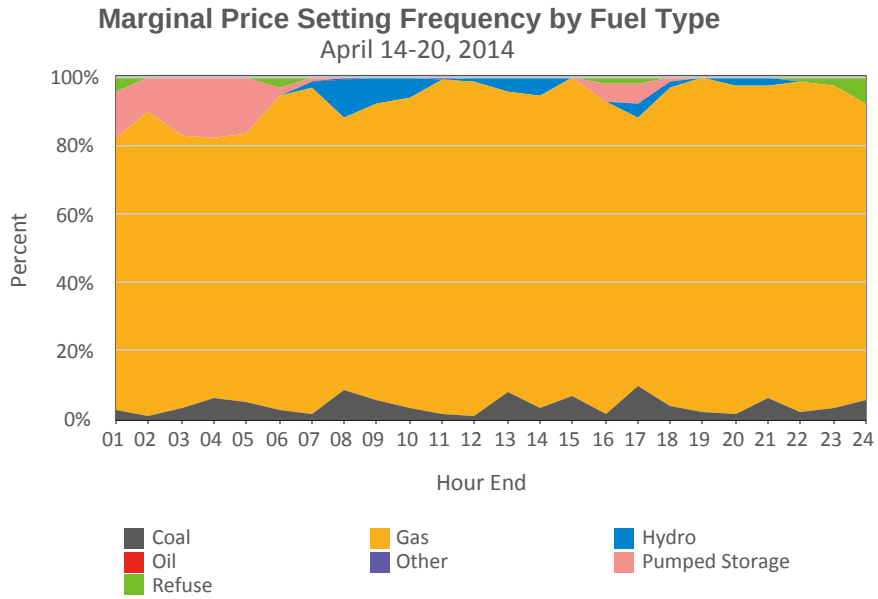
The following table provides the total real-time imports by interface for this week, last week, the same week a year ago, and the percent change for each.

Location	This Week (MWh)	Last Week (MWh)	% Chg vs. Prior Week	Last Year (MWh)	% Chg vs. Prior Year
NB Ext	75,311	68,578	9.8%	50,980	47.7%
NY-N AC Ext	120,189	156,325	-23.1%	105,937	13.5%
HQ Ext	217,177	226,681	-4.2%	236,342	-8.1%
HG Ext	26,432	28,797	-8.2%	34,582	-23.6%
CSC Ext	0	0	0.0%	0	0.0%
NNC Ext	0	1,624	-100.0%	405	-100.0%

The following graph shows the percentage of time in which a particular resource-type was responsible for setting the price during each of the last 52 weeks.



The next graph shows the percentage of time in which a particular fuel-type, as registered, was responsible for setting the price during each hour of the last week.



5. Net Commitment Period Compensation (NCPC)

The following three tables show daily NCPC payments for the week. The first two tables display day-ahead and real-time NCPC payments by day, separated by NCPC categories. The third table shows day-ahead and real-time second contingency reliability payments separated by reliability region.

Day-Ahead Reliability Payments (NCPC) by Day
April 14-20, 2014

Date	1st Contingency Reliability Cost Payments (Internal Locations)	1st Contingency Reliability Cost Payments (External Locations)	2nd Contingency Reliability Cost Payments	Voltage Reliability Cost Payments	Distribution Reliability Cost Payments	Generator Performance Audit
14APR14	$73,653	$0	$119,009	$55,704	N/A	N/A
15APR14	$108,293	$0	$97,724	$111,003	N/A	N/A
16APR14	$86,095	$4	$81,467	$126,600	N/A	N/A
17APR14	$81,127	$0	$74,308	$141,537	N/A	N/A
18APR14	$258,954	$0	$98,892	$105,516	N/A	N/A
19APR14	$168,066	$0	$363,771	$74,299	N/A	N/A
20APR14	$140,827	$0	$347,393	$0	N/A	N/A
Total DA	$917,016	$4	$1,182,563	$614,658	N/A	N/A

Real-Time Reliability Payments (NCPC) by Day
April 14-20, 2014

Date	1st Contingency Reliability Cost Payments (Internal Locations)	1st Contingency Reliability Cost Payments (External Locations)	2nd Contingency Reliability Cost Payments	Voltage Reliability Cost Payments	Distribution Reliability Cost Payments	Generator Performance Audit
14APR14	$32,211	$525	$0	$0	$0	$0
15APR14	$11,160	$798	$196	$0	$0	$0
16APR14	$27,721	$0	$0	$0	$0	$0
17APR14	$31,676	$3	$0	$0	$0	$0
18APR14	$10,540	$1,476	$617	$0	$0	$0
19APR14	$500	$0	$15,334	$0	$51,573	$0
20APR14	$12,942	$662	$28,688	$0	$0	$0
Total RT	$126,750	$3,463	$44,835	$0	$51,573	$0
DA and RT	$1,043,766	$3,467	$1,227,398	$614,658	$51,573	$0

Total Second Contingency Reliability Payments (NCPC)
By Reliability Region
April 14-20, 2014

Reliability Region	DA Reliability Payments	RT Reliability Payments	Total Reliability Payments
ME Region	$355,207	$22,849	$378,056
NH Region	$124,179	$0	$124,179
VT Region	$0	$0	$0
CT Region	$0	$0	$0
RI Region	$355,295	$2,066	$357,361
SEMA Region	$290,176	$19,107	$309,282
WCMA Region	$57,707	$813	$58,519
NEMA Region	$0	$0	$0

6. Reserve Markets

The results of the most recent Forward Reserve Market Auction, covering Winter 2013-2014 Procurement Period (October-May), may be found on the ISO's Web site located here.

The following table shows the Daily Forward Reserve Daily Threshold Prices for the past week.

Forward Reserve Daily Threshold Prices
April 14-20, 2014

Day	Daily Threshold Price
14APR14	$65.12
15APR14	$82.36
16APR14	$86.19
17APR14	$82.04
18APR14	$68.16
19APR14	$68.16
20APR14	$68.16

Forward Reserve Market (FRM) payments by reserve zone made during the prior week are shown in the following table. These figures are preliminary and subject to revision during the settlement process.

FRM Payment Summary by Reserve Zone
April 14-20, 2014

Reserve Zone	Reserve Product	Max FRM Payment	Total FRM Credits	Failure to Reserve Penalties	Failure to Activate Penalties	Total FRM Performance	Pct. of Max.
ALL	TMNSR	$1,915,613	$1,817,251	-$147,573	$0	$1,669,677	87.2%
ALL	TMOR	$694,668	$641,842	-$79,265	$0	$562,577	81.0%
ALL	ALL	$2,610,281	$2,459,093	-$226,839	$0	$2,232,254	85.5%
ROS	TMNSR	$1,383,685	$1,307,788	-$113,869	$0	$1,193,918	86.3%
ROS	TMOR	$191,091	$188,815	-$3,414	$0	$185,401	97.0%
ROS	ALL	$1,574,776	$1,496,603	-$117,284	$0	$1,379,319	87.6%
SWCT	TMNSR	$0	$0	$0	$0	$0	N/A
SWCT	TMOR	$149,335	$145,842	-$5,240	$0	$140,602	94.2%
SWCT	ALL	$149,335	$145,842	-$5,240	$0	$140,602	94.2%
CT	TMNSR	$531,928	$509,463	-$33,704	$0	$475,759	89.4%
CT	TMOR	$354,243	$307,185	-$70,610	$0	$236,574	66.8%
CT	ALL	$886,170	$816,648	-$104,314	$0	$712,334	80.4%
NEMABSTN	TMNSR	$0	$0	$0	$0	$0	N/A
NEMABSTN	TMOR	$0	$0	$0	$0	$0	N/A
NEMABSTN	ALL	$0	$0	$0	$0	$0	N/A

The following two tables show FRM charges allocated to each load zone during the prior week and the real-time reserve payments by reserve zone. These figures are also preliminary and subject to revision during the settlement process.

FRM Charge Summary by Load Zone
April 14-20, 2014

Load Zone	FRM Charge
ME	$212,145
NH	$210,237
VT	$102,880
CT	$543,002
RI	$143,895
SEMA	$257,613
WCMA	$308,590
NEMA	$453,891

Real-Time Reserve Payment Summary by Reserve Zone
April 14-20, 2014

Date	CT	NEMABSTN	ROS	SWCT	Total
16APR14	$0	$44	$7,557	$105	$7,706
17APR14	$0	$111	$3,871	$22	$4,003
20APR14	$0	$0	$9	$0	$9
Total	$0	$155	$11,437	$127	$11,719

The follow table show real-time reserve clearing prices. These figures are also preliminary and subject to revision during the settlement process.

Real-Time Reserve Clearing Prices
April 14-20, 2014

		SW Connecticut			Connecticut			NEMA/Boston			Rest Of System		
Day	Hr	TMSR	TMNSR	TMOR	TMSR	TMNSR	TMOR	TMSR	TMNSR	TMOR	TMSR	TMNSR	TMOR
16APR14	7	$1.96	$0.00	$0.00	$1.96	$0.00	$0.00	$1.96	$0.00	$0.00	$1.96	$0.00	$0.00
16APR14	8	$4.46	$0.00	$0.00	$4.46	$0.00	$0.00	$4.46	$0.00	$0.00	$4.46	$0.00	$0.00
16APR14	20	$0.34	$0.00	$0.00	$0.34	$0.00	$0.00	$0.34	$0.00	$0.00	$0.34	$0.00	$0.00
16APR14	21	$6.66	$0.00	$0.00	$6.66	$0.00	$0.00	$6.66	$0.00	$0.00	$6.66	$0.00	$0.00
17APR14	7	$0.33	$0.00	$0.00	$0.33	$0.00	$0.00	$0.33	$0.00	$0.00	$0.33	$0.00	$0.00
17APR14	8	$6.79	$0.00	$0.00	$6.79	$0.00	$0.00	$6.79	$0.00	$0.00	$6.79	$0.00	$0.00
17APR14	9	$2.42	$0.00	$0.00	$2.42	$0.00	$0.00	$2.42	$0.00	$0.00	$2.42	$0.00	$0.00
17APR14	10	$0.32	$0.00	$0.00	$0.32	$0.00	$0.00	$0.32	$0.00	$0.00	$0.32	$0.00	$0.00
20APR14	7	$0.01	$0.00	$0.00	$0.01	$0.00	$0.00	$0.01	$0.00	$0.00	$0.01	$0.00	$0.00

The table below displays the time intervals, reserve types, and bias adjustment values for any reserve bias adjustments during this week.

Real-Time Reserve Bias
April 14-20, 2014

Day	Reserve Bias
Apr 14-20, 2014	None

7. Glossary and Links

7.1 Locational Marginal Price (LMP)

A LMP is a calculated price of wholesale electric energy at a pricing node, load zone, reliability region, or the Hub. LMPs are comprised of three components: energy, congestion, and marginal losses. The energy component is the same at all locations, while the congestion and marginal loss components can vary among locations. More information on LMPs can be found at the ISO web site located here.

Analyze: Weekly Average Day-Ahead LMP Statistics, Hub and Load Zones (53 weeks, Excel format.)
TAB NAME: 'Avg DA and RT LMP Hub and Zones'

Analyze: Weekly Average Congestion and Loss Components, Hub and Load Zones (53 weeks, Excel format.)
TAB NAME: 'Average Congestion and Loss'

7.2 Day-Ahead and Real-Time Energy Markets

Day-Ahead and Real-Time Demand

Participants can bid fixed and price sensitive asset-based demand into the Day-Ahead Energy Market. They can also submit virtual demand bids called decrement (DECs) bids as well as external transaction bids. Day-ahead load obligation (DALO) is the result of clearing the Day-Ahead Energy Market, and is easily aggregated by location. DALO is the total MWh of cleared asset demand bids, cleared locational demand bids, cleared DECs and cleared exports at all locations. Real-time load obligation (RTLO) is the total MWhs of a participant's metered load. RTLO, less DALO positions on a locational basis represents a participant's RT Adjusted Net Interchange deviation.

Analyze: Weekly Total Day-Ahead and Real-Time Load Obligation, Hub and Zones (53 weeks, Excel format)
TAB NAME: 'Total DA and RT Load Obligation'

Day-Ahead and Real-Time Supply

Participants can offer "must run" and Economic asset-based supply into the Day-Ahead Energy Market. They can also submit virtual supply offers called increment (INCs) bids as well as external transaction offers or bids. Day-ahead generation obligation (DAGO) is the result of clearing the Day-Ahead Energy Market, and is easily aggregated by location. DAGO is the total MWhs of cleared asset supply offers, cleared INC offers, and cleared imports at all locations. Real-time generation obligation deviation (RTGO) is the total MWh of a participant's metered generation less their DAGO positions.

Analyze: Weekly Total Day-Ahead Generation Obligation, Hub and Zones (53 weeks, Excel format)
TAB NAME: 'DA Supply'

Analyze: Marginal Fuel Type by Week (53 weeks, Excel format).
TAB NAME: 'Percent Marginal Fuel Type'

Analyze: Marginal Resource Type by Week (53 weeks, Excel format).
TAB NAME: 'Percent Marginal Resource Type'

System Load

System load is 'net energy' for load on the system and is defined as the sum of generation and net external interchange, less pumping load. Real-time load obligation is the sum of all revenue quality metered load within the control area plus real-time external transaction sales (purchases on the ties are ignored).

For more information on the Day-Ahead and Real-Time Energy Markets and associated charges, see the ISO web site here for day-ahead and here for real-time.

7.3 Net Commitment Period Compensation (NCPC)

Reliability payments are made to eligible generators that have a shortfall between their revenue (based on clearing prices in the energy and regulation markets), and their offer (based on their energy offer, start-up fee, and no-load fee). Certain external transactions and virtual transactions are also eligible for these payments. These "make-whole" payments for reliability are calculated through the NCPC settlement process.

For more information on the Day-Ahead and Real-Time Energy Markets and associated charges, see the ISO web site here for day-ahead and here for real-time.

Analyze: Total Day-Ahead and Real-Time NCPC Payment, by Week (53 weeks, Excel format)
TAB NAME: 'Total DA and RT NCPC Payments'

Analyze: Total Day-Ahead and Real-Time NCPC Components, by Week (53 weeks, Excel format)
TAB NAME: 'Total DA and RT NCPC Components'

7.4 Reserve Market

The reserve markets are composed of the Forward Reserve Market (FRM) and Real-Time Reserve Markets. The FRM is the procurement mechanism for delivery of reserve products to meet TMNSR and TMOR requirements in New England during on-peak hours. Market Participants submit offers for FRM obligations in specific reserve zones to the Forward Reserve Market Auction, which occurs twice annually prior to each Seasonal Capability Period.

The real-time LMP calculation process simultaneously sets Real-Time Reserve Market Clearing Prices (RMCP) for Ten-Minute Spinning Reserve (TMSR), Ten-Minute Non-Spinning Reserve (TMNSR), and Thirty-Minute Operating Reserve (TMOR).

For more information on the Forward Reserve Market and Real-Time Reserve Market, see the ISO web site located here.

Analyze: Total Forward Reserve Market Results, by Week (53 weeks, Excel format)
TAB NAME: 'Total Forward Reserve Market'

Document Revision History		
Date	**Version**	**Remarks**
4/24/2014	Original	Initial posting.