Weekly Market Summary

June 9-15, 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: June 9-15, 2014

Notable Events

- A Minimum Generation Emergency was declared on Saturday, June 14, from 2:00 a.m. to 7:00 a.m., resulting in four hours with $0/MWh LMPs system-wide during that time period.
- A Minimum Generation Emergency was declared on Sunday June 15, from 12:00 a.m. to 1:00 p.m., resulting in twelve hours with $0/MWh LMPs system-wide during that time period.

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	$35.44	$35.96	-1.4%	$33.48	5.9%
Real-Time Energy Market; All Hours	$29.49	$31.78	-7.2%	$31.51	-6.4%

Weekly Demand Statistics (MWh)	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Peak Load (MW - Preliminary)	17,522	17,397	0.7%	16,530	6.0%
DA Load Obligation (All Zones)	-2,294,661	-2,259,702	1.5%	-2,221,412	3.3%
RT Load Obligation (All Zones)	-2,313,017	-2,305,403	0.3%	-2,267,692	2.0%
DA Cleared Exports (All Interfaces)	-81,266	-87,596	-7.2%	-94,173	-13.7%
RT Scheduled Exports (All Interfaces)	-99,964	-105,368	-5.1%	-127,031	-21.3%

Weekly Supply Statistics	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Input Fuel Price (Natural Gas, $/MMBtu)	$4.06	$3.99	1.6%	$4.00	1.3%
Mass Average Input Fuel Price (Natural Gas, $/MMBtu)	$4.29	$3.95	8.6%	$3.96	8.4%
Metered Generation (MWh)	2,059,060	2,056,672	0.1%	2,018,810	2.0%
Generation Obligation (MWh)	2,443,447	2,439,354	0.2%	2,431,902	0.5%
Self-Scheduled Generation (MWh)	1,603,167	1,679,458	-4.5%	1,556,115	3.0%
DA Cleared Imports (MWh - All Interfaces)	378,749	365,525	3.6%	371,687	1.9%
RT Scheduled Imports (MWh - All Interfaces)	384,387	382,682	0.4%	413,092	-6.9%

Weekly Reliability Costs (NCPC)	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Total NCPC ($)	$1,181,995	$535,481	120.7%	$679,255	74.0%

Reserve Market Payments	This Week	Last Week	% Chg vs. Prior Week	Last Year	% Chg vs. Prior Year
Forward Reserve Market Payments ($)	$5,075,737	$4,600,320	10.3%	$1,430,600	Large
Real-Time Reserve Market Payments ($)	$19,980	$82,963	-75.9%	$63,177	-68.4%

Underlying natural gas data furnished by:

ICE Global markets in clear view

Day-Ahead Price Separation

- On Thursday, June 12, depressed pricing in the Vermont (VT) Load zone was caused by a binding constraint on the Sheffield-Highgate Export Interface due to the planned outage of the K21 (Essex-Georgia) line. The K21 line was restored on June 12.
- On Saturday, June 14, elevated pricing in the Rhode Island (RI) Load Zone was caused by a binding constraint on the Rhode Island Import Interface due to patterns of load and generation.

Real-Time Price Separation

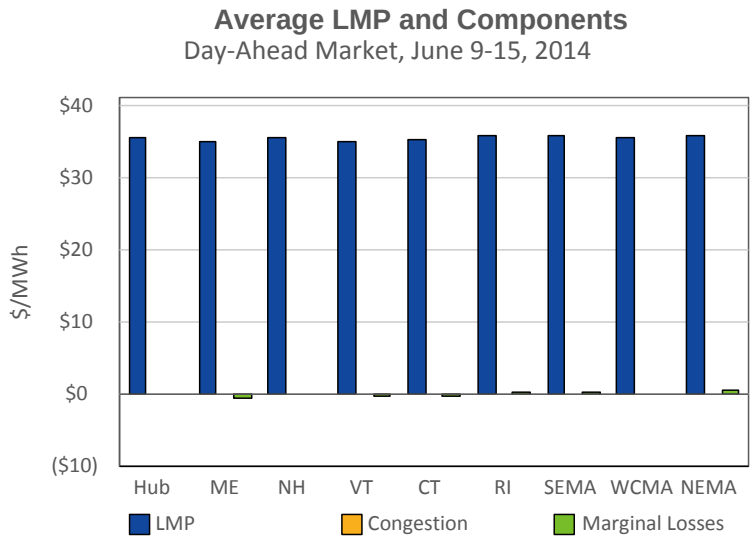
- On Friday, June 13, elevated pricing in the RI and Southeastern Massachusetts (SEMA) Load Zones, in addition to depressed pricing in the Connecticut (CT) Load Zone was caused by a binding constraint on the 1870S (Shunock-Wood River) line due to the planned outage of the 347 (Killingly-Sherman Road) line. The 347 line was restored on June 14.

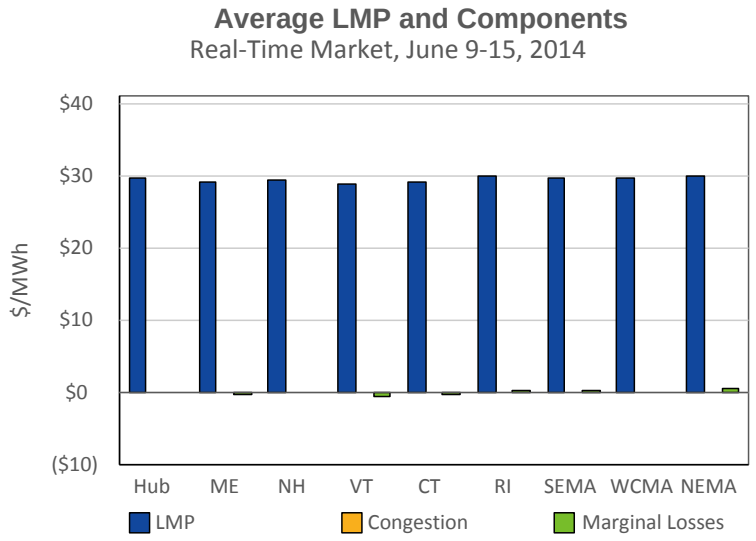
Real-Time Price Corrections

- In the hours ending 1:00 a.m., 2:00 a.m., 7:00 a.m., and 8:00 a.m. on Sunday, June 15, due to a software error. The LMPs for all Load Zones and Hub were not affected.

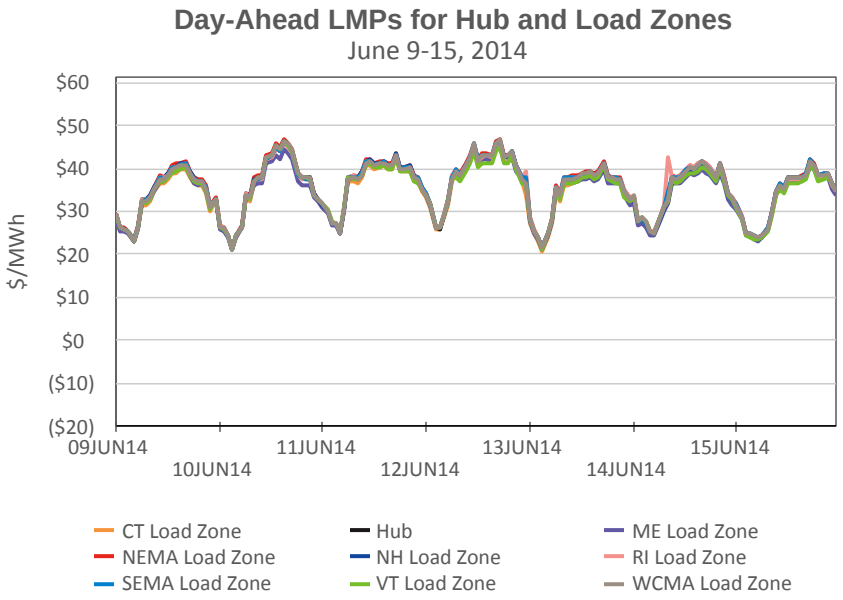
2. Pricing

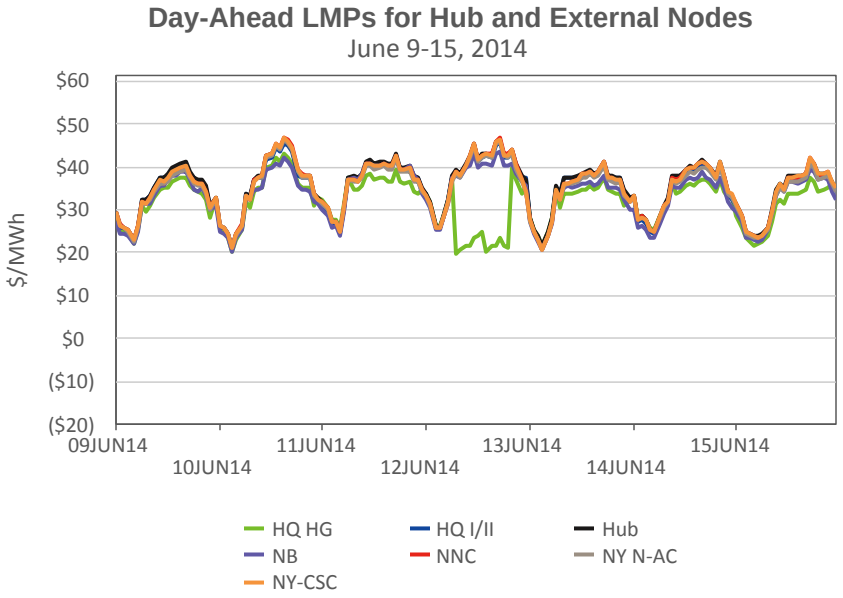
The two graphs below show the weekly average LMPs, congestion, and marginal loss components at the Hub and load zones for both the Day-Ahead and Real-Time Energy Markets.



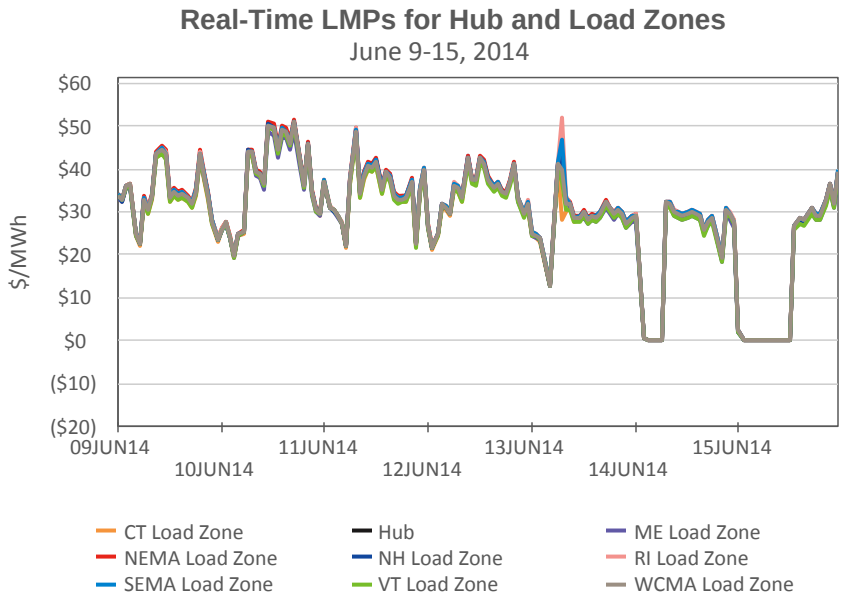


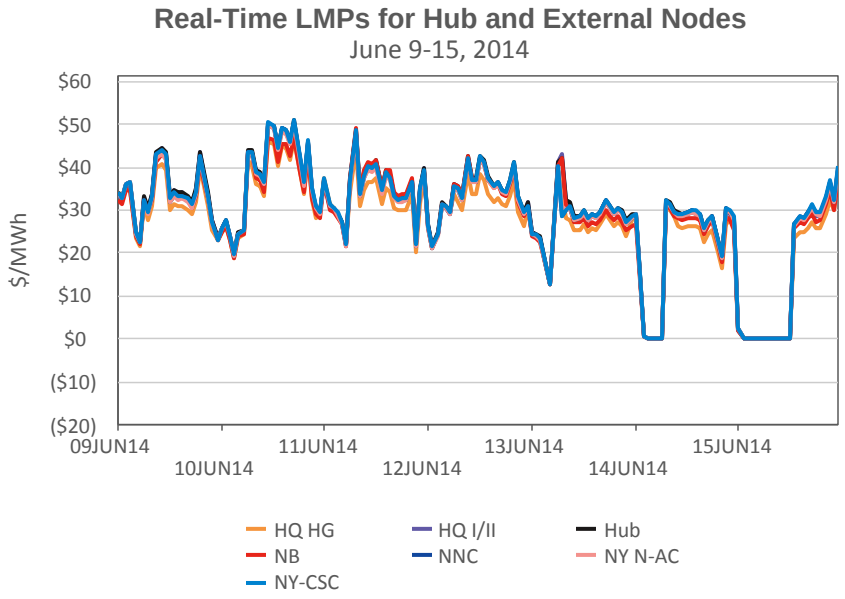
The following two graphs show hourly day-ahead LMPs for the Hub, the eight load zones, and the five external nodes. In cases where there is little or no price separation, the lines for multiple locations may be indistinguishable from each other.


Day-Ahead LMPs for Hub and Load Zones
June 9-15, 2014
$/MWh
$60
$50
$40
$30
$20
$10
$0
($10)
($20)
09JUN14
10JUN14
11JUN14
12JUN14
13JUN14
14JUN14
15JUN14
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
June 9-15, 2014
$/MWh
$60
$50
$40
$30
$20
$10
$0
($10)
($20)
09JUN14
10JUN14
11JUN14
12JUN14
13JUN14
14JUN14
15JUN14
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.

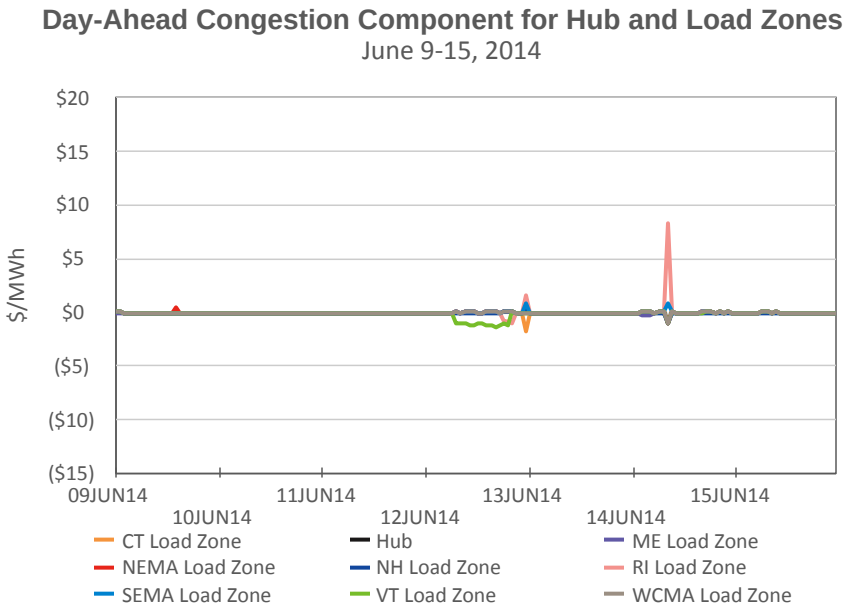


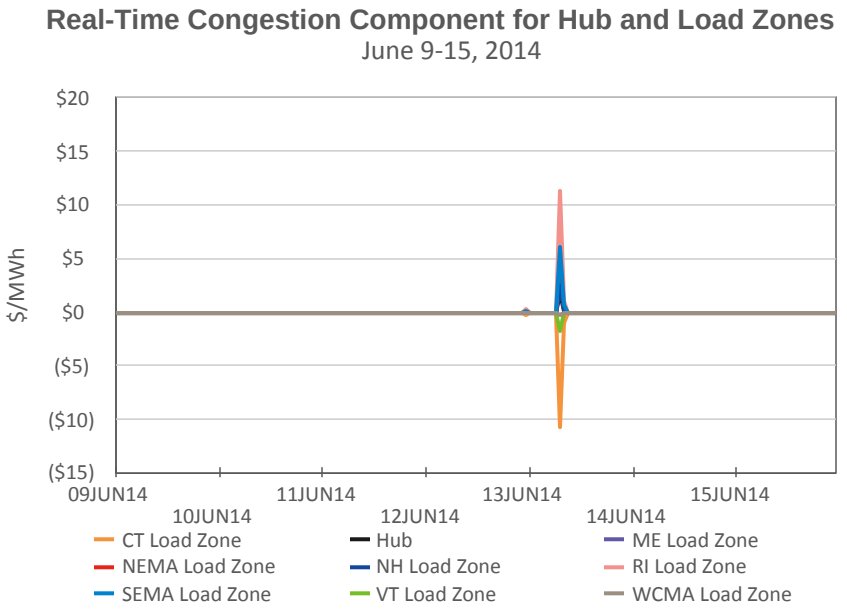


LMP Summary Statistics, June 9-15, 2014

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	$35.44	$29.49	$21.28	$0.00	$46.42	$50.74	1.00	1.00	0.83	6.13	12.19	1.99
ME	$34.70	$29.00	$21.00	$0.00	$44.97	$49.20	0.98	0.98	0.84	5.95	12.03	2.02
NH	$35.41	$29.40	$21.26	$0.00	$46.47	$50.58	1.00	1.00	0.83	6.15	12.21	1.98
VT	$34.90	$28.76	$21.16	$0.00	$46.42	$49.94	0.98	0.98	0.82	5.86	11.91	2.03
CT	$34.96	$28.95	$20.82	$0.00	$46.50	$50.41	0.99	0.98	0.83	6.09	11.96	1.96
RI	$35.54	$29.69	$21.34	$0.00	$46.13	$52.11	1.00	1.01	0.84	6.03	12.27	2.04
SEMA	$35.52	$29.66	$21.19	$0.00	$46.44	$50.78	1.00	1.01	0.83	6.15	12.27	1.99
WCMA	$35.46	$29.43	$21.34	$0.00	$46.57	$50.73	1.00	1.00	0.83	6.14	12.16	1.98
NEMA	$35.77	$29.85	$21.36	$0.00	$46.85	$51.38	1.01	1.01	0.83	6.25	12.38	1.98
NB Ext	$33.60	$28.40	$20.40	$0.00	$43.34	$48.96	0.95	0.96	0.85	5.74	11.79	2.05
NY-N AC Ext	$34.61	$28.78	$20.84	$0.00	$46.15	$50.01	0.98	0.98	0.83	5.94	11.88	2.00
HQ Ext	$34.96	$29.20	$21.06	$0.00	$45.61	$50.08	0.99	0.99	0.84	6.00	12.08	2.01
HG Ext	$31.69	$27.11	$19.59	$0.00	$43.08	$46.31	0.89	0.92	0.86	5.52	11.12	2.02
CSC Ext	$35.07	$29.23	$20.85	$0.00	$46.66	$50.91	0.99	0.99	0.83	6.11	12.08	1.98
NNC Ext	$35.06	$29.01	$20.85	$0.00	$46.91	$50.67	0.99	0.98	0.83	6.14	11.99	1.95

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.





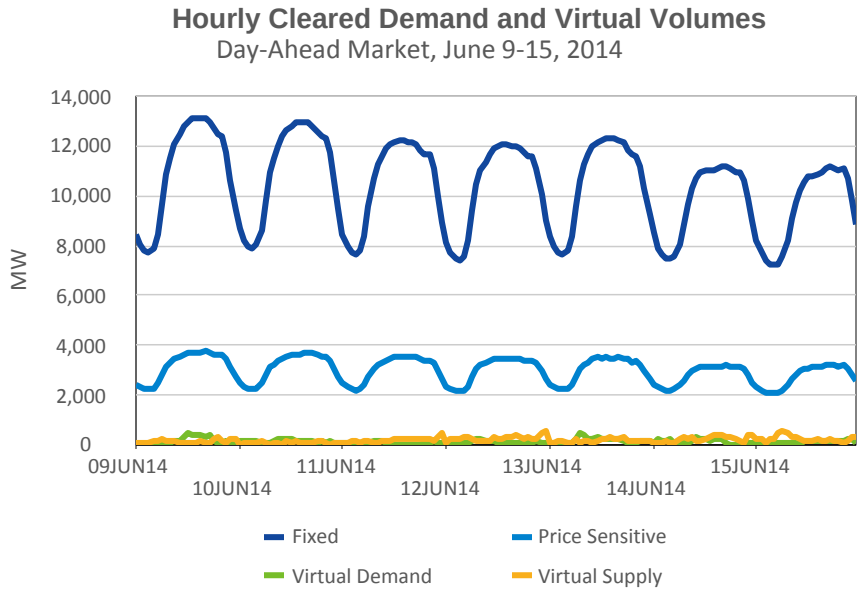
3. Energy Market Demand

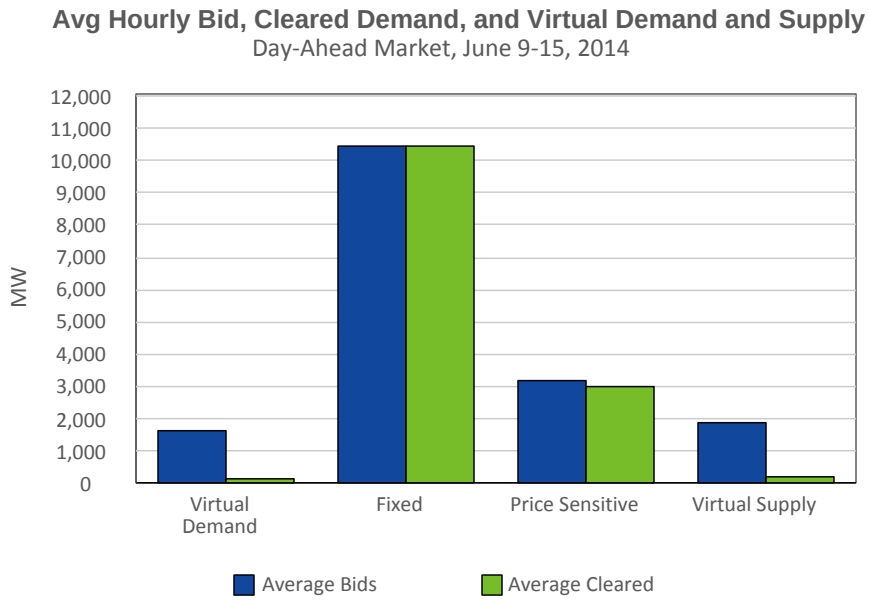
3.1 Day-Ahead Demand

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	4,136	5,868	-29.5%	6,327	-34.6%
ME	196,788	190,905	3.1%	186,480	5.5%
NH	209,646	205,050	2.2%	207,555	1.0%
VT	102,740	101,042	1.7%	102,504	0.2%
CT	569,039	561,918	1.3%	554,497	2.6%
RI	149,873	147,256	1.8%	143,694	4.3%
SEMA	260,209	255,504	1.8%	255,361	1.9%
WCMA	338,016	337,332	0.2%	313,917	7.7%
NEMA	464,213	454,827	2.1%	451,077	2.9%
NB Ext	2,296	440	Large	0	Large
NY-N AC Ext	17,924	18,736	-4.3%	19,375	-7.5%
HQ Ext	0	0	0.0%	0	0.0%
HG Ext	152	122	24.4%	250	-39.2%
CSC Ext	48,720	55,440	-12.1%	54,980	-11.4%
NNC Ext	12,361	13,071	-5.4%	21,418	-42.3%

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)
June 9-15, 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	09JUN14	0	0	674	3,631	0	0	484	1,571	484
Hub	10JUN14	0	0	1,435	1,572	0	0	835	132	835
Hub	11JUN14	0	0	540	2,440	0	0	310	850	310
Hub	12JUN14	0	0	537	2,667	0	0	297	1,137	297
Hub	13JUN14	0	0	704	1,802	0	0	504	132	504
Hub	14JUN14	0	0	757	1,983	0	0	517	433	517
Hub	15JUN14	0	0	1,428	2,827	0	0	1,188	1,107	1,188
ME	09JUN14	23,281	6,322	10,406	6,326	23,281	5,975	1,752	546	31,008
ME	10JUN14	22,907	5,840	11,536	9,311	22,907	5,529	342	415	28,778
ME	11JUN14	22,593	5,644	9,860	9,736	22,593	5,285	300	1,242	28,179
ME	12JUN14	22,086	6,222	9,940	9,552	22,086	5,553	476	1,421	28,115
ME	13JUN14	21,731	5,706	10,312	9,329	21,731	5,368	608	634	27,707
ME	14JUN14	20,604	5,973	12,787	8,591	20,604	5,575	218	1,231	26,398
ME	15JUN14	20,751	6,226	13,707	8,709	20,751	5,636	216	1,525	26,603
NH	09JUN14	18,530	13,442	3,011	6,711	18,530	13,442	553	698	32,525
NH	10JUN14	18,393	12,639	3,263	7,011	18,393	12,621	1,052	596	32,066
NH	11JUN14	17,632	12,273	3,092	7,248	17,632	12,271	542	1,216	30,445
NH	12JUN14	17,176	11,922	3,856	7,275	17,176	11,922	910	1,669	30,008
NH	13JUN14	17,496	11,818	3,728	6,865	17,496	11,807	910	842	30,213
NH	14JUN14	15,809	11,141	3,280	6,609	15,809	11,099	634	1,708	27,542
NH	15JUN14	15,508	10,974	2,996	6,154	15,508	10,952	388	1,201	26,848
VT	09JUN14	891	14,744	1,378	2,431	891	14,744	288	399	15,924
VT	10JUN14	759	14,459	1,377	2,328	759	14,459	187	192	15,405
VT	11JUN14	859	14,299	1,339	2,824	859	14,299	139	472	15,297
VT	12JUN14	711	13,961	1,093	3,508	711	13,961	367	562	15,039
VT	13JUN14	711	13,867	2,675	3,370	711	13,867	199	498	14,777
VT	14JUN14	822	12,475	2,406	2,839	822	12,475	45	851	13,342
VT	15JUN14	839	12,028	2,455	2,498	839	12,028	89	247	12,956
CT	09JUN14	65,520	17,821	2,823	6,194	65,520	17,797	80	77	83,397
CT	10JUN14	67,149	19,670	2,931	8,231	67,149	18,626	161	367	85,937
CT	11JUN14	65,446	19,082	2,919	8,388	65,446	18,143	66	191	83,655
CT	12JUN14	64,550	18,774	2,889	8,181	64,550	17,720	66	520	82,336
CT	13JUN14	66,052	19,178	3,717	8,417	66,052	18,374	964	926	85,390
CT	14JUN14	57,221	17,718	3,133	6,113	57,221	16,676	550	544	74,447
CT	15JUN14	57,103	17,362	3,186	5,592	57,103	16,411	363	339	73,877
RI	09JUN14	19,404	2,857	3,312	5,226	19,404	2,857	50	12	22,311
RI	10JUN14	19,563	2,934	3,306	6,683	19,563	2,934	60	240	22,557
RI	11JUN14	18,744	2,838	3,314	7,244	18,744	2,838	8	532	21,589
RI	12JUN14	18,526	2,785	3,306	7,449	18,526	2,785	0	838	21,311
RI	13JUN14	18,724	2,826	3,306	7,854	18,724	2,826	148	750	21,698
RI	14JUN14	17,982	2,466	3,746	5,903	17,982	2,466	440	228	20,888
RI	15JUN14	17,184	2,335	3,066	6,426	17,184	2,335	0	49	19,519

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	09JUN14	34,535	4,521	246	1,817	34,535	4,486	6	14	39,026
SEMA	10JUN14	34,457	5,553	240	1,803	34,457	4,418	50	0	38,925
SEMA	11JUN14	32,571	5,284	250	2,117	32,571	4,180	10	38	36,760
SEMA	12JUN14	32,970	5,342	0	2,185	32,970	4,188	0	52	37,158
SEMA	13JUN14	33,055	5,439	2,640	2,043	33,055	4,434	740	0	38,229
SEMA	14JUN14	31,200	5,498	2,040	1,709	31,200	4,364	0	0	35,564
SEMA	15JUN14	30,272	5,369	1,442	2,188	30,272	4,275	0	109	34,547
WCMA	09JUN14	39,429	9,361	2,912	5,273	39,429	9,337	146	172	48,912
WCMA	10JUN14	38,508	10,474	2,997	5,332	38,508	9,430	315	115	48,253
WCMA	11JUN14	36,837	10,213	2,924	5,404	36,837	9,199	12	86	46,048
WCMA	12JUN14	35,549	10,197	2,597	5,532	35,549	9,133	30	174	44,712
WCMA	13JUN14	37,294	10,192	2,699	5,522	37,294	9,243	110	30	46,646
WCMA	14JUN14	34,164	9,255	2,802	4,959	34,164	8,211	403	164	42,778
WCMA	15JUN14	32,815	8,827	2,424	6,421	32,815	7,788	0	885	40,603
NEMA	09JUN14	64,093	7,783	942	1,504	64,093	7,759	446	0	72,298
NEMA	10JUN14	63,175	8,453	766	1,504	63,175	7,394	340	0	70,909
NEMA	11JUN14	58,632	8,149	634	1,722	58,632	7,105	88	12	65,824
NEMA	12JUN14	57,818	8,071	634	1,746	57,818	7,007	88	72	64,913
NEMA	13JUN14	59,501	8,209	579	1,867	59,501	7,203	43	123	66,747
NEMA	14JUN14	56,253	7,414	777	1,464	56,253	6,355	231	88	62,839
NEMA	15JUN14	54,233	7,327	722	1,722	54,233	6,273	176	2	60,682

3.2 Real-Time Demand

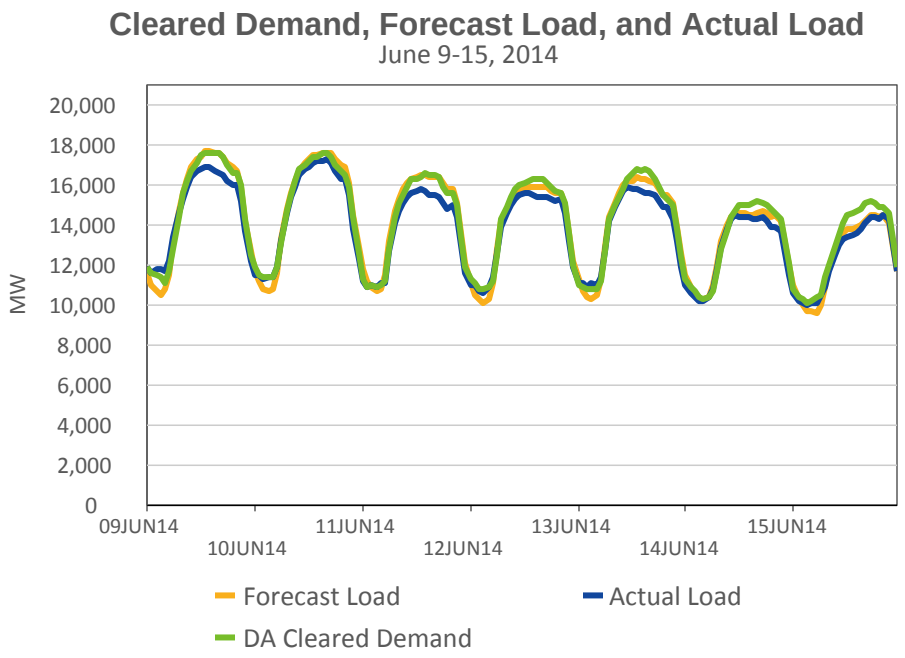
The following table displays the real-time load obligation at each load zone and external nodes for this week, last week, the same week a year ago, and the percent change for each.

Location	This Week (MWh)	Last Week (MWh)	% Chg vs. Prior Week	Last Year (MWh)	% Chg vs. Prior Year
ME	216,232	215,742	0.2%	204,343	5.8%
NH	211,966	210,712	0.6%	208,127	1.8%
VT	102,464	102,464	-0.0%	102,231	0.2%
CT	550,993	562,690	-2.1%	550,726	0.0%
RI	149,685	146,011	2.5%	148,255	1.0%
SEMA	274,493	266,415	3.0%	273,343	0.4%
WCMA	337,951	339,082	-0.3%	327,183	3.3%
NEMA	469,234	462,286	1.5%	453,483	3.5%
NB Ext	10,570	8,470	24.8%	3,252	Large
NY-N AC Ext	26,331	25,832	1.9%	44,557	-40.9%
HQ Ext	0	0	0.0%	0	0.0%
HG Ext	0	0	0.0%	0	0.0%
CSC Ext	48,605	55,300	-12.1%	54,980	-11.6%
NNC Ext	14,458	15,766	-8.3%	24,242	-40.4%

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
09JUN14	14	17,196	$34.86	$34.58	$35.08	$33.77	$33.74	$35.17	$35.14	$34.69	$35.55
10JUN14	17	17,522	$46.06	$44.21	$45.90	$45.16	$45.58	$45.79	$46.15	$46.02	$46.74
11JUN14	14	16,038	$35.24	$35.46	$35.40	$34.21	$34.35	$35.33	$35.50	$35.13	$35.86
12JUN14	14	15,872	$41.46	$41.11	$41.35	$40.13	$40.89	$41.39	$41.68	$41.40	$41.99
13JUN14	12	16,085	$28.82	$27.92	$28.60	$27.80	$28.35	$28.76	$28.94	$28.77	$29.20
14JUN14	13	14,688	$29.57	$28.63	$29.15	$28.41	$29.33	$29.95	$29.81	$29.51	$29.87
15JUN14	21	14,749	$32.71	$31.82	$32.22	$31.43	$32.69	$32.74	$32.98	$32.70	$32.99

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.



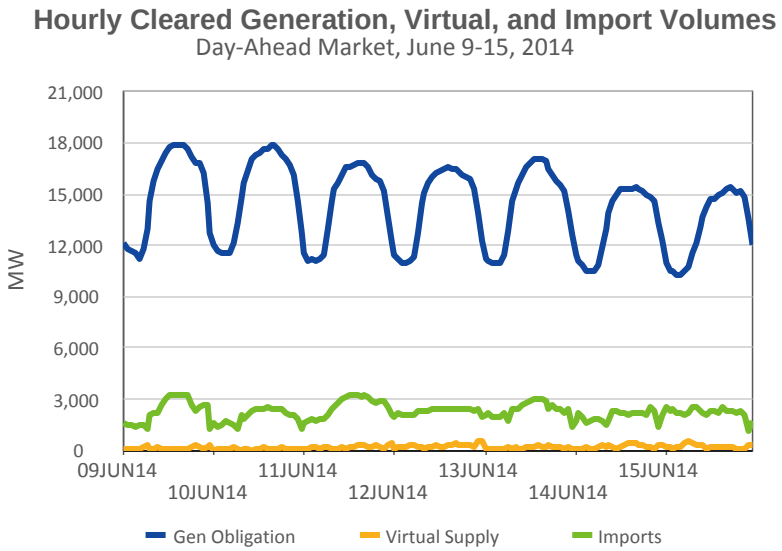
The table below compares the total quantities (MWh) of day-ahead load obligation with the real-time load obligation for each Load Zone (including nodal locations within each Load Zone) for the week. Day-ahead load obligation is composed of day-ahead cleared demand bids and cleared decrement bids. Real-time 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	196,788	216,232	-19,444	91.0%
NH	209,646	211,966	-2,320	98.9%
VT	102,740	102,464	276	100.3%
CT	569,039	550,993	18,046	103.3%
RI	149,873	149,685	189	100.1%
SEMA	260,209	274,493	-14,284	94.8%
WCMA	338,016	337,951	66	100.0%
NEMA	464,213	469,234	-5,021	98.9%

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	14,334	14,160	1.2%	13,998	2.4%
Day-Ahead Cleared Increments	190	176	7.9%	191	-0.8%
Day-Ahead Imports	2,254	2,176	3.6%	2,212	1.9%

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	40,159	34,372	16.8%	66,218	-39.4%
NY-N AC Ext	106,257	110,006	-3.4%	38,485	176.1%
HQ Ext	205,513	192,524	6.7%	230,673	-10.9%
HG Ext	26,499	28,622	-7.4%	36,162	-26.7%
CSC Ext	0	0	0.0%	0	0.0%
NNC Ext	321	0	0.0%	149	115.4%

4.2 Real-Time Supply

Weekly Market Summary

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

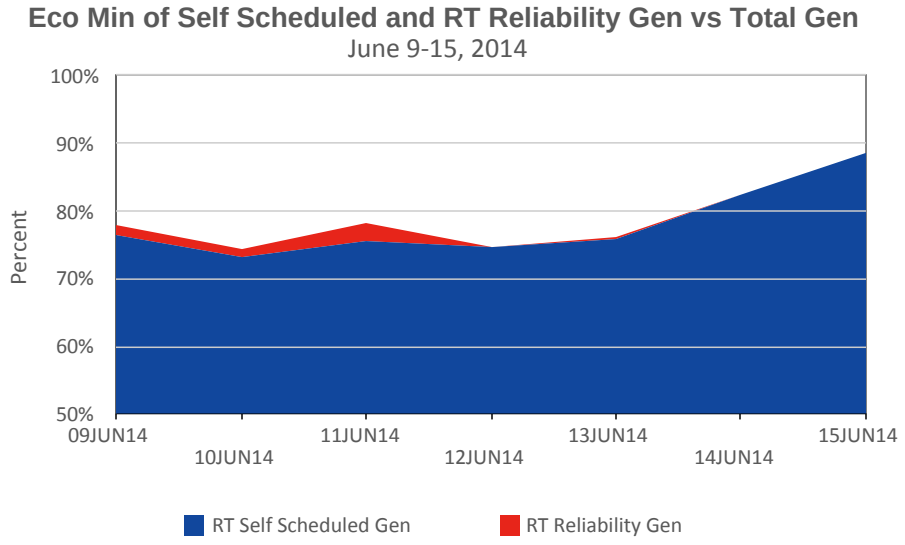
The following table provides daily and weekly totals, in megawatt-hours (MWh), of the amount of electricity produced by each fuel type (as registered) during the week. The data provided are for the full system, including "settlement only" generators that do not offer their output into the wholesale markets.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

	Metered Generation (Megawatt hours)							
Category	09JUN14	10JUN14	11JUN14	12JUN14	13JUN14	14JUN14	15JUN14	Total
Coal	40	44	0	30	0	182	6	303
Gas	162,751	173,588	136,014	135,678	131,895	112,700	96,276	948,902
Hydro	19,104	18,481	15,601	17,322	20,315	26,935	25,612	143,370
Nuclear	111,128	110,858	110,780	110,925	111,120	111,214	111,349	777,375
Oil	0	17	59	1,273	736	45	31	2,161
Refuse	19,764	20,372	20,718	21,239	20,545	20,344	21,605	144,586
Solar	761	869	1,057	566	358	950	1,778	6,338
Wind	1,367	3,178	3,243	5,974	8,424	5,026	8,715	35,926
Total	314,915	327,407	287,473	293,005	293,392	277,396	265,372	2,058,960

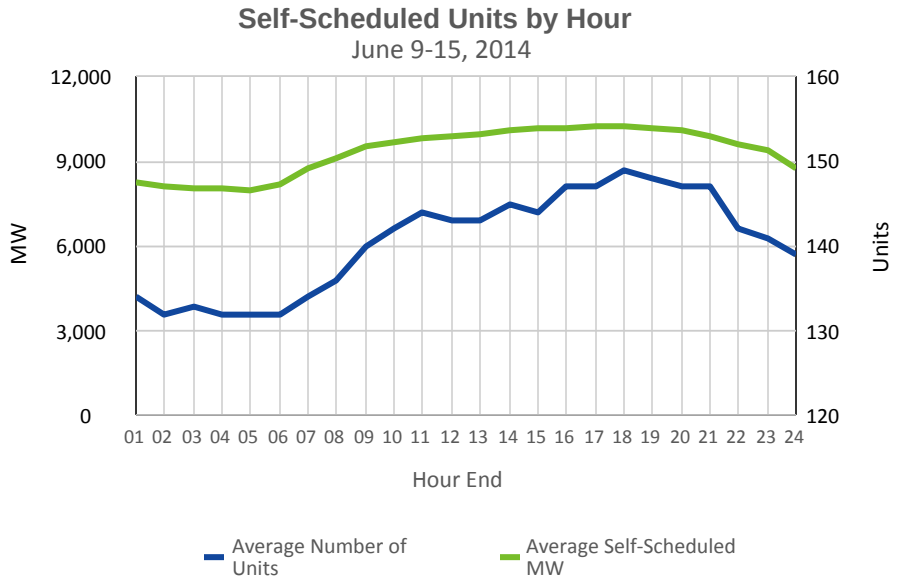
Online generators that are at their Economic Minimum output level are not eligible to set the clearing price. Real-Time Self-Scheduled Generation shown below reflects output by self-scheduled generation and by (non-dispatchable) Settlement Only Generators (SOGs). Real-Time Reliability Generation represents 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
09JUN14	241,084	4,230	314,929
10JUN14	239,270	4,210	327,421
11JUN14	217,552	7,097	287,489
12JUN14	219,037	0	293,020
13JUN14	222,695	800	293,407
14JUN14	228,456	0	277,413
15JUN14	235,073	0	265,381

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



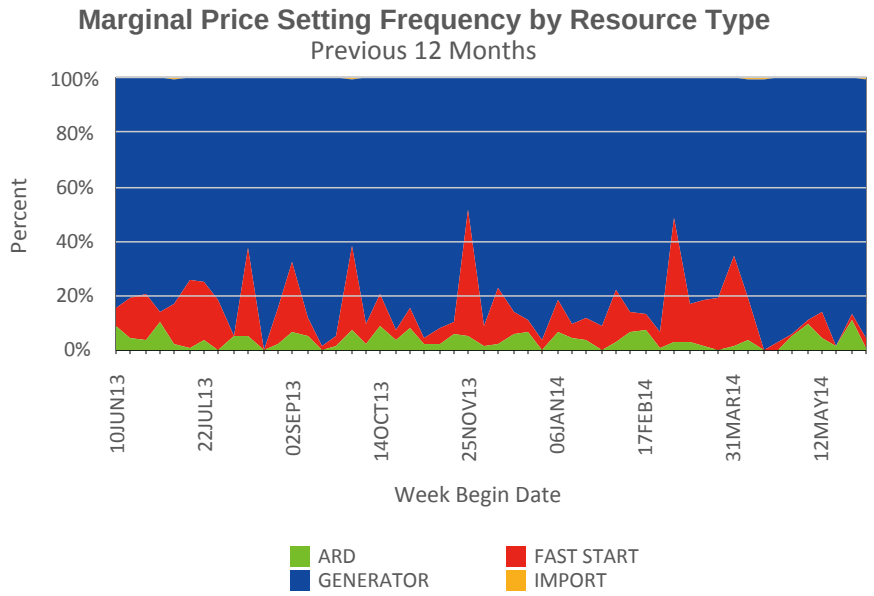
The following graph shows the average number of self-scheduled generating units and MWh for each hour of the last week.



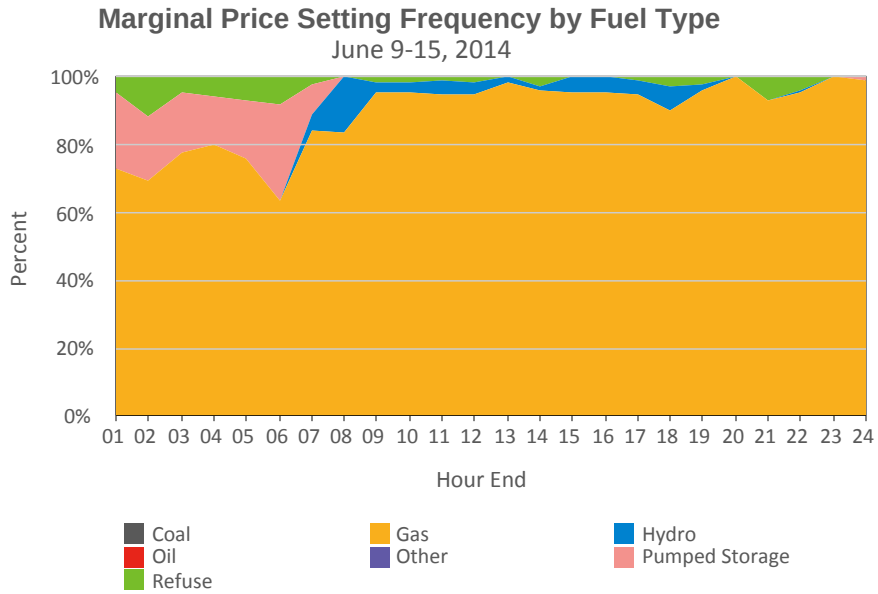
The following table provides the total real-time imports by interface for this week, last week, the same week a year ago, and the percent change for each.

Location	This Week (MWh)	Last Week (MWh)	% Chg vs. Prior Week	Last Year (MWh)	% Chg vs. Prior Year
NB Ext	40,410	36,378	11.1%	70,734	-42.9%
NY-N AC Ext	115,209	114,909	0.3%	51,214	125.0%
HQ Ext	201,991	201,754	0.1%	254,862	-20.7%
HG Ext	26,281	29,635	-11.3%	36,133	-27.3%
CSC Ext	0	0	0.0%	0	0.0%
NNC Ext	496	6	Large	149	Large

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
June 9-15, 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
09JUN14	$27,162	$0	$252,627	$0	N/A	N/A
10JUN14	$8,842	$0	$234,217	$0	N/A	N/A
11JUN14	$65,678	$0	$28,084	$0	N/A	N/A
12JUN14	$62,592	$0	$0	$0	N/A	N/A
13JUN14	$29,659	$0	$0	$0	N/A	N/A
14JUN14	$22,318	$0	$0	$0	N/A	N/A
15JUN14	$46,105	$0	$0	$0	N/A	N/A
Total DA	$262,356	$0	$514,927	$0	N/A	N/A

Real-Time Reliability Payments (NCPC) by Day
June 9-15, 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
09JUN14	$10,181	$0	$19,360	$0	$0	$0
10JUN14	$5,612	$1,754	$23,406	$0	$0	$0
11JUN14	$6,155	$785	$8,521	$0	$0	$0
12JUN14	$7,031	$1,831	$0	$0	$0	$0
13JUN14	$9,454	$3,663	$141,159	$0	$0	$0
14JUN14	$67,853	$5,071	$0	$0	$0	$0
15JUN14	$92,876	$0	$0	$0	$0	$0
Total RT	$199,162	$13,103	$192,447	$0	$0	$0
DA and RT	$461,518	$13,103	$707,374	$0	$0	$0

Total Second Contingency Reliability Payments (NCPC)
By Reliability Region
June 9-15, 2014

Reliability Region	DA Reliability Payments	RT Reliability Payments	Total Reliability Payments
ME Region	$0	$0	$0
NH Region	$0	$0	$0
VT Region	$0	$0	$0
CT Region	$0	$141,159	$141,159
RI Region	$28,084	$0	$28,084
SEMA Region	$0	$8,521	$8,521
WCMA Region	$0	$0	$0
NEMA Region	$486,844	$42,766	$529,610

6. Reserve Markets

The results of the most recent Forward Reserve Market Auction, covering Summer 2014 Procurement Period (June-September), 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
June 9-15, 2014

Day	Daily Threshold Price
09JUN14	$61.16
10JUN14	$69.58
11JUN14	$88.62
12JUN14	$83.31
13JUN14	$72.32
14JUN14	$78.18
15JUN14	$78.18

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
June 9-15, 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	$3,998,059	$3,896,127	-$152,914	$0	$3,743,213	93.6%
ALL	TMOR	$1,574,524	$1,477,732	-$145,207	$0	$1,332,525	84.6%
ALL	ALL	$5,572,582	$5,373,859	-$298,121	$0	$5,075,737	91.1%
ROS	TMNSR	$2,604,413	$2,502,573	-$152,778	$0	$2,349,796	90.2%
ROS	TMOR	$470,413	$465,991	-$6,636	$0	$459,355	97.6%
ROS	ALL	$3,074,826	$2,968,564	-$159,414	$0	$2,809,151	91.4%
SWCT	TMNSR	$0	$0	$0	$0	$0	N/A
SWCT	TMOR	$431,287	$344,713	-$129,876	$0	$214,837	49.8%
SWCT	ALL	$431,287	$344,713	-$129,876	$0	$214,837	49.8%
CT	TMNSR	$1,393,645	$1,393,554	-$137	$0	$1,393,417	100.0%
CT	TMOR	$672,824	$667,028	-$8,694	$0	$658,333	97.8%
CT	ALL	$2,066,469	$2,060,581	-$8,831	$0	$2,051,750	99.3%
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
June 9-15, 2014

Load Zone	FRM Charge
ME	$460,725
NH	$473,919
VT	$224,366
CT	$1,251,765
RI	$328,206
SEMA	$602,928
WCMA	$694,709
NEMA	$1,039,121

Real-Time Reserve Payment Summary by Reserve Zone
June 9-15, 2014

Date	CT	NEMABSTN	ROS	SWCT	Total
09JUN14	$4	$252	$2,319	$46	$2,620
10JUN14	$2	$659	$5,822	$71	$6,554
11JUN14	$29	$47	$2,683	$37	$2,797
12JUN14	$319	$102	$6,595	$64	$7,080
14JUN14	$14	$15	$288	$8	$325
15JUN14	$16	$8	$526	$54	$603
Total	$383	$1,083	$18,232	$281	$19,980

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

Real-Time Reserve Clearing Prices
June 9-15, 2014

		SW Connecticut			Connecticut			NEMA/Boston			Rest Of System		
Day	Hr	TMSR	TMNSR	TMOR	TMSR	TMNSR	TMOR	TMSR	TMNSR	TMOR	TMSR	TMNSR	TMOR
09JUN14	1	$0.58	$0.00	$0.00	$0.58	$0.00	$0.00	$0.58	$0.00	$0.00	$0.58	$0.00	$0.00
09JUN14	10	$1.02	$0.00	$0.00	$1.02	$0.00	$0.00	$1.02	$0.00	$0.00	$1.02	$0.00	$0.00
09JUN14	12	$0.87	$0.00	$0.00	$0.87	$0.00	$0.00	$0.87	$0.00	$0.00	$0.87	$0.00	$0.00
09JUN14	14	$0.54	$0.00	$0.00	$0.54	$0.00	$0.00	$0.54	$0.00	$0.00	$0.54	$0.00	$0.00
09JUN14	15	$1.03	$0.00	$0.00	$1.03	$0.00	$0.00	$1.03	$0.00	$0.00	$1.03	$0.00	$0.00
10JUN14	7	$0.15	$0.00	$0.00	$0.15	$0.00	$0.00	$0.15	$0.00	$0.00	$0.15	$0.00	$0.00
10JUN14	9	$0.83	$0.00	$0.00	$0.83	$0.00	$0.00	$0.83	$0.00	$0.00	$0.83	$0.00	$0.00
10JUN14	12	$6.47	$0.00	$0.00	$6.47	$0.00	$0.00	$6.47	$0.00	$0.00	$6.47	$0.00	$0.00
10JUN14	16	$1.58	$0.00	$0.00	$1.58	$0.00	$0.00	$1.58	$0.00	$0.00	$1.58	$0.00	$0.00
10JUN14	17	$0.03	$0.00	$0.00	$0.03	$0.00	$0.00	$0.03	$0.00	$0.00	$0.03	$0.00	$0.00
10JUN14	21	$0.32	$0.00	$0.00	$0.32	$0.00	$0.00	$0.32	$0.00	$0.00	$0.32	$0.00	$0.00
11JUN14	8	$3.76	$0.00	$0.00	$3.76	$0.00	$0.00	$3.76	$0.00	$0.00	$3.76	$0.00	$0.00
11JUN14	10	$0.97	$0.00	$0.00	$0.97	$0.00	$0.00	$0.97	$0.00	$0.00	$0.97	$0.00	$0.00
12JUN14	10	$3.89	$0.00	$0.00	$3.89	$0.00	$0.00	$3.89	$0.00	$0.00	$3.89	$0.00	$0.00
12JUN14	13	$1.89	$0.00	$0.00	$1.89	$0.00	$0.00	$1.89	$0.00	$0.00	$1.89	$0.00	$0.00

Day	Hr	SW Connecticut			Connecticut			NEMA/Boston			Rest Of System		
		TMSR	TMNSR	TMOR	TMSR	TMNSR	TMOR	TMSR	TMNSR	TMOR	TMSR	TMNSR	TMOR
12JUN14	14	$3.28	$0.00	$0.00	$3.28	$0.00	$0.00	$3.28	$0.00	$0.00	$3.28	$0.00	$0.00
14JUN14	8	$0.56	$0.00	$0.00	$0.56	$0.00	$0.00	$0.56	$0.00	$0.00	$0.56	$0.00	$0.00
15JUN14	22	$0.76	$0.00	$0.00	$0.76	$0.00	$0.00	$0.76	$0.00	$0.00	$0.76	$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
June 9-15, 2014

Day	Reserve Bias
Jun 9-15, 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**
6/18/2014	Rev. 1	Corrected Real-Time Price Separation explanation.
6/4/2014	Original	Initial posting.