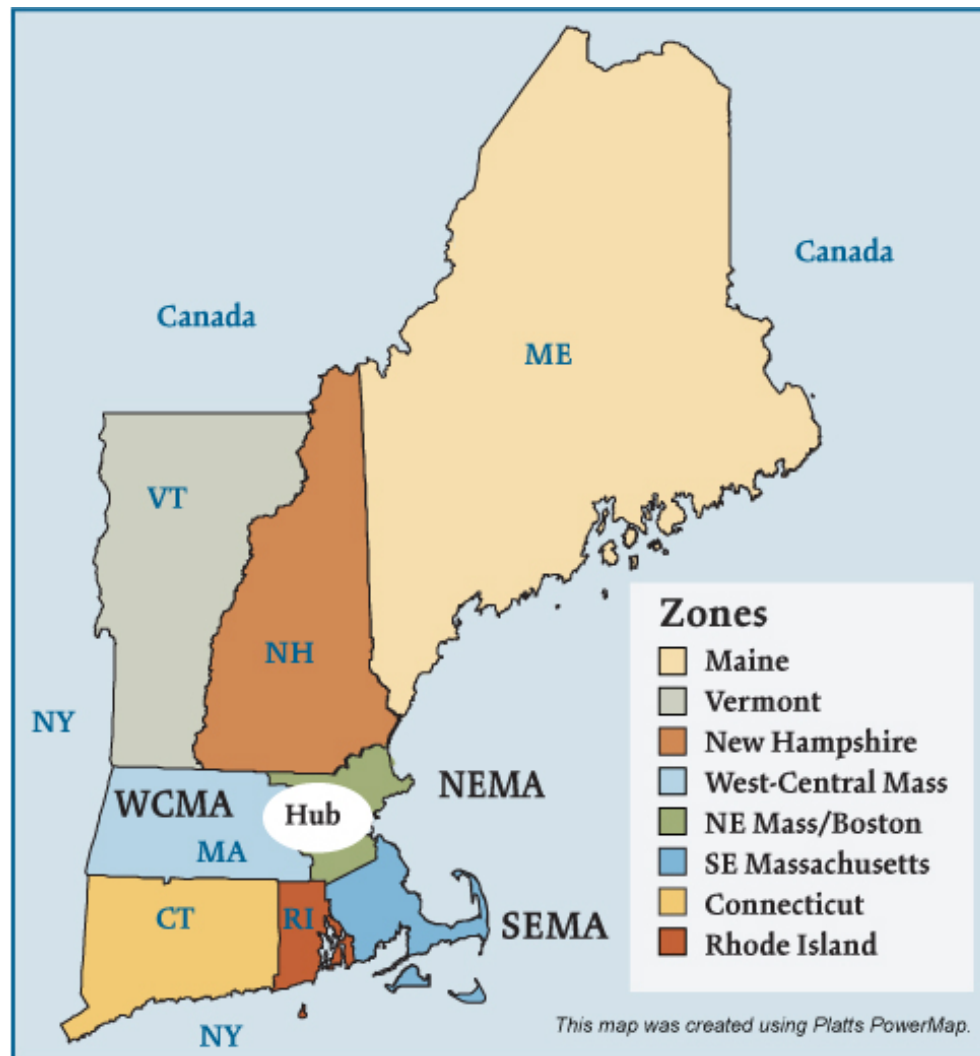


## New England (ISO-NE) Electric Regions



## Overview

### Geography

States covered: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island and Vermont

Reliability region: ISO New England (ISO-NE) sub-region of the Northeast Power Coordinating Council (NPCC)

Balancing authority: ISO New England (ISO-NE)

Load zones: Connecticut, Maine, New Hampshire, Rhode Island, Vermont, Northeastern Massachusetts/Boston (NEMA), Southeastern Massachusetts (SEMA) and Western/Central Massachusetts (WCMA).

Hub: Mass Hub

### RTO/ISO

ISO New England (ISO-NE) (established 1997) operates the region's power grid and wholesale electric markets:

- Energy market: two-settlement (day ahead and real-time) spot market with locational marginal pricing (an internal hub, eight load zones and more than 500 nodes),
- Capacity market,
- Forward reserves market,
- Regulation market, and
- Financial transmission rights market.

[ISO-NE 2009 State of the Markets Report](#)

Market Monitor: David LaPlante – Internal Market Monitor

## Generation/Supply

Marginal fuel type: natural gas

Generating capacity (summer 2007): 30,879 MW

Very little new generation has been brought on line recently in New England. The ISO states that it, "...has adequate installed capacity to meet regional capacity needs through 2009. The ISO is optimistic that adequate demand and supply resources will be purchased and installed in time to meet the projected capacity needs and the resource adequacy requirements for 2010 and beyond."

Capacity reserve (summer 2007): 4,736 MW

Reserve margin (summer 2007): 18.1%

## Demand

All time peak demand: 28,130 MW (set August 2, 2006)

In summer of 2006, demand reached record levels on several occasions due to extremely hot weather.

Peak demand growth: 7.1% (2007-2006) (weather-normalized peak increased by 1.9%)

	2004	2005	2006	2007
Summer Peak Demand (MW)	24,116	26,885	28,130	26,143
<i>Source: Derived from ISO-NE Data</i>				

Load pockets: Southwest Connecticut, Southeastern Massachusetts (SEMA), and Northeastern Massachusetts/Boston (NEMA).

## Prices

### Annual Average Price (RTO Day-Ahead Mass Hub)

**2004:** \$53.74/MWh

**2005:** \$78.63/MWh

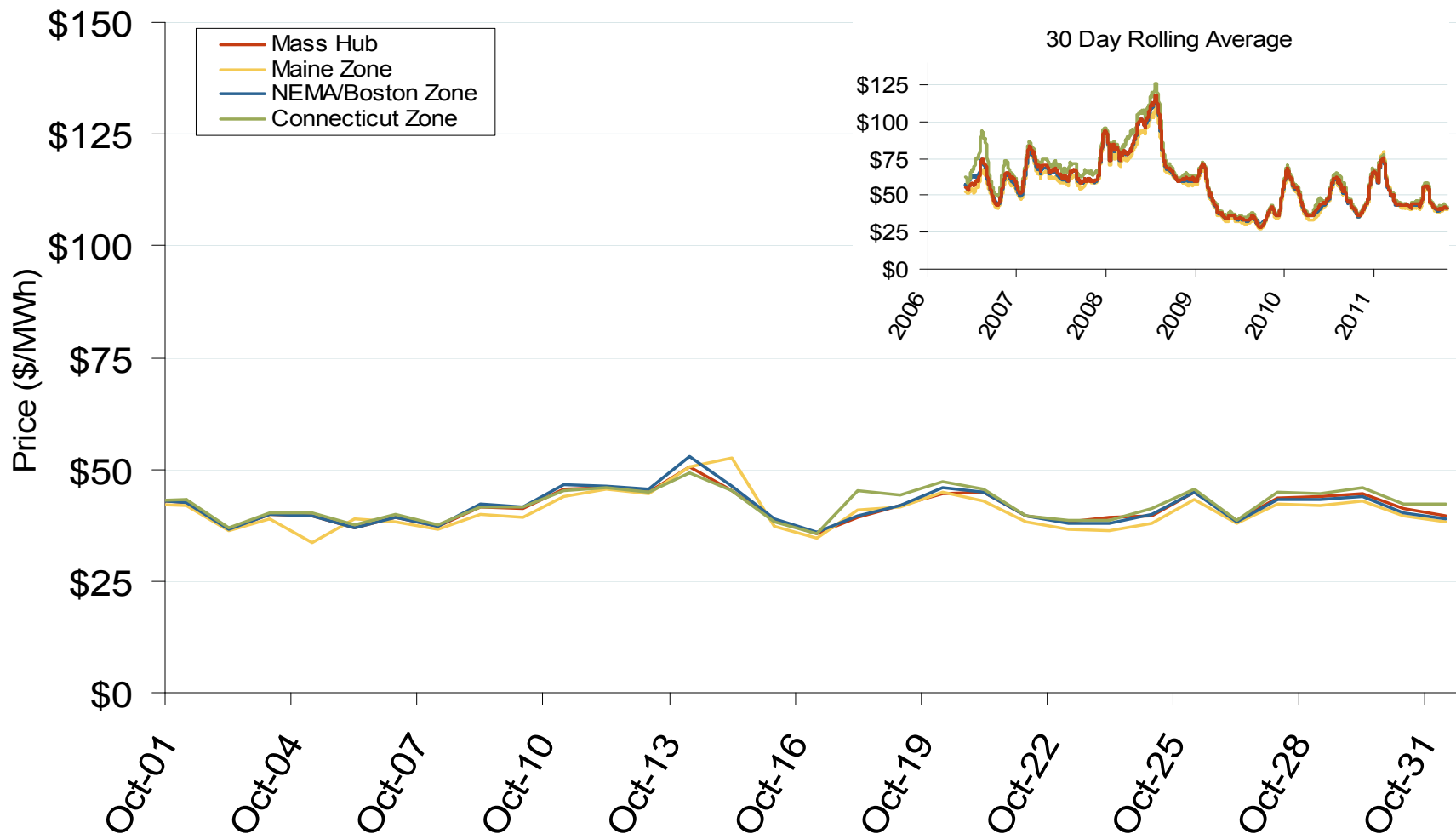
**2006:** \$60.88/MWh

**2007:** \$67.97/MWh

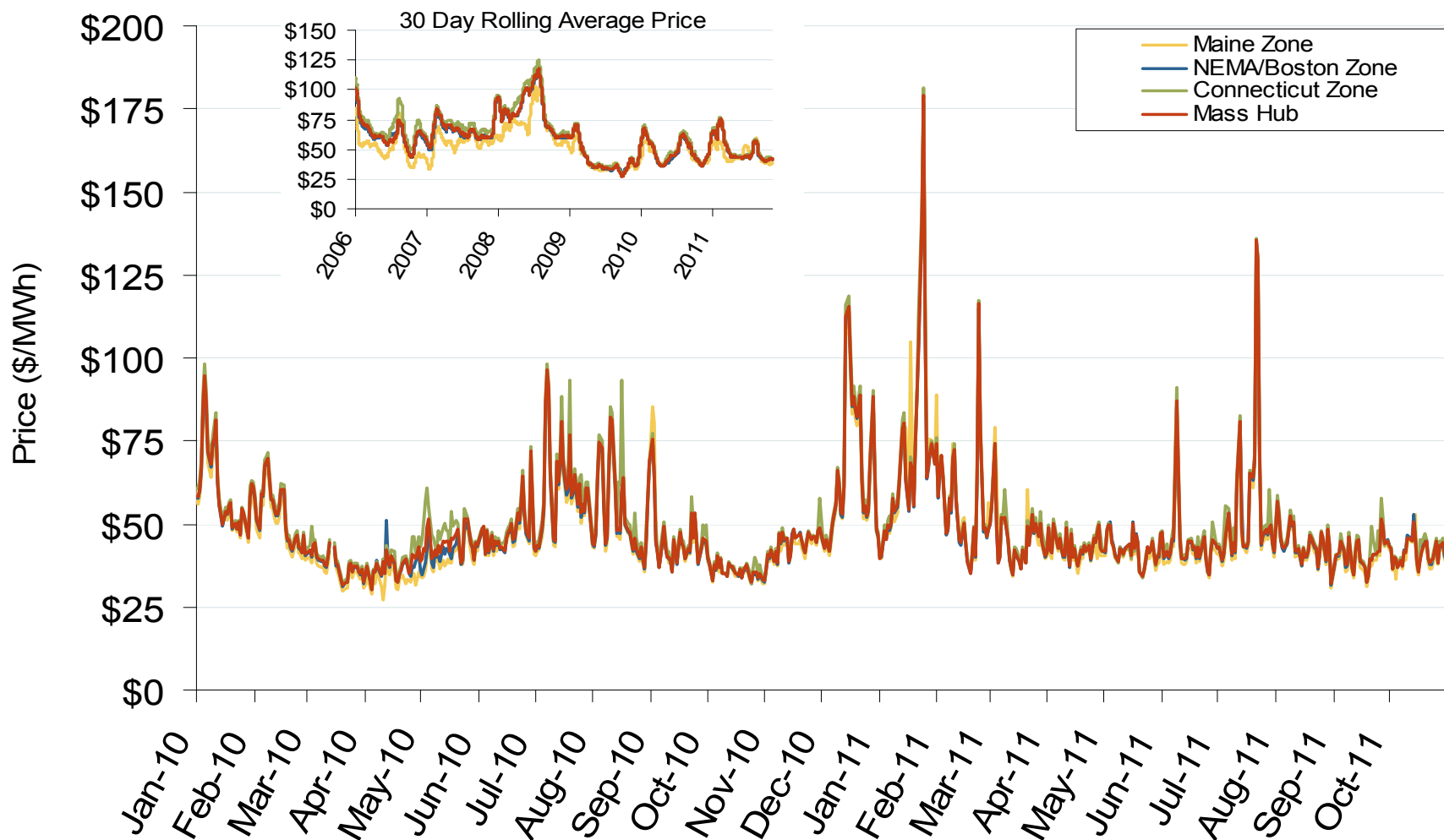
## New England Annual Average Bilateral Prices

Annual Average Day Ahead On Peak Prices (\$/MWh)						
	2006	2007	2008	2009	2010	5-Year Avg
Mass Hub	\$69.85	\$77.39	\$91.55	\$46.24	\$56.18	\$68.23
Ny Zone G	\$75.95	\$83.51	\$100.99	\$49.80	\$59.48	\$73.94
NY Zone J	\$85.96	\$94.15	\$112.63	\$55.77	\$65.76	\$82.84
NY Zone A	\$58.70	\$64.02	\$68.34	\$35.54	\$43.89	\$54.09
PJM West	\$61.90	\$71.15	\$83.70	\$44.60	\$53.68	\$63.00

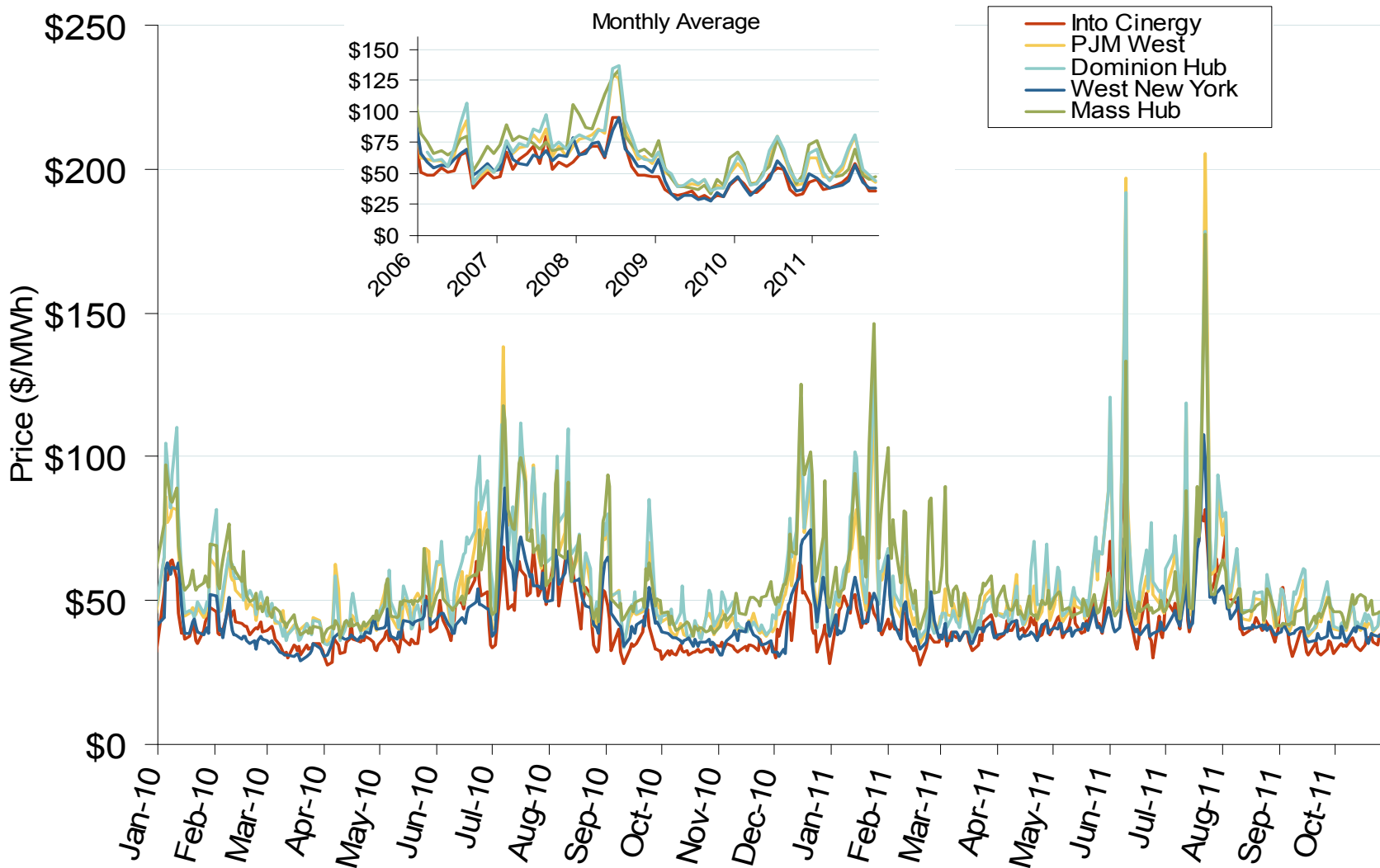
## Daily Average of ISO-NE Day-Ahead Prices - All Hours



## Daily Average of ISO-NE Day-Ahead Prices - All Hours



## Eastern Daily Bilateral Day-Ahead On-Peak Prices

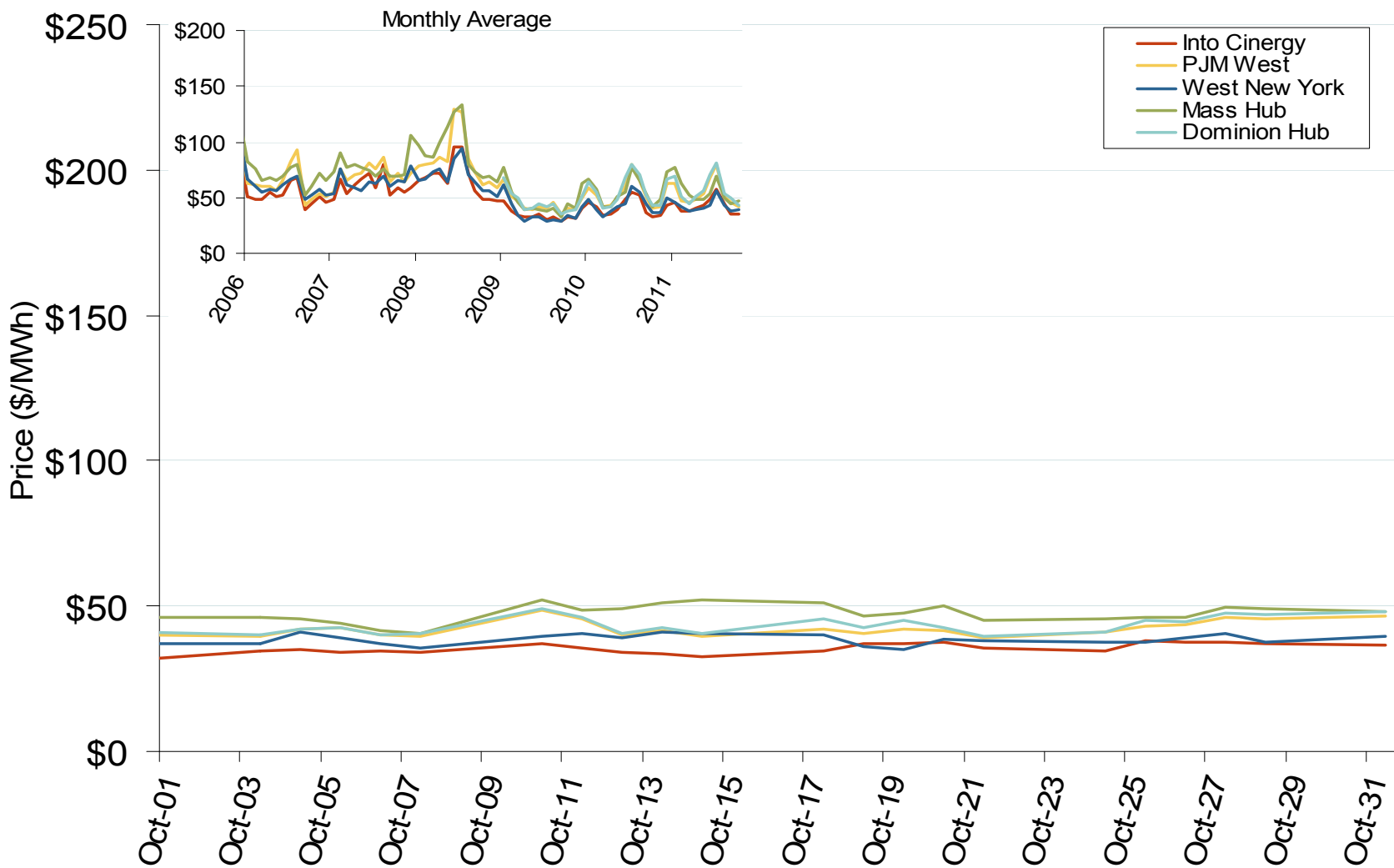




New England Electric Market: Last Month's Eastern Bilateral Prices

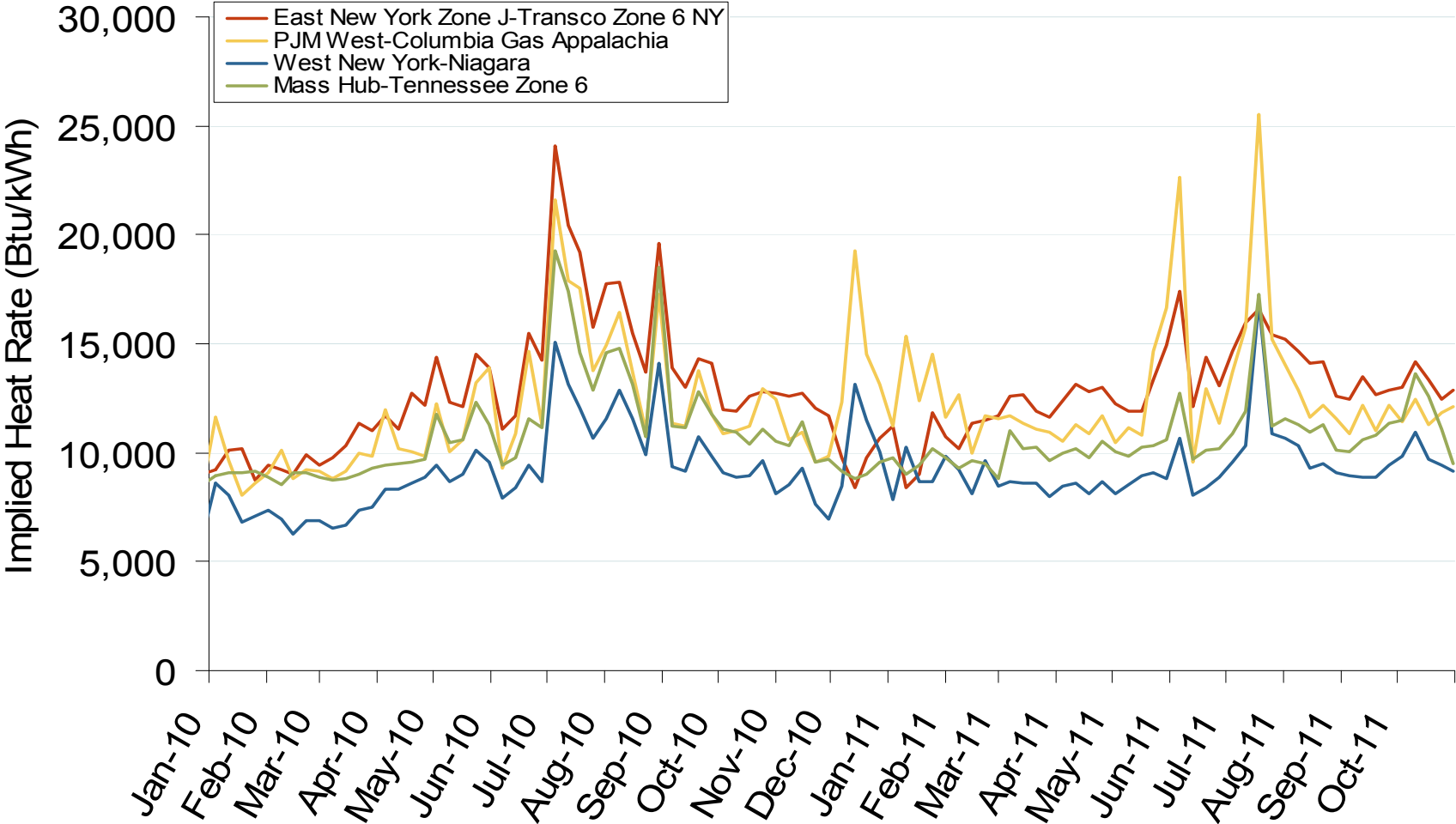
Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

## Eastern Daily Bilateral Day-Ahead On-Peak Prices



Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

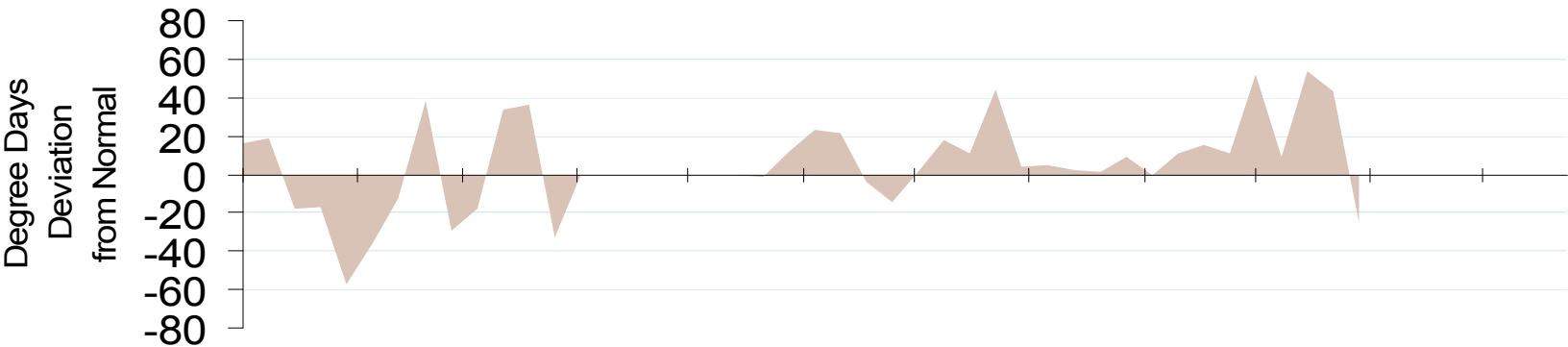
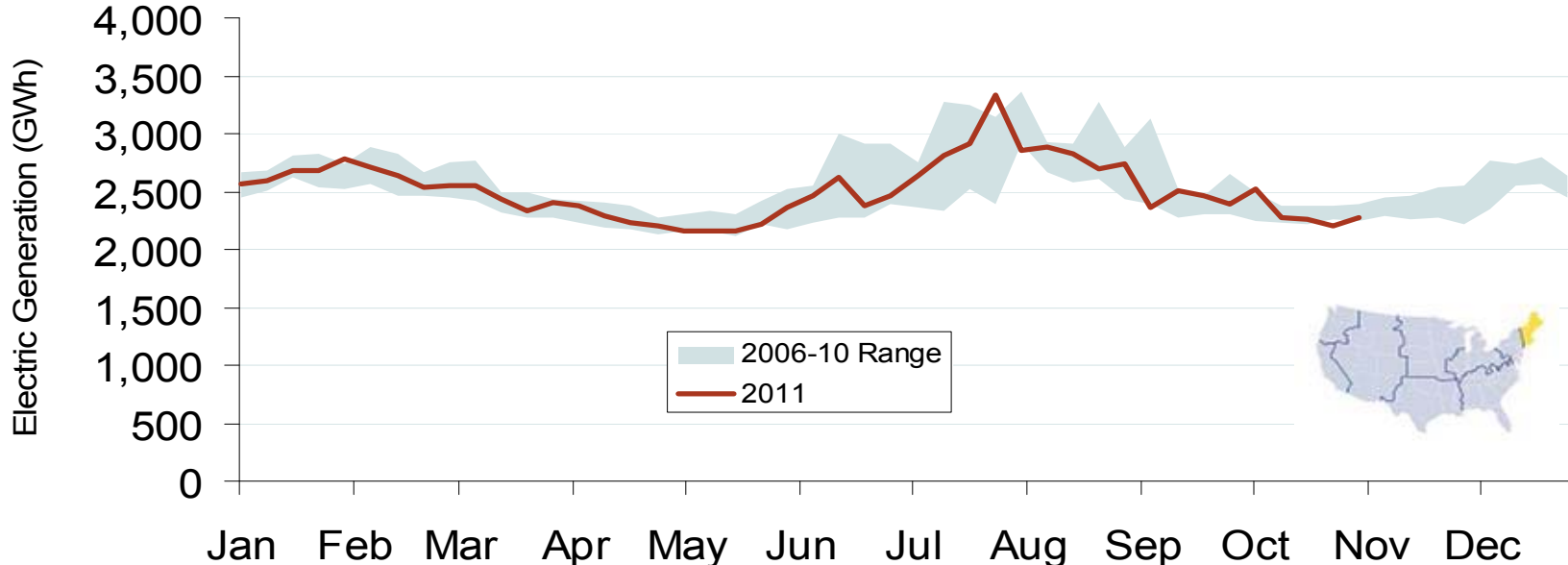
### Implied Heat Rates at Eastern Trading Points - Weekly Avgs.



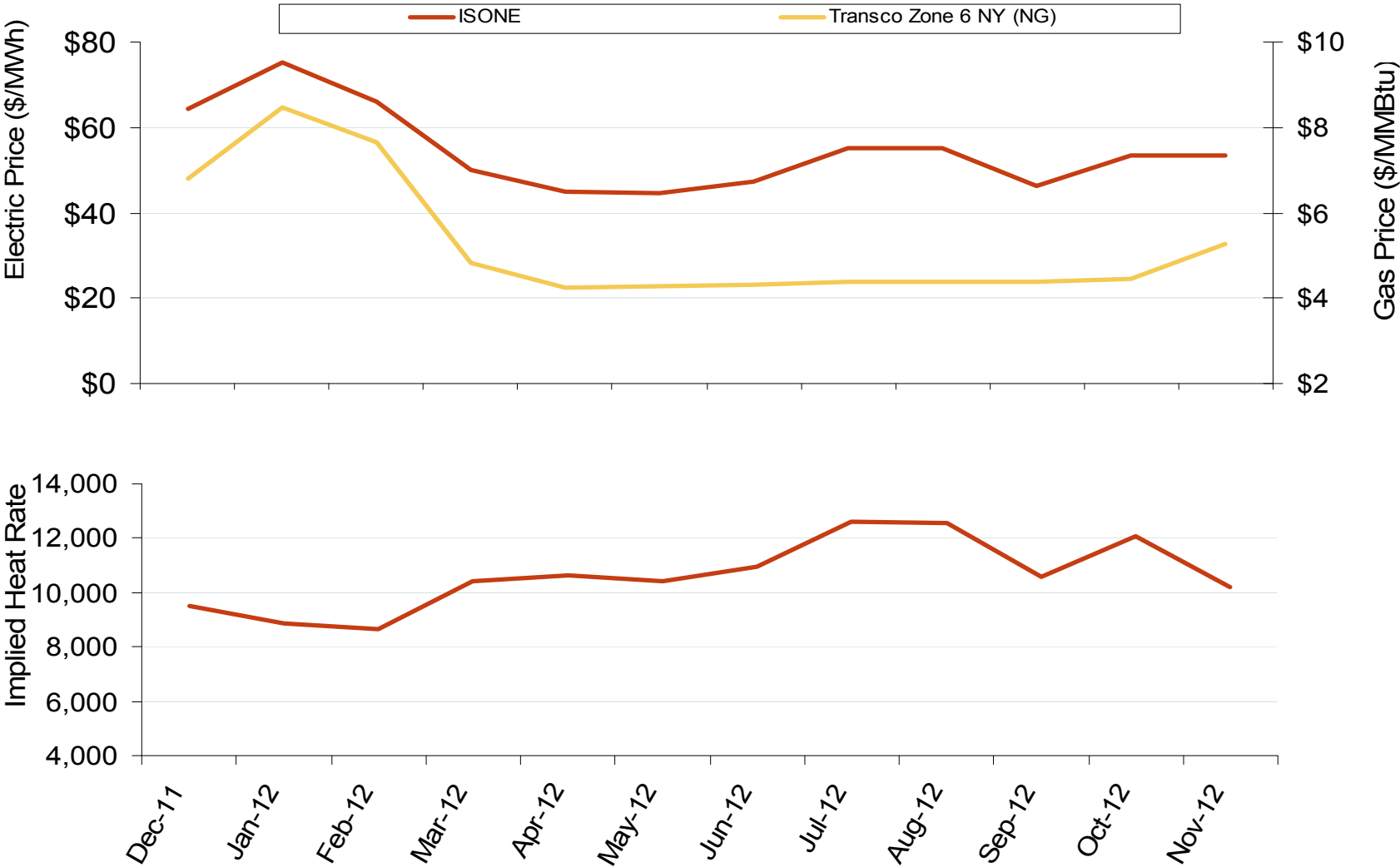
Source: Derived from Platts on-peak electric and natural gas price data  
November 2011

Updated: November 01, 2011

# Weekly Generation Output and Temperatures New England



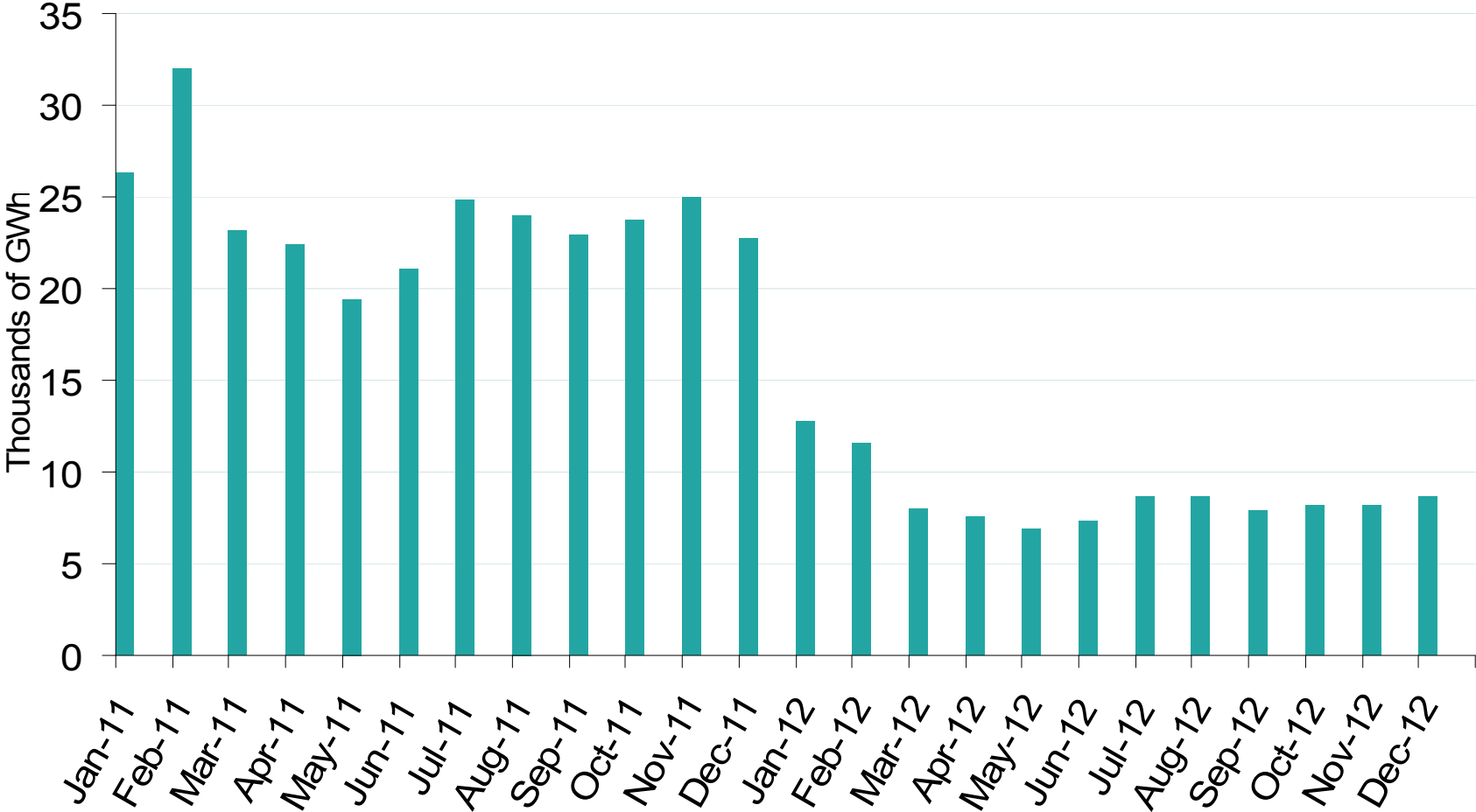
# New England Electric Forward Price Curves and Implied Heat Rate



Source: Derived from Nymex data  
November 2011

Updated: November 04, 2011

# New England Forward and Swap Volumes



Source: Derived from ICE data  
November 2011

Updated: November 02, 2011