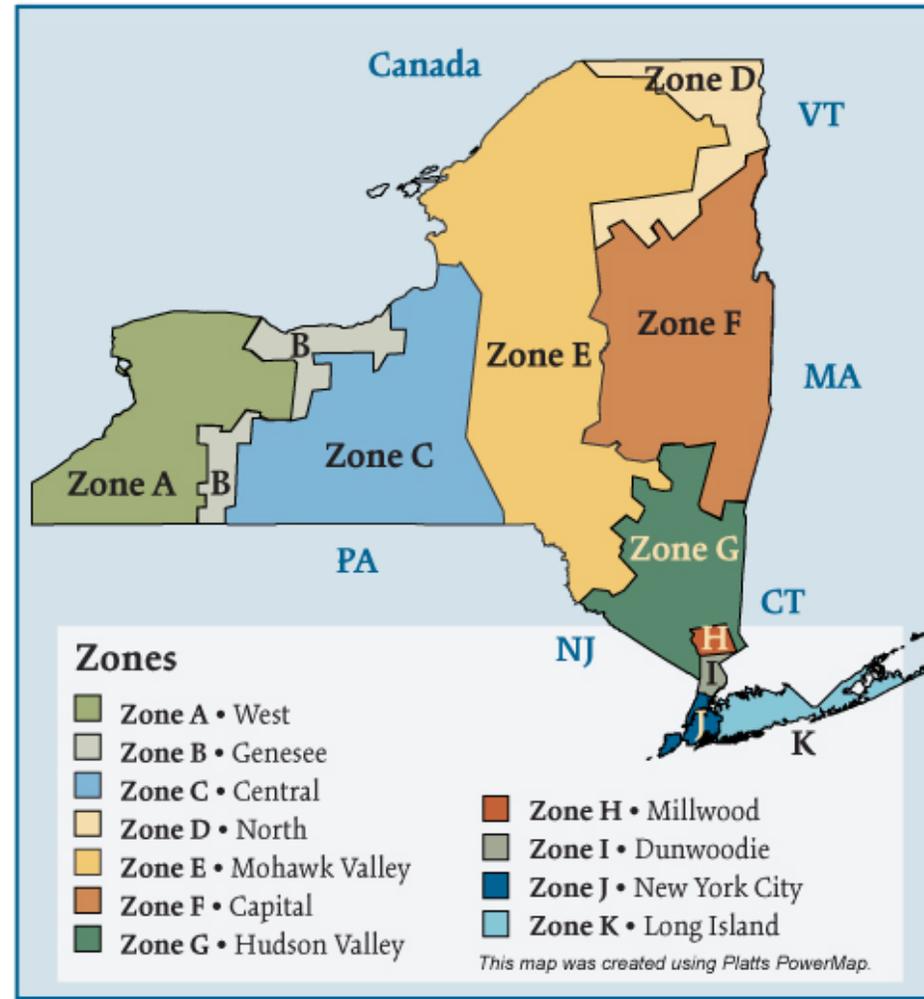


## New York (NYISO) Electric Regions



## Overview

### Geography

State covered: New York

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

Balancing authority: NYISO

Zones: Capital (Zone F), Central (Zone C), Dunwoodie (Zone I), Genesee (Zone B), Hudson Valley (Zone G), Long Island (Zone K), Millwood (Zone H), Mohawk Valley (Zone E), New York City (Zone J), North (Zone D), West (Zone A)

### RTO/ISO

NYISO (established 1999) 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,
- Regional and locational capacity market, and
- Financial transmission rights market.

### [NYISO 2008 State of the Markets Report](#)

Market Monitor:

Nicole Bouchez – Manager, Internal Market Monitor, New York ISO

David Patton – Independent Market Advisor, Potomac Economics, LTD.

**RTO/ISO (continued)**

Also, market participants trade electricity bilaterally through brokers, the Intercontinental Exchange (ICE) and the New York Mercantile Exchange's (Nymex) ClearPort, using Zone A (West) as a pricing point.

**Generation/Supply**

Marginal fuel type: natural gas

Generating capacity (summer 2006): 39,704 MW

Capacity reserve (summer 2006): 5,765 MW

Reserve margin (summer 2006): 17%

The New York City metropolitan area (NYC) and Long Island (LI) are areas of concentrated demand. Both localities have requirements for installed generating capacity that are more stringent than the rest of the region, to ensure reliability of service.

**Demand**

All time peak demand: 33,939 MW (set August 2, 2006)

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

Peak demand growth: 5.6 % (2006-2005)

Summer Peak Demand (MW) 28,433 (2004), 32,075 (2005), 33,939 (2006) (Source: NYISO)

Load pockets: Zone J New York City and Zone K Long Island

## Prices

### Annual Average Day-Ahead Price

#### Zone J New York City

**2004:** \$63.16/MWh

**2005:** \$93.77/MWh

**2006:** \$70.90/MWh

#### Zone K Long Island

**2004:** \$63.20/MWh

**2005:** \$99.32/MWh

**2006:** \$86.15/MWh

Prices increased in 2005 as a result of disturbances to the natural gas market. Prices declined in 2006 as natural gas storage levels remained above historical ranges throughout the injection season (April through October).

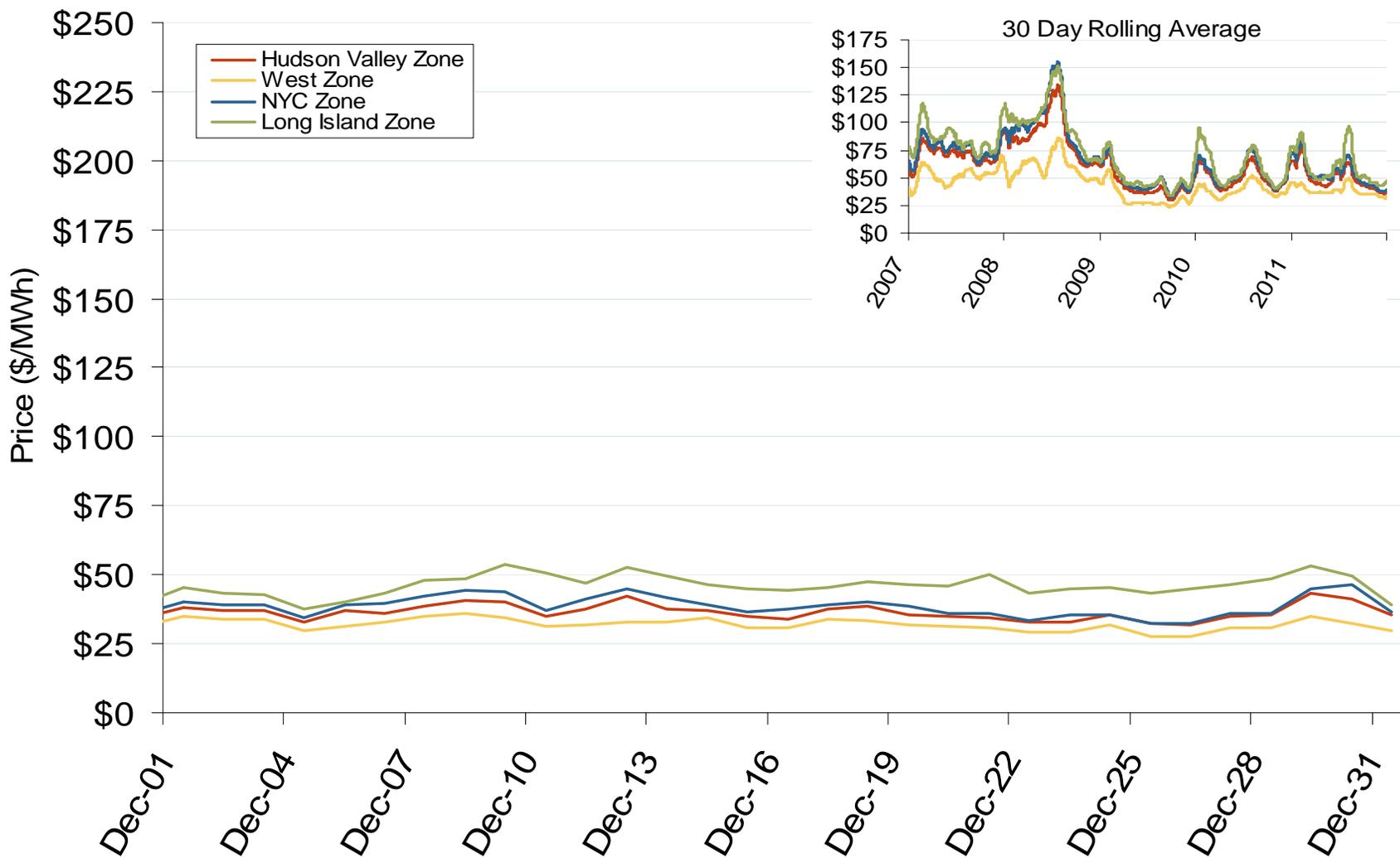
## New York Annual Average Bilateral Prices

Annual Average Day Ahead On Peak Prices (\$/MWh)						
	2007	2008	2009	2010	2011	5-Year Avg
Mass Hub	\$77.39	\$91.55	\$46.24	\$56.18	\$52.64	\$68.23
Ny Zone G	\$83.51	\$100.99	\$49.80	\$59.48	\$56.41	\$73.94
NY Zone J	\$94.15	\$112.63	\$55.77	\$65.76	\$62.71	\$82.84
NY Zone A	\$64.02	\$68.34	\$35.54	\$43.89	\$41.52	\$54.09
PJM West	\$71.15	\$83.70	\$44.60	\$53.68	\$51.99	\$63.00

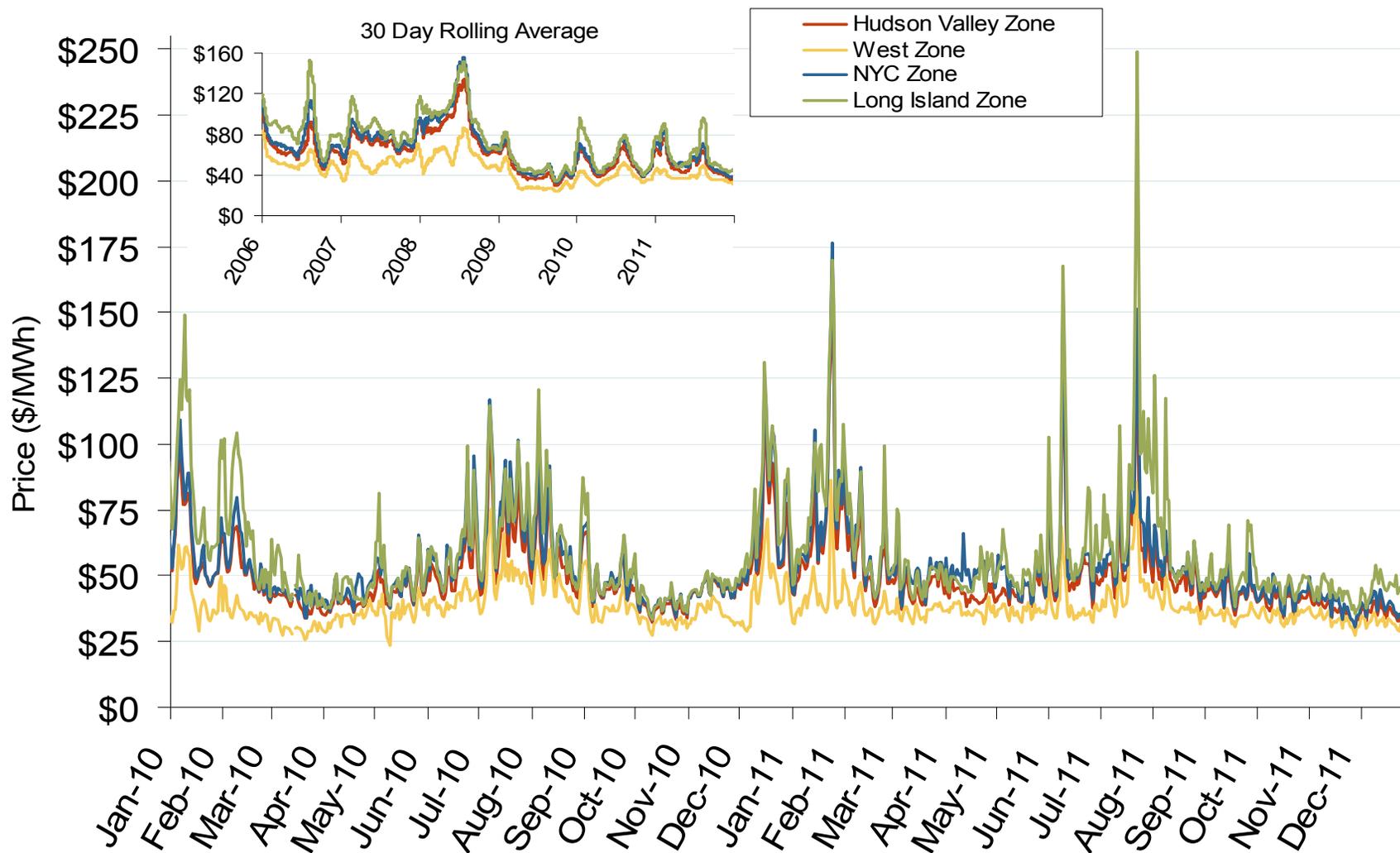
New York Electric Market: Last Month's RTO Prices

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

## Daily Average of NYISO Day-Ahead Prices - All Hours



## Daily Average of NYISO Day-Ahead Prices - All Hours



Notes: ICE on-peak forward (physical) and swap (financial) volumes are for the Nepoch Mass Hub and include monthly, dual monthly, quarterly, and calendar year contracts traded for each month

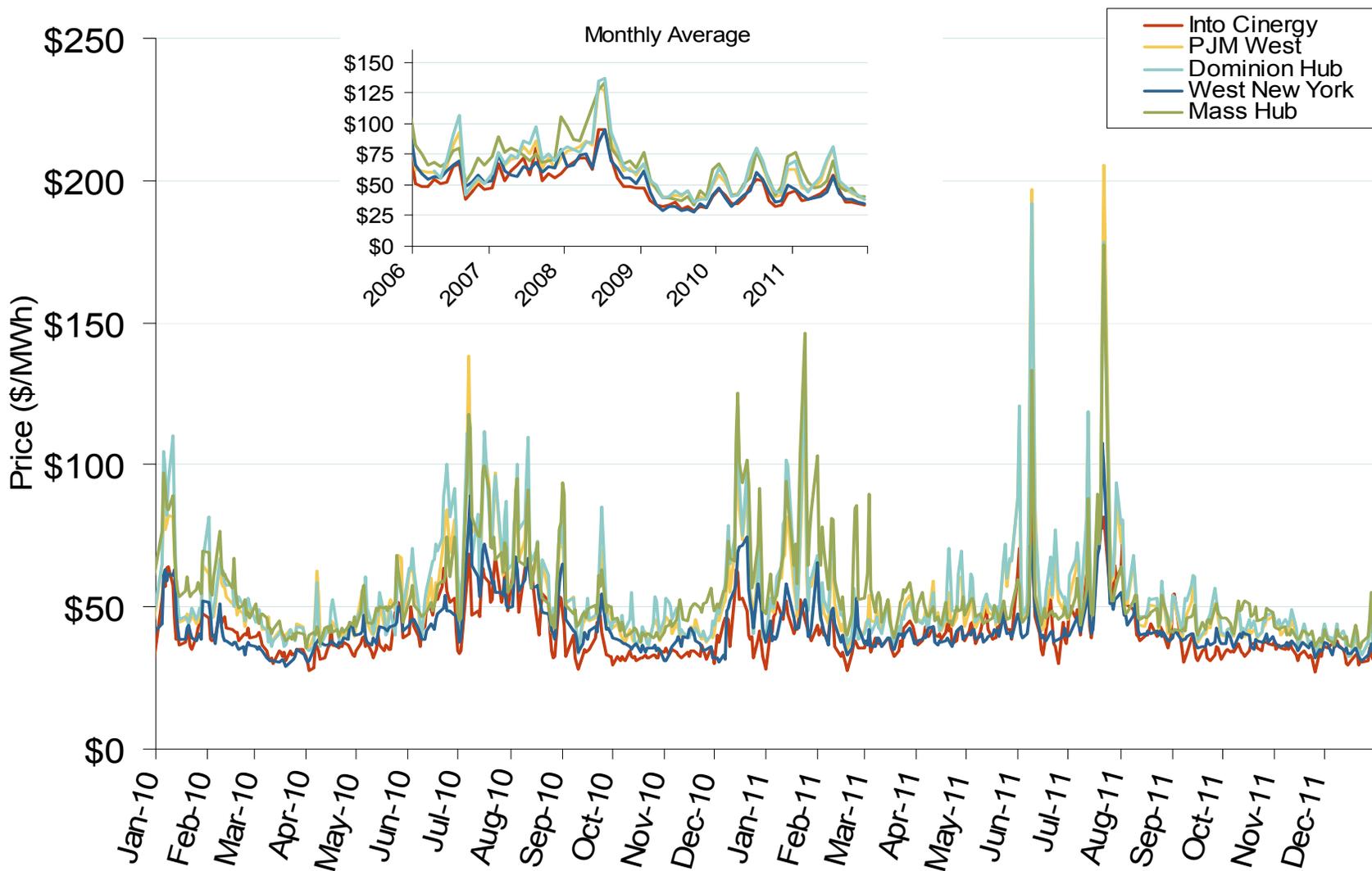
Source: Derived from Bloomberg data

Updated: January 04, 2012

New York Electric Market: Eastern Bilateral Prices

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

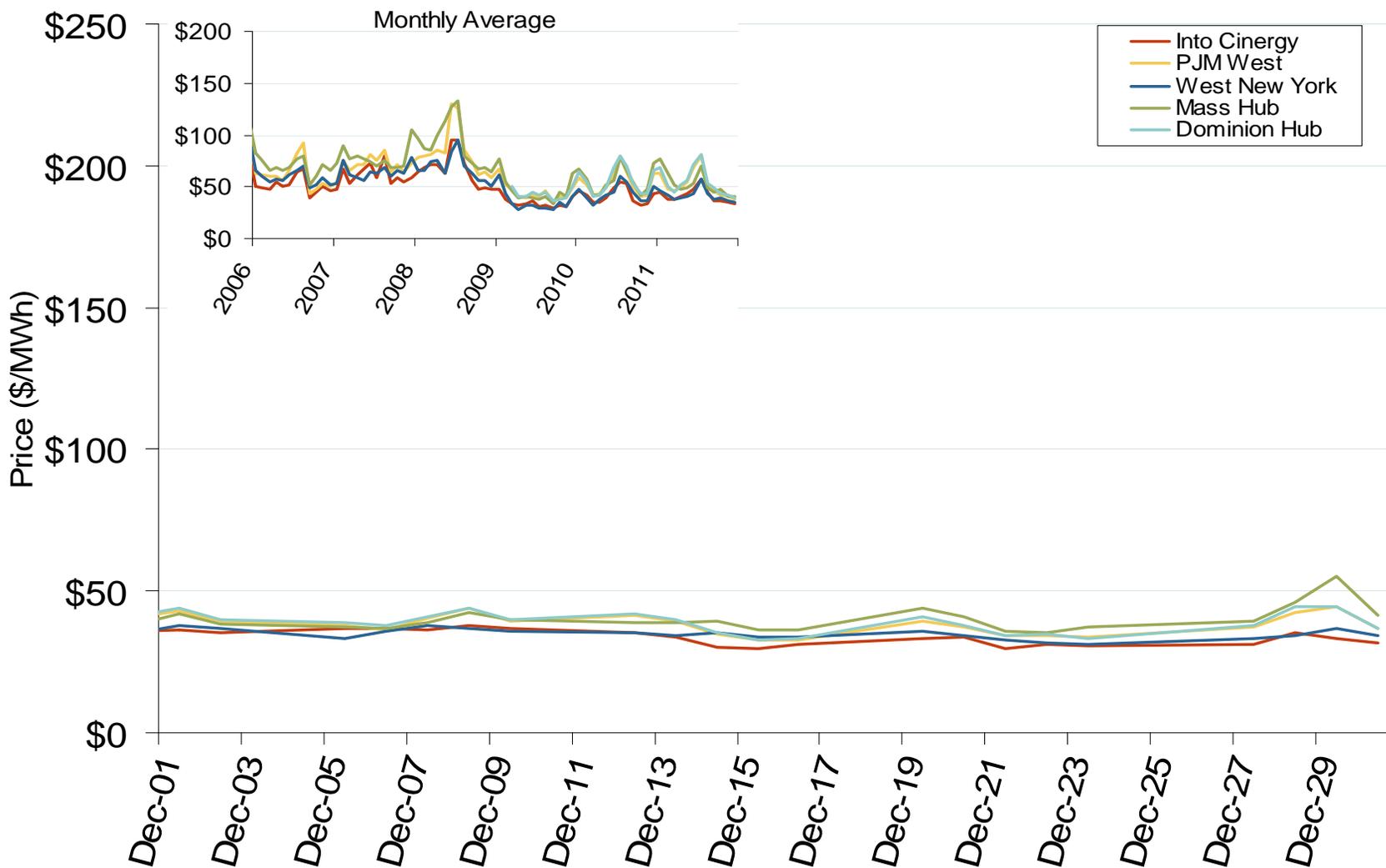
## Eastern Daily Bilateral Day-Ahead On-Peak Prices



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

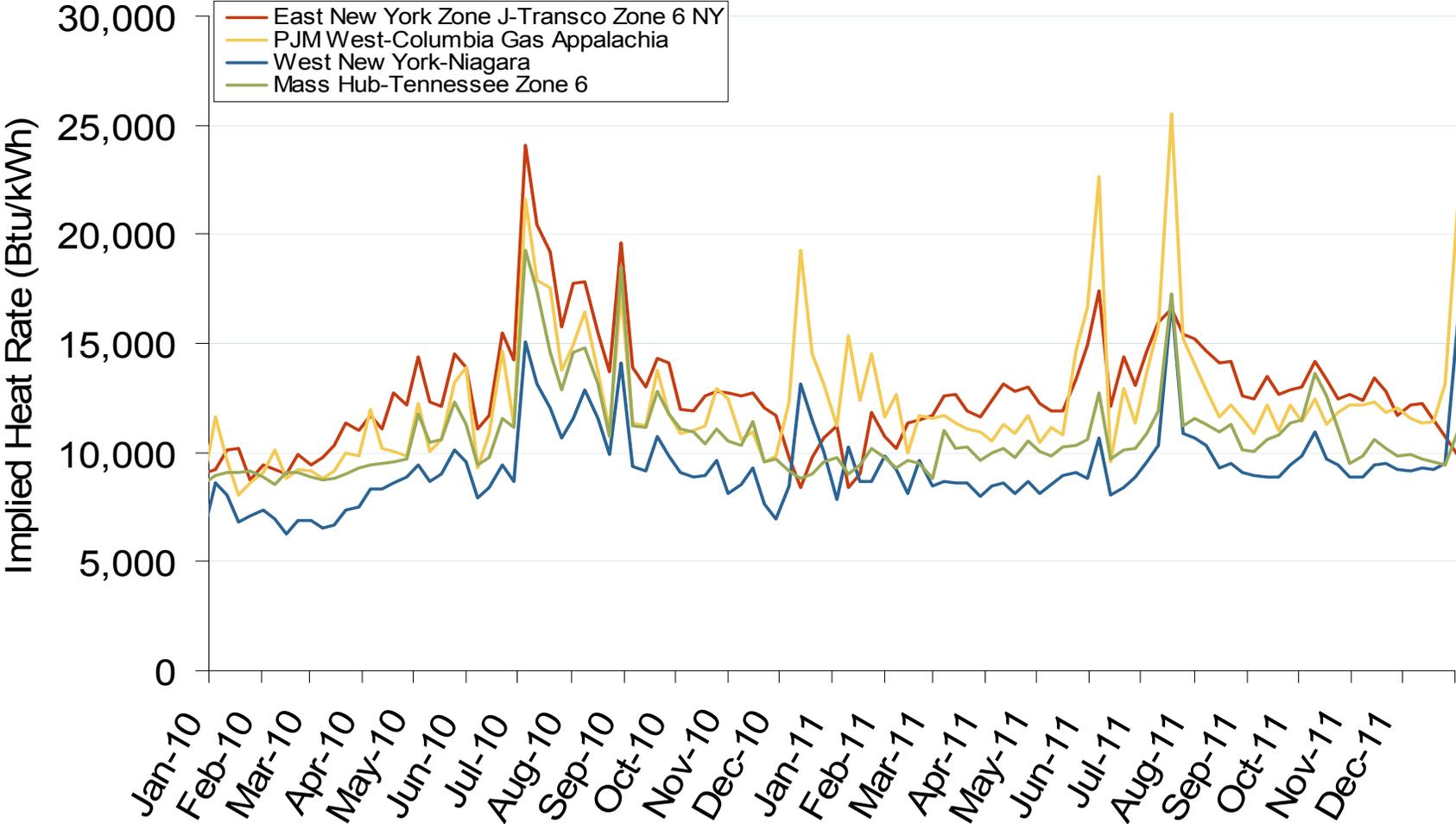
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## Eastern Daily Bilateral Day-Ahead On-Peak Prices



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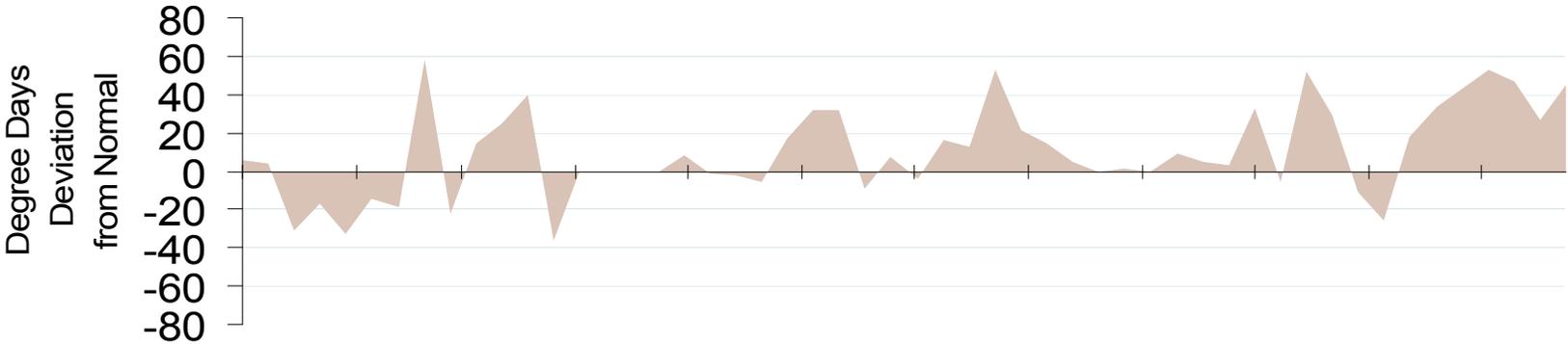
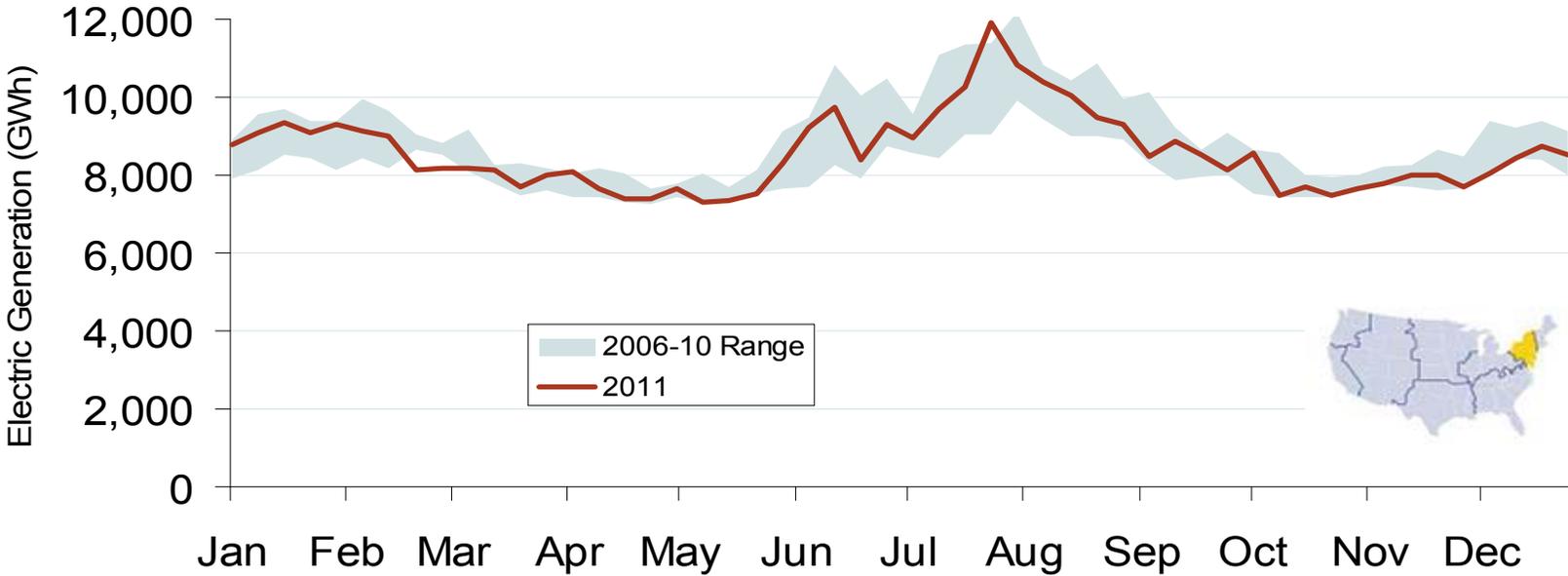
### Implied Heat Rates at Eastern Trading Points - Weekly Avgs.



Source: Derived from *Platts* on-peak electric and natural gas price data  
January 2012

Updated: January 03, 2012

### Weekly Power Generation & Temps. - Mid Atlantic

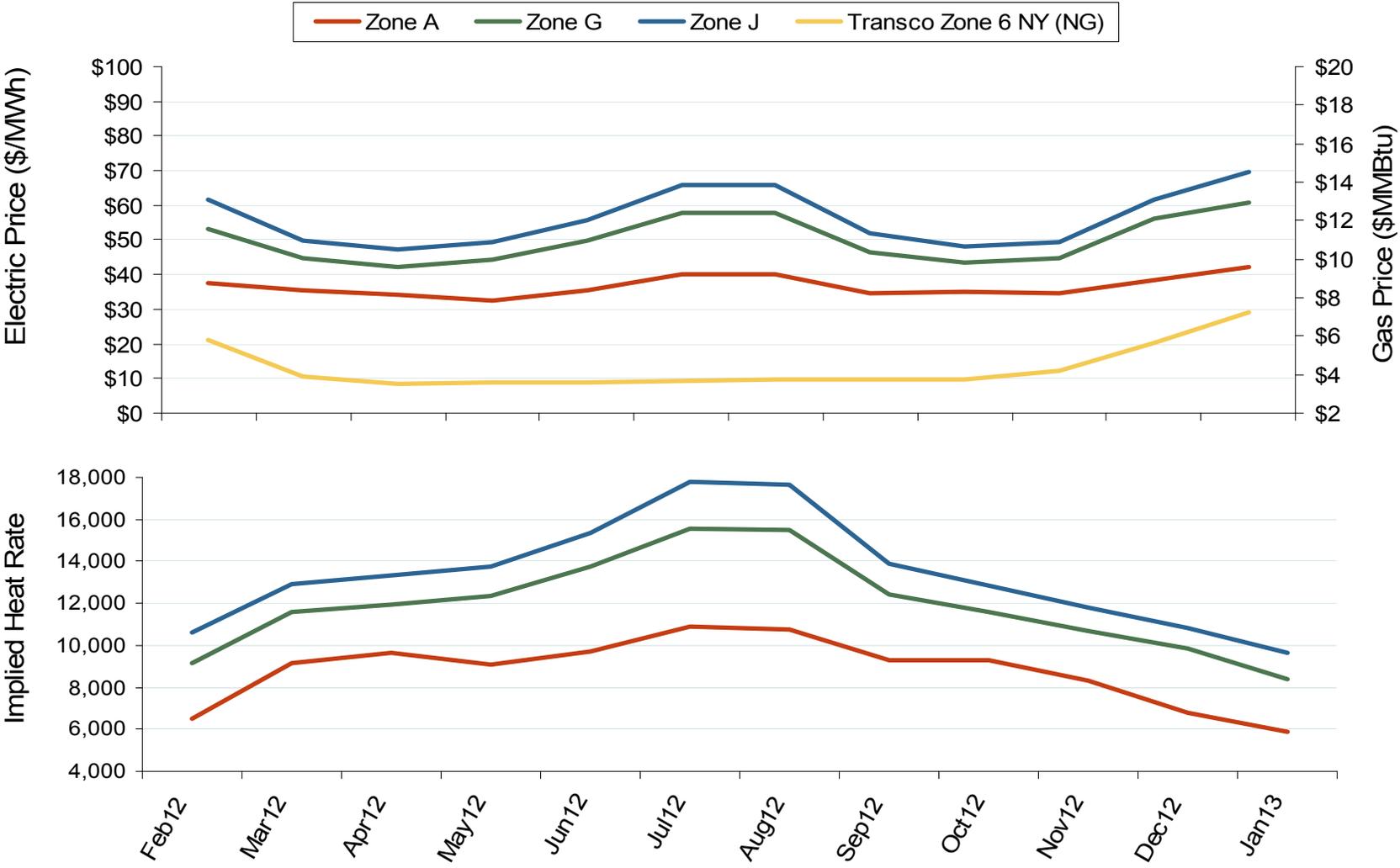


Source: Derived from EEI and NOAA data  
January 2012

Updated: January 05, 2012

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

# New York Electric Forward Price Curves and Implied Heat Rates



Source: Derived from Nymex data  
January 2012

Updated: January 04, 2012

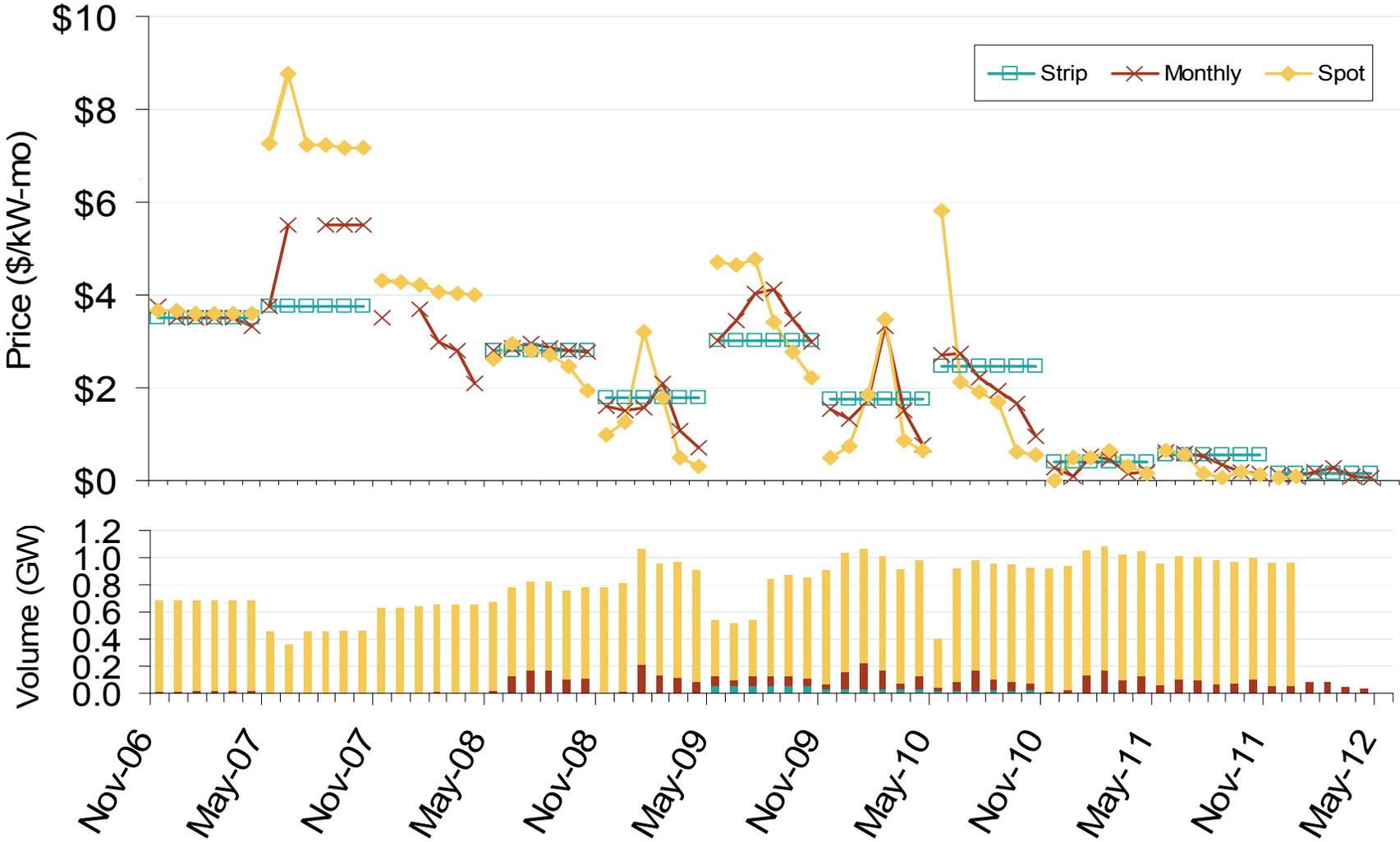
### Wtd. Avg. ICAP Prices & Volumes: NYC



Source: Derived from NYISO data  
January 2012

Updated: January 04, 2012

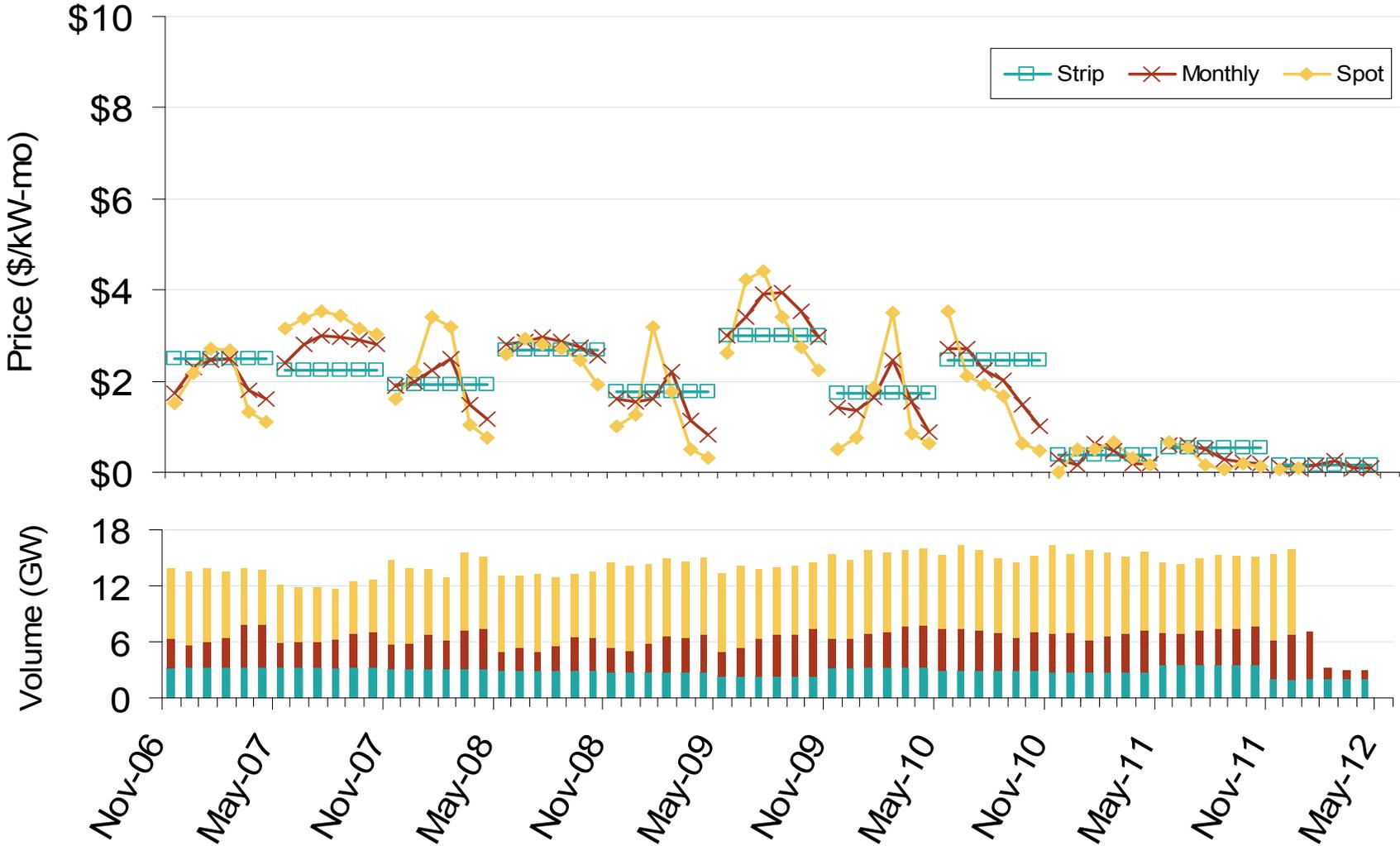
# Weighted Average ICAP Clearing Prices and Volumes: Long Island



Source: Derived from NYISO data  
January 2012

Updated: January 04, 2012

# Wtd. Avg. ICAP Prices & Volumes: New York State, excluding NYC

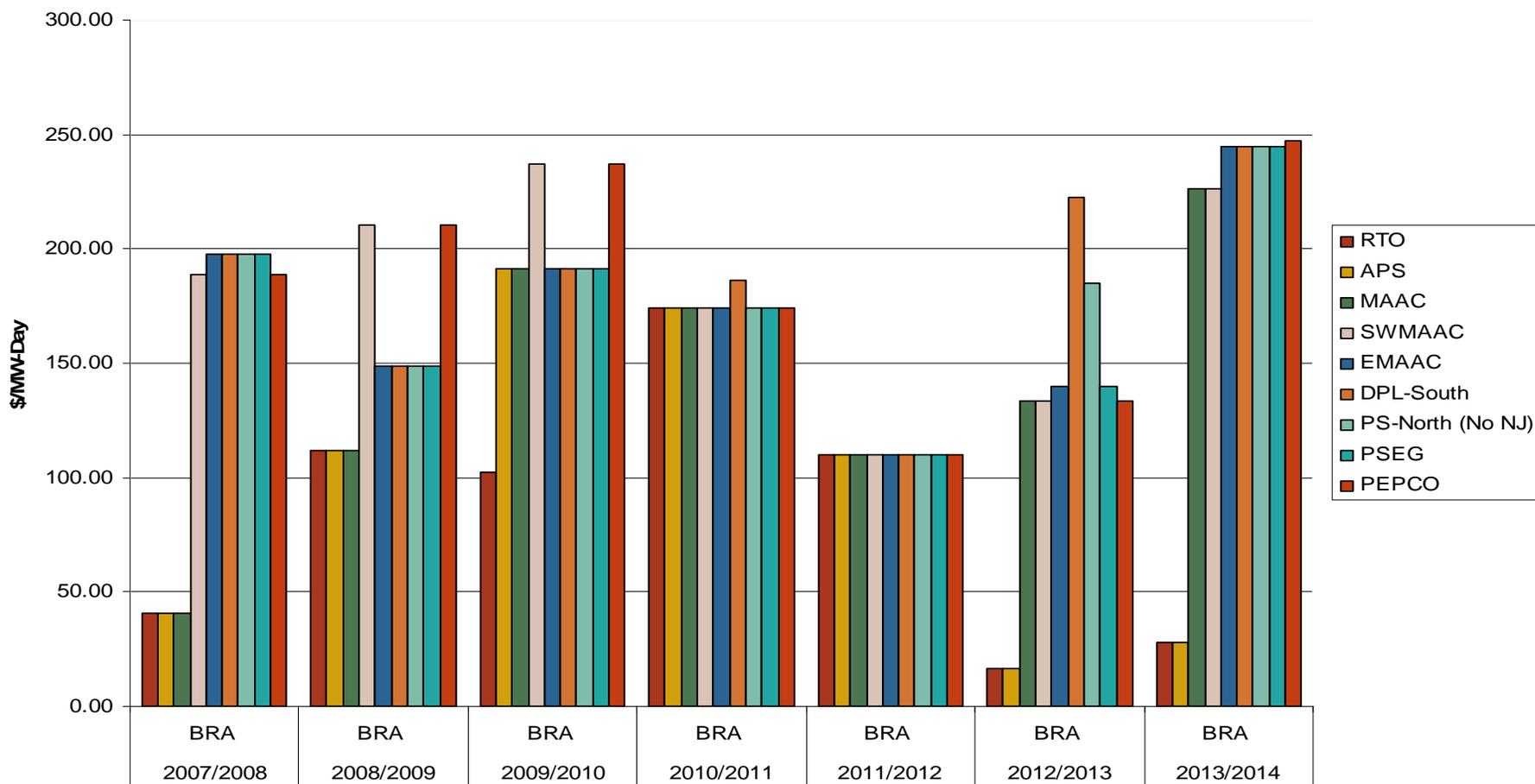


Source: Derived from NYISO data  
January 2012

Updated: January 04, 2012

# PJM, NYISO and ISO-NE Capacity Auction Prices

## RPM Auction Clearing Prices by Locational Delivery Area (LDA)



Note: PJM values are for Base Residual Auctions only.

ISO-NE results are based on preliminary FCM auction before pro-rationing and EAS adjustment.

Source: Derived from PJM, NYISO and ISO-NE data