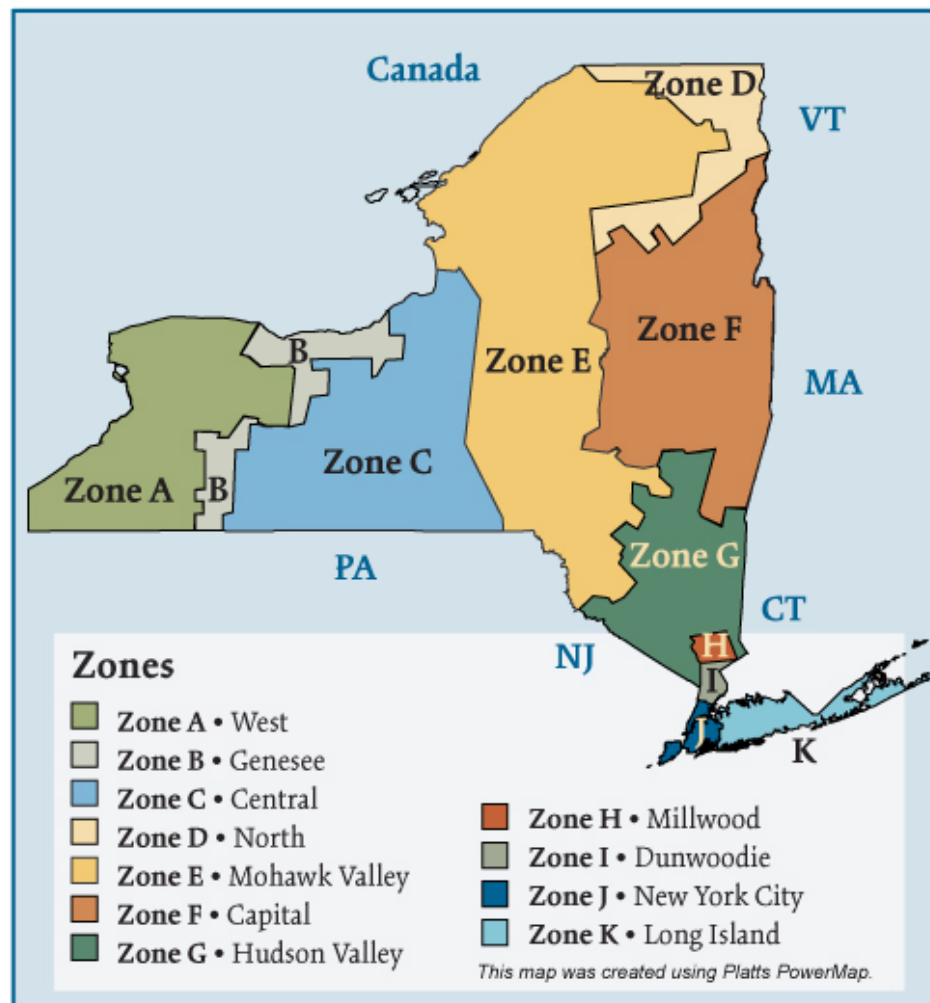


New York (NYISO) Electric Regions



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

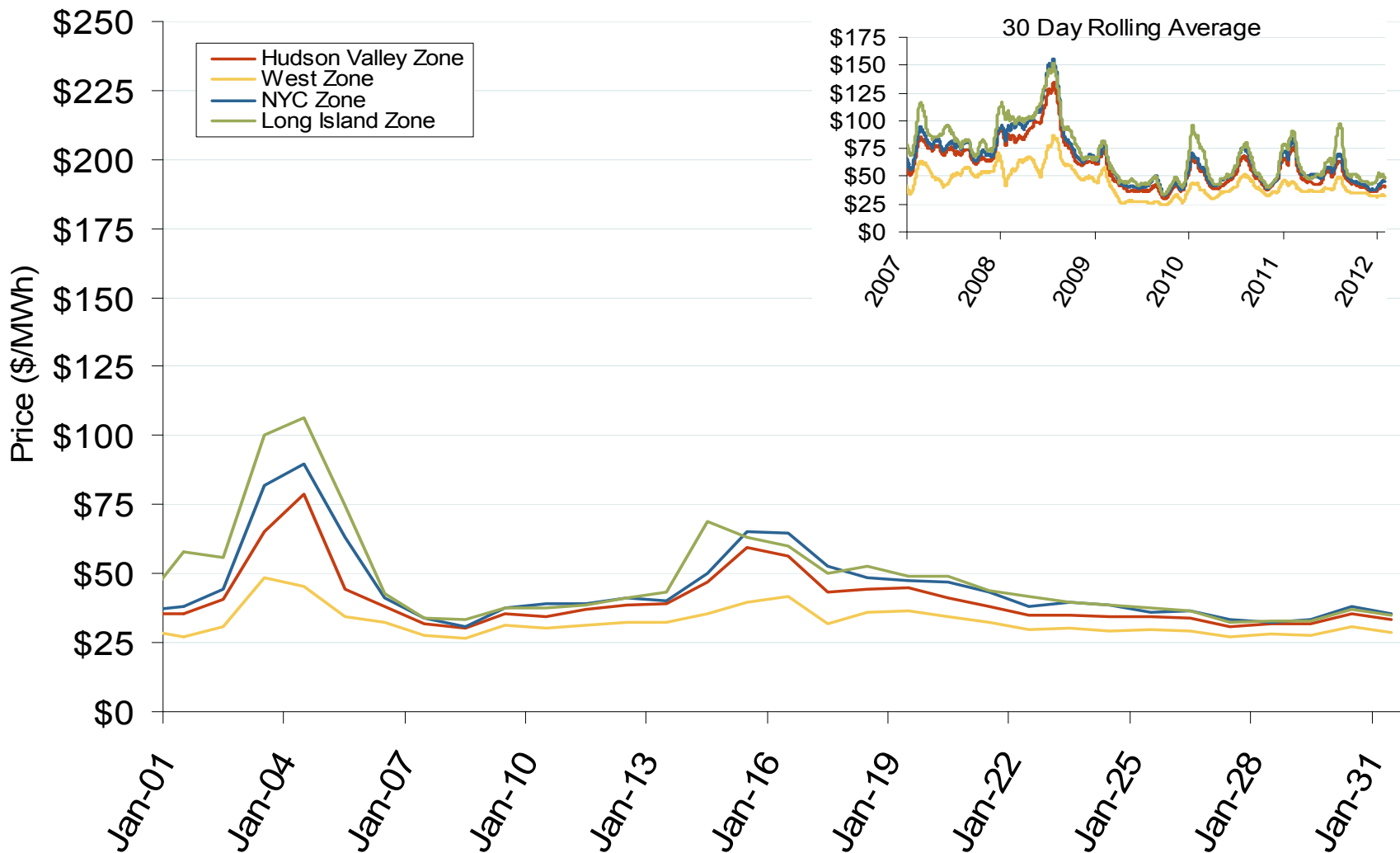
2006: \$86.15/MWh

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).

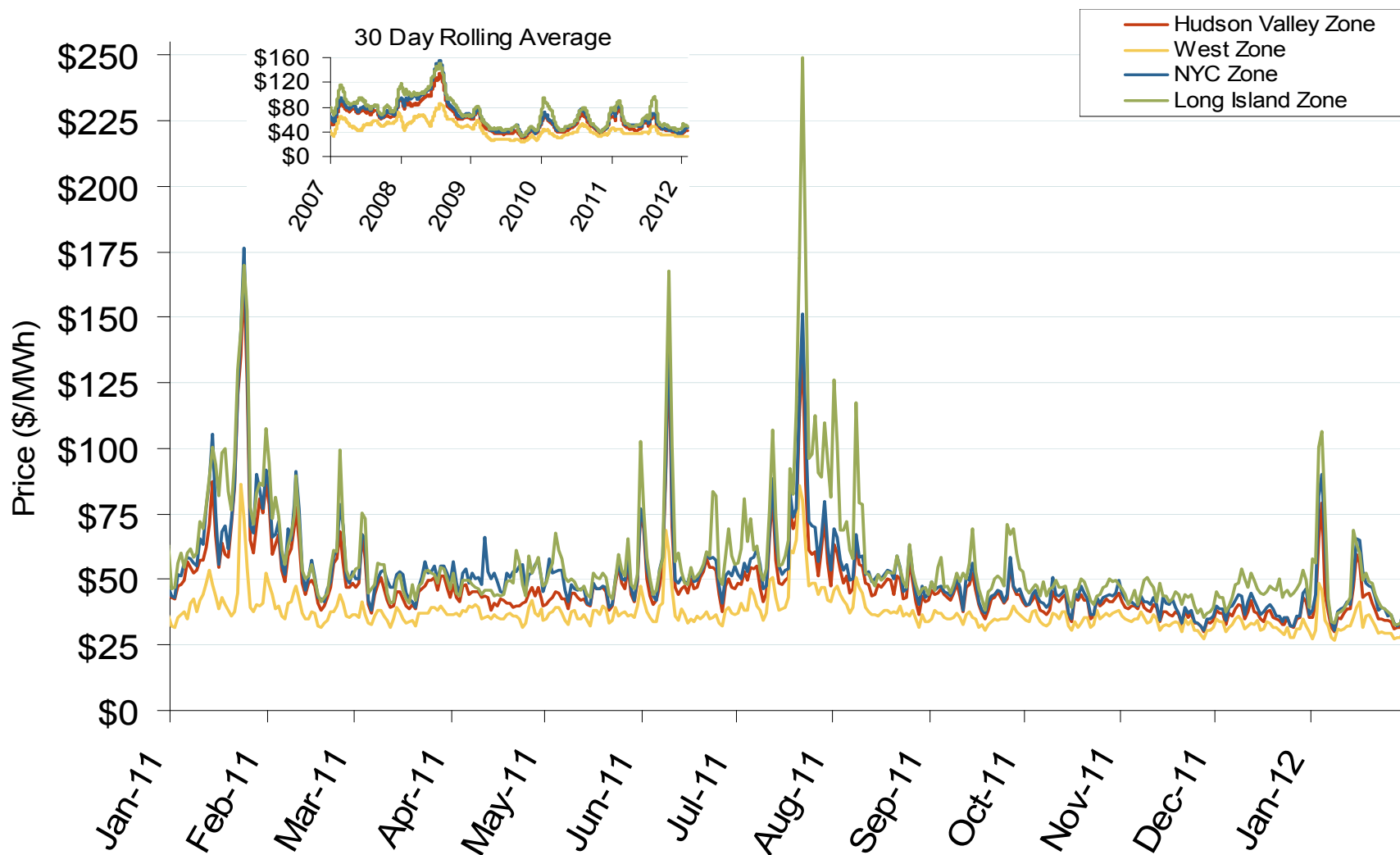
New York Annual Average Bilateral Prices

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

Daily Average of NYISO Day-Ahead Prices - All Hours



Daily Average of NYISO Day-Ahead Prices - All Hours



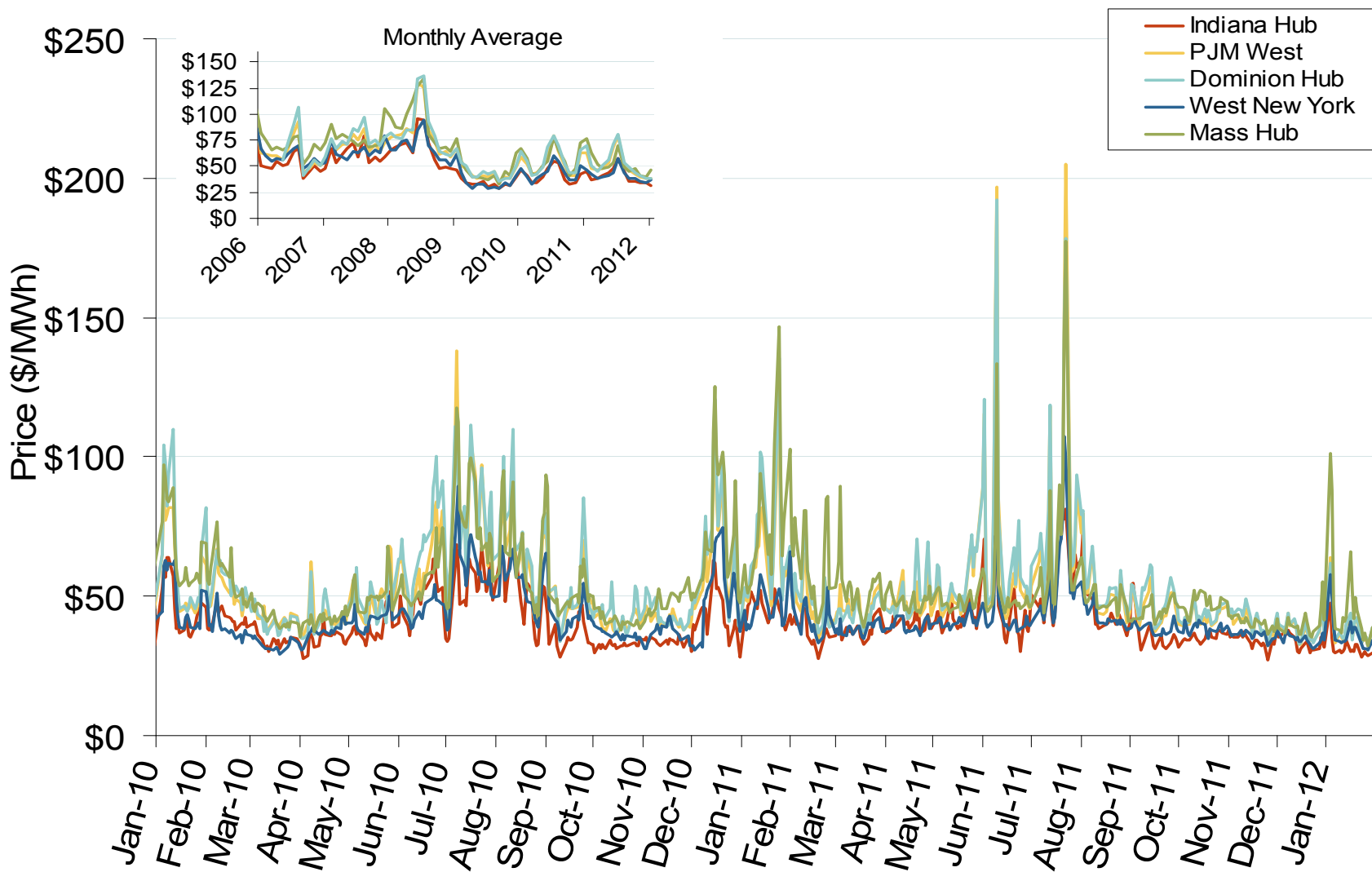
Notes: ICE on-peak forward (physical) and swap (financial) volumes are for the Nepoch Mass Hub and include monthly, dual monthly, quarterly, and calendar year contracts traded for each month

Source: Derived from Bloomberg data

February 2012

Updated: February 14, 2012

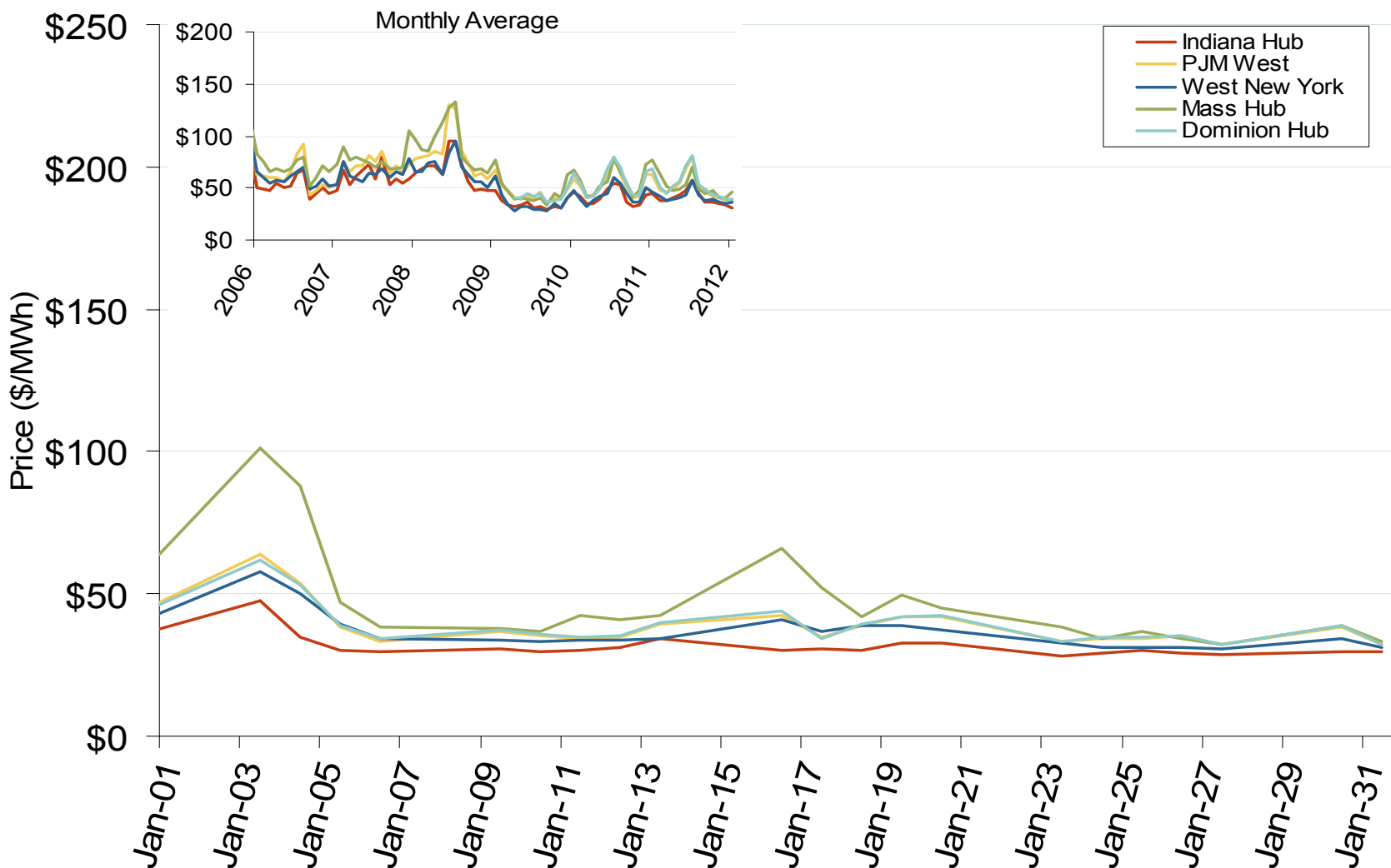
Eastern Daily Index Day-Ahead On-Peak Prices



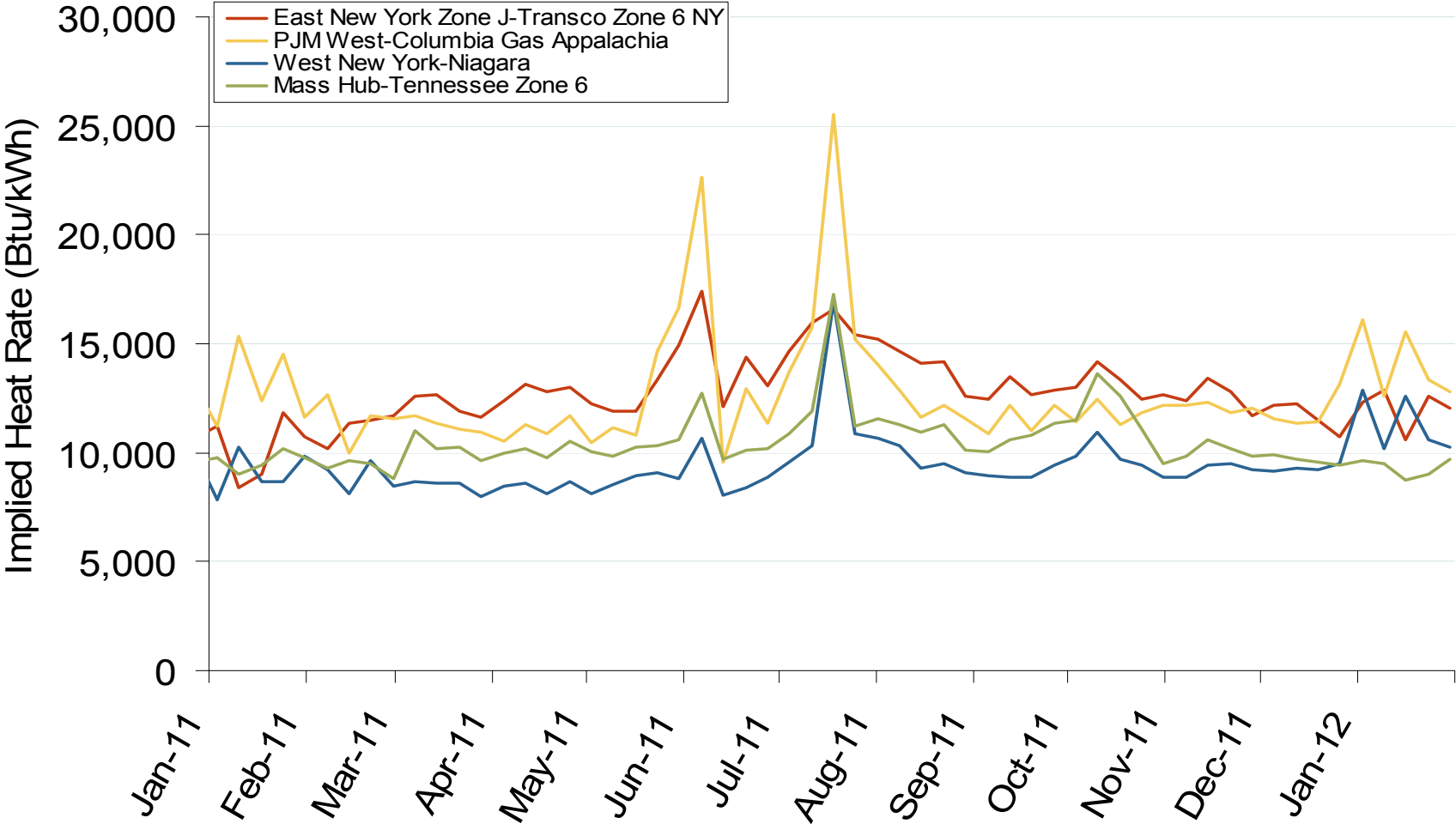
New York Electric Market: Last Month's Eastern Index Prices

Federal Energy Regulatory Commission • Market Oversight • www.ferc.gov/oversight

Eastern Daily Index Day-Ahead On-Peak Prices



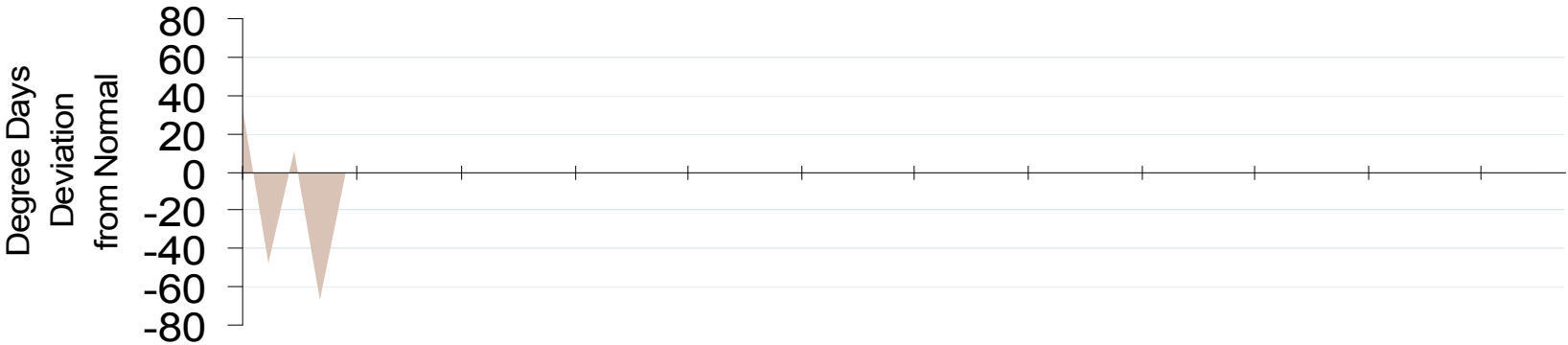
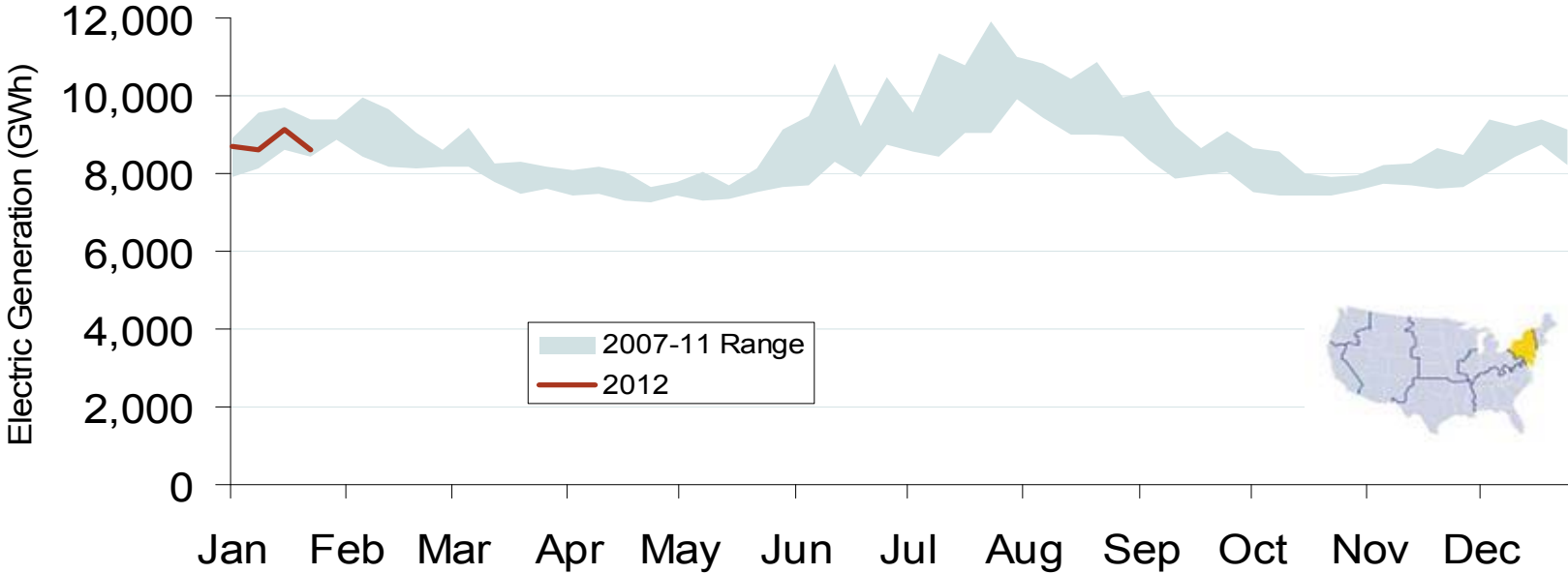
Implied Heat Rates at Eastern Trading Points - Weekly Avgs.



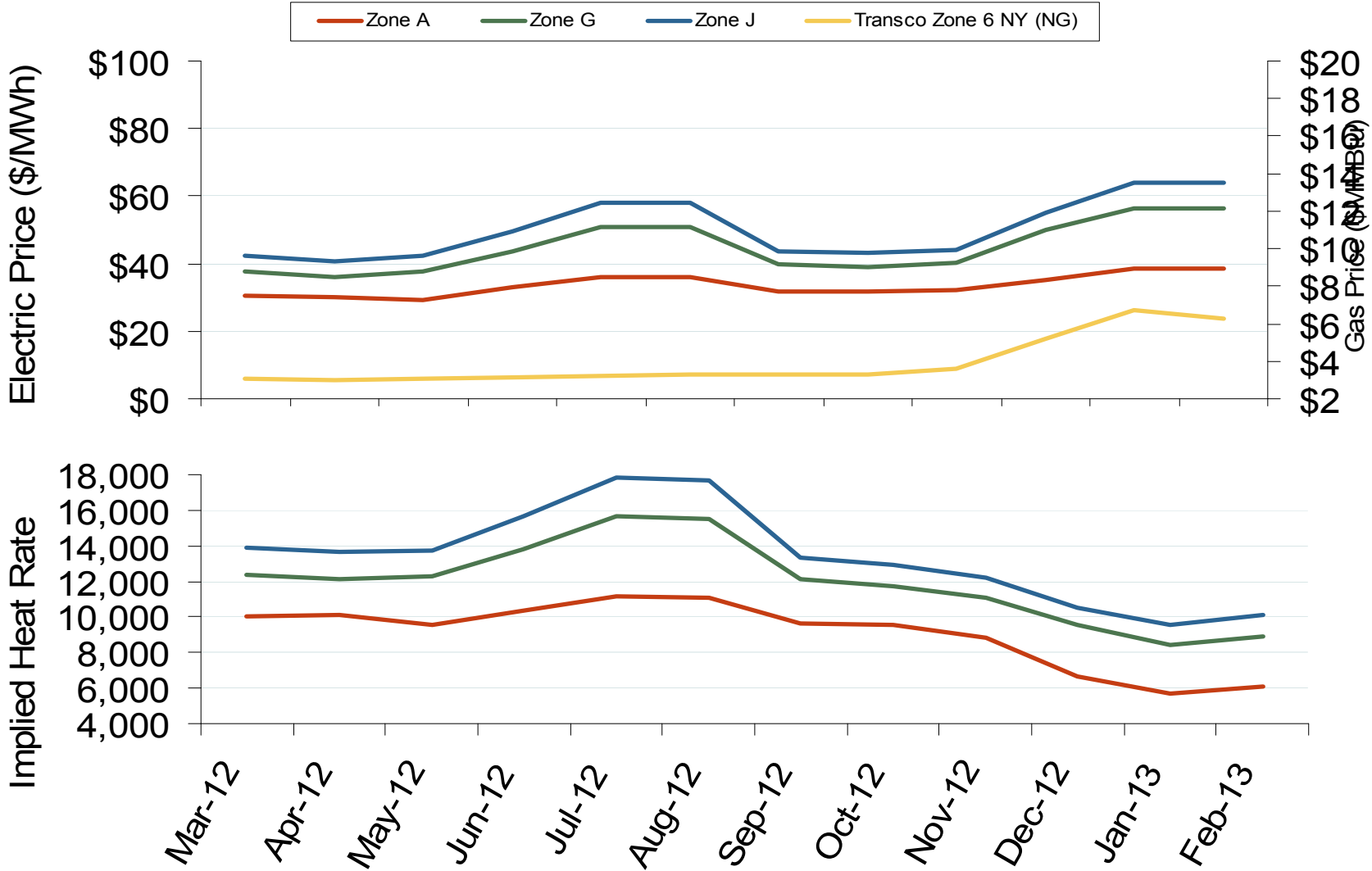
Source: Derived from Platts on-peak electric and natural gas price data
February 2012

Updated: February 14, 2012

Weekly Power Generation & Temps. - Mid Atlantic



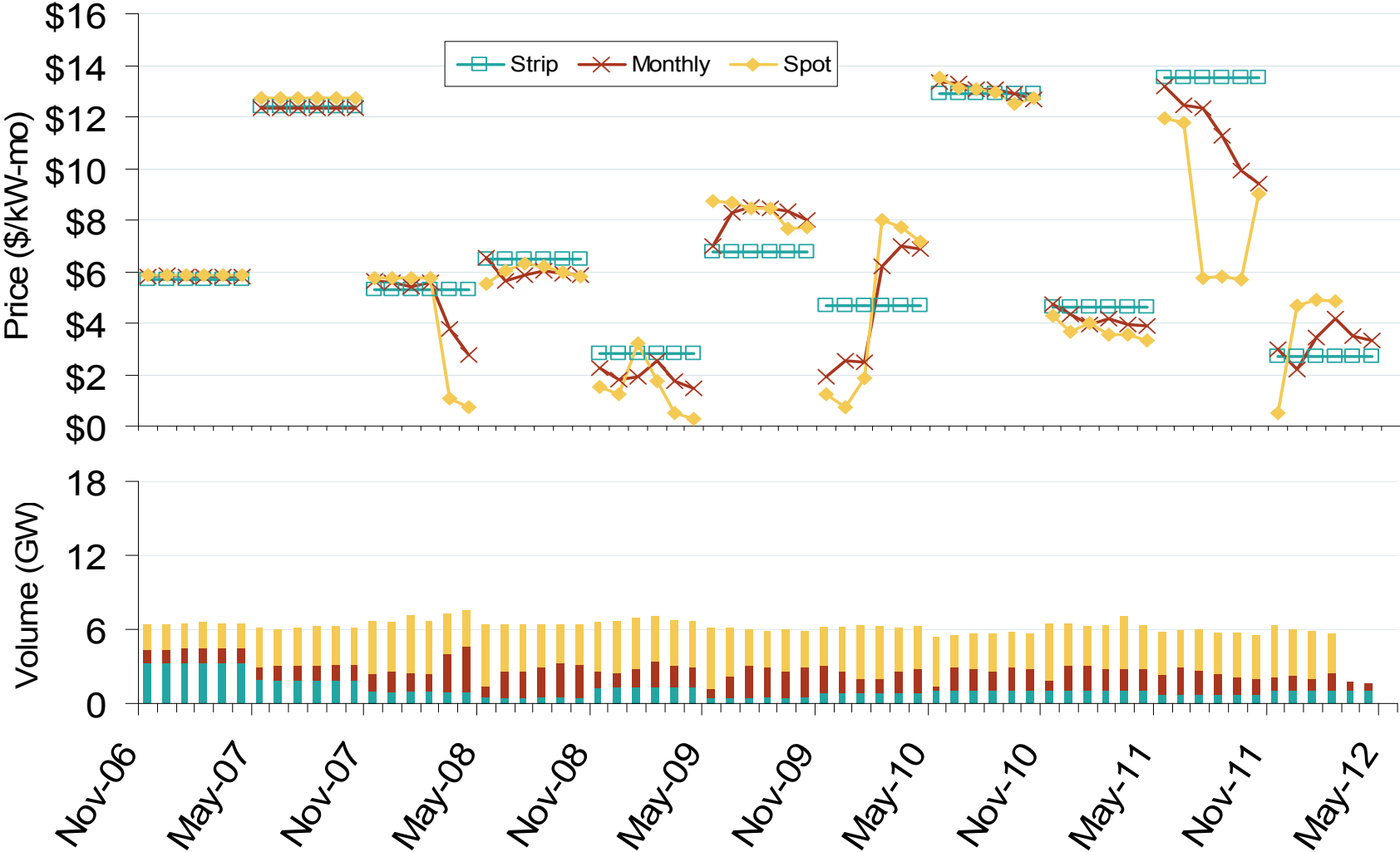
New York Electric Forward Price Curves and Implied Heat Rates



Source: Derived from Nymex data
February 2012

Updated: February 08, 2012

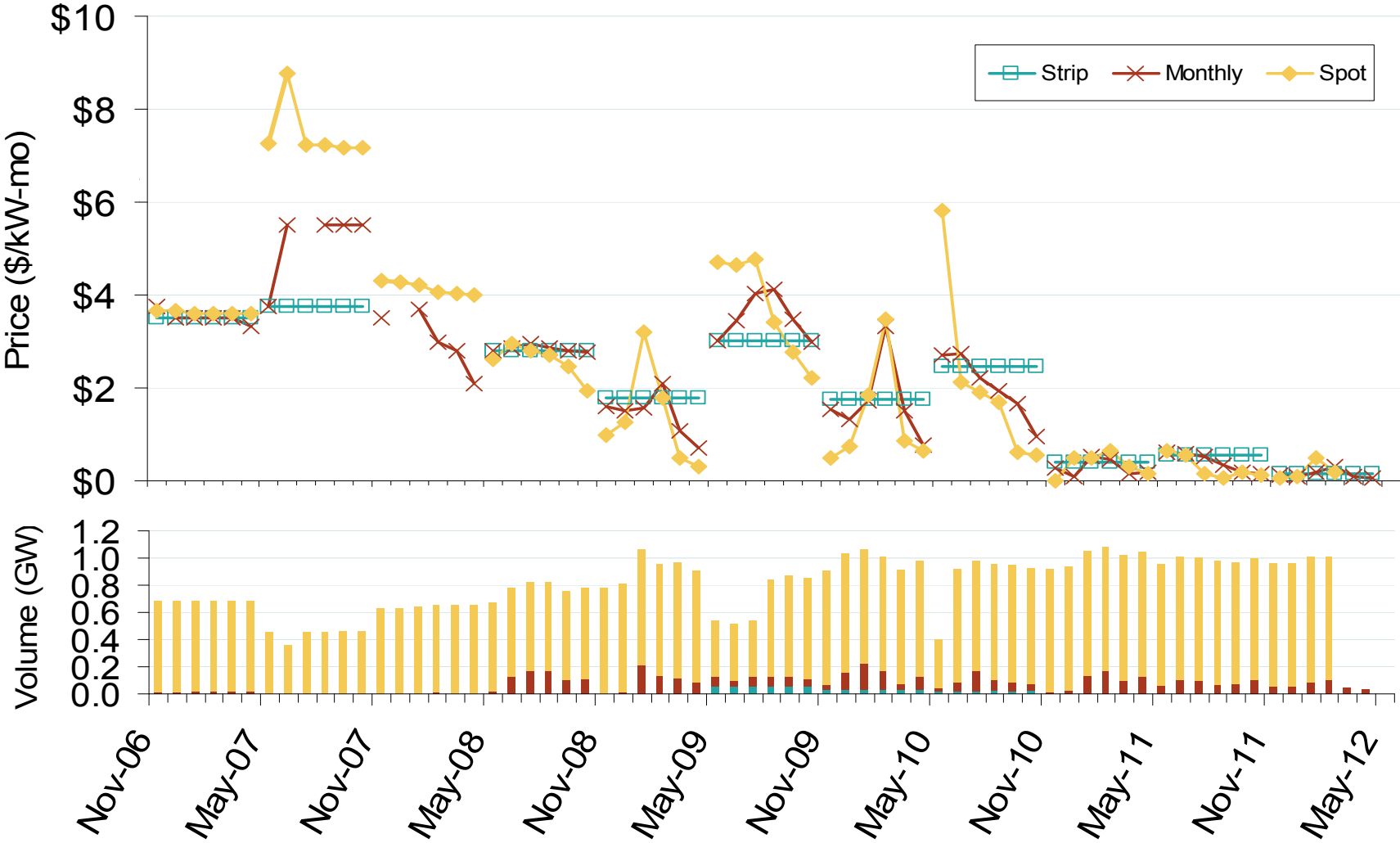
Wtd. Avg. ICAP Prices & Volumes: NYC



Source: Derived from NYISO data
February 2012

Updated: February 14, 2012

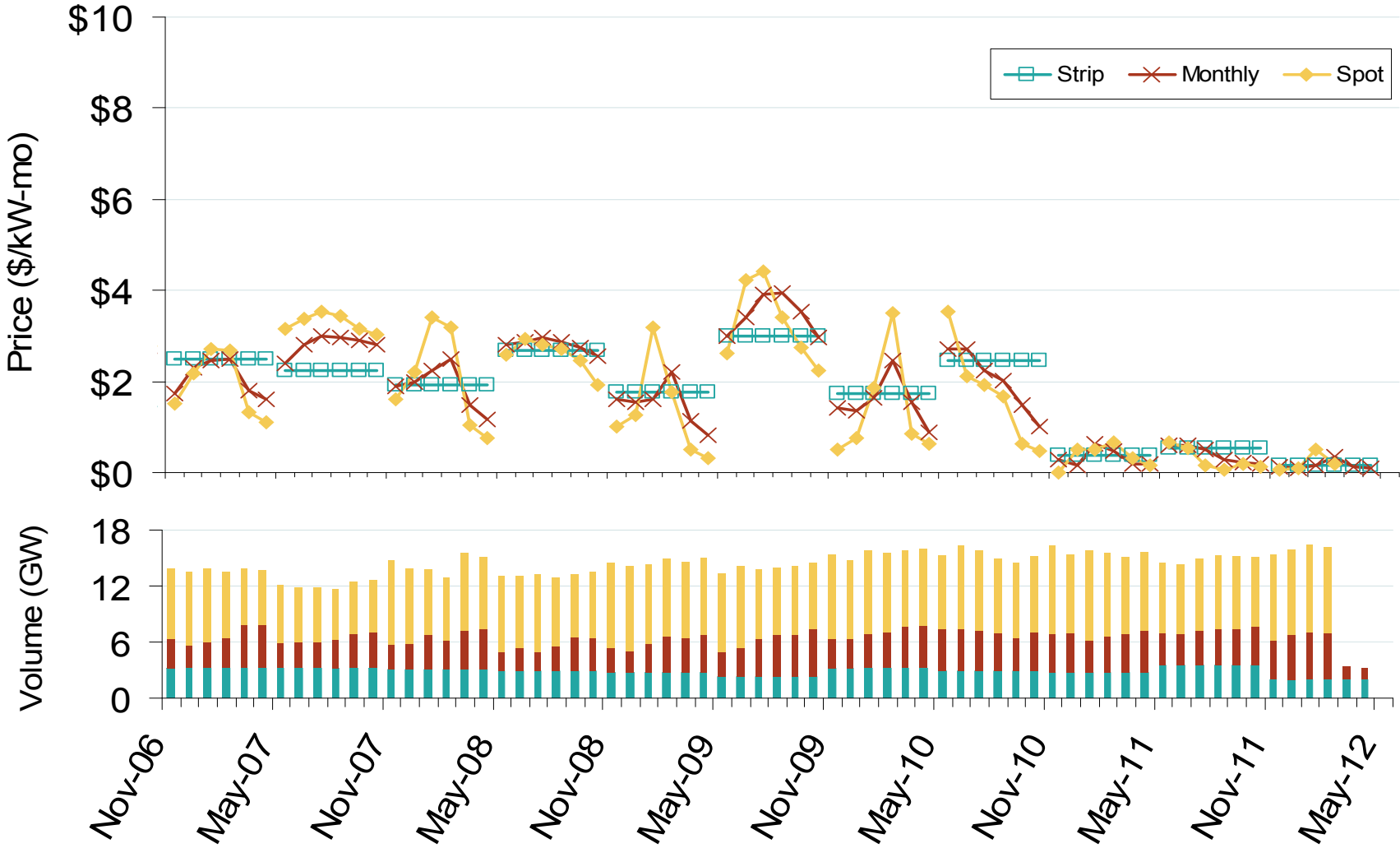
Weighted Average ICAP Clearing Prices and Volumes: Long Island



Source: Derived from NYISO data
February 2012

Updated: February 14, 2012

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

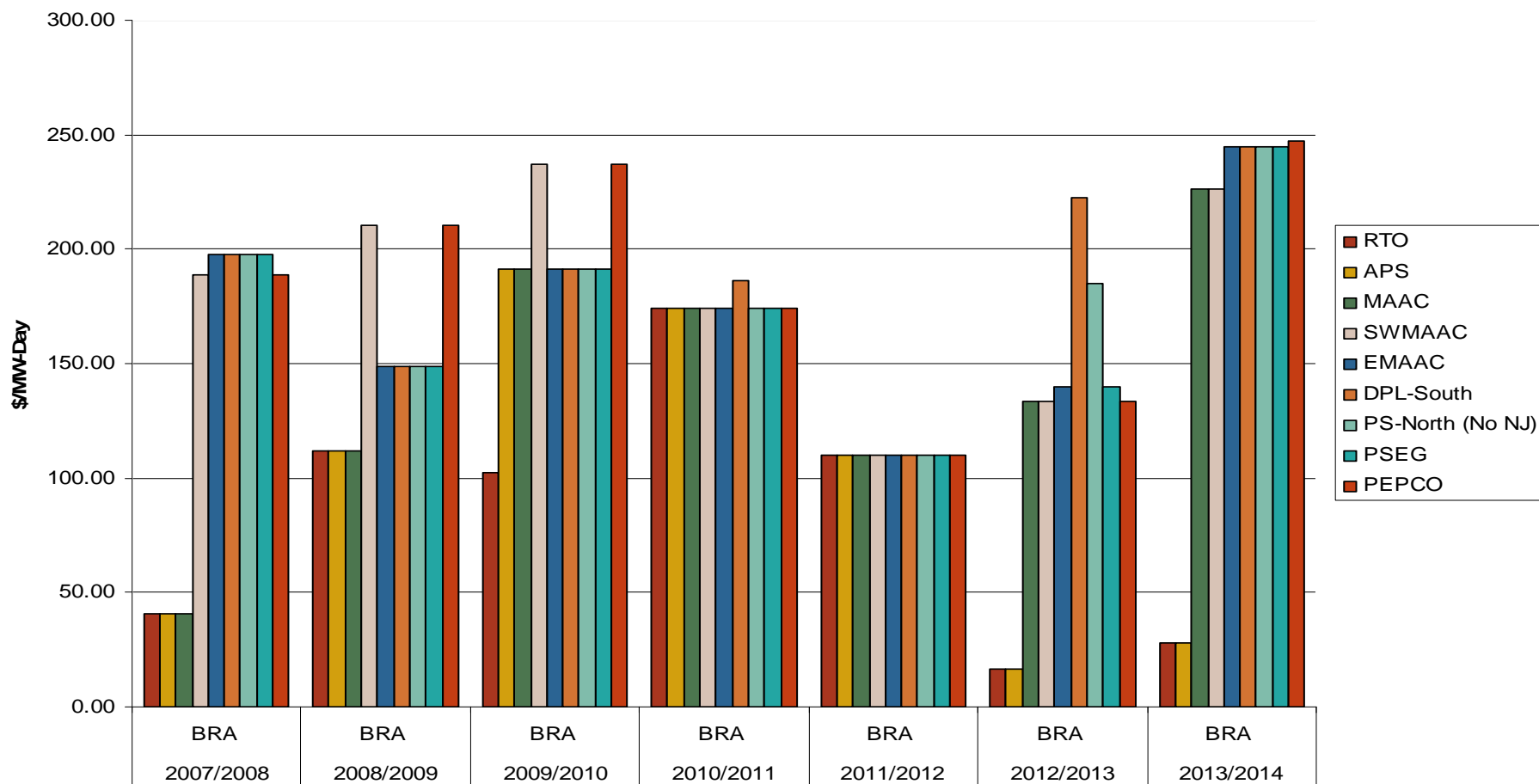


Source: Derived from NYISO data
February 2012

Updated: February 14, 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