OE ENERGY MARKET SNAPSHOT

Mid-Atlantic States Version – February 2012 Data

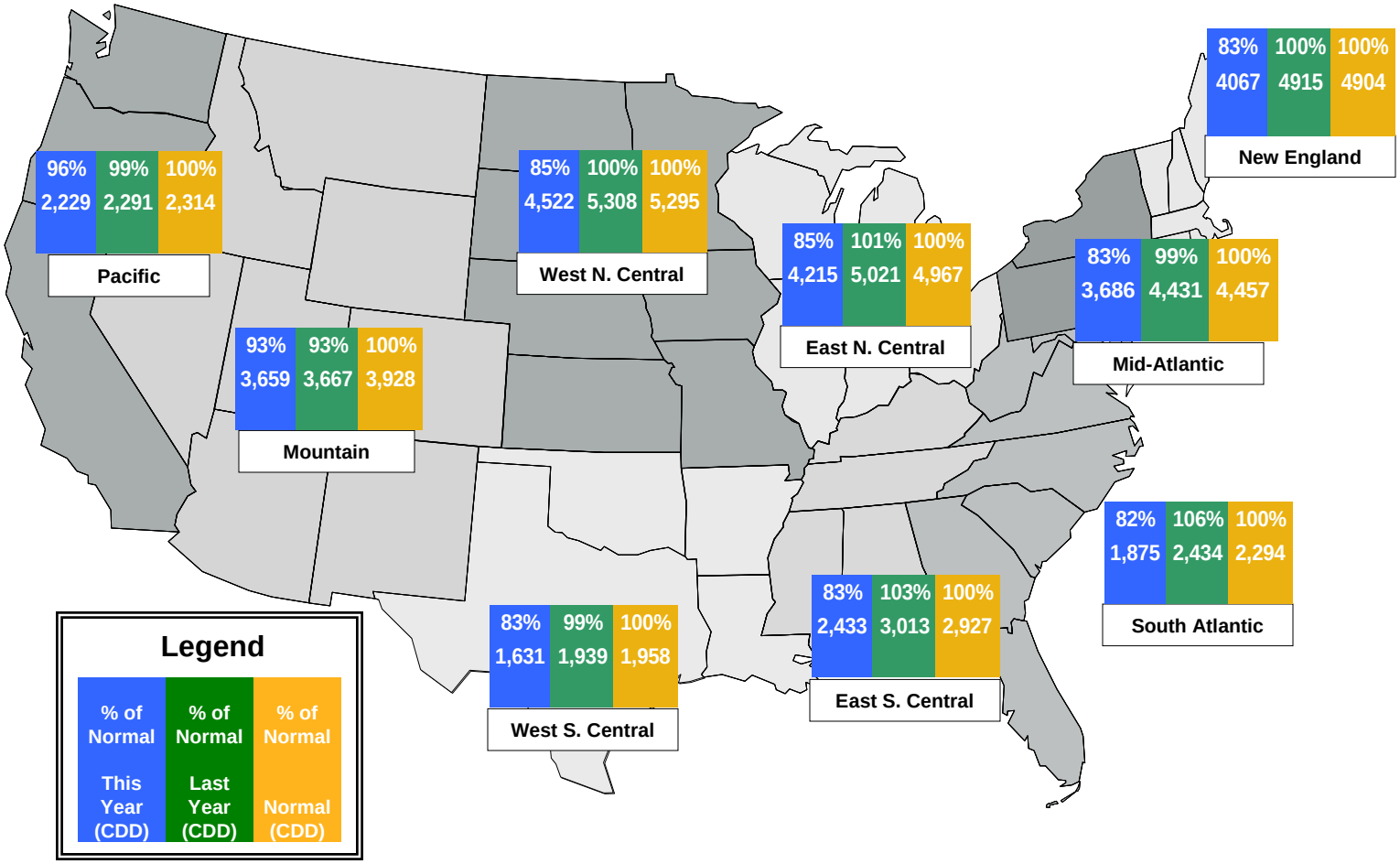
Office of Enforcement
Federal Energy Regulatory Commission
March 2012

Infrastructure Report

February Infrastructure Report

Weather

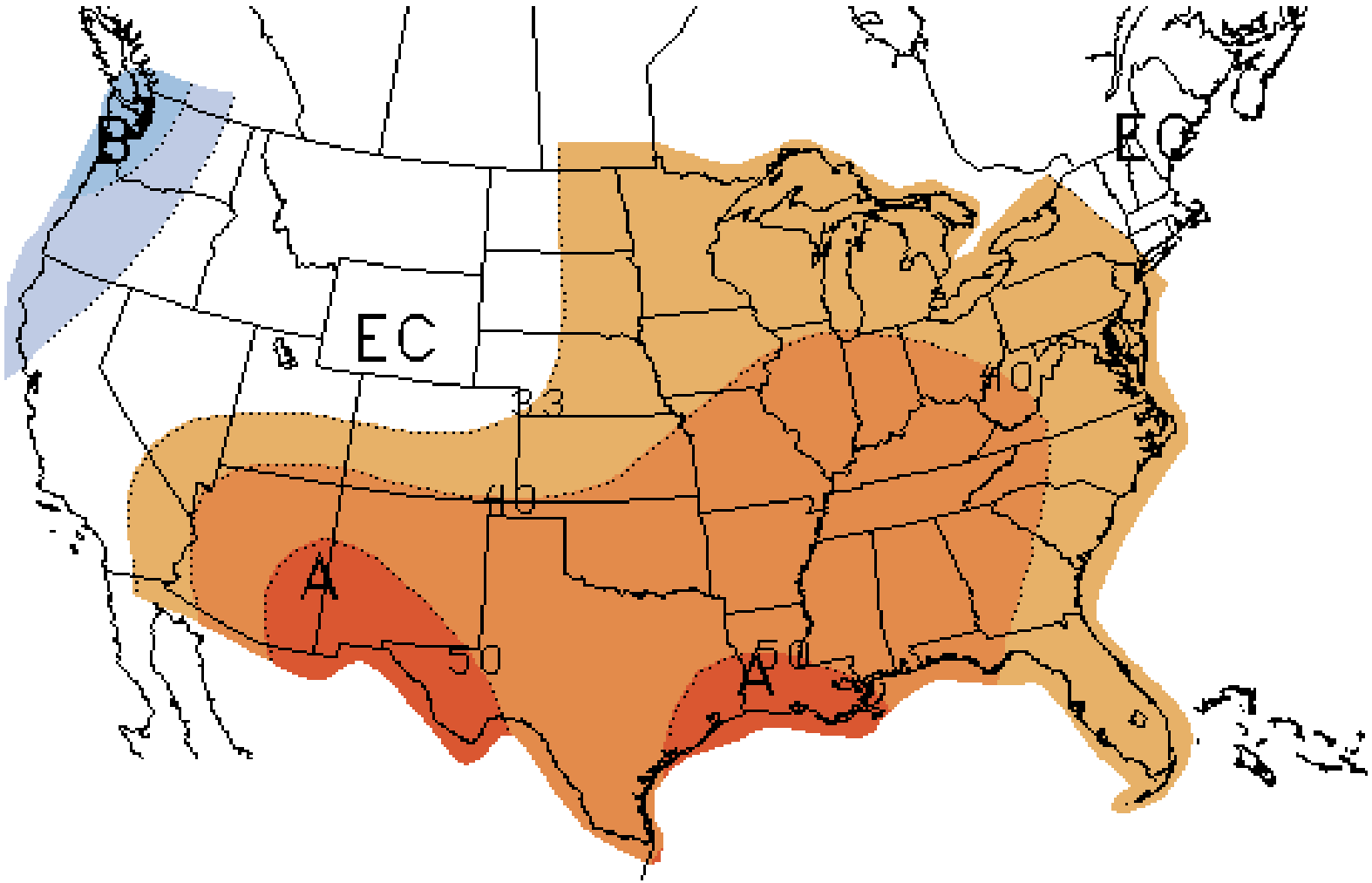
Regional Heating Degree Days – July 2011 to February 2012



Source: Derived from *NOAA* data. Normal is based on a 30-year average of heating degree day data.

Updated: March 6, 2012

NOAA's 3 Month Temperature Forecast
Made February 16, 2012, Valid for March 2012 – May 2012

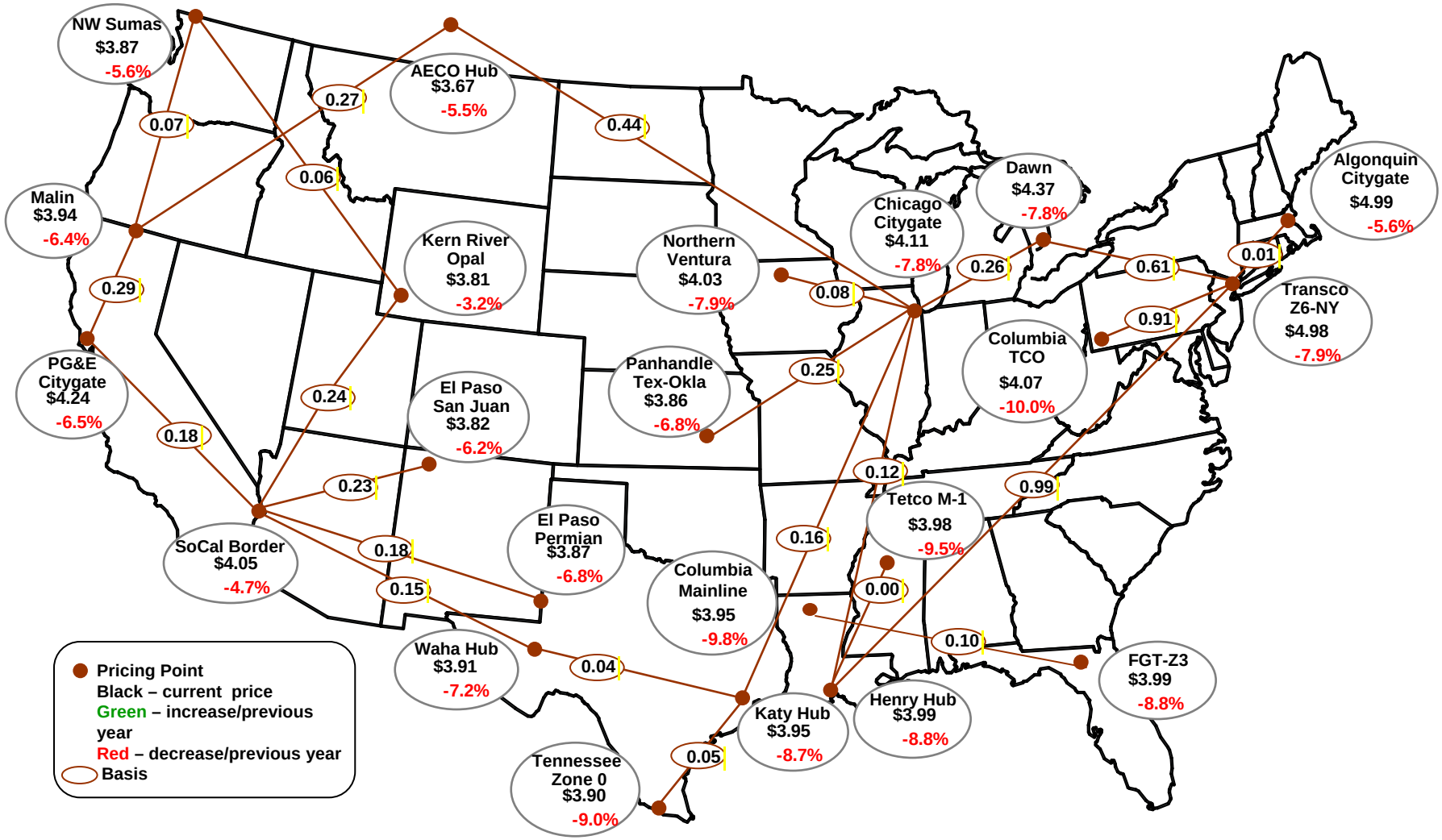


Note: "A" areas are above normal, "B" areas are below normal and "EC" means equal chance. Normal is based on the last 30 years of data.
Source: Derived from *NOAA* data.

Updated: March 6, 2012

Natural Gas and Fuels Markets

Average Spot Gas Prices, 2011 ($MMBtu)



Source: Derived from *Platts* data.

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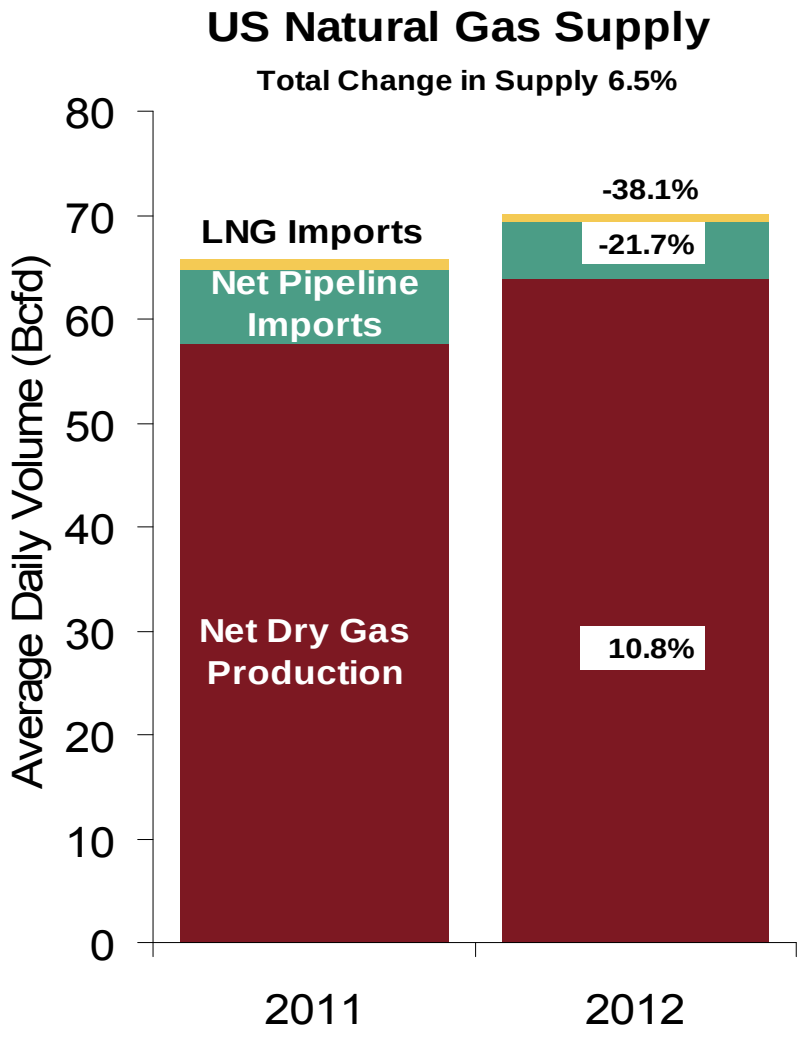
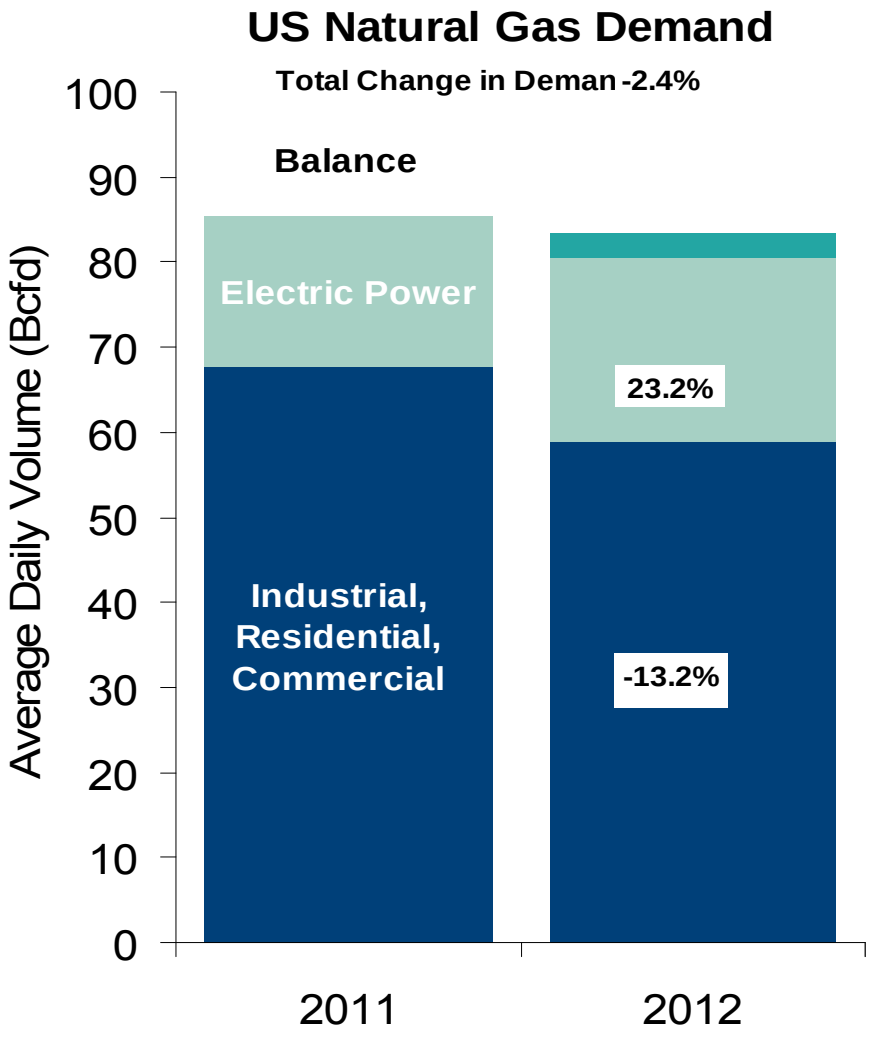
U.S. NG Supply and Demand 2011 vs. 2012: January - February





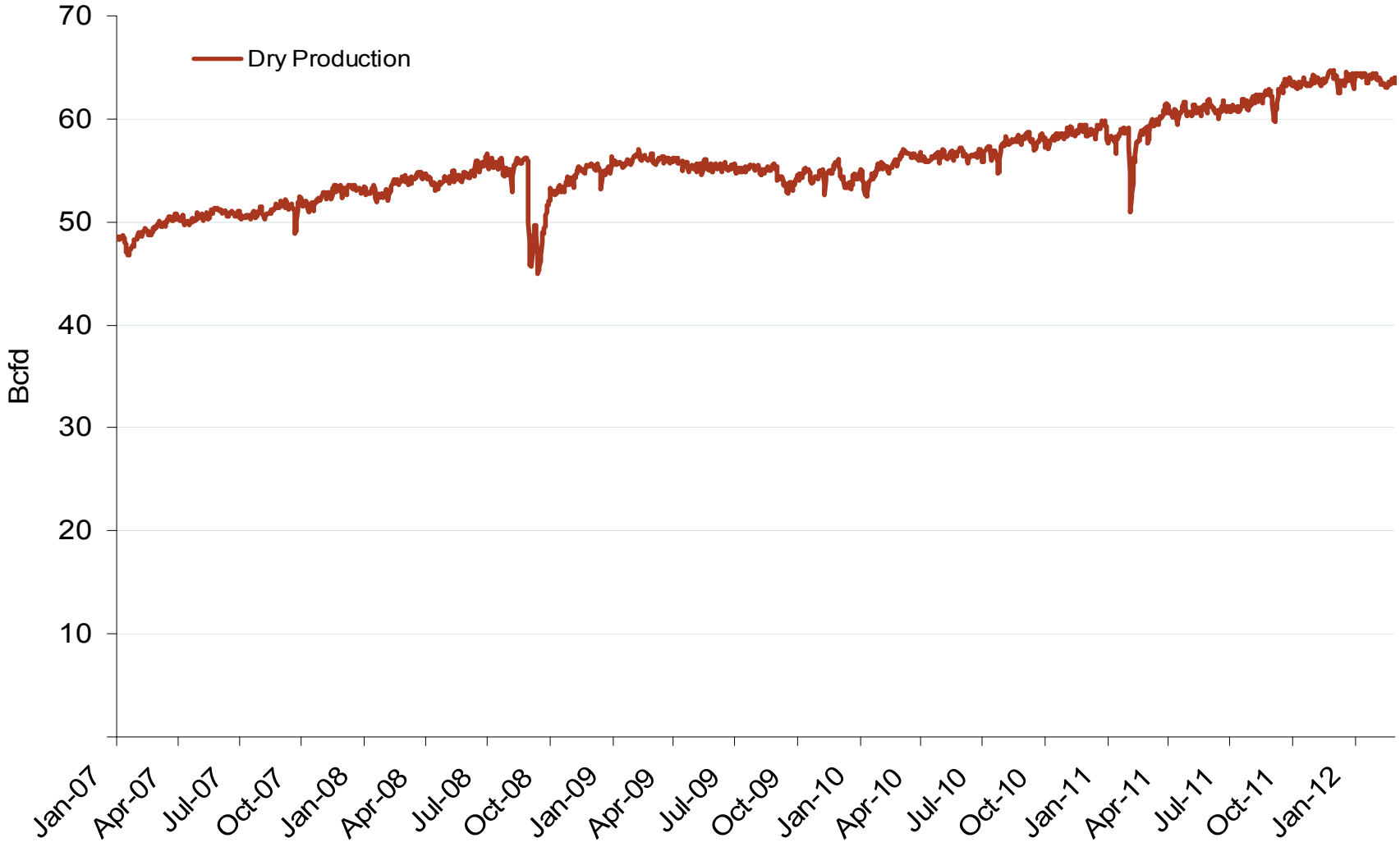
Note: Balance includes all amounts not attributable to other categories.

Source: Derived from *Bentek Energy* data

March 2012 Mid-Atlantic Snapshot

Updated: March 09, 2012

Monthly U.S. Dry Gas Production – Lower 48 States



Note: Prior to July 2010, chart was derived from a combination of *EIA* and *Bentek Energy* data

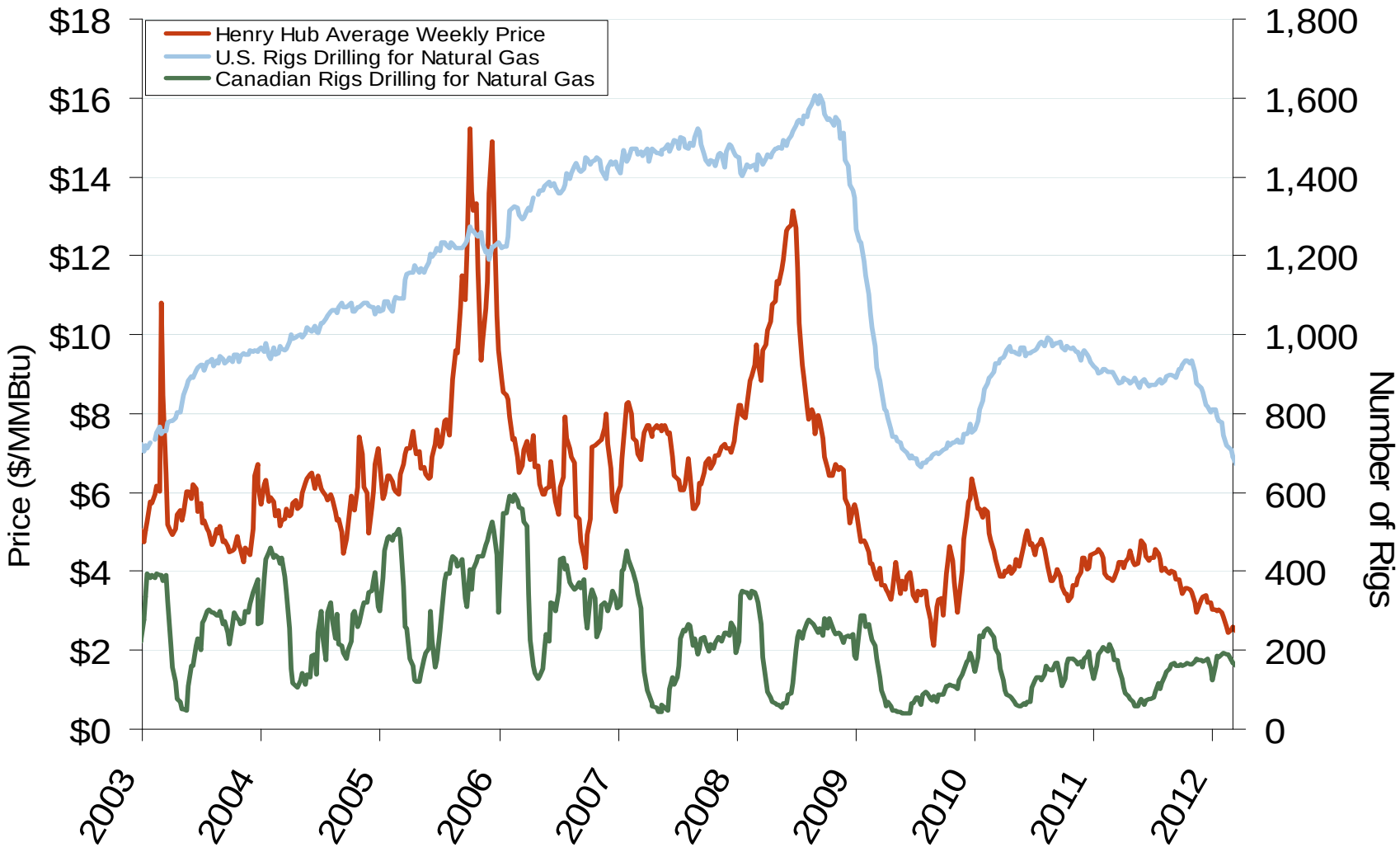
Source: Derived from *Bentek Energy* data

March 2012 Mid-Atlantic Snapshot

Updated: March 09, 2012

20021

U.S. and Canadian NG Drilling Rig Count and Daily Spot Prices

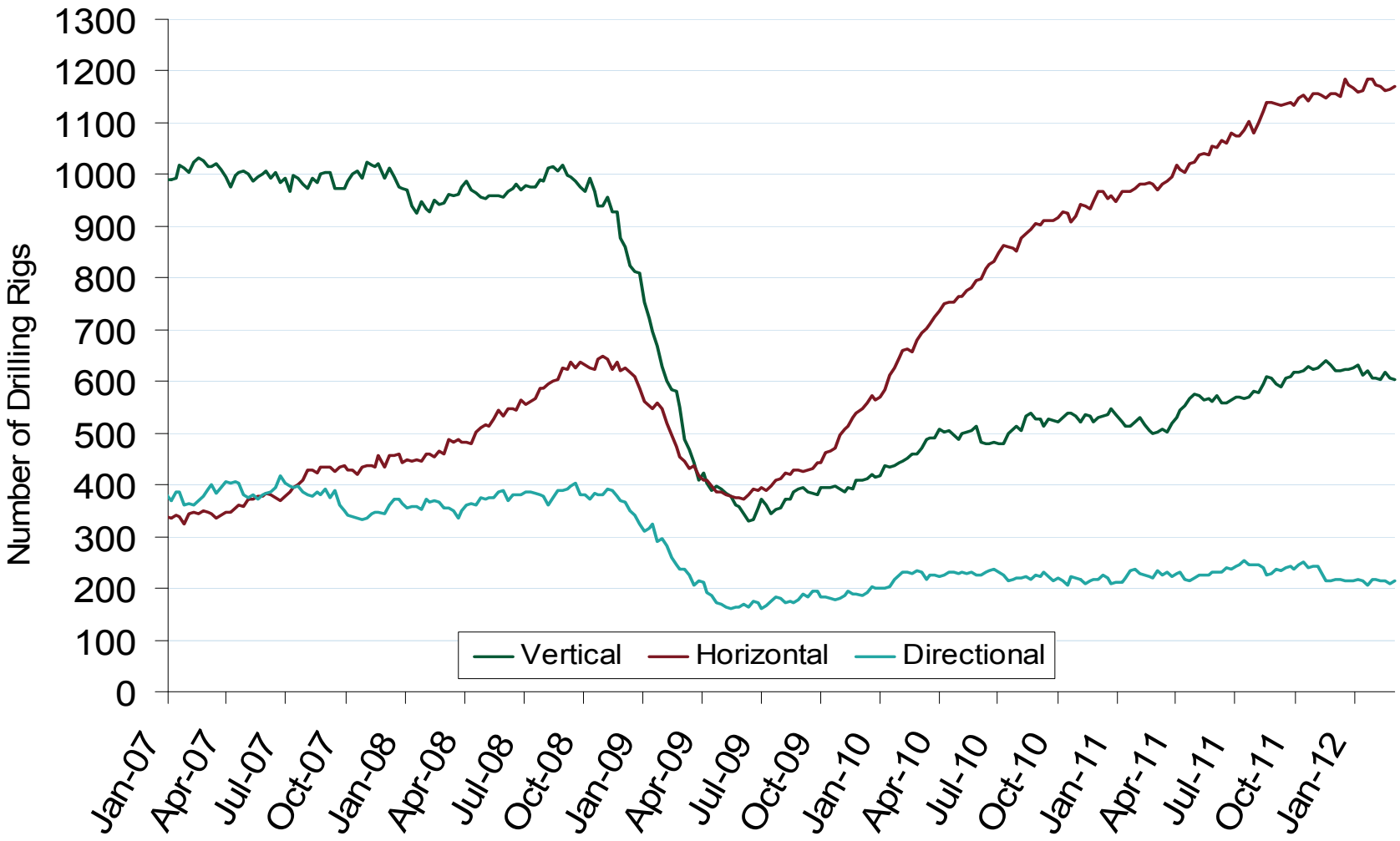


Source: Derived from *Platts* and *Baker Hughes* data

March 2012 Mid-Atlantic Snapshot

Updated: March 8, 2012

U.S. Oil and Natural Gas Drilling Rig Count by Type

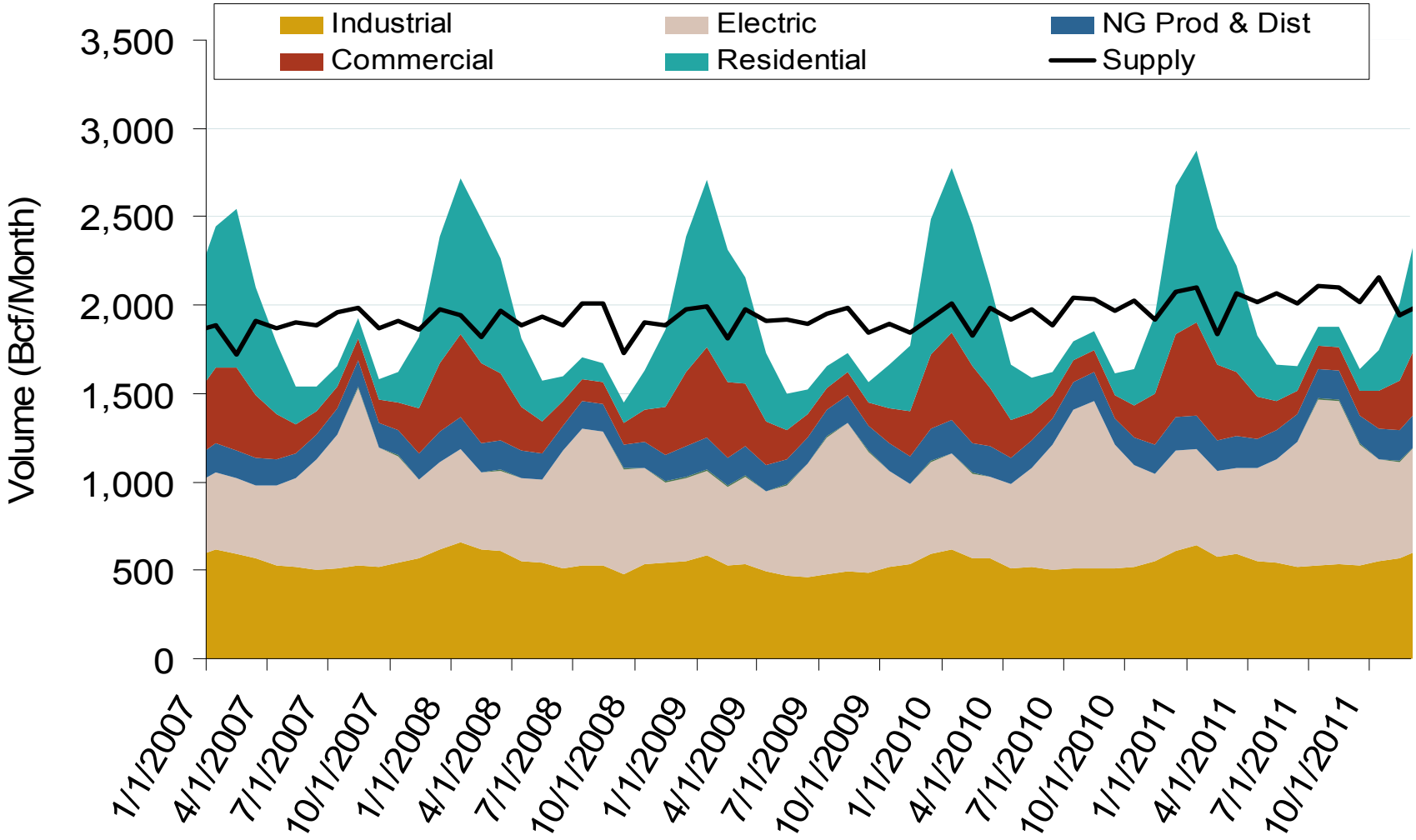


Source: Derived from *Platts* and *Baker Hughes* data

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

Annual U.S. Natural Gas Consumption by Sector



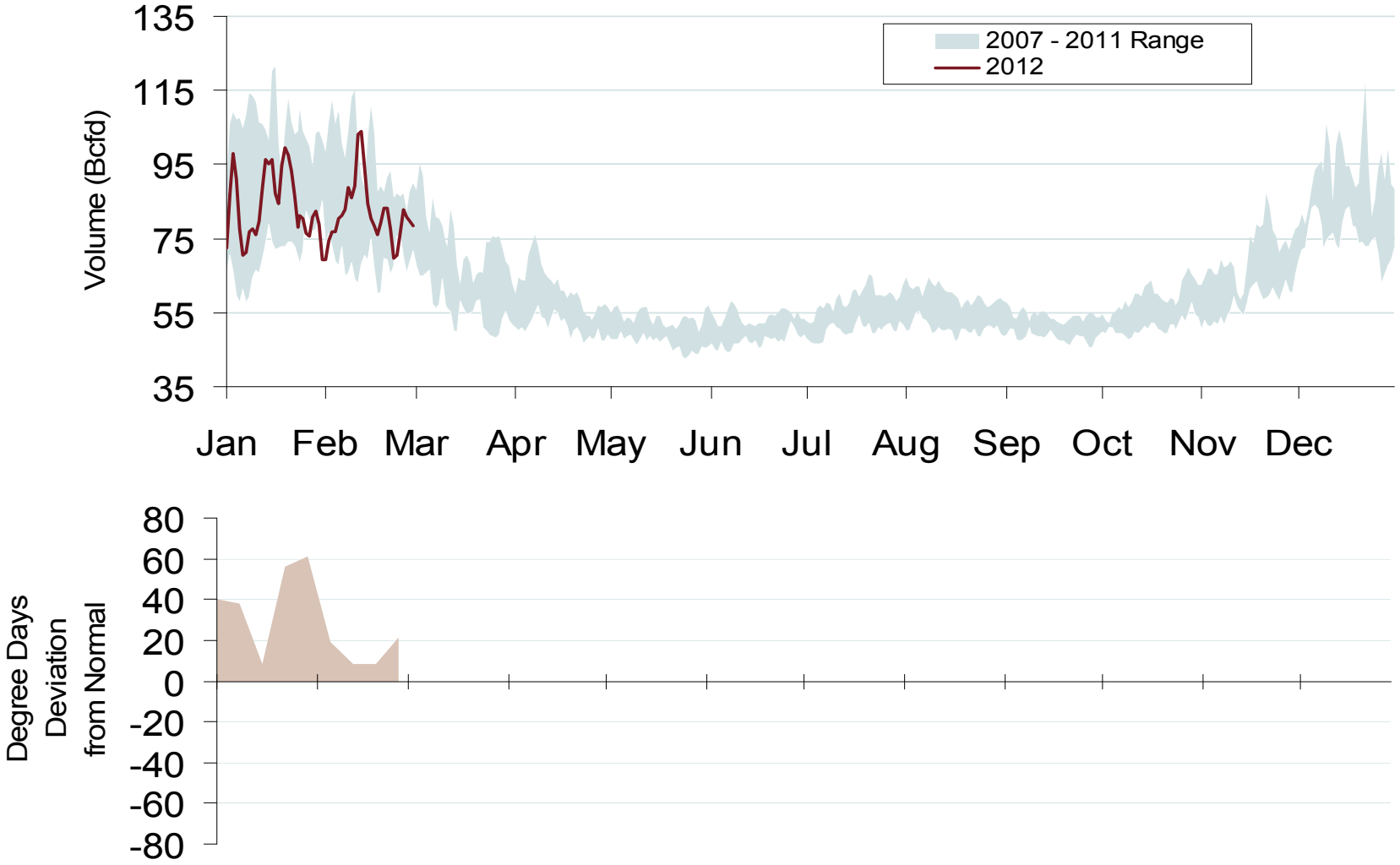
Notes: Supply includes lower 48 state production, net pipeline imports, and LNG imports

Source: Derived from *EIA* data

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

Total U.S. Natural Gas Demand (All Sectors) and Temperatures

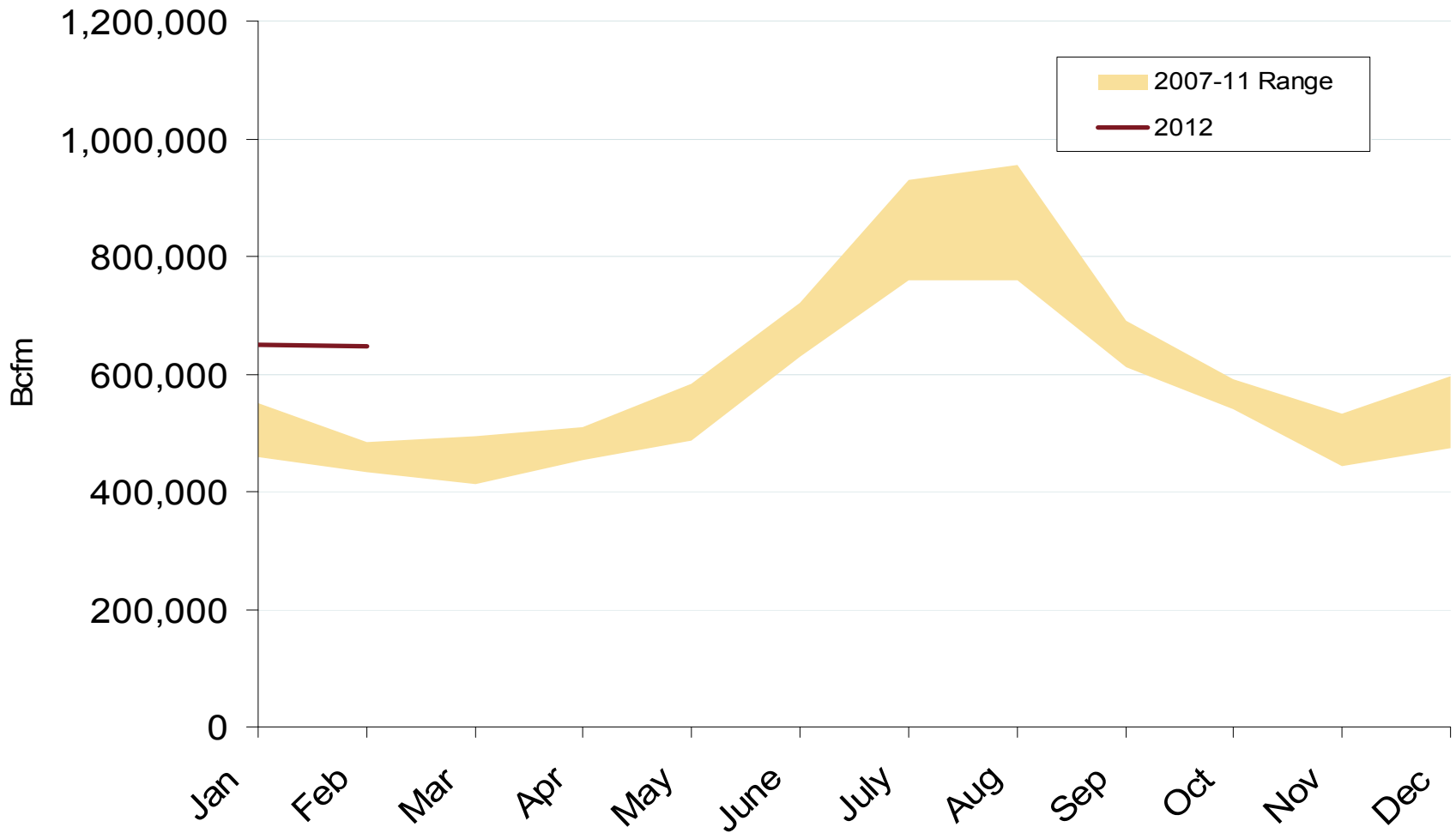


Source: Derived from *Bentek Energy* and *Weekly NOAA* data

March 2012 Mid-Atlantic Snapshot

Updated: March 09, 2012

U.S. Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data

March 2012 Mid-Atlantic Snapshot

Updated: March 12, 2012

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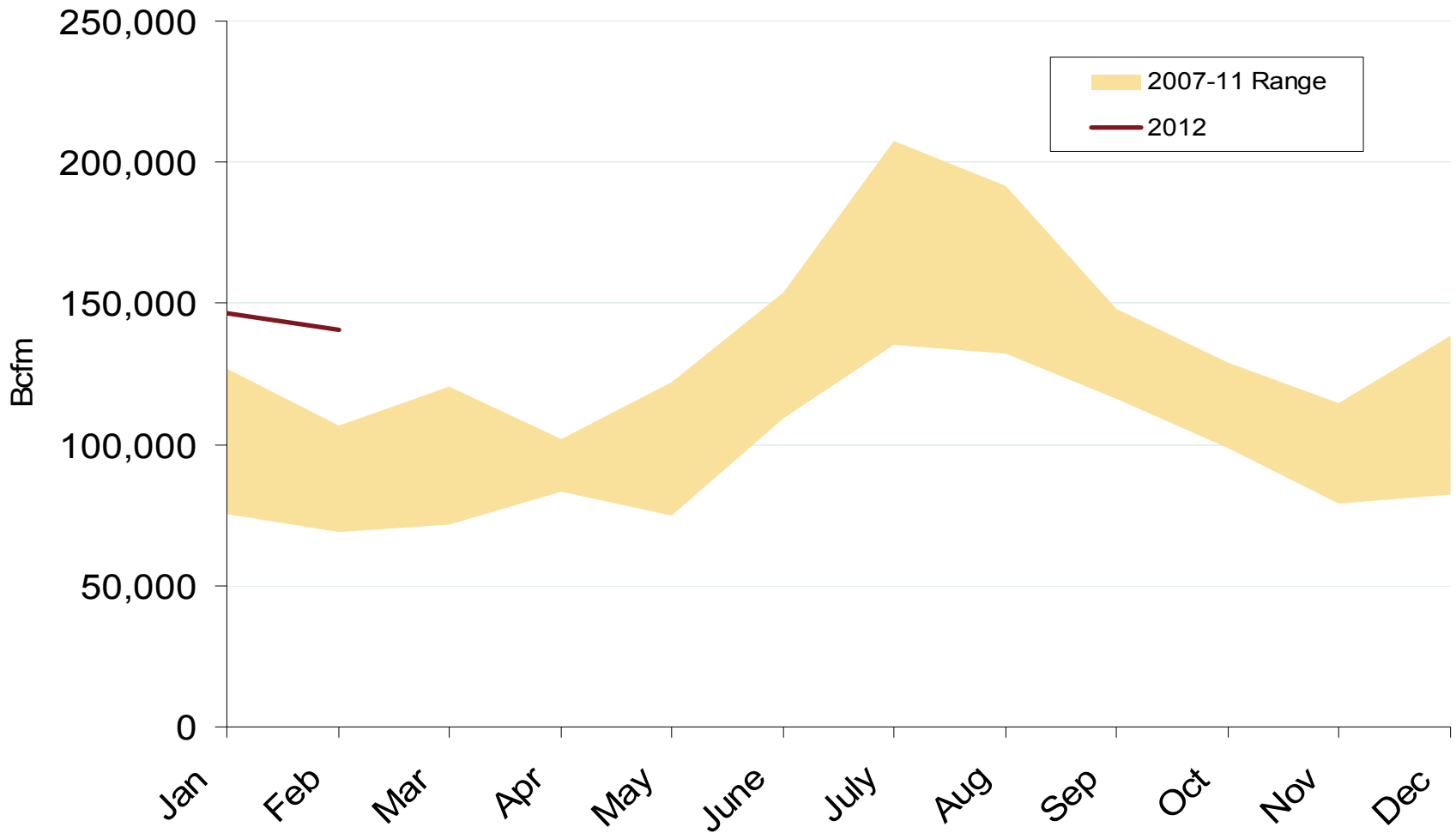
Northeast Natural Gas Consumption for Power Generation



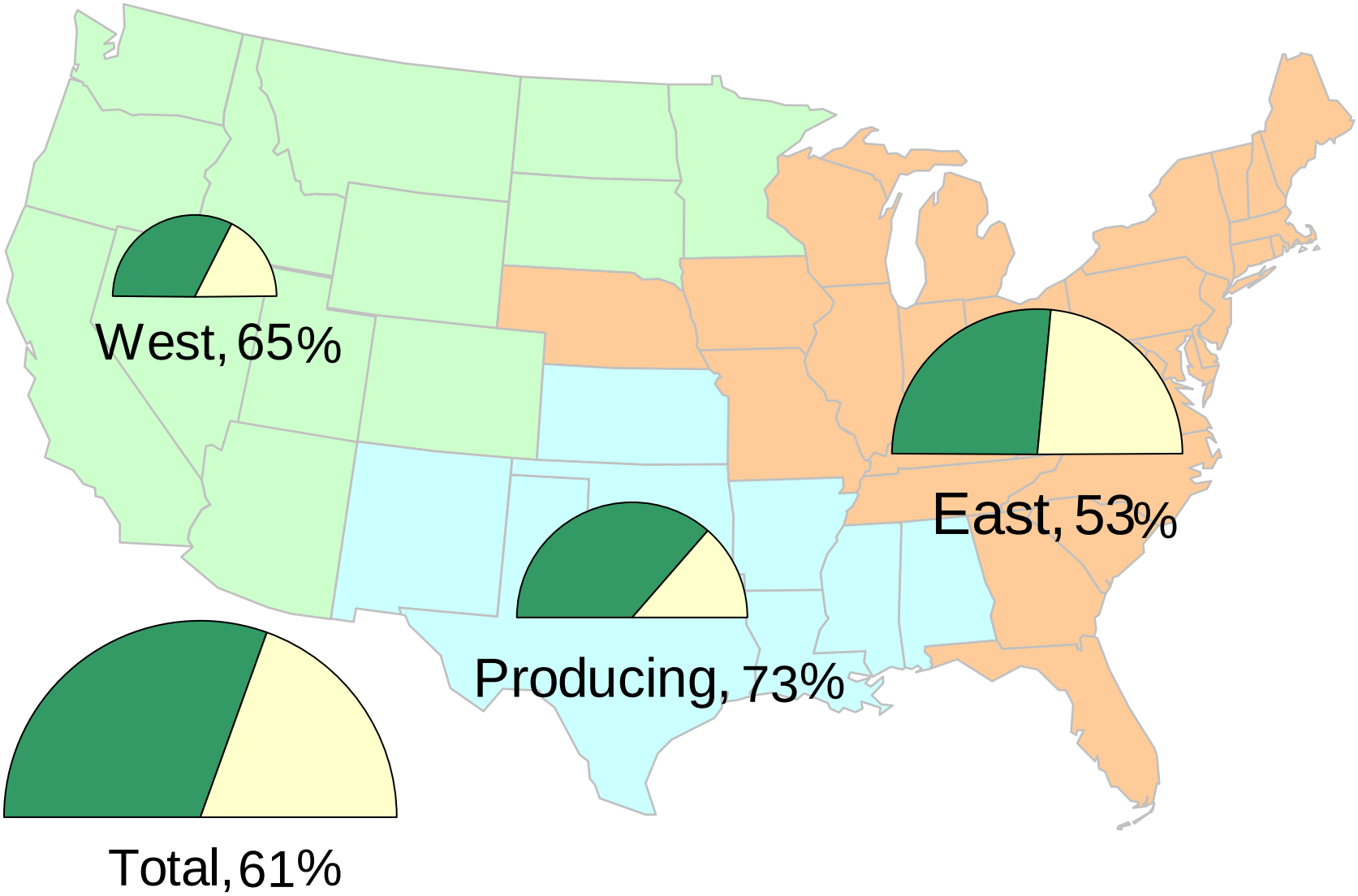
Source: Derived from *Bentek Energy* data

March 2012 Mid-Atlantic Snapshot

Updated: March 12, 2012

22057

Natural Gas Storage Inventories – March 2, 2012

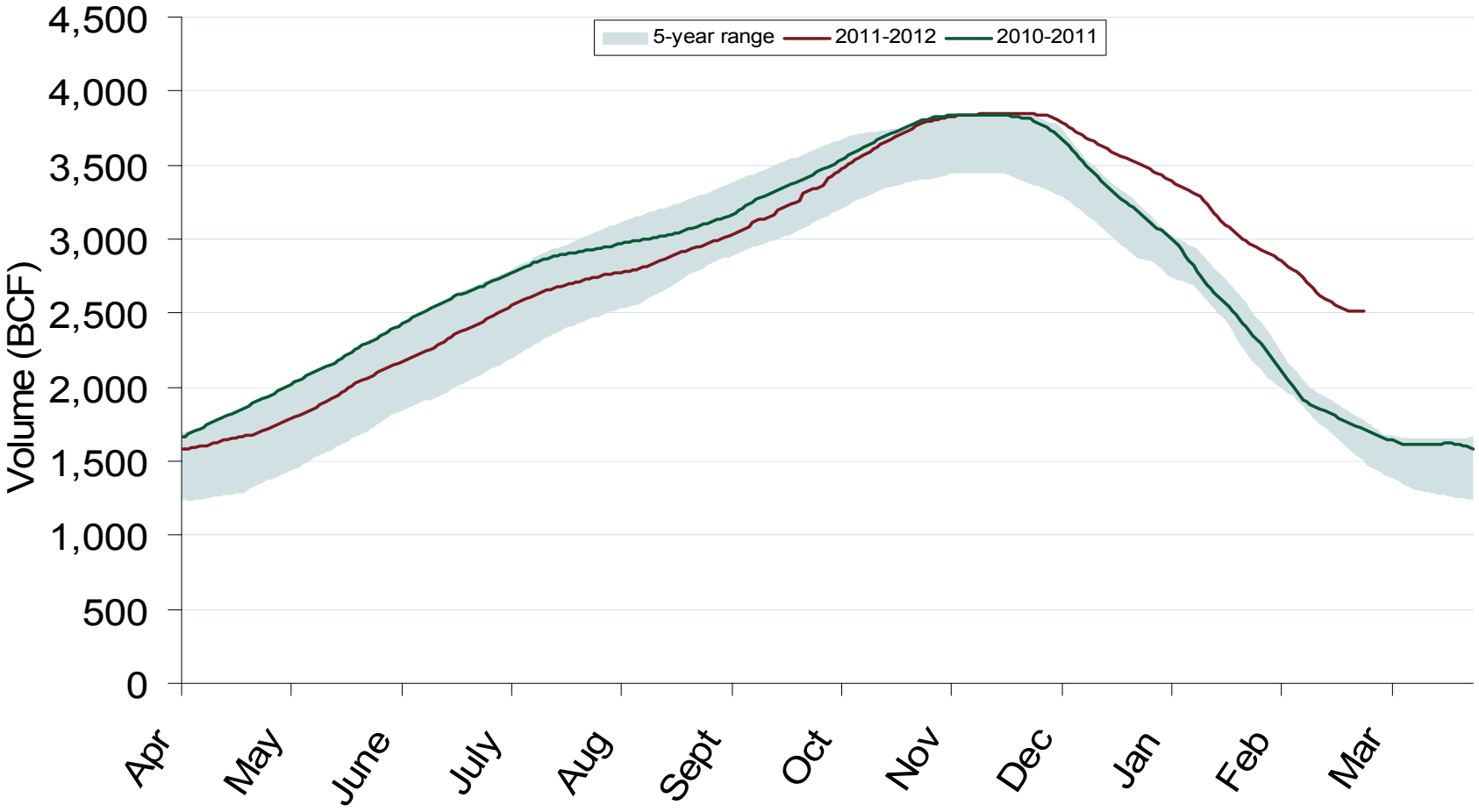


Source: Derived from *EIA Storage* and *Estimated Working Gas Capacity* data

March 2012 Mid-Atlantic Snapshot

Updated: March 6, 2012

Total U.S. Working Gas in Storage



Source: Derived from *EIA* data

March 2012 Mid-Atlantic Snapshot

Updated: March 08, 2012

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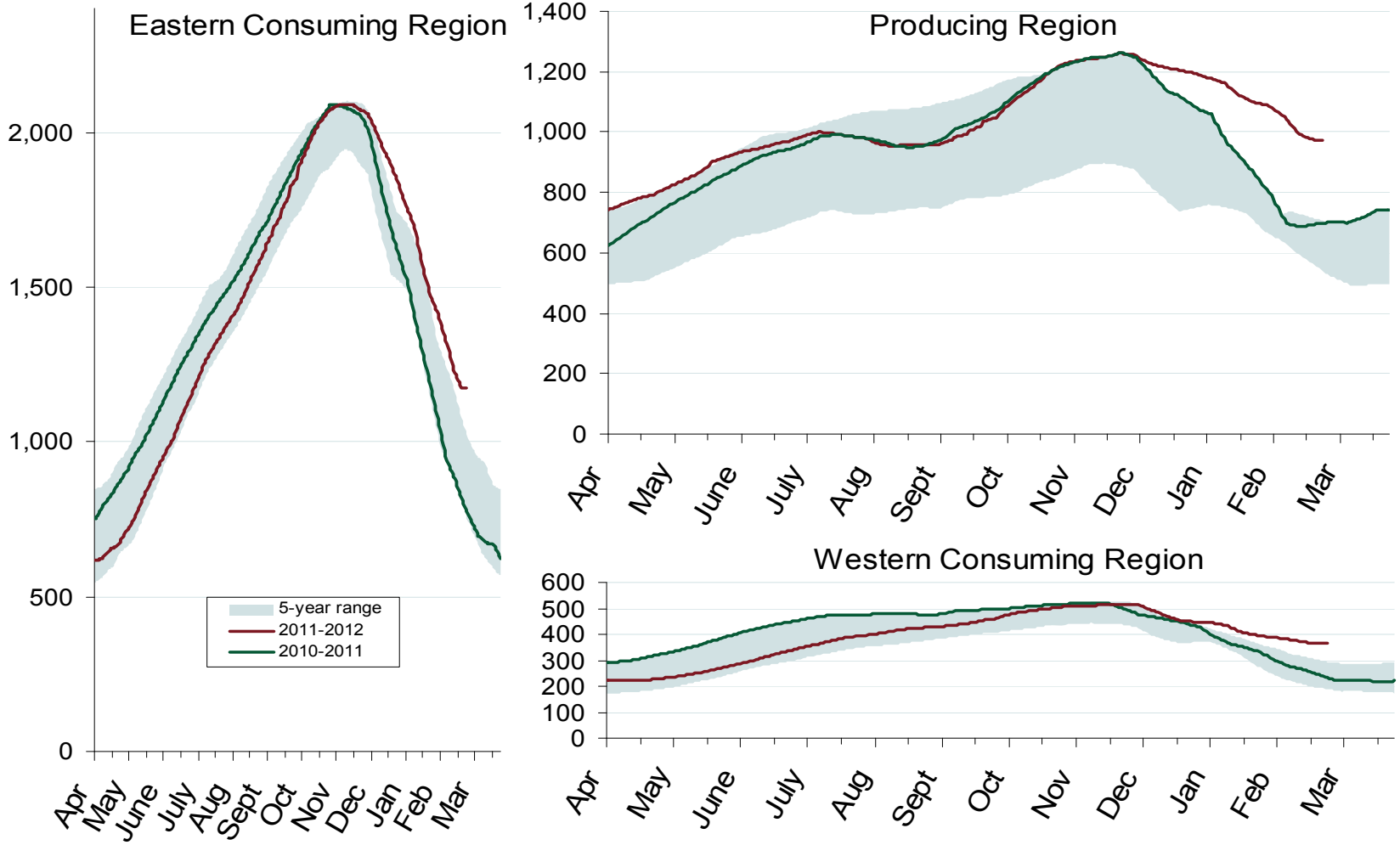
Regional Totals of Working Gas in Storage



Source: Derived from *EIA* data

March 2012 Mid-Atlantic Snapshot

Updated: March 08, 2012

2004

World LNG Estimated April 2012 Landed Prices

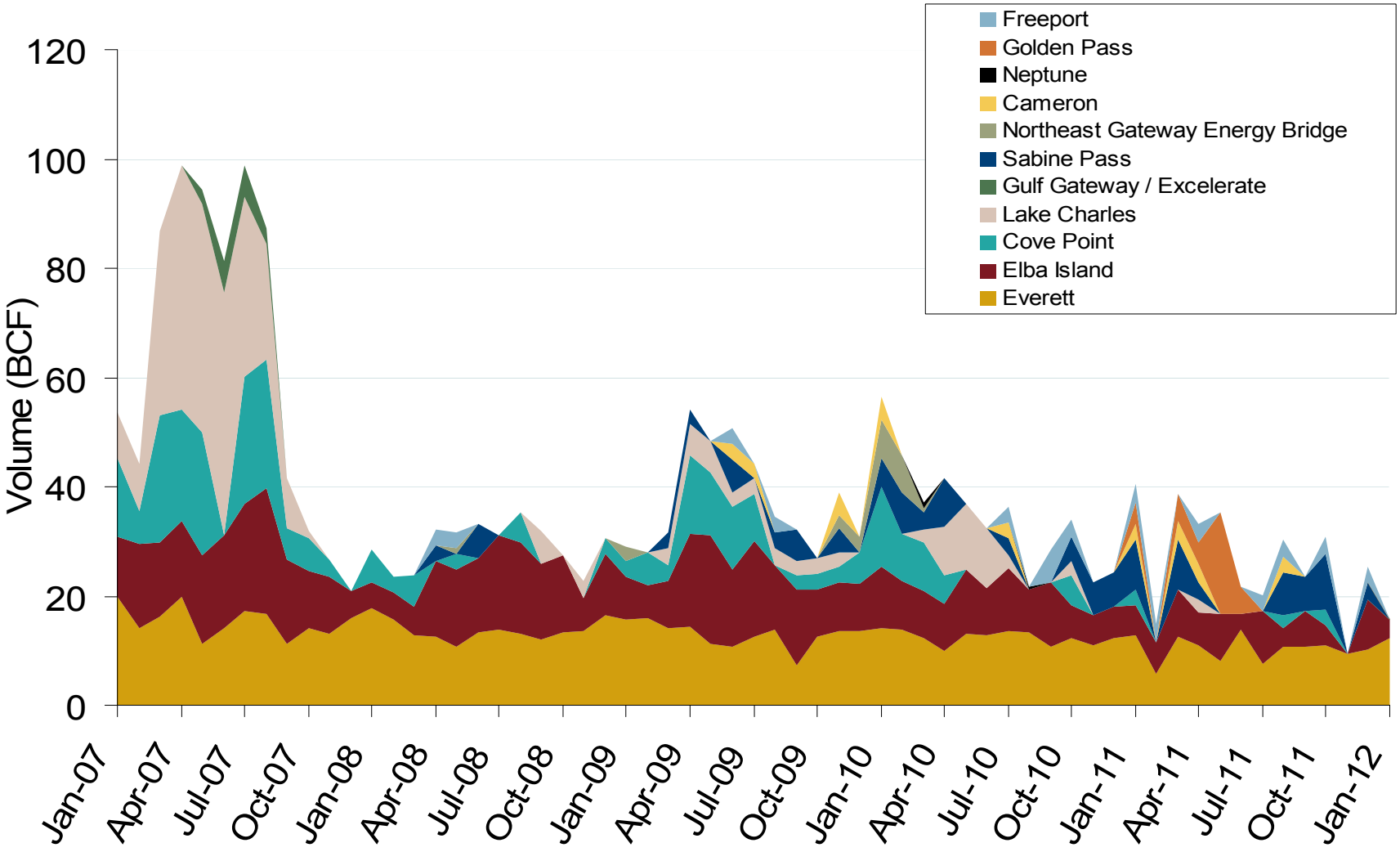
Source: *Waterborne Energy, Inc*. Data in $US/MMBtu

March 2012 Mid-Atlantic Snapshot

Updated: March 6, 2012

3024

Monthly Gas Imports at Existing U.S. LNG Facilities

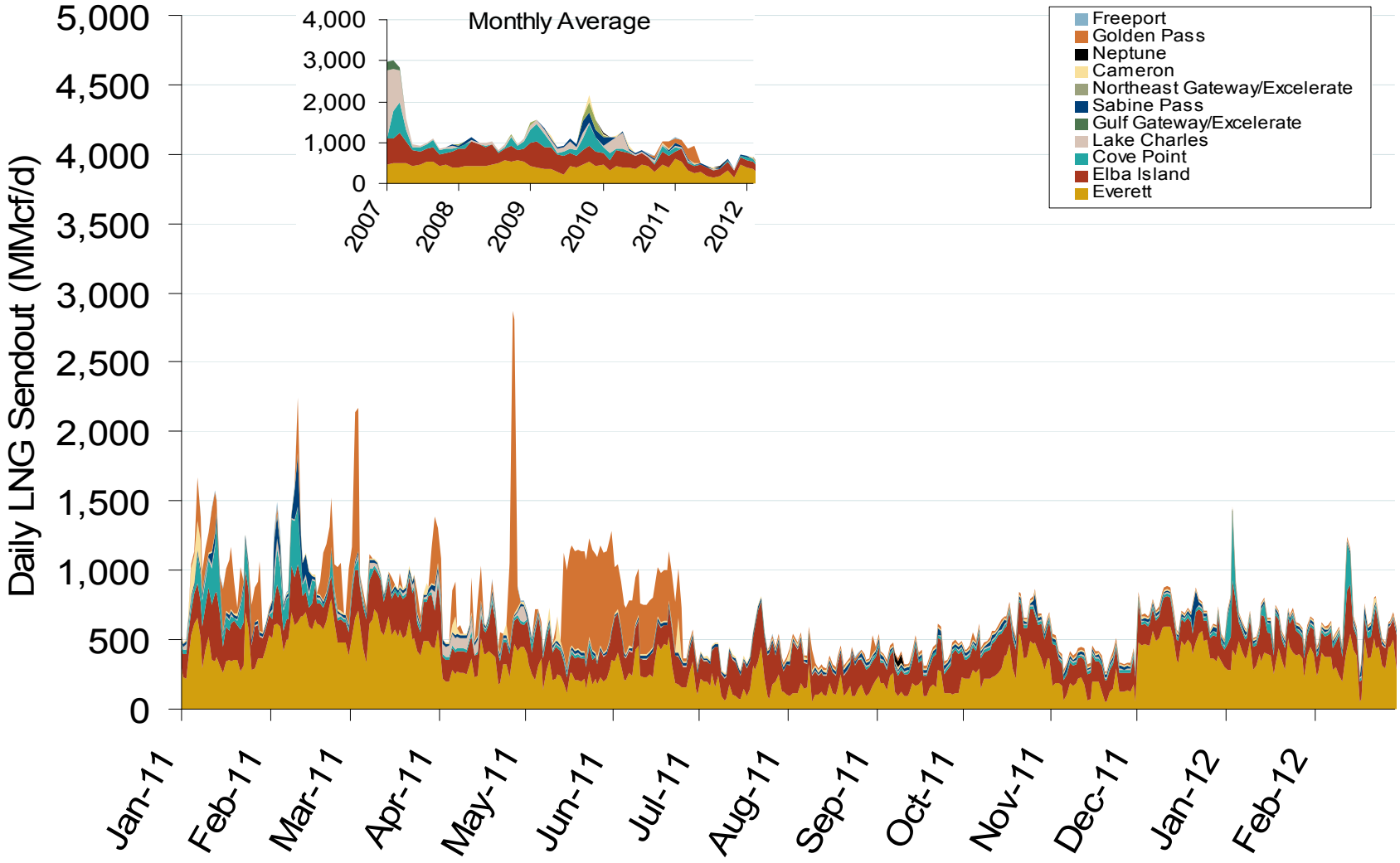


Source: Derived from *DOE Office of Fossil Energy* data

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

Daily Gas Sendout from Existing U.S. LNG Facilities

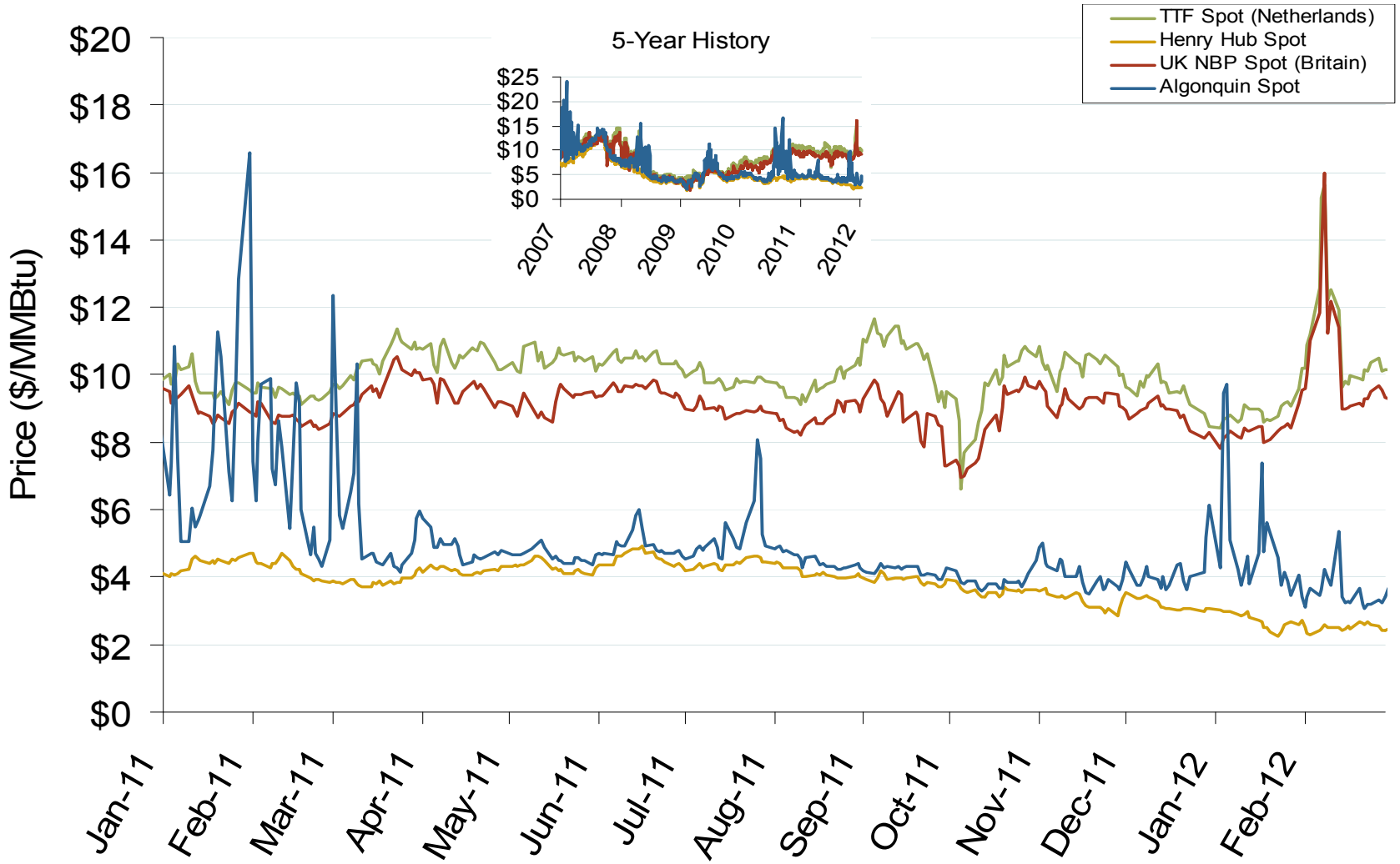


Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes Freeport LNG which flows via intrastate pipelines

Source: Derived from *Bentek Energy* data

Updated: March 09, 2012

Atlantic Basin European and US Spot Natural Gas Prices

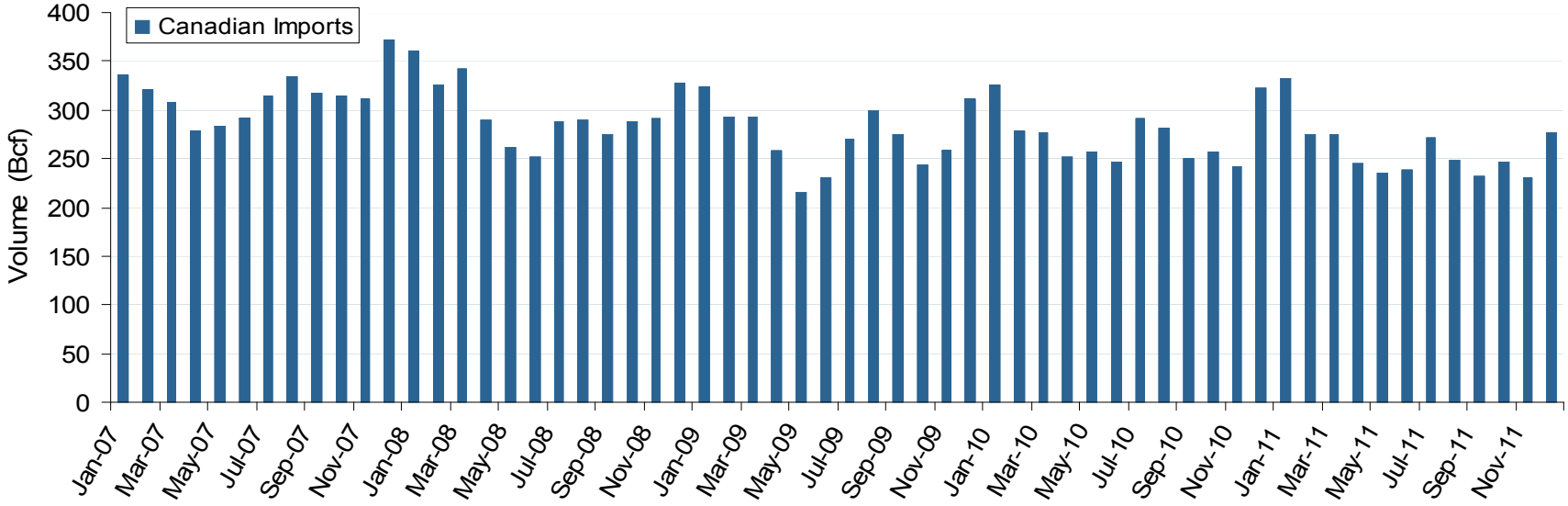


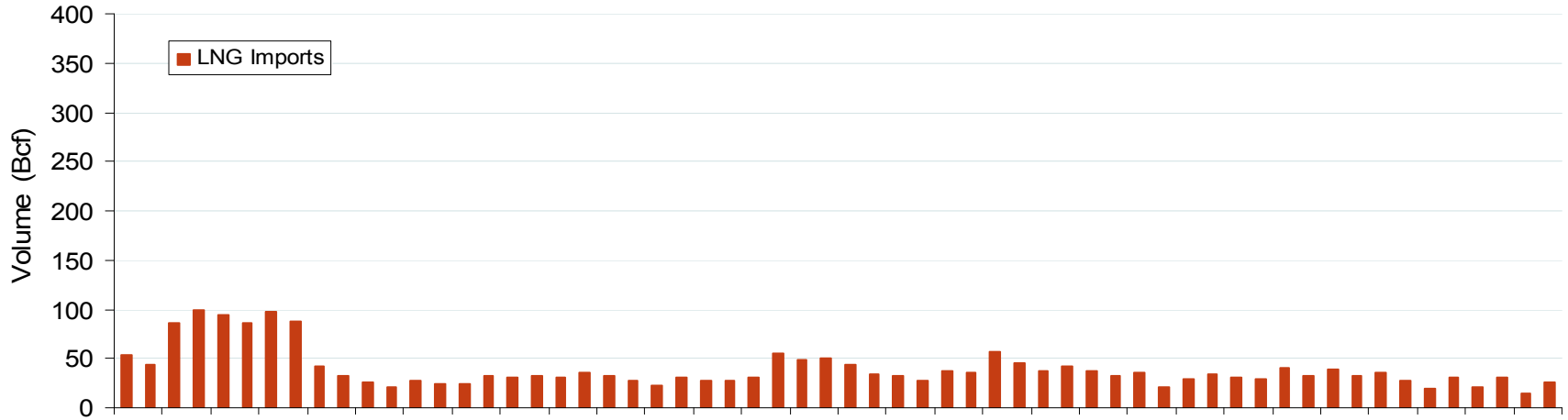
Source: Derived from *Bloomberg* and *ICE* data

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

Canadian and LNG Natural Gas Imports Into the U.S.



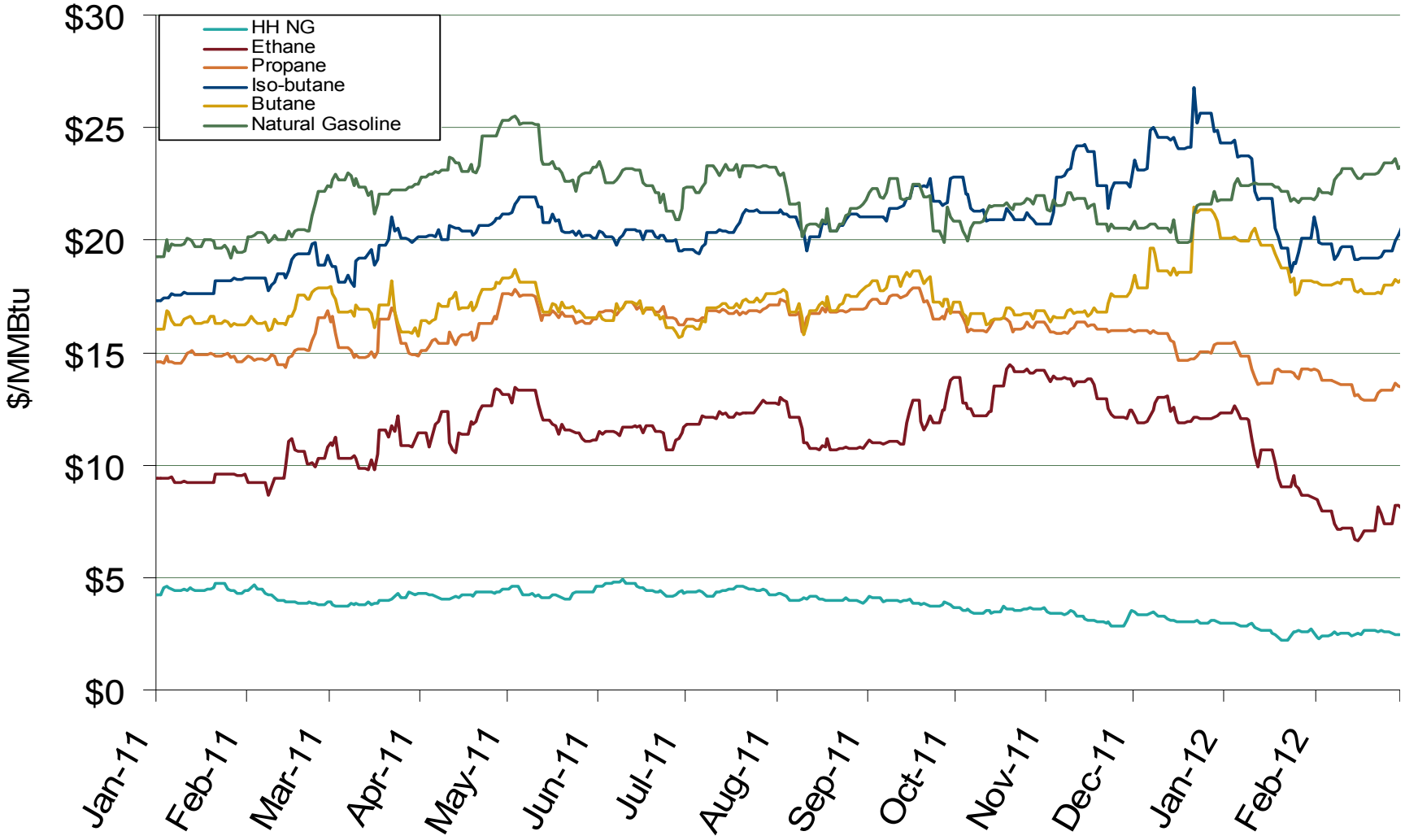


Source: *EIA Natural Gas Monthly*

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

U.S. Natural Gas vs. Natural Gas Liquids (NGL) Prices

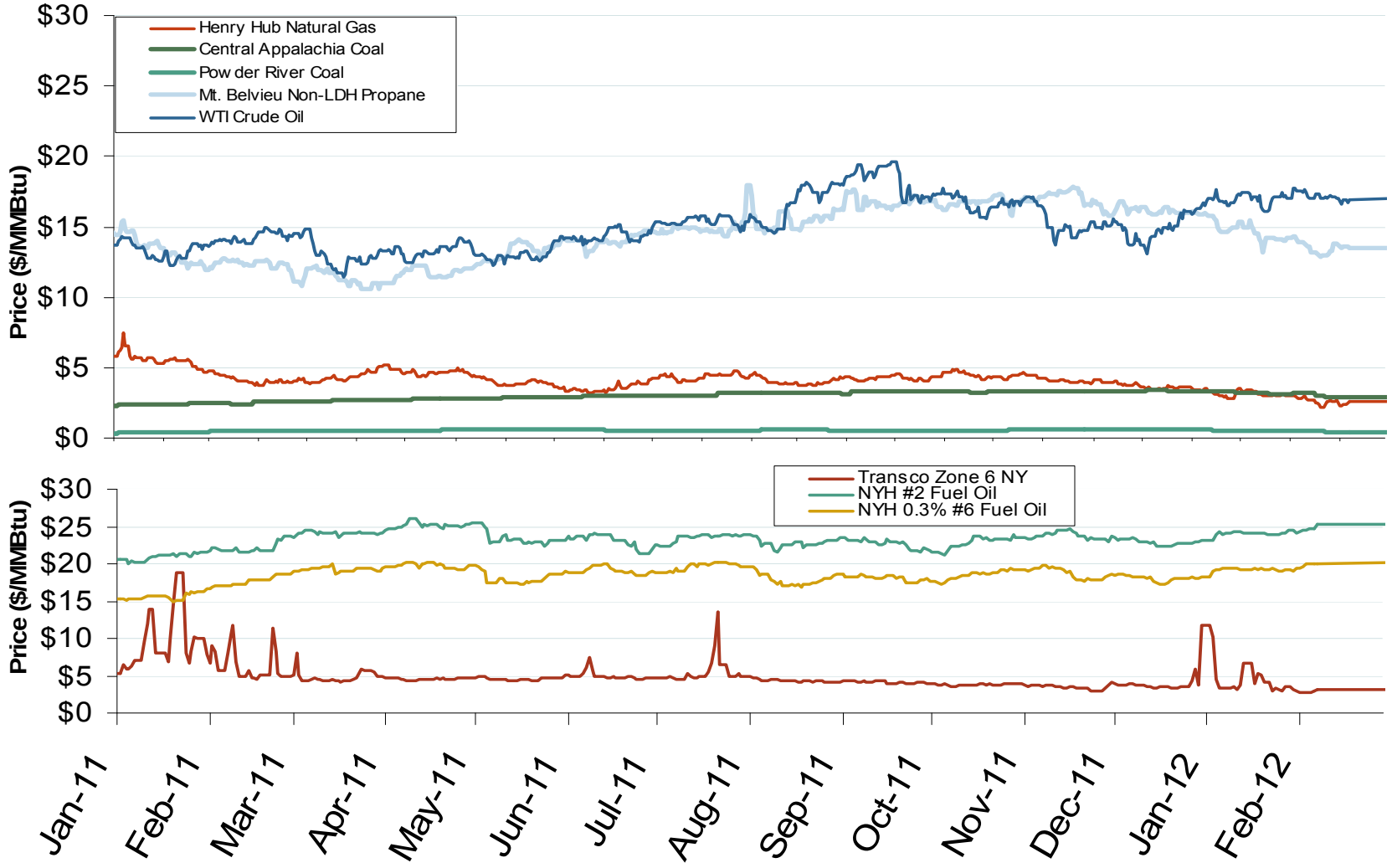


Source: Derived from *Bloomberg* Data

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

Oil, Coal, Natural Gas and Propane Daily Spot Prices

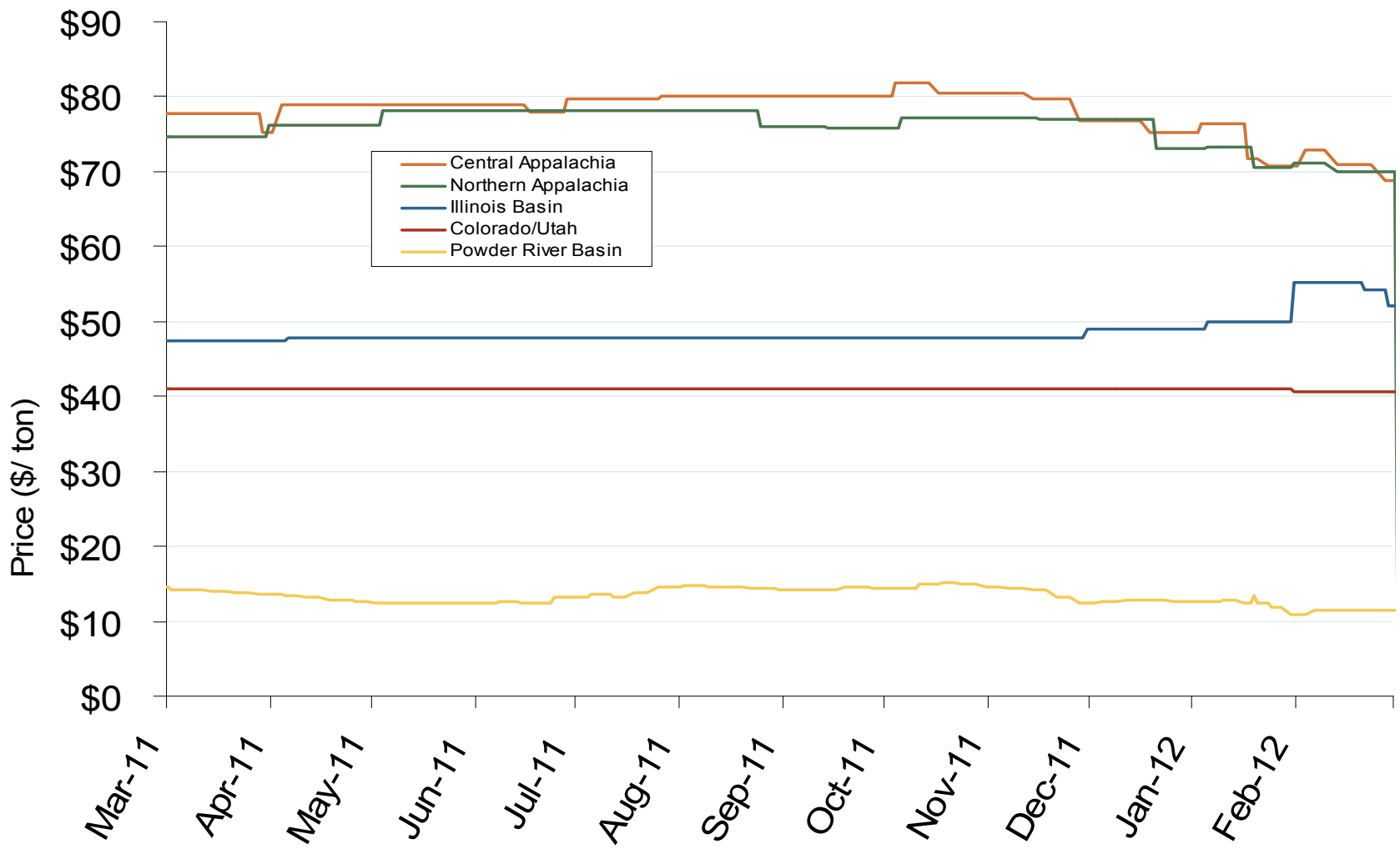


Notes: Coal prices are quoted in $/ton. Conversion factors to $/MMBtu are based on contract specifications of 12,000 btus/pound for Central Appalachian coal and 8800 btus/pound for Powder River Basin coal

Source: Derived from *ICE* and *Bloomberg* data

Updated: March 06, 2012

Central Appalachian and Powder River Basin Coal Prices

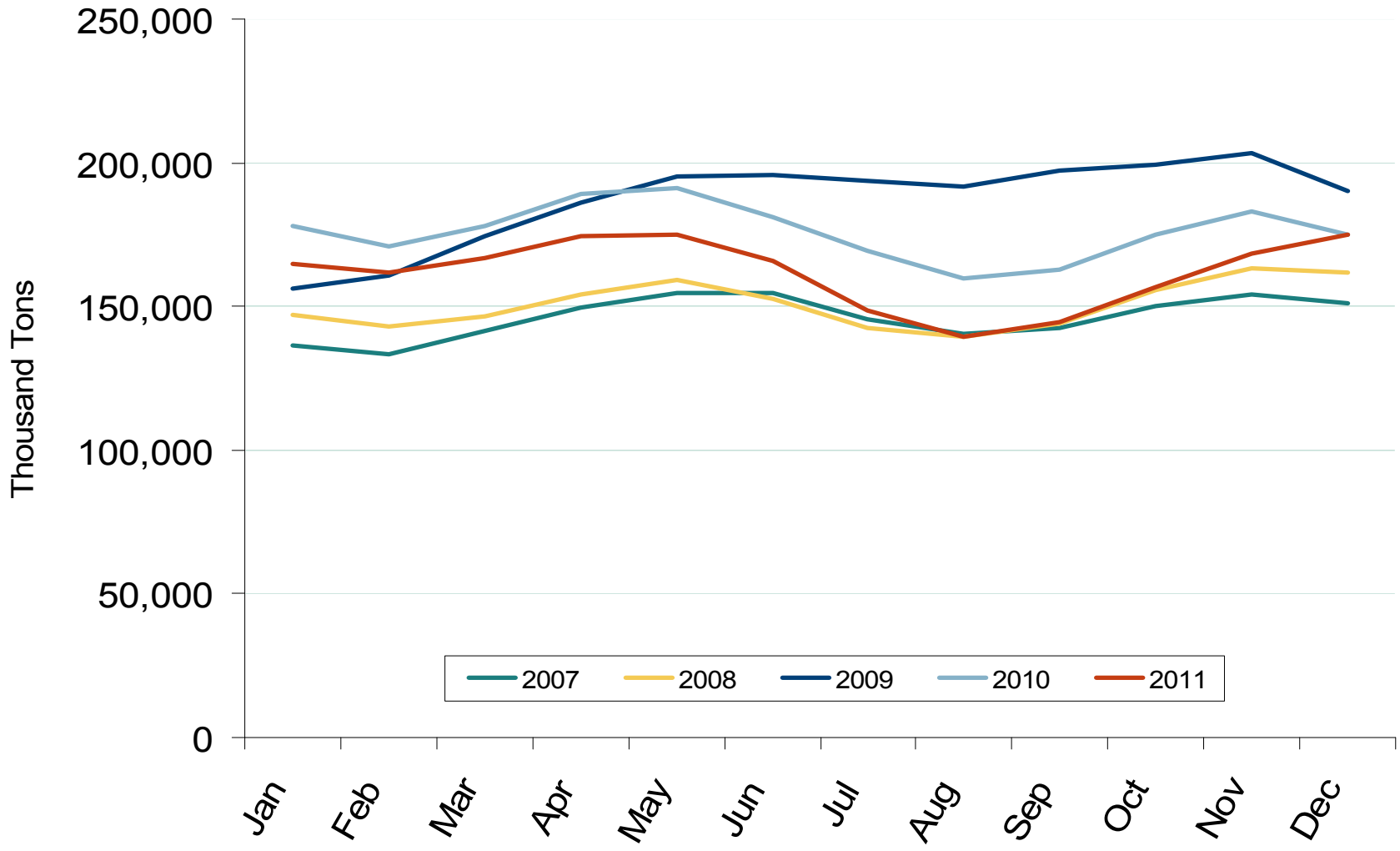


Notes: The Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances

Source: Derived from *Bloomberg* data

Updated: March 06, 2012

U.S. Coal Stockpiles at Electric Power Generating Facilities



Source: Derived from *EIA* data. Excludes Industrial and Commercial Plants

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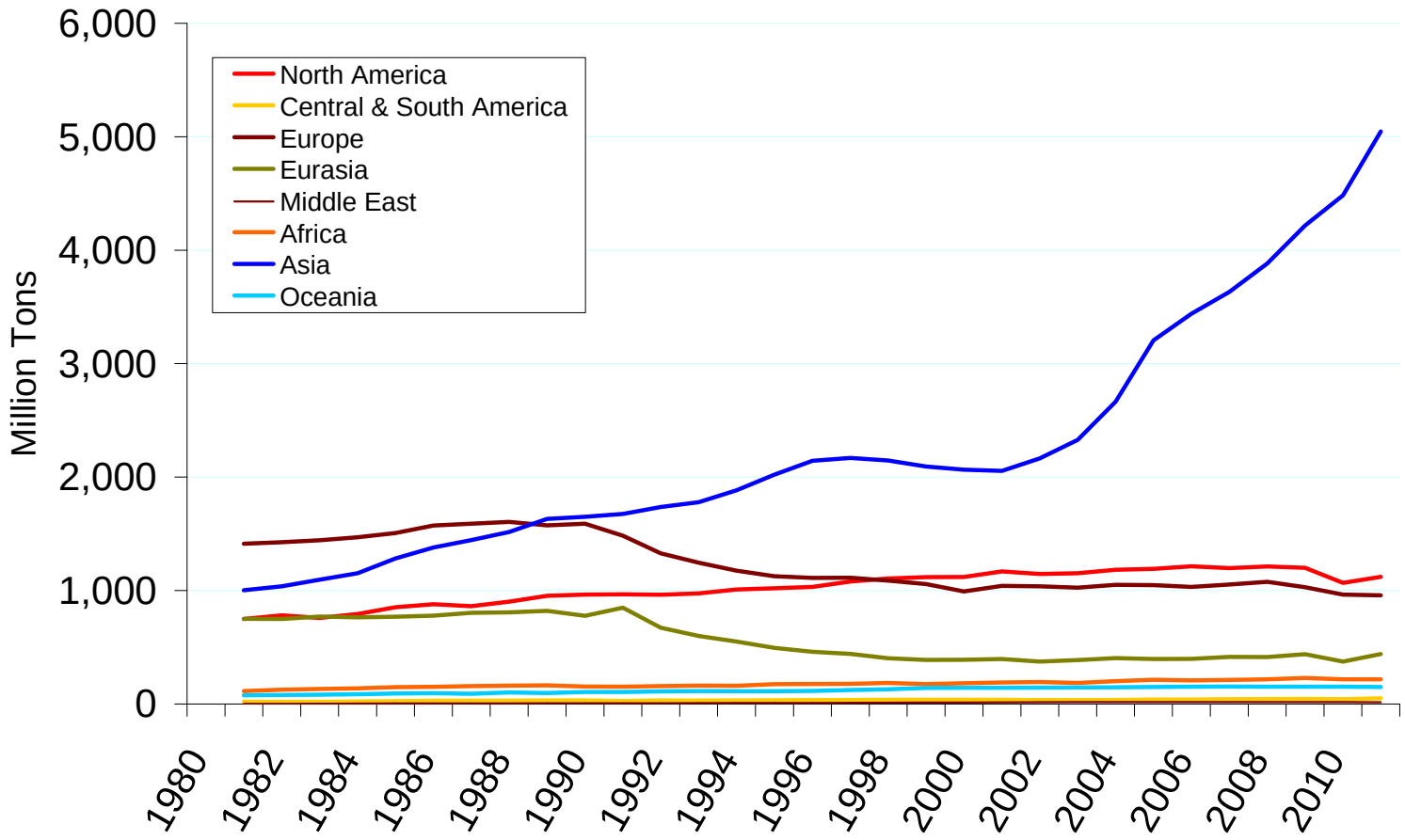
Updated: March 06, 2012

31000

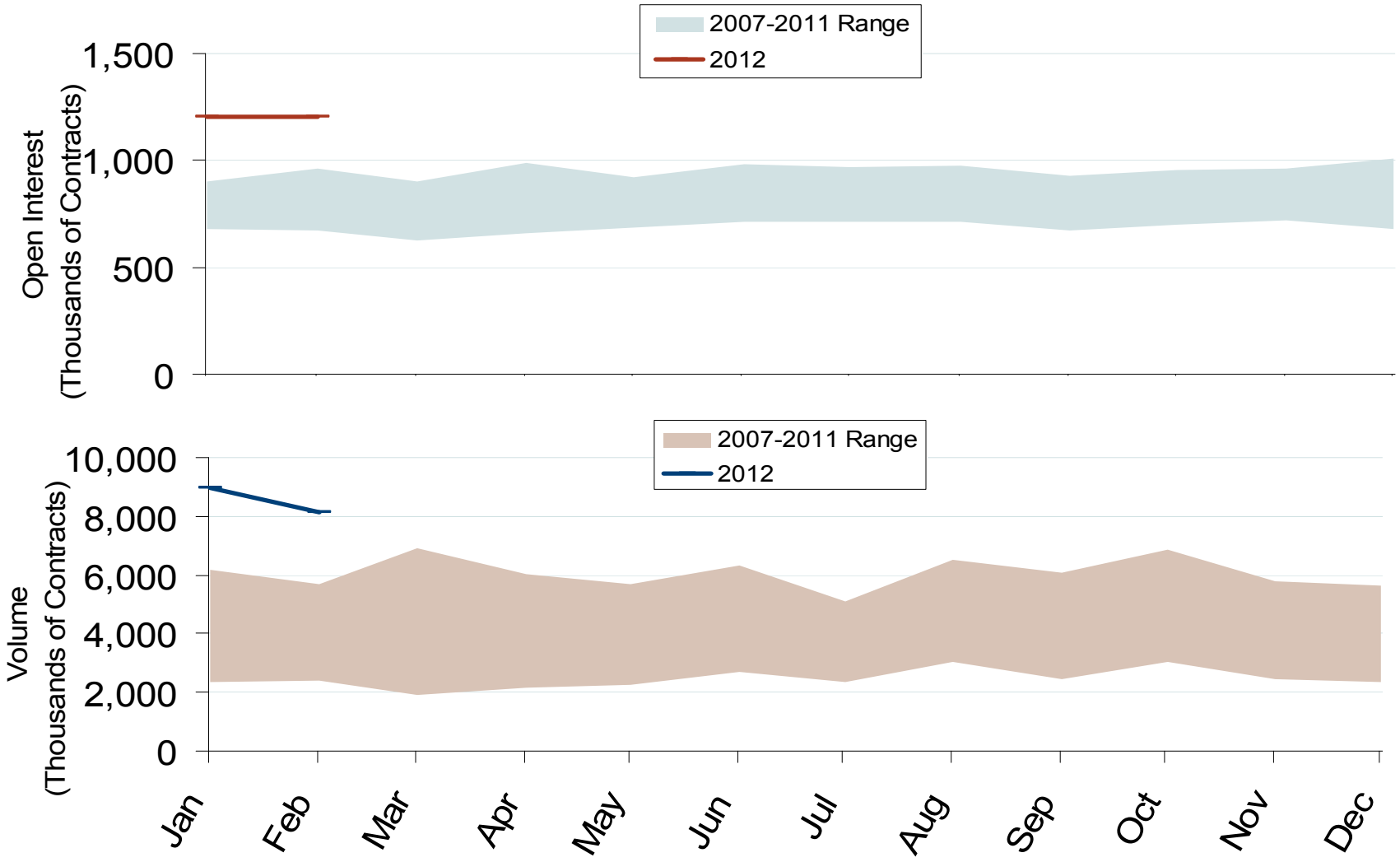
U.S. Coal Producers Find Markets Abroad



Source: Energy Information Administration

Updated February 2, 2012

Nymex NG Futures Month-End Open Interest and Monthly Volume

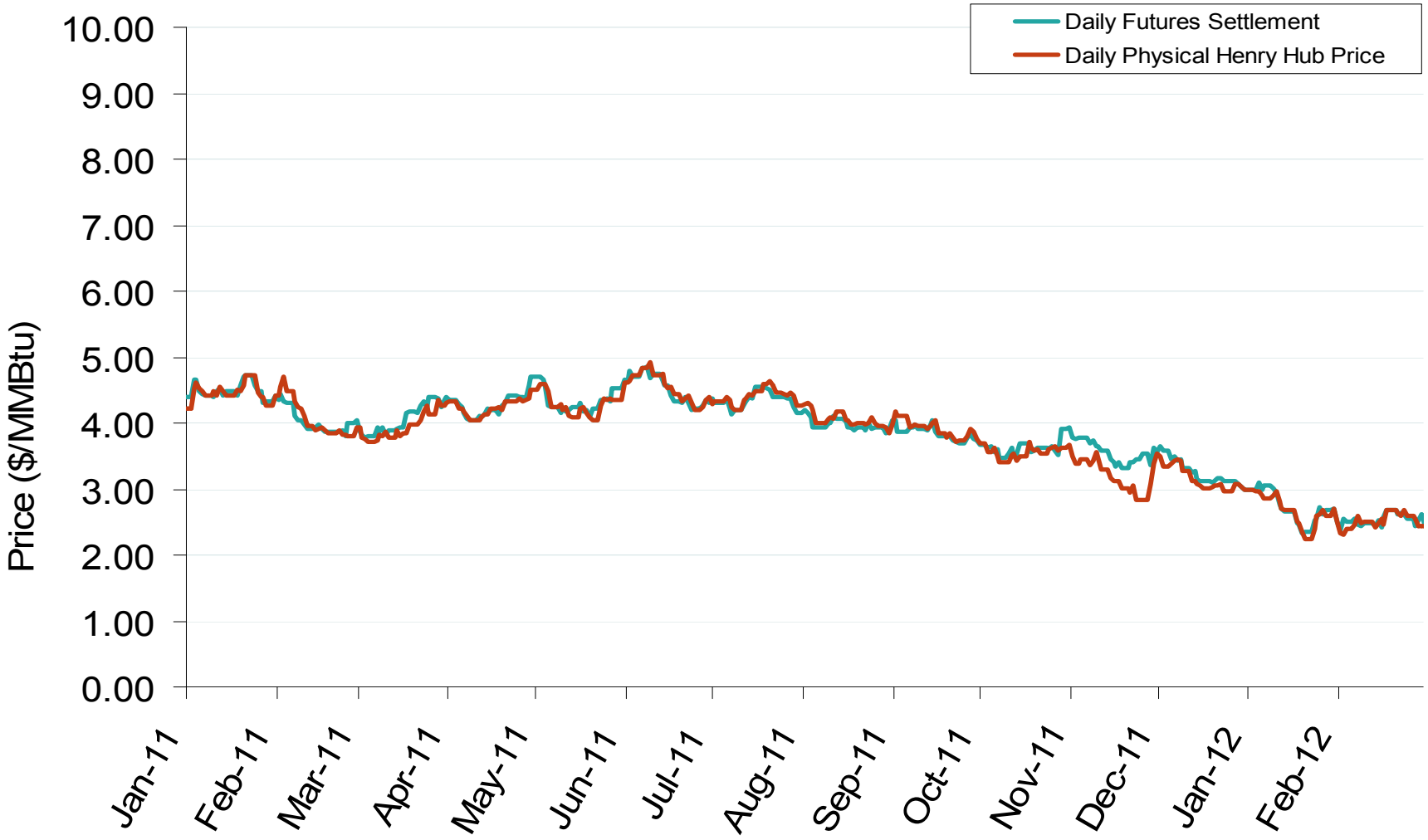


Source: Derived from *Nymex* data

March 2012 Mid-Atlantic Snapshot

Updated: March 08, 2012

Daily Physical Index Price & Daily Futures Settlement Price

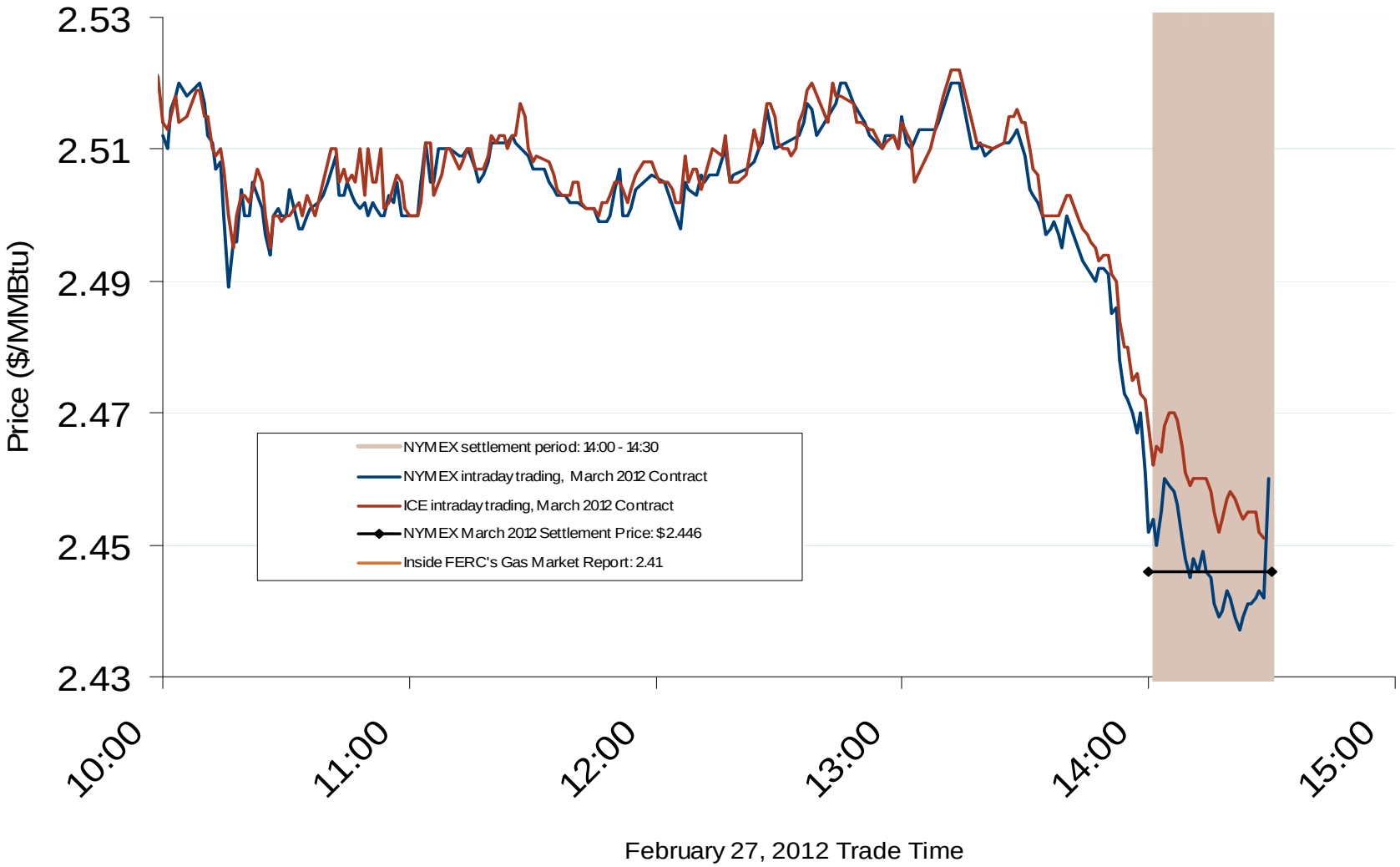


Source: Derived from *Bloomberg* data

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

Nymex and ICE Contract Final Settlement - March 2012



Notes: The final settlement day for this Nymex contract is three business days before the start of the contract term (which is the 1st day of the month)

Source: Derived from *Nymex* and *ICE* data

Updated: March 3, 2012

Electricity Markets

Electric Market Overview: On-Peak Spot Electric Prices

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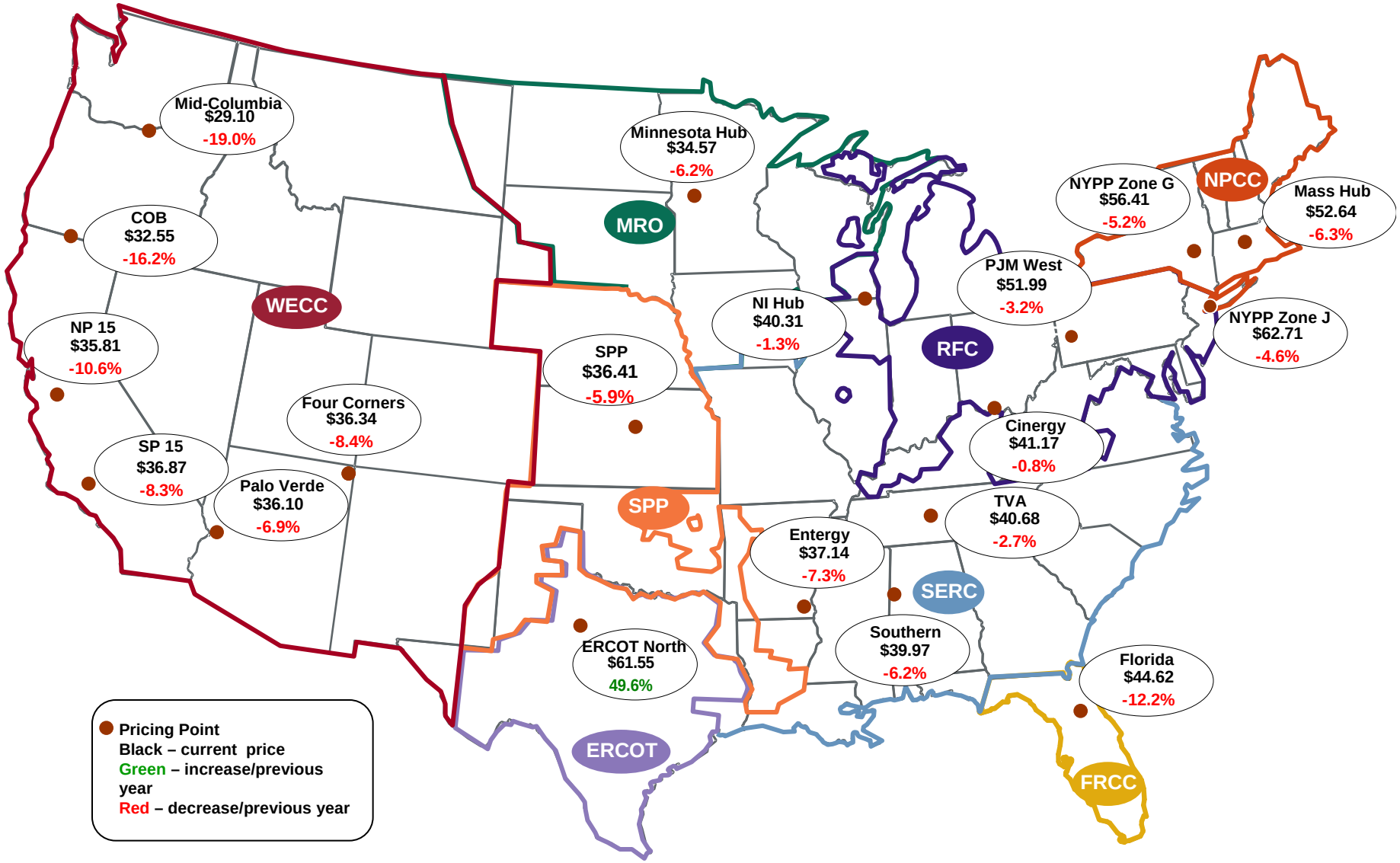
Average On-Peak Spot Electric Prices 2011 ($/MWh)



Source: Derived from *Platts* data.

Updated: March 2, 2012

Regional Spot Prices: 2009-2011

	On-peak Spot Prices ($/MWh)					Off-peak Spot Prices ($/MWh)				
	2009	2010	2011	% Change 09-10	% Change 10-11	2009	2010	2011	% Change 09-10	% Change 10-11
Northeast										
Mass Hub	46.24	56.18	52.64	21.5%	-6.3%	34.57	38.84	37.95	12.4%	-2.3%
Ny Zone G	49.80	59.48	56.41	19.4%	-5.2%	34.14	39.47	38.26	15.6%	-3.1%
NY Zone J	55.77	65.76	62.71	17.9%	-4.6%	35.25	40.37	39.19	14.5%	-2.9%
NY Zone A	35.54	43.89	41.52	23.5%	-5.4%	27.98	34.05	32.65	21.7%	-4.1%
PJM West	44.60	53.68	51.99	20.4%	-3.2%	31.68	35.81	33.94	13.0%	-5.2%
Southeast										
VACAR	36.42	43.24	44.44	18.7%	2.8%	25.68	29.18	30.23	13.6%	3.6%
Southern	36.58	42.61	39.97	16.5%	-6.2%	25.82	29.51	27.98	14.3%	-5.2%
TVA	34.91	41.79	40.68	19.7%	-2.7%	24.69	27.43	27.55	11.1%	0.4%
Florida	40.75	50.81	44.62	24.7%	-12.2%	28.00	31.59	31.27	12.8%	-1.0%
Entergy	33.57	40.07	37.14	19.3%	-7.3%	21.89	24.87	24.52	13.7%	-1.4%
Midwest										
Cinergy*	34.65	41.51	41.17	19.8%	-0.8%	22.15	24.34	25.86	9.9%	6.2%
Michigan Hub	36.56	43.68	42.73	19.5%	-2.2%	22.97	26.84	27.52	16.9%	2.5%
Minnesota Hub	32.09	36.86	34.57	14.9%	-6.2%	14.19	17.61	16.39	24.1%	-6.9%
NI Hub	34.47	40.85	40.31	18.5%	-1.3%	19.49	21.70	22.78	11.3%	5.0%
Illinois Hub	31.36	38.22	38.12	21.9%	-0.2%	17.44	20.44	22.20	17.2%	8.6%
MAPP South	33.31	37.60	35.48	12.9%	-5.6%	20.78	21.76	19.90	4.7%	-8.5%
South Central										
SPP North	32.94	38.71	36.41	17.5%	-5.9%	20.36	21.51	20.42	5.7%	-5.1%
ERCOT North	34.89	41.15	61.55	17.9%	49.6%	22.37	26.97	25.74	20.6%	-4.6%
Southwest										
Four Corners	35.38	39.68	36.34	12.2%	-8.4%	23.76	27.02	20.45	13.7%	-24.3%
Palo Verde	34.77	38.76	36.10	11.5%	-6.9%	24.26	27.72	21.57	14.3%	-22.2%
Mead	36.58	40.11	36.92	9.7%	-8.0%	26.34	29.37	22.34	11.5%	-23.9%
Northwest										
Mid-C	35.66	35.90	29.10	0.7%	-19.0%	28.24	29.19	19.98	3.4%	-31.6%
COB	38.02	38.84	32.55	2.2%	-16.2%	29.22	29.86	19.92	2.2%	-33.3%
California										
NP15	39.29	40.08	35.81	2.0%	-10.6%	28.66	29.89	21.26	4.3%	-28.9%
SP15	38.31	40.21	36.87	5.0%	-8.3%	26.64	29.14	21.78	9.4%	-25.3%

Note: Effective January 1, 2012, Platts will replace the Cinergy Hub with the Indiana Hub.

Source: Derived from *Platts* data.

Updated: March 12, 2012

PJM 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

Source: Derived from *Platts* data.

Updated January 11, 2012

PJM Electric Market: Last Month's RTO Prices

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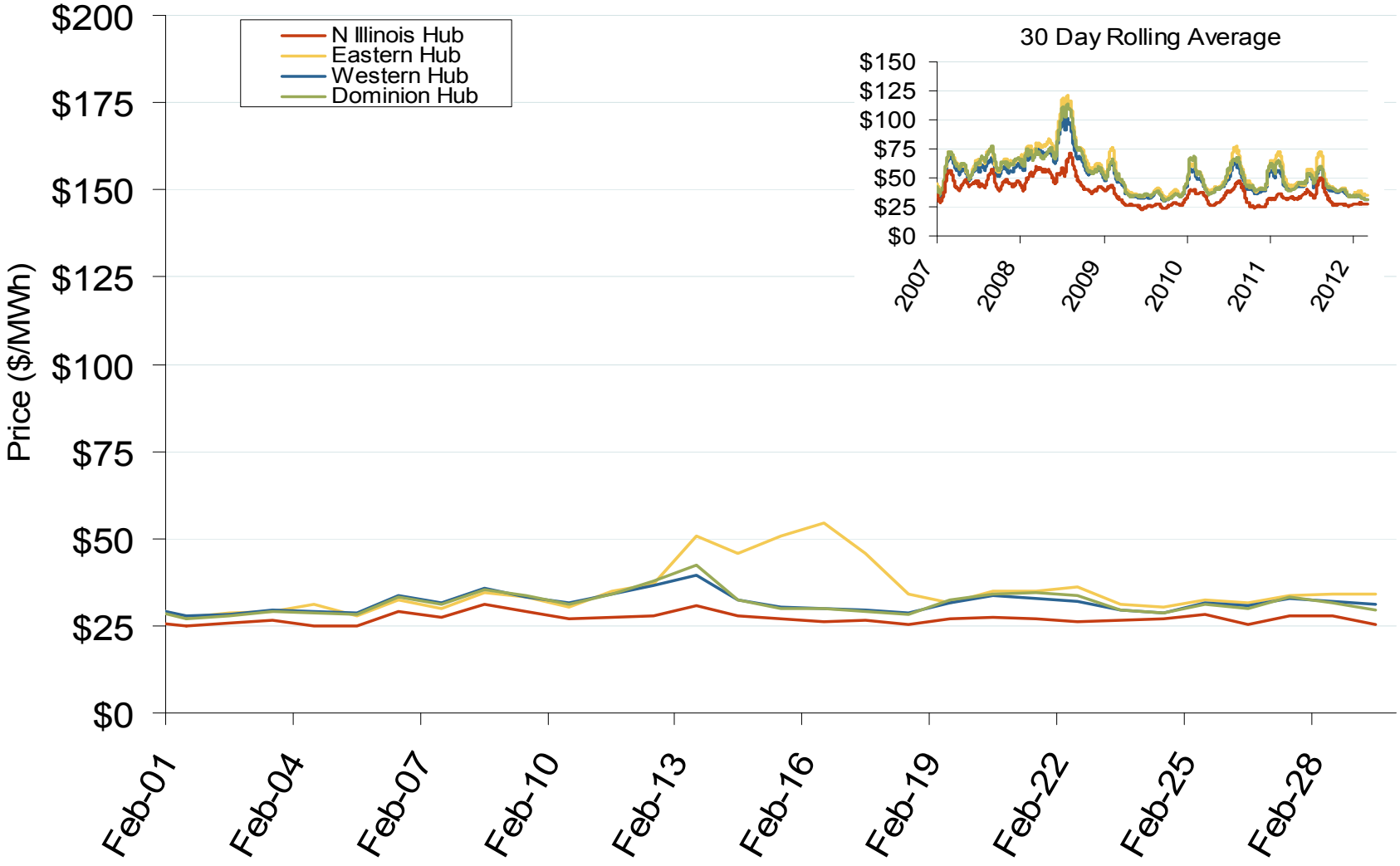
Daily Average of PJM Day-Ahead Prices - All Hours

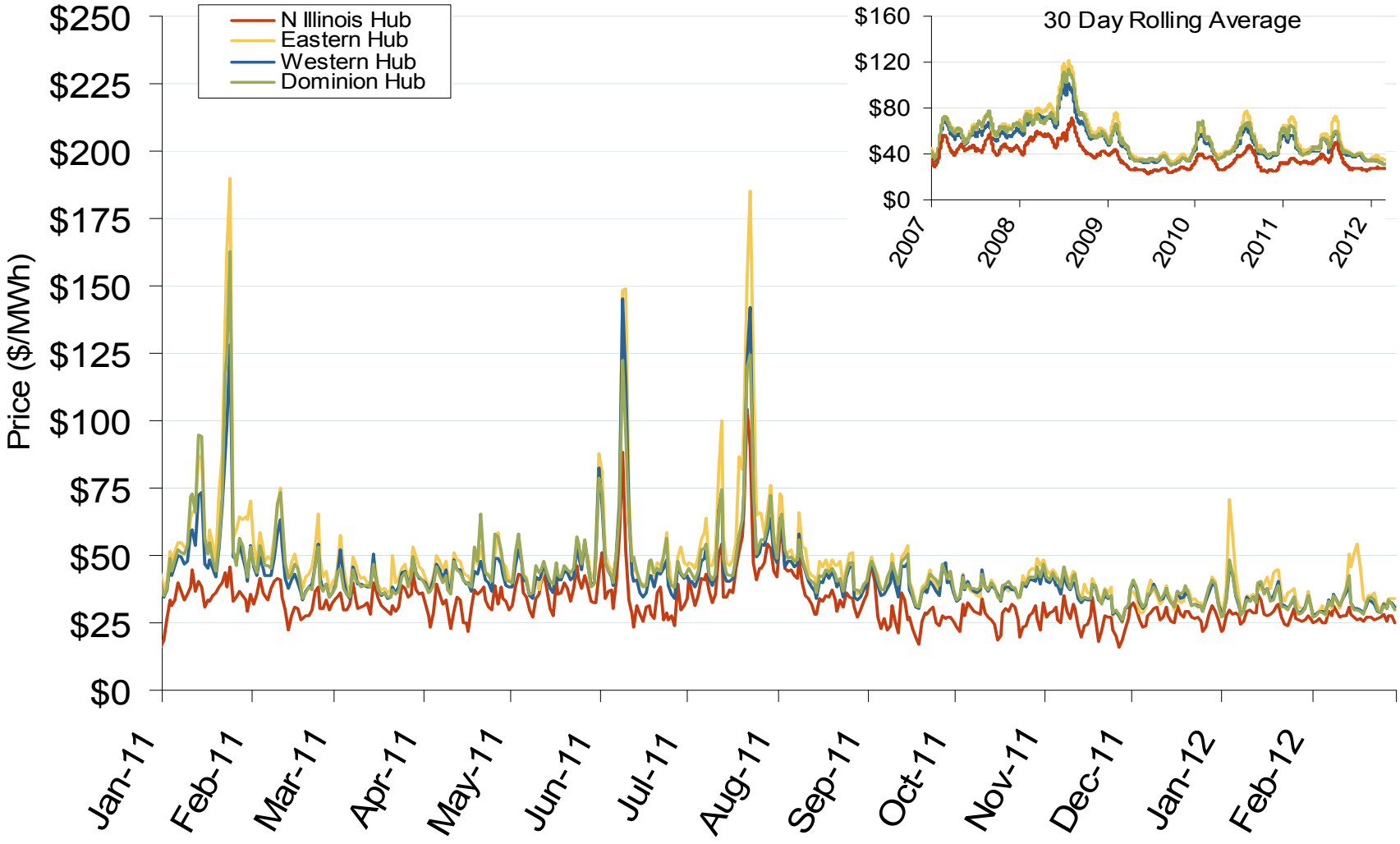


Source: Derived from *Bloomberg* data

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

Daily Average of PJM Day-Ahead Prices - All Hours



Source: Derived from *Bloomberg* data

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

PJM Electric Market: Last Month's Eastern Index Prices

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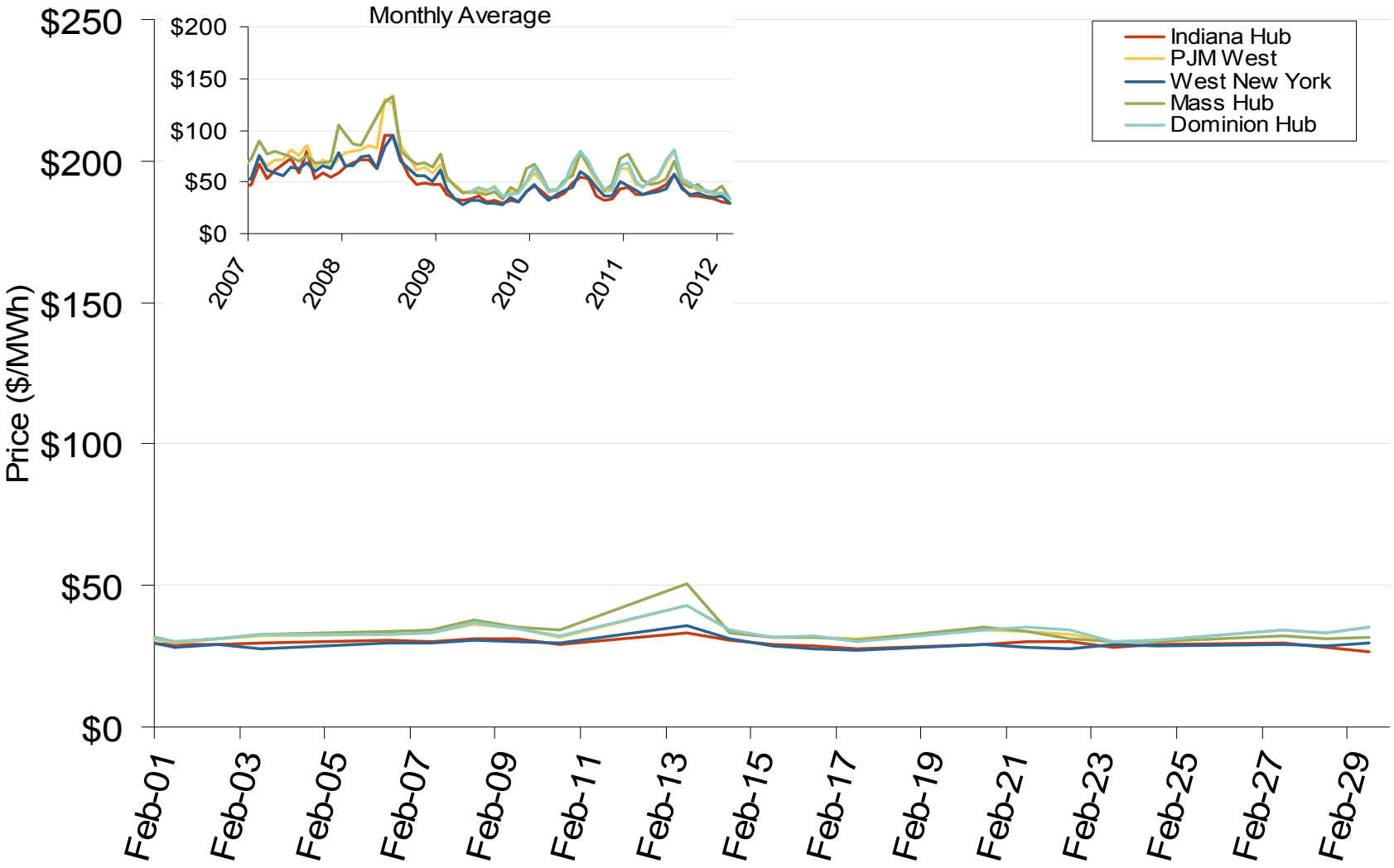
Eastern Daily Index Day-Ahead On-Peak Prices



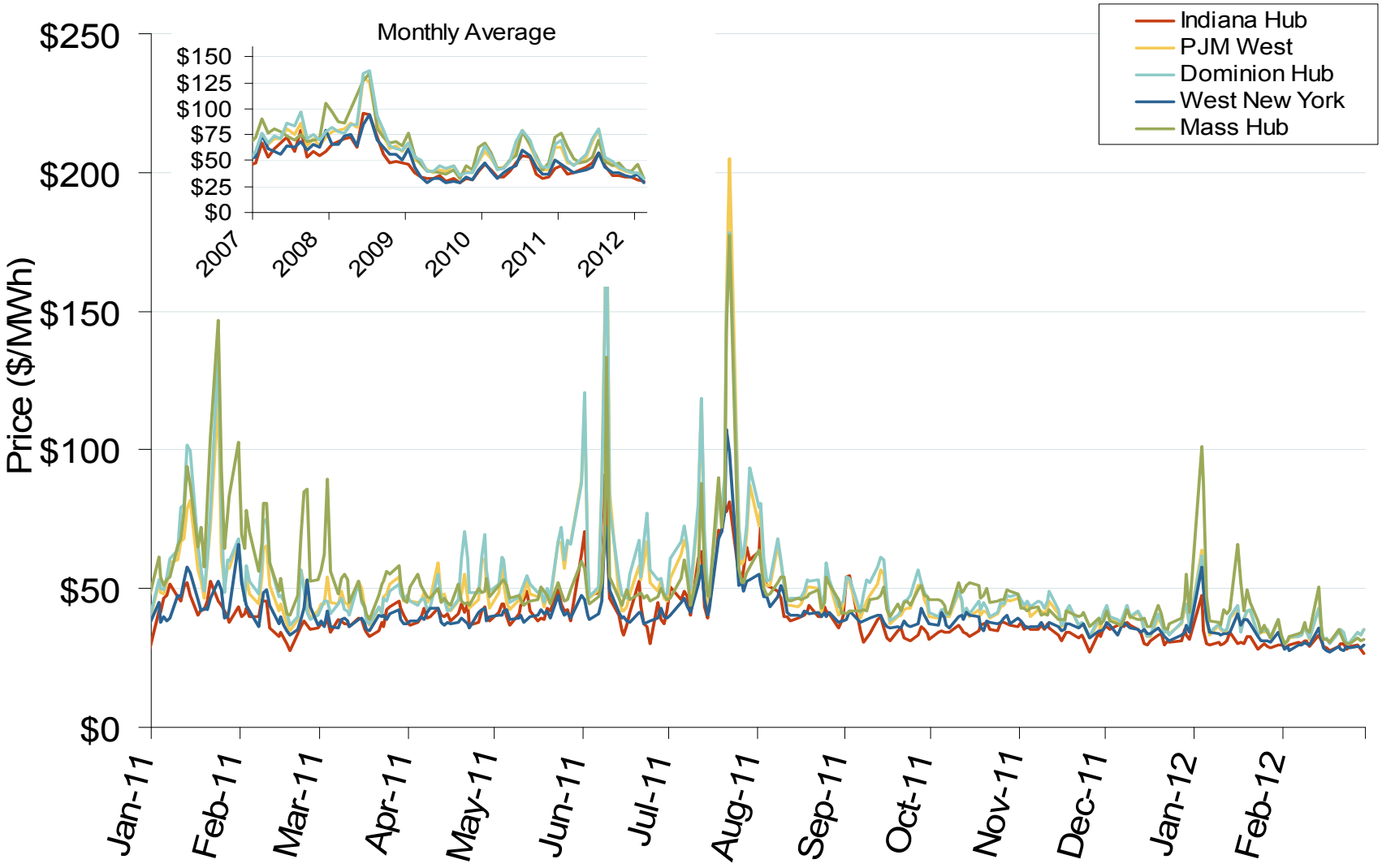
Source: Derived from *Platts* data

March 2012 Mid-Atlantic Snapshot

Updated: March 12, 2012

13562

Eastern Daily Index Day-Ahead On-Peak Prices



Source: Derived from *Platts* data

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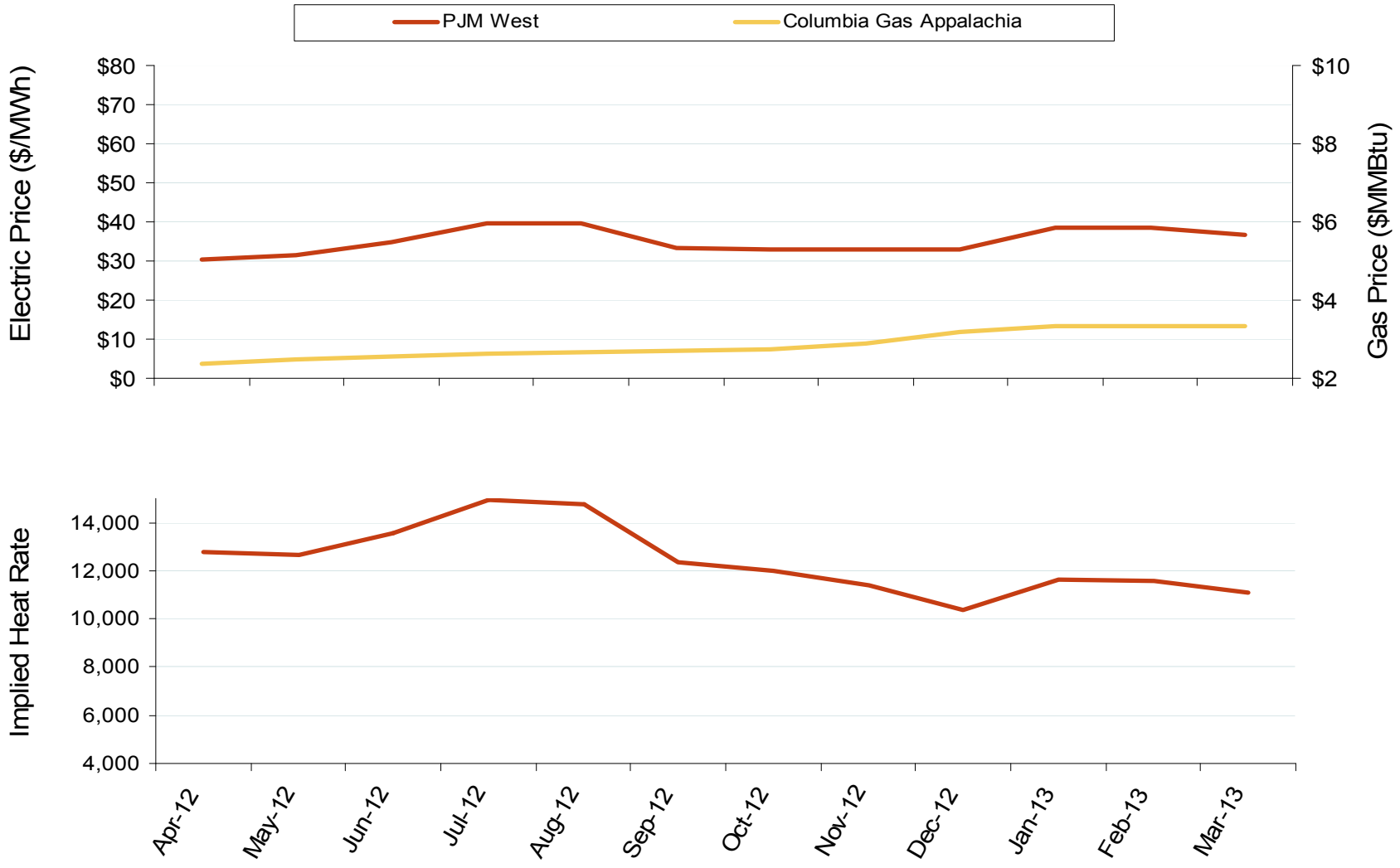
PJM West Electric Forward Price Curves and Implied Heat Rates

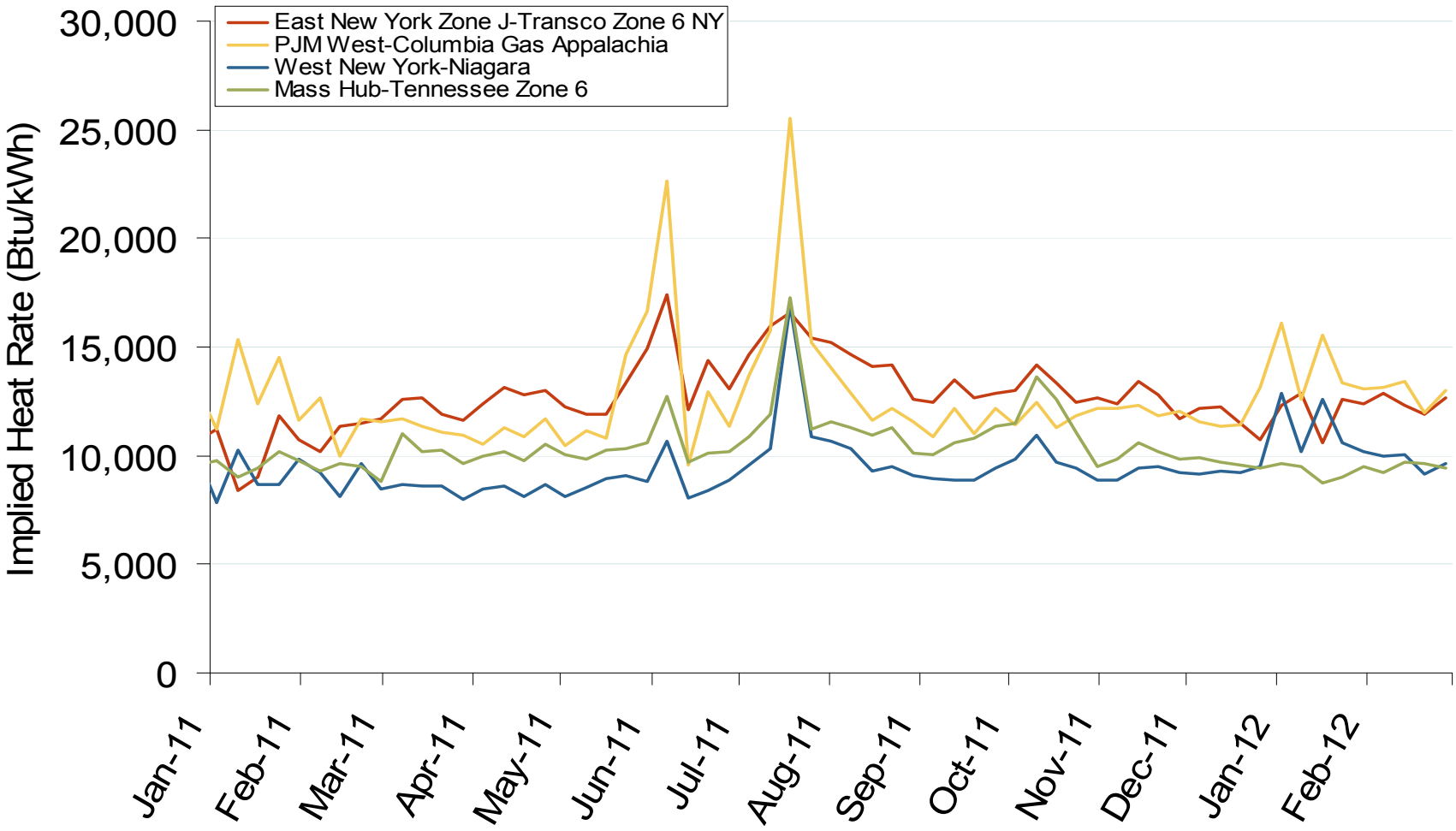


Source: Derived from *Nymex* data

March 2012 Mid-Atlantic Snapshot

Updated: March 06, 2012

Implied Heat Rates at Eastern Trading Points - Weekly Avgs.

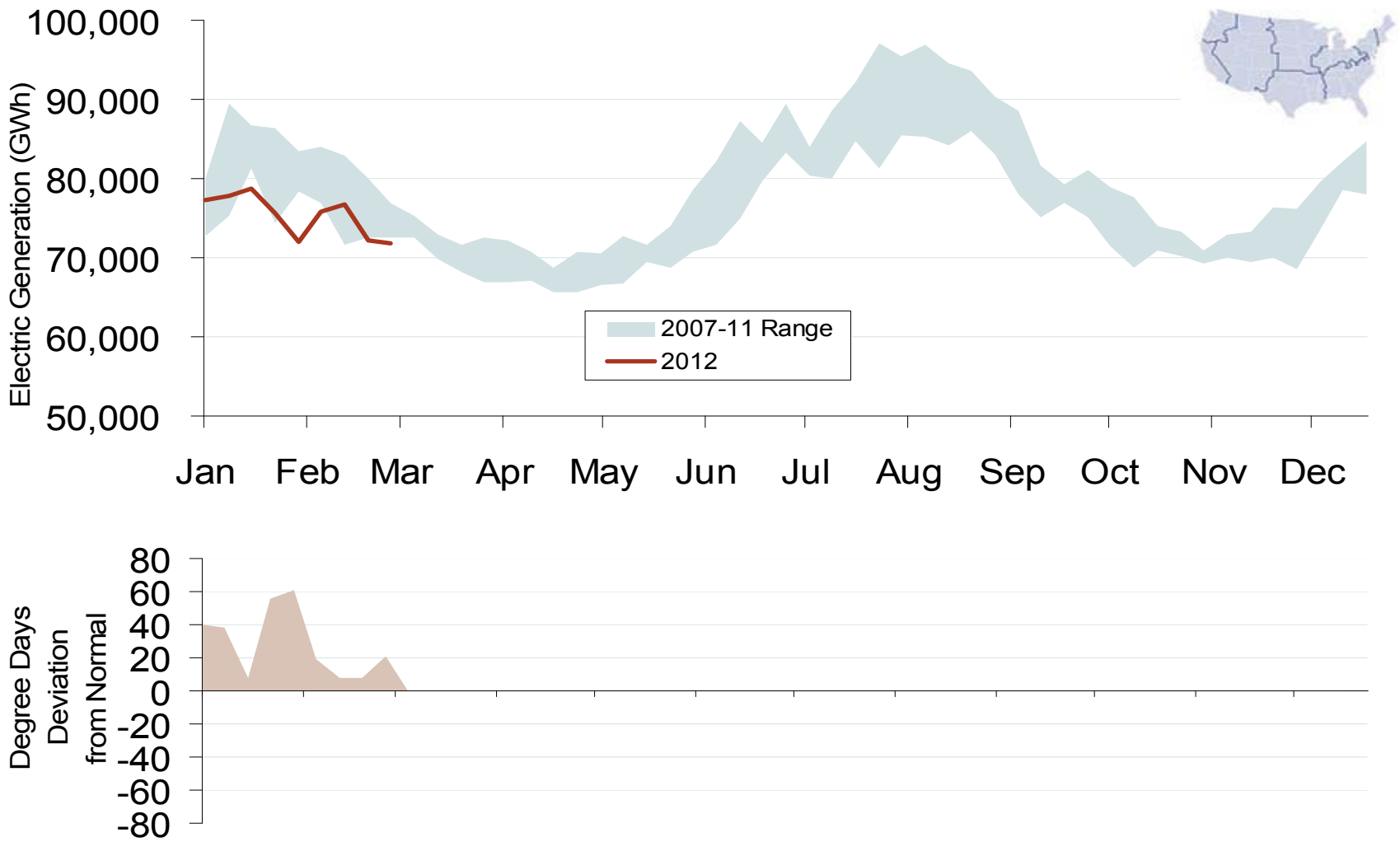


Source: Derived from *Platts* on-peak electric and natural gas price data

March 2012 Mid-Atlantic Snapshot

Updated: March 12, 2012

Weekly U.S. Electric Generation Output and Temperatures

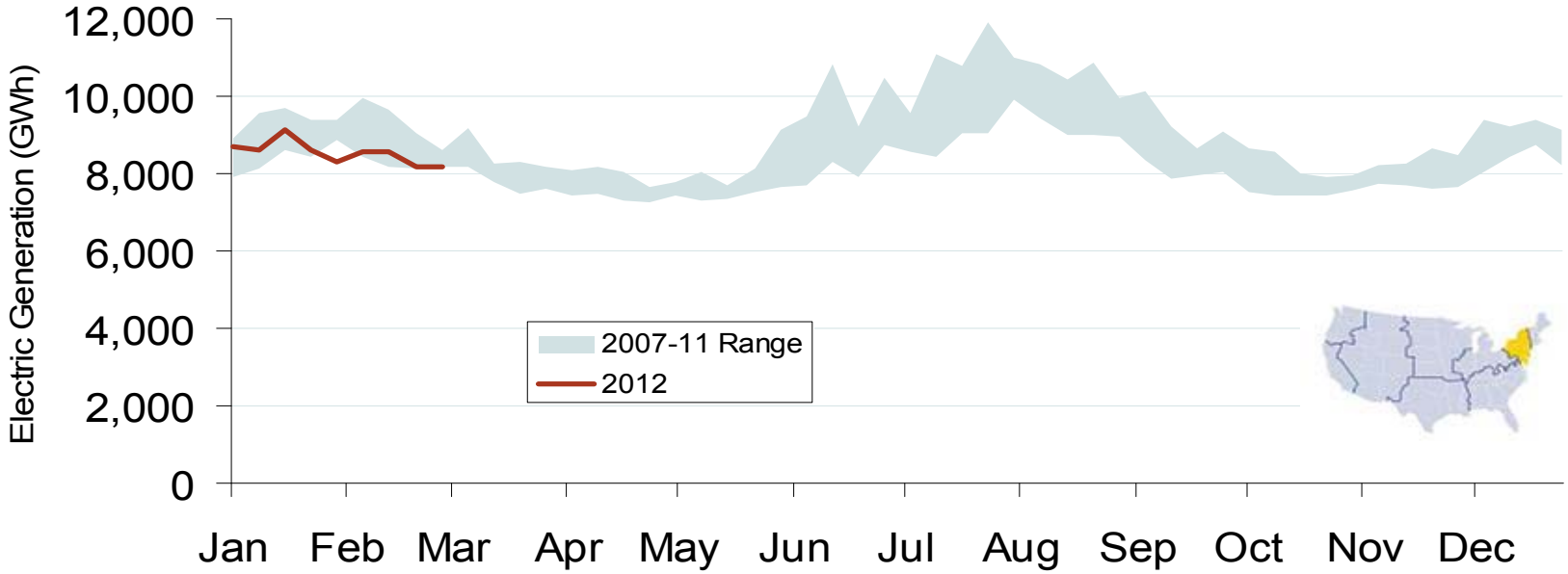


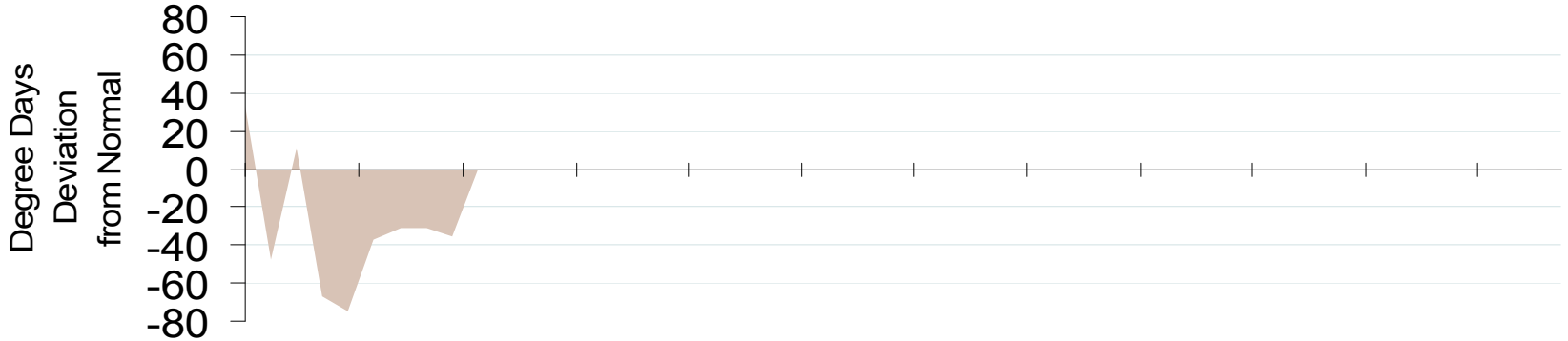
Source: Derived from *EEI* and *NOAA* data

March 2012 Mid-Atlantic Snapshot

Updated: March 08, 2012

Weekly Power Generation & Temps. - Mid Atlantic



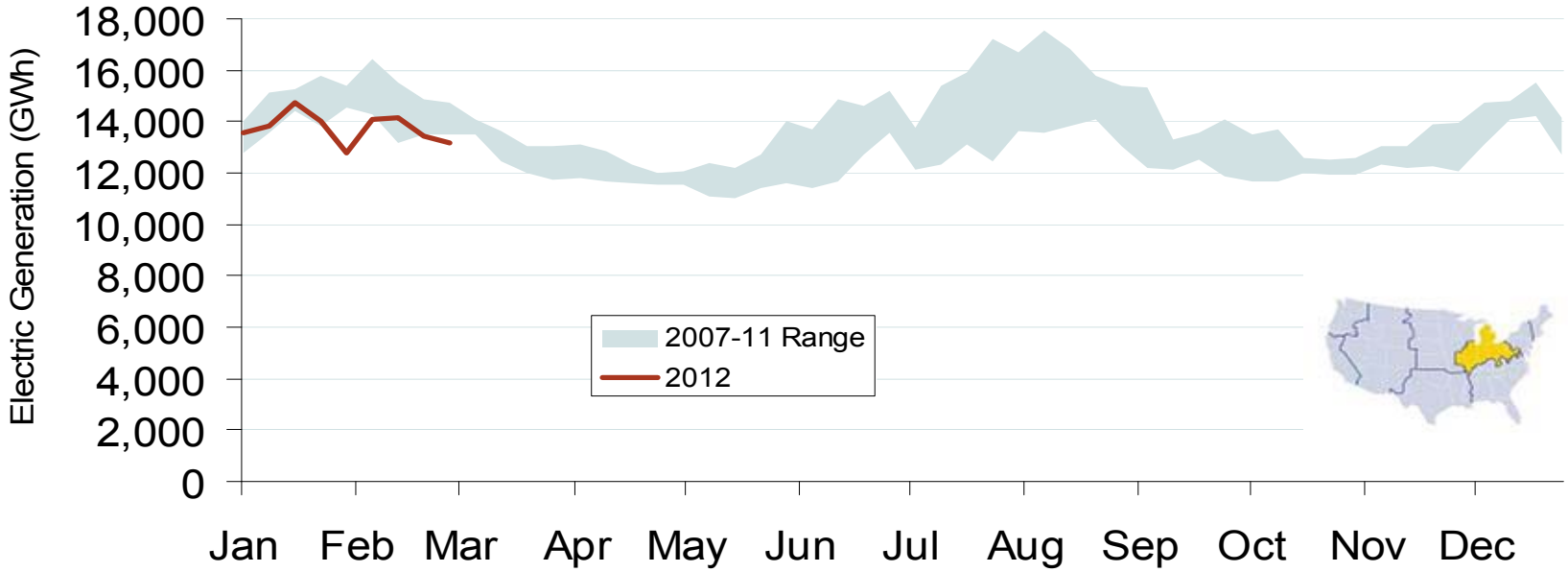


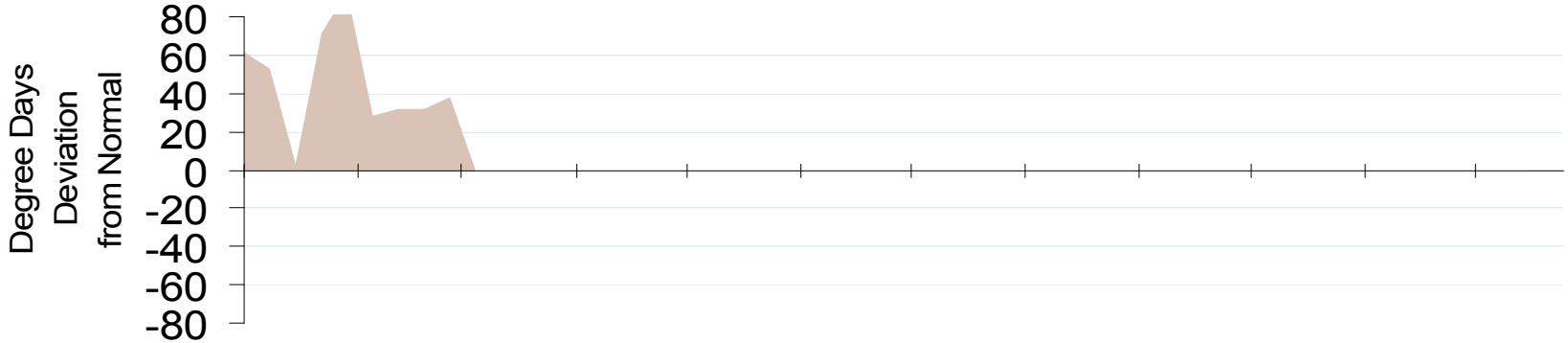
Source: Derived from *EEI* and *NOAA* data

March 2012 Mid-Atlantic Snapshot

Updated: March 08, 2012

Weekly Power Generation & Temps. - Central Industrial Region





Source: Derived from *EEI* and *NOAA* data

March 2012 Mid-Atlantic Snapshot

Updated: March 08, 2012