

# **OE ENERGY MARKET SNAPSHOT**

## **Mid-Atlantic States Version – August 2012 Data**

---

Office of Enforcement  
Federal Energy Regulatory Commission  
September 2012



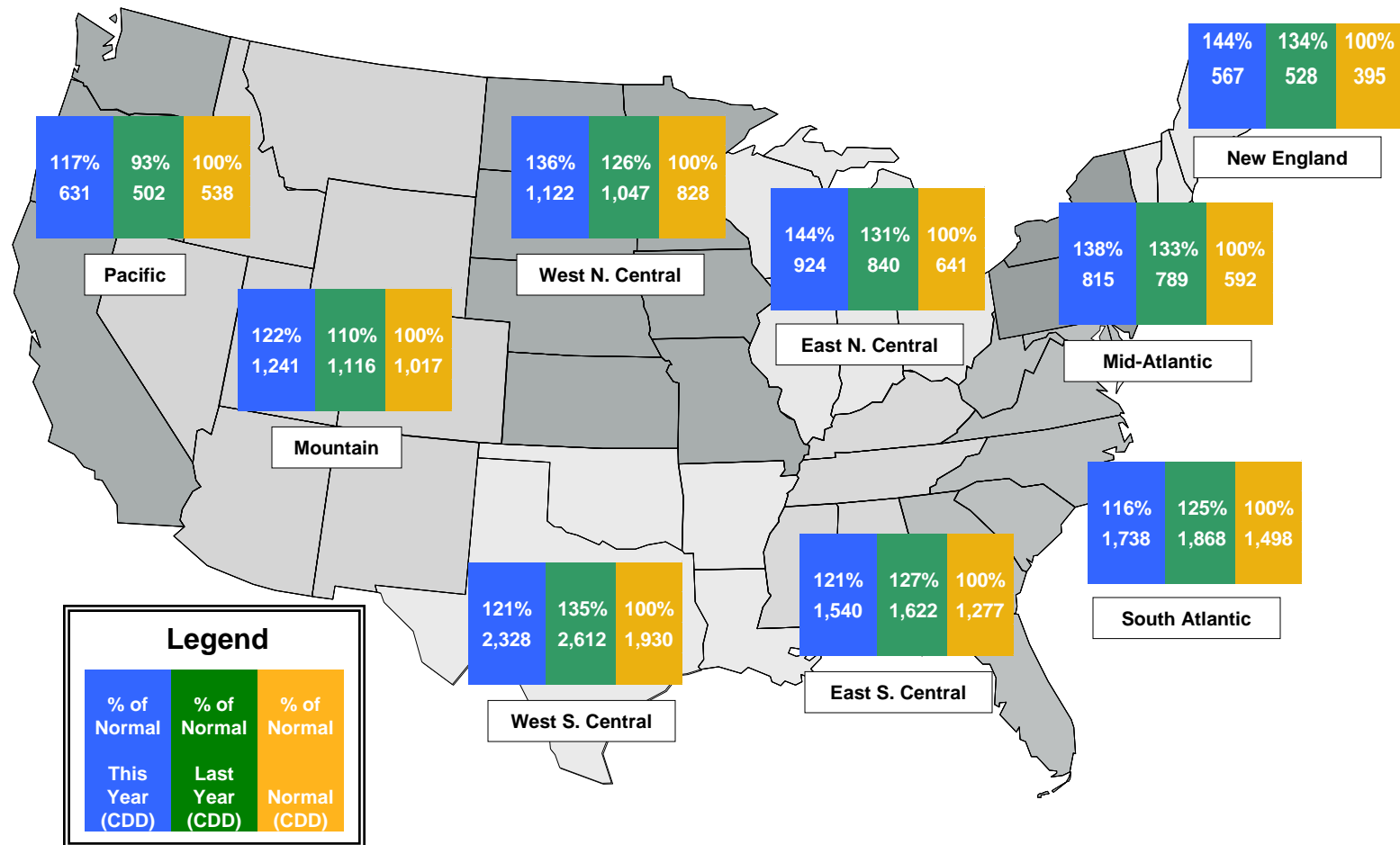
# Infrastructure Report

## August Infrastructure Report



# Weather

## Regional Cooling Degree Days – January to August 2012

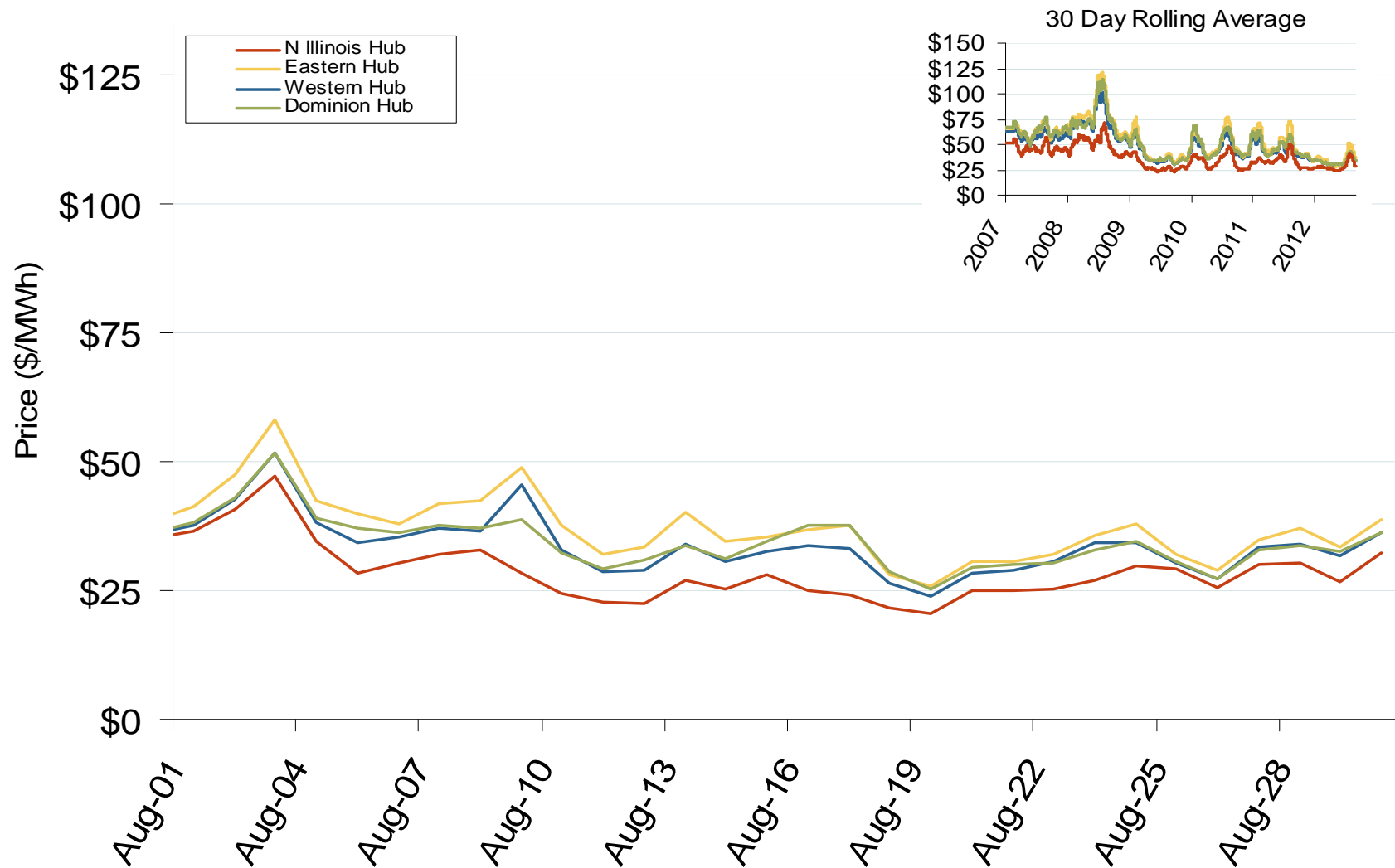


Source: Derived from NOAA data. Normal is based on a 30-year average of cooling degree day data.  
September 2012 Mid-Atlantic Snapshot Report

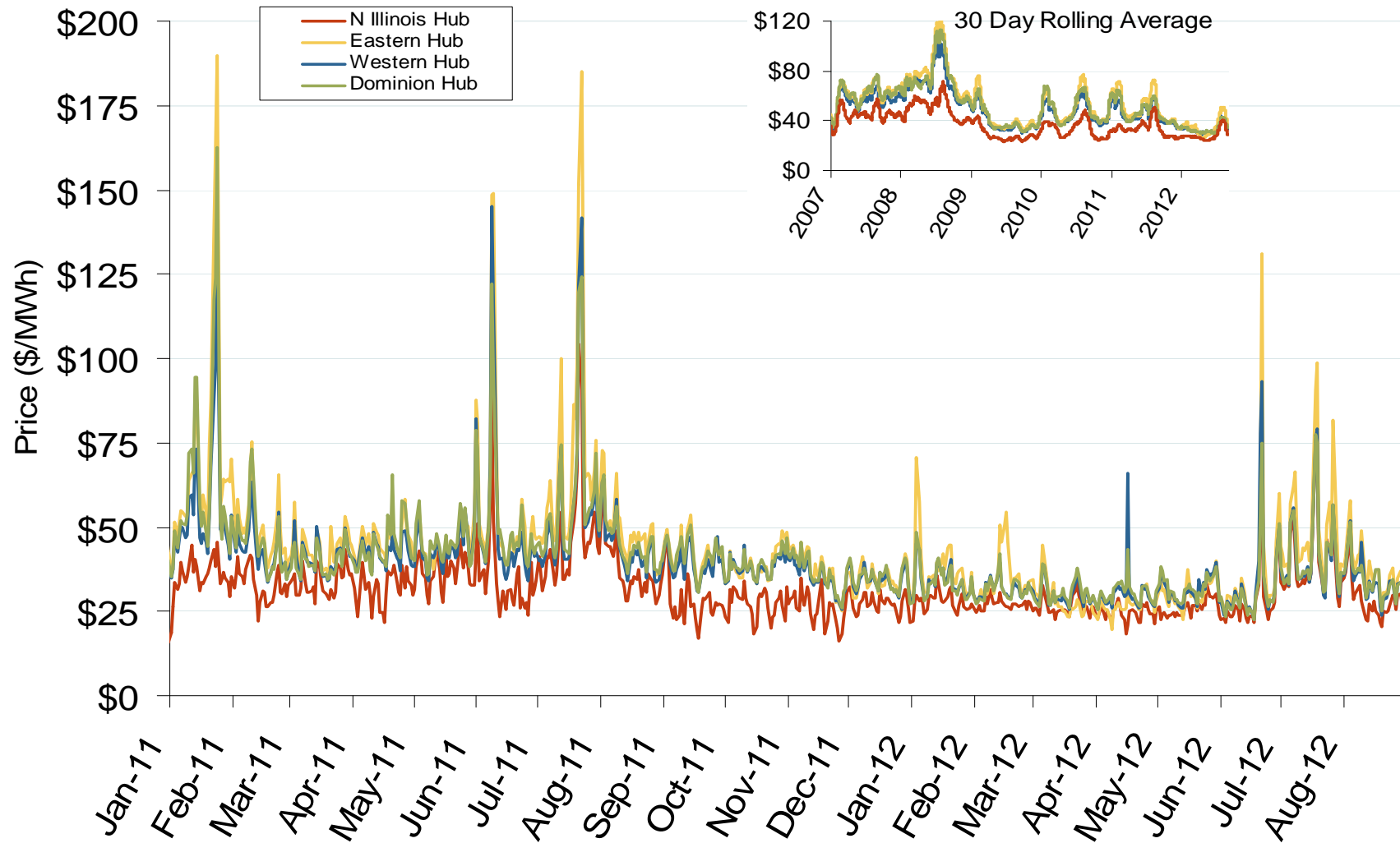


# Electricity Markets

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



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

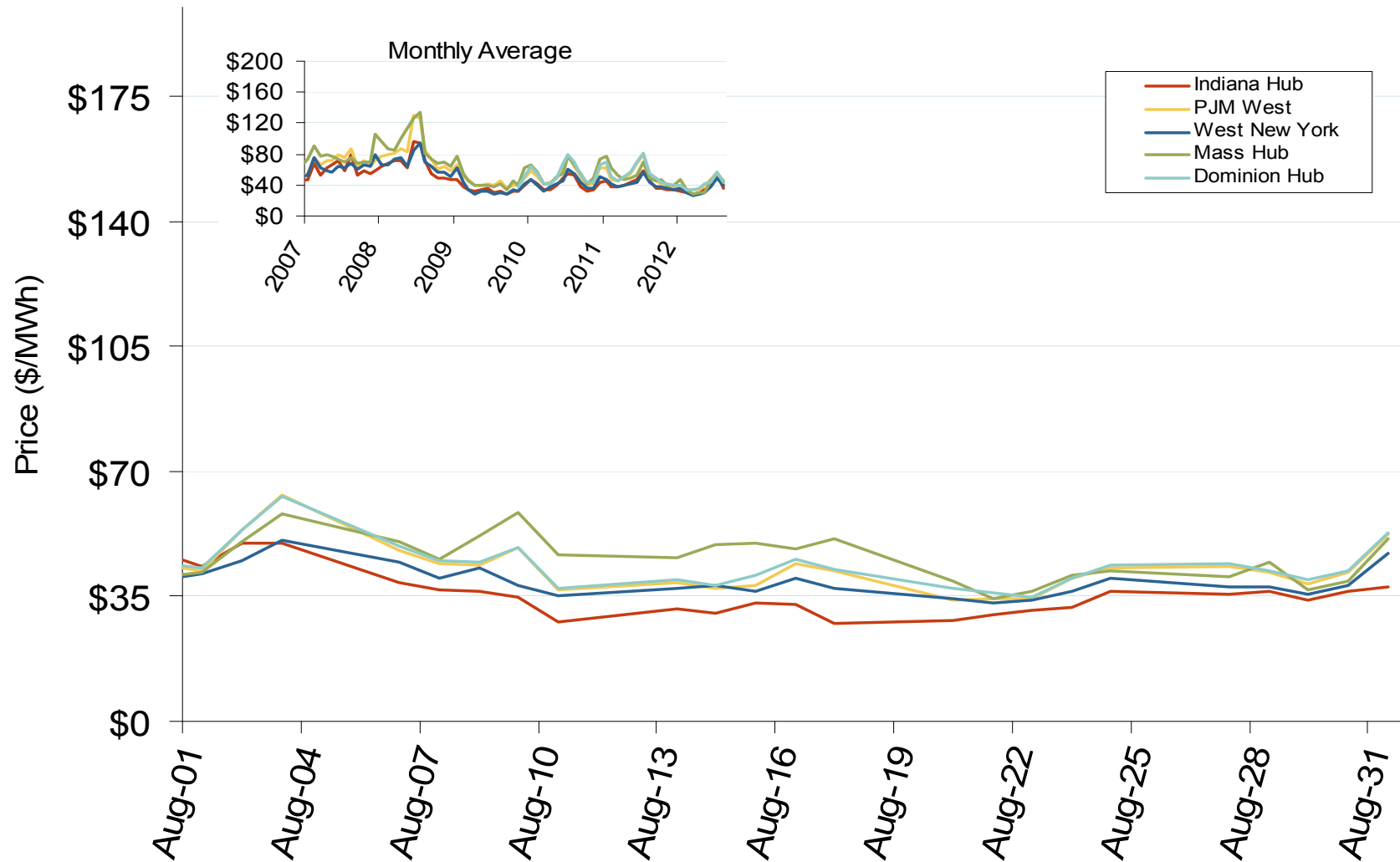


Source: Derived from Bloomberg data

PJM Electric Market: Last Month's Eastern Index Prices

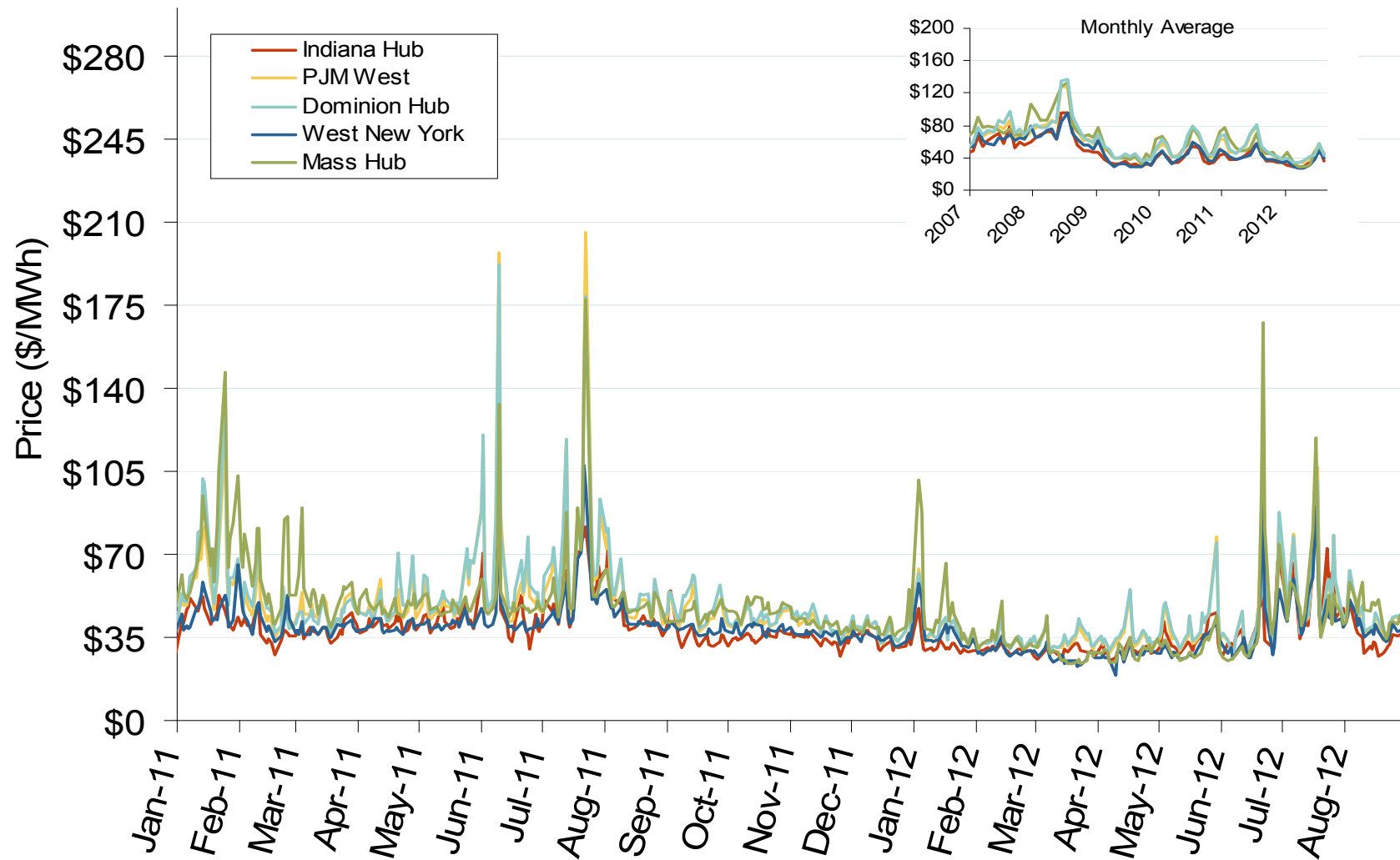
Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

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



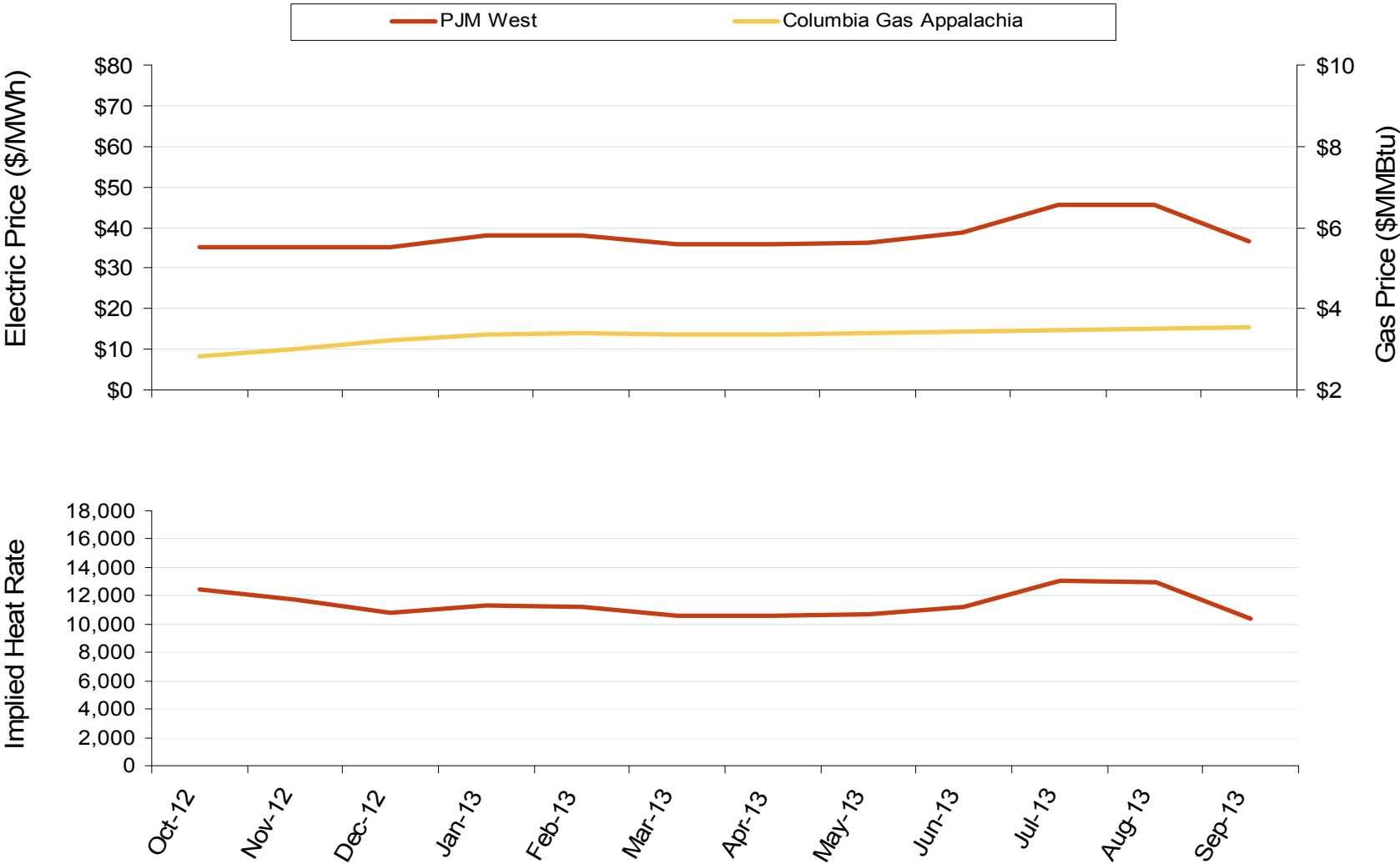


## Eastern Daily Index Day-Ahead On-Peak Prices

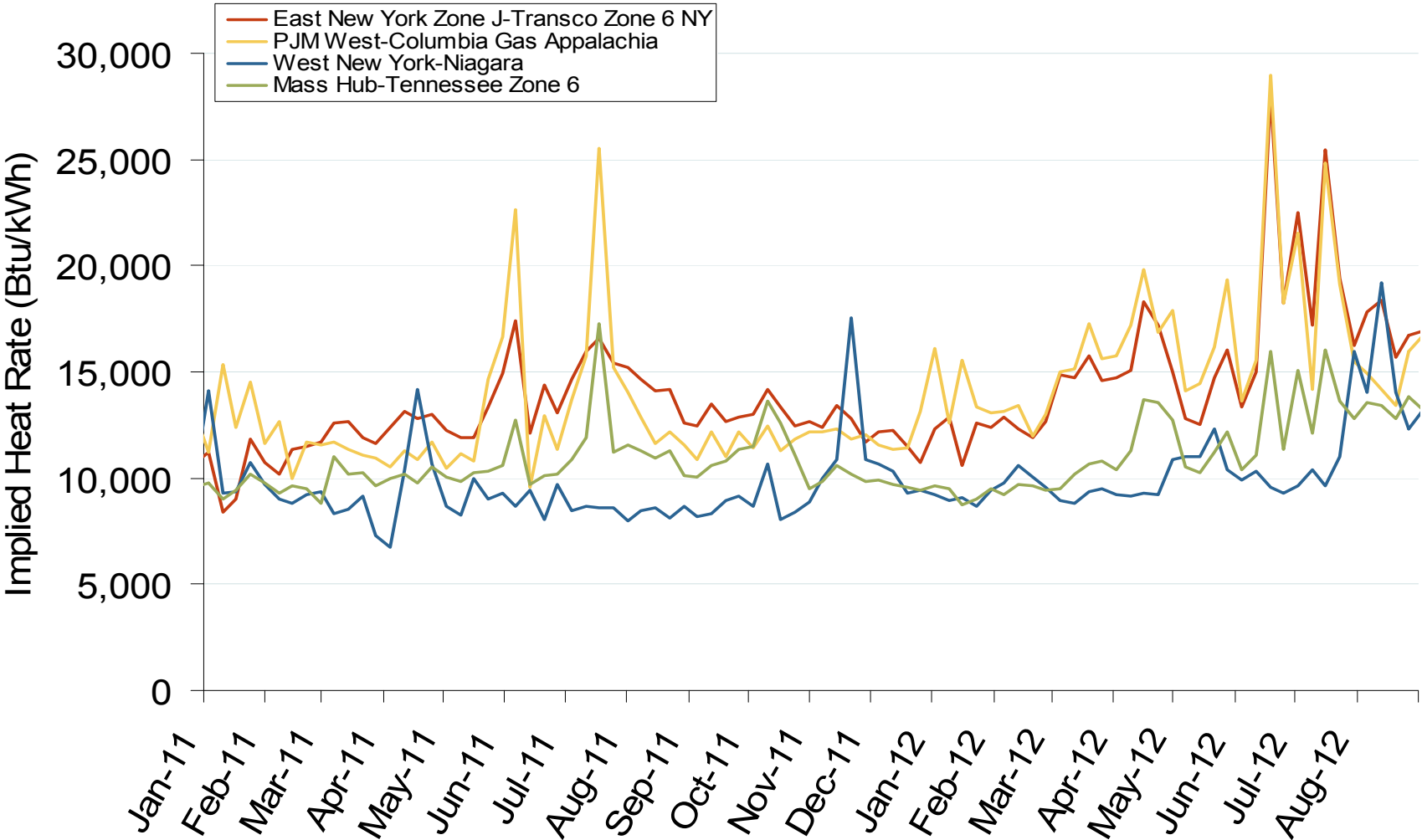


Source: Derived from *Platts* data

# PJM West Electric Forward Price Curves and Implied Heat Rates

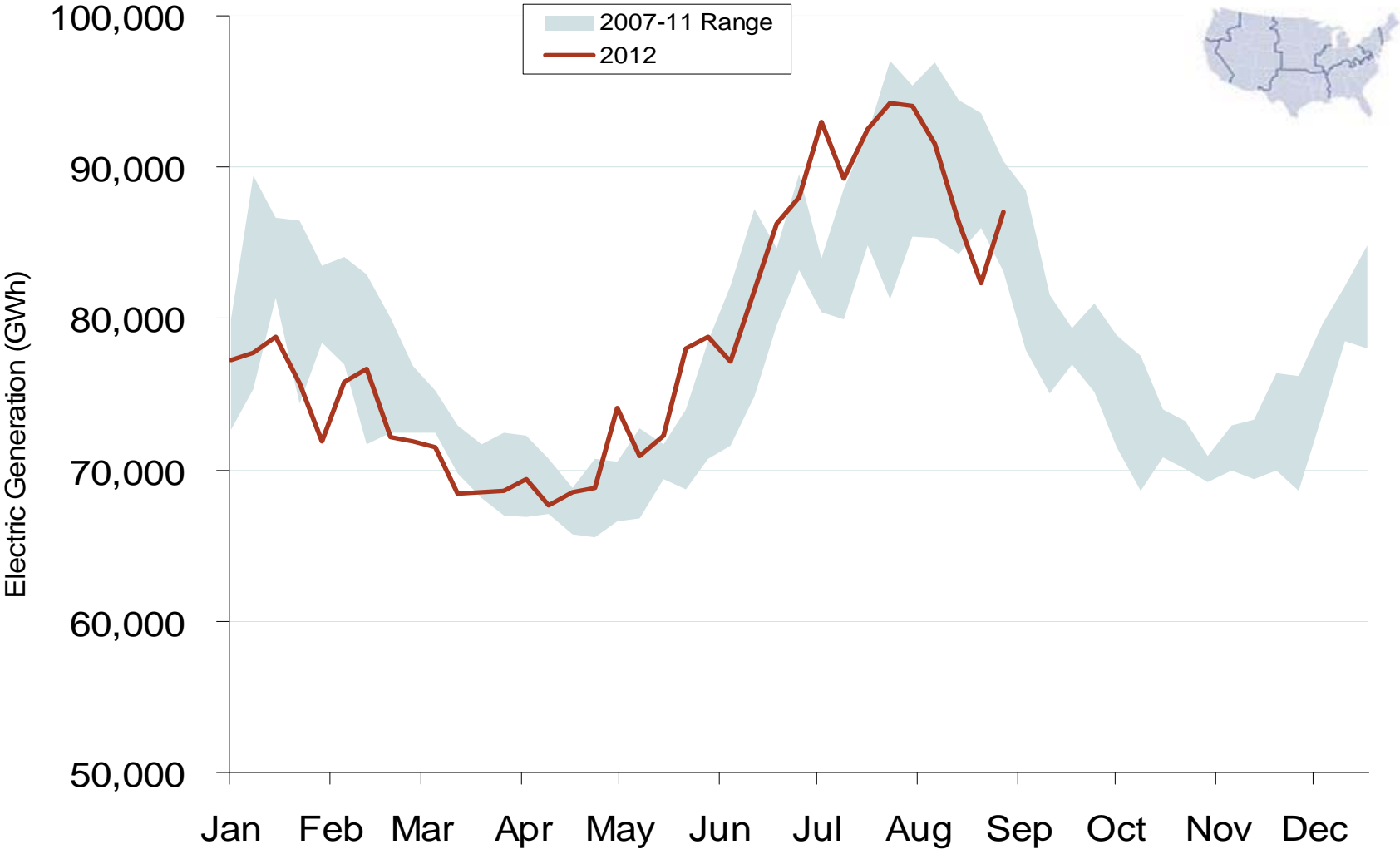


### Implied Heat Rates at Eastern Trading Points - Weekly Avgs.



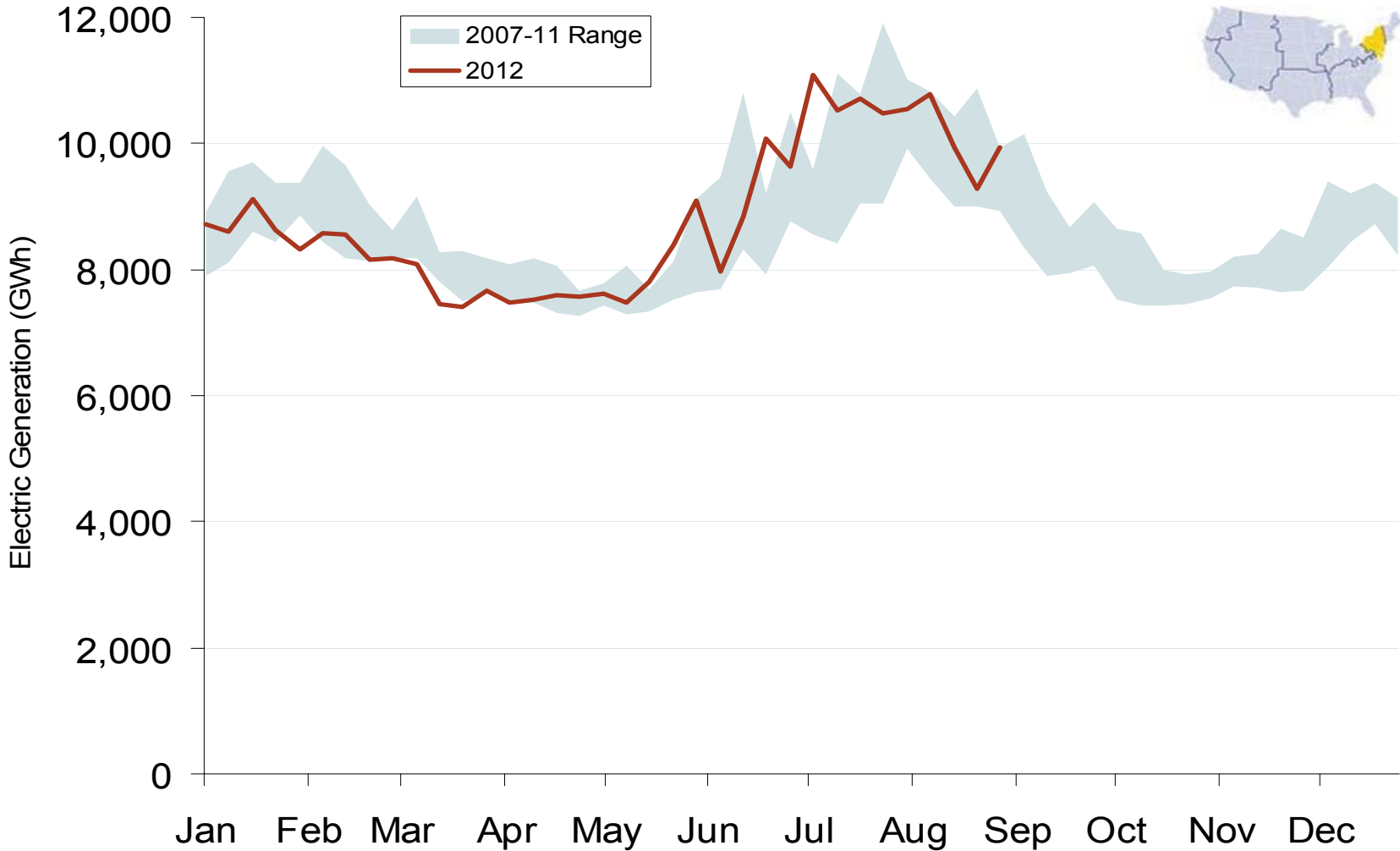
Source: Derived from Platts on-peak electric and natural gas price data  
September 2012 Mid-Atlantic Snapshot Report

# Weekly U.S. Electric Generation Output



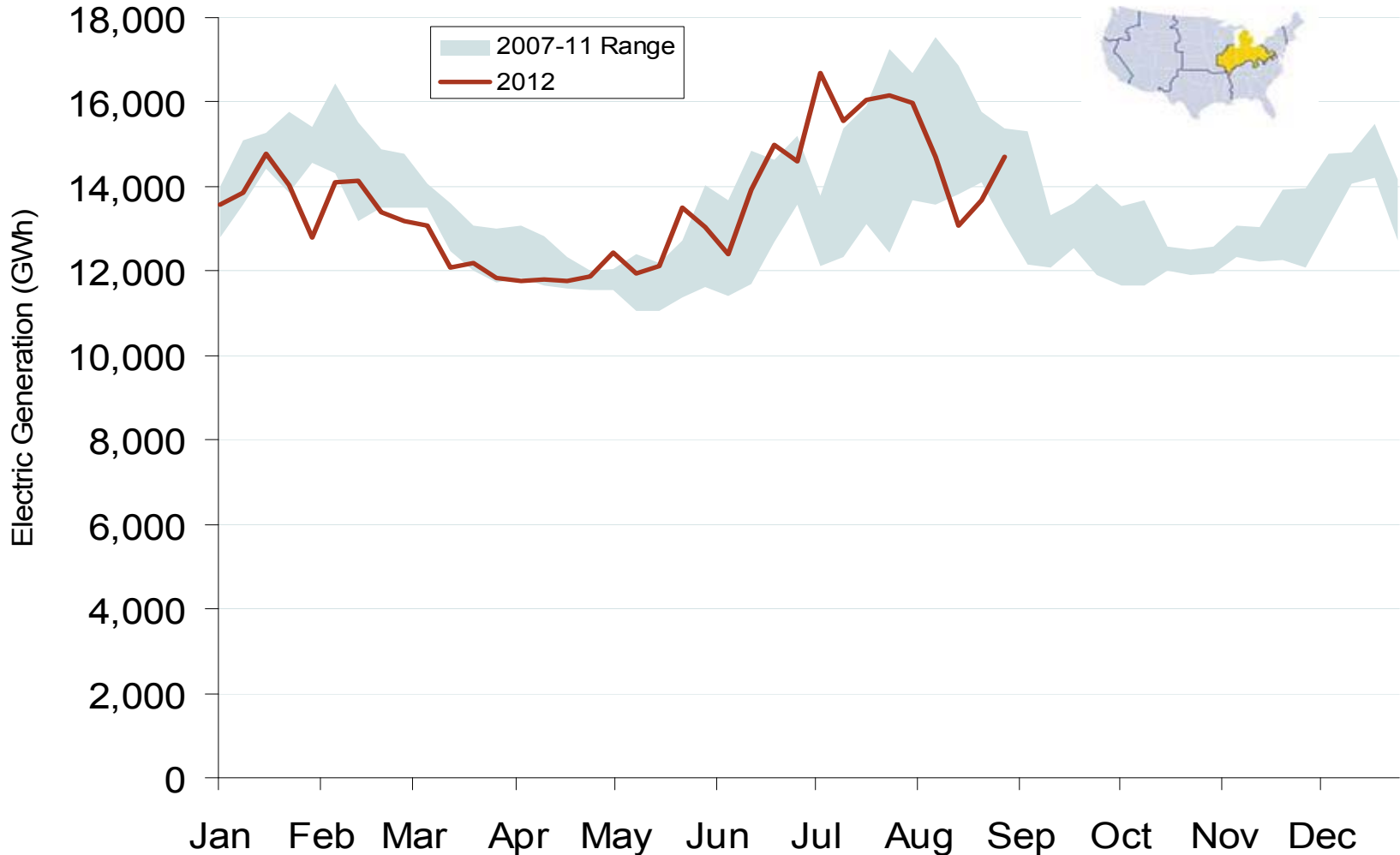
Source: Derived from *EEI* data  
September 2012 Mid-Atlantic Snapshot Report

### Weekly Generation Output - Mid Atlantic



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

# Weekly Generation Output - Central Industrial Region



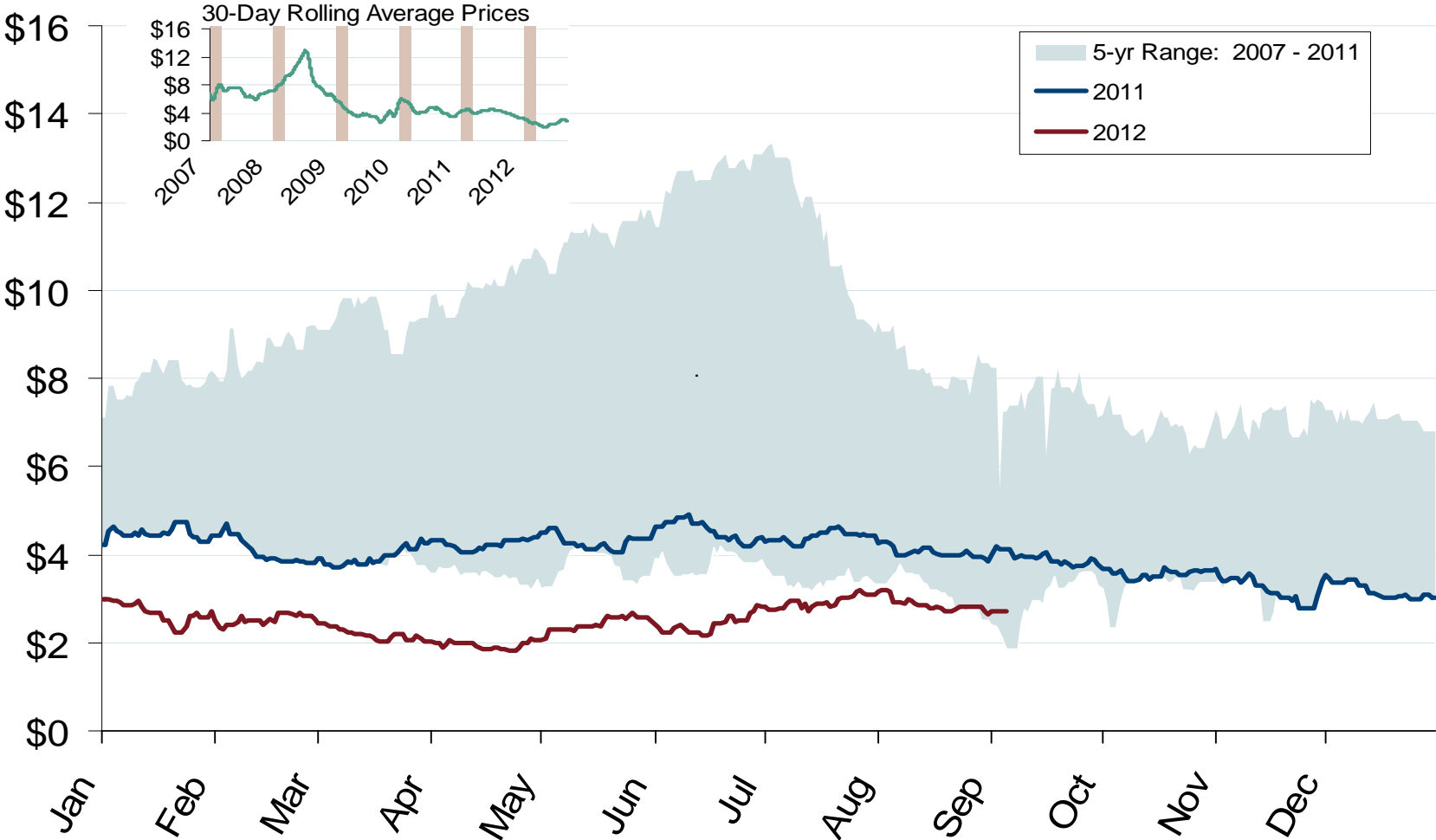


# Natural Gas and Fuels Markets

Natural Gas Market Overview: 5 Year Range of Henry Hub Spot Prices

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

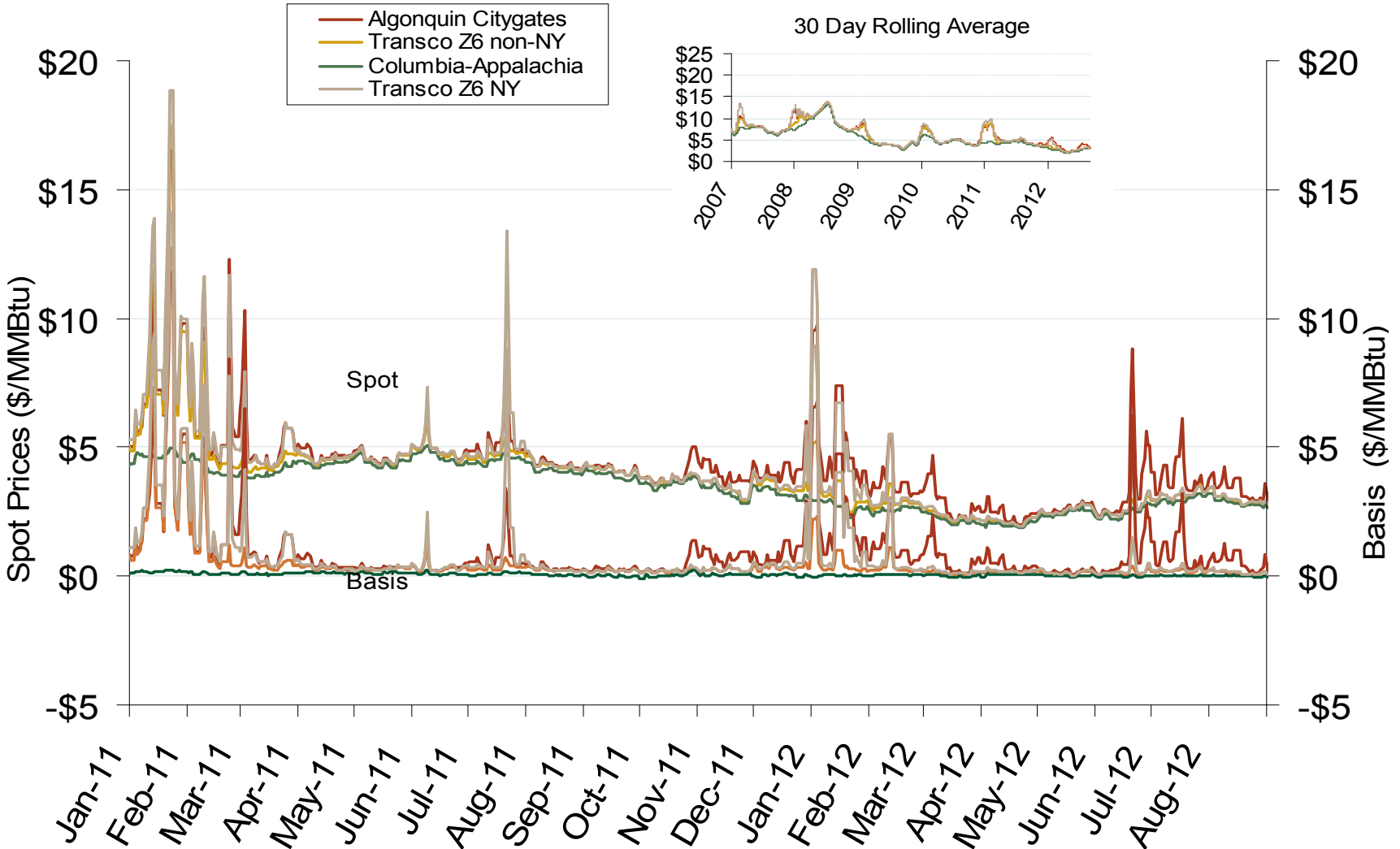
# Henry Hub Natural Gas Daily Spot Prices



Source: Derived from *Platts* data  
September 2012 Mid-Atlantic Snapshot Report

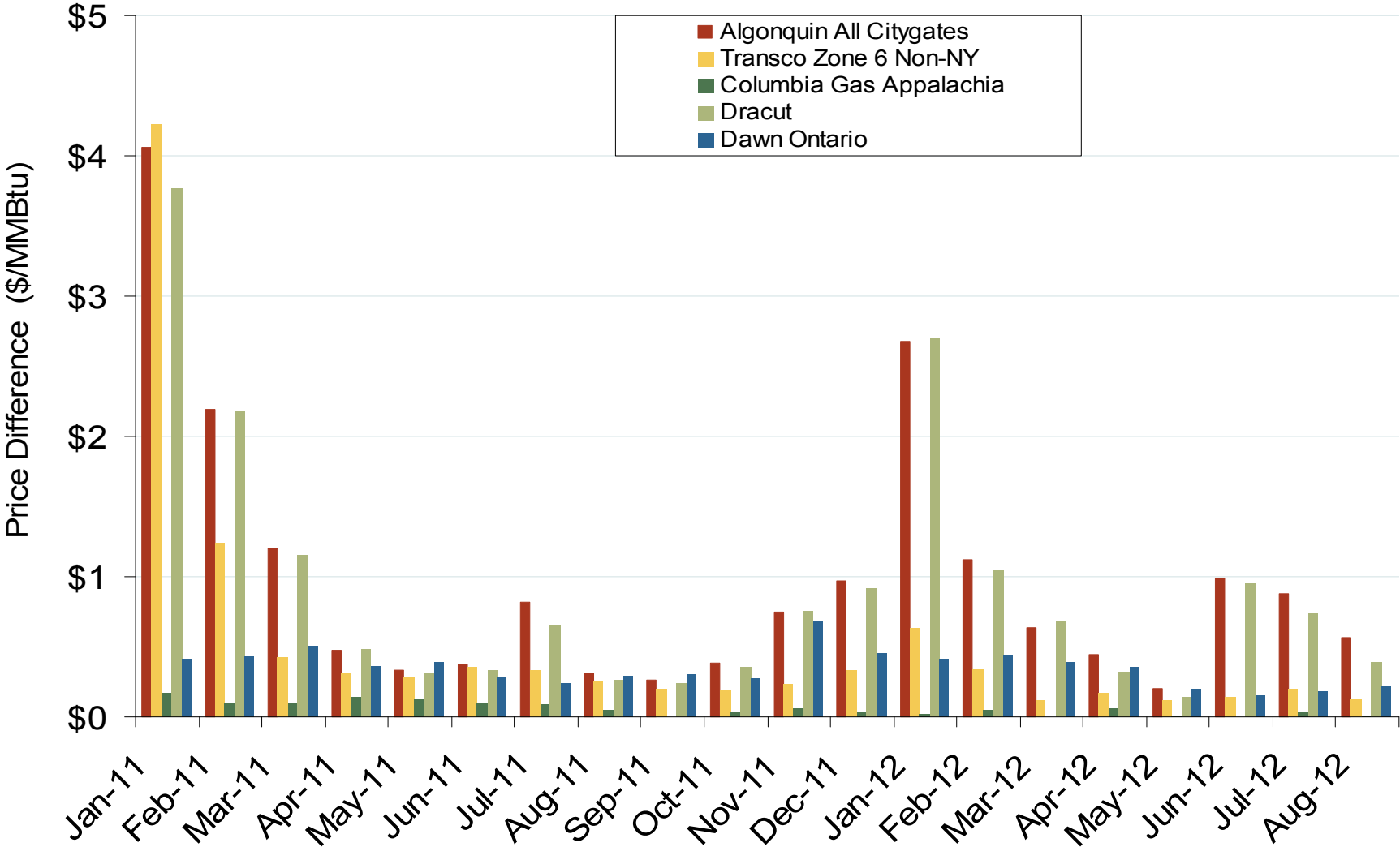


### Northeastern Spot Prices and Basis



Source: Derived from *Platts* data  
September 2012 Mid-Atlantic Snapshot Report

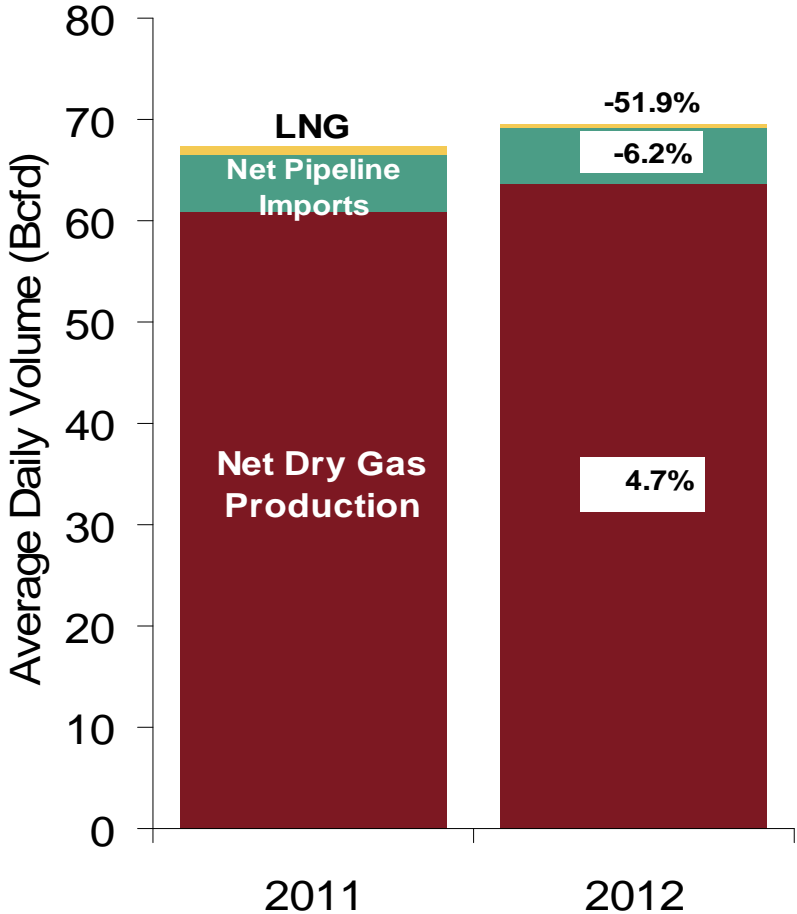
# Northeastern Monthly Average Basis Value to Henry Hub



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

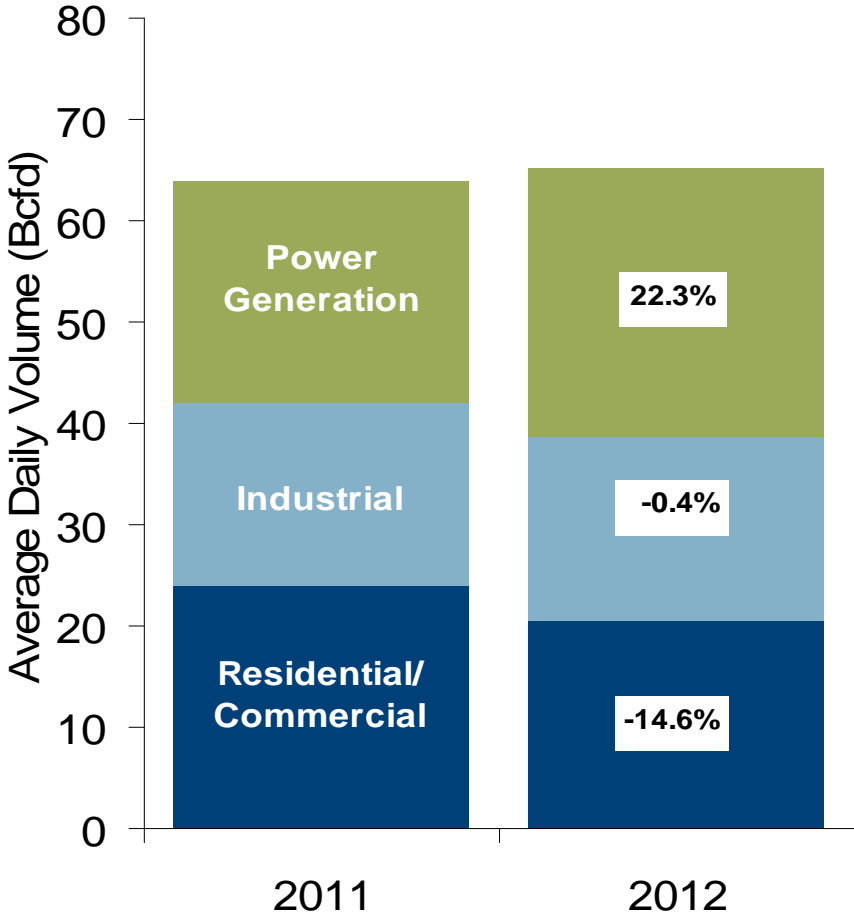
## US Natural Gas Supply

Total Change in Supply 2.9%

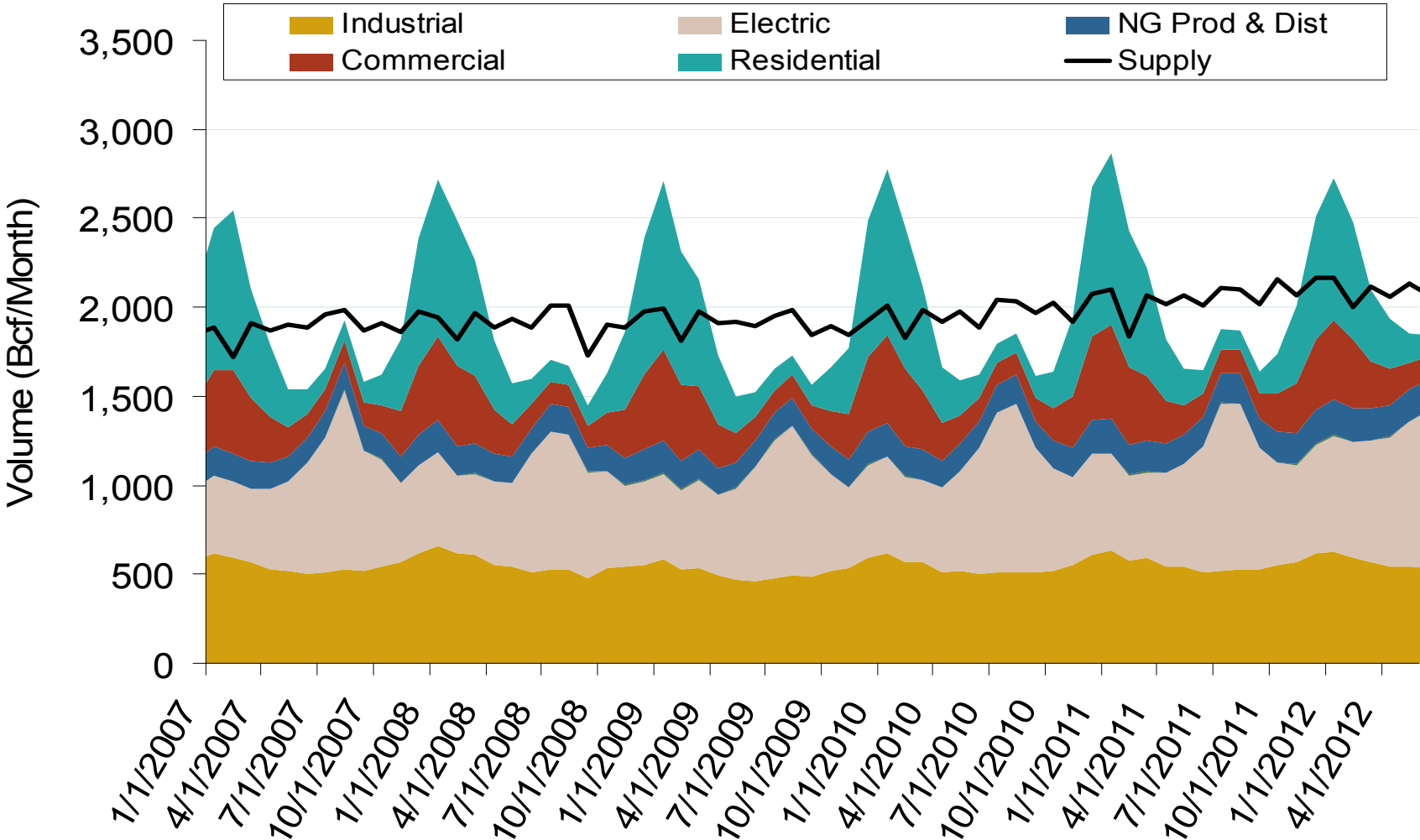


## US Natural Gas Demand

Total Change in Demand 2.7%



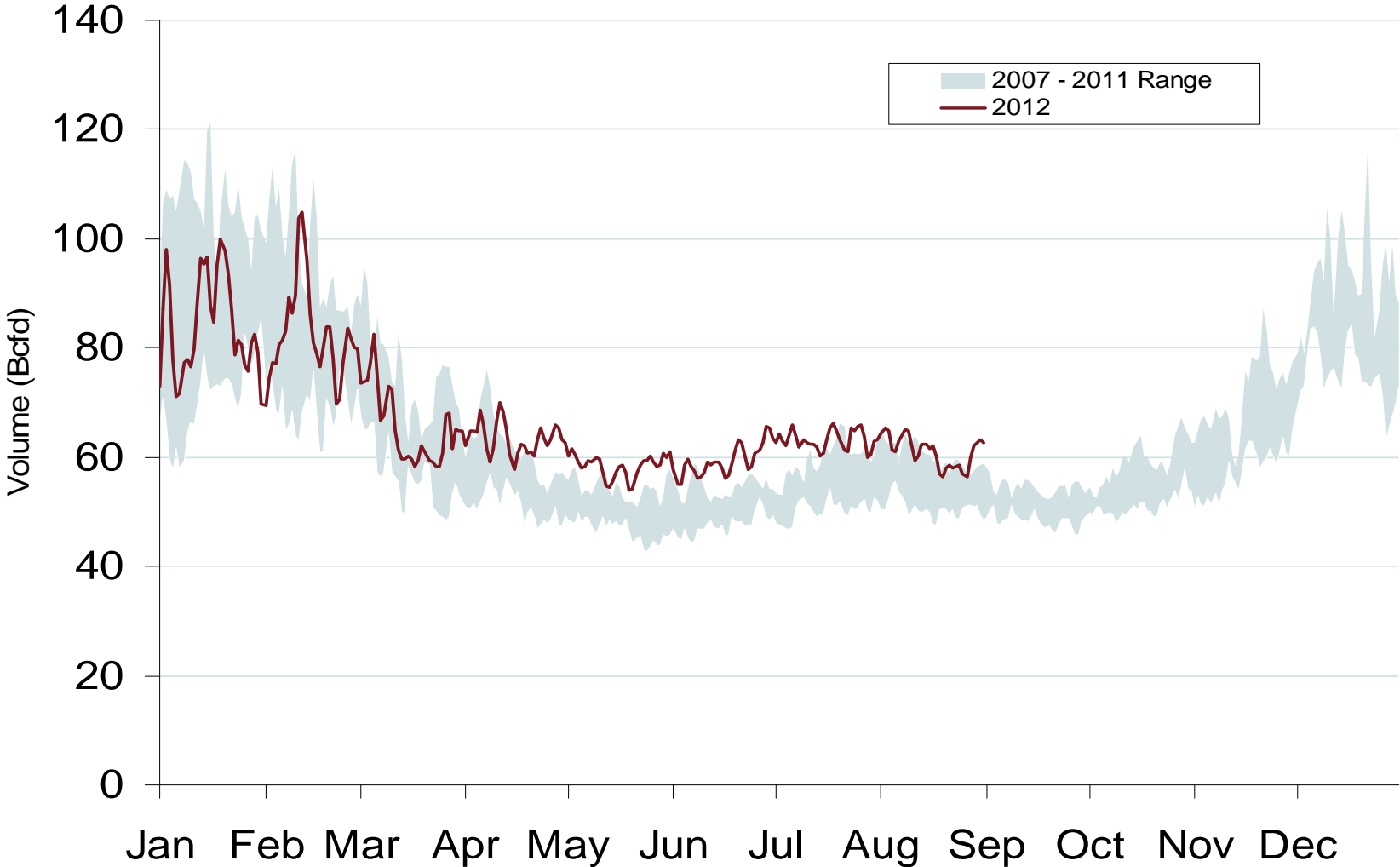
### Annual U.S. Natural Gas Consumption by Sector



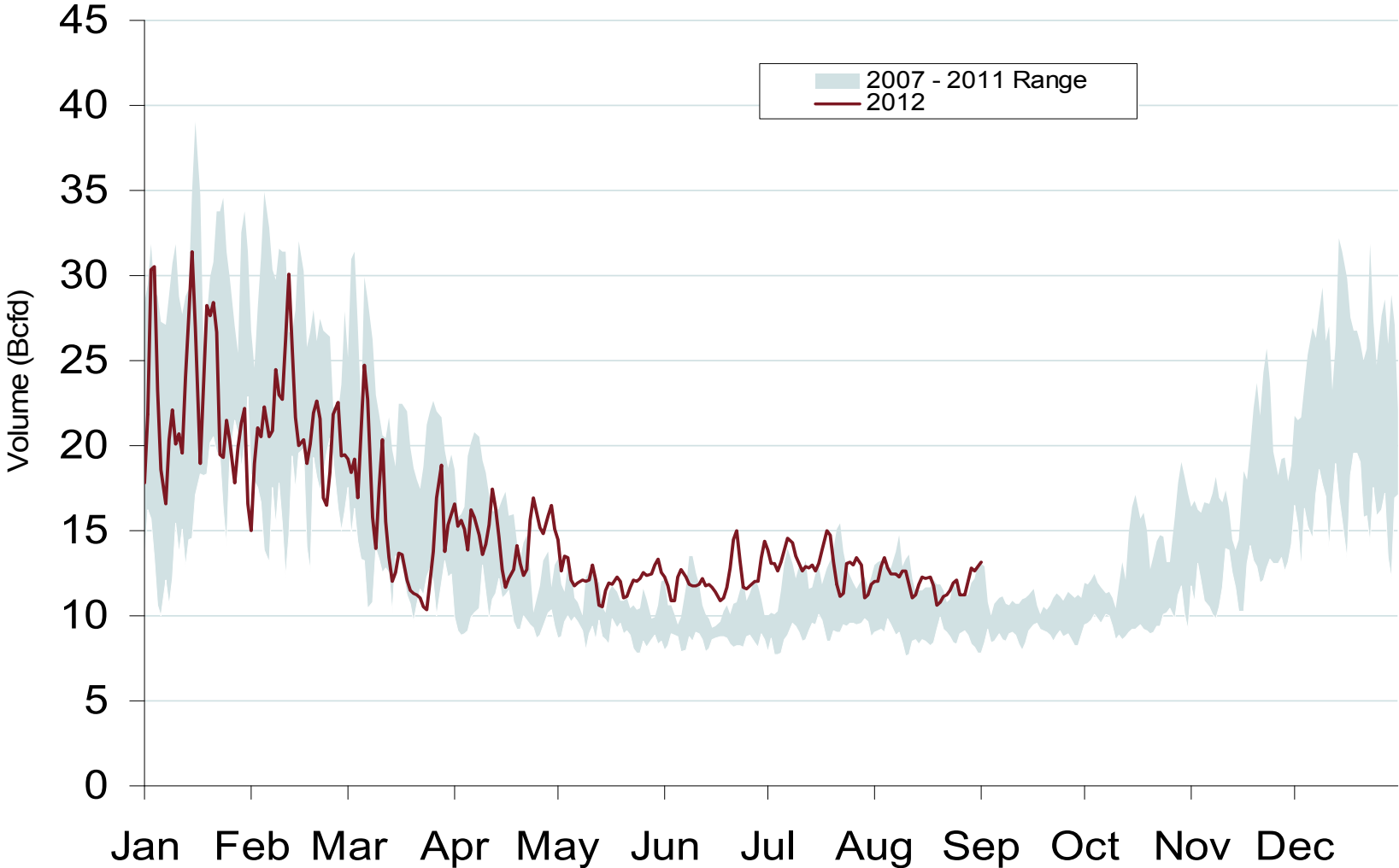
Notes: Supply includes lower 48 state production, net pipeline imports, and LNG imports

Source: Derived from EIA data

### Total U.S. Natural Gas Demand All Sectors



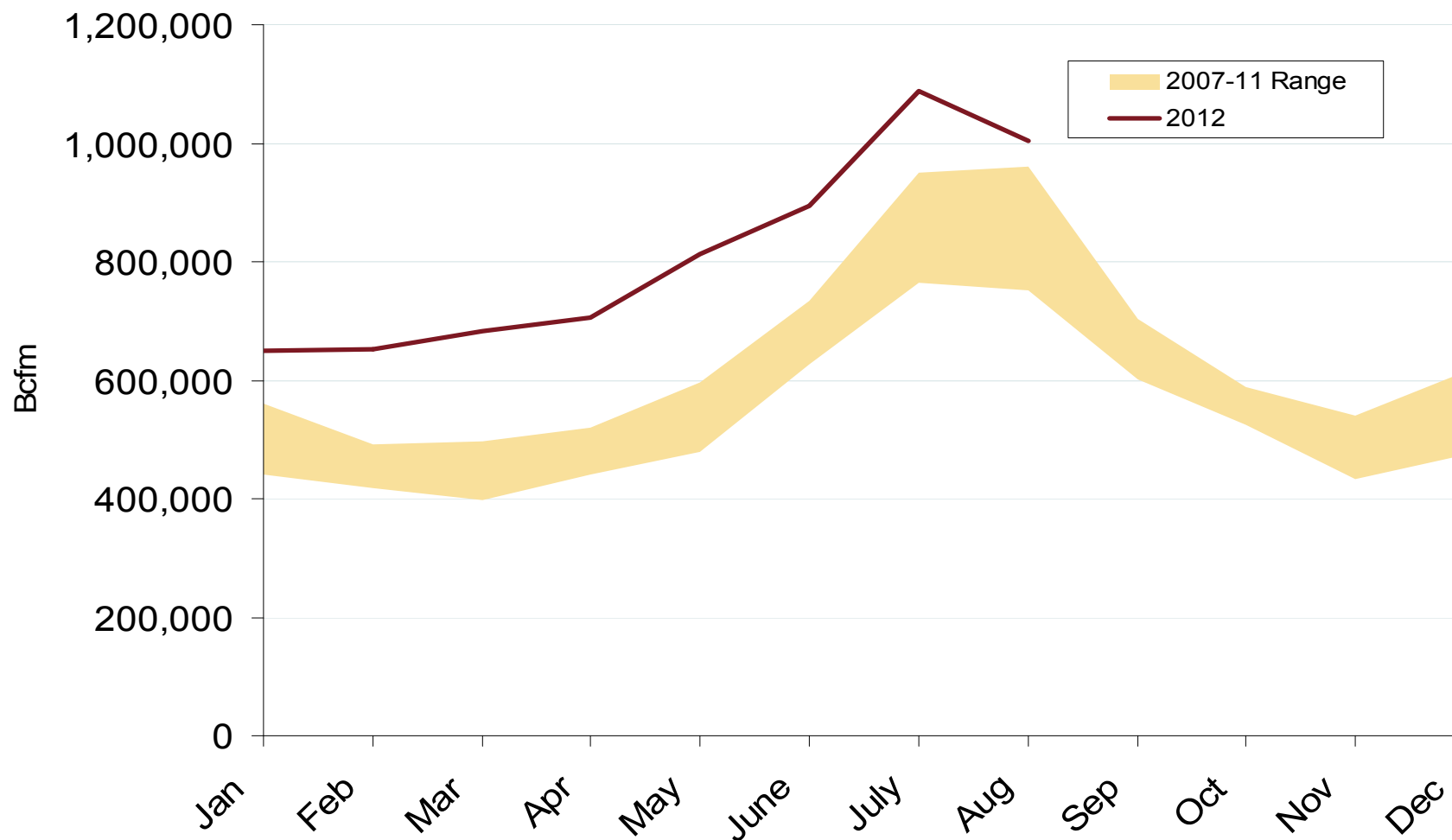
### Daily Northeast Natural Gas Demand All Sectors



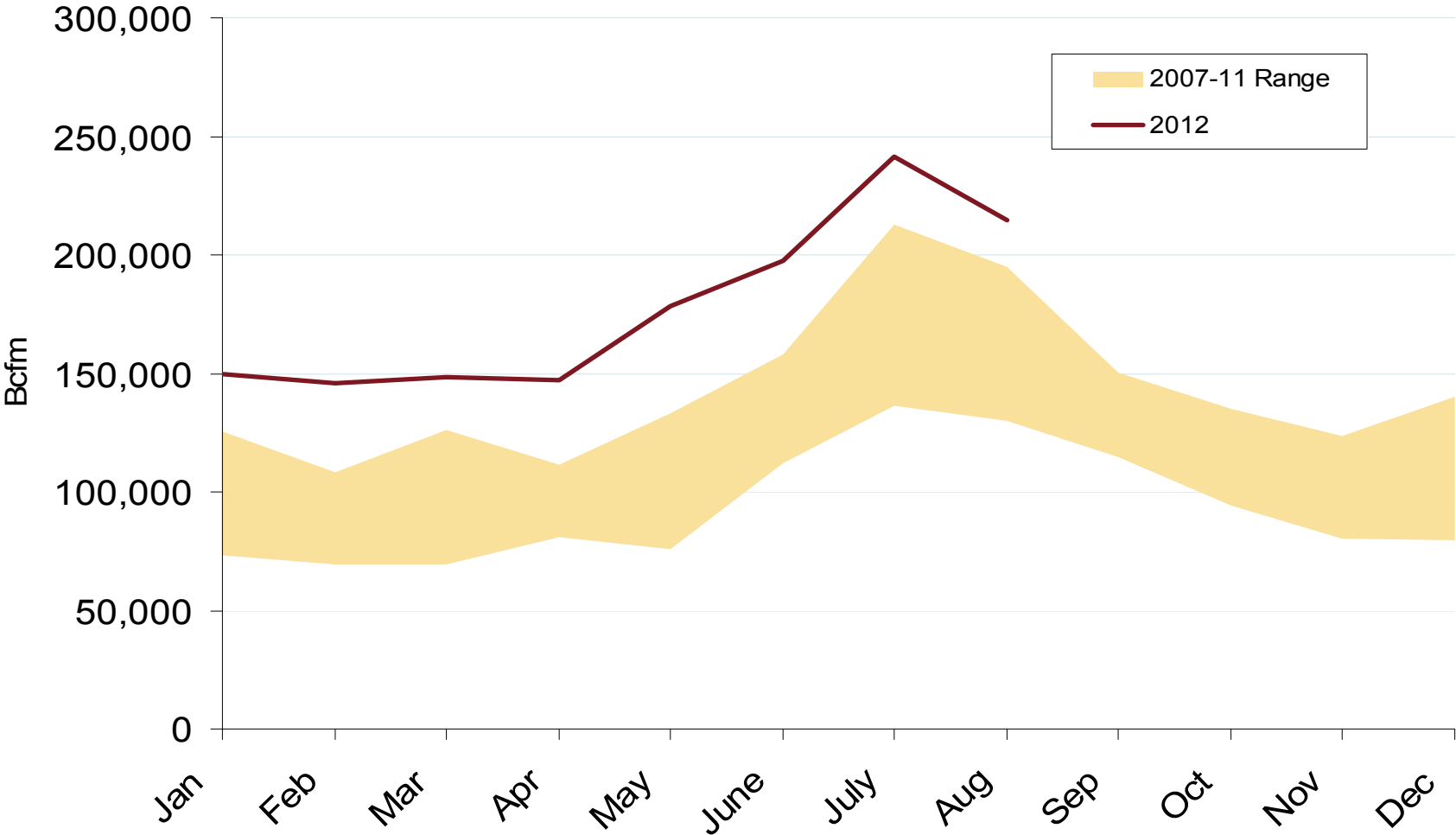
Source: Derived from *Bentek Energy* and Weekly NOAA data  
September 2012 Mid-Atlantic Snapshot Report

Updated: September 06, 2012

## U.S. Natural Gas Consumption for Power Generation



# Northeast Natural Gas Consumption for Power Generation

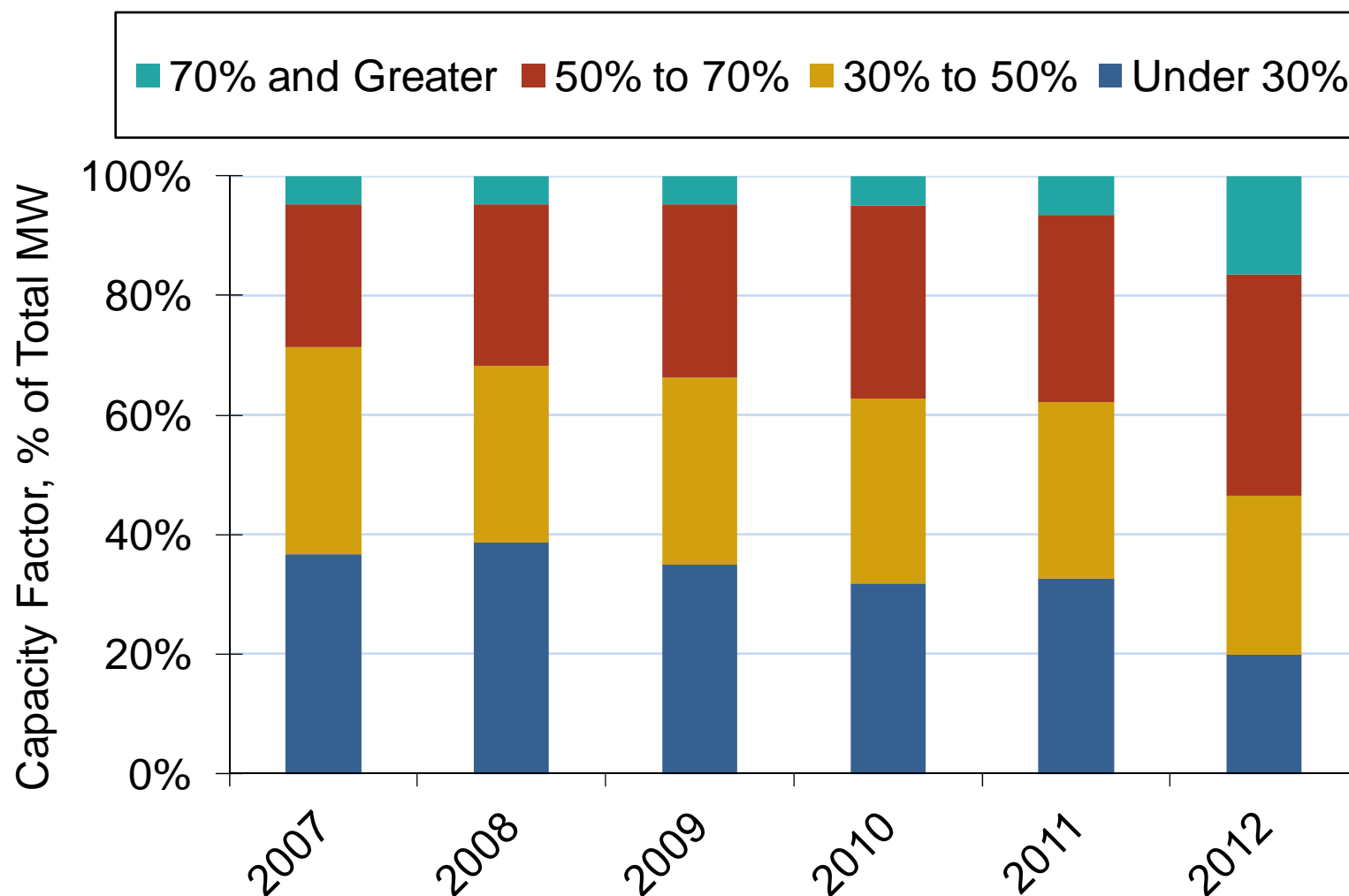


Source: Derived from *Bentek Energy* data  
September 2012 Mid-Atlantic Snapshot Report

Updated: September 06, 2012



## Major Shifts in U.S. CCGT Units Capacity Factors in 2012



Note: CCGT-Combined Cycle Gas Turbines. The capacity factor of a plant as the annual number of MWh generated divided by the plants annual operating capability which is maximum load at which a generator can operate without exceeding approved plant stress limits.

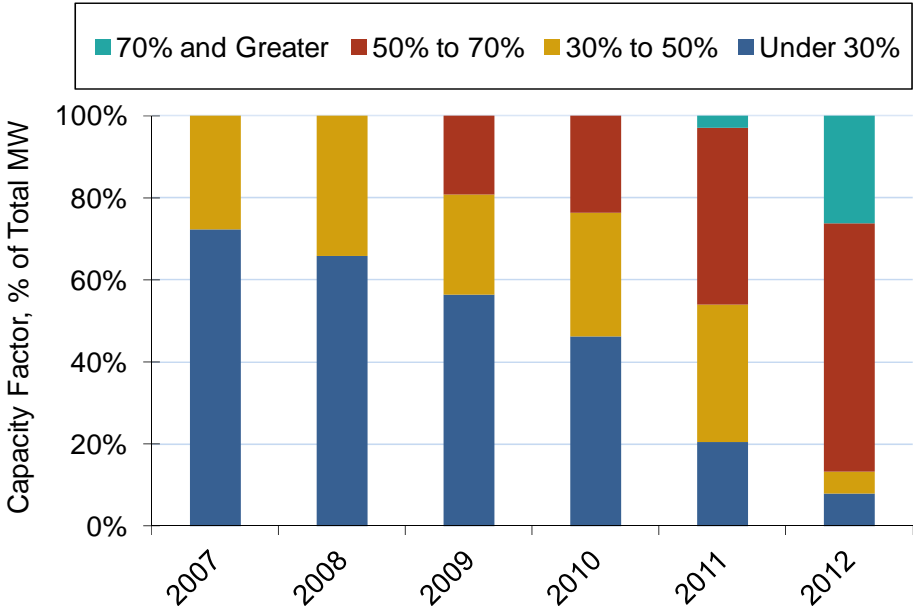
Source: Derived from SNL Data

Updated May, 2011

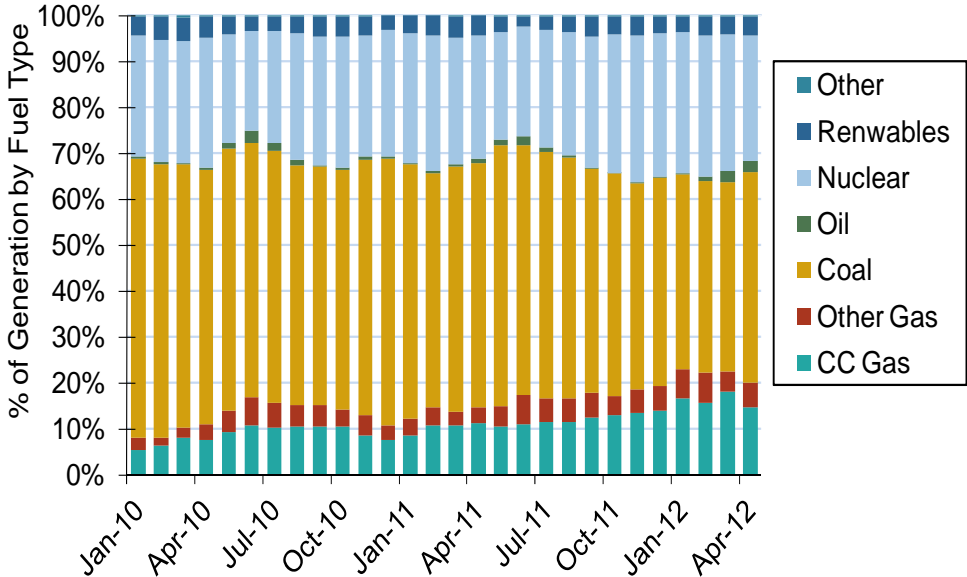
2122

# PJM Ramps-up CCGT Use Although Continues Reliance on Coal

PJM CCGT Use

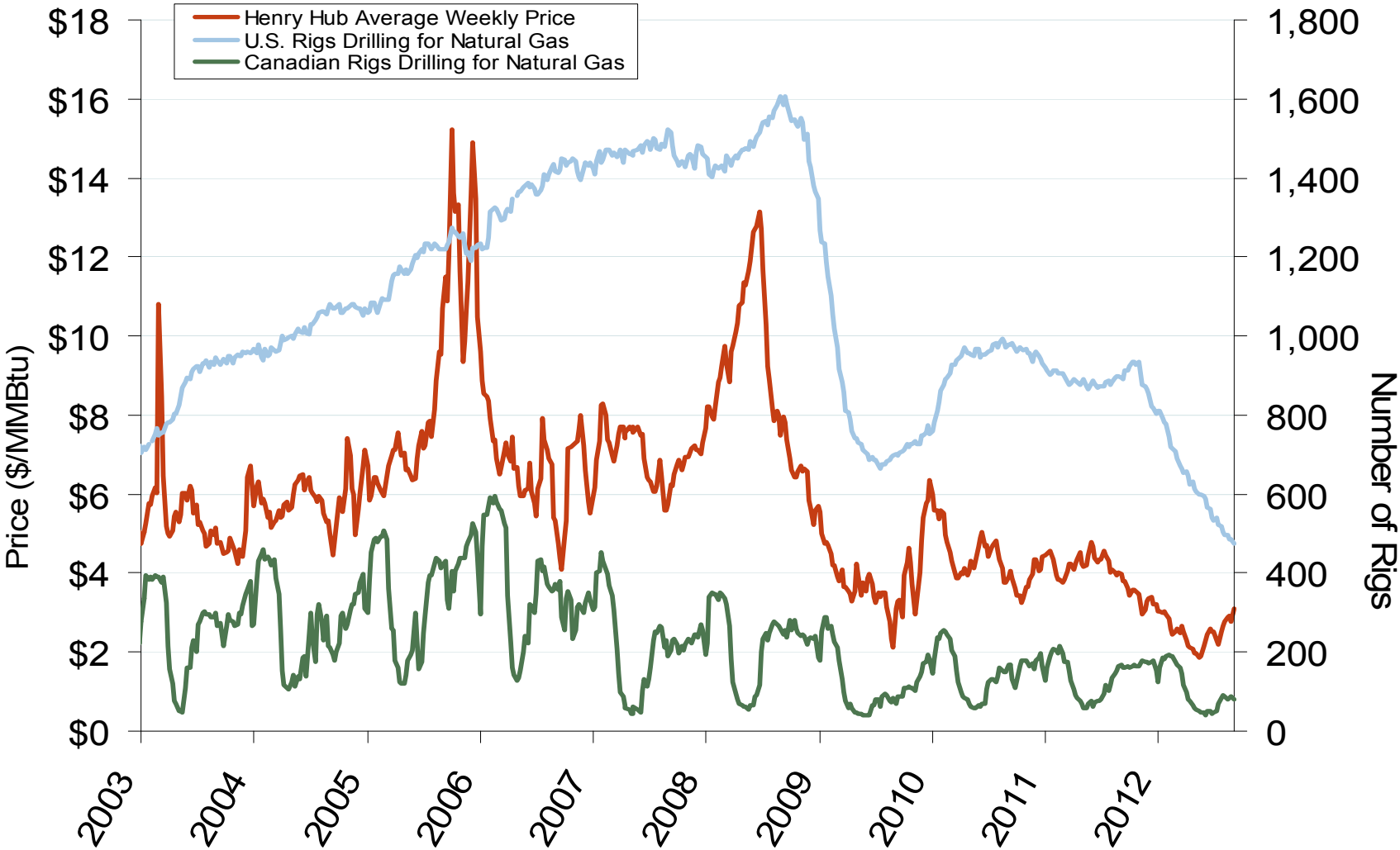


Coal Continues to Dominate PJM Generation Mix



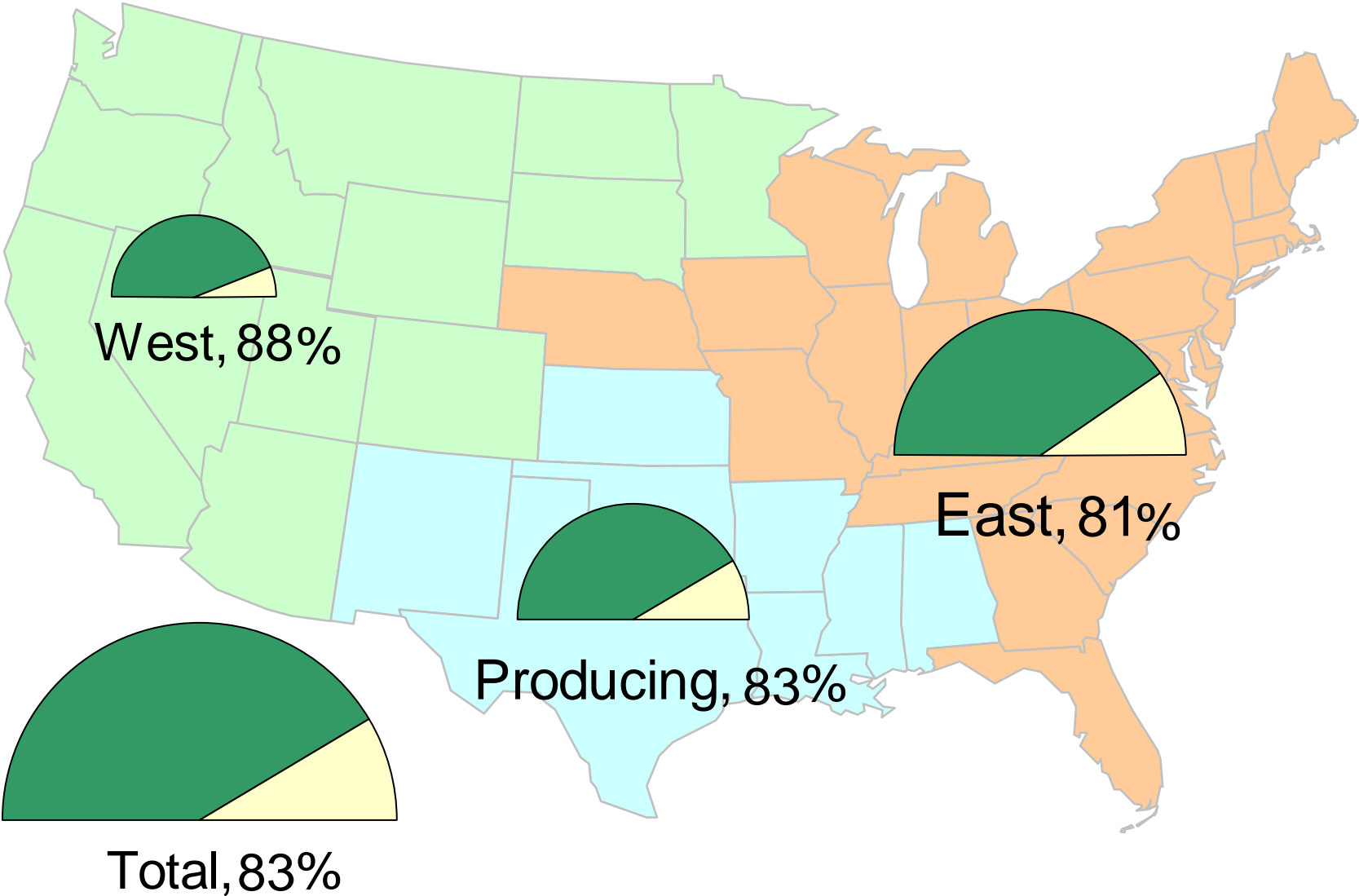
Note: CCGT-Combined Cycle Gas Turbines. The capacity factor of a plant as the annual number of MWh generated divided by the plants annual operating capability which is maximum load at which a generator can operate without exceeding approved plant stress limits. Source: Derived from SNL Data

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



Source: Derived from *Platts* and *Baker Hughes* data  
September 2012 Mid-Atlantic Snapshot Report

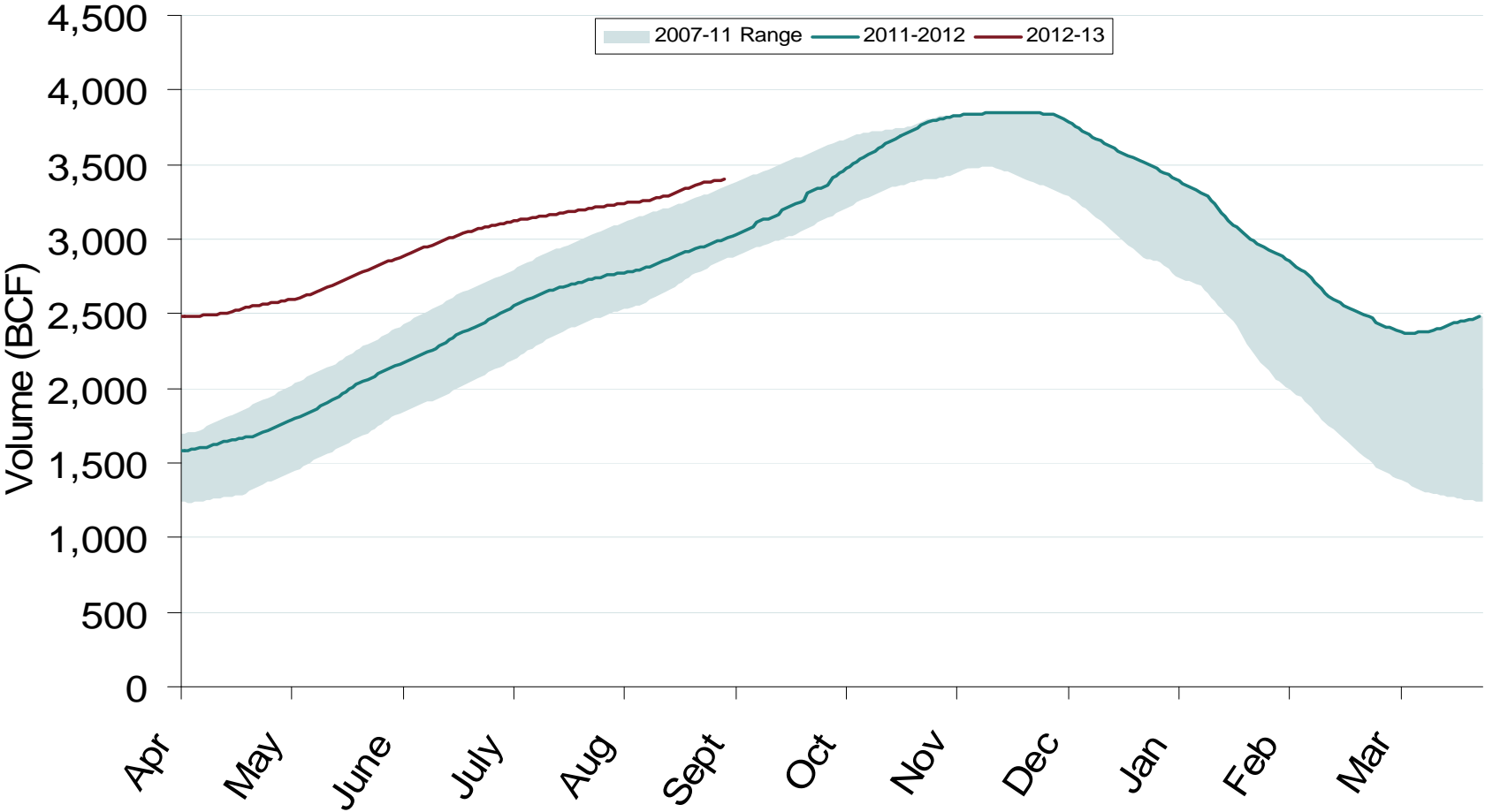
# Natural Gas Storage Inventories – August 31, 2012



Source: Derived from *EIA Storage* and *Estimated Working Gas Capacity* data  
September 2012 Mid-Atlantic Snapshot Report

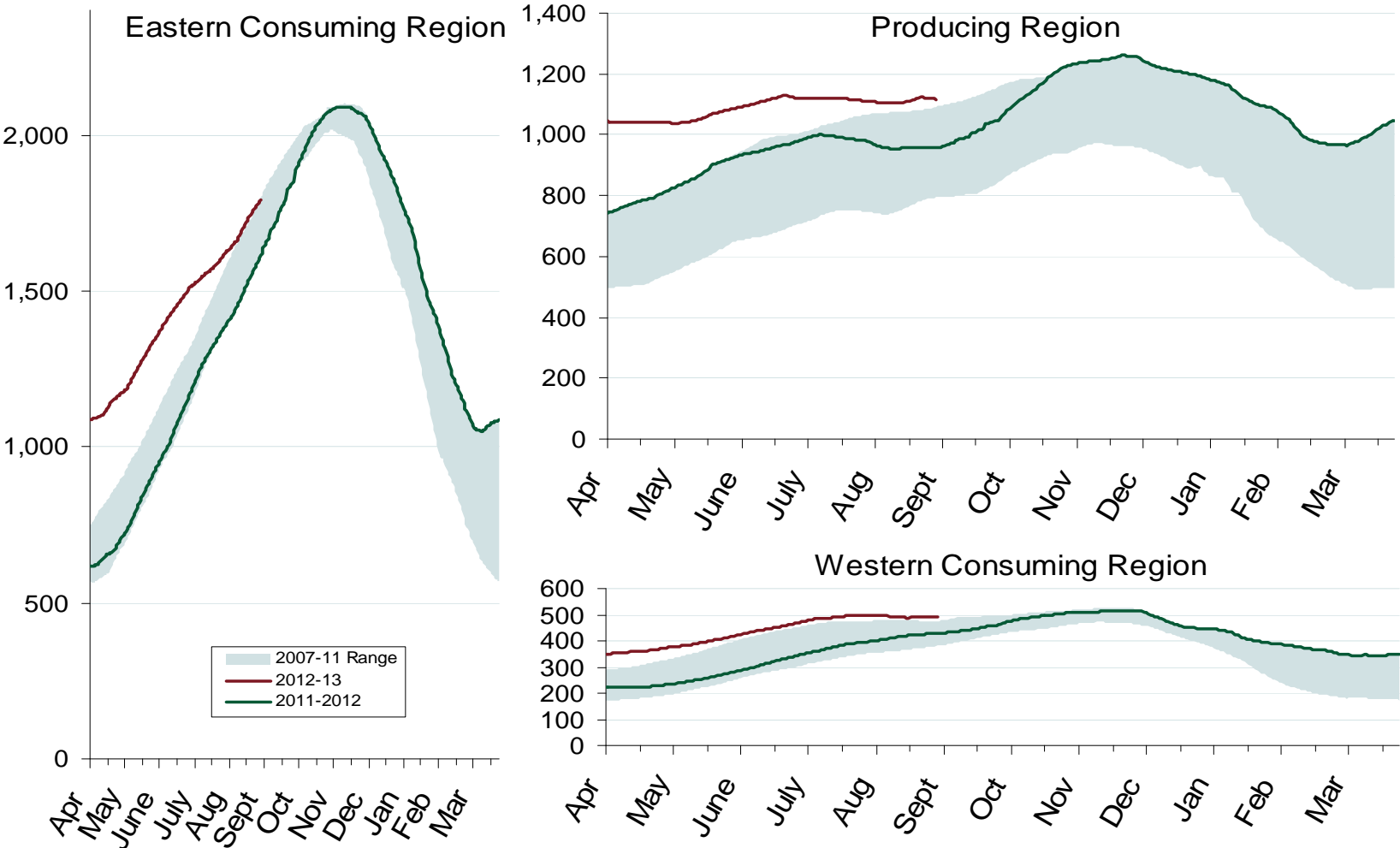
Updated: September 6, 2012<sup>022</sup>

### Total U.S. Working Gas in Storage



Source: Derived from EIA data  
September 2012 Mid-Atlantic Snapshot Report

# Regional Totals of Working Gas in Storage

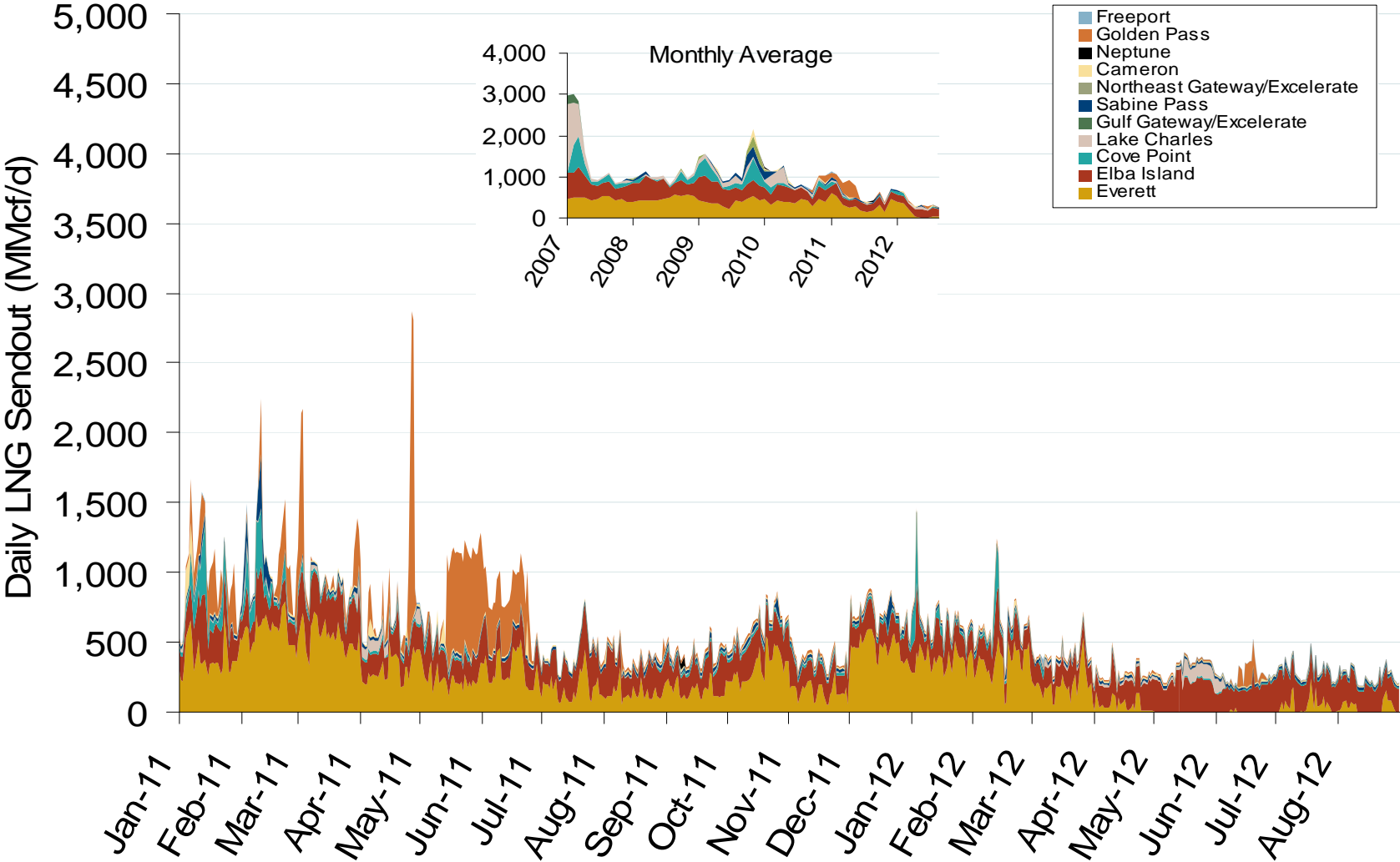


Source: Derived from EIA data  
September 2012 Mid-Atlantic Snapshot Report

## World LNG Estimated October 2012 Landed Prices



# 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 BostonGas, and LNG trucked out of the terminal. Excludes flows to the Freeport LNG which flows via intrastate pipelines and flows to the Mystic 8 and 9 power plants.

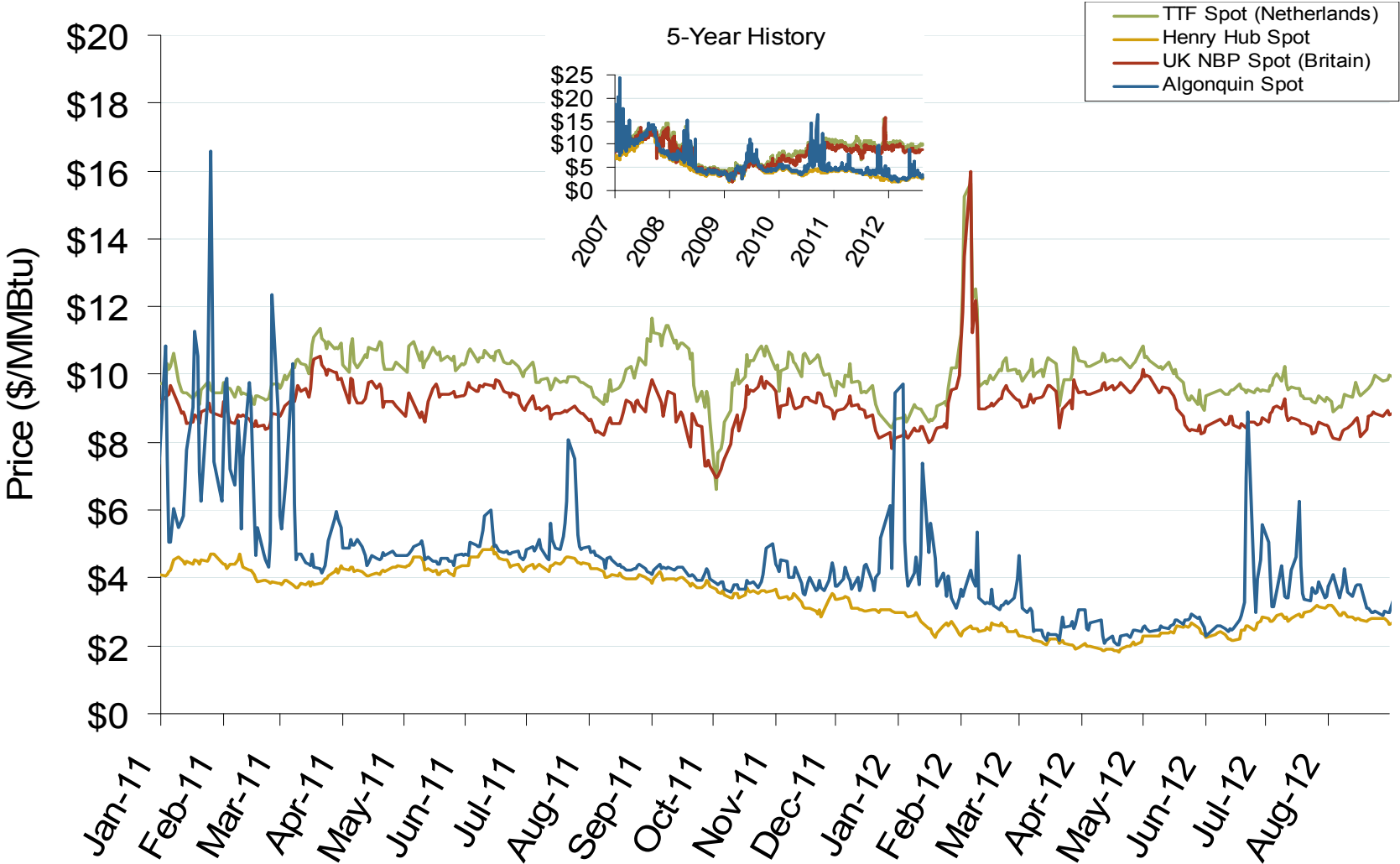
Source: Derived from Bentek Energy data

September 2012 Mid-Atlantic Snapshot Report

Updated: September 07, 2012



# Atlantic Basin European and US Spot Natural Gas Prices

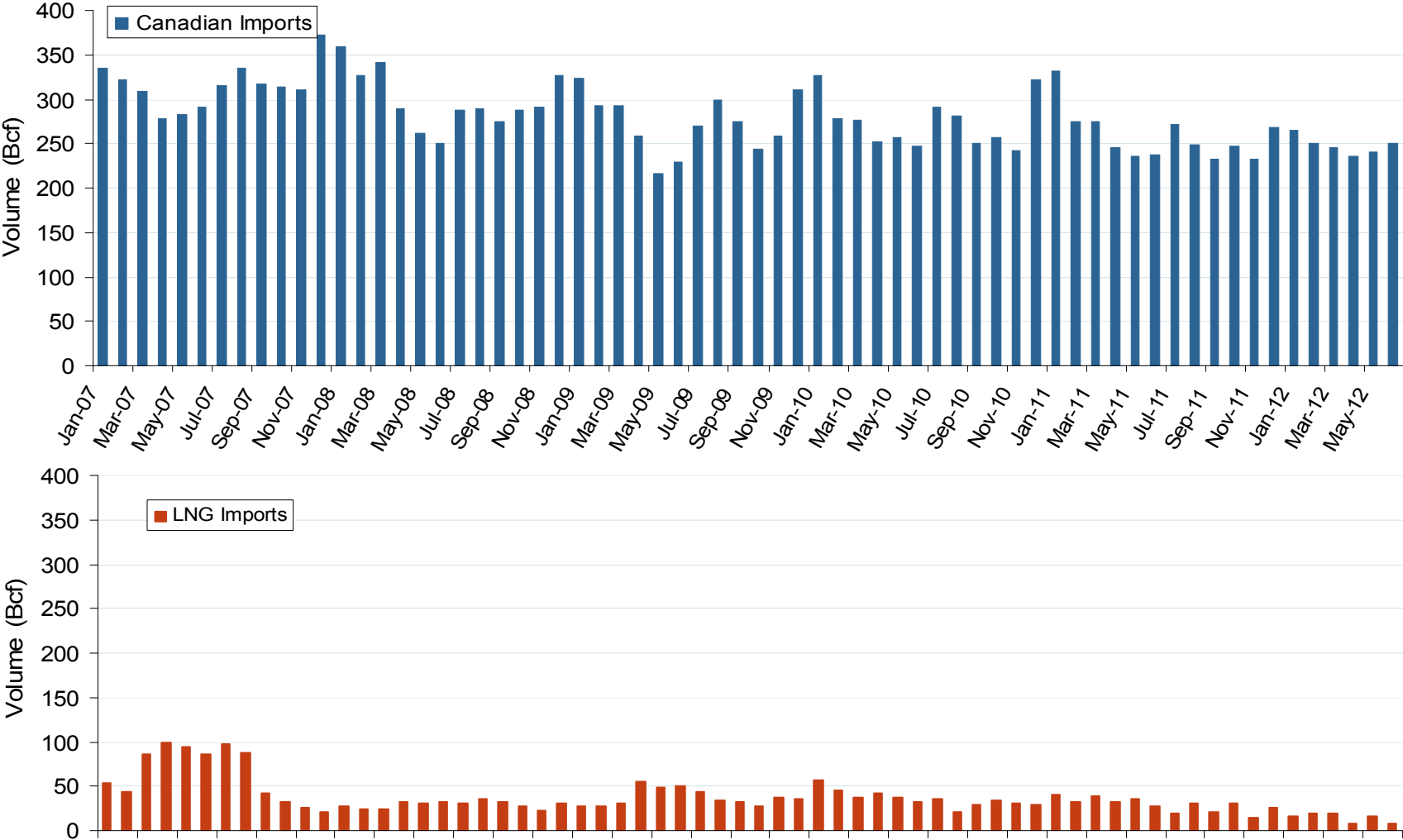


Source: Derived from *Bloomberg* and *ICE* data  
September 2012 Mid-Atlantic Snapshot Report

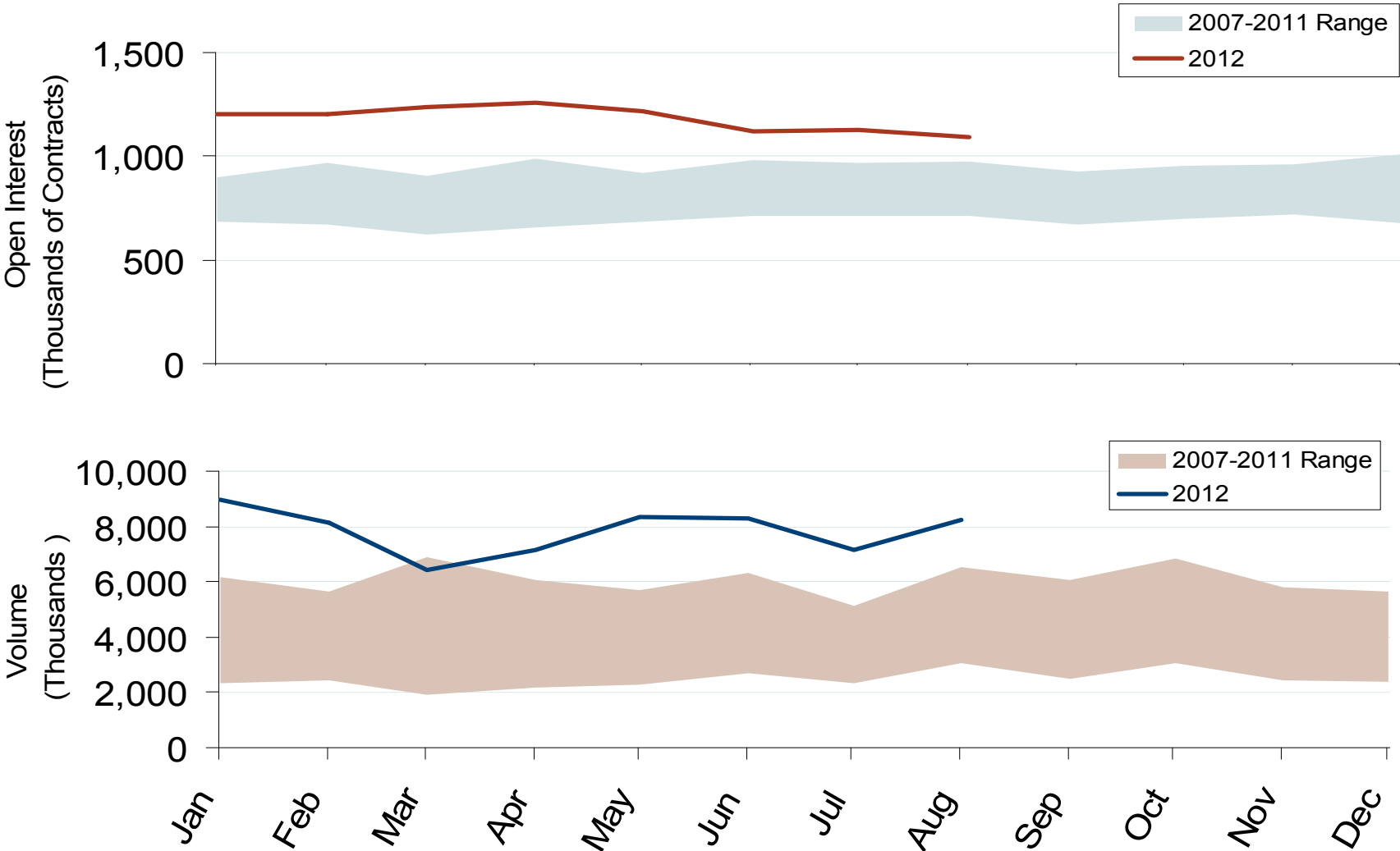
Natural Gas Overview: Natural Gas Imports

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

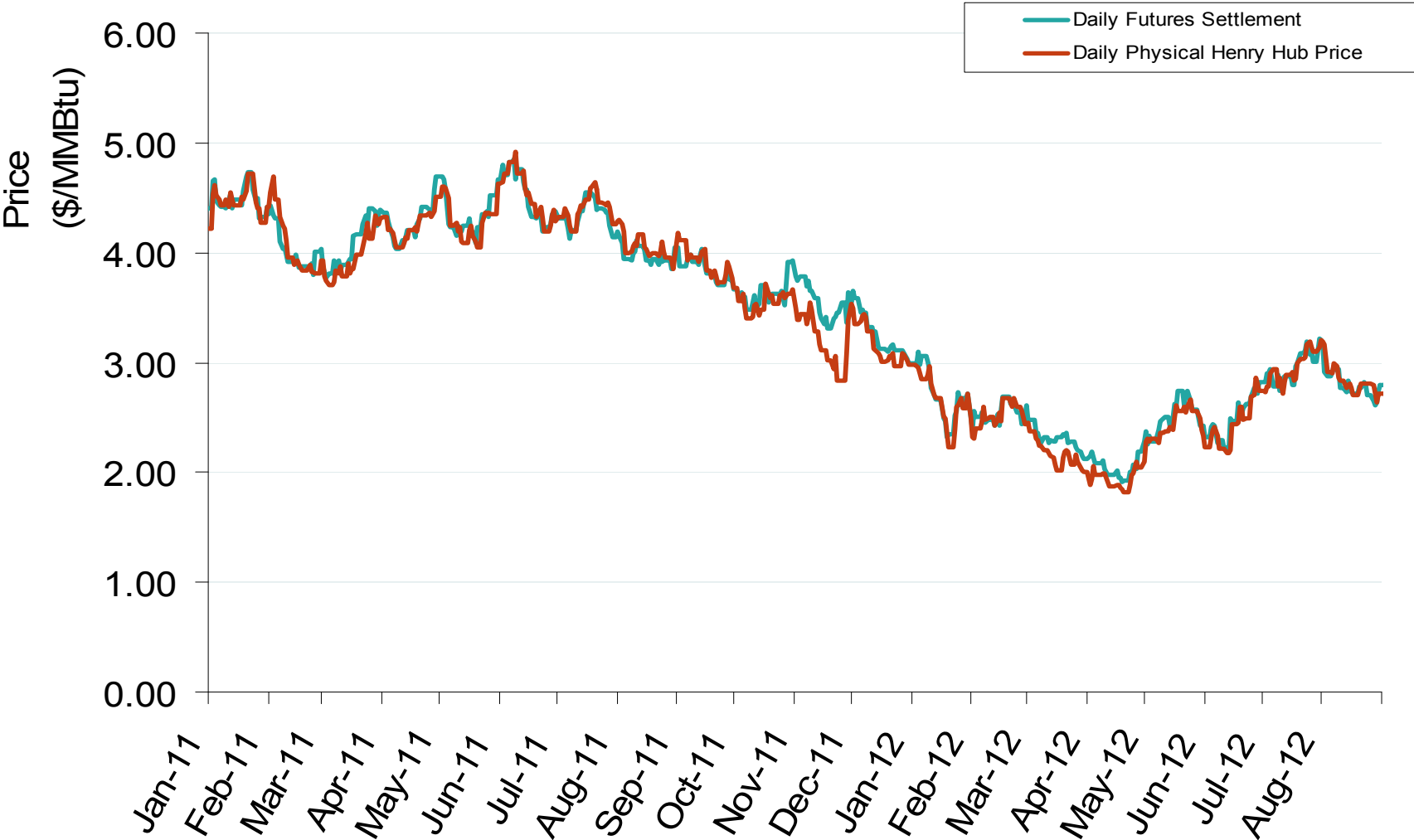
### Canadian and LNG Natural Gas Imports Into the U.S.



# Nymex NG Futures Month-End Open Interest and Monthly Volume



# Daily Physical Index Price & Daily Futures Settlement Price

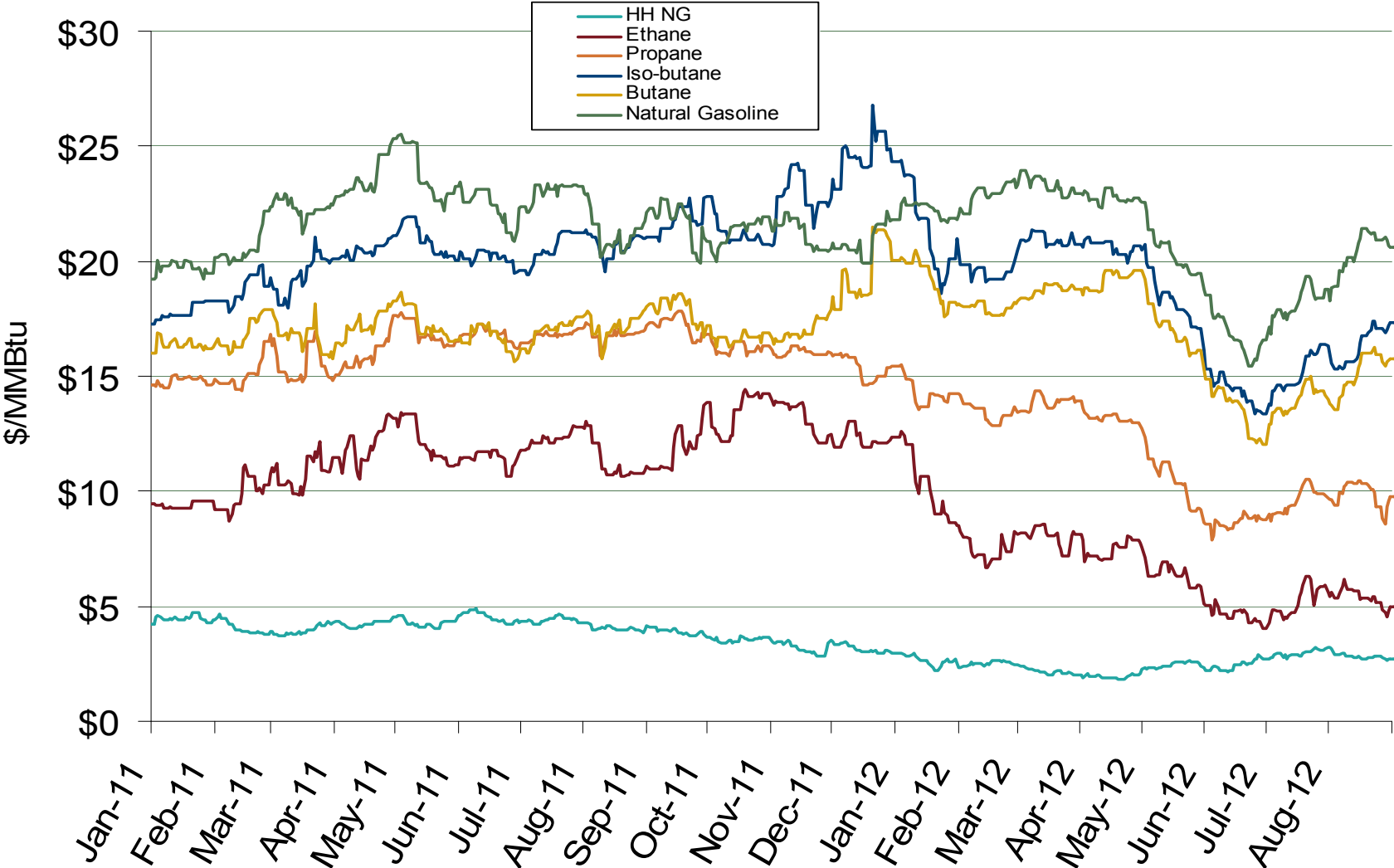


Source: Derived from *Bloomberg* data  
September 2012 Mid-Atlantic Snapshot Report

Natural Gas Market Overview: NGL Prices

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

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

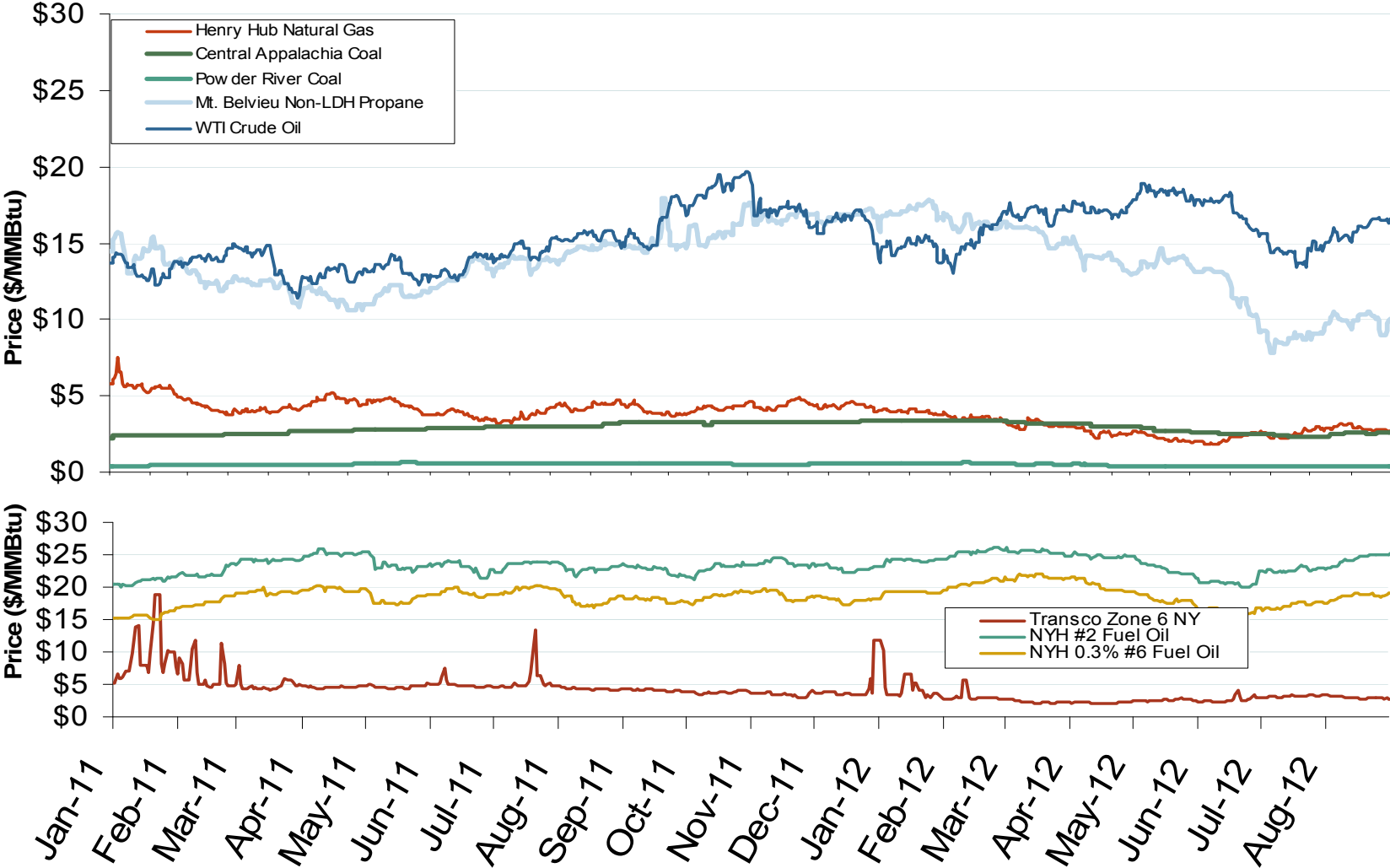


Source: Derived from Bloomberg Data  
September 2012 Mid-Atlantic Snapshot Report

Other Fuels Market: Fossil Fuel Prices

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

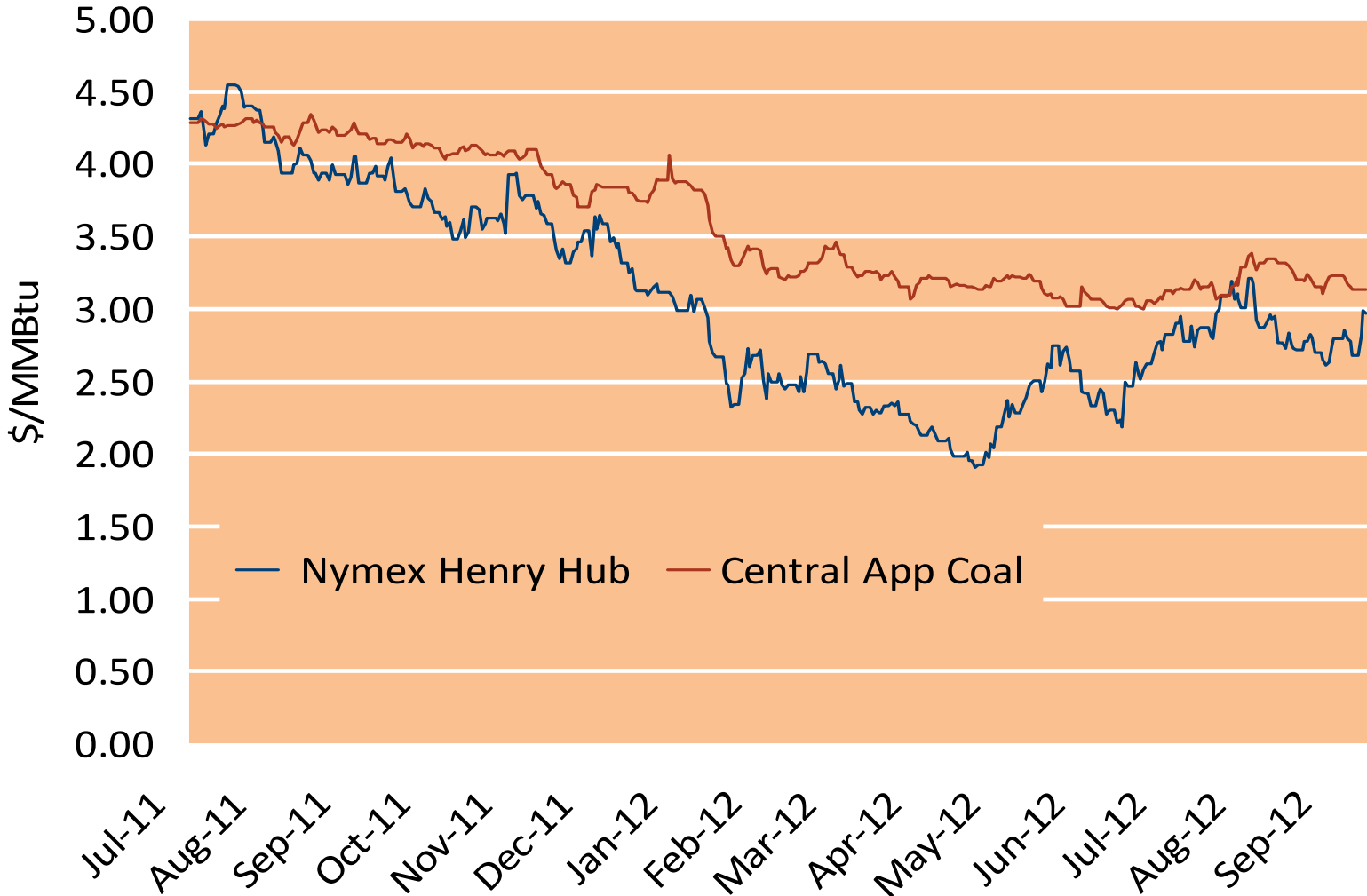
# Oil, Coal, Natural Gas and Propane Daily Spot Prices



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

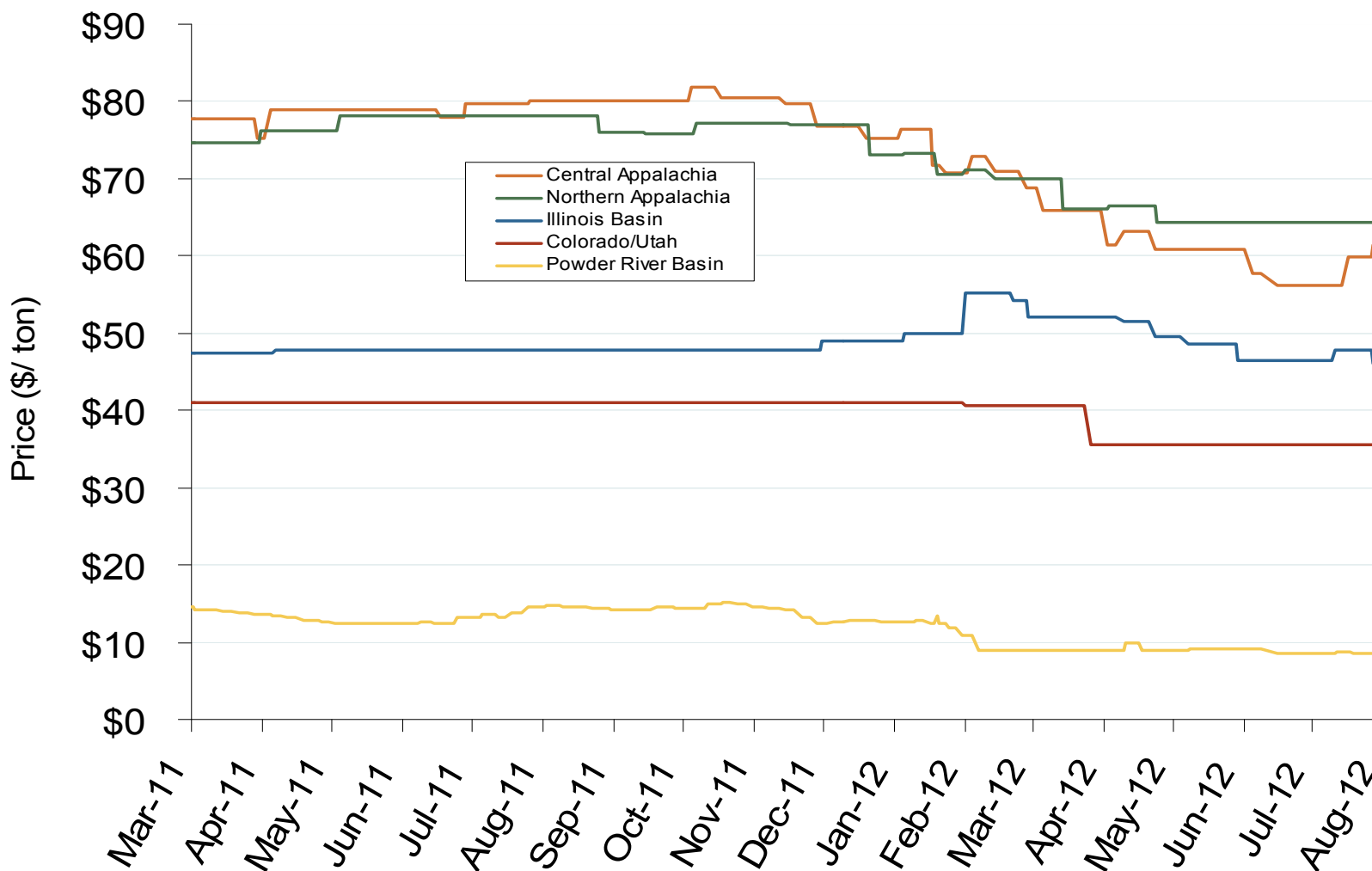
Source: Derived from ICE and Bloomberg data

### Gas Prices Reach Parity with Coal



Source: Bloomberg

## 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

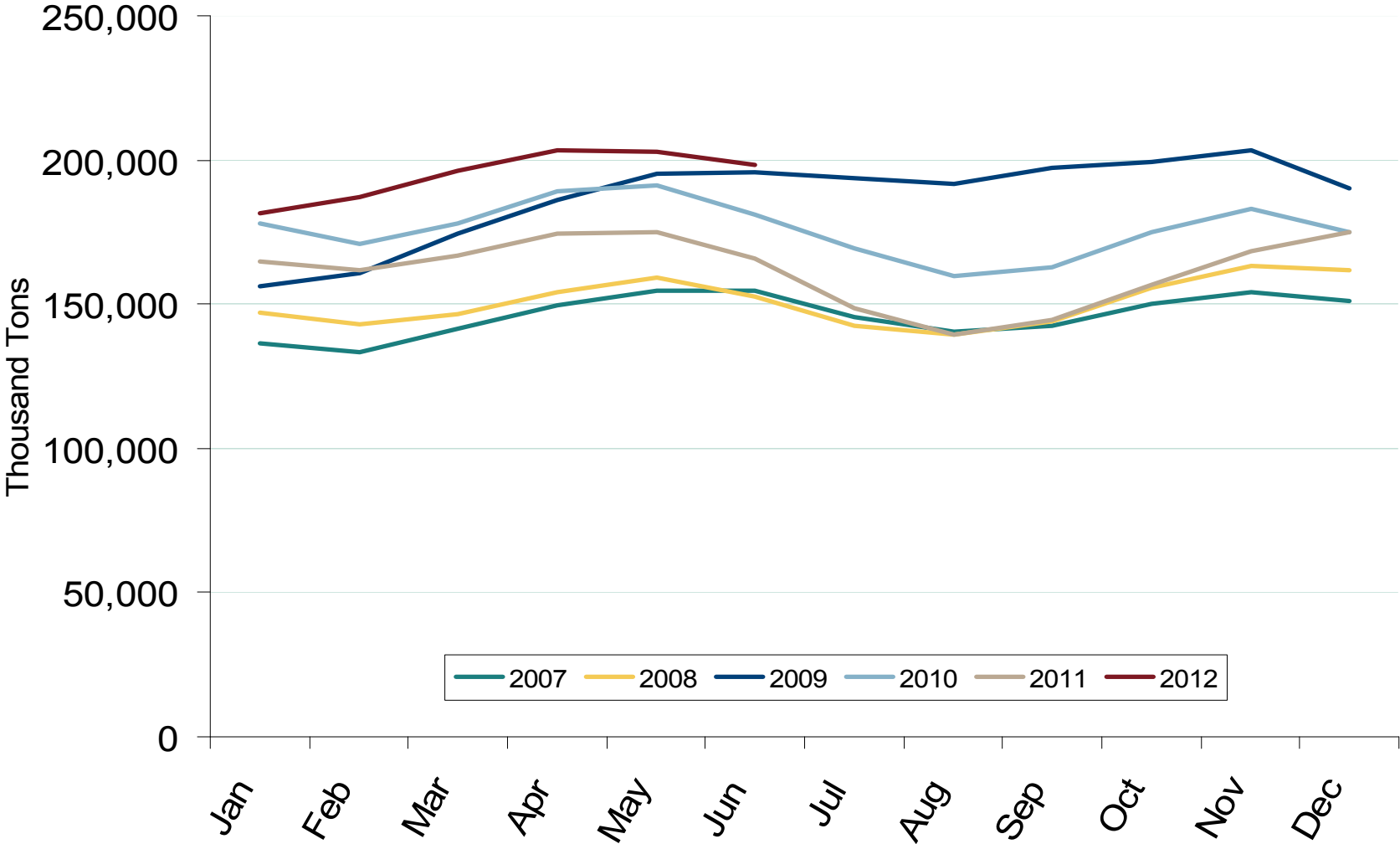
September 2012 Mid-Atlantic Snapshot Report

Updated: September 04, 2012

1148



# U.S. Coal Stockpiles at Electric Power Generating Facilities



Source: Derived from EIA data. Excludes Industrial and Commercial Plants  
September 2012 Mid-Atlantic Snapshot Report