

# **OE ENERGY MARKET SNAPSHOT**

## **Southeast States Version – August 2012 Data**

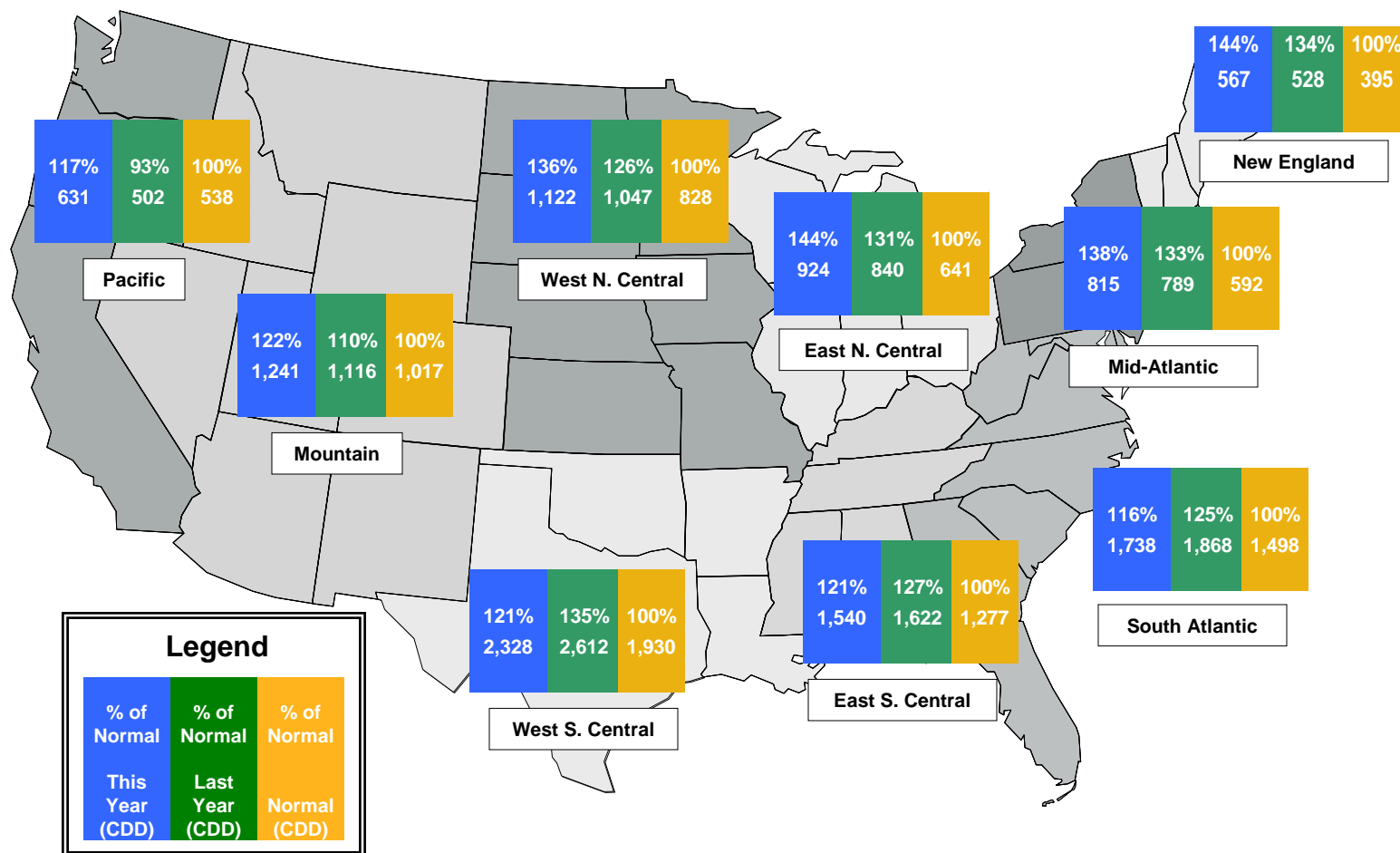
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Office of Enforcement  
Federal Energy Regulatory Commission  
September 2012



# 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 Southeast Snapshot Report

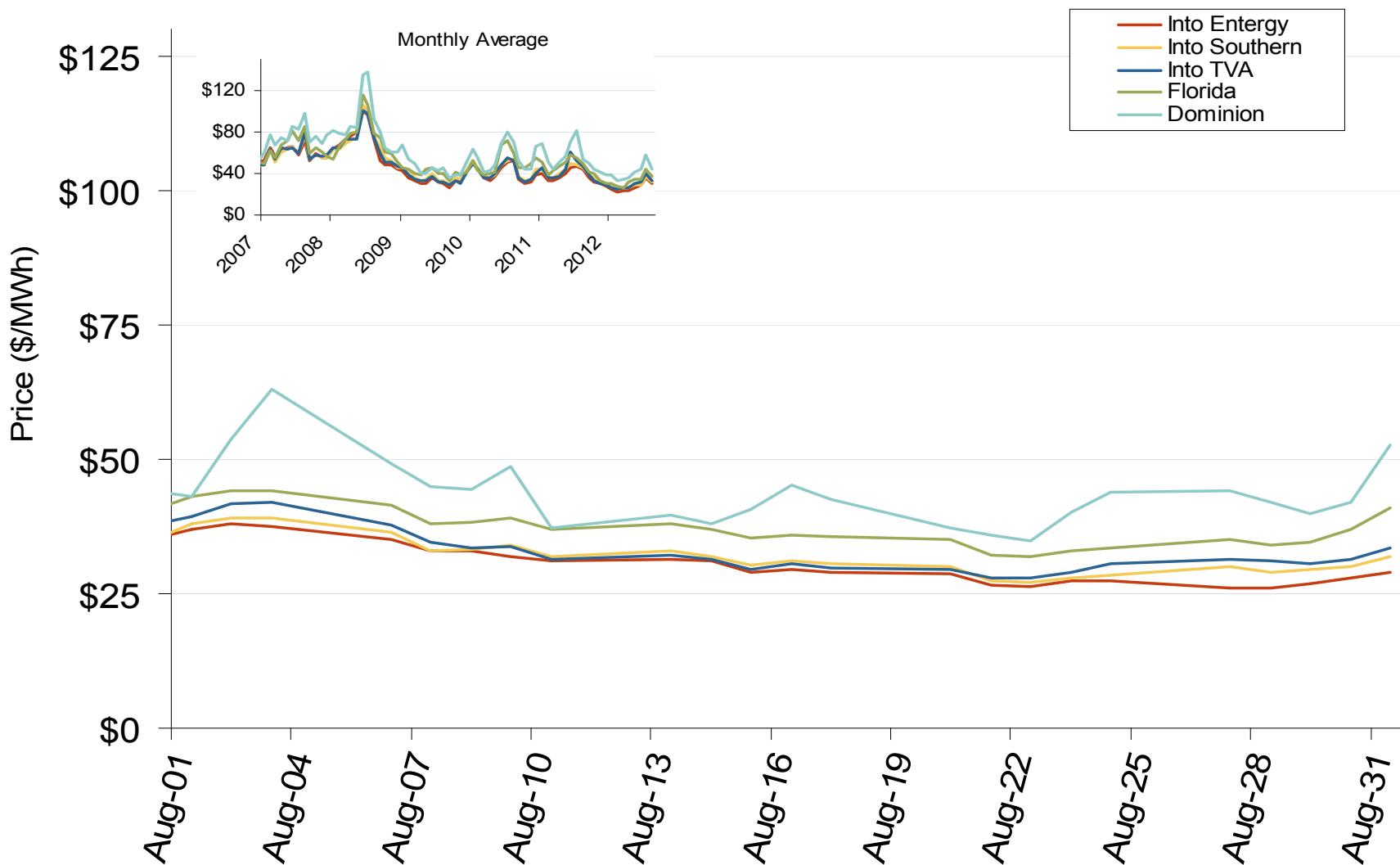


# Electricity Markets

Southeast Electric Market: Last Month's Southeastern Index Prices

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

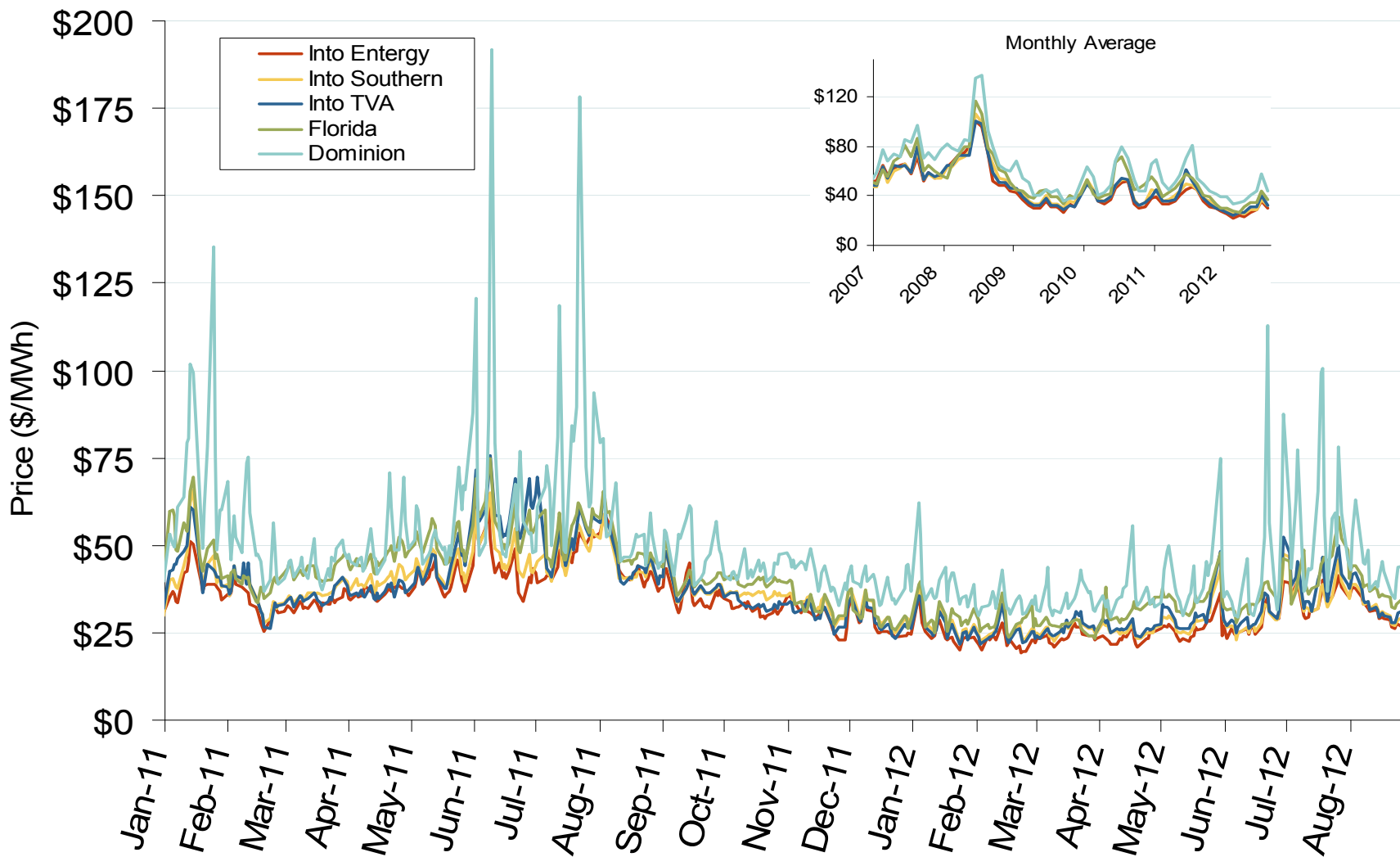
## Southeastern Daily Index Day-Ahead On-Peak Prices



Southeast Electric Market: Southeastern Index Prices

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

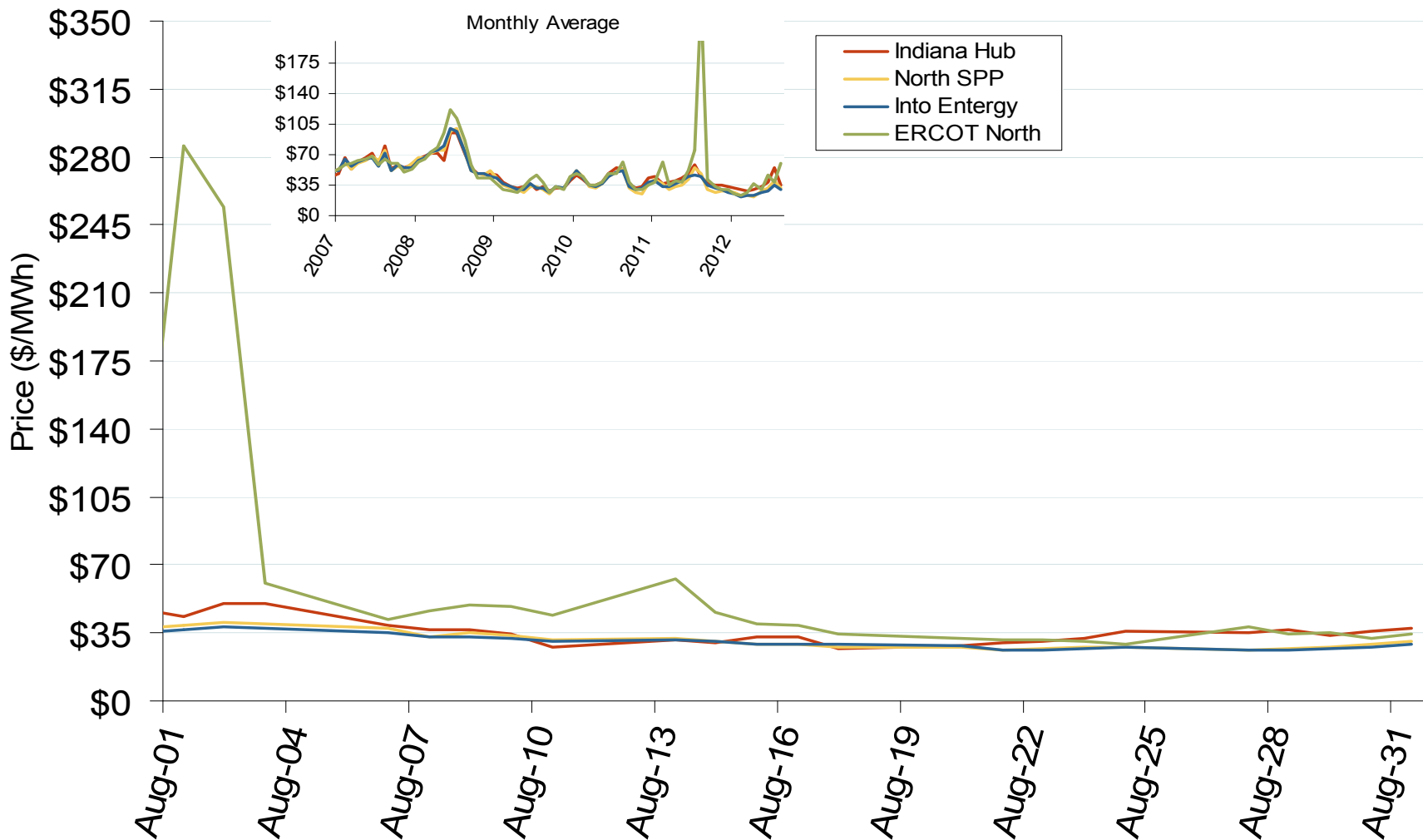
## Southeastern Daily Index Day-Ahead On-Peak Prices



Southeast Electric Market: Last Month's Midwestern Index Prices

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

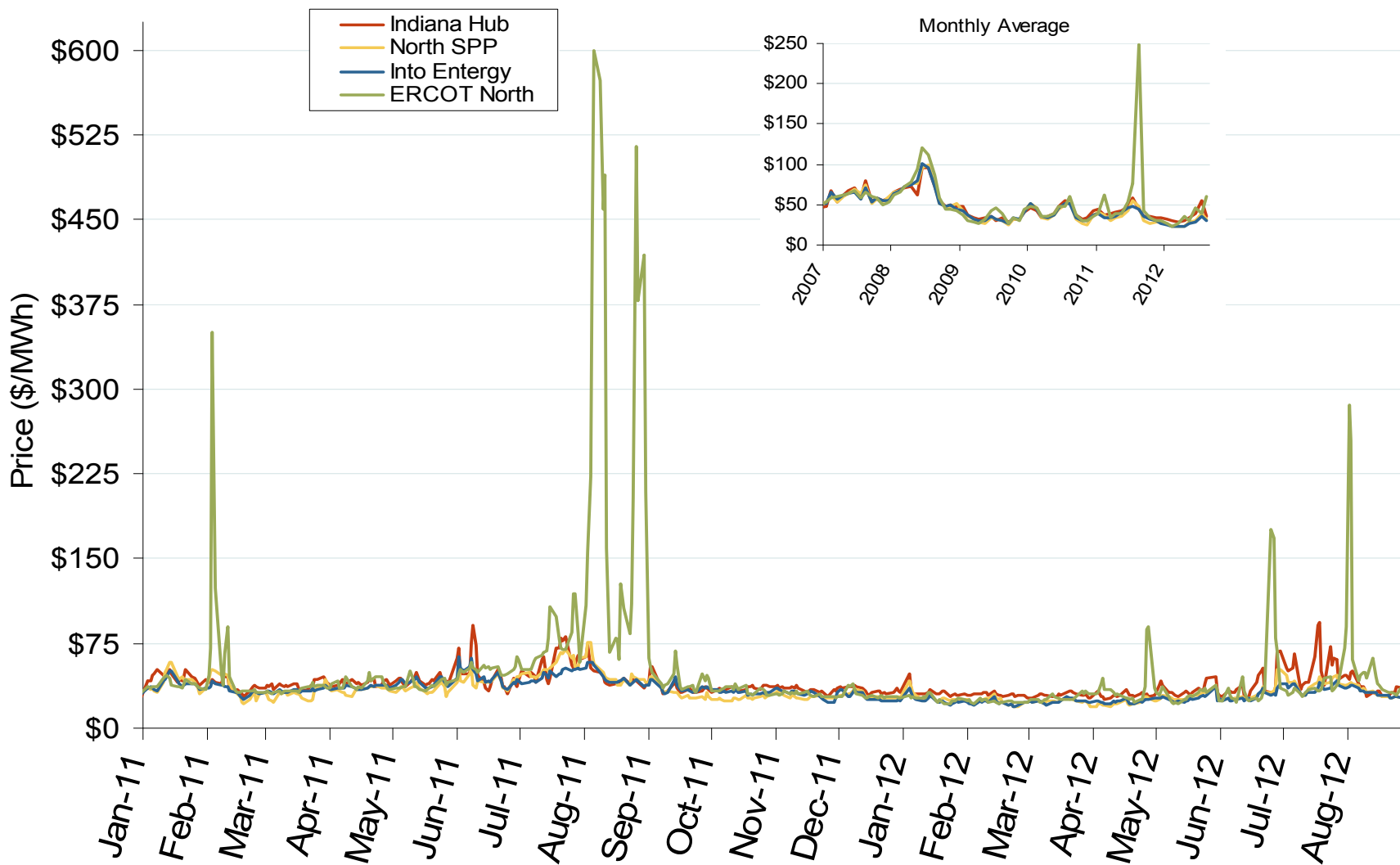
## Midwestern Daily Index Day-Ahead On-Peak Prices



Southeast Electric Market: Midwestern Index Prices

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

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

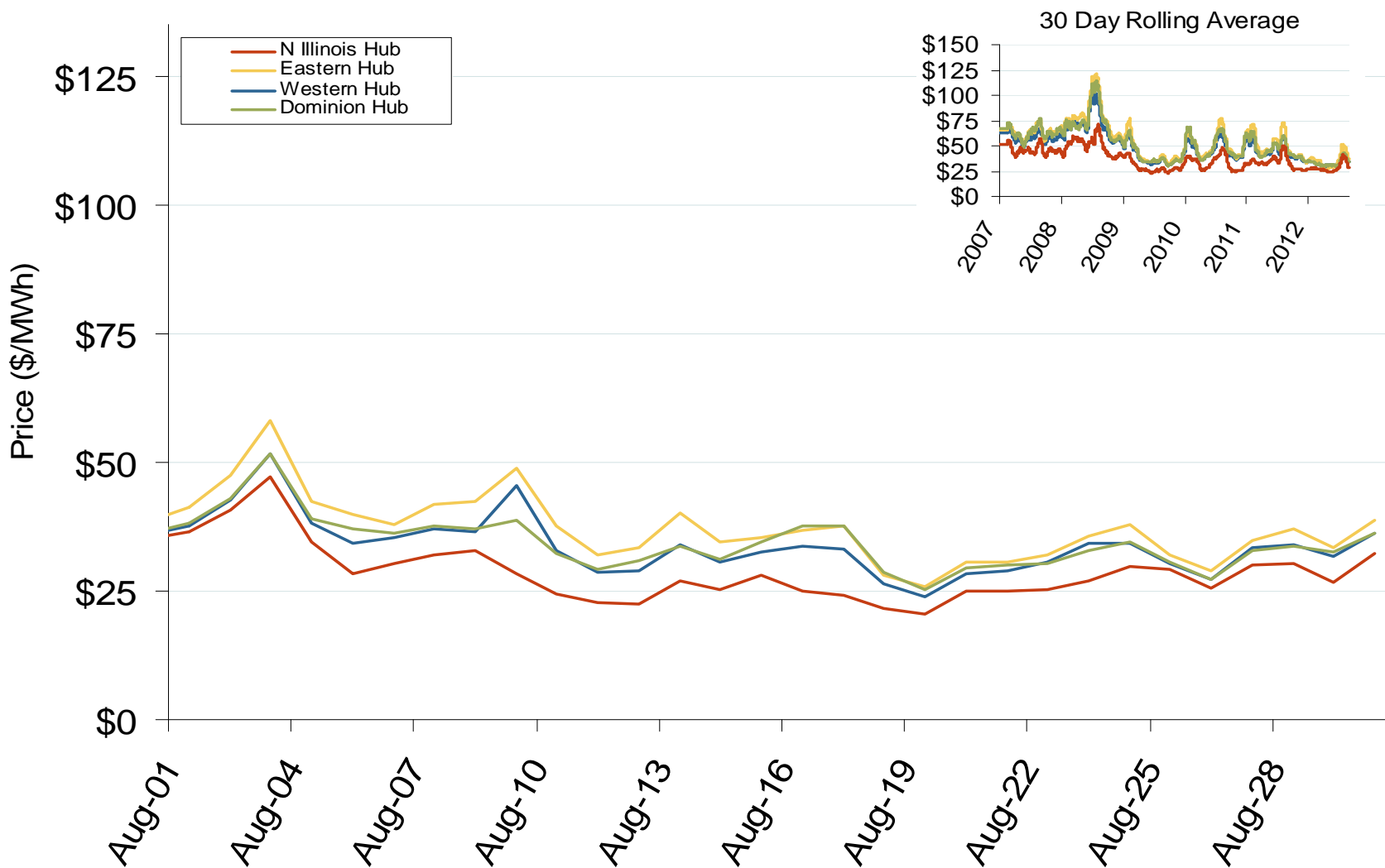




PJM Electric Market: Last Month's RTO Prices

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

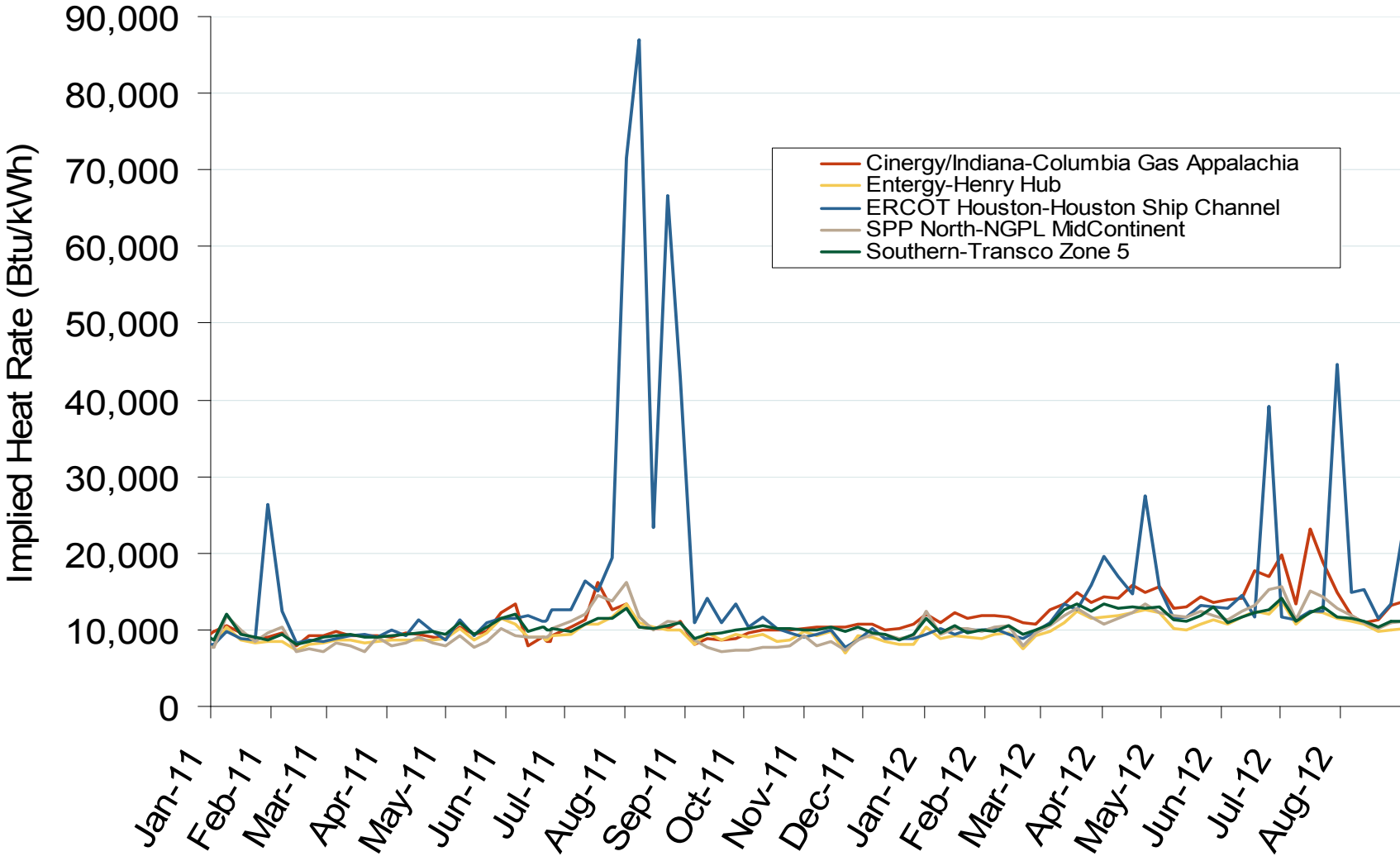
## Daily Average of PJM Day-Ahead Prices - All Hours



Southeast Electric Market: South Central Implied Heat Rates

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

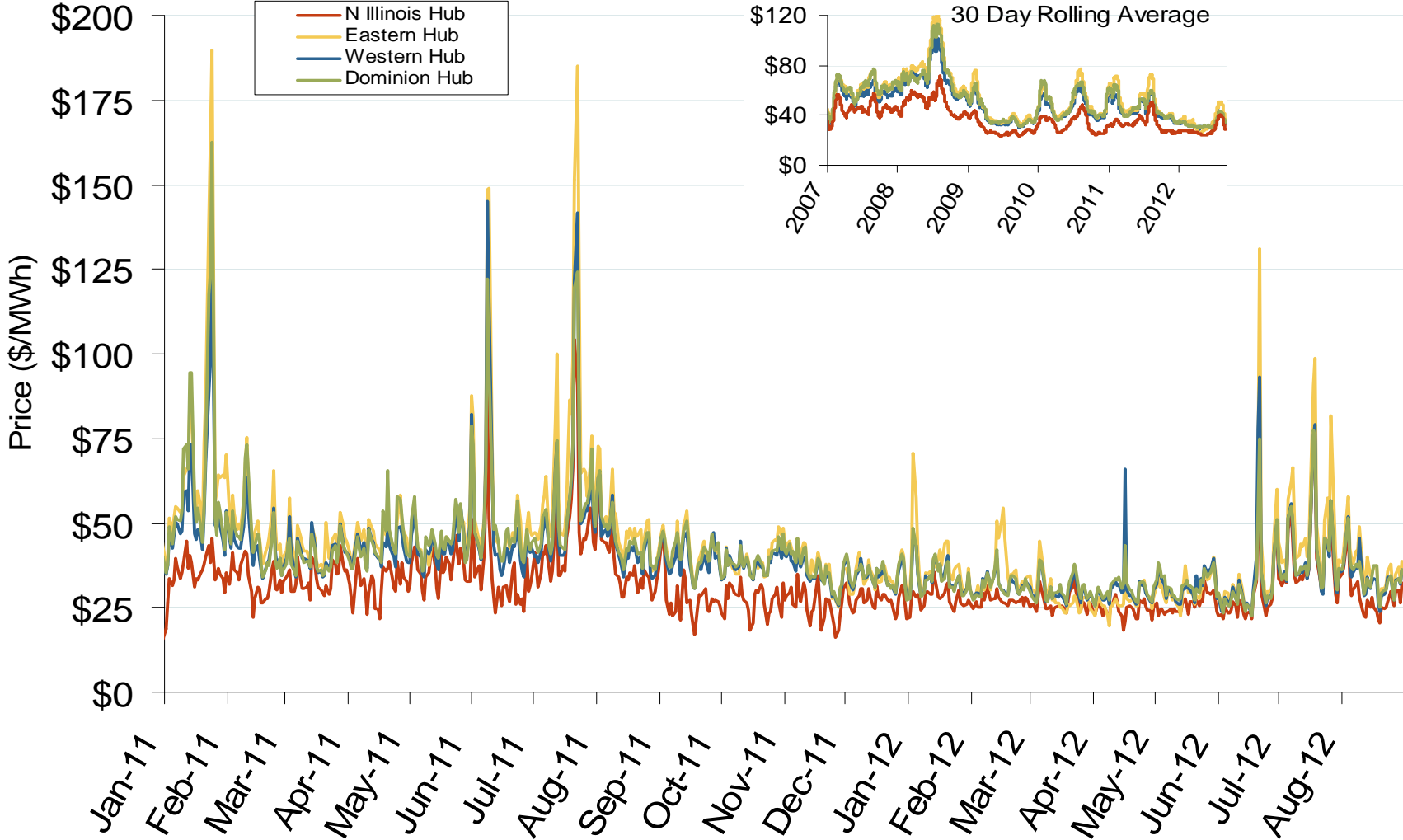
**Implied Heat Rates at South Central Trading Points - Weekly Avgs.**



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

Updated: September 06, 2012

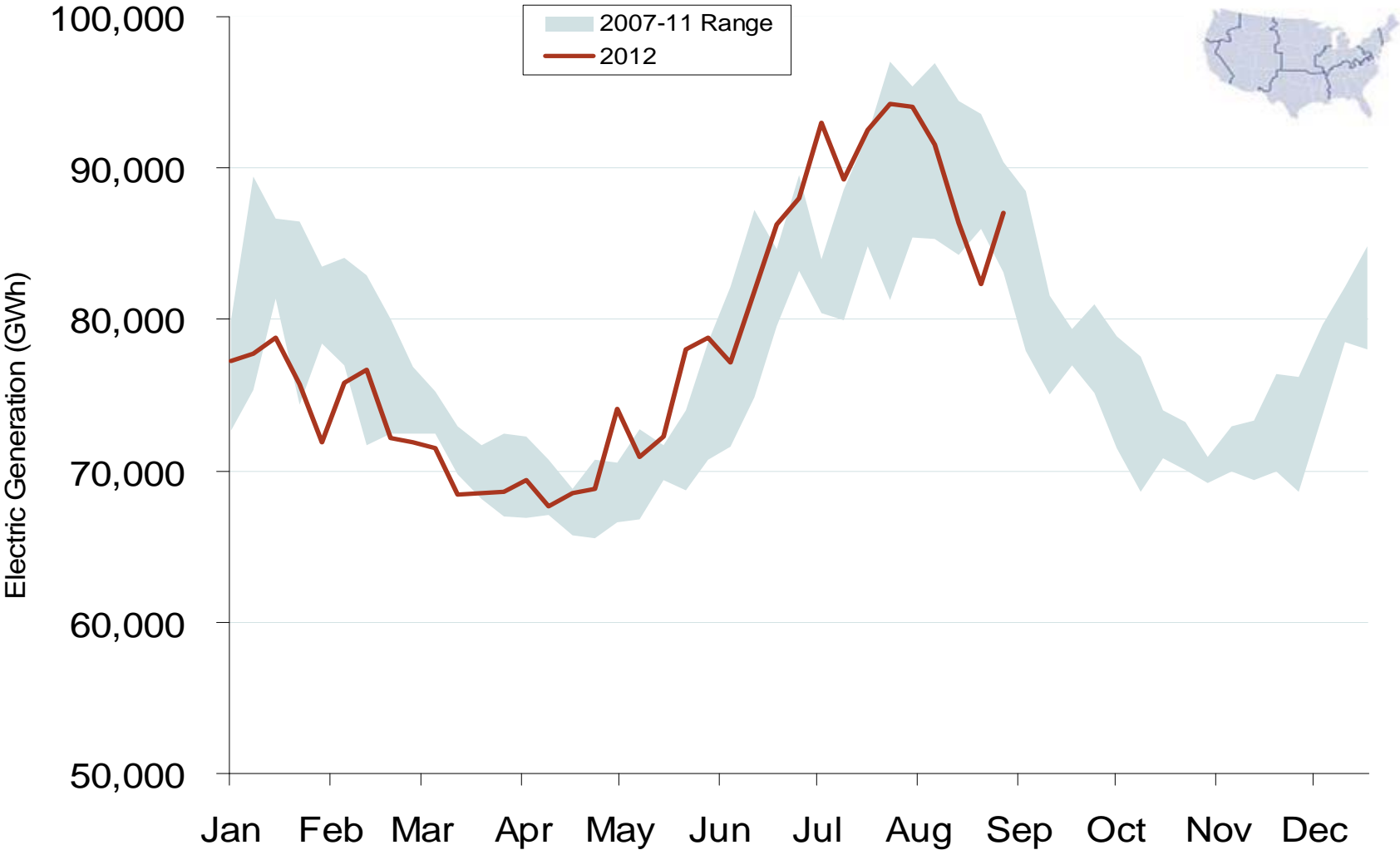
# Daily Average of PJM Day-Ahead Prices - All Hours



Source: Derived from Bloomberg data  
September 2012 Southeast Snapshot Report

Updated: September 04, 2012

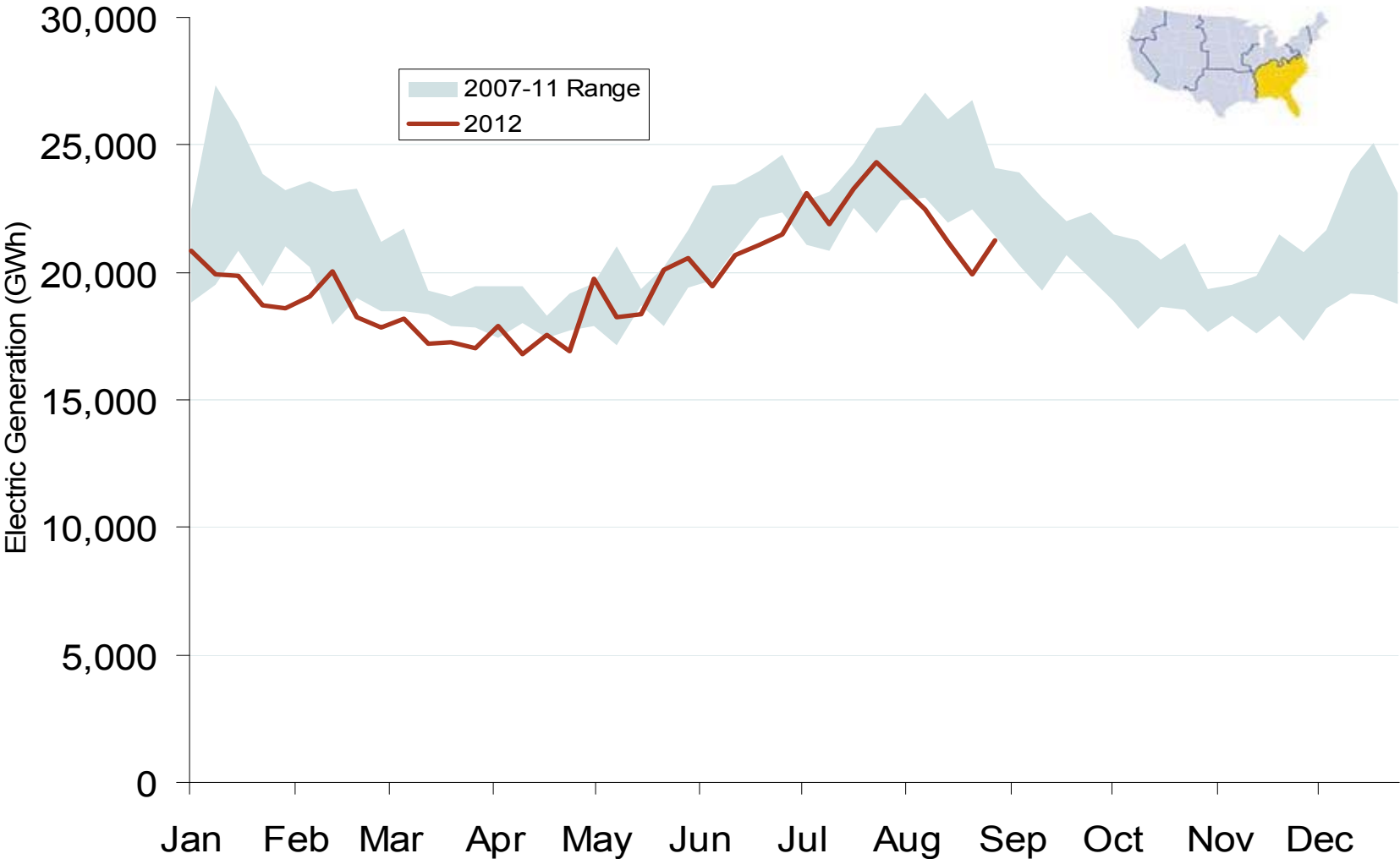
# Weekly U.S. Electric Generation Output



Southeast Electric Market: Generation Output

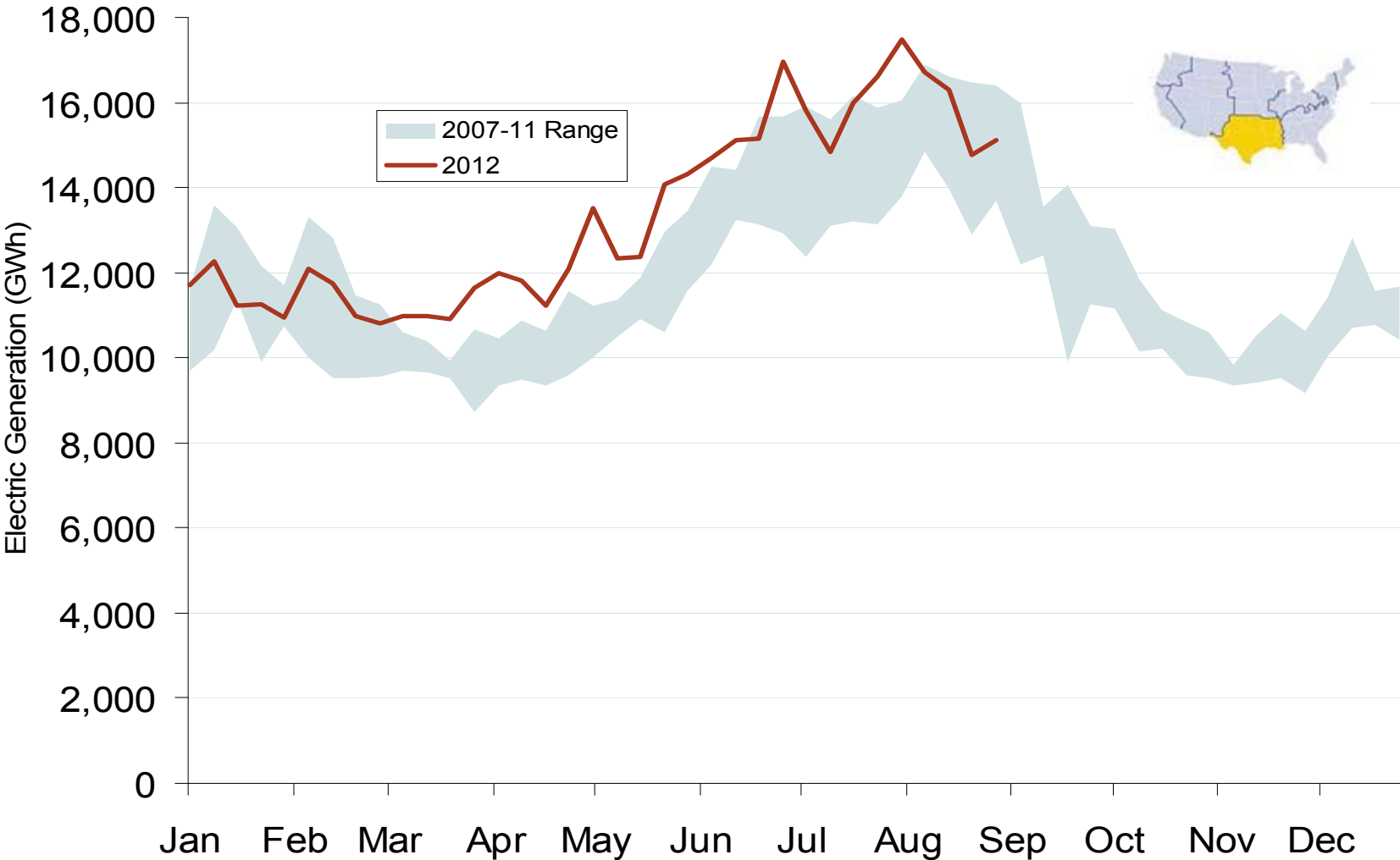
Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

### Weekly Generation Output - Southeast



Source: Derived from *EEI* data  
September 2012 Southeast Snapshot Report

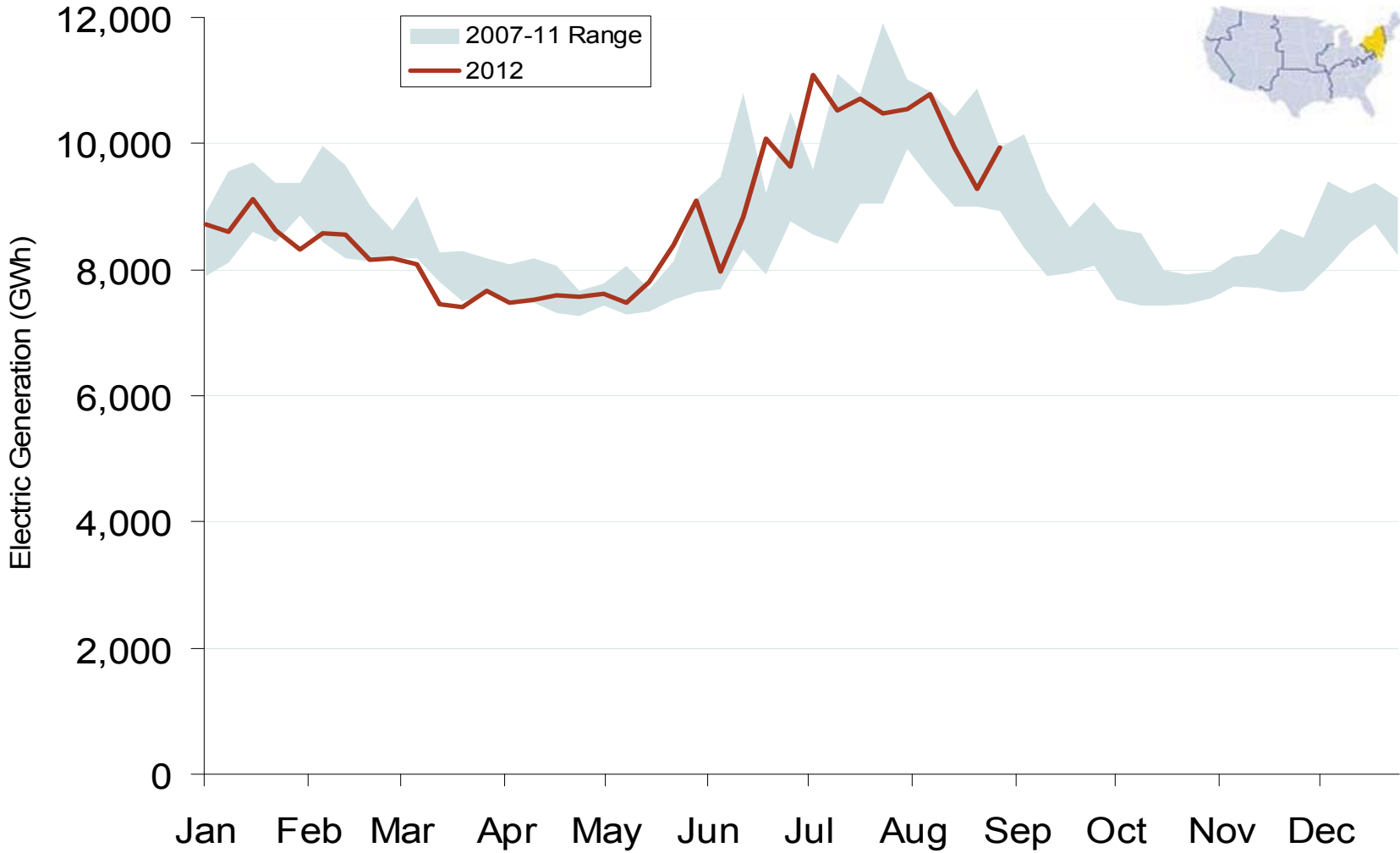
### Weekly Generation Output - South Central



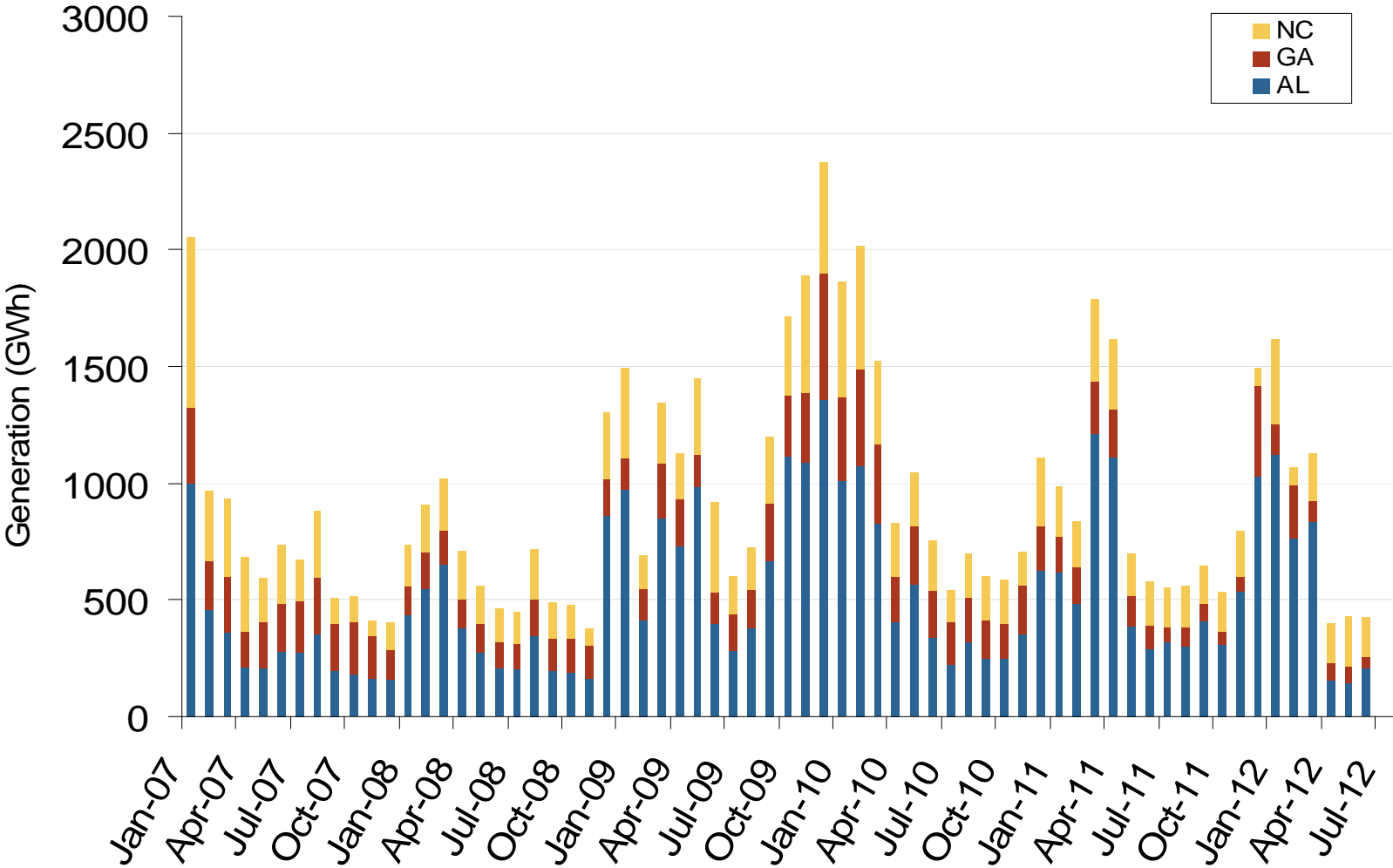
Source: Derived from *EEI* data  
September 2012 Southeast Snapshot Report

Updated: September 06, 2012

# Weekly Generation Output - Mid Atlantic



# Monthly Southeastern Hydroelectric Generation





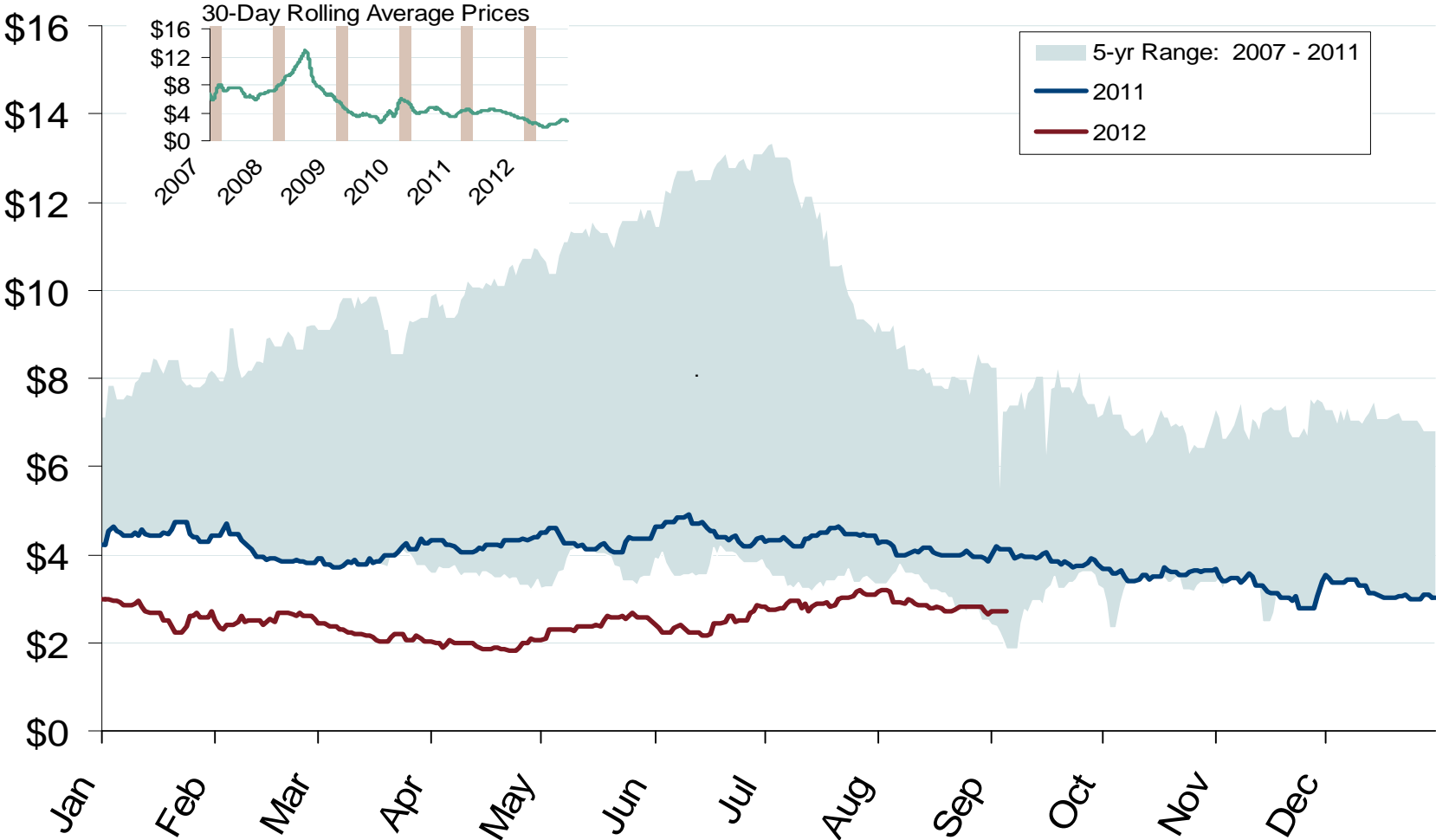
A decorative graphic consisting of several thick, parallel red lines. One vertical line runs down the left side of the page, and several horizontal lines cross it, creating a grid-like structure. The lines are slightly blurred and have a glowing effect.

# 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



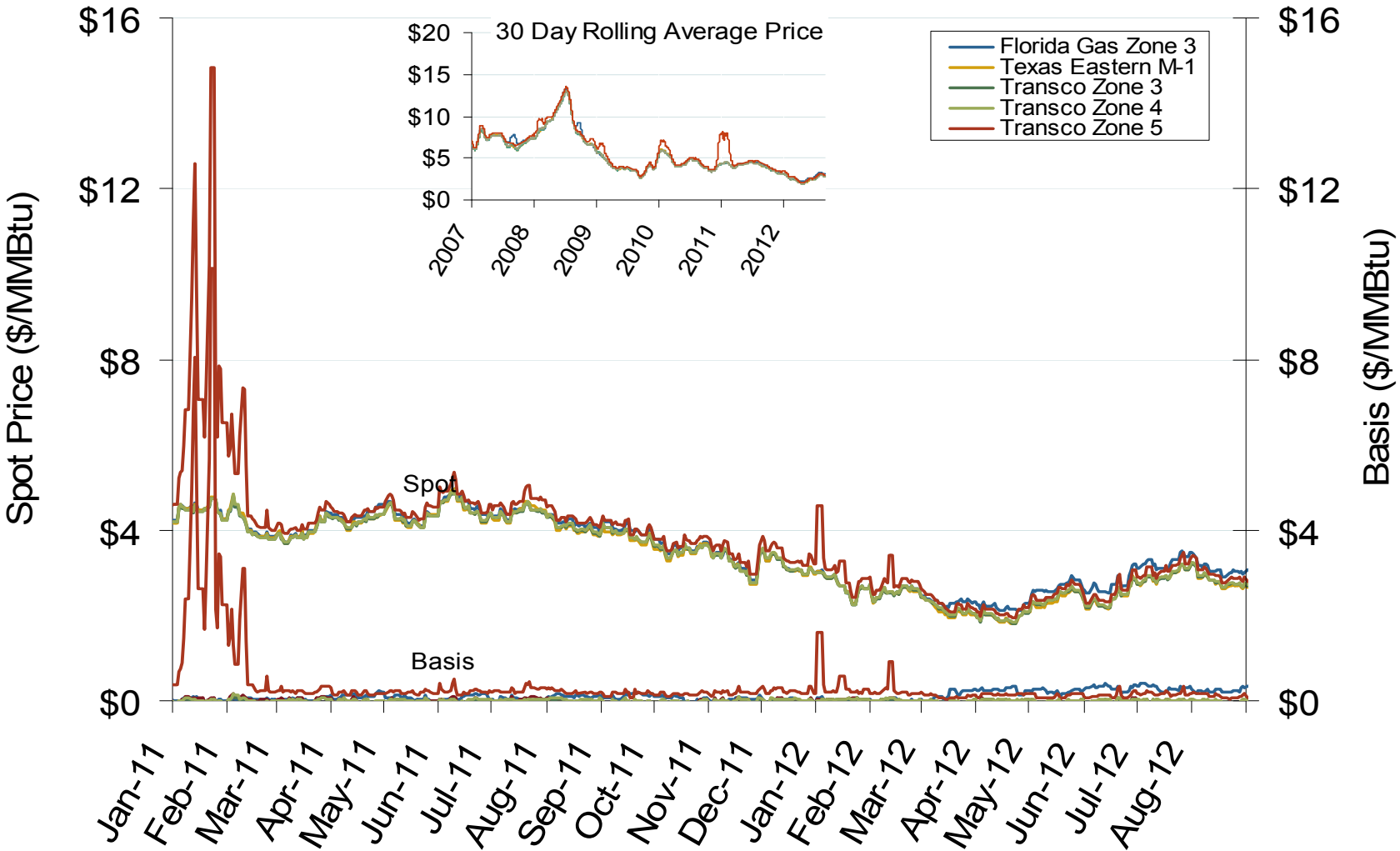
Source: Derived from *Platts* data  
September 2012 Southeast Snapshot Report

Updated: September 10, 2012

Southeast Natural Gas Market: Spot Prices and Basis

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

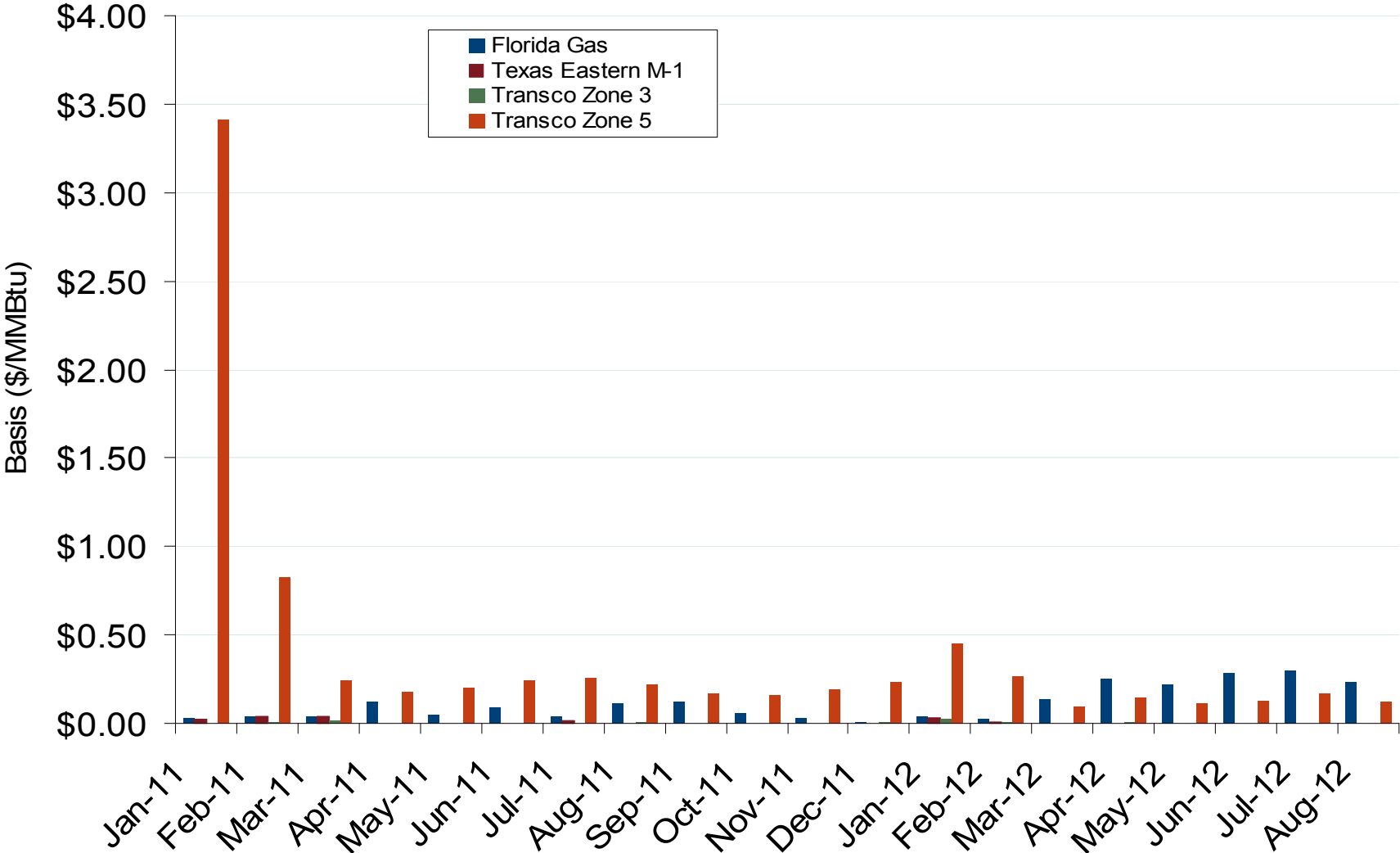
### Southeastern Day-Ahead Hub Spot Prices and Basis



Southeast Natural Gas Market: Average Basis to Henry Hub

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

### Southeastern Monthly Average Basis Value to Henry Hub

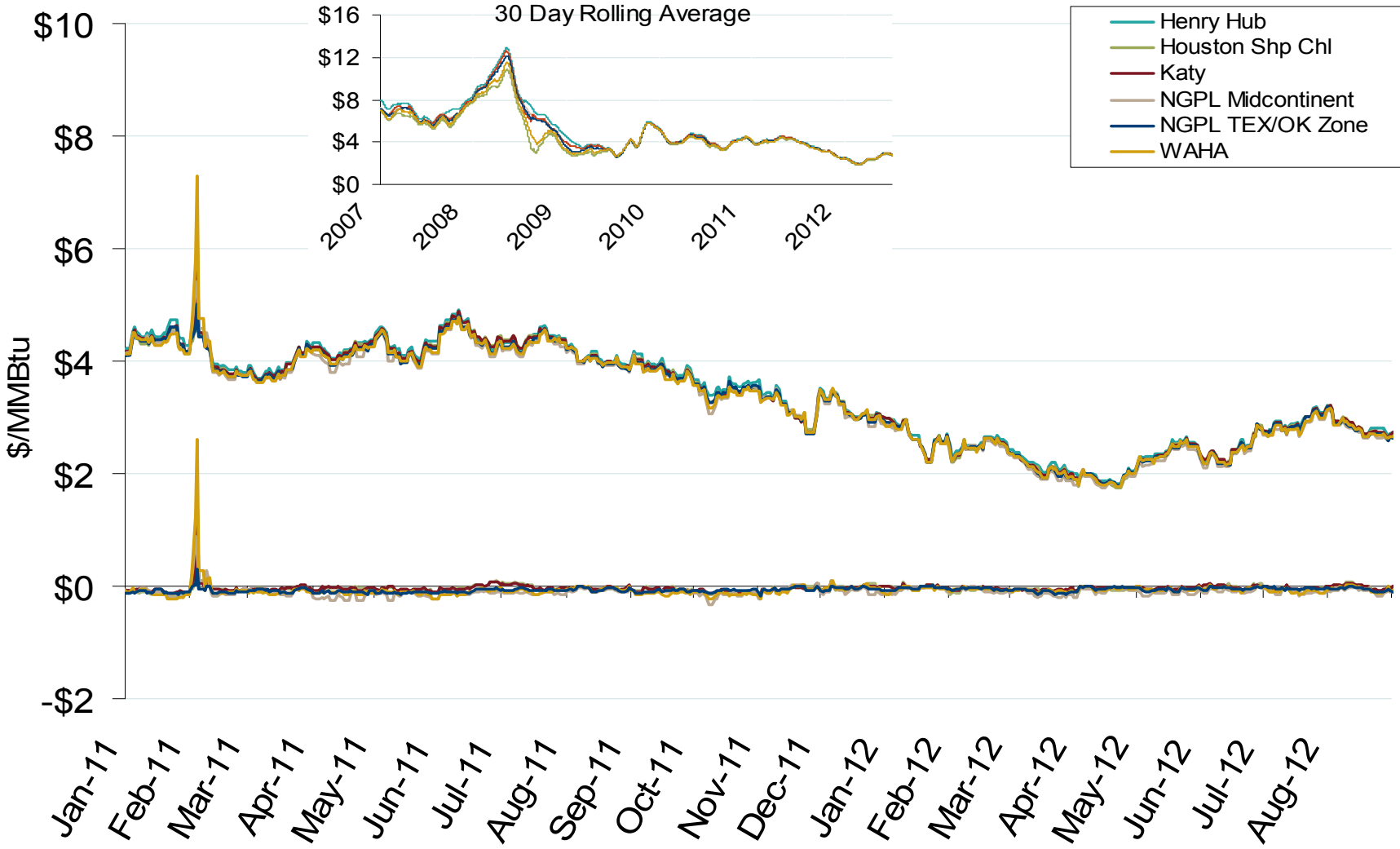


Source: Derived from Platts data  
September 2012 Southeast Snapshot Report

South Central Natural Gas Market: Spot Prices and Basis

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

### Gulf Day-Ahead Hub Spot Prices and Basis



Source: Derived from *Platts* data  
September 2012 Southeast Snapshot Report

Updated: September 04, 2012

Gulf Natural Gas Market: Average Basis to Henry Hub

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

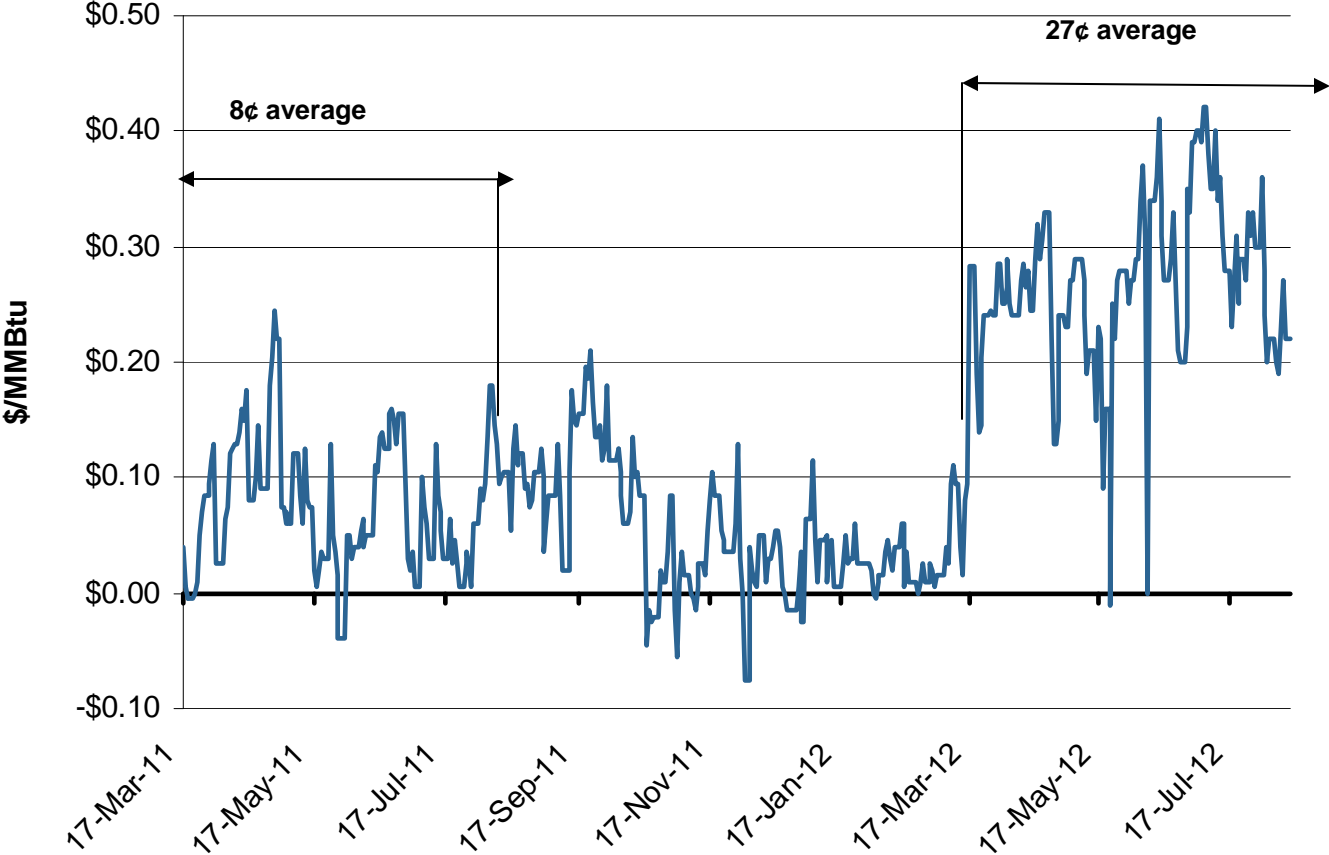
### Gulf Monthly Average Basis Value to Henry Hub



Source: Derived from Platts data  
September 2012 Southeast Snapshot Report

Updated: September 04, 2012

# FGT Z3 Basis Increases



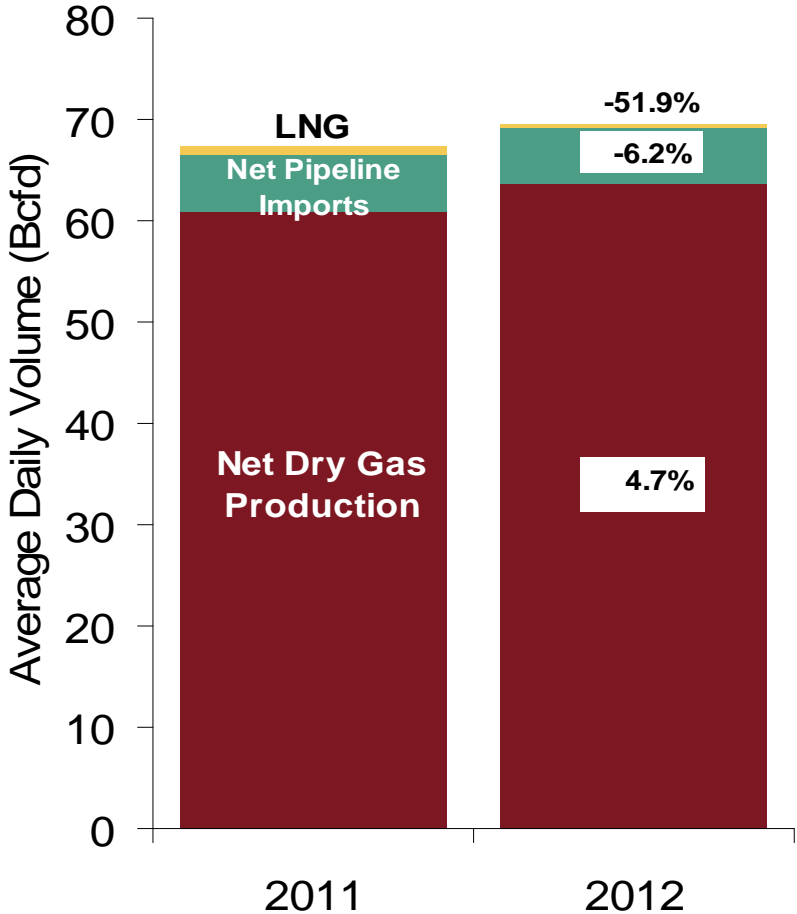
Source: Derived from NGI's Daily Gas Price Index data.

Updated August 2012

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

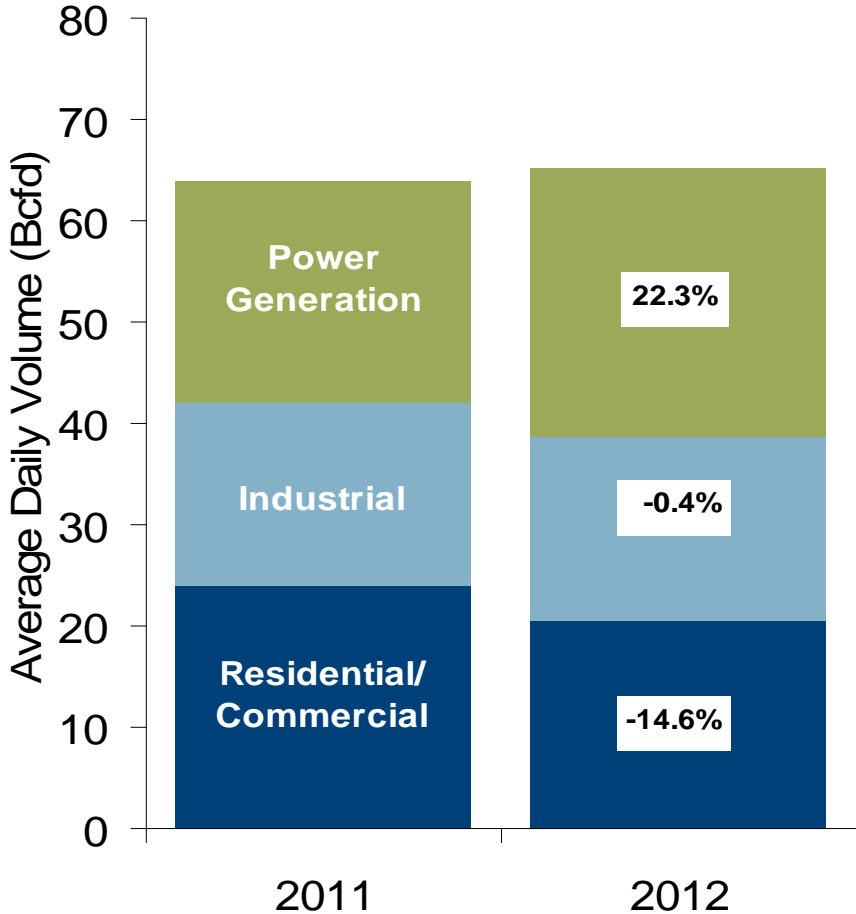
## US Natural Gas Supply

Total Change in Supply 2.9%



## US Natural Gas Demand

Total Change in Demand 2.7%

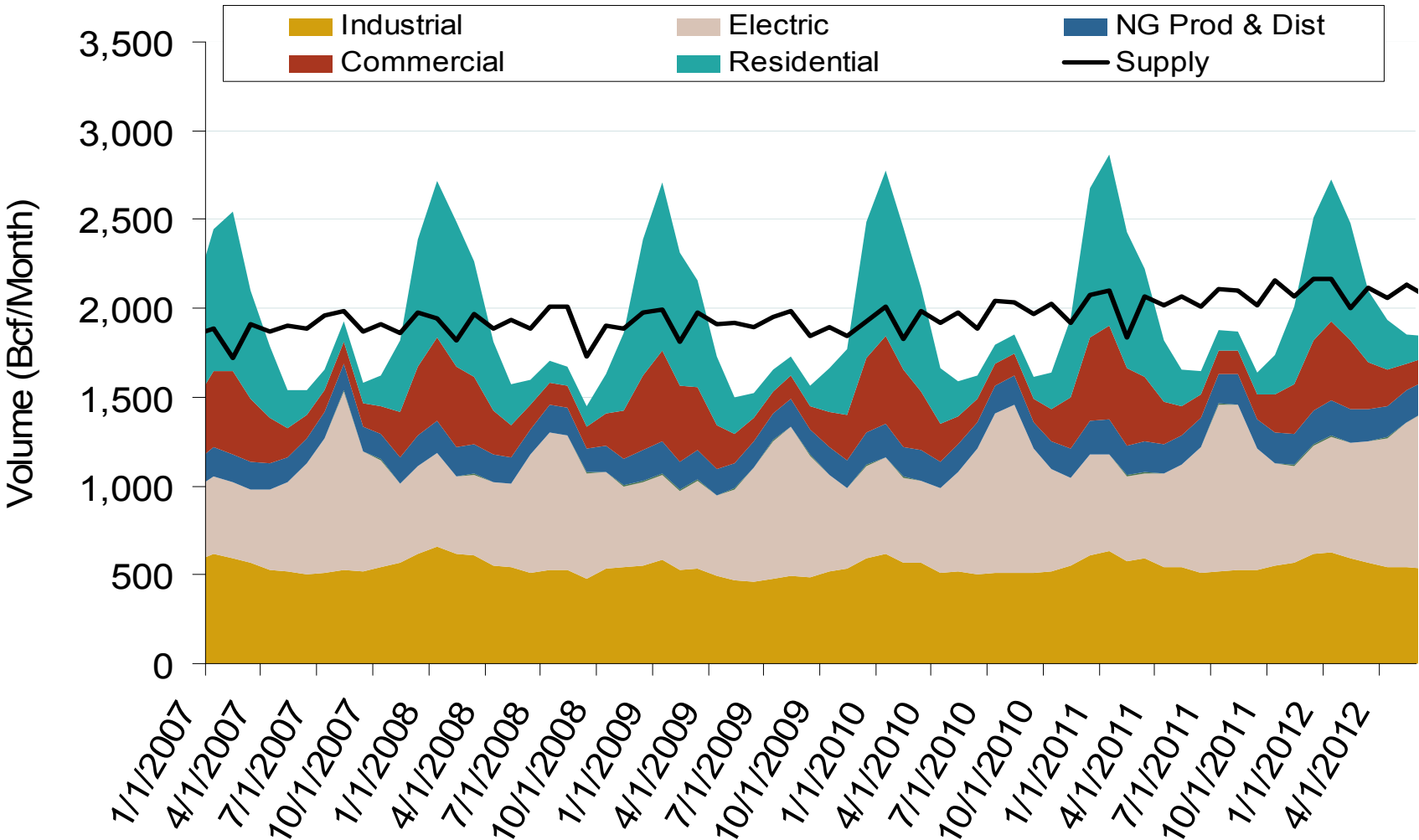




Natural Gas market Overview: Consumption by Sector

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

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



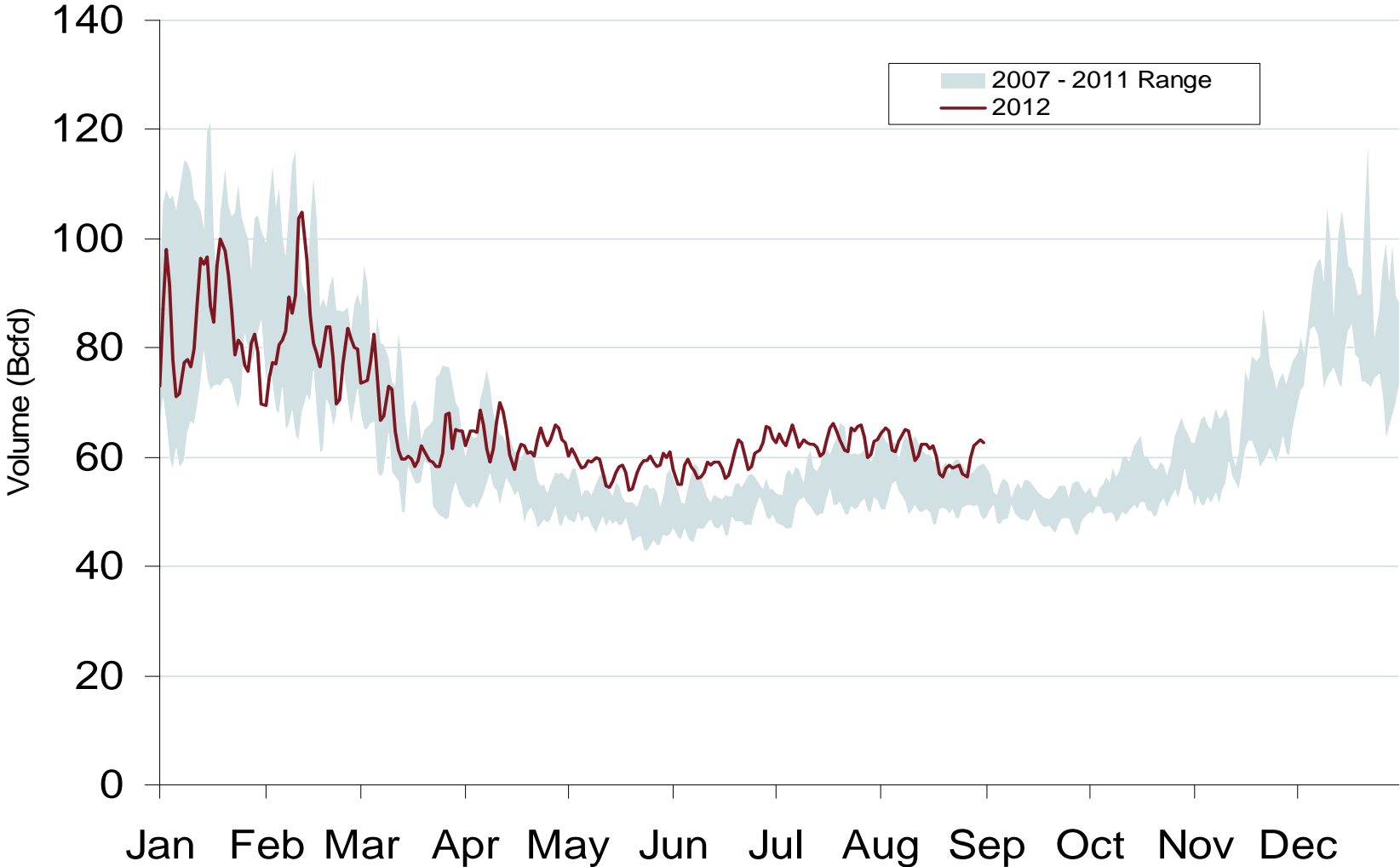
Notes: Supply includes lower 48 state production, net pipeline imports, and LNG imports

Source: Derived from EIA data

Natural Gas Market Overview: Total US Gas Demand

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

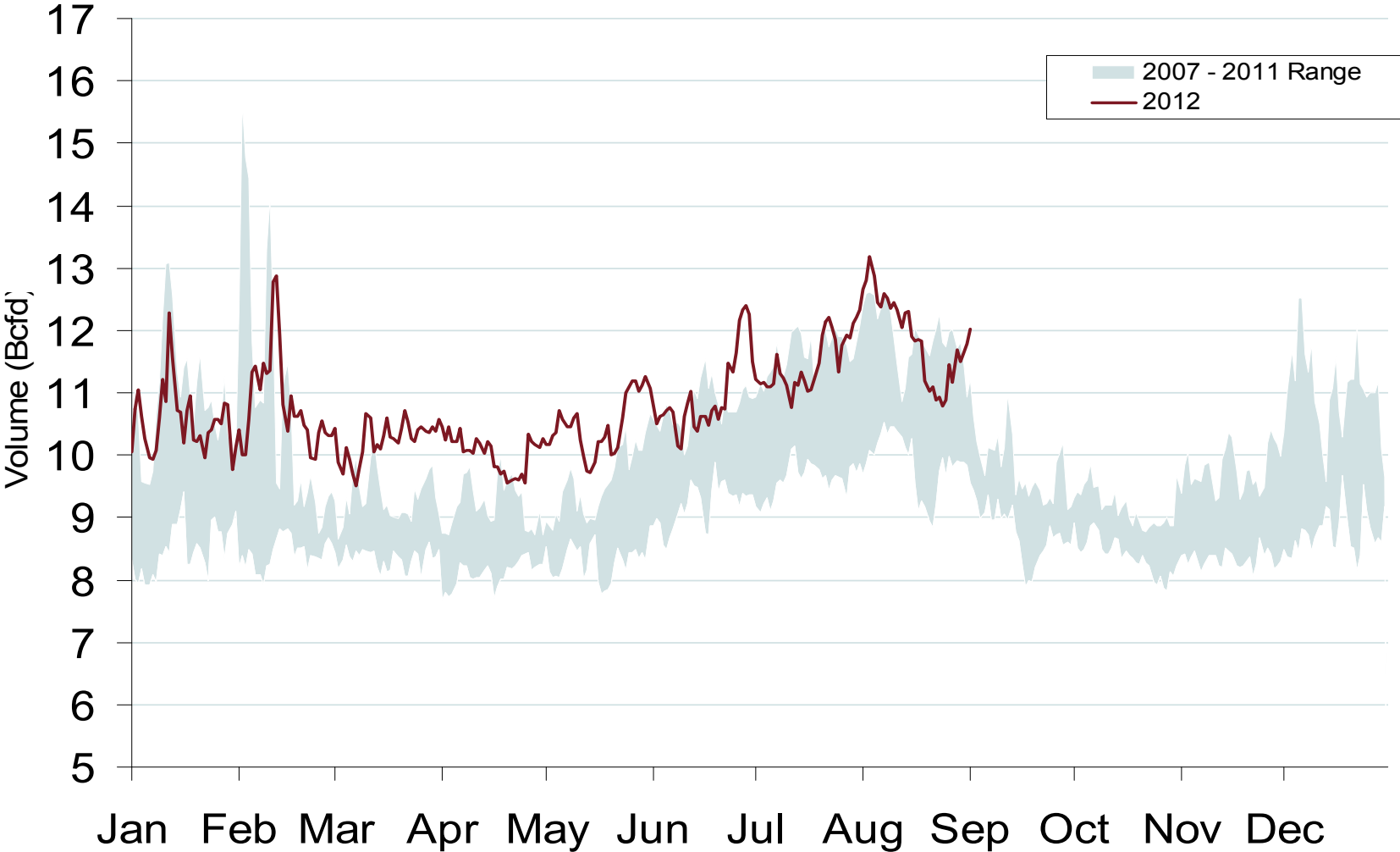
### Total U.S. Natural Gas Demand All Sectors



Source: Derived from *Bentek Energy* data  
September 2012 Southeast Snapshot Report

Updated: September 06, 2012

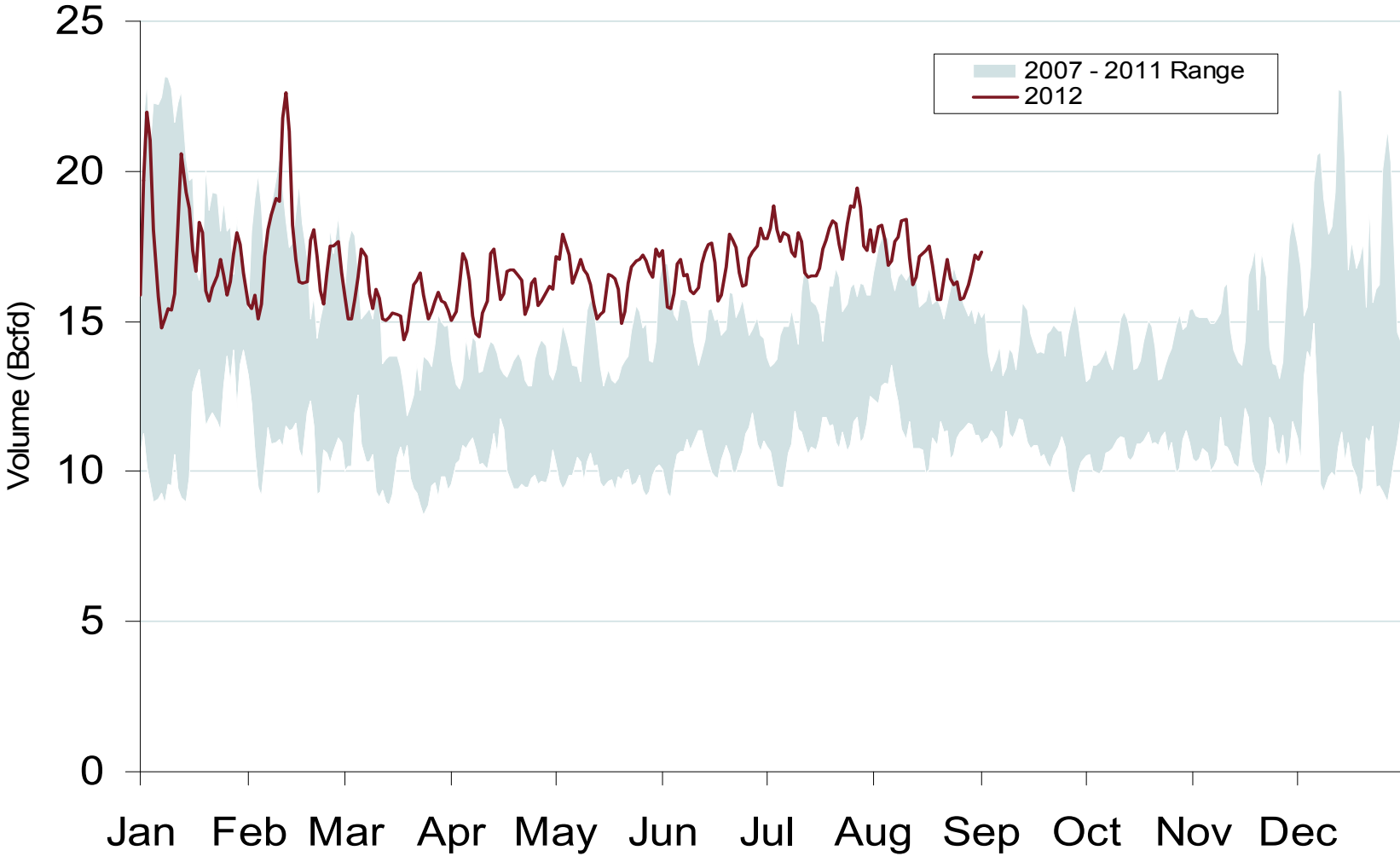
### Daily Gulf Natural Gas Demand All Sectors



Southeast Natural Gas Market: Daily Demand

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

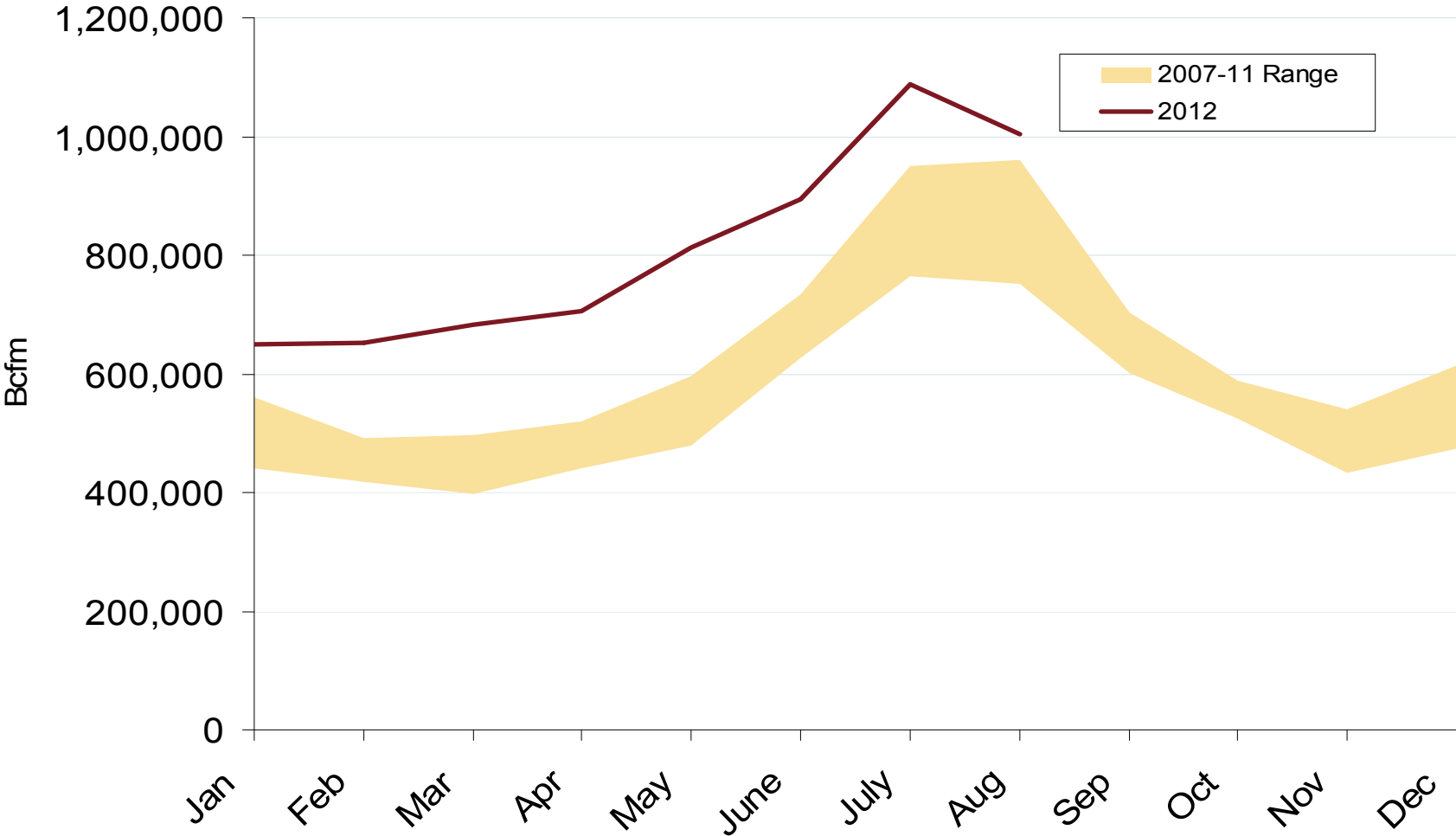
**Daily Southeast Natural Gas Demand All Sectors**



Source: Derived from *Bentek Energy* data  
September 2012 Southeast Snapshot Report

Updated: September 06, 2012

# U.S. Natural Gas Consumption for Power Generation



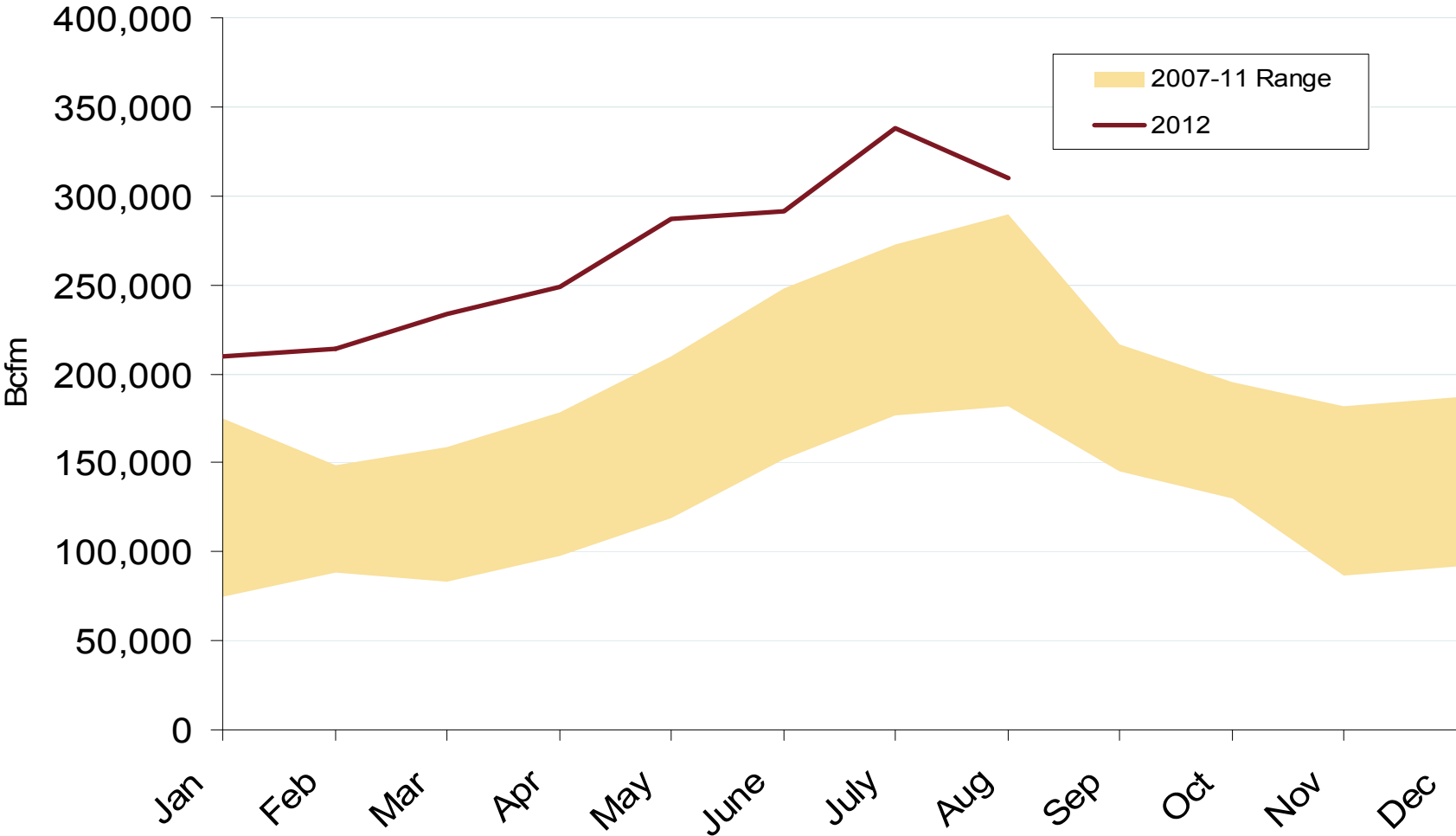
Source: Derived from *Bentek Energy* data  
September 2012 Southeast Snapshot Report

Updated: September 06, 2012

Southeast Natural Gas Market: NG Consumption for Power Generation

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

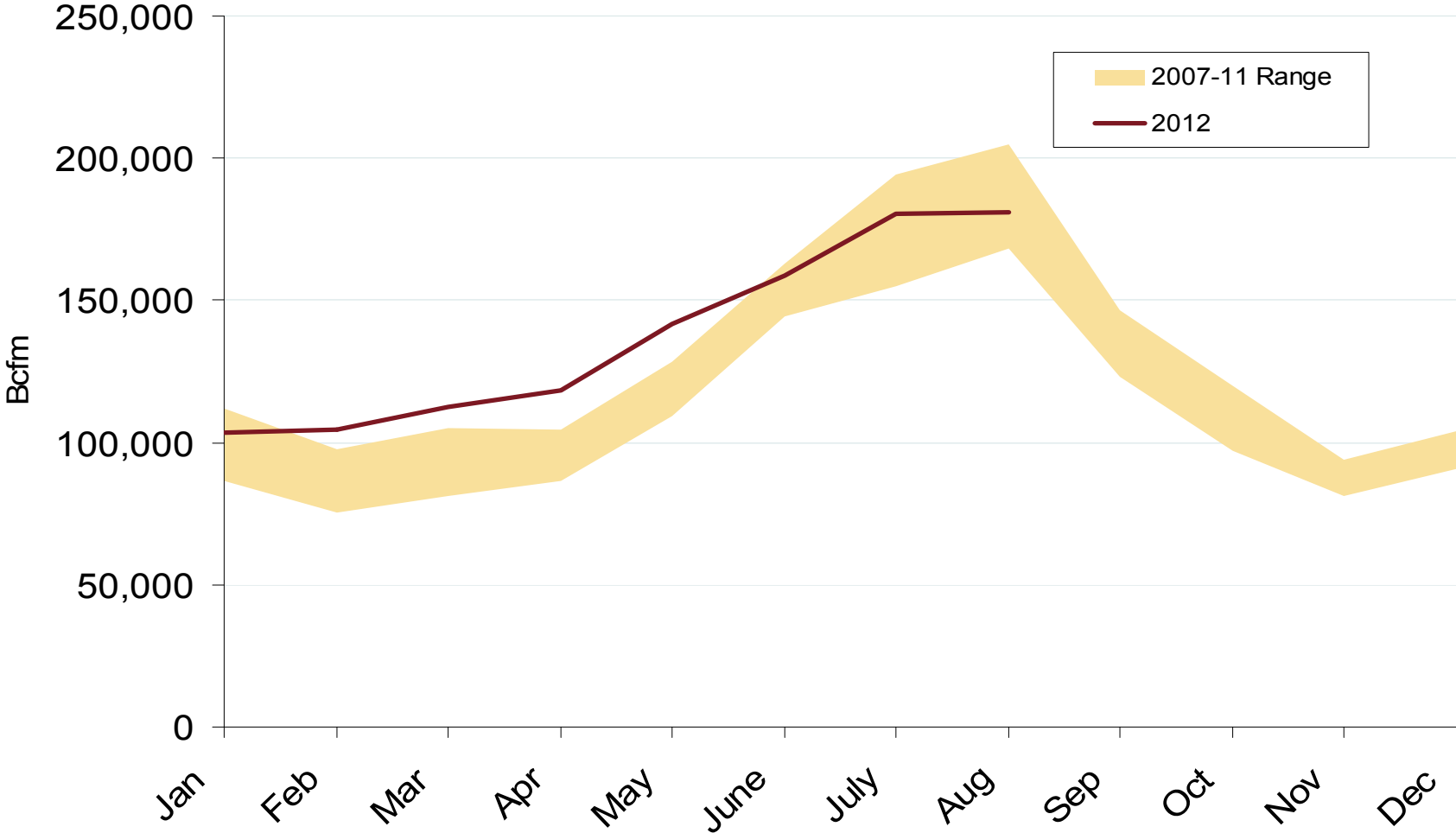
# Southeast Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data  
September 2012 Southeast Snapshot Report

Updated: September 06, 2012

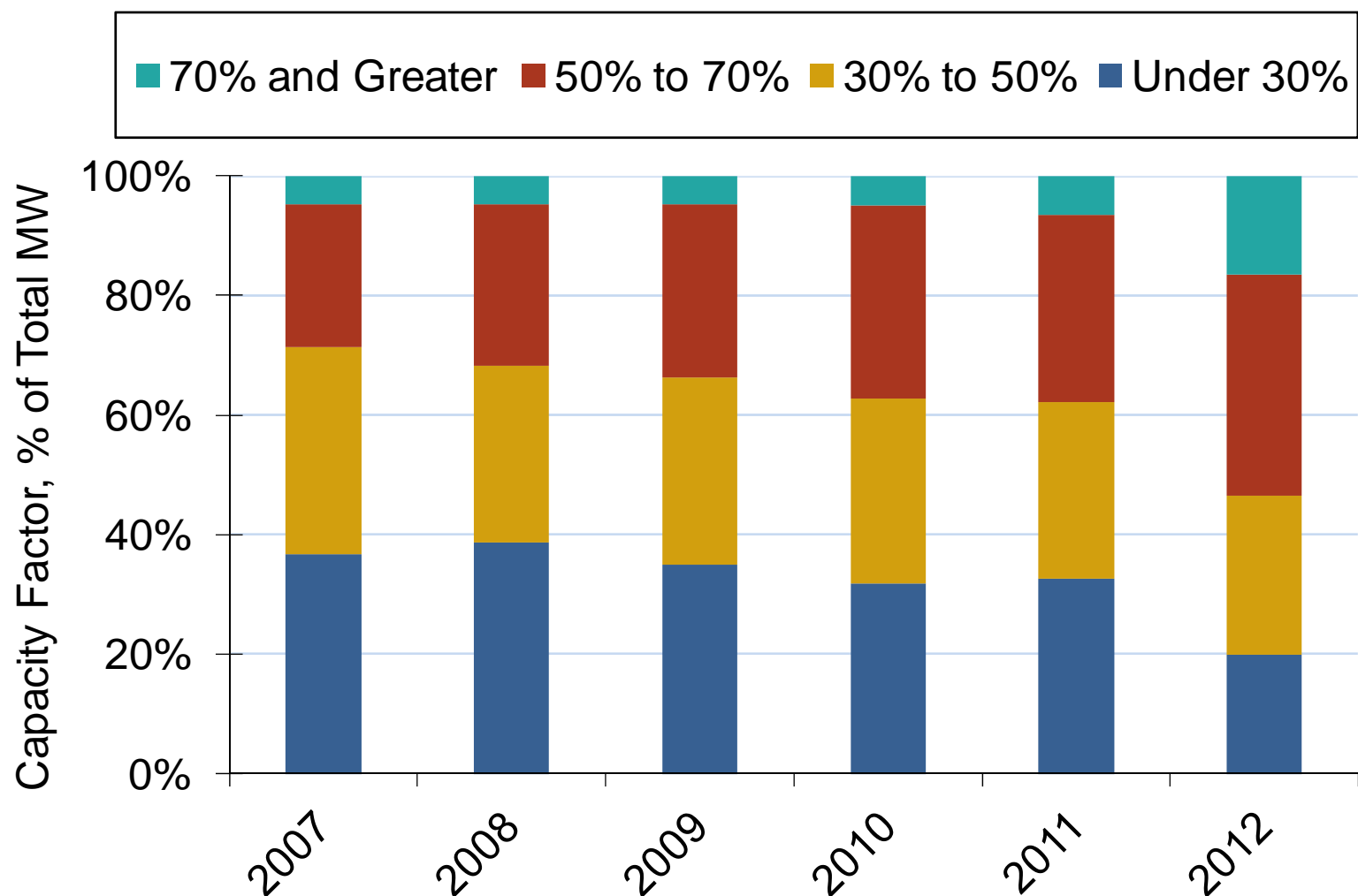
# Gulf Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data  
September 2012 Southeast 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

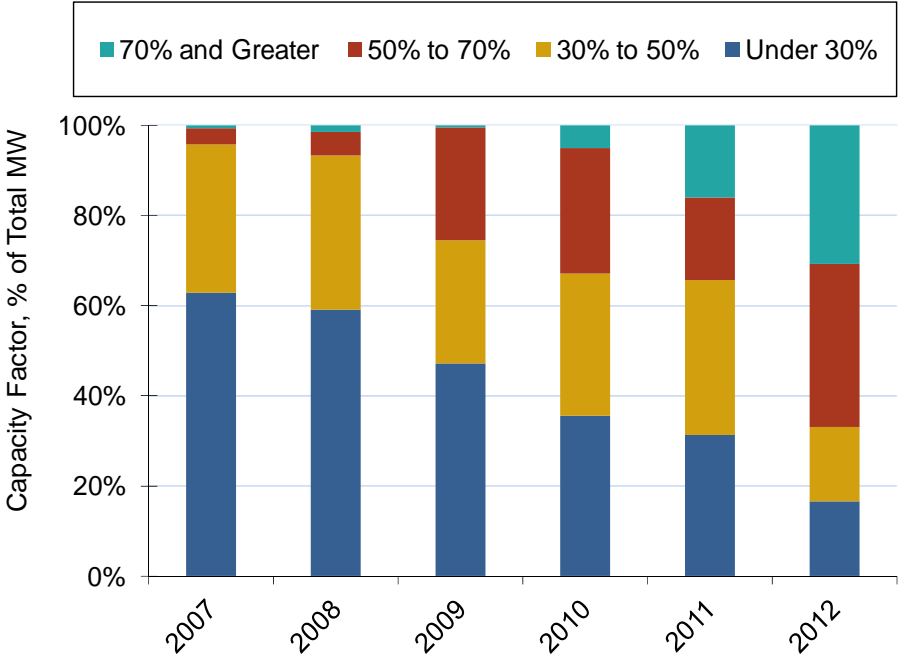
Updated May, 2011

2122

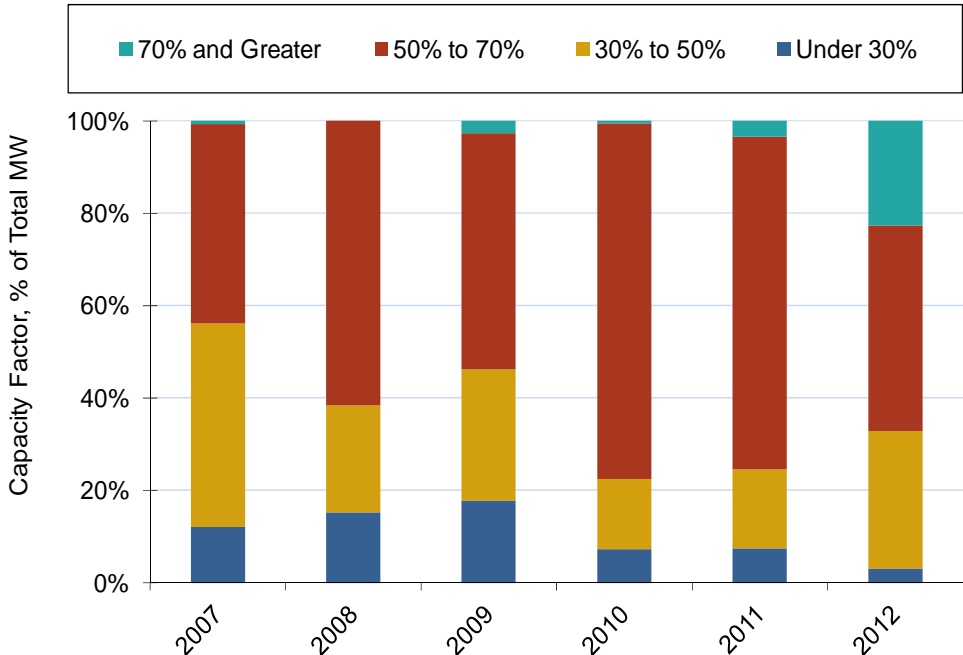


# While Coal Dominates SERC Capacity, CCGT Use on the Rise

SERC CCGT Use



FRCC CCGT Use

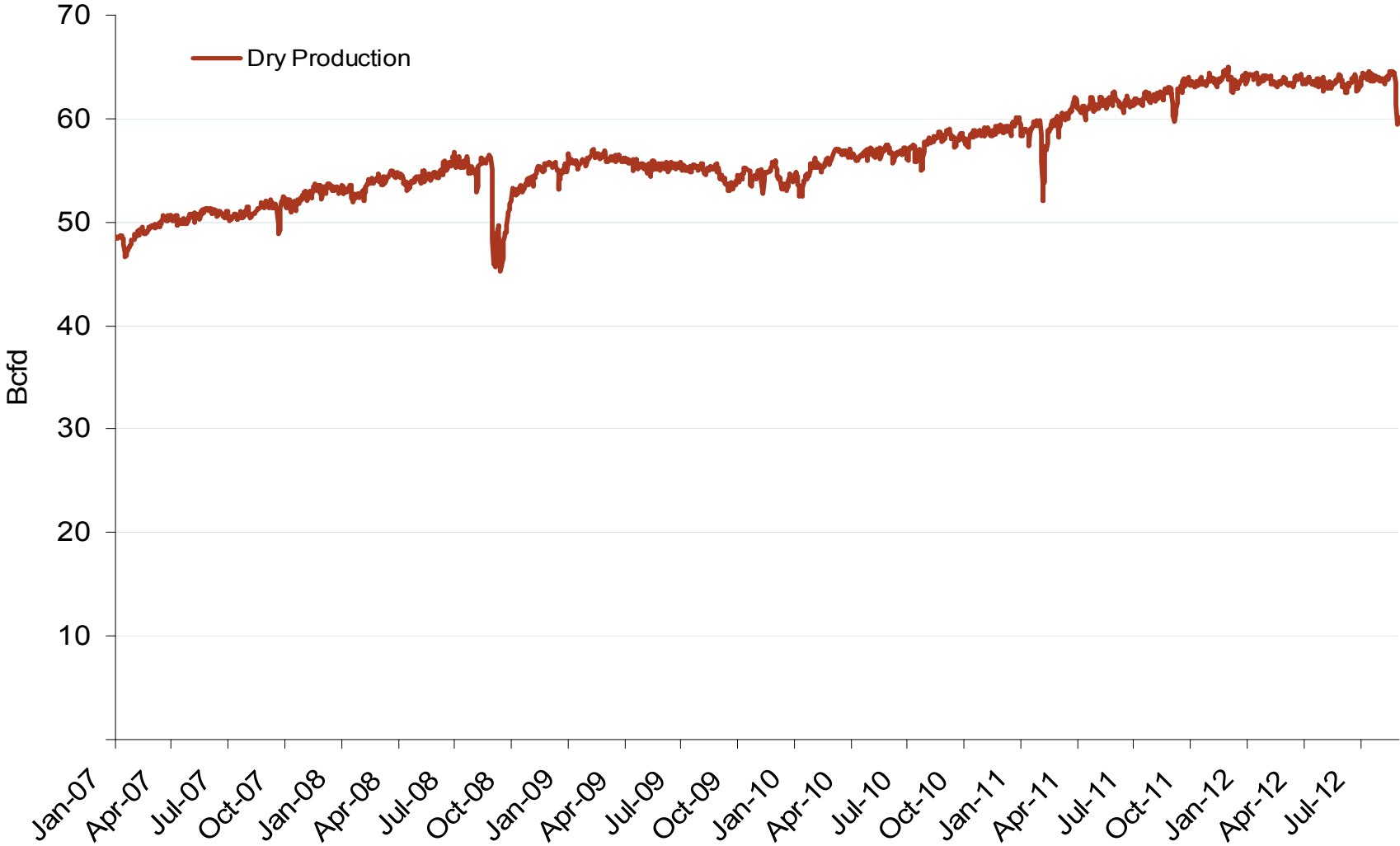


Note: CCGT-Combined Cycle Gas Turbines. The capacity factor of a plant as the annual number of MWh generated divided by the plants annual operating capability which is maximum load at which a generator can operate without exceeding approved plant stress limits. Source: Derived from SNL Data

Natural Gas Markets: Monthly U.S. Dry Gas Production

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



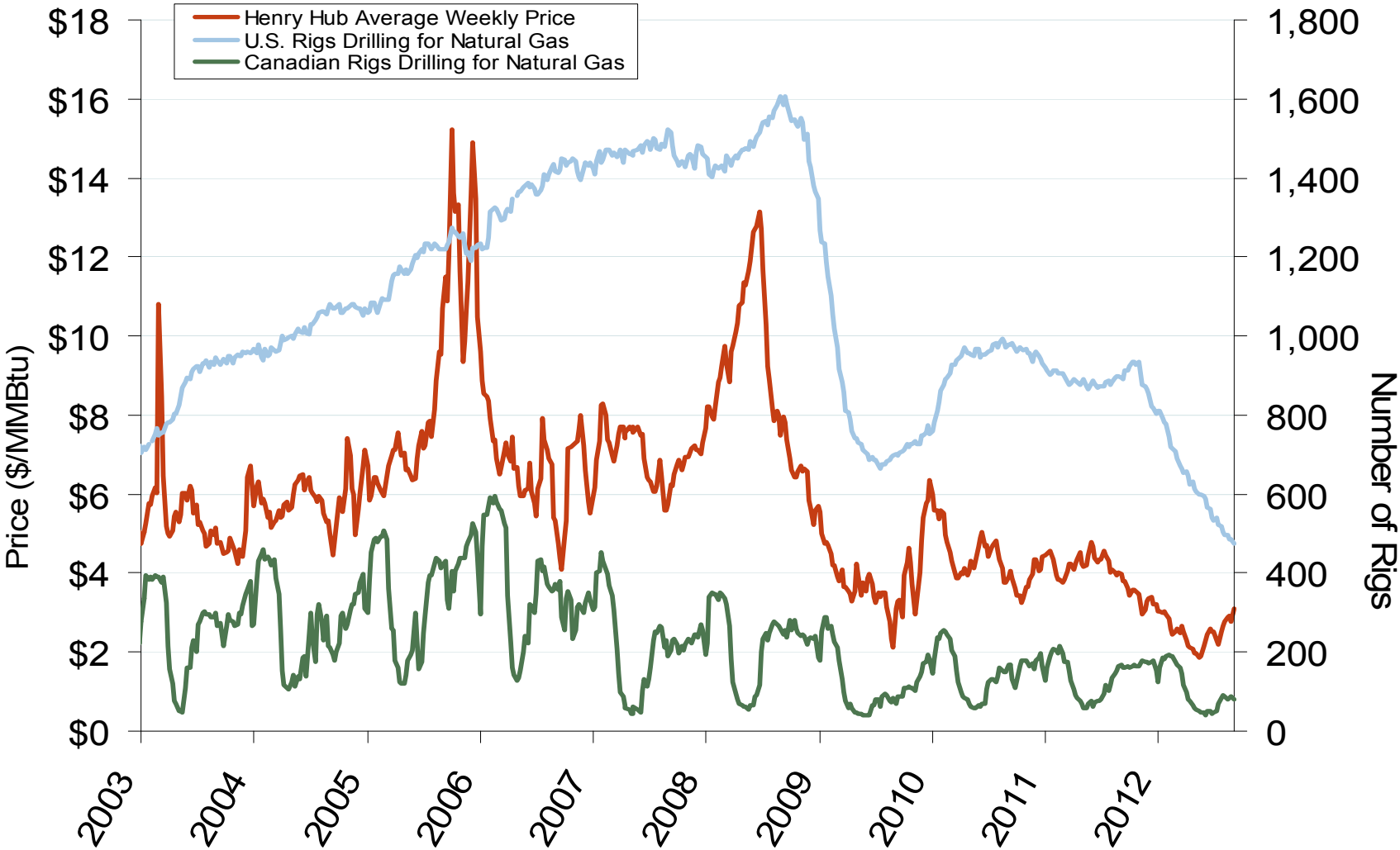
Note: Prior to July 2010, chart was derived from a combination of EIA and Bentek Energy data

Source: Derived from Bentek Energy data

Natural Gas Market Overview: Drilling Rig Count

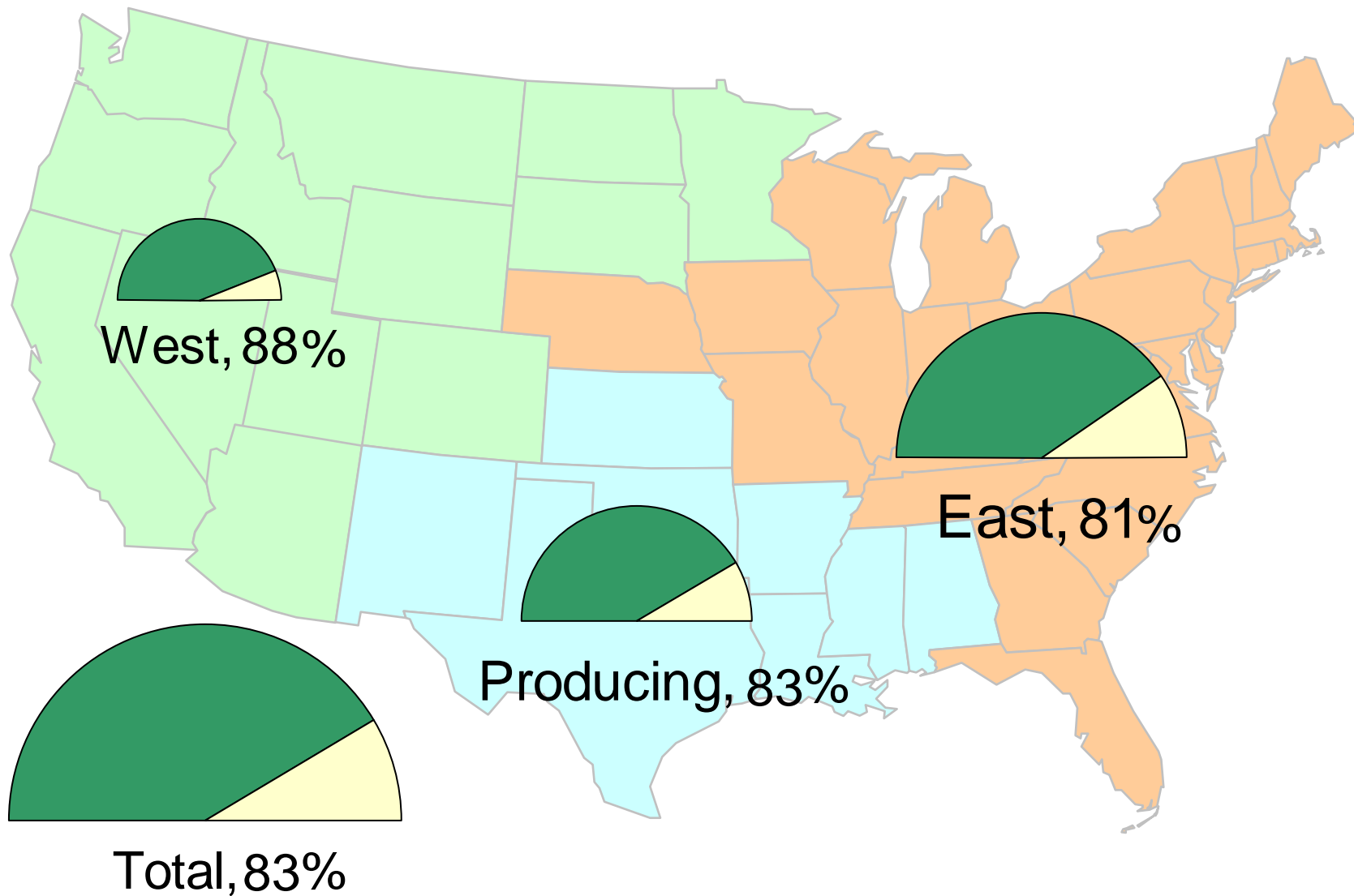
Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

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



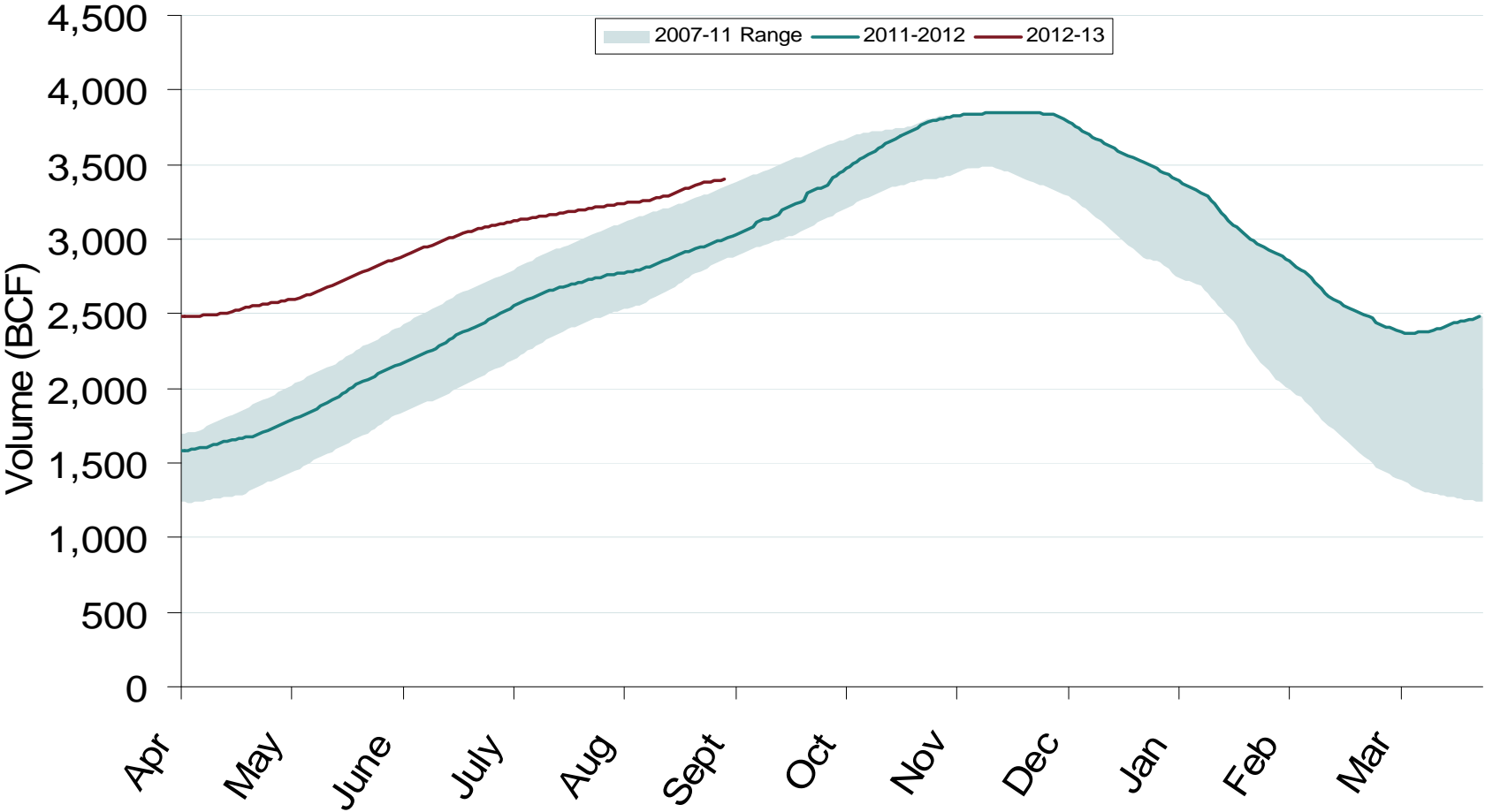
Source: Derived from *Platts* and *Baker Hughes* data  
September 2012 Southeast Snapshot Report

## Natural Gas Storage Inventories – August 31, 2012



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

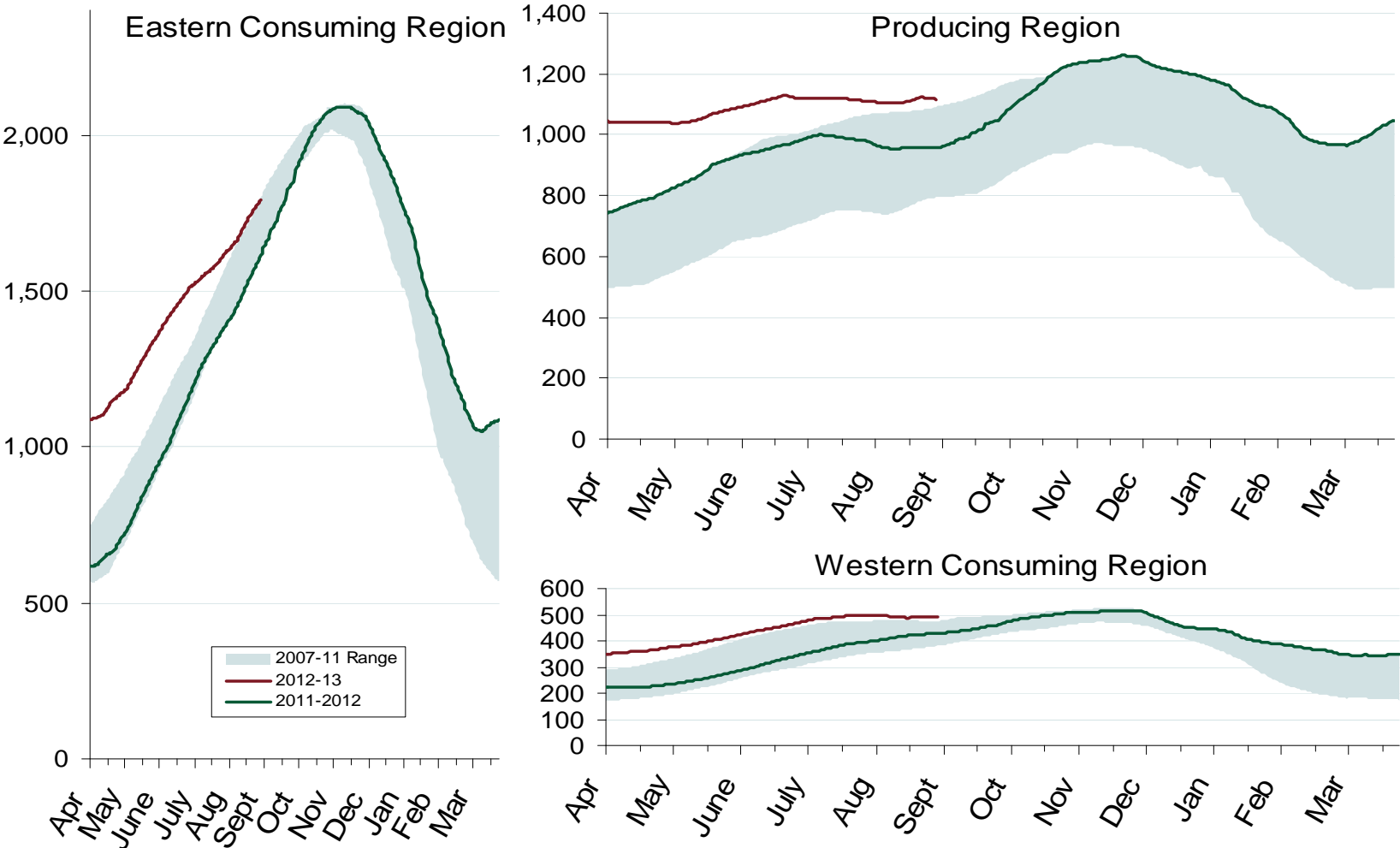
### Total U.S. Working Gas in Storage



Natural Gas Market Overview: Regional Storage

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

# Regional Totals of Working Gas in Storage

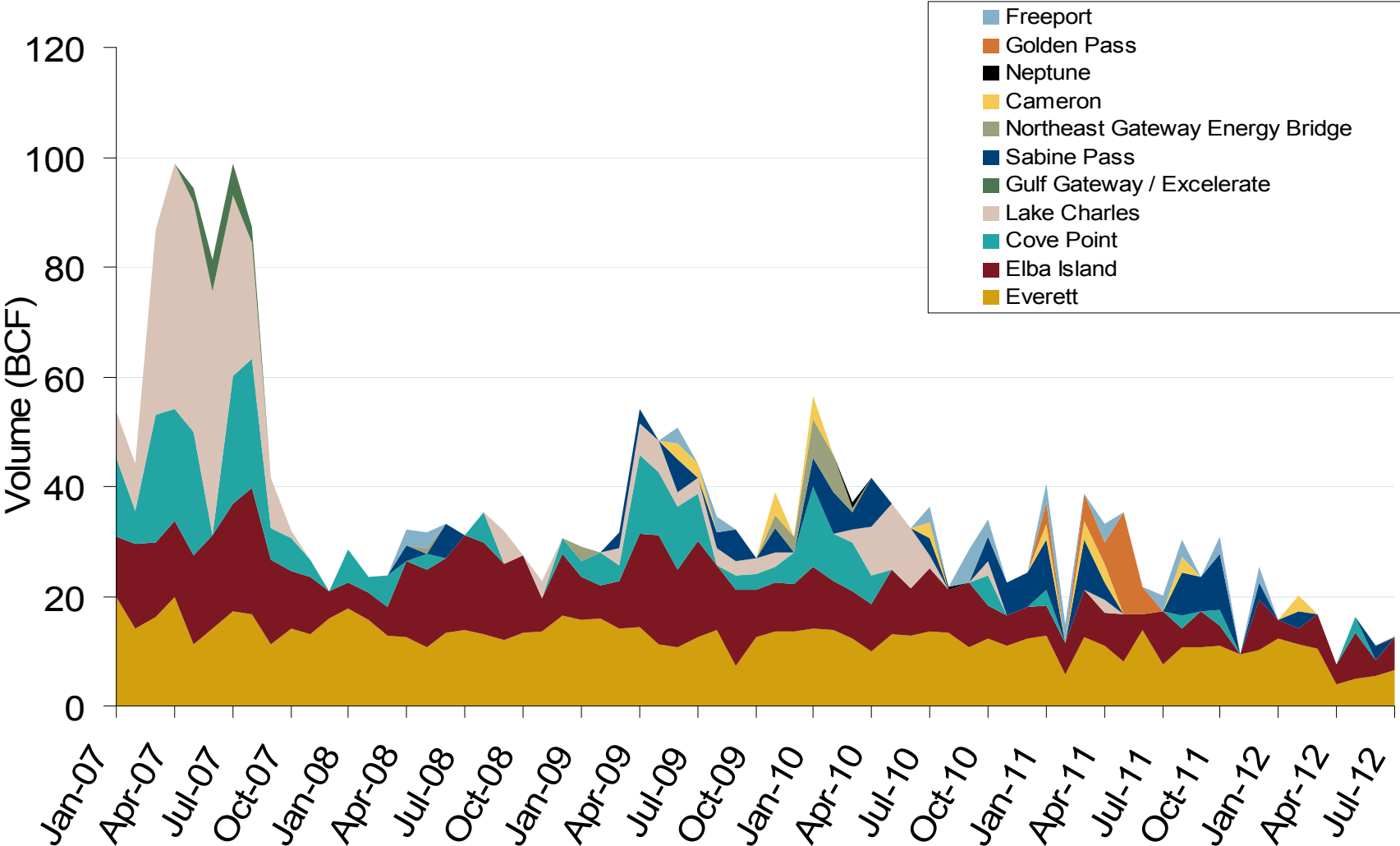


Source: Derived from EIA data  
September 2012 Southeast Snapshot Report

## Natural Gas Overview: World LNG Prices

Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)**World LNG Estimated October 2012 Landed Prices**

# Monthly Gas Imports at Existing U.S. LNG Facilities

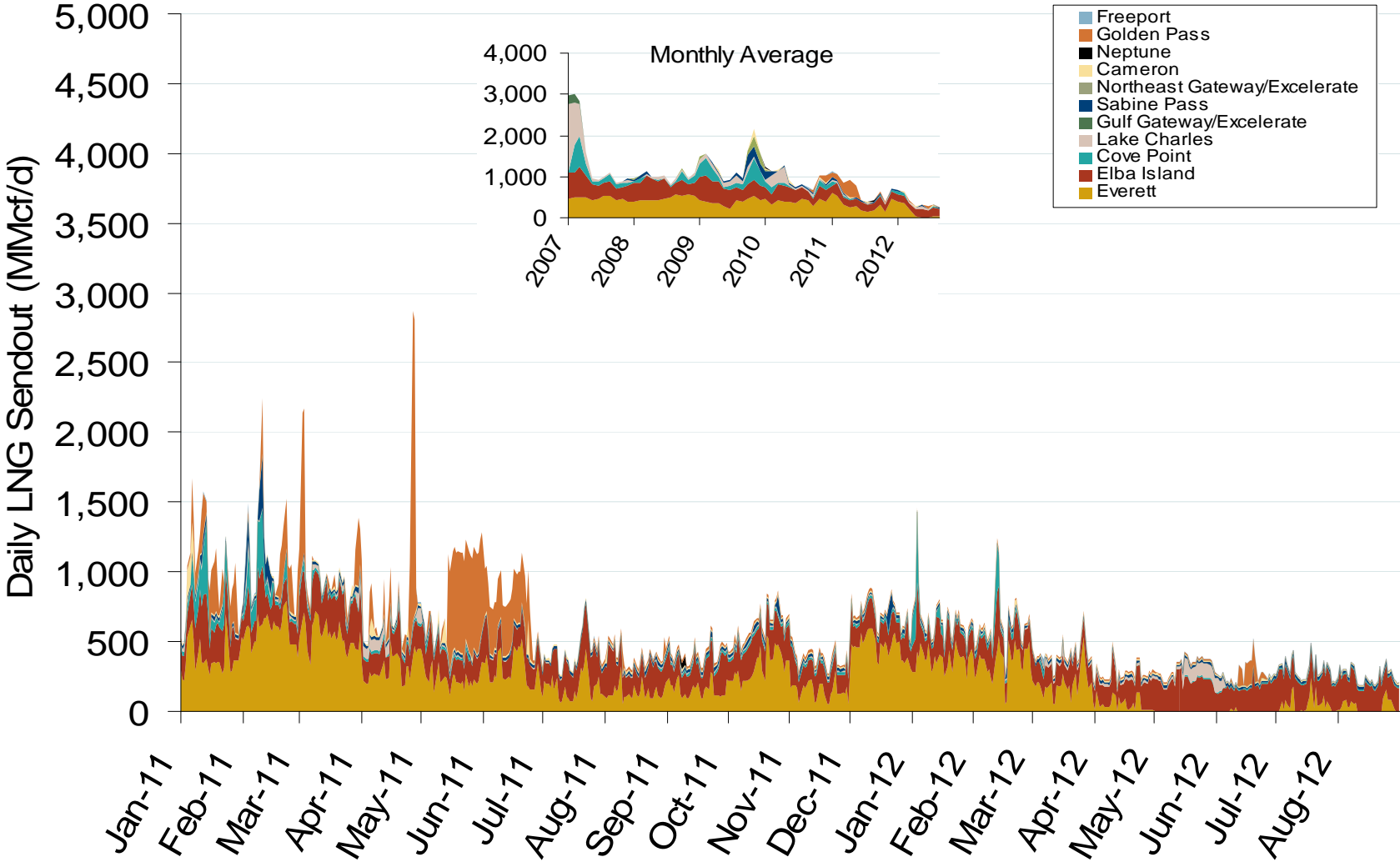


Source: Derived from DOE Office of Fossil Energy data  
September 2012 Southeast Snapshot Report

Updated: September 06, 2012



# Daily Gas Sendout from Existing U.S. LNG Facilities

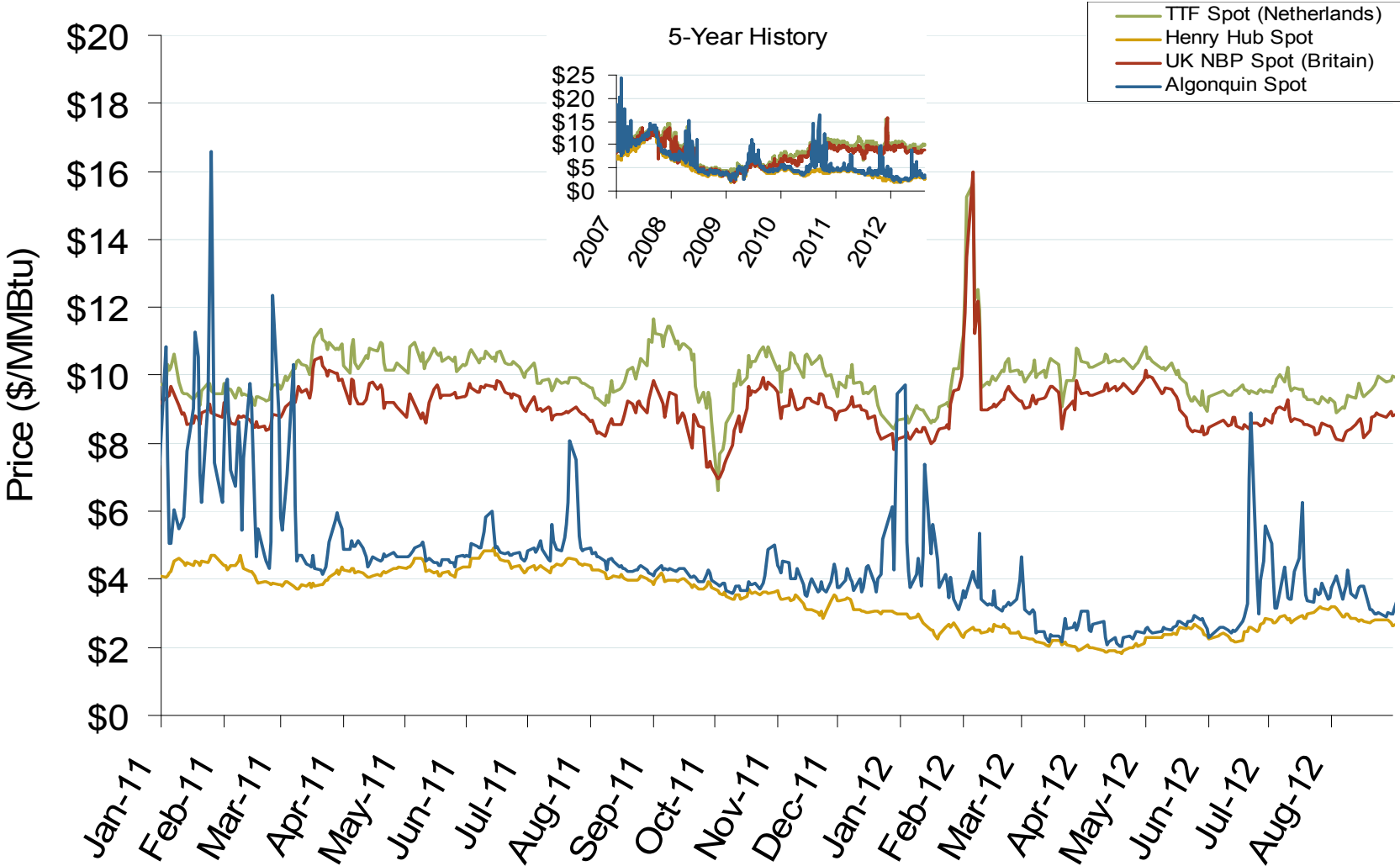


Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan BostonGas, and LNG trucked out of the terminal. Excludes flows to the Freeport LNG which flows via intrastate pipelines and flows to the Mystic 8 and 9 power plants.

Source: Derived from Bentek Energy data  
September 2012 Southeast Snapshot Report

Updated: September 07, 2012

# Atlantic Basin European and US Spot Natural Gas Prices



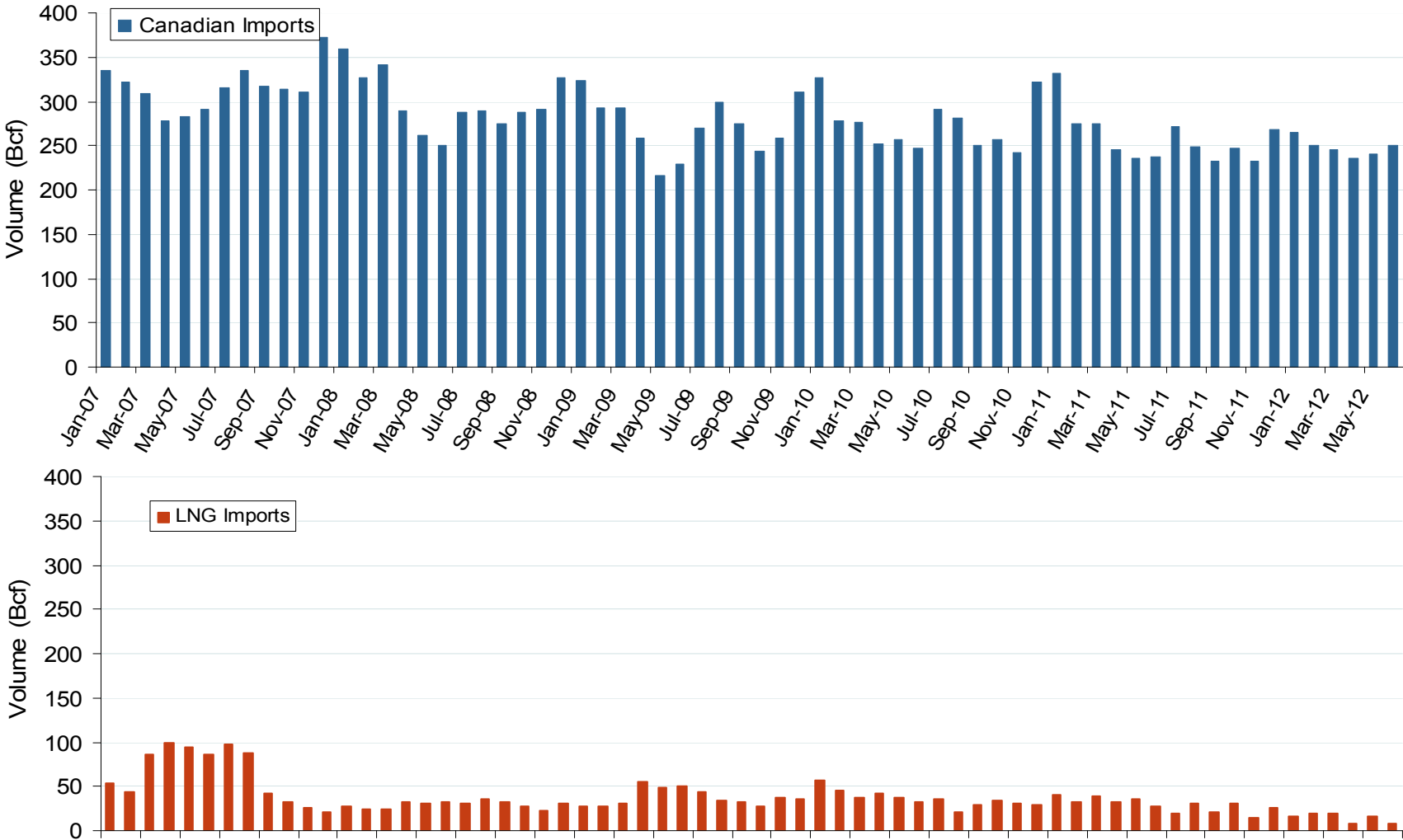
Source: Derived from *Bloomberg* and *ICE* data  
September 2012 Southeast Snapshot Report

Updated: September 04, 2012

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.



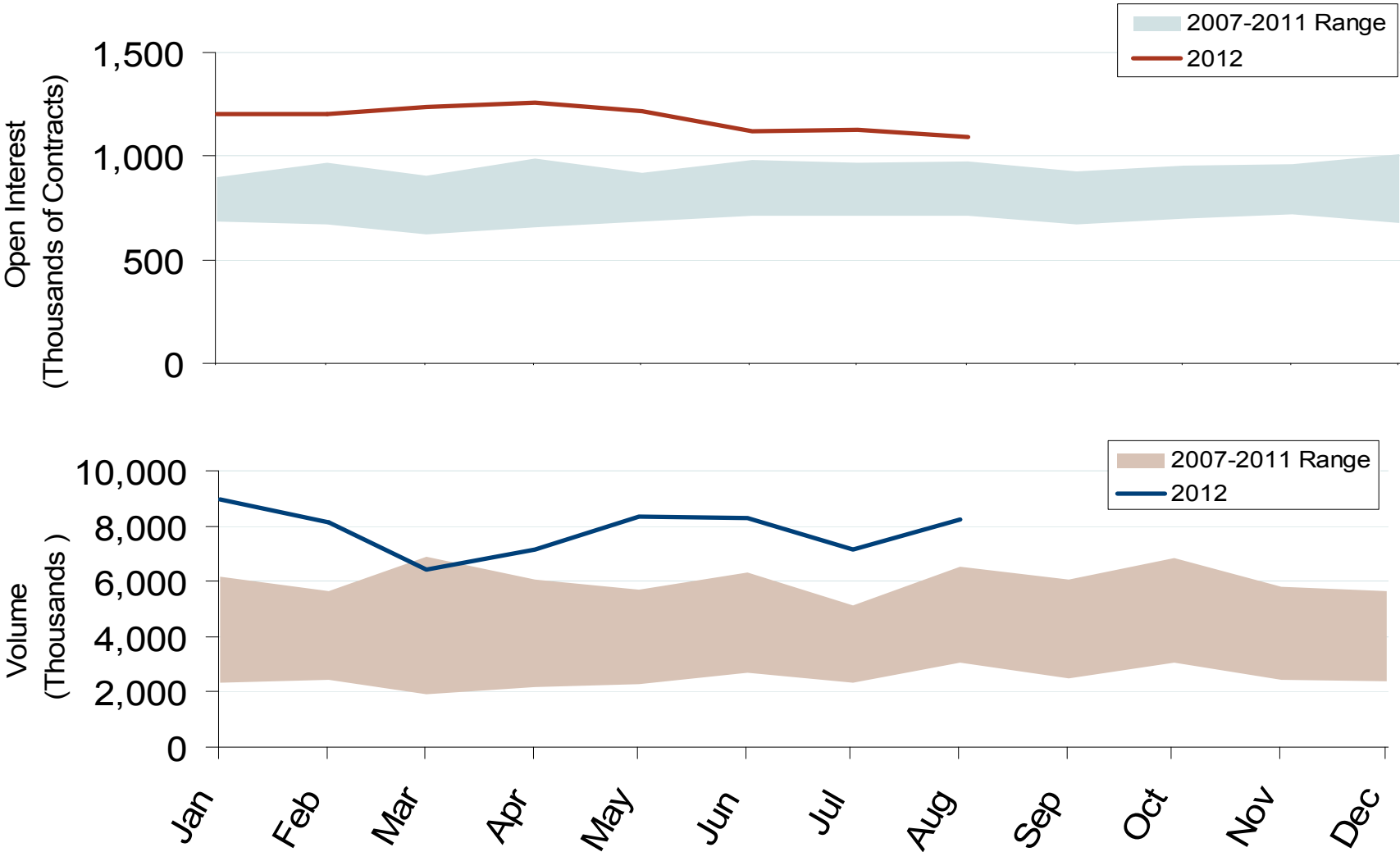
Source: EIA Natural Gas Monthly  
September 2012 Southeast Snapshot Report

Updated: September 06, 2012

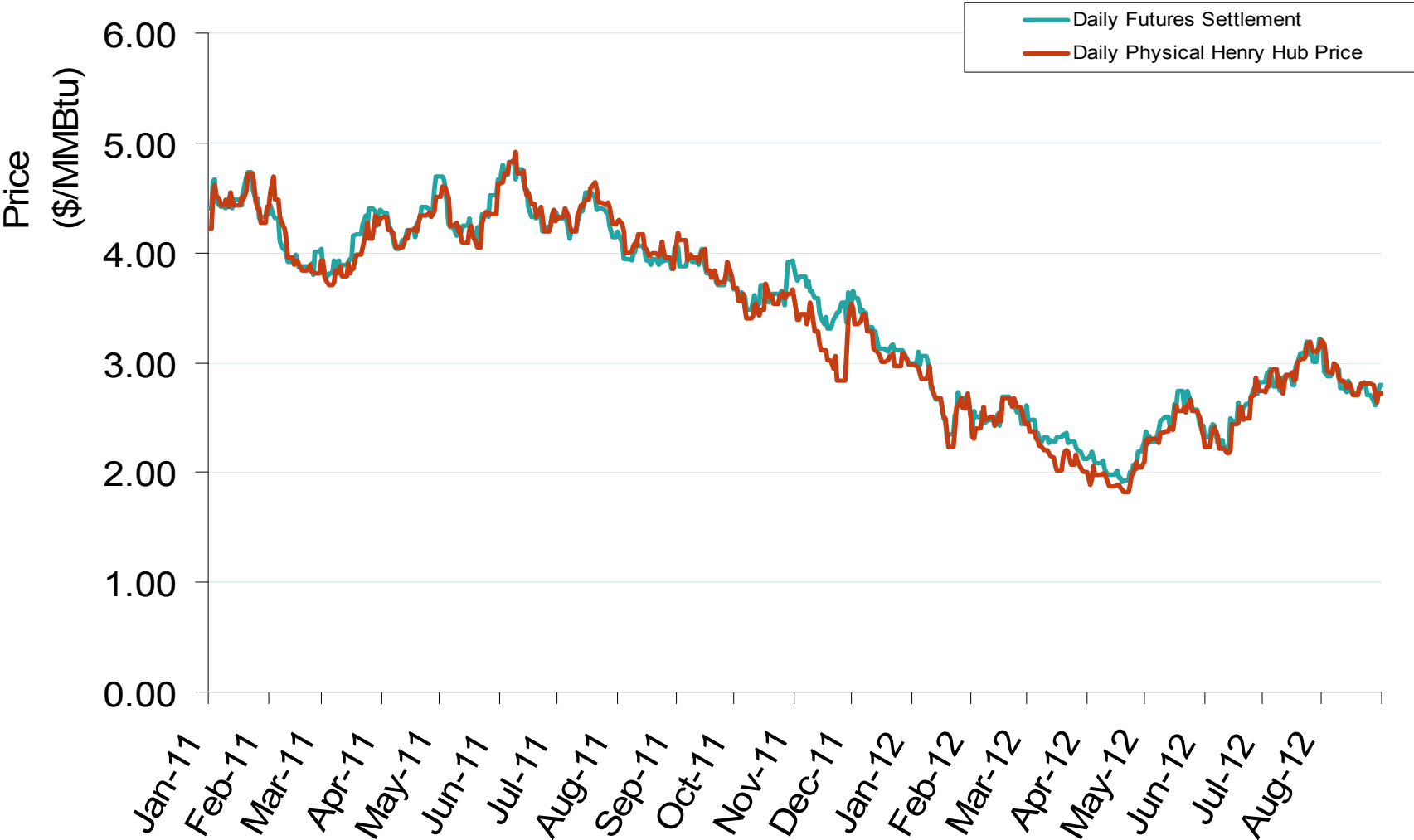
Natural Gas Trading: Futures Open Interest and Volume

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

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



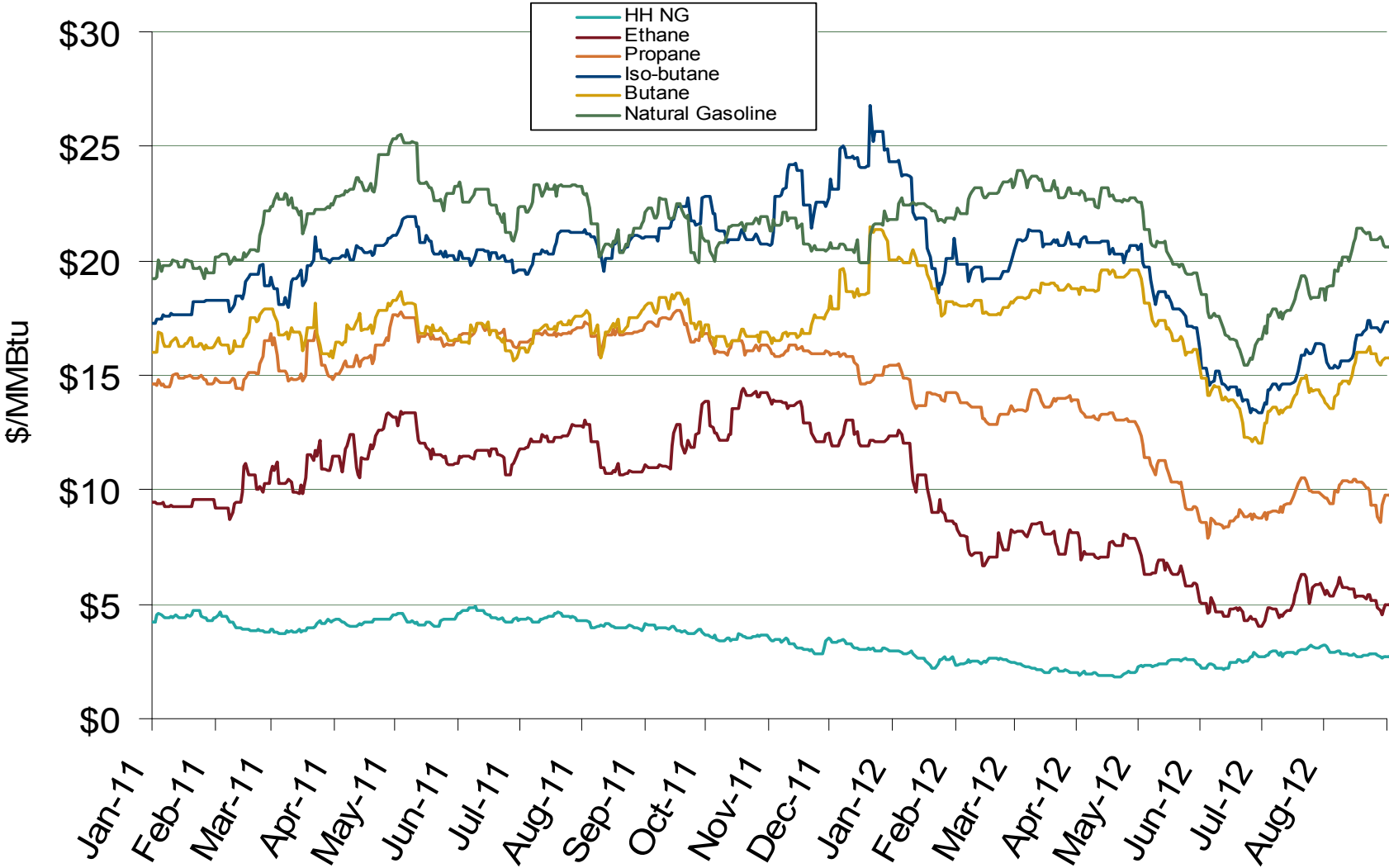
# Daily Physical Index Price & Daily Futures Settlement Price



Natural Gas Market Overview: NGL Prices

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



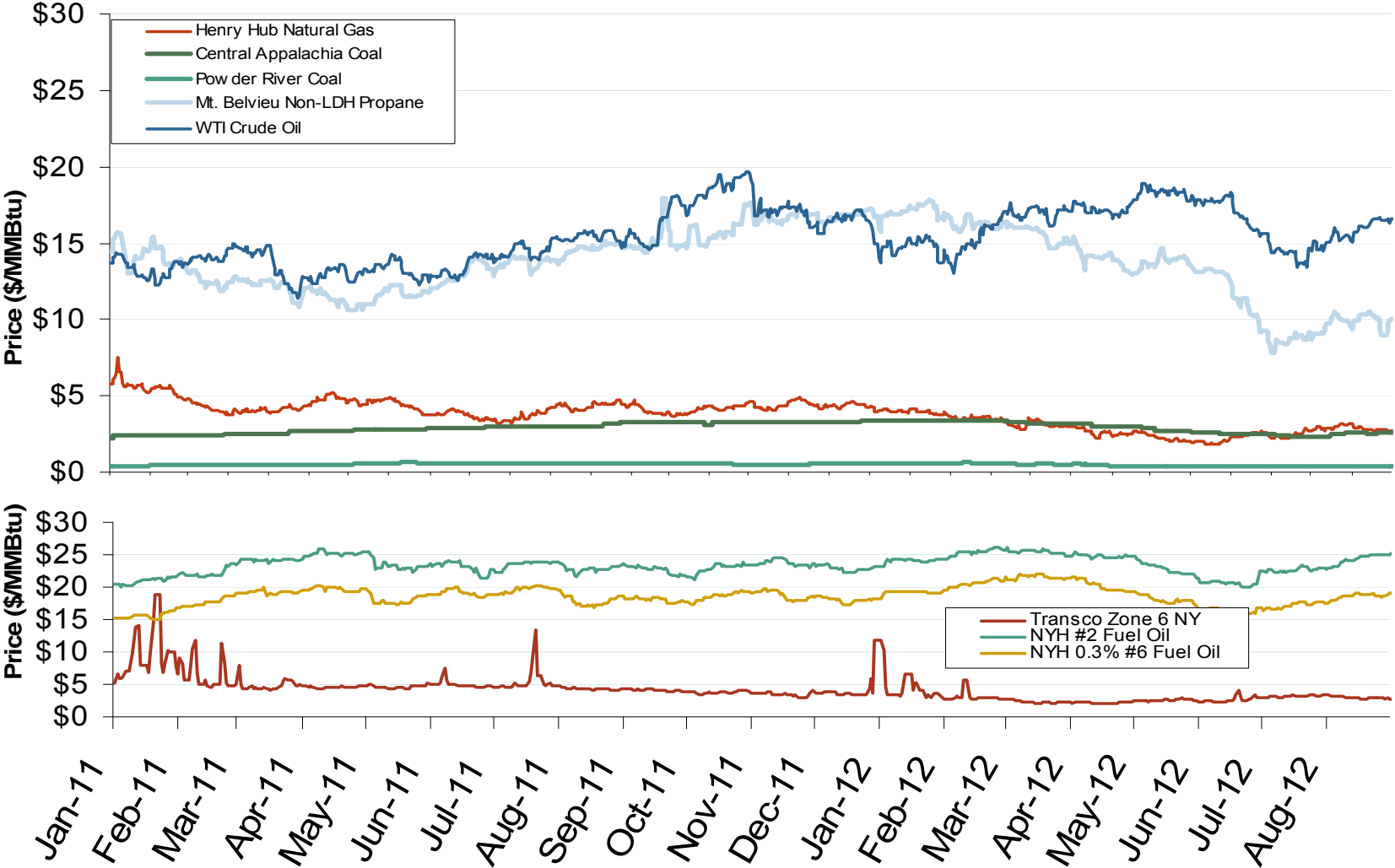
Source: Derived from Bloomberg Data  
September 2012 Southeast Snapshot Report

Updated: September 04, 2012

Other Fuels Market: Fossil Fuel Prices

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

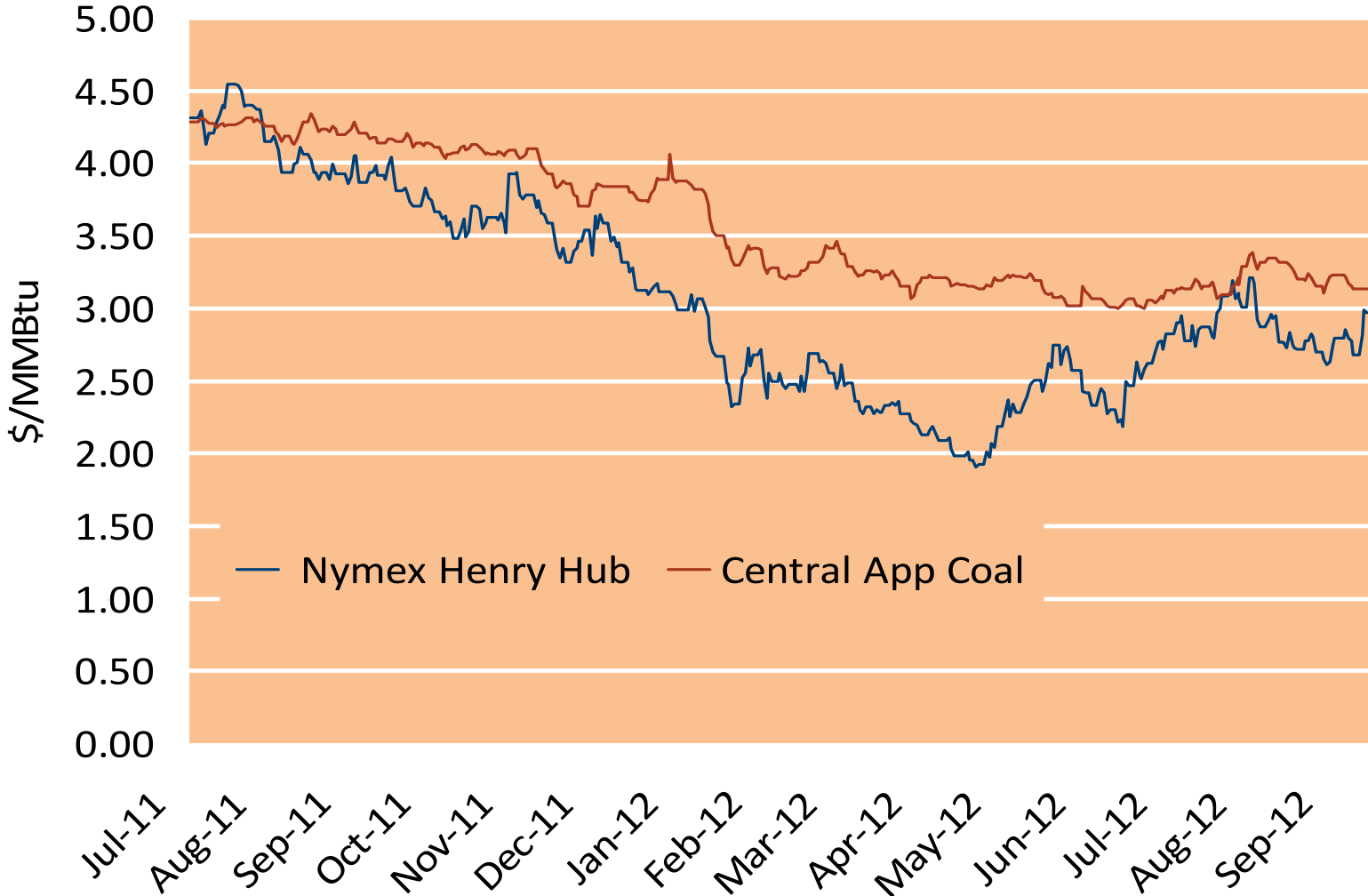
# Oil, Coal, Natural Gas and Propane Daily Spot Prices



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



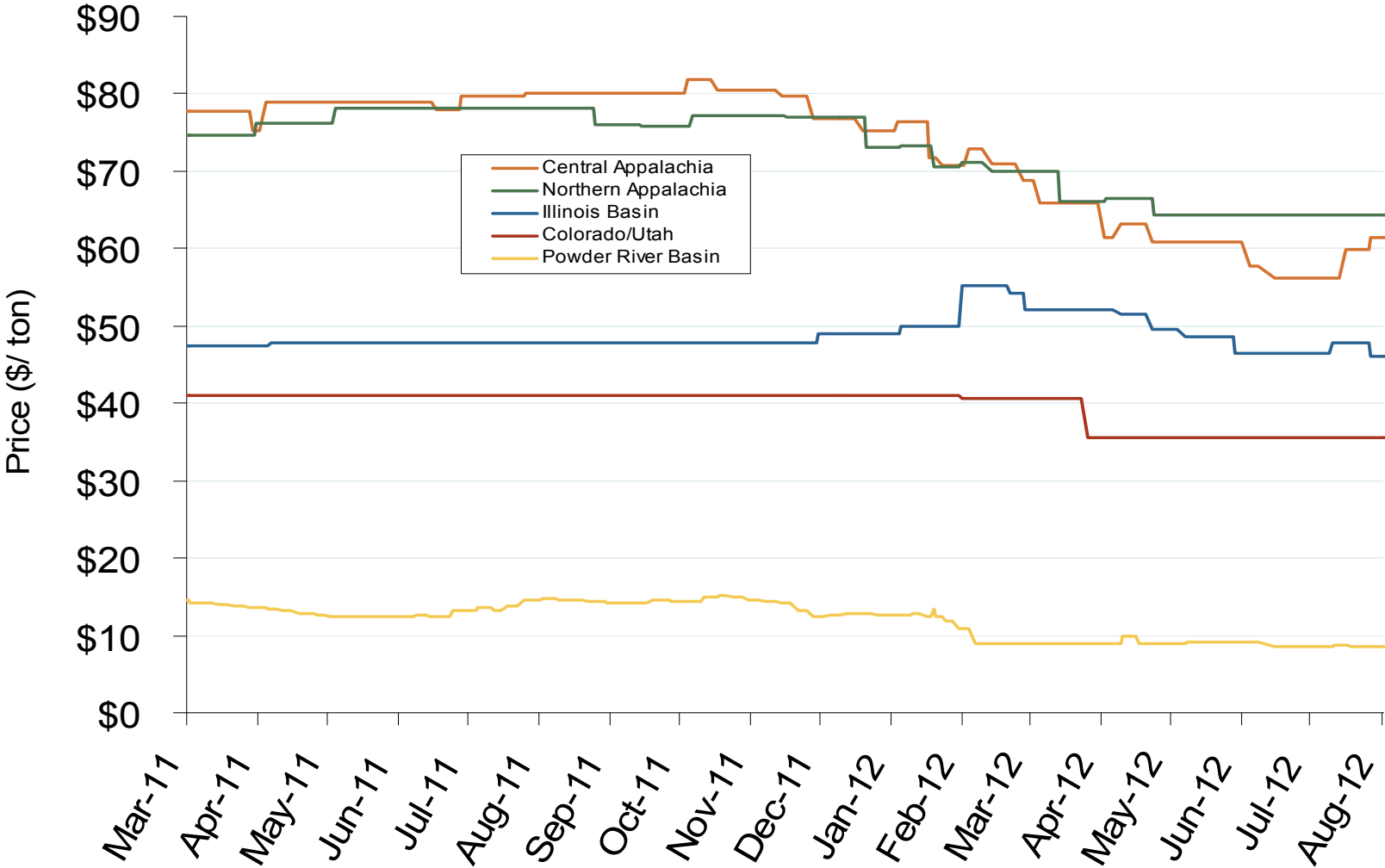
Source: Bloomberg



National Electric Market Overview: Coal Prices

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

# 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

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

