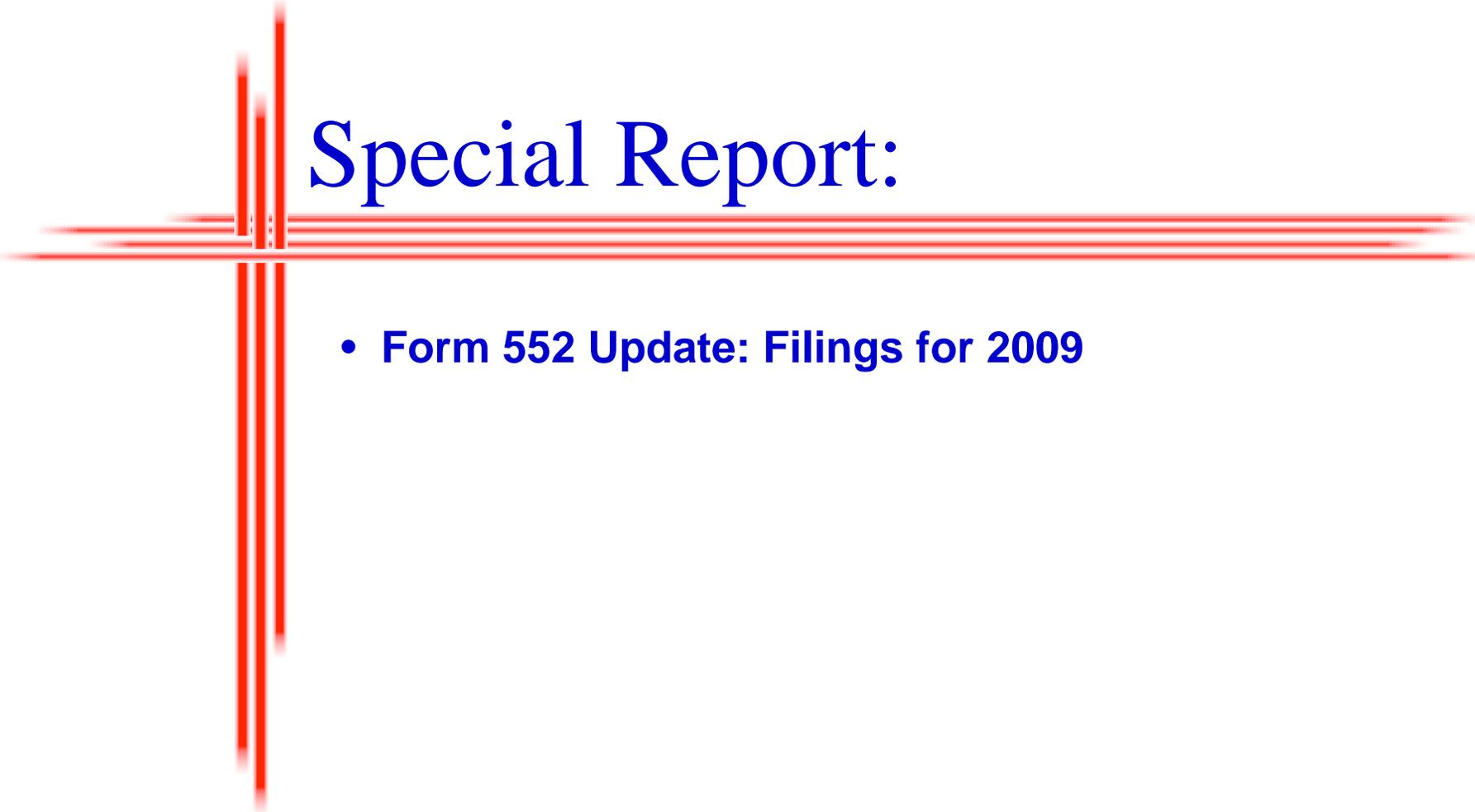


# OE ENERGY MARKET SNAPSHOT

## Southeast States Version – September 2010 Data

- **Special Report**
- **Natural Gas and Fuel Markets**
- **Electricity Markets**

Office of Enforcement  
Federal Energy Regulatory Commission  
October 2010



# Special Report:

- **Form 552 Update: Filings for 2009**

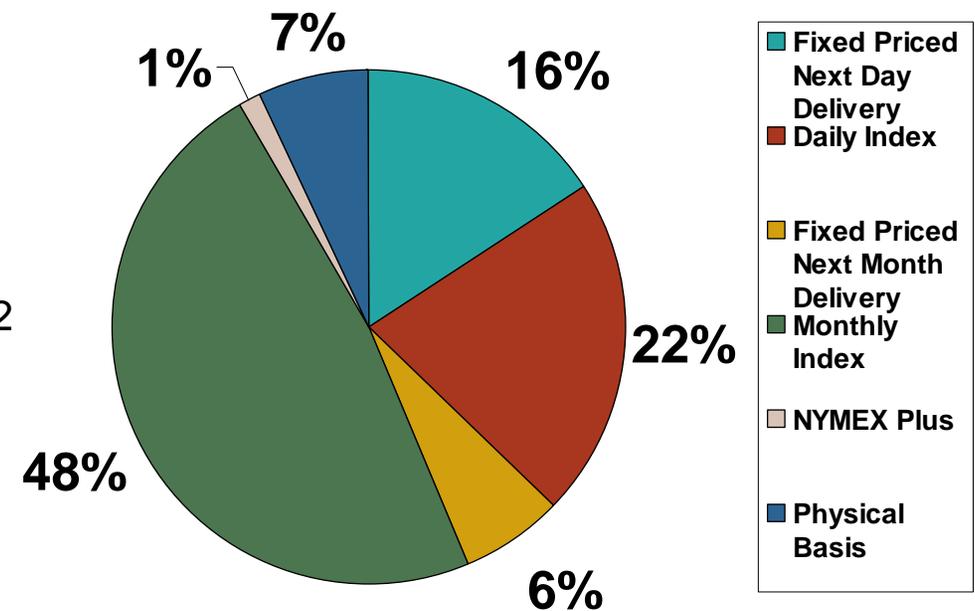
## FERC Form No. 552 – Year 2

In effort to further transparency, the Commission used its annual Form No. 552 to collect transactional information for a 2nd year from market participants that sold and purchased physical natural gas in 2009.

As of October 4th, 689 respondents reported sales and purchases. Total sales reached over 56 Tcf (2.5 times 2009 U.S. production) Other significant results included:

- The top 20 sellers represented 45% of the total sales. The top 5 were:
  1. BP (4.9 Tcf)
  2. Conoco Phillips (3.1 Tcf)
  3. Shell (2.8 Tcf)
  4. Macquarie Energy (1.8 Tcf)
  5. Chevron (1.7 Tcf)
- Monthly indices accounted for over 1/2 of the reported volumes.
- Only 22% of the transactions were for fixed priced delivery.
- Reported sales and purchases were similar.

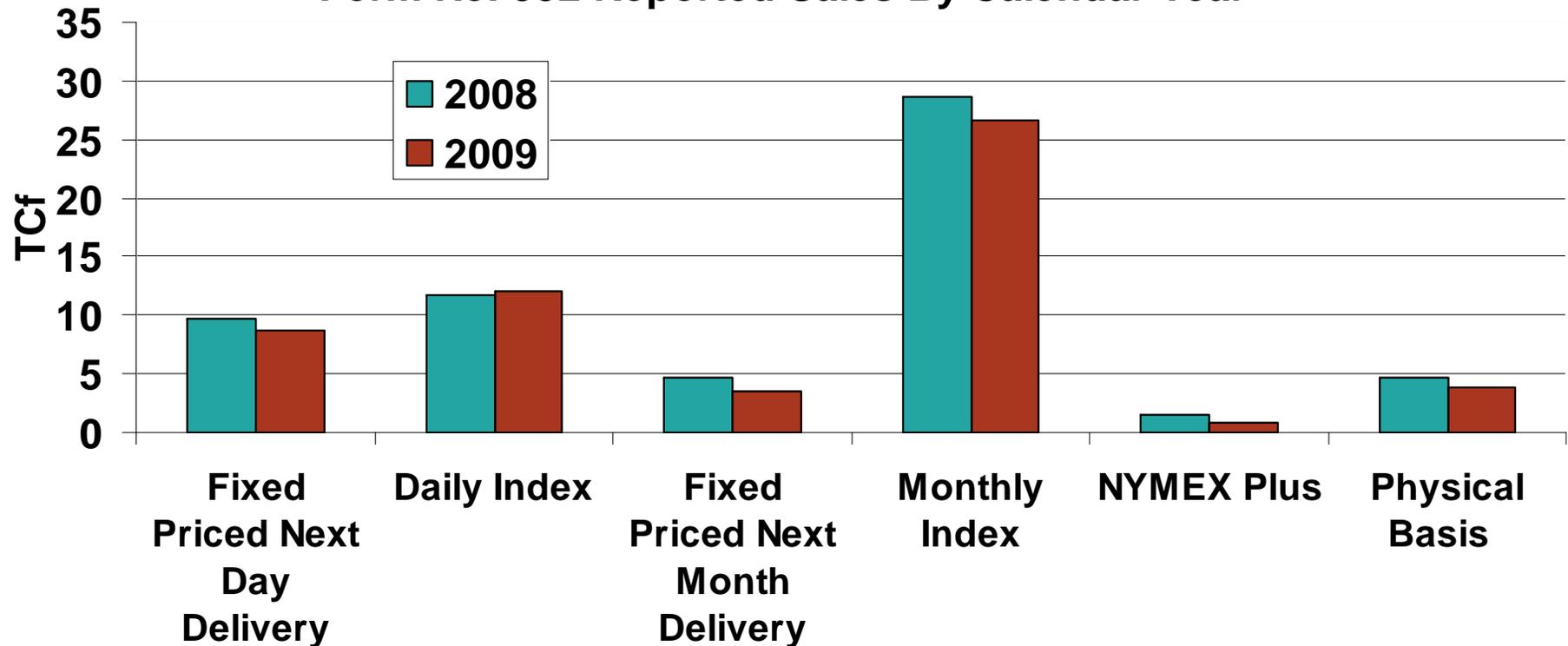
### Breakdown of Form No. 552 Reportable Sales for Calendar Year 2009

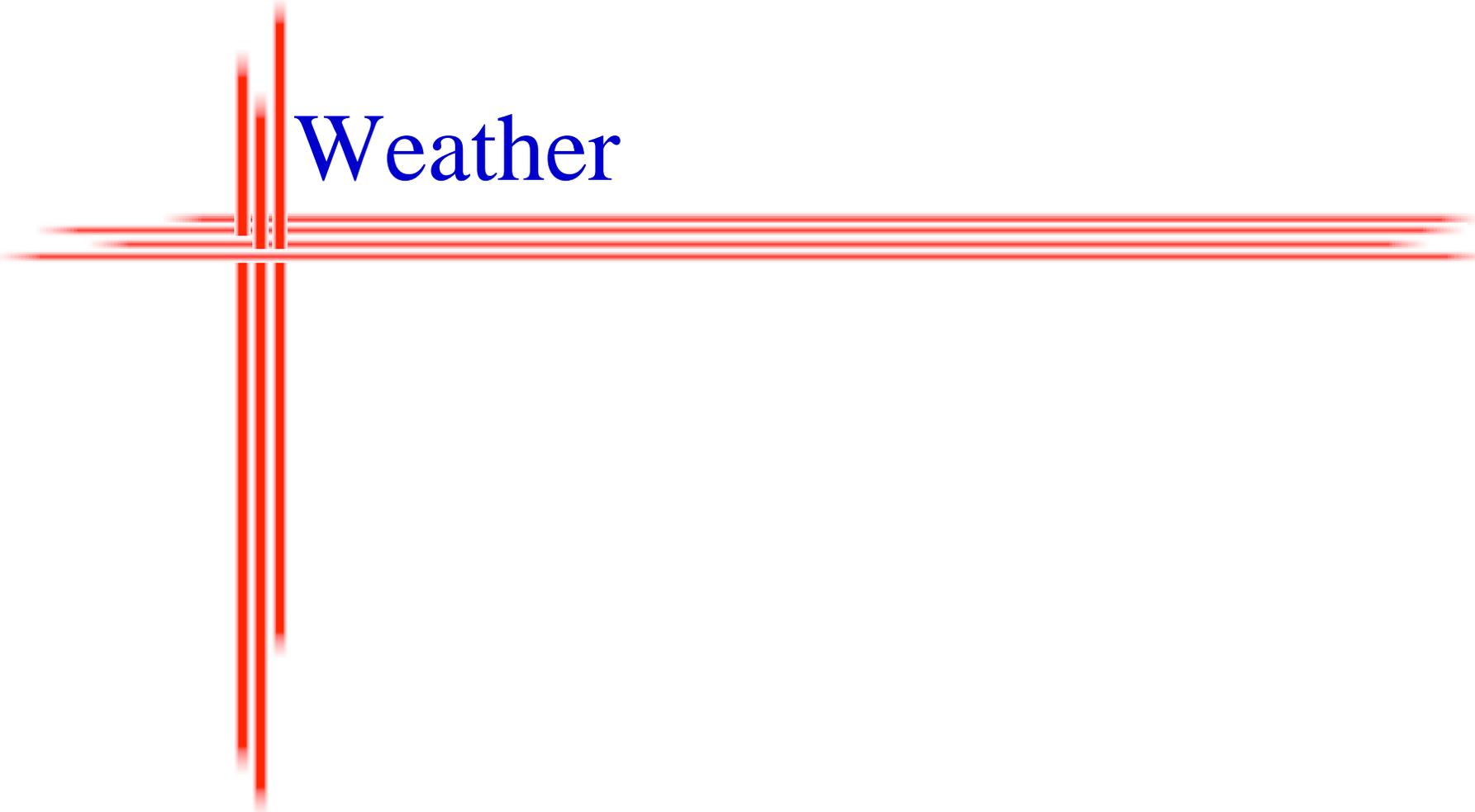


## Purchases and Sales Decline

- The largest change in the results from 2008 to 2009 is the nearly 6 Tcf (9%) decline in purchases and sales.
- The majority of the 9% decline in volumes from 2008 to 2009 is due to the 3 Tcf drop in volume of the next month transactions. All other categories fell as well with the exception of next day index use which increased by 3%.

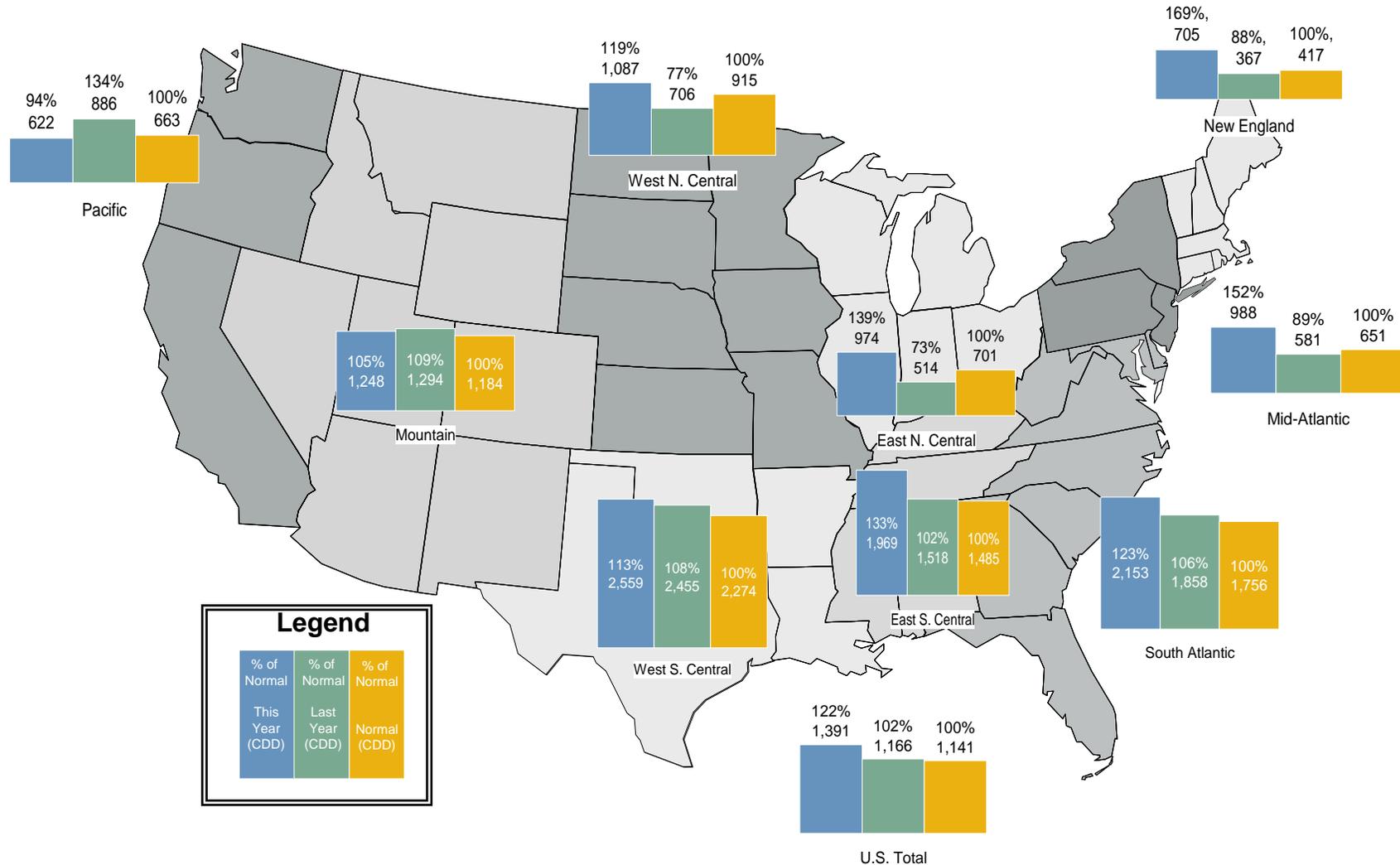
**Form No. 552 Reported Sales By Calendar Year**





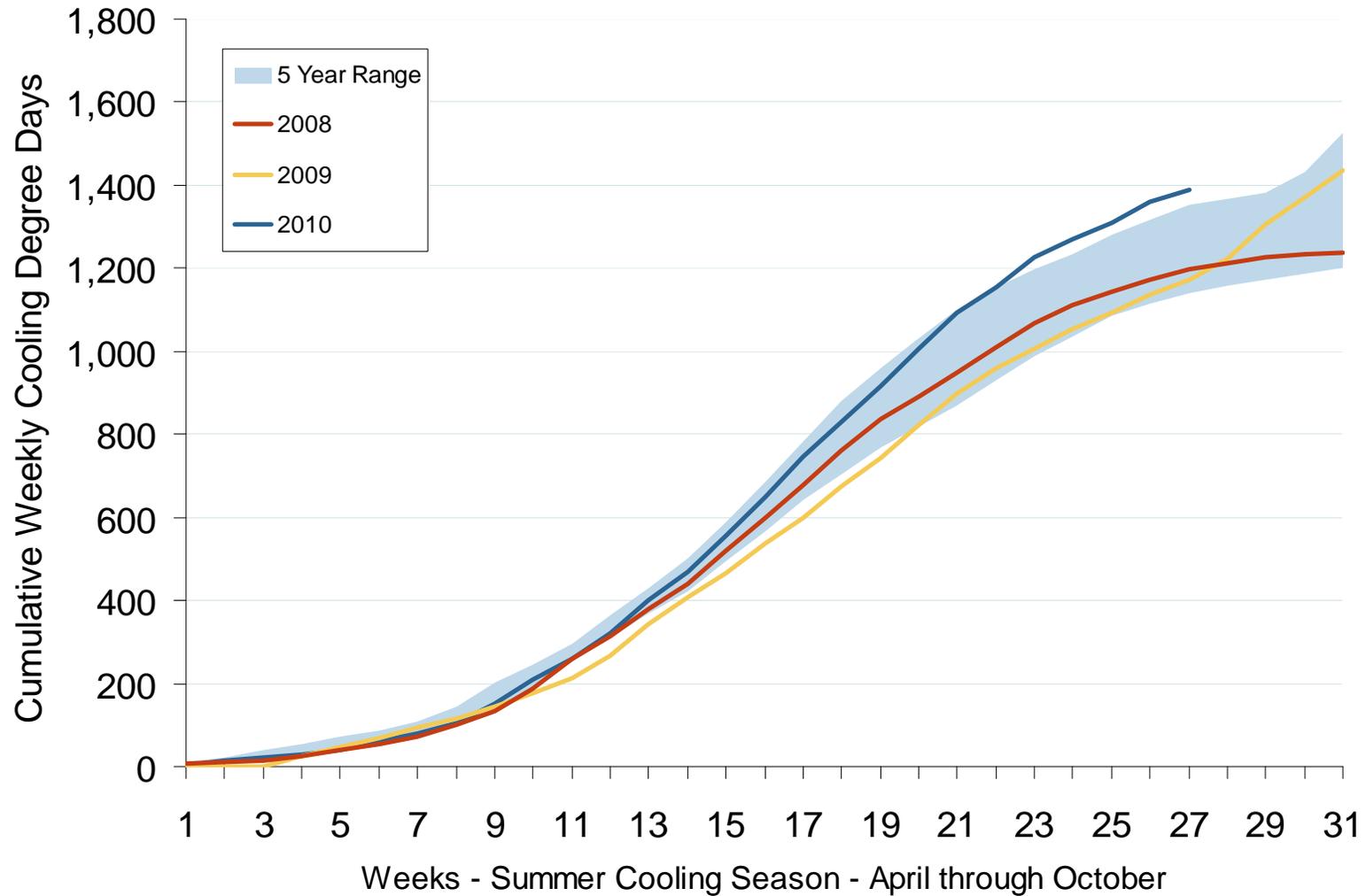
# Weather

# Regional Cooling Degree Days: January – September 2010



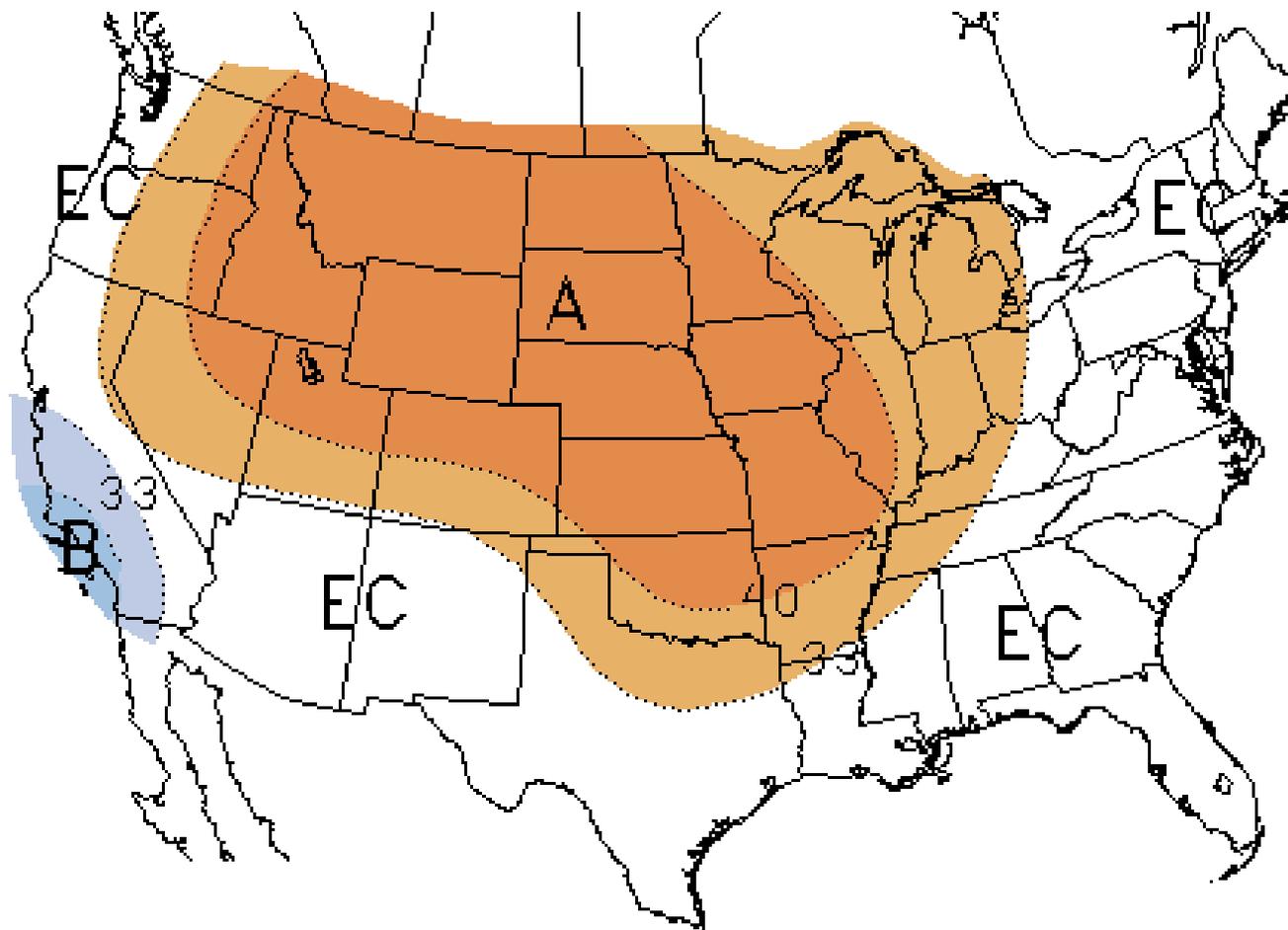
Source: Derived from NOAA data. Normal is based on a 30-year average of cooling degree days.  
 October 2010 Southeast Snapshot Report

## U. S. Summer Cumulative Cooling Degree Days - 2010



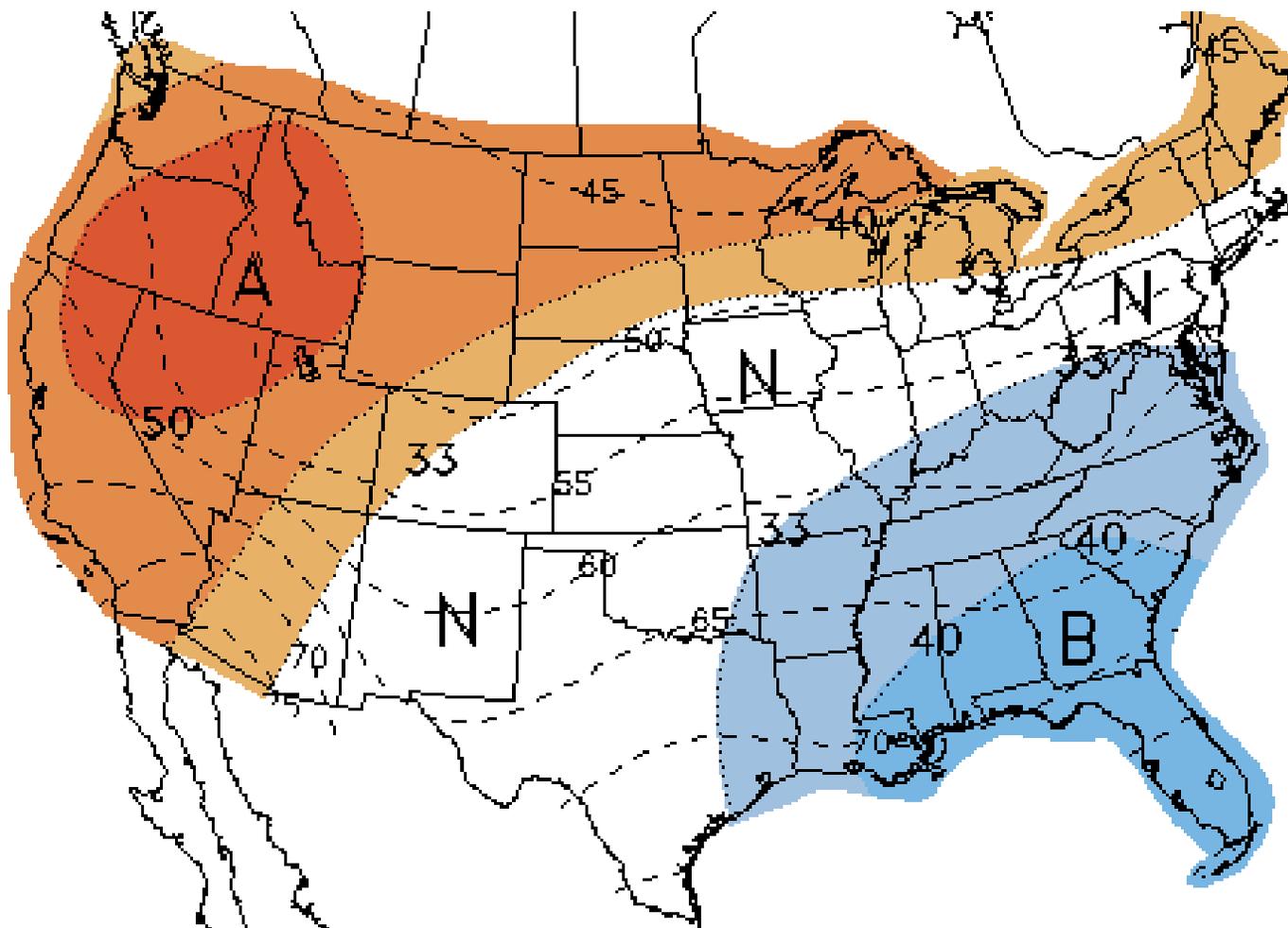
Source: Derived from NOAA data.

## NOAA's Monthly Temperature Forecast Made September 30, Valid for October 2010



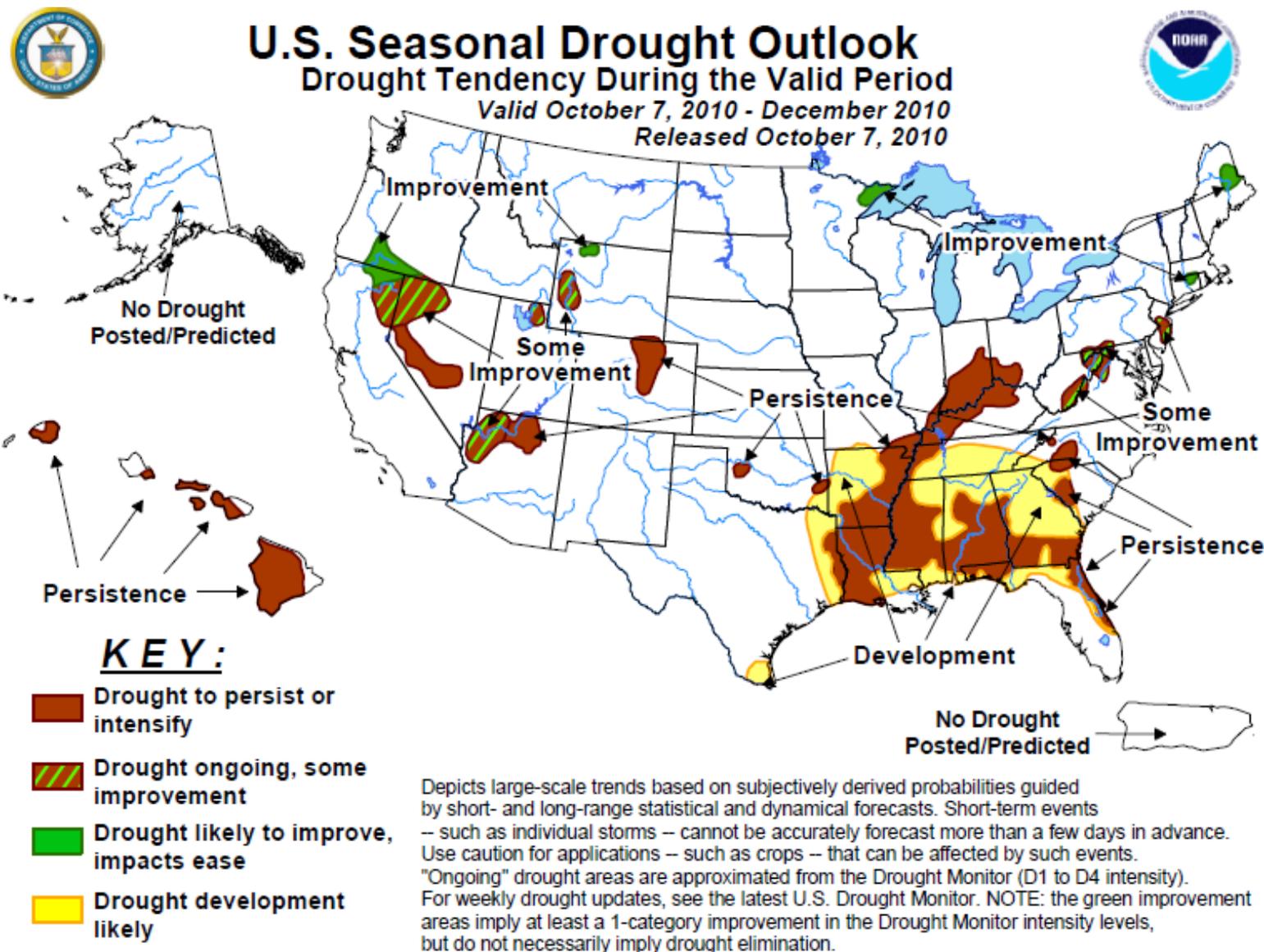
Note: "A" areas are above normal, "B" areas are below normal and "EC" means equal chance. Normal is based on the last 30 years of data.

## NOAA's 8 to 14 Day Temperature Forecast Made October 4, Valid for October 12-18, 2010



Note: "A" areas are above normal and "B" areas are below normal. Normal is based on the last 30 years of data.

Source: NOAA

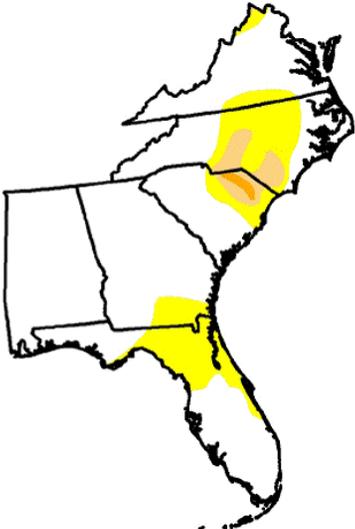


Source: NOAA, [http://www.cpc.noaa.gov/products/expert\\_assessment/seasonal\\_drought.pdf](http://www.cpc.noaa.gov/products/expert_assessment/seasonal_drought.pdf).

# Monthly Southeastern Drought Conditions

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	77.6	22.4	4.0	0.5	0.0	0.0
Last Week (10/06/2009 map)	82.6	17.4	5.5	1.0	0.0	0.0
3 Months Ago (07/21/2009 map)	64.5	35.5	0.0	0.0	0.0	0.0
Start of Calendar Year (01/06/2009 map)	65.3	34.7	15.7	5.3	2.8	0.0
Start of Water Year (10/06/2009 map)	82.6	17.4	5.5	1.0	0.0	0.0
One Year Ago (10/14/2008 map)	36.0	64.0	34.9	22.5	9.6	1.3



*Intensity:*

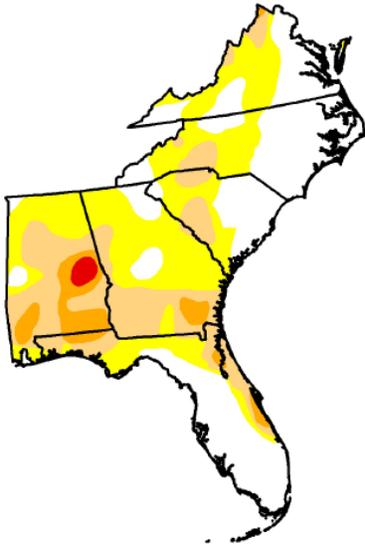
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

**October 13, 2009**

**October 5, 2010**

*Drought Conditions (Percent Area)*

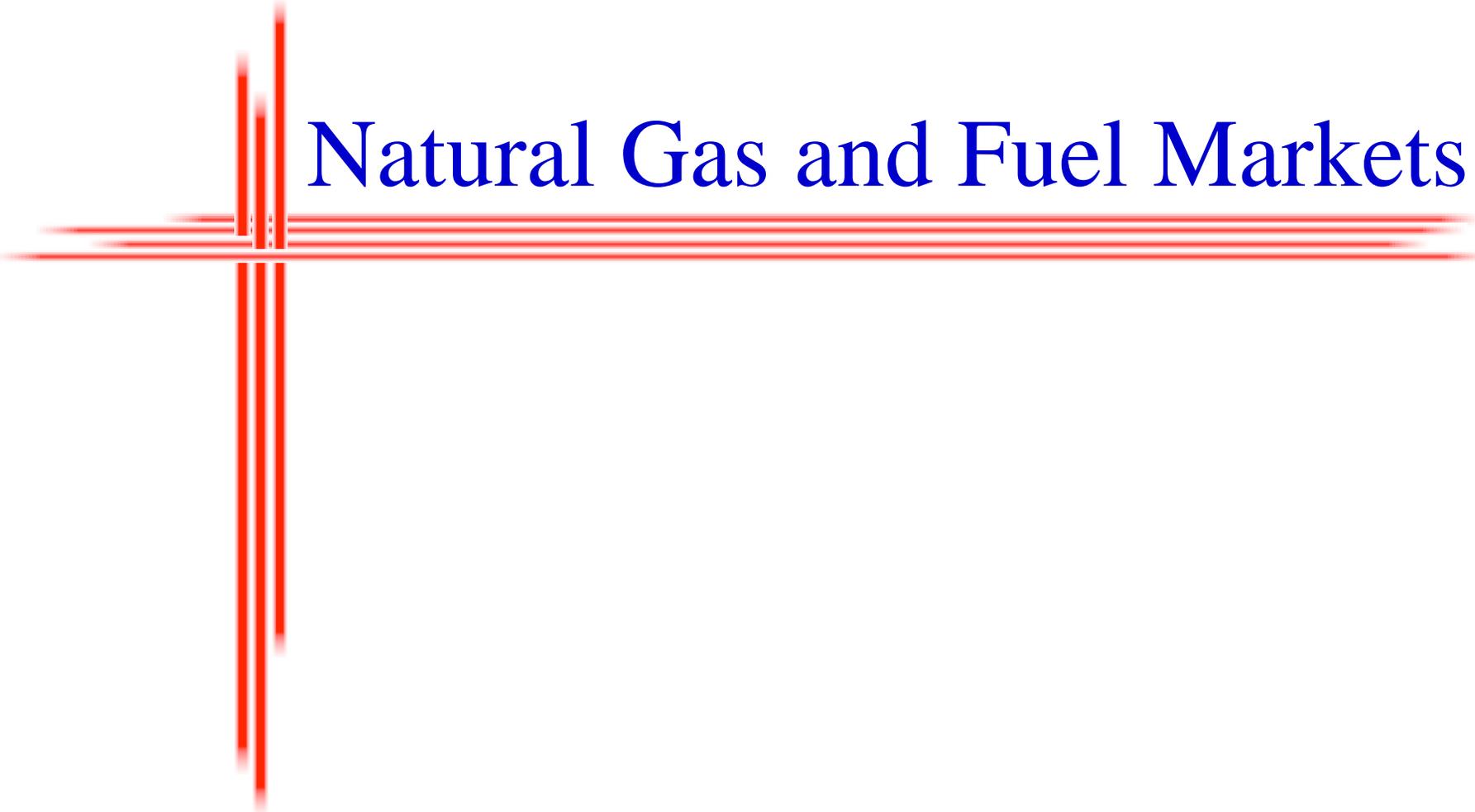
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	37.3	62.7	29.0	6.7	0.8	0.0
Last Week (09/28/2010 map)	18.2	81.8	38.0	10.3	0.9	0.0
3 Months Ago (07/13/2010 map)	57.1	42.9	7.5	0.0	0.0	0.0
Start of Calendar Year (01/05/2010 map)	99.5	0.5	0.0	0.0	0.0	0.0
Start of Water Year (10/05/2010 map)	37.3	62.7	29.0	6.7	0.8	0.0
One Year Ago (10/06/2009 map)	82.6	17.4	5.5	1.0	0.0	0.0



*Intensity:*

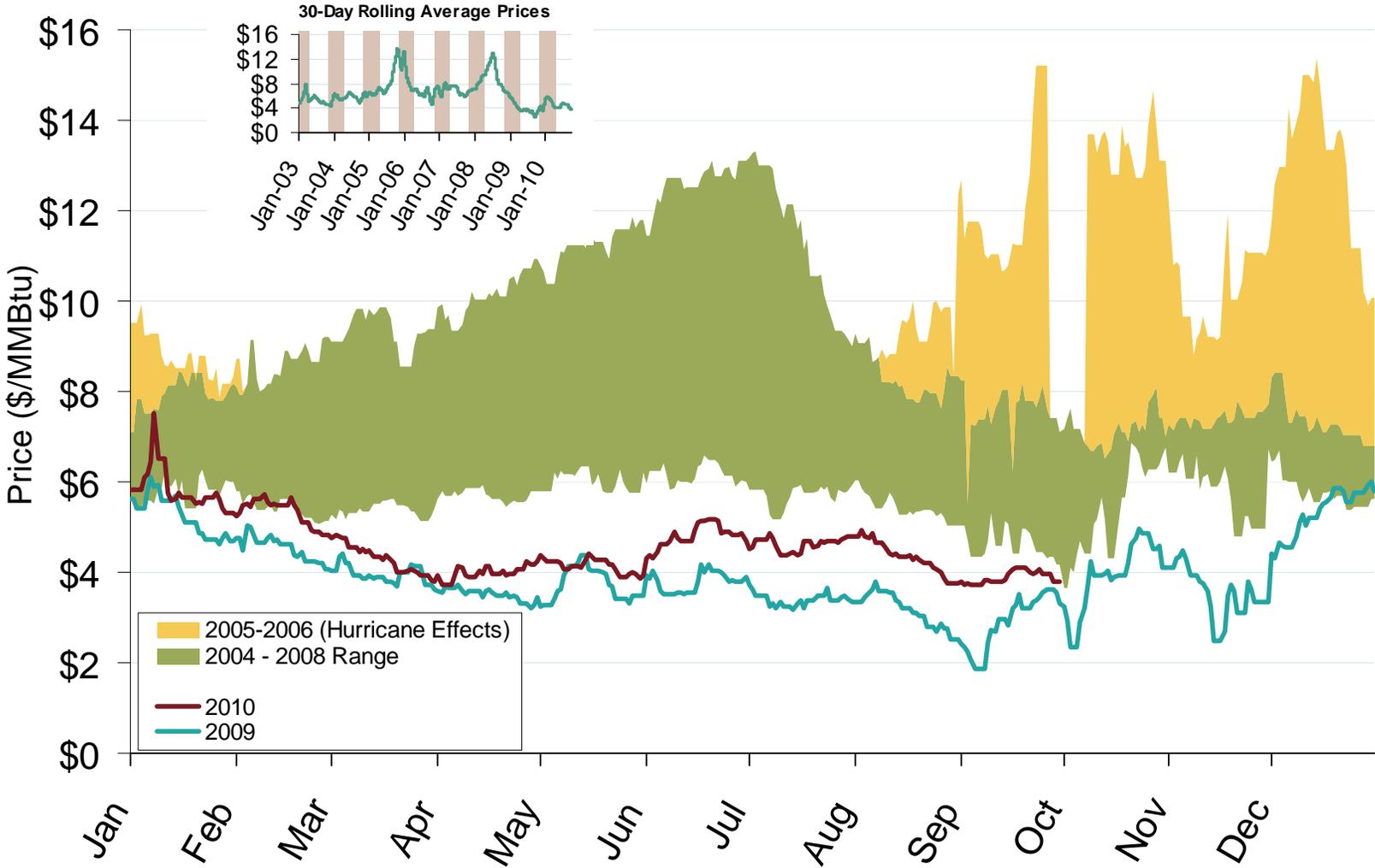
- D0 Abnormally Dry
- D1 Drought - Moderate
- D2 Drought - Severe
- D3 Drought - Extreme
- D4 Drought - Exceptional

Source: NOAA, National Water and Climate Center, Weekly Snowpack and Drought Update Report.  
October 2010 Southeast Snapshot Report



# Natural Gas and Fuel Markets

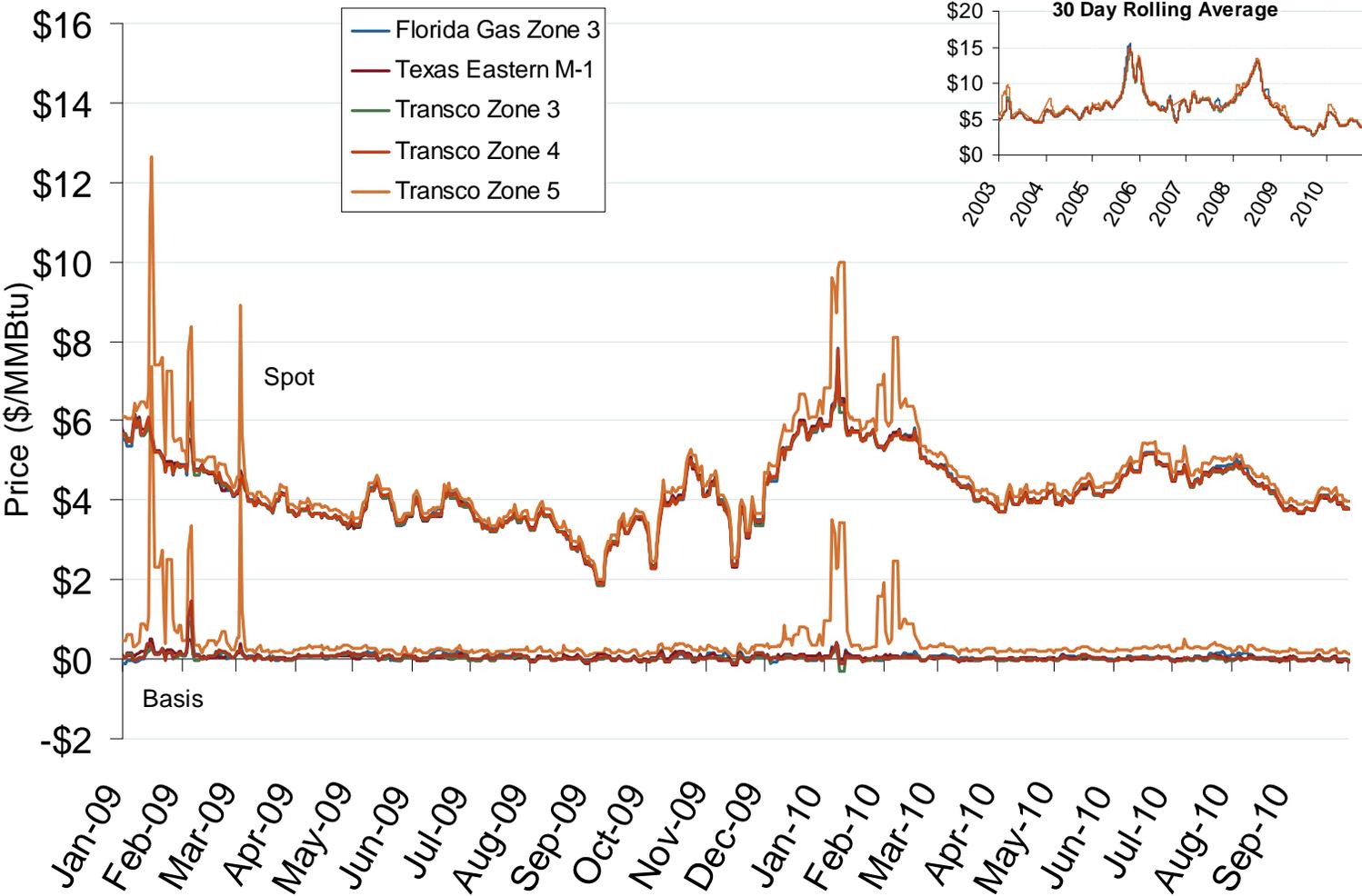
# Henry Hub Natural Gas Daily Spot Prices



Source: Derived from *Platts* data.  
October 2010 Southeast Snapshot Report

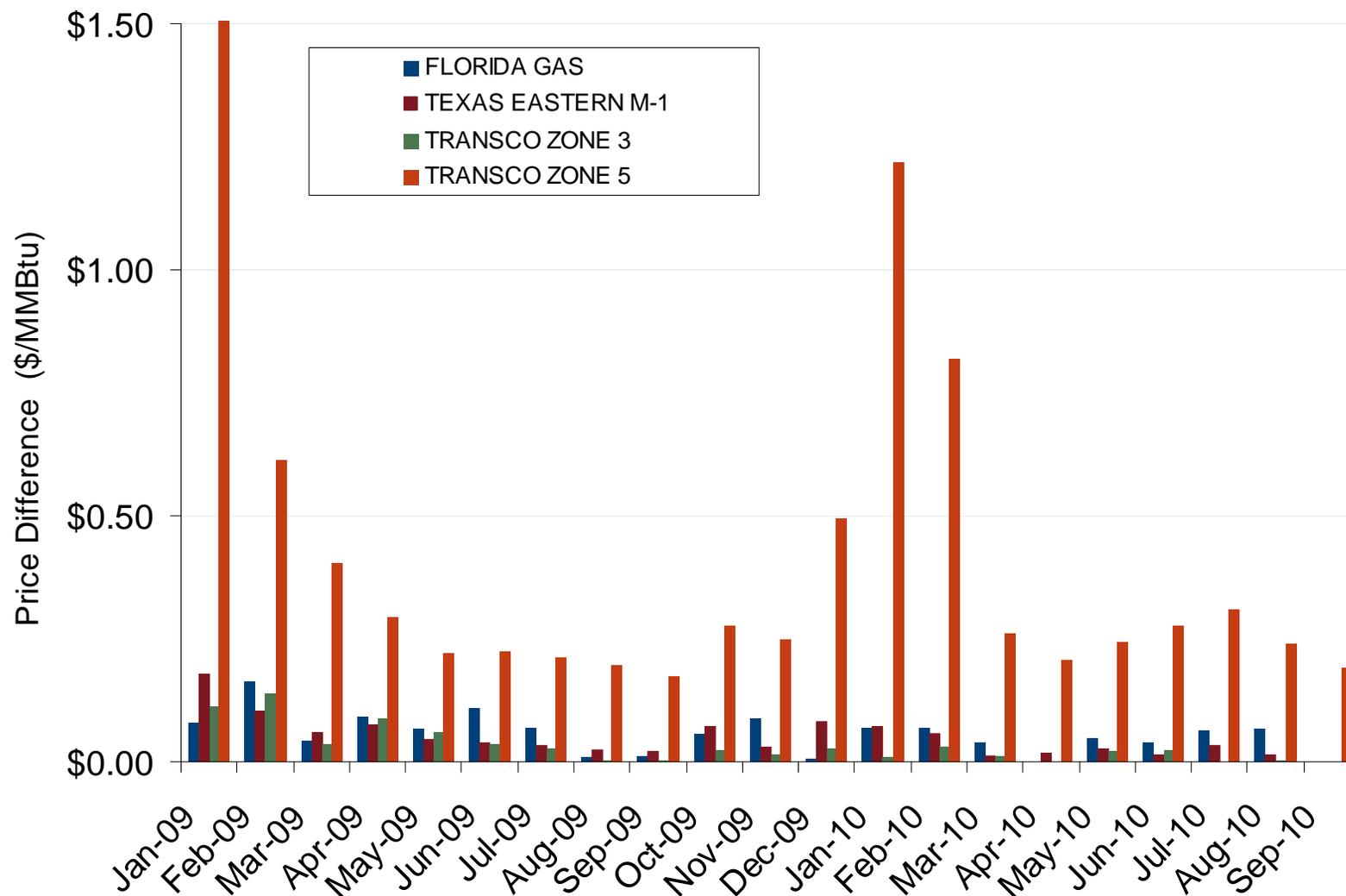
Updated October 7, 2010

# Southeastern Day-Ahead Hub Spot Prices and Basis

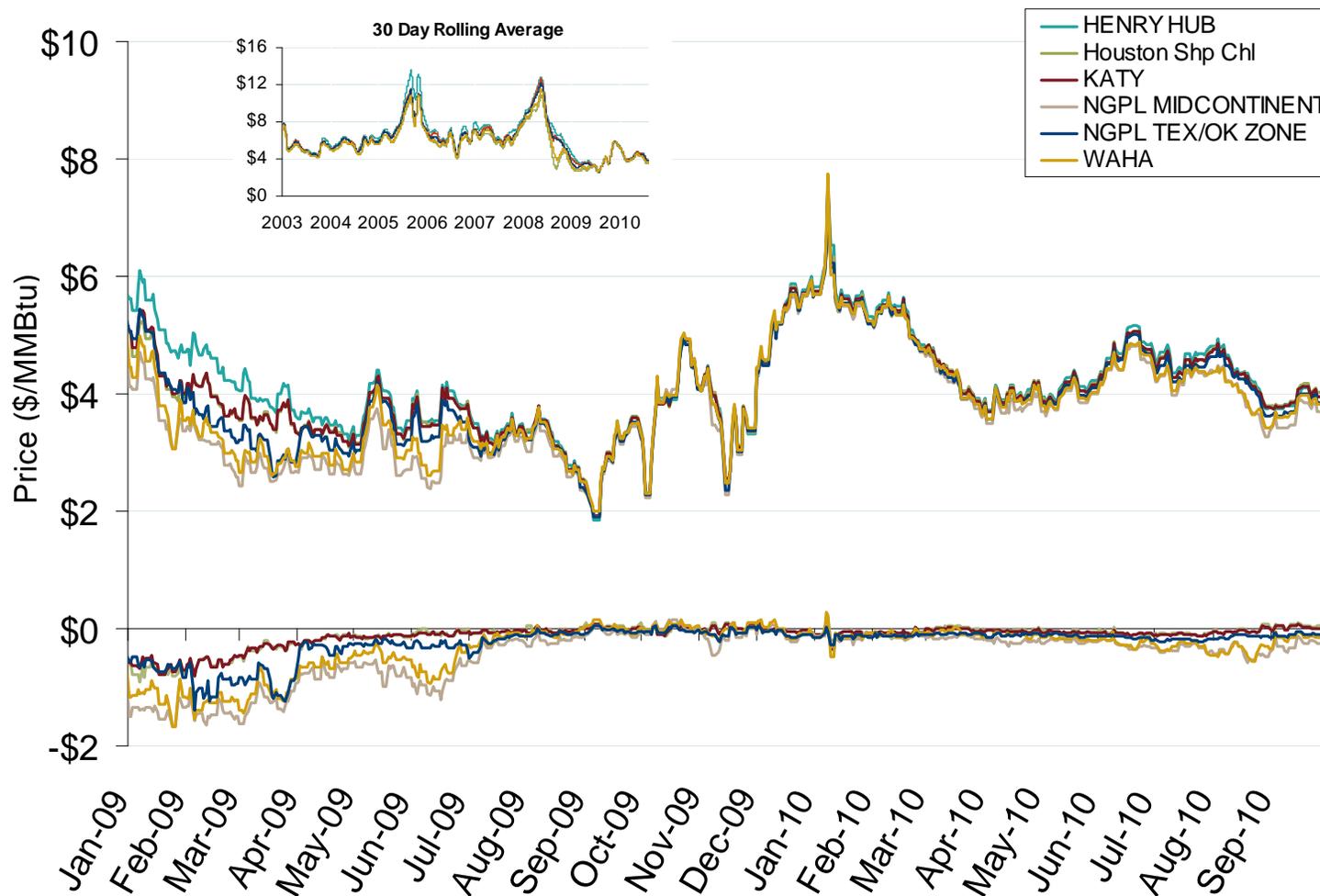


Source: Derived from *Platts* data.  
October 2010 Southeast Snapshot Report

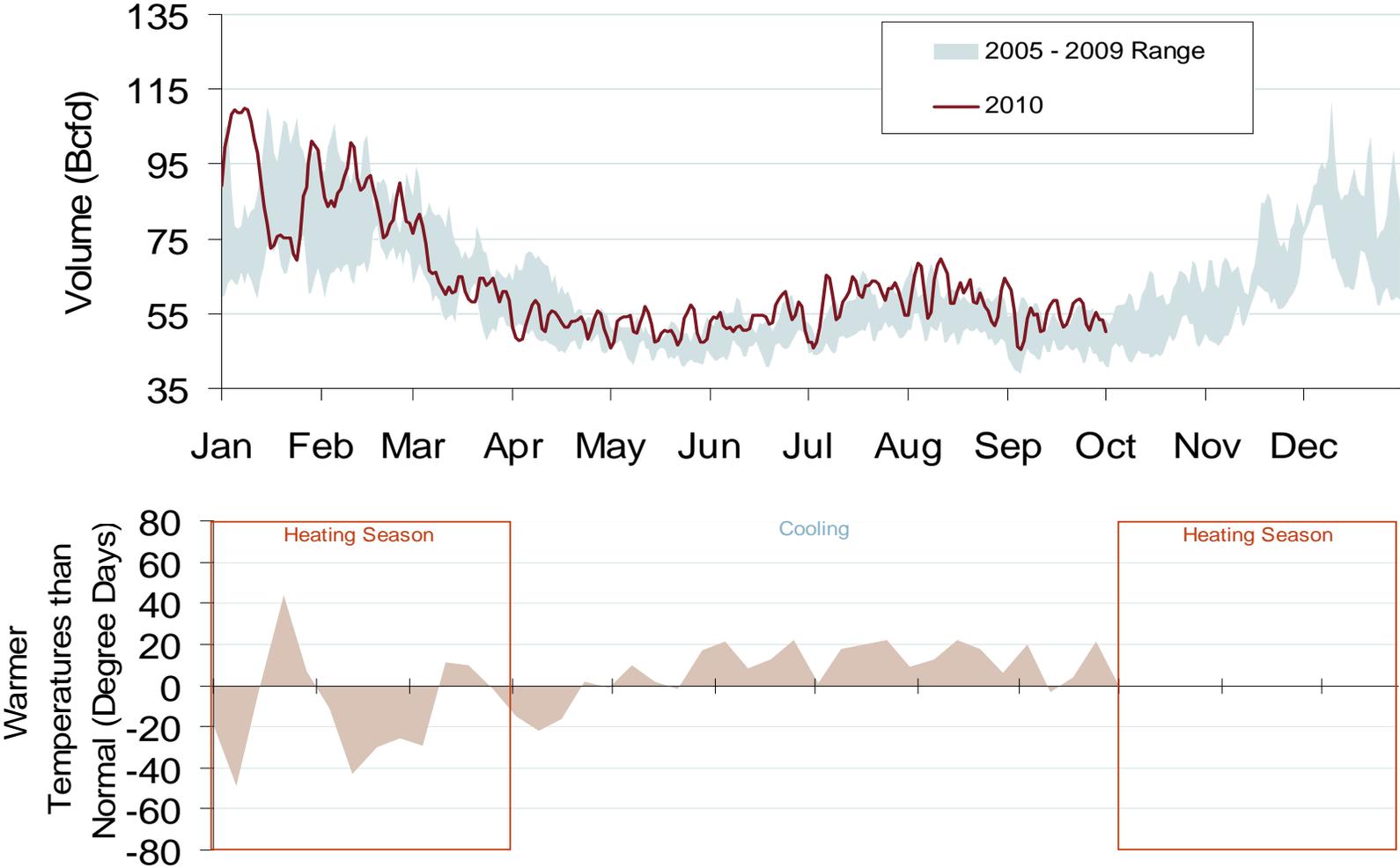
## Southeastern Monthly Average Basis Value to Henry Hub



## Gulf Day-Ahead Hub Spot Prices and Basis

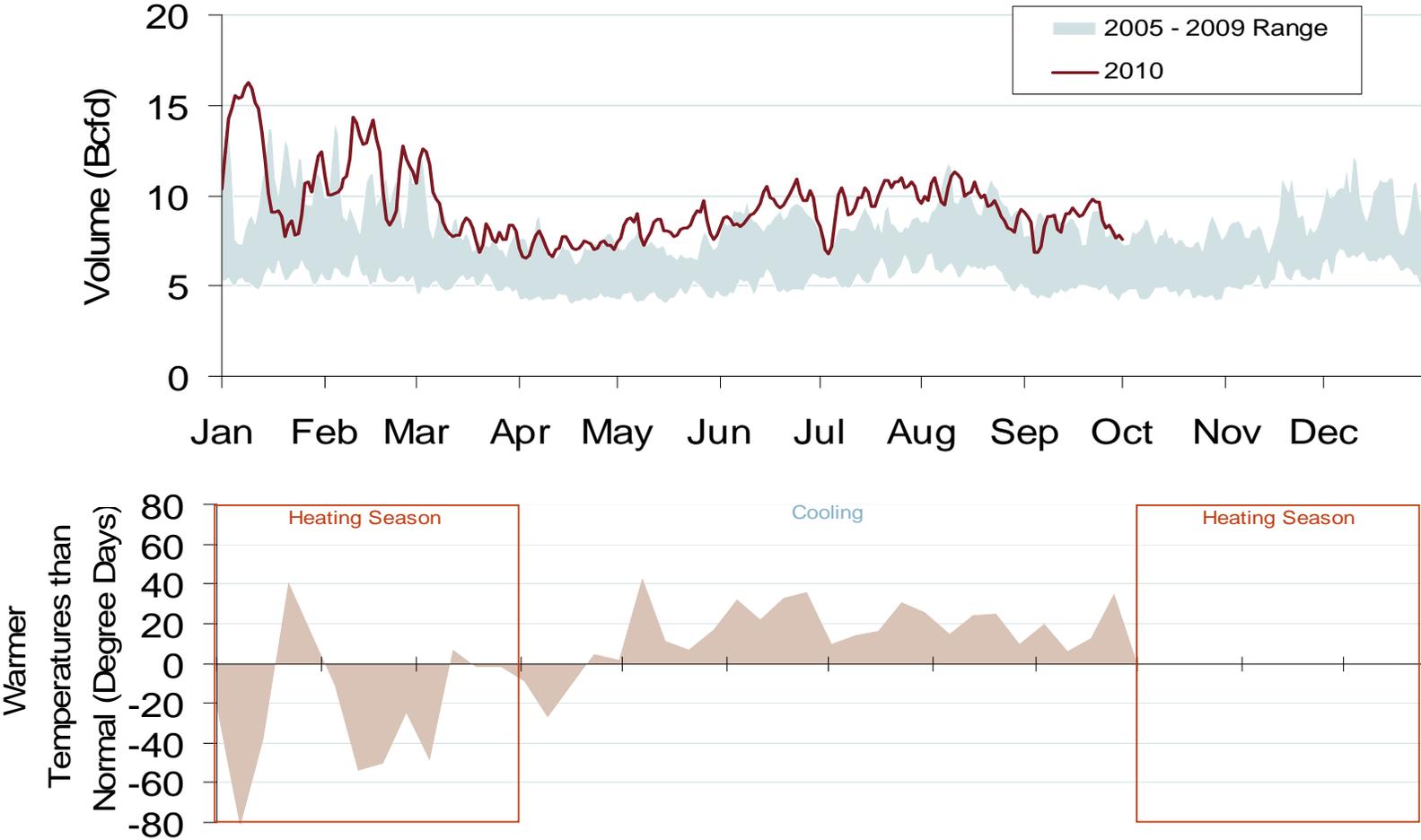


# Total U.S. Natural Gas Demand (All Sectors) and Temperatures

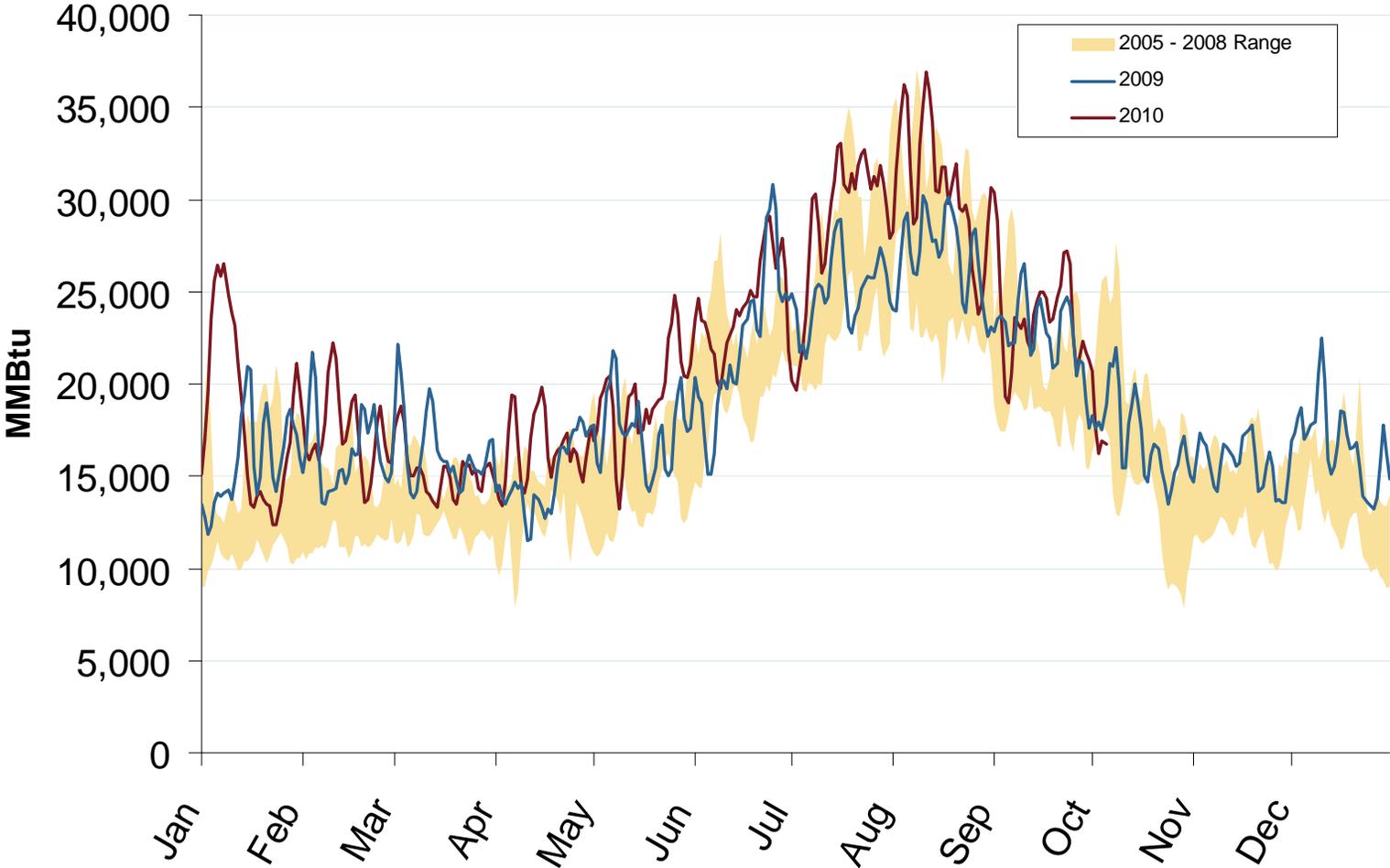


Source: Derived from Bentek Energy and Weekly NOAA data.  
October 2010 Southeast Snapshot Report

# Daily Southeast Natural Gas Demand All Sectors



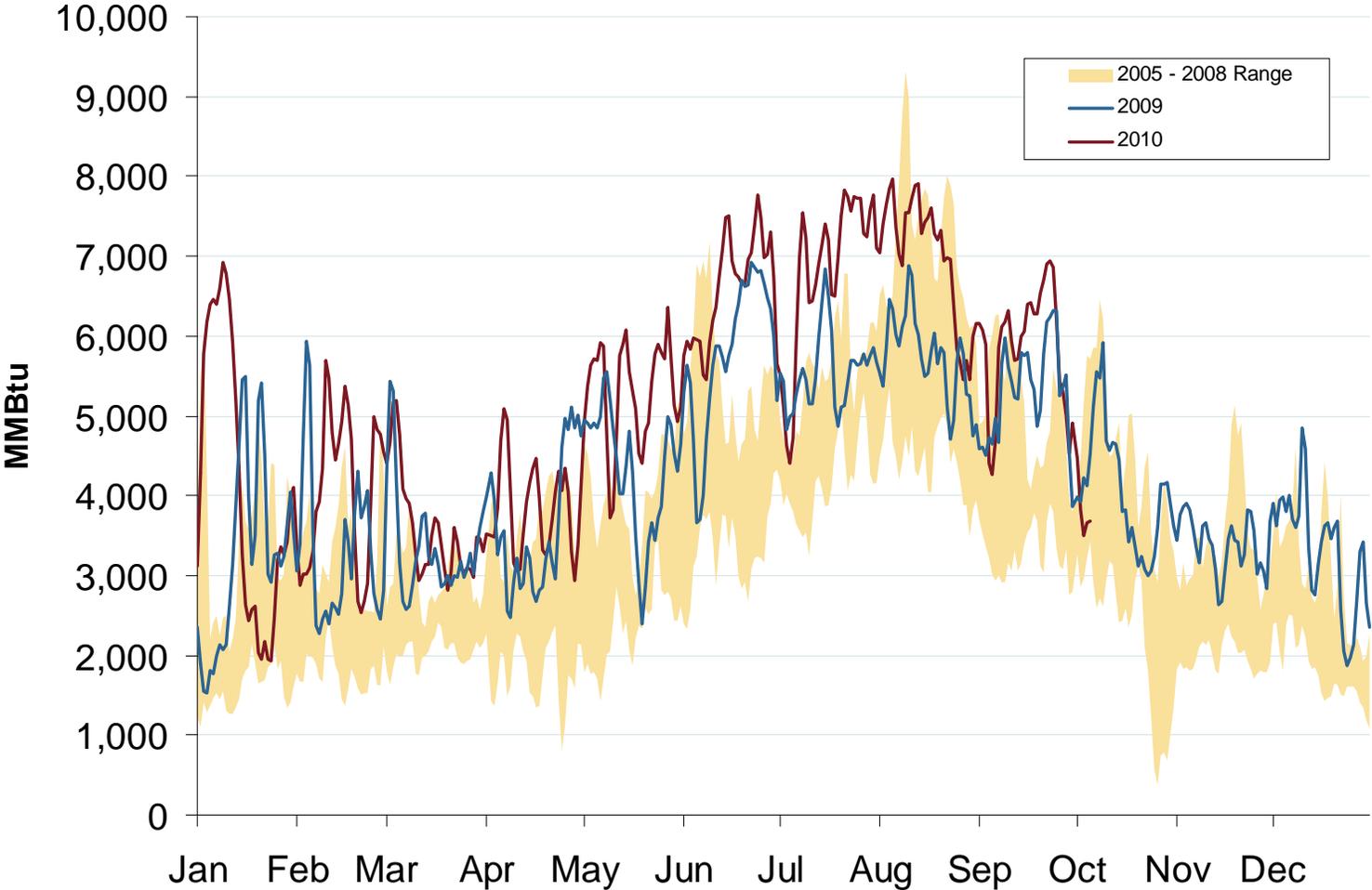
# U.S. Natural Gas Consumption for Power Generation



Source: Derived from Bentek Data  
October 2010 Southeast Snapshot Report

Updated October 7, 2010

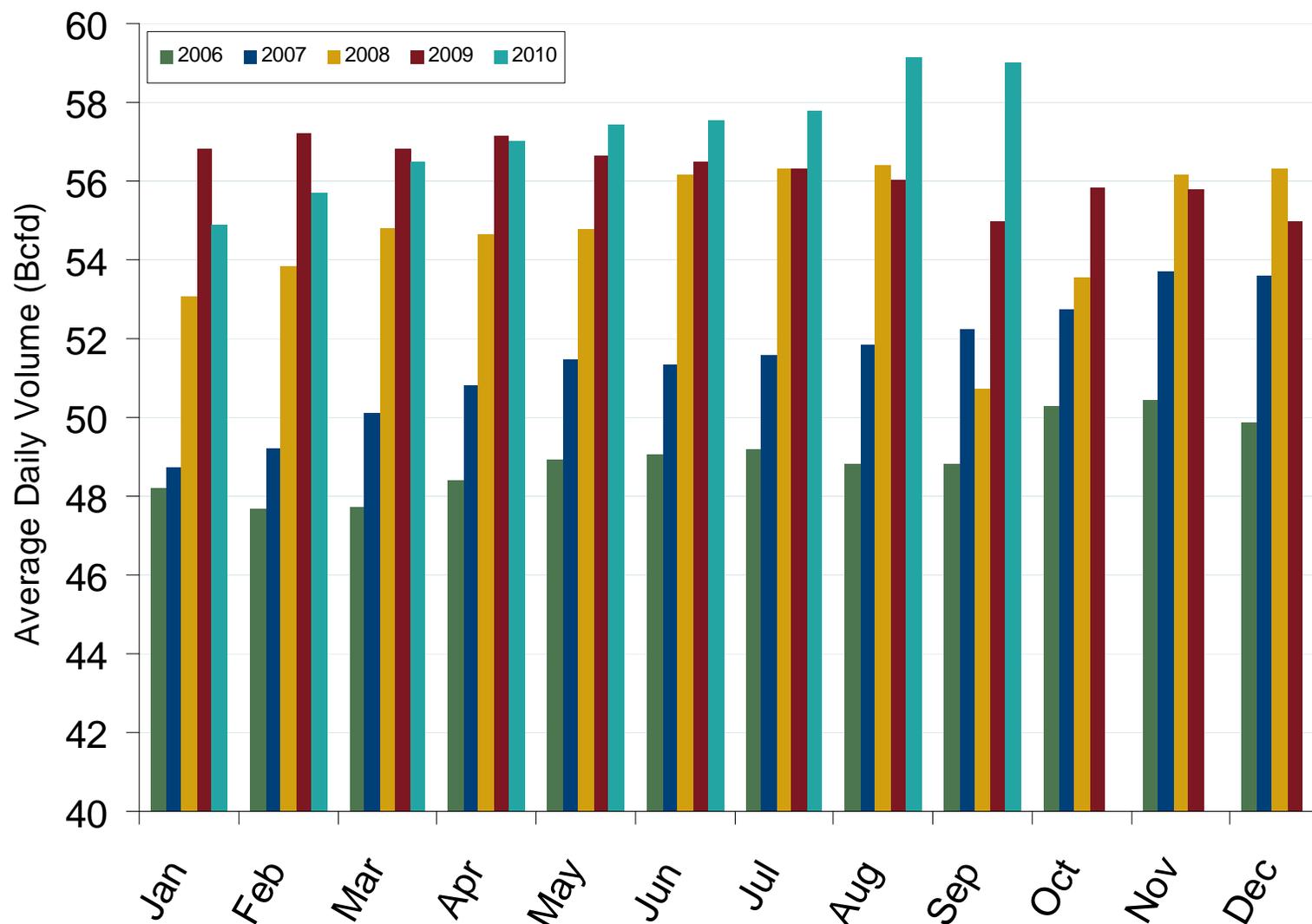
# Southeast Natural Gas Consumption for Power Generation



Source: Derived from Bentek Data  
October 2010 Southeast Snapshot Report

Updated October 7, 2010

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



Source: Derived from *Bentek* data.

Note: Prior to July 2010, chart was derived from a combination of EIA and Bentek data  
October 2010 Southeast Snapshot Report

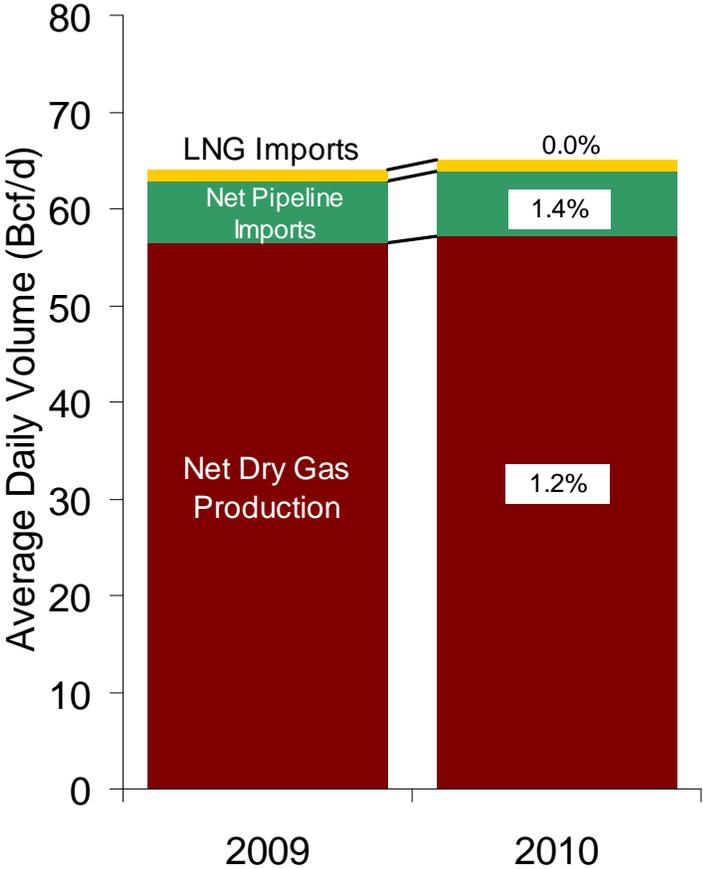
Updated October 7, 2010

20021

# U.S. Natural Gas Supply and Demand 2009 vs. 2010: January - September

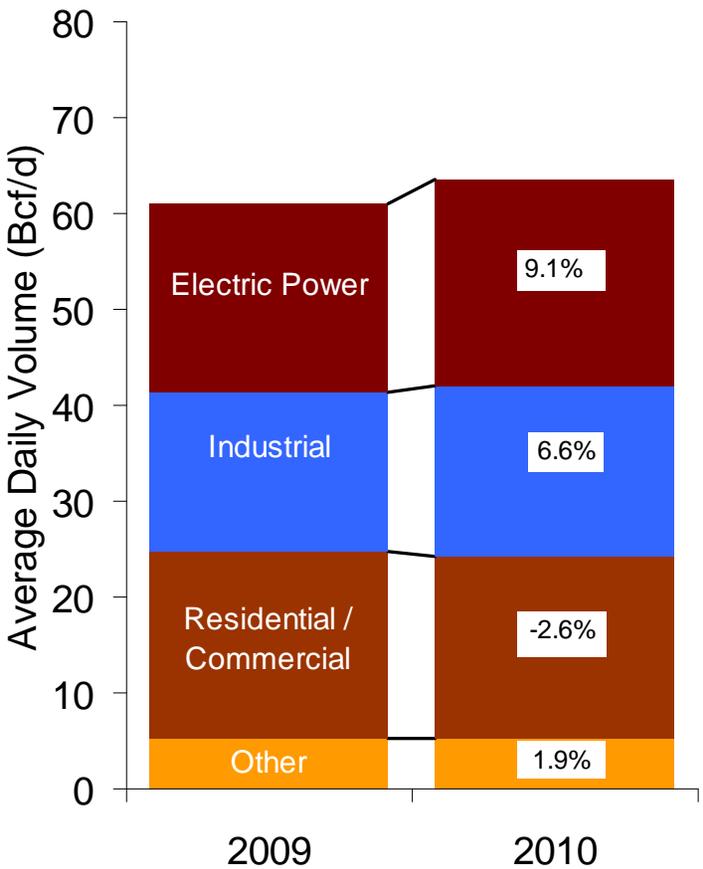
### US Natural Gas Supply

Total Change in Supply 1.2%



### US Natural Gas Demand

Total Change in Demand 4.1%

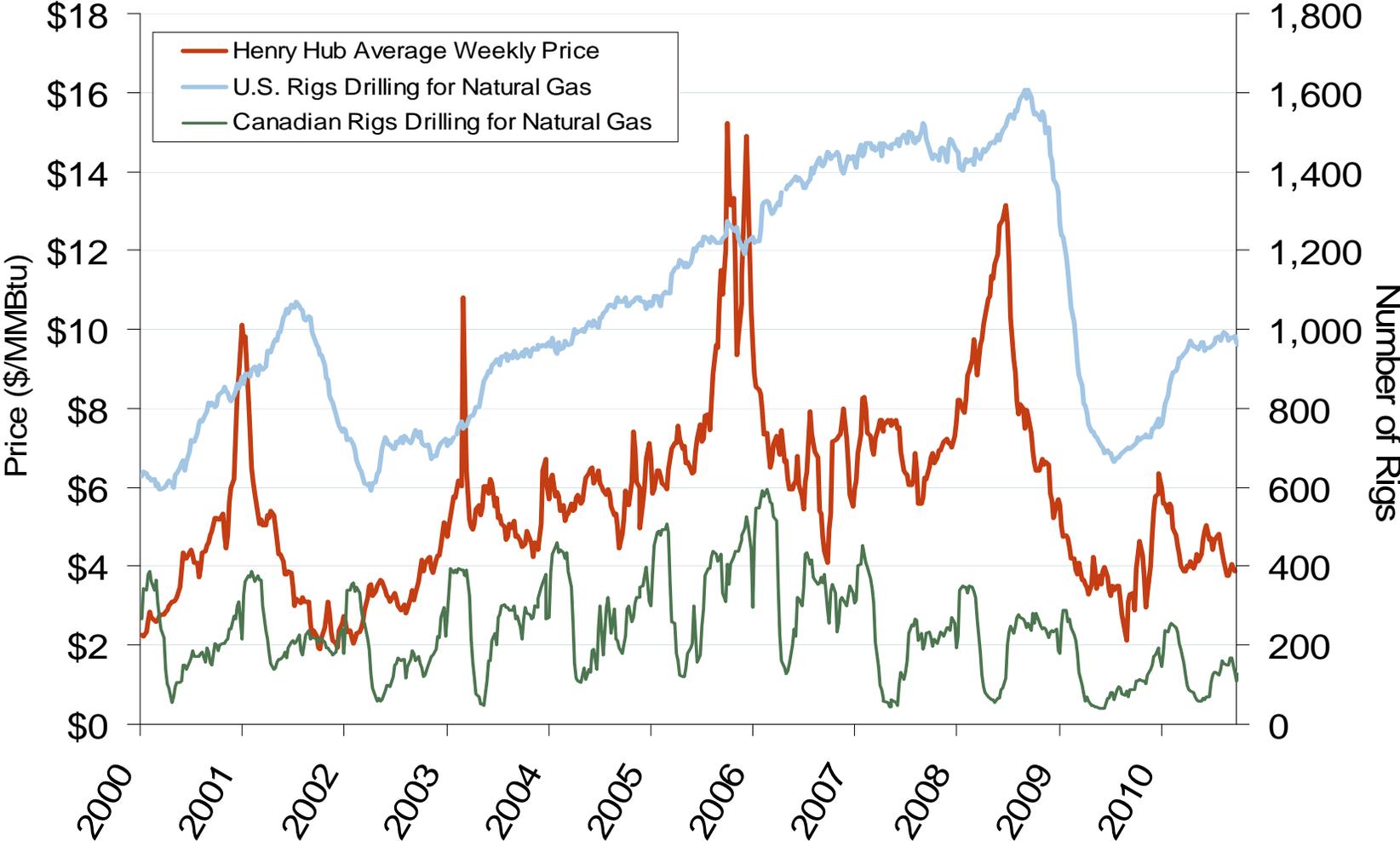


Source: Derived from Bentek data.  
October 2010 Southeast Snapshot Report

## New Pipeline Brings More Shale Gas to Market

- **What:**
  - 185-mile, 42-inch diameter, 2 Bcfd Fayetteville Express Pipeline.
  - Expected initial flow rate of ~600 MMcfd with one receipt point and two delivery points.
  - Joint venture between Kinder Morgan Energy Partners, LP and Energy Transfer Partners, LP.
- **When:**
  - Initial receipt and delivery point testing complete. Service expected to begin the week of October 10.
- **Where:**
  - The pipeline begins in Conway County in north-central Arkansas and terminates in Panola County in northwest Mississippi.
- **Particulars:**
  - The pipeline will transport Fayetteville shale gas to interstate pipelines serving the Midwest and Northeast.
  - Interconnects with four pipelines – NGPL, Trunkline, ANR and Texas Gas.

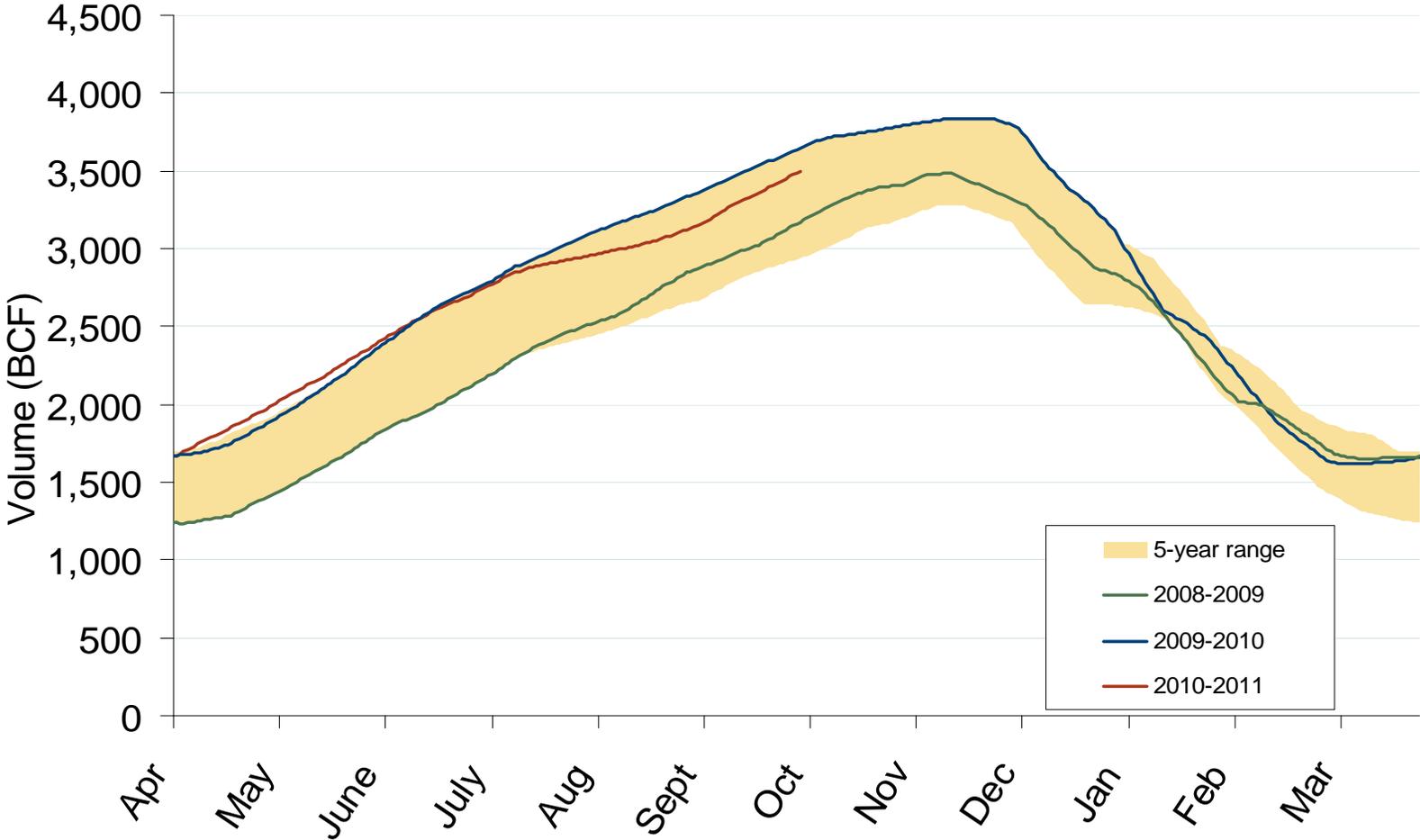
# U.S. and Canadian Natural Gas Drilling Rig Count and Daily Spot Prices



Source: Derived from *Platts* and *Baker Hughes* data.  
October 2010 Southeast Snapshot Report

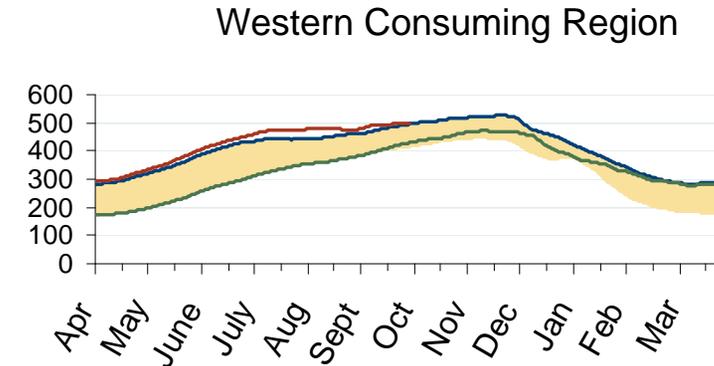
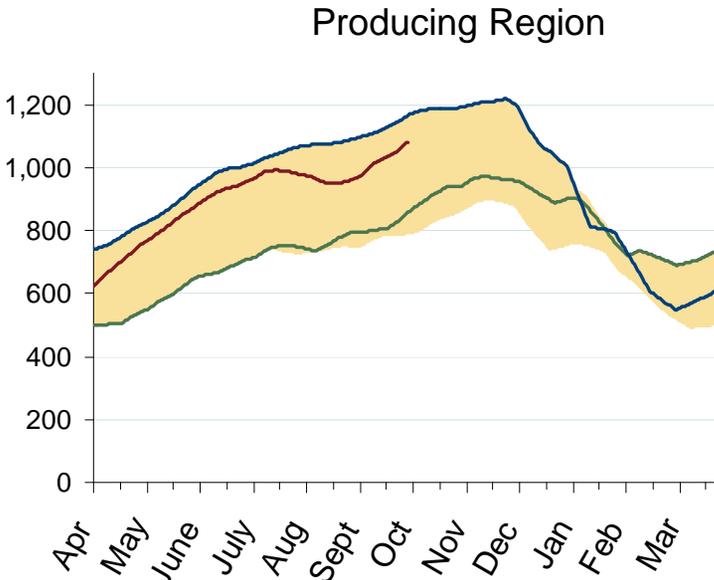
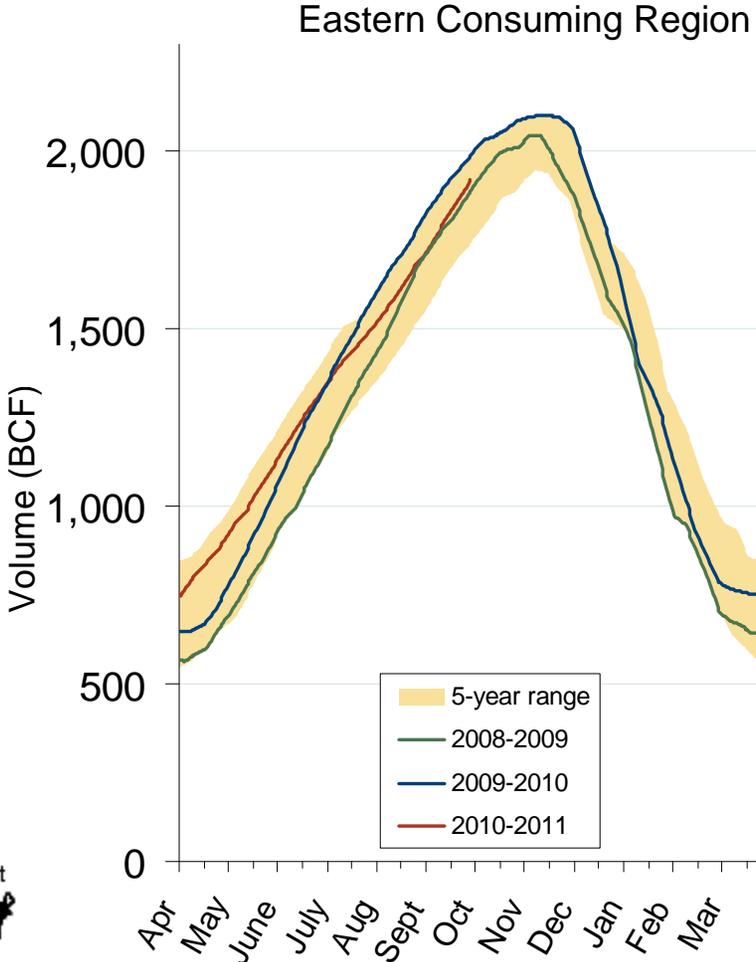
Updated October 7, 2010

# Total U.S. Working Gas in Storage



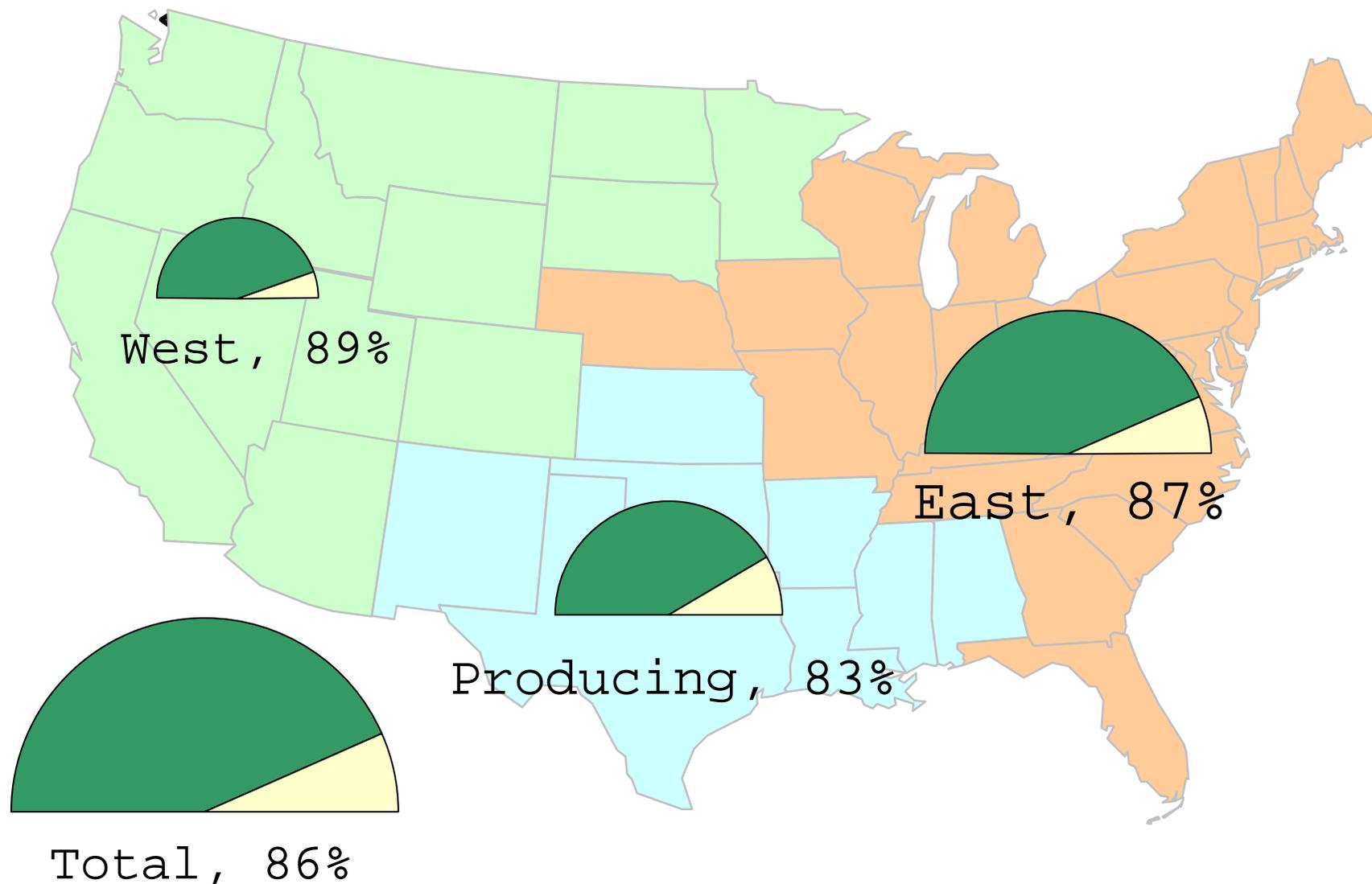
Source: Derived from EIA data.  
October 2010 Southeast Snapshot Report

# Regional Totals of Working Gas in Storage

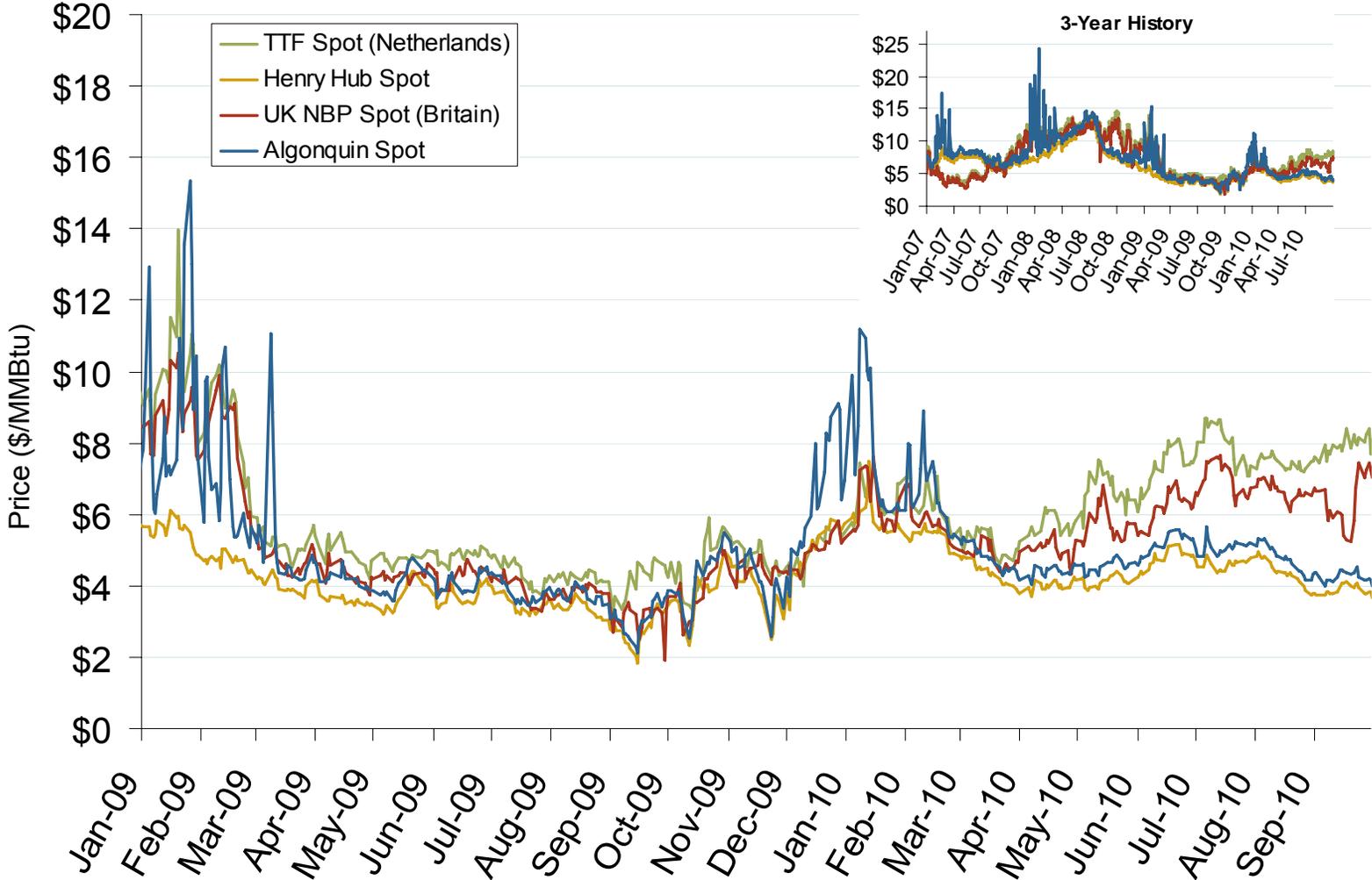


Source: Derived from EIA data. October 2010 Southeast Snapshot Report

## Natural Gas Storage Inventories – % full as of October 1, 2010



# Atlantic Basin European and US Spot Natural Gas Prices

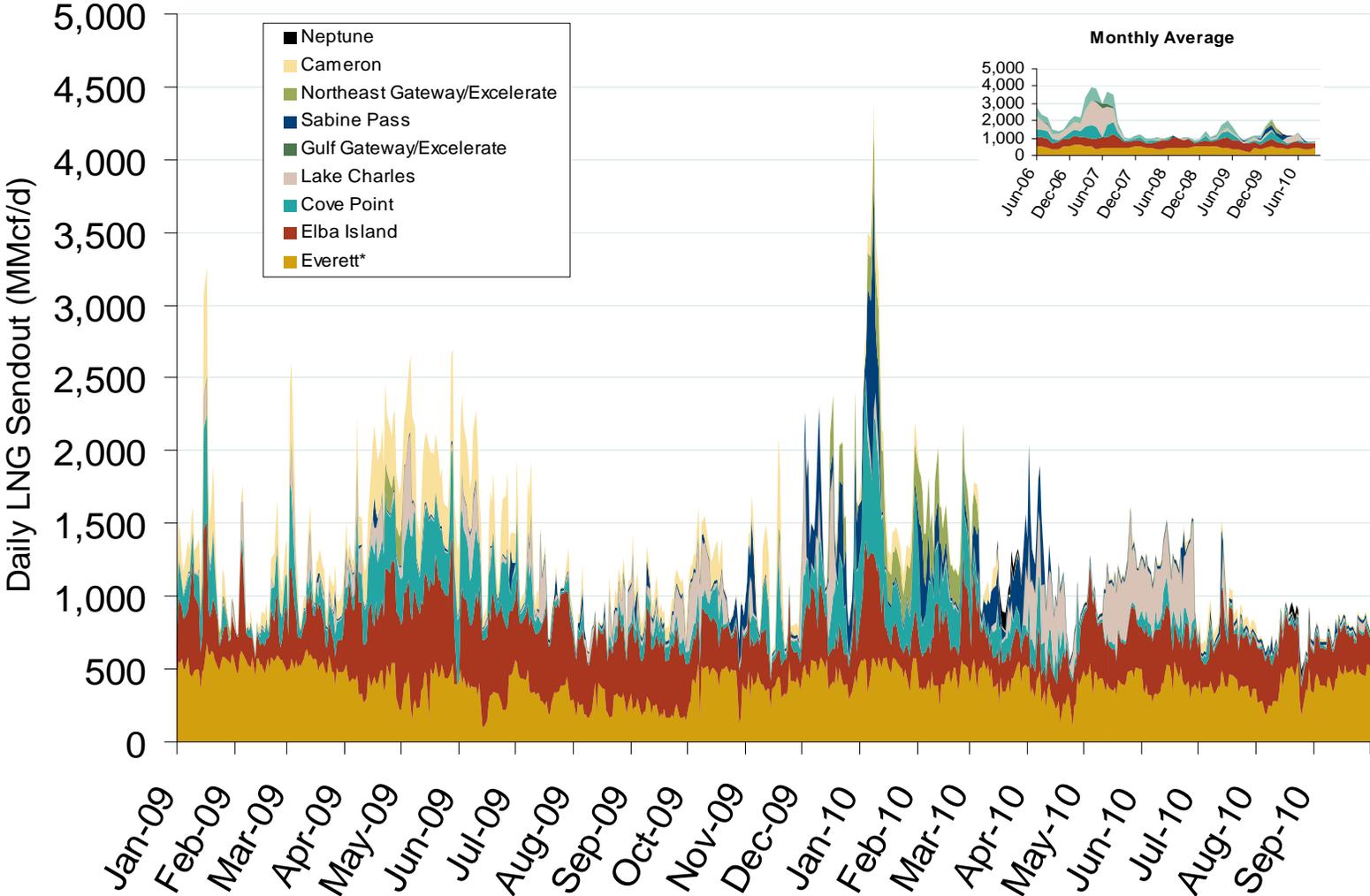


Source: Derived from *Bloomberg* and *ICE* data.  
October 2010 Southeast Snapshot Report

## World LNG Estimated October 2010 Landed Prices



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

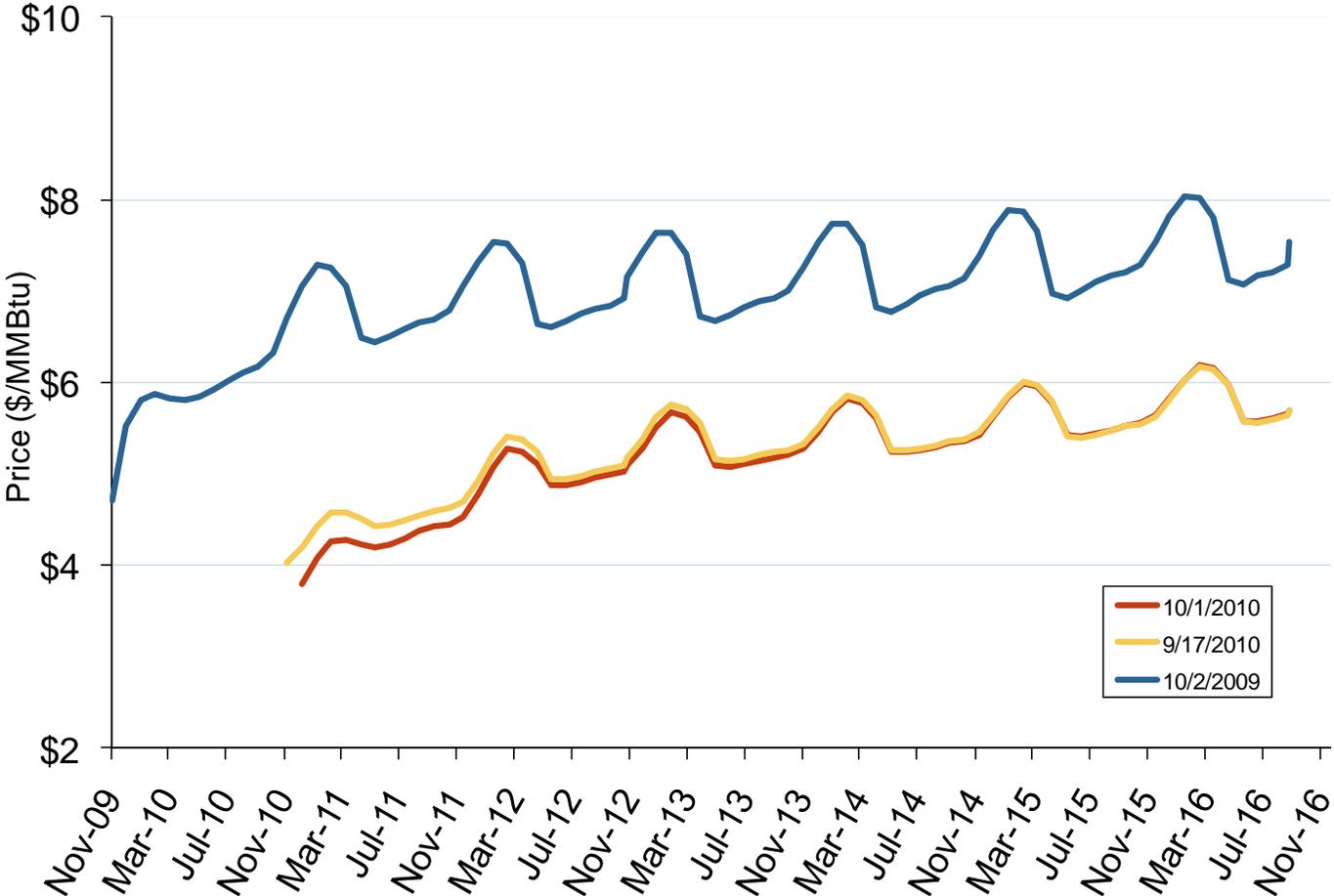


Source: Derived from Bentek data.

\* 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.

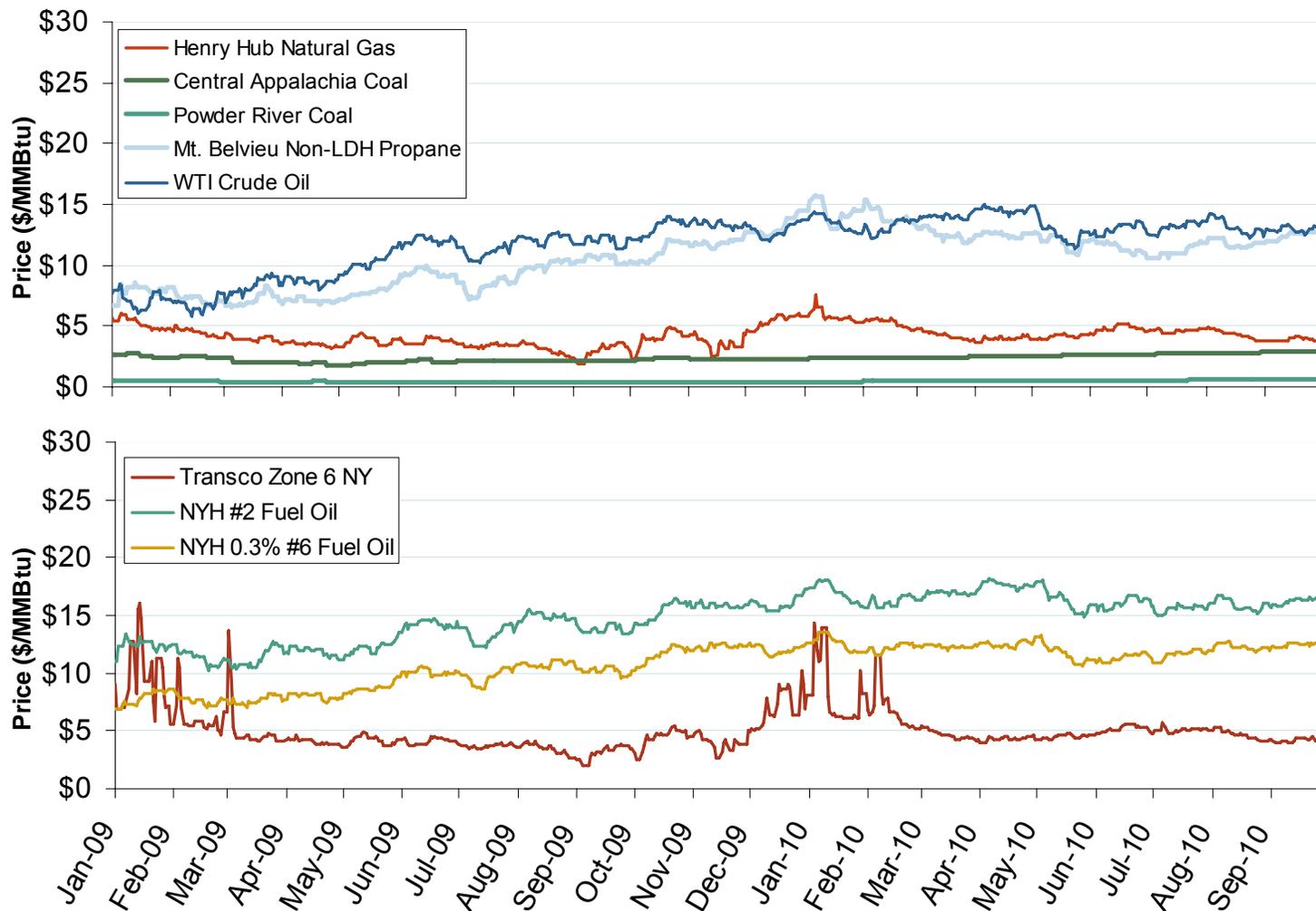
Updated October 7, 2010

# NYMEX Natural Gas Forward Price Curve



The NYMEX futures contract trades in 10,000 million Btu units. The blue series shows the forward price curve for these contracts 1-year ago. The red and yellow curves show prices for contracts traded on the current and previous months.

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

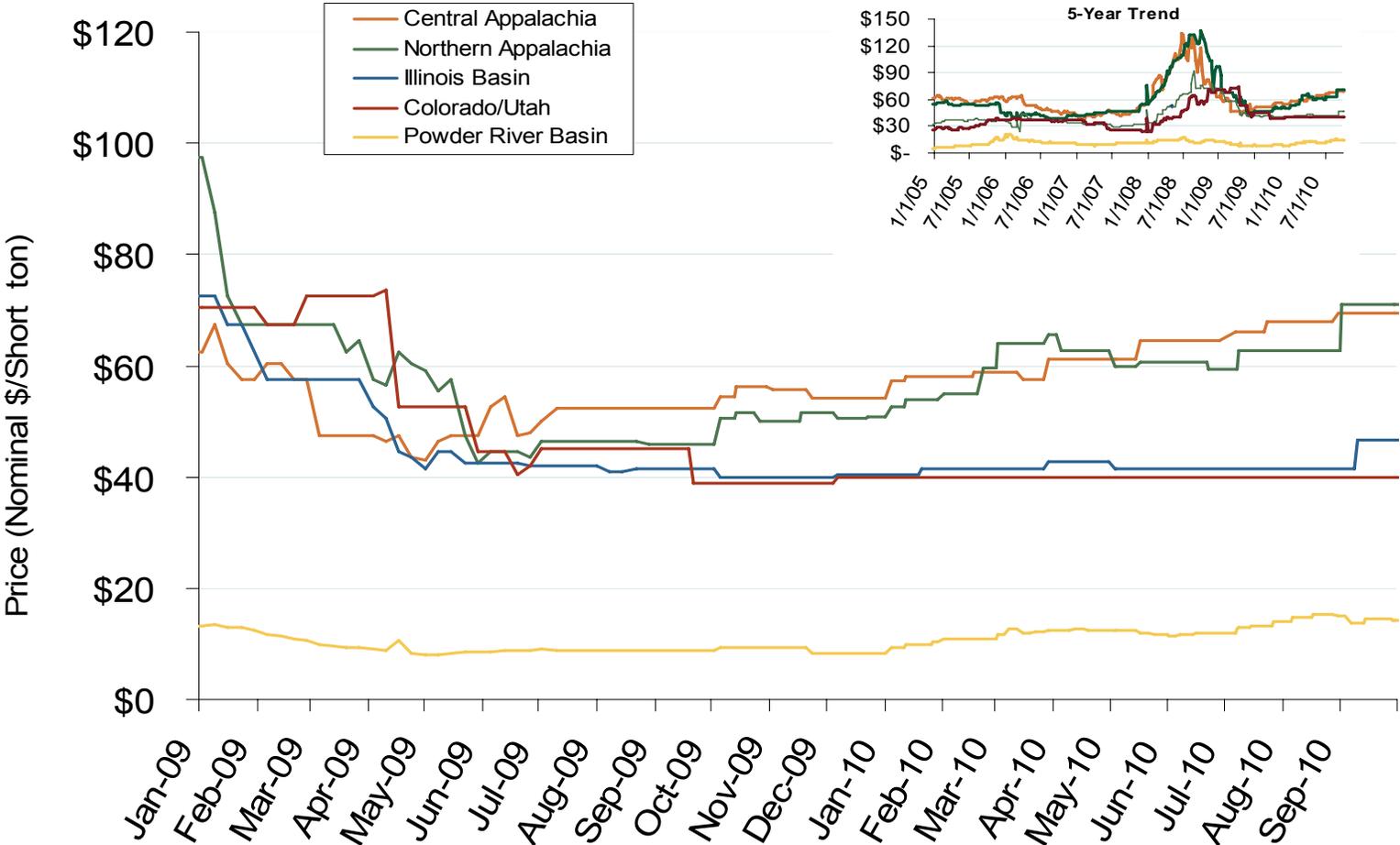


Source: Derived from *ICE* and *Bloomberg* data.

Note: 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.

Updated October 7, 2010

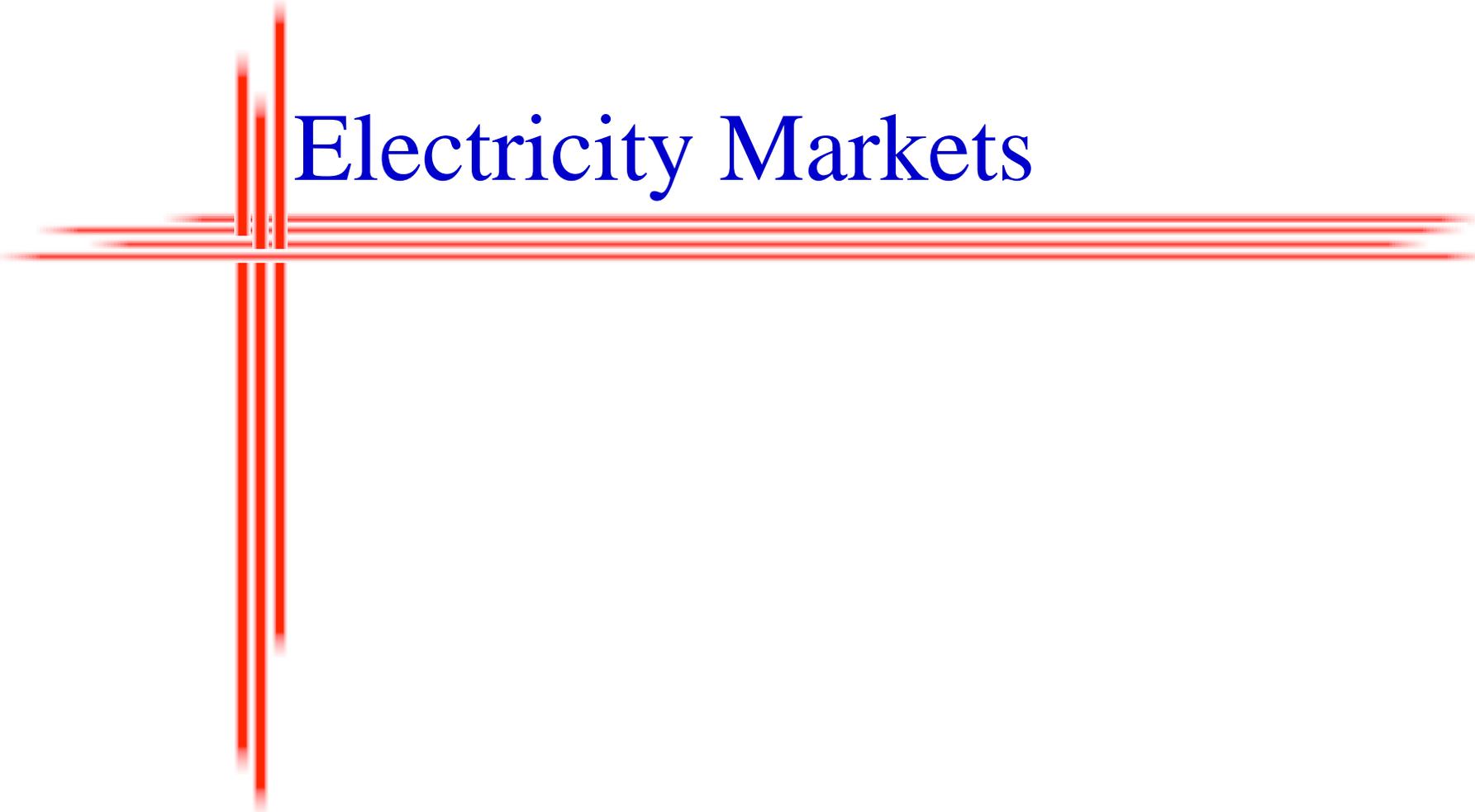
# Regional Coal Spot Prices



Note: 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.

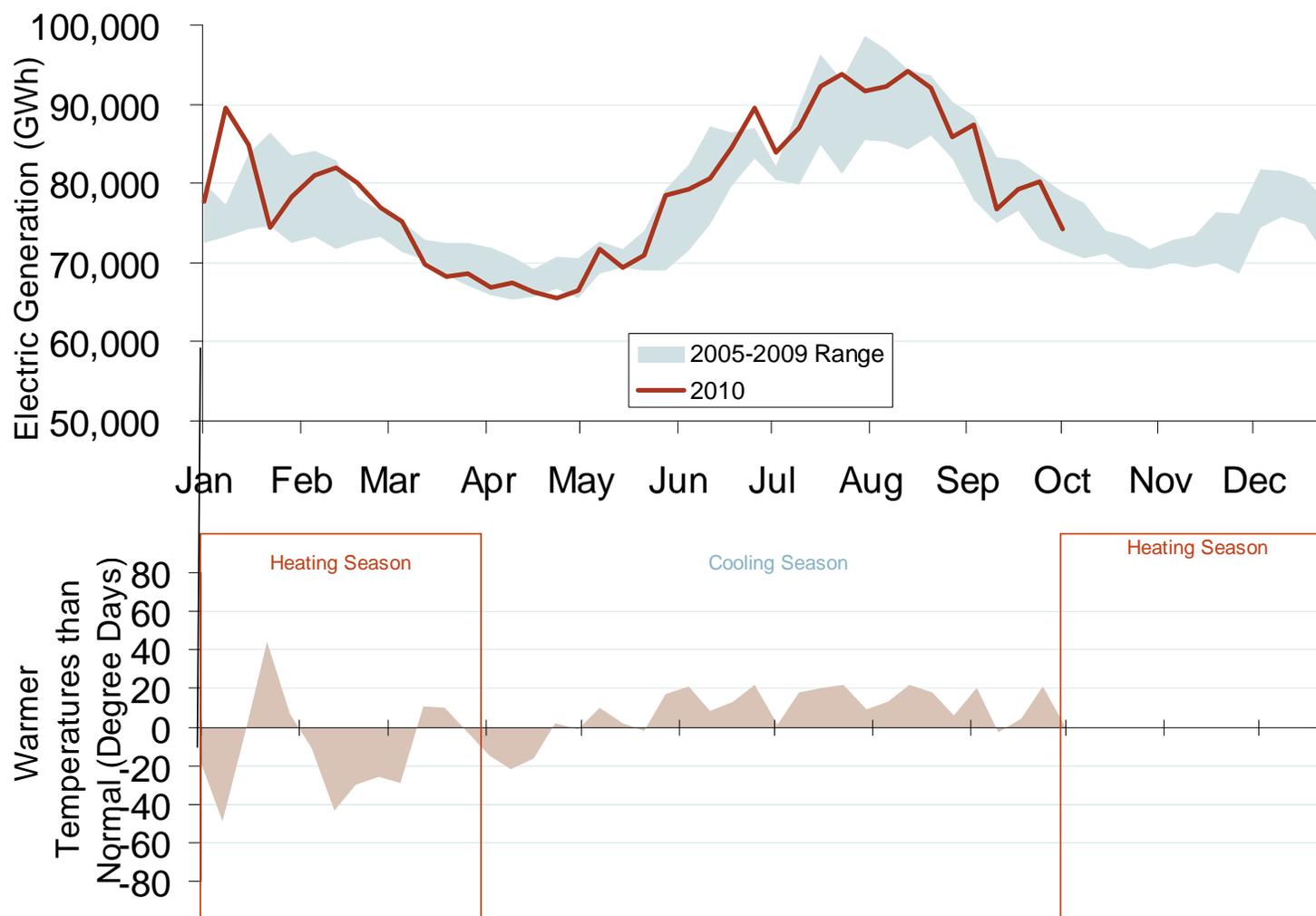
Source: Derived from *Bloomberg* data.  
October 2010 Southeast Snapshot Report

Updated October 7, 2010

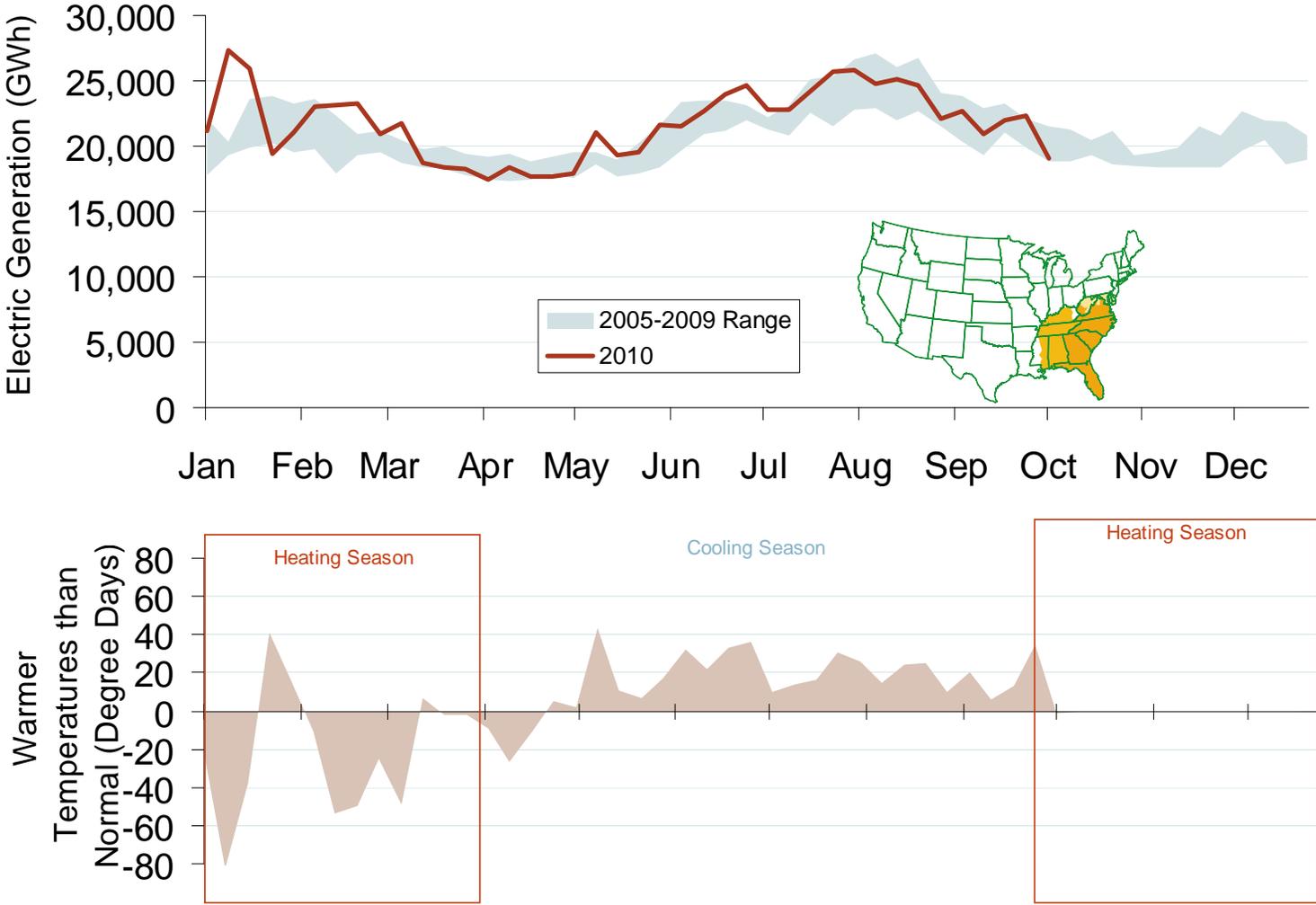


# Electricity Markets

## Weekly U.S. Electric Generation Output and Temperatures

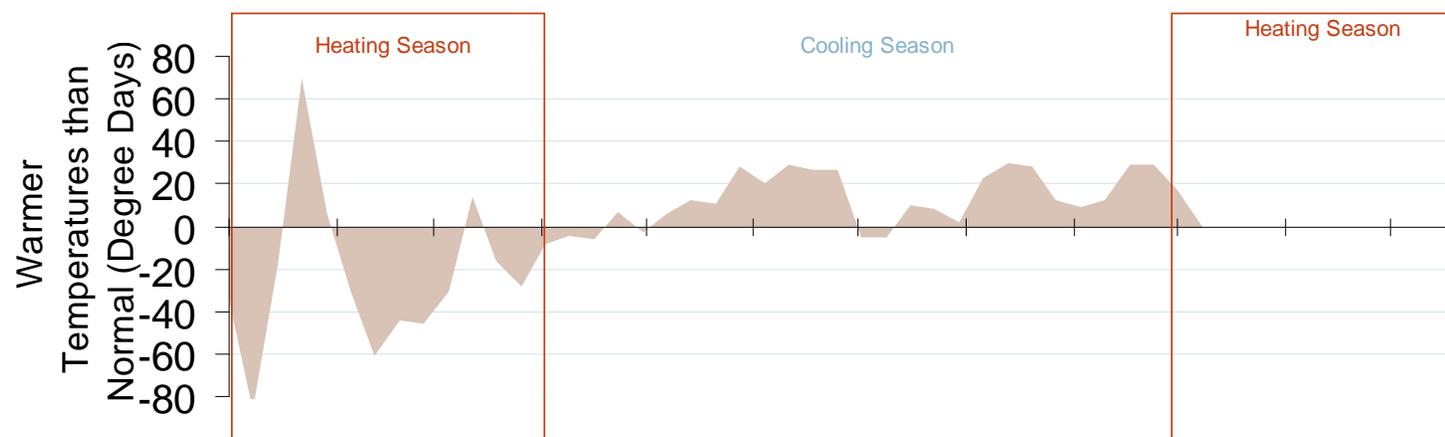
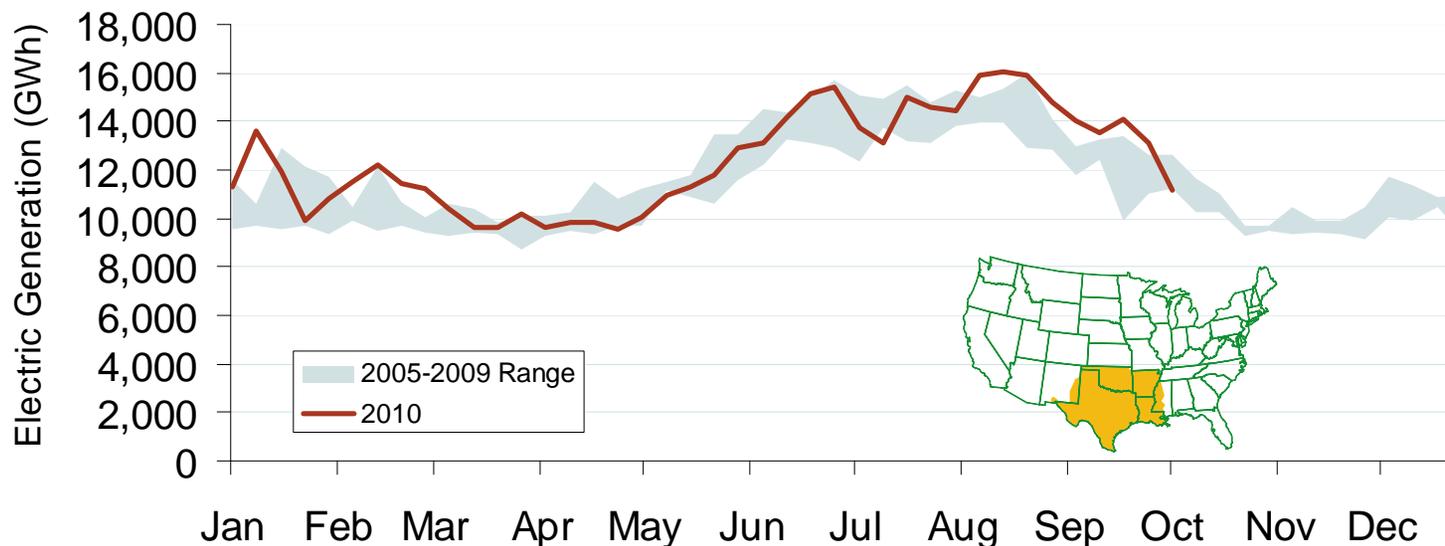


# Weekly Electric Generation Output and Temperatures Southeast Region

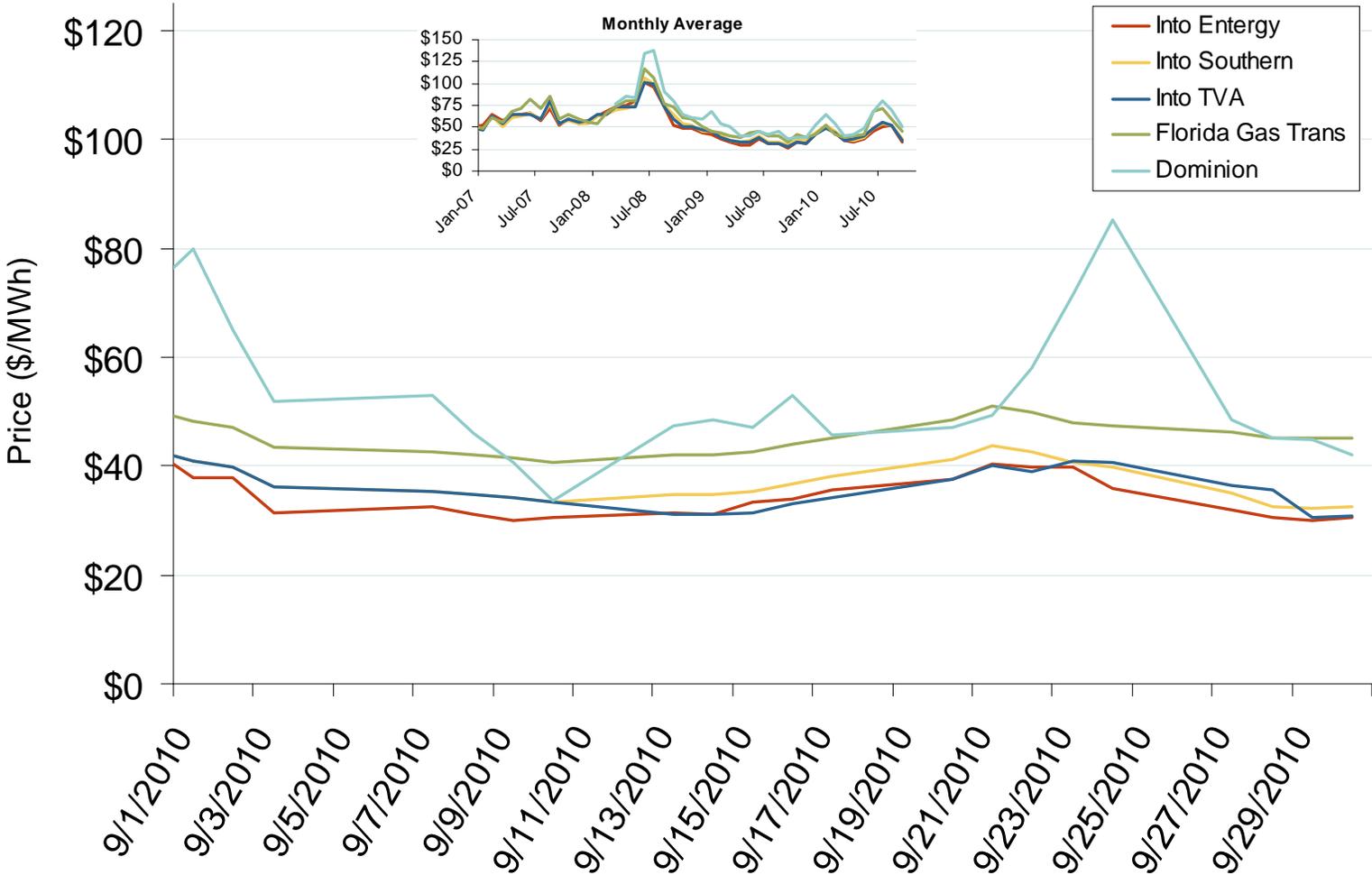


Source: Derived from *EI* and *NOAA* data.  
October 2010 Southeast Snapshot Report

# Weekly Electric Generation Output and Temperatures South Central Region



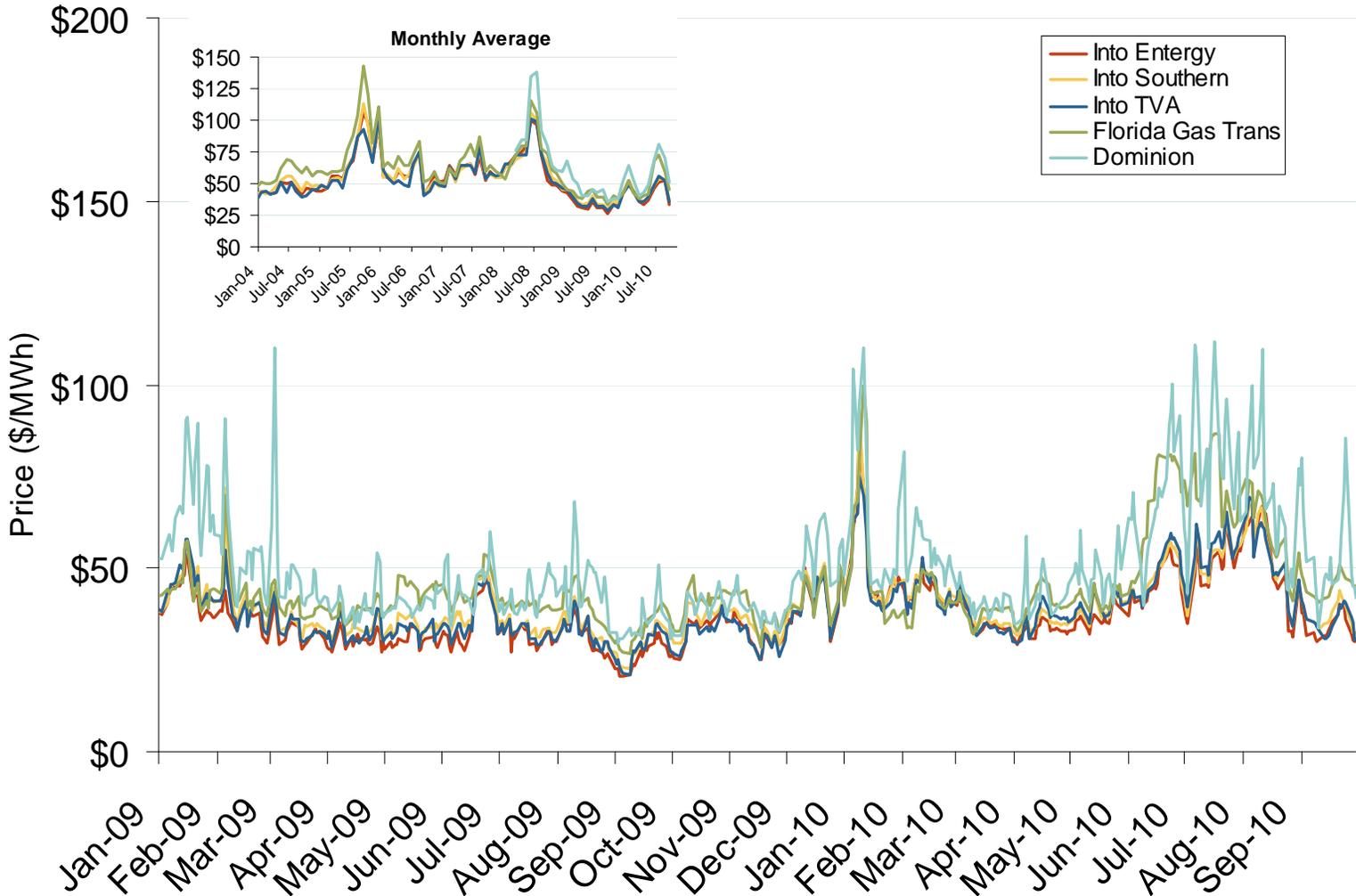
# Southeastern Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from Platts data.  
October 2010 Southeast Snapshot Report

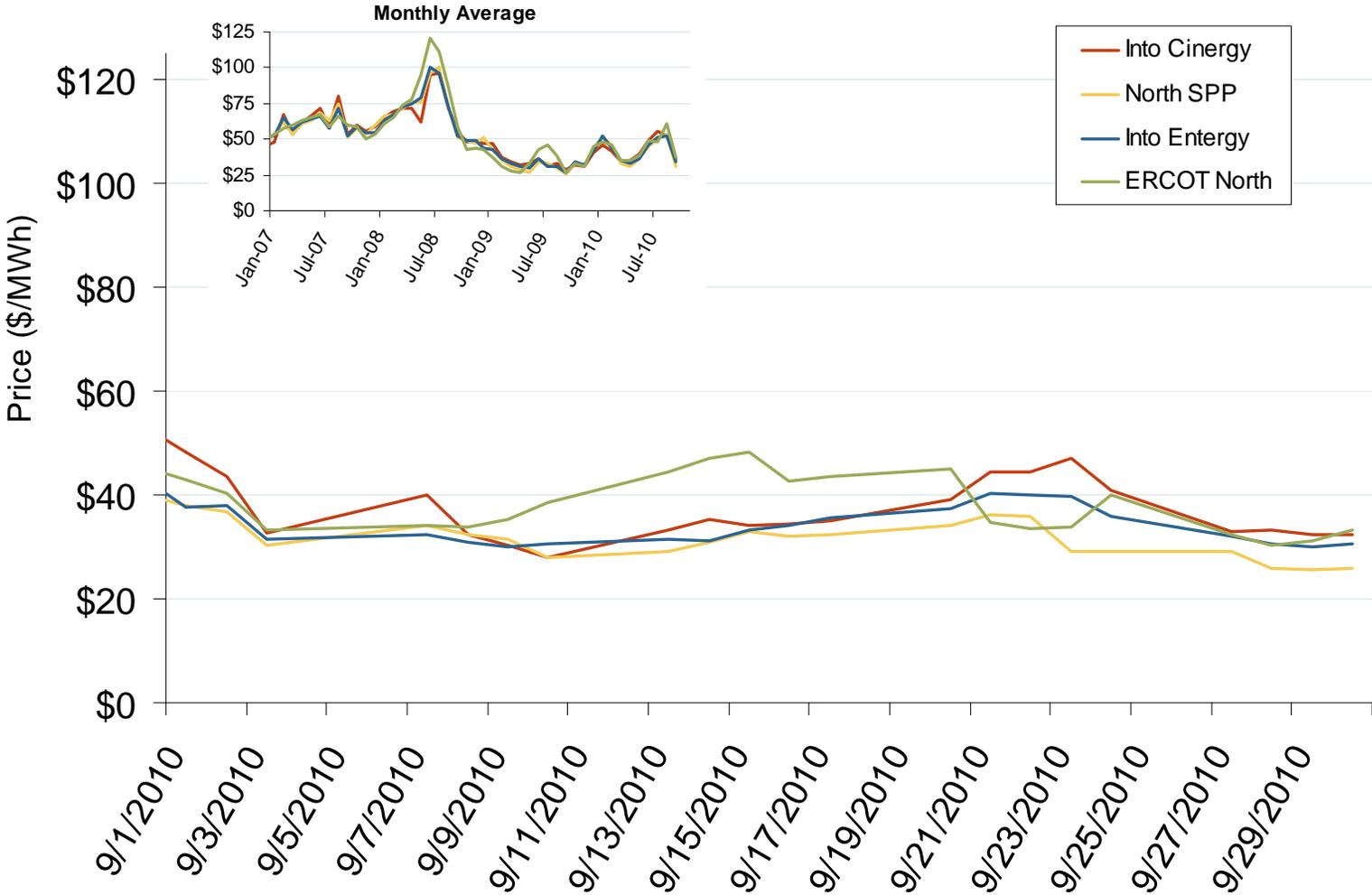
Updated October 7, 2010

# Southeastern Daily Bilateral Day-Ahead On-Peak Prices



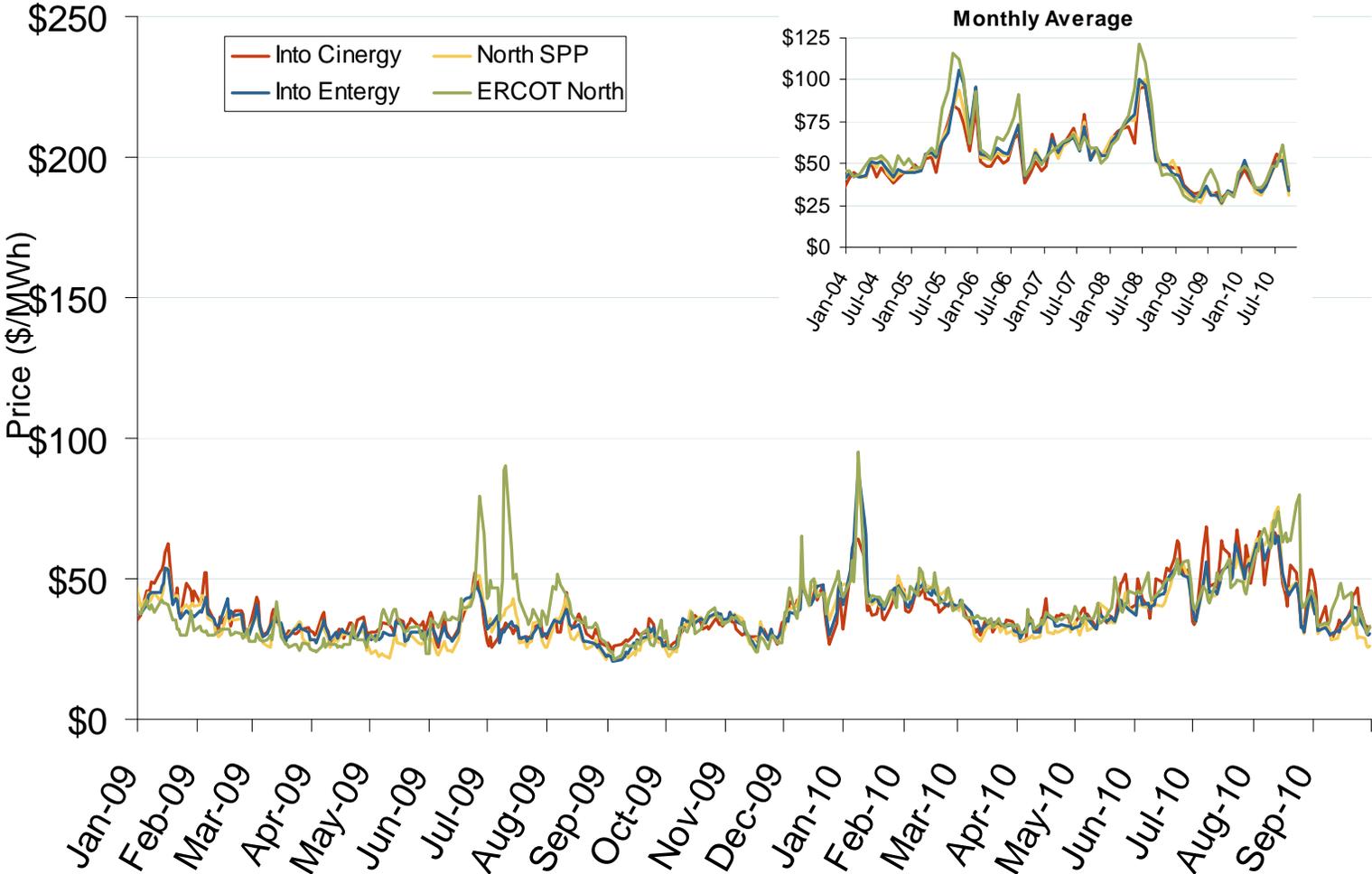
Source: Derived from *Platts* data.  
October 2010 Southeast Snapshot Report

# Midwestern Daily Bilateral Day-Ahead On-Peak Prices



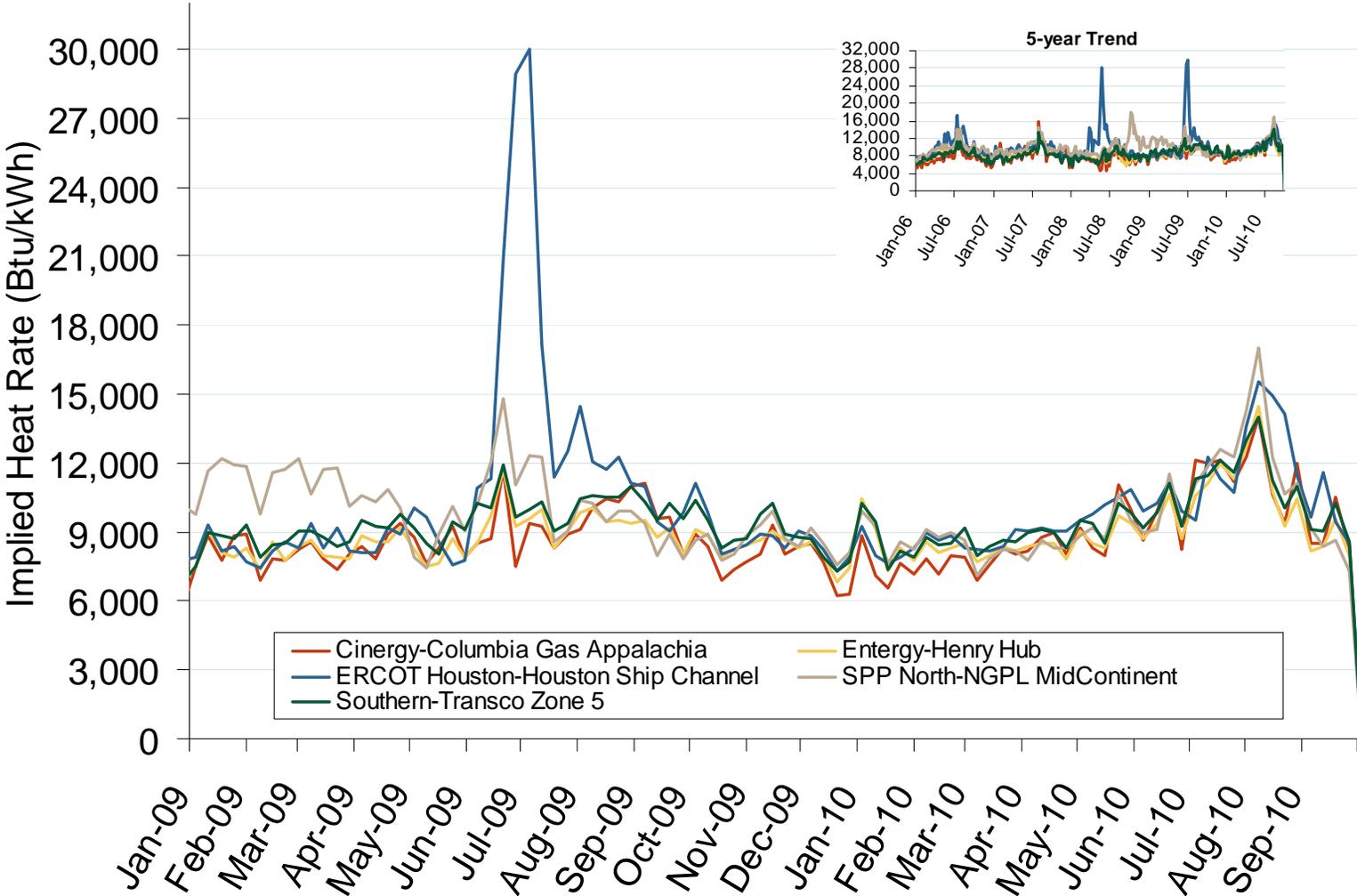
Source: Derived from *Platts* data.  
October 2010 Southeast Snapshot Report

# Midwestern Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from *Platts* data.  
October 2010 Southeast Snapshot Report

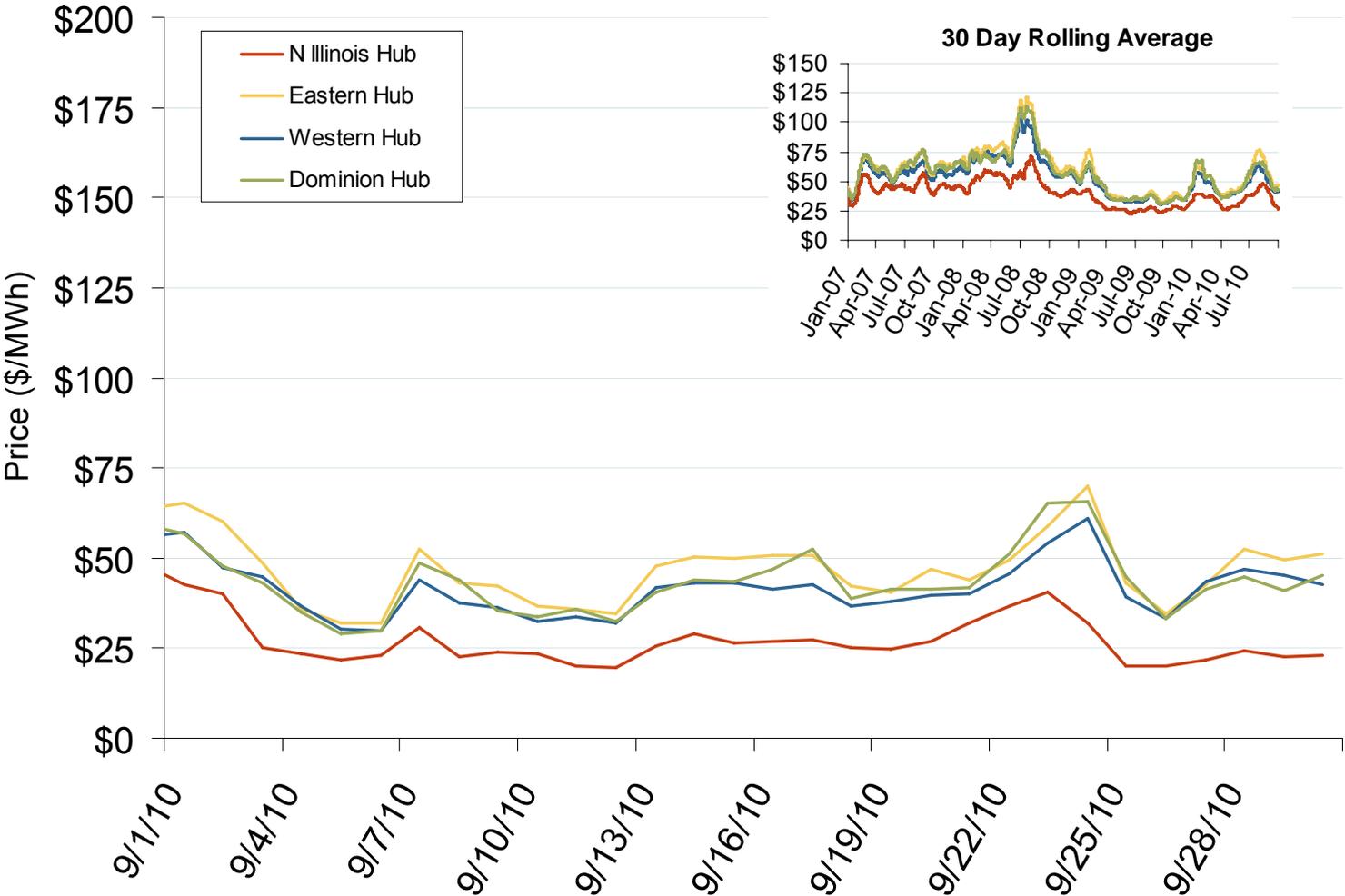
# Implied Heat Rates at South Central Trading Points Weekly Averages



Source: Derived from *Platts* on-peak electric and natural gas price data.  
October 2010 Southeast Snapshot Report

Updated October 7, 2010

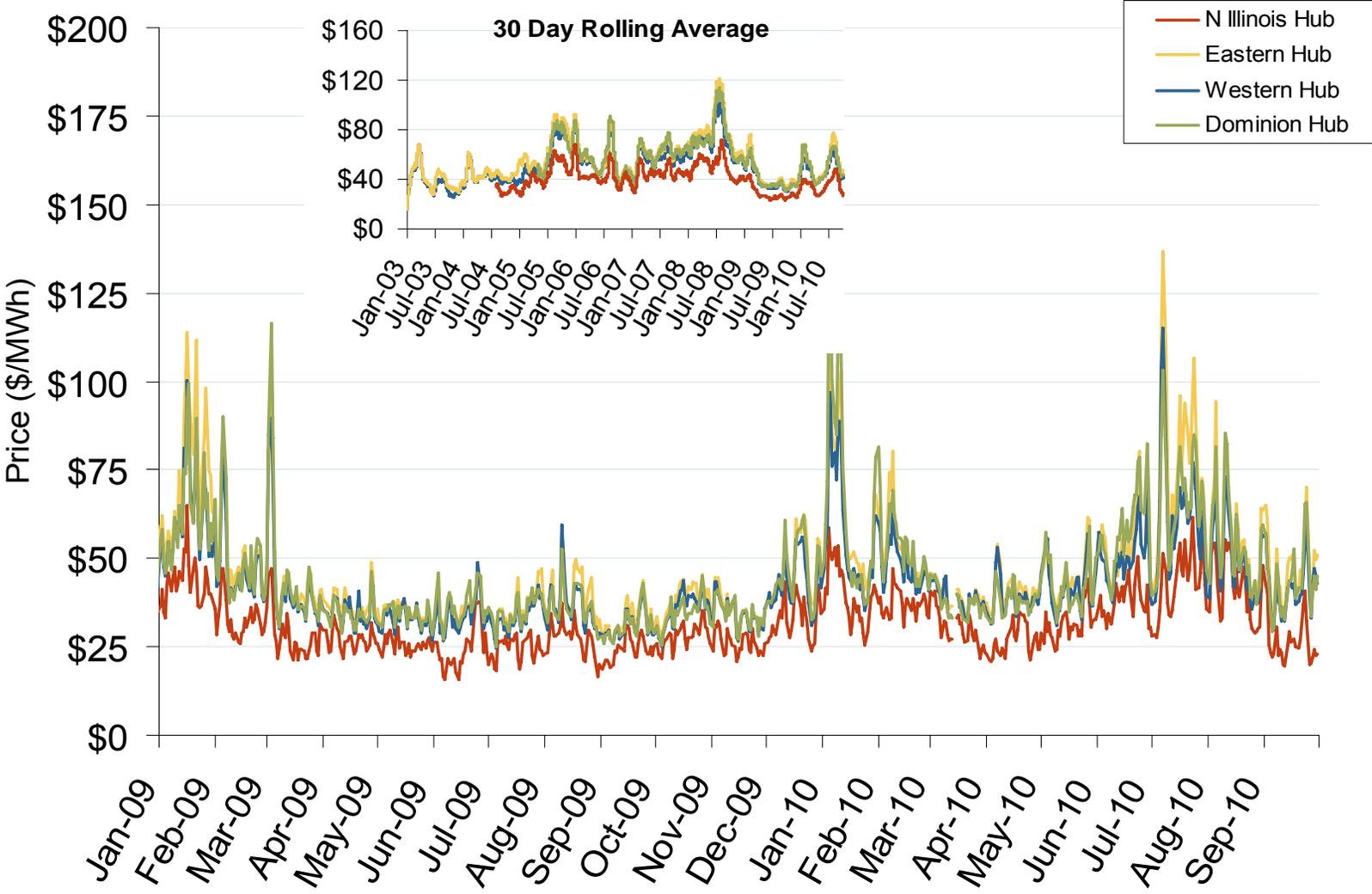
# Daily Average of PJM Day-Ahead Prices - All Hours



Source: Derived by Bloomberg from PJM data as reported by Bloomberg. October 2010 Southeast Snapshot Report

Updated October 7, 2010

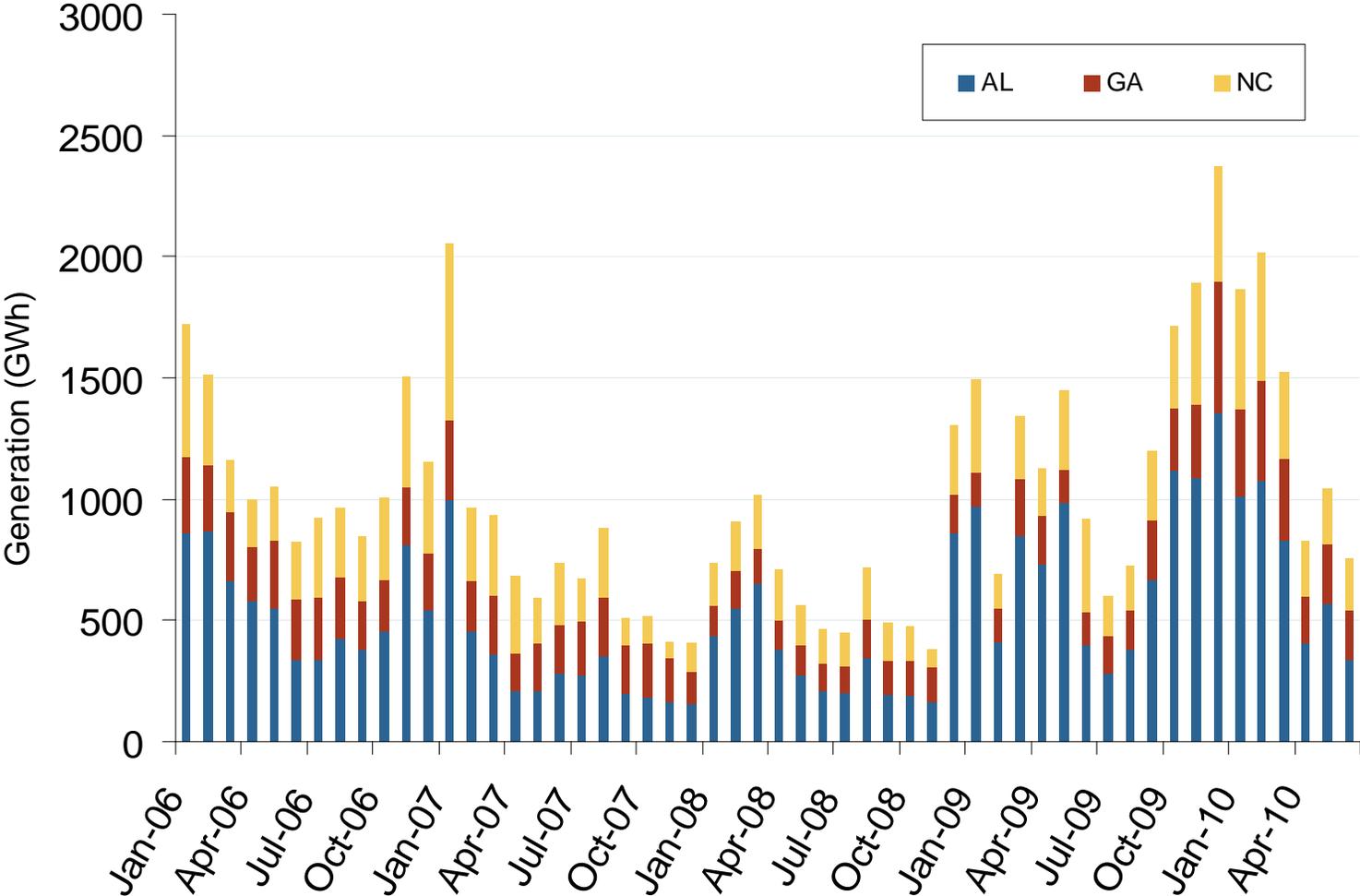
# Daily Average of PJM Day-Ahead Prices - All Hours



Source: Derived by Bloomberg from PJM data as reported by Bloomberg.  
October 2010 Southeast Snapshot Report

Updated October 7, 2010

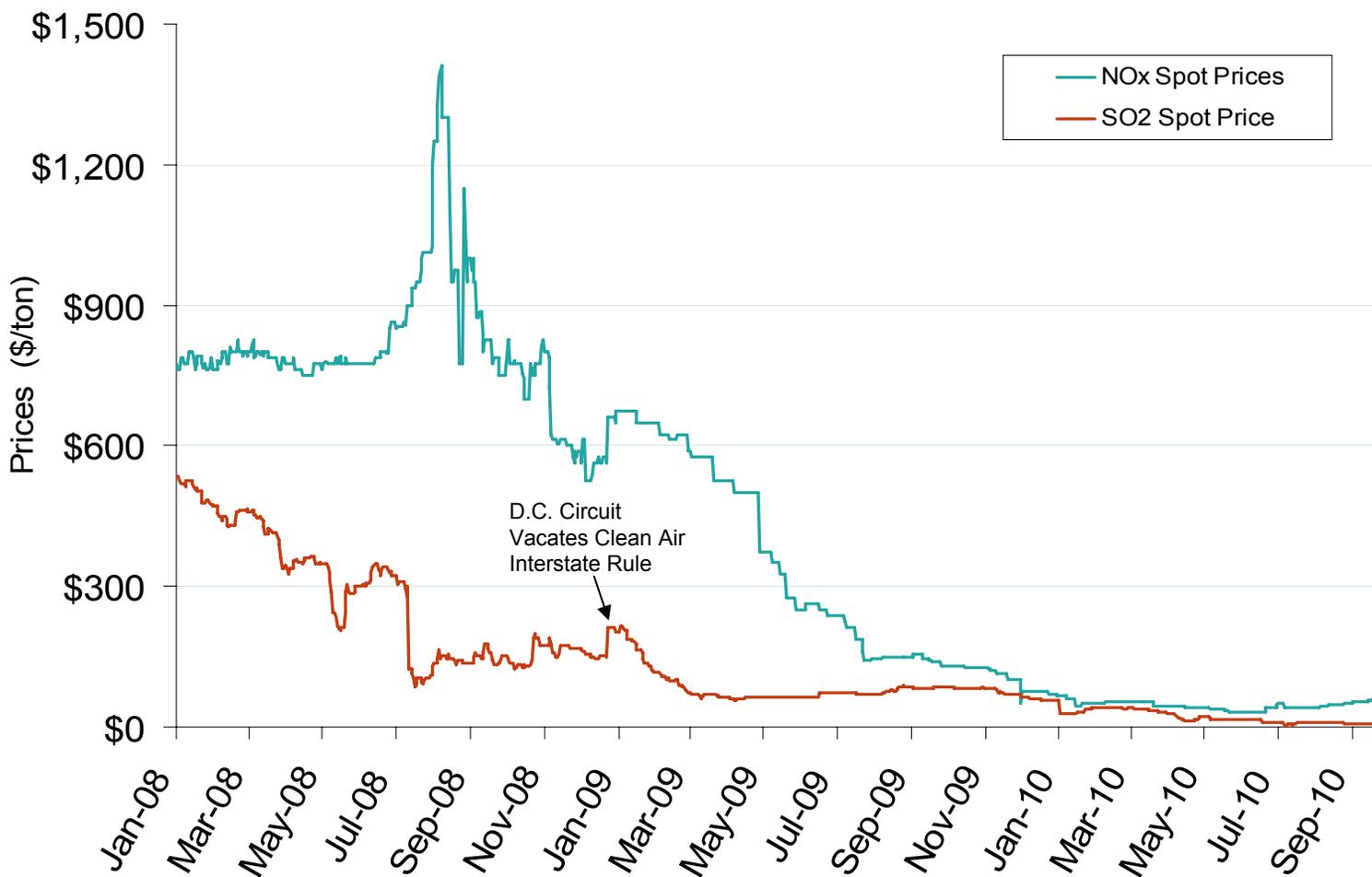
# Monthly Southeastern Hydroelectric Generation



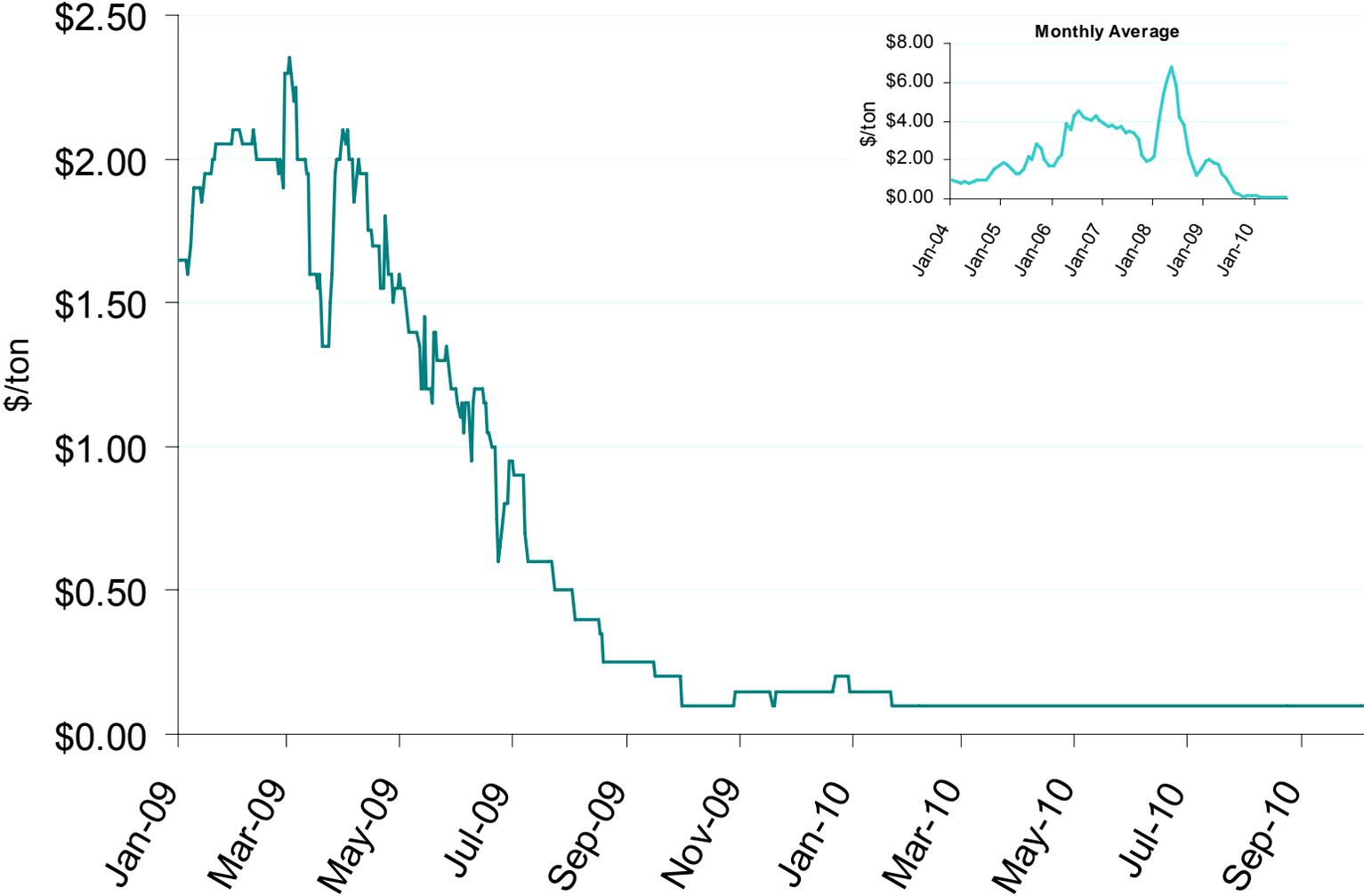
Source: Energy Velocity, Derived from EIA and EPA data.  
October 2010 Southeast Snapshot Report

Updated October 7, 2010

## SO<sub>2</sub> Allowance Spot Prices and NOx Seasonal Allowance Spot Prices



# Chicago Climate Exchange CO2 Index



Source: Derived from *Bloomberg*.  
October 2010 Southeast Snapshot Report

Updated October 7, 2010