

OE ENERGY MARKET SNAPSHOT

Southeast States Version – September 2011 Data

- **Weather**
- **Electricity Markets**
- **Natural Gas and Fuel Markets**

Office of Enforcement
Federal Energy Regulatory Commission
October 2011

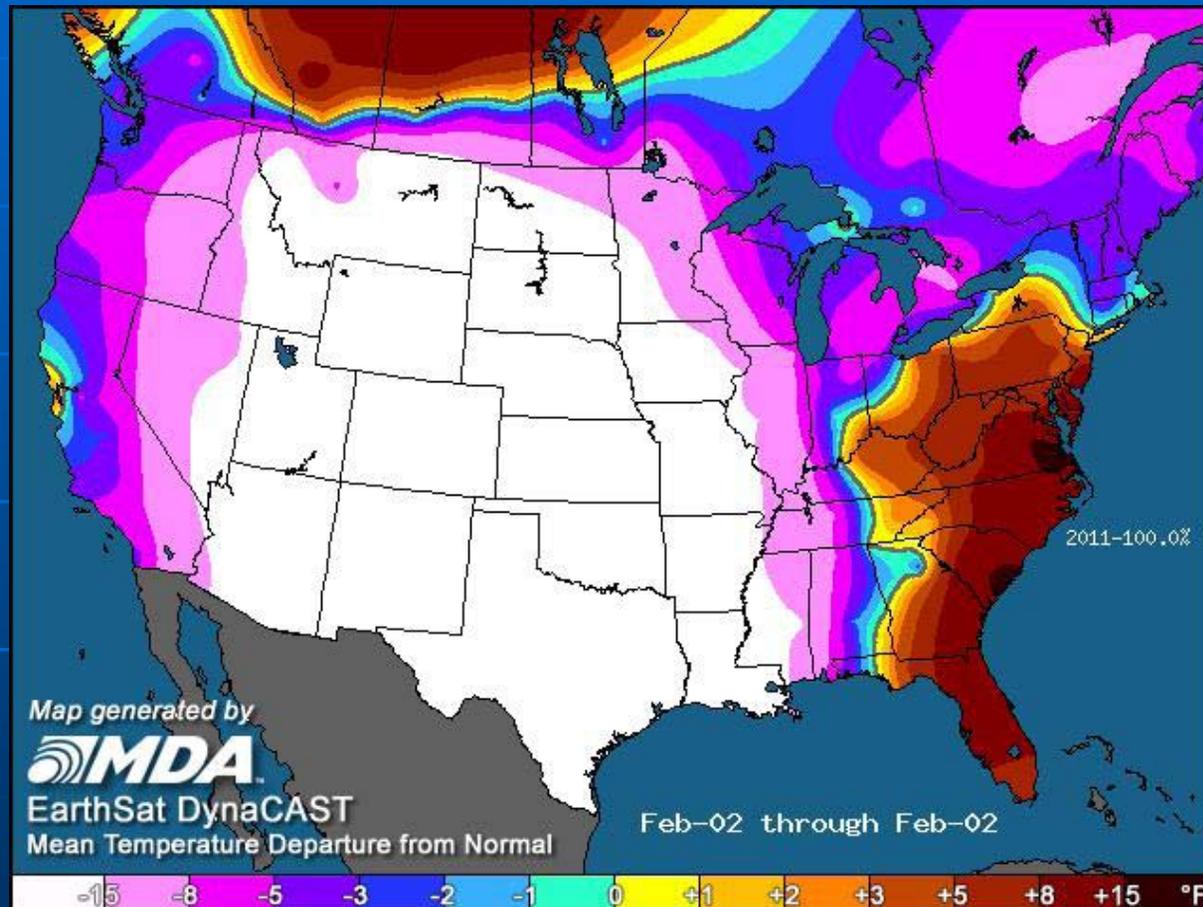


Outages and Curtailments Southwest Cold Weather Event February 1-5

Item No: A-4

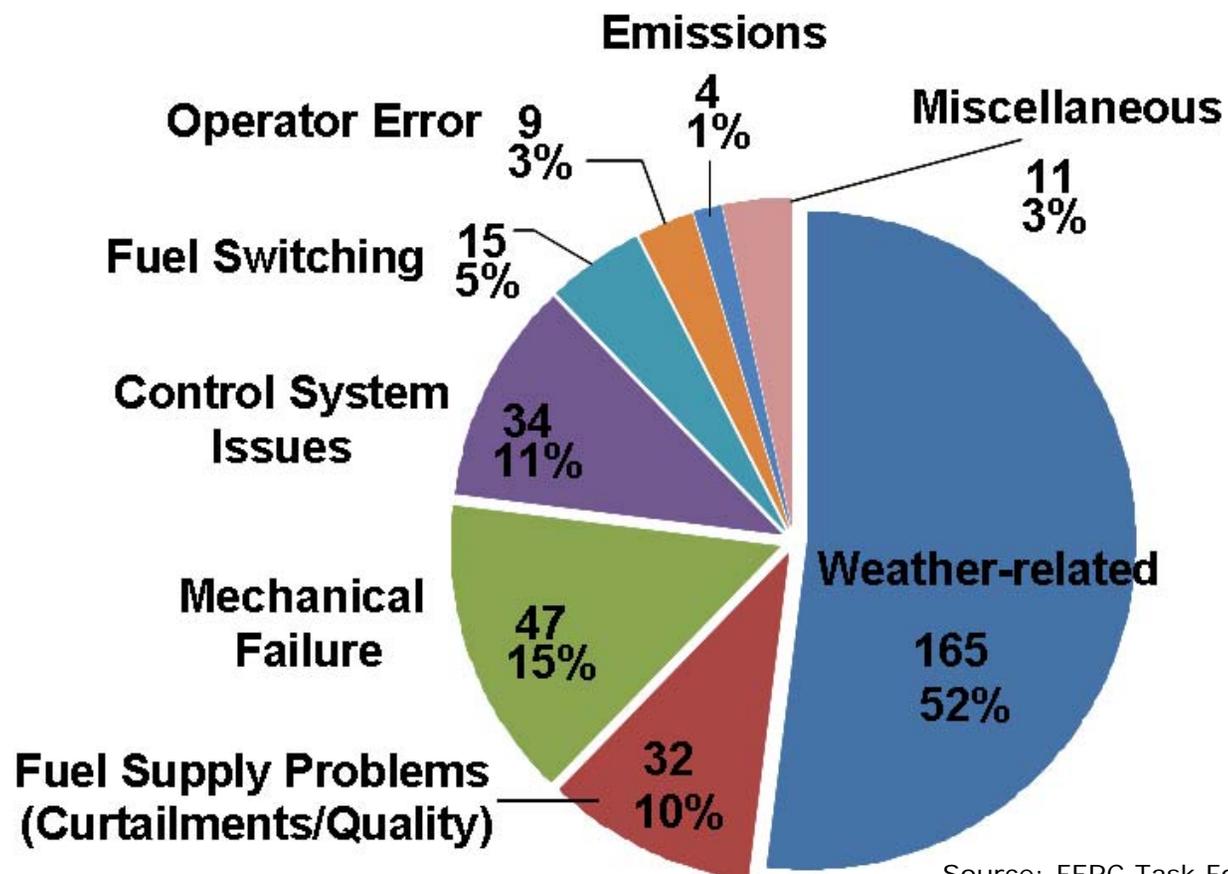
September 15, 2011

Widespread Low Temperatures Feb. 2, 2011



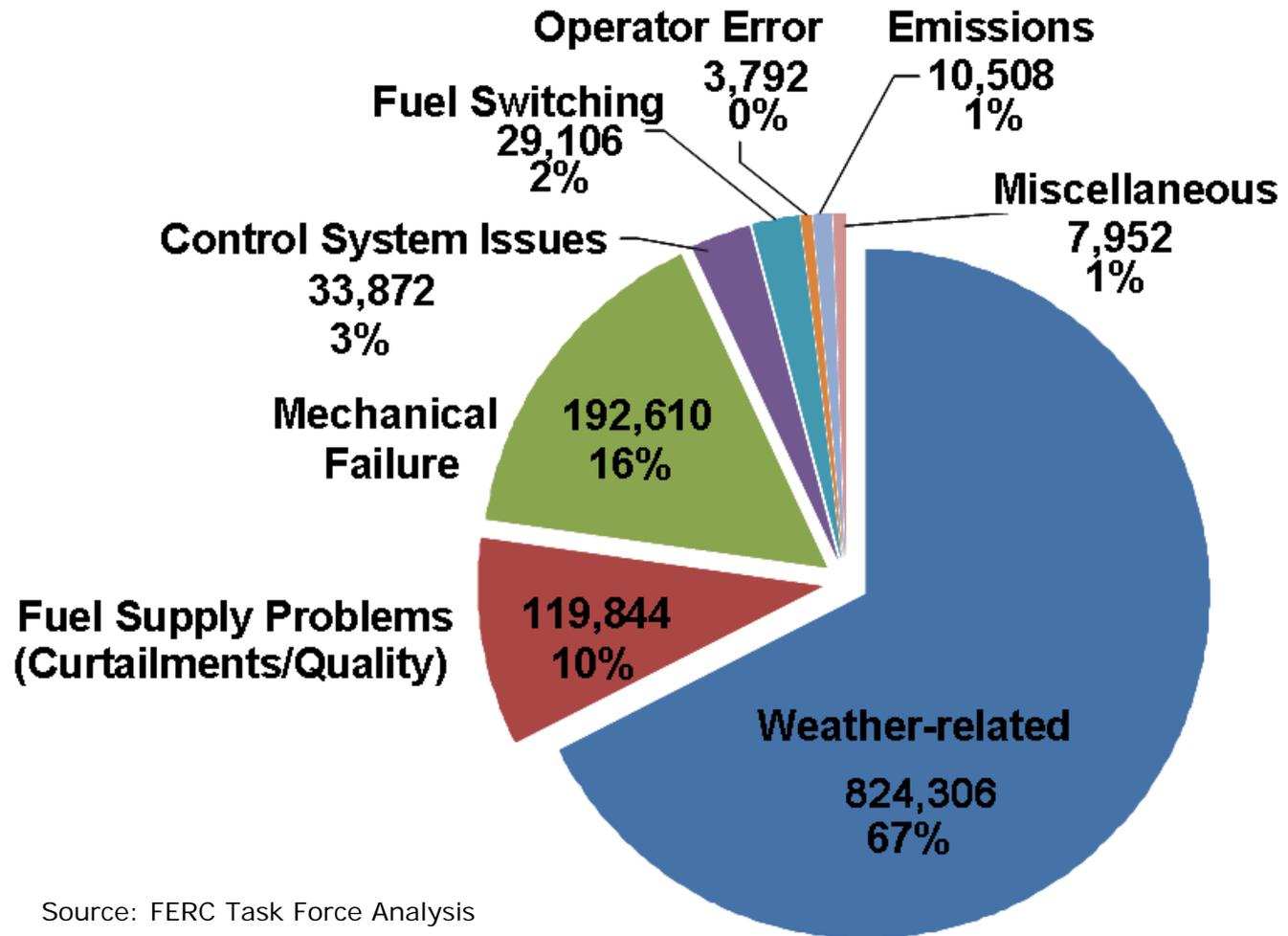
Source: MDA EarthSat

SW Units Tripped, Derated, Failed, on Feb 1-5

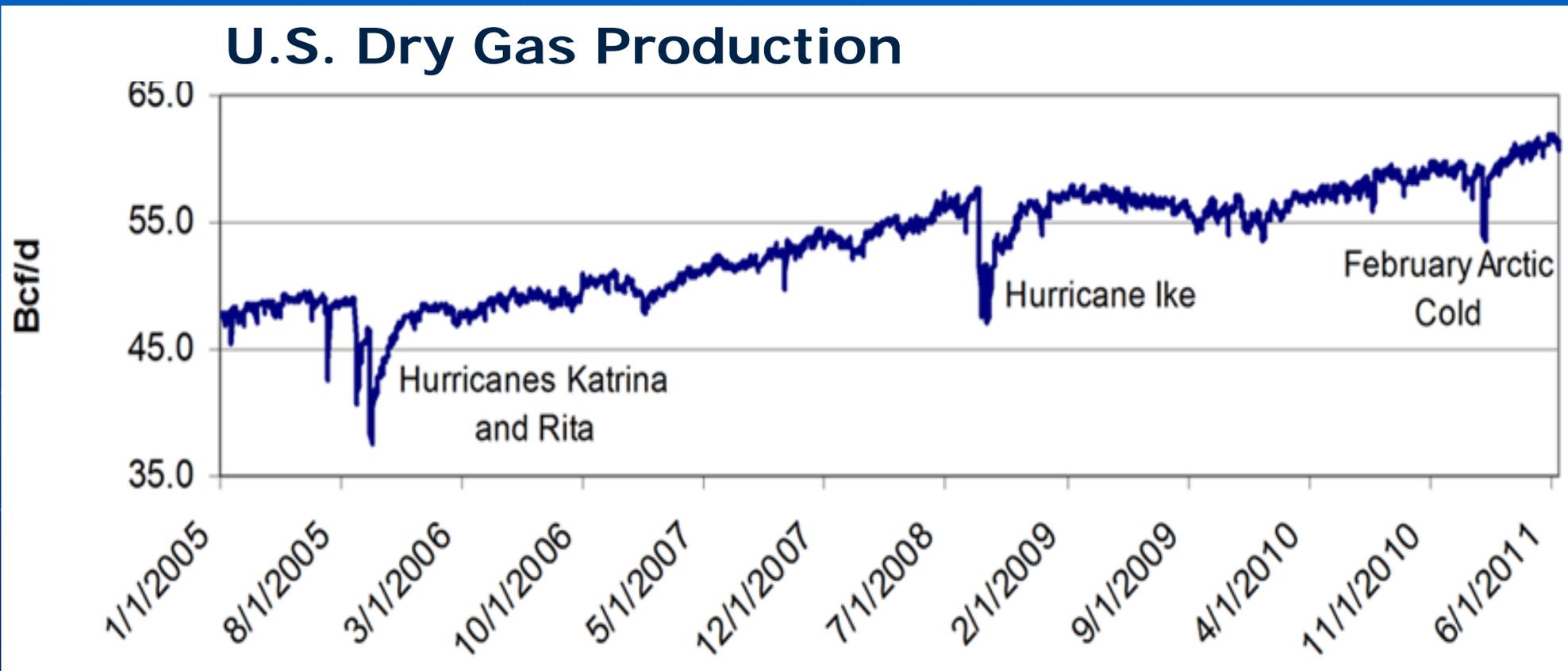


Source: FERC Task Force Analysis

SW Mwh of Generation Unavailable on Feb 1-5

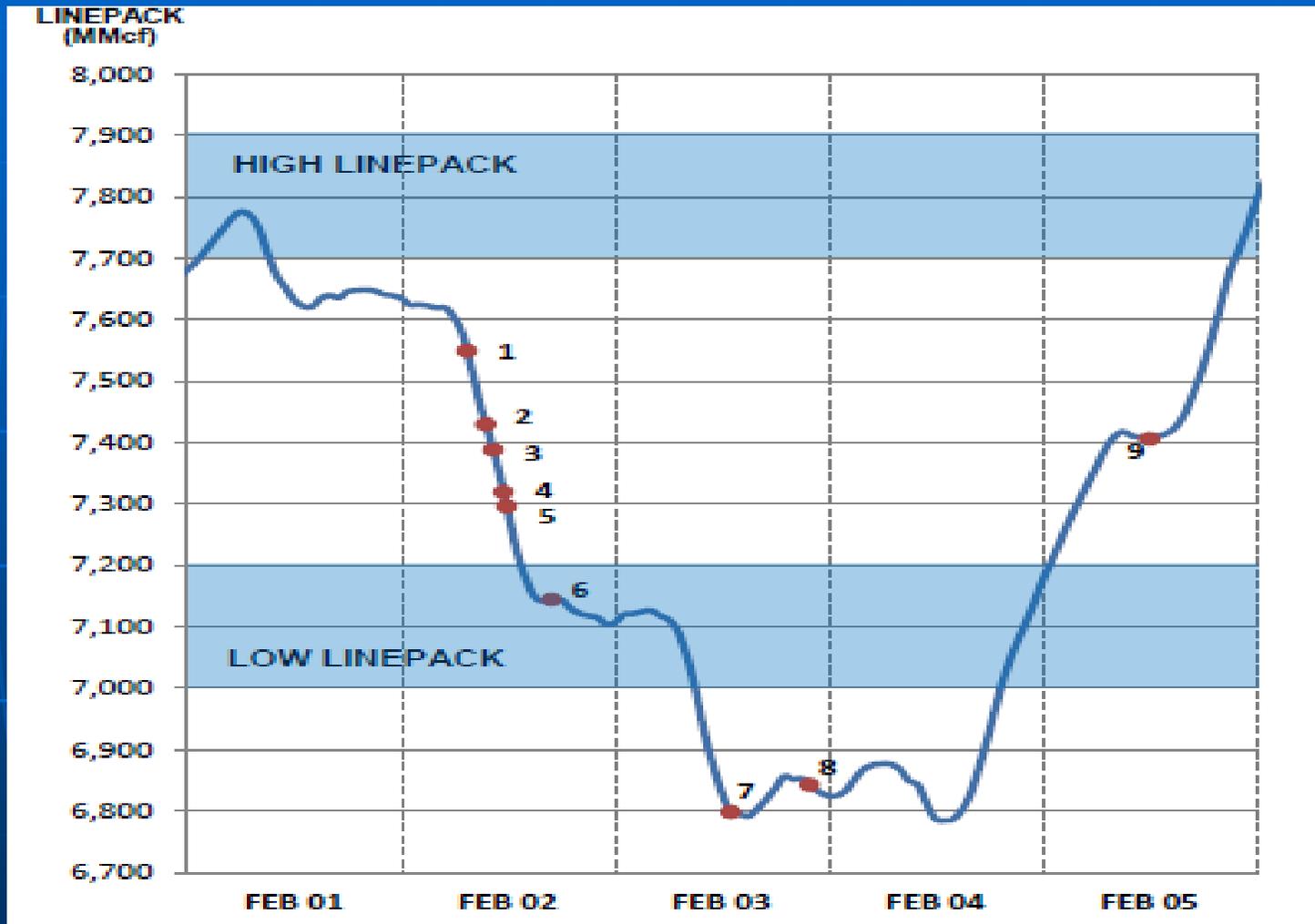


Supply Reductions



Source: FERC Task Force Analysis from Bentek data.

Pipeline Line Pack



Source: El Paso Natural Gas Company

Report on Outages and Curtailments During the Southwest Cold Weather Event Of February 1-5, 2011

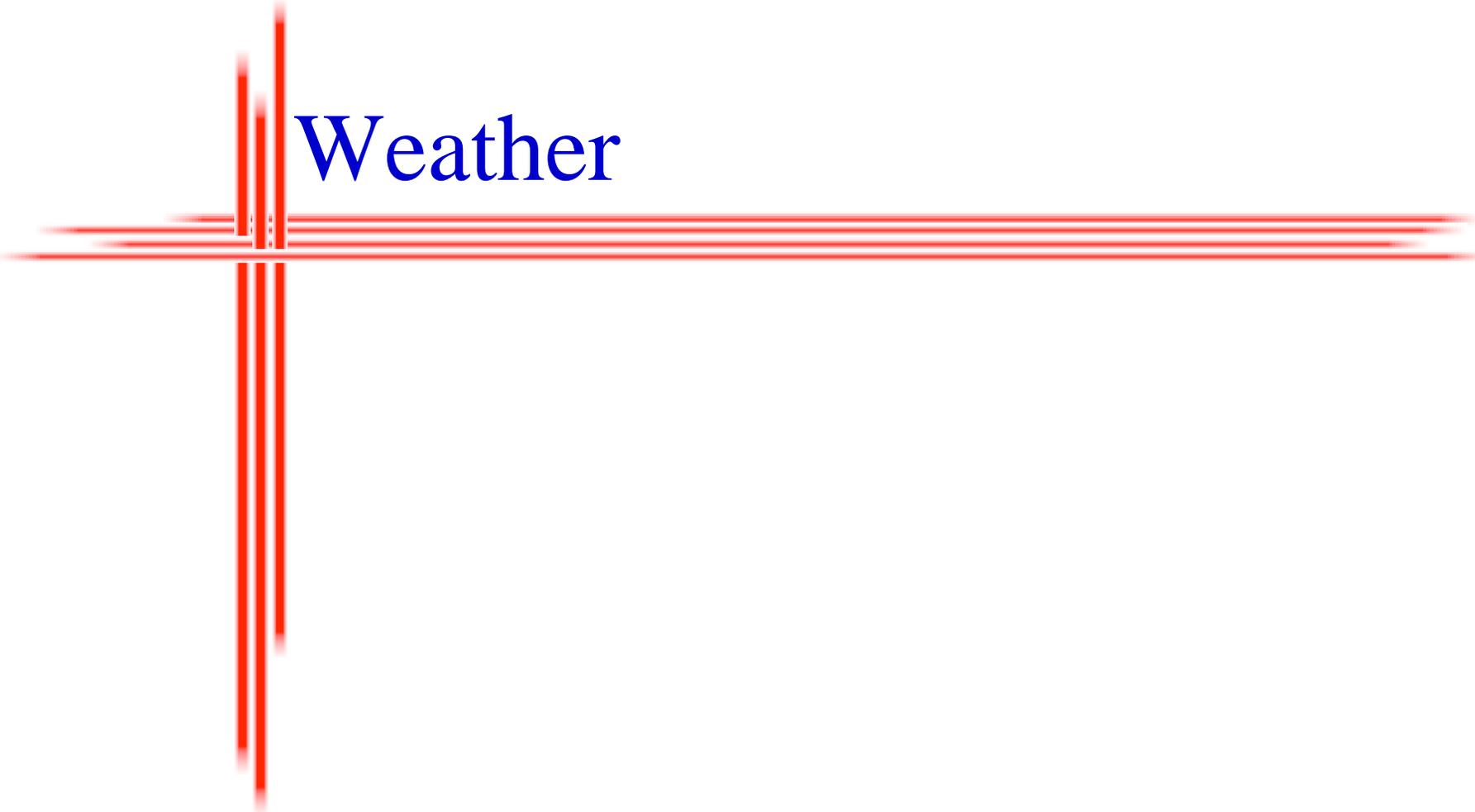
<http://www.ferc.gov/legal/staff-reports/08-16-11-report.pdf>



Infrastructure Report

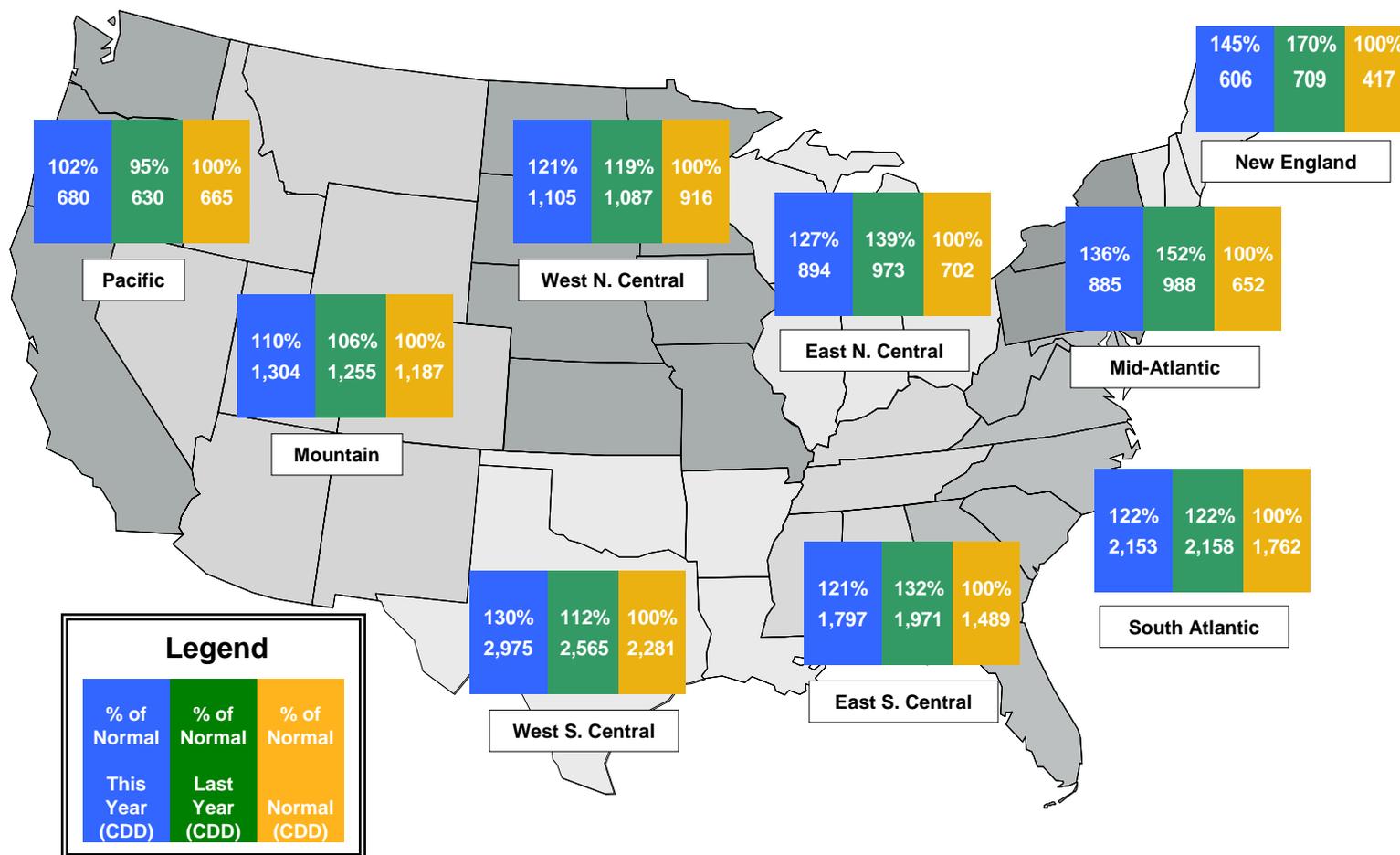
Infrastructure Report

<http://www.ferc.gov/legal/staff-reports/09-19-11-energy-infrastructure.pdf>



Weather

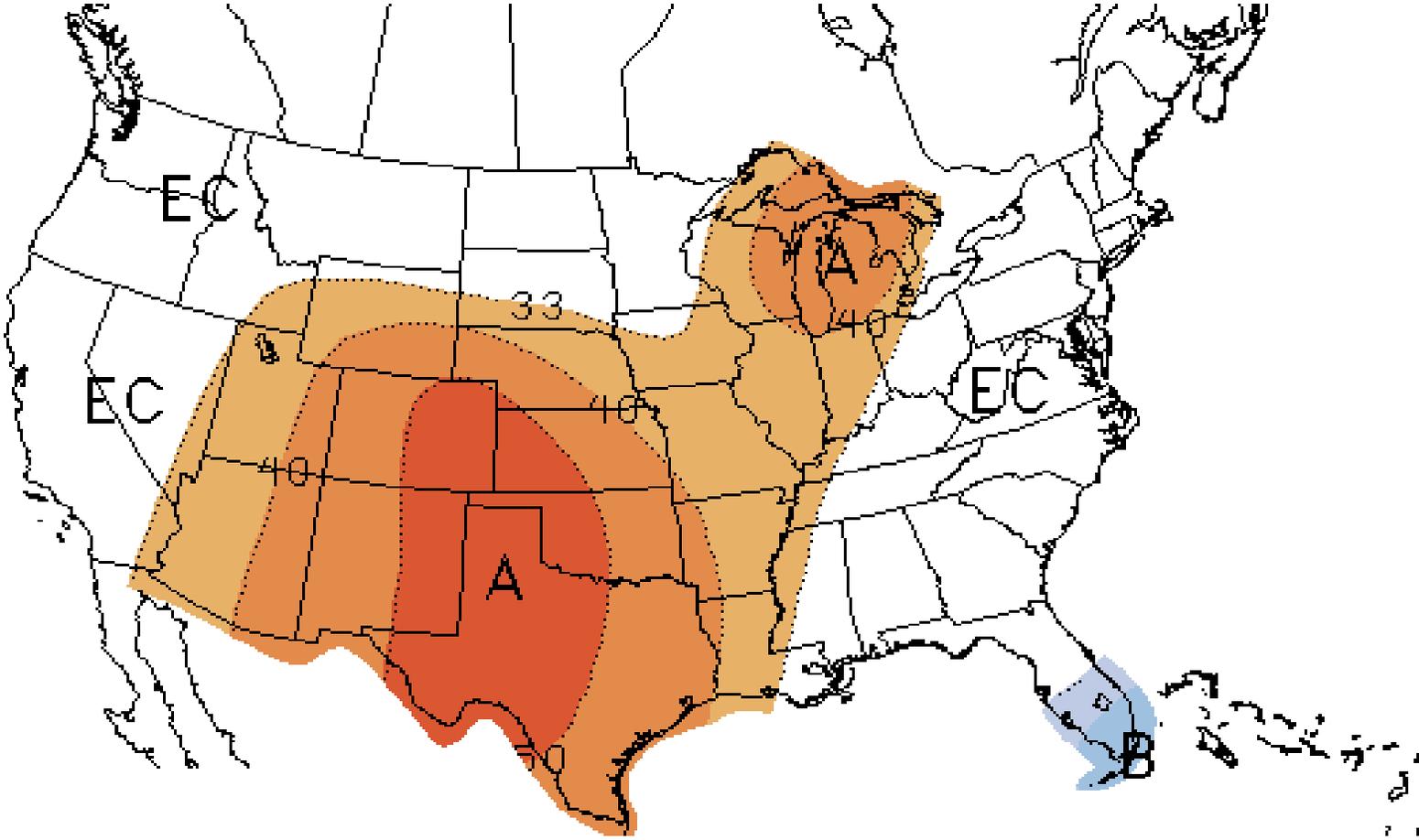
Regional Cooling Degree Days – January Through September 2011



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

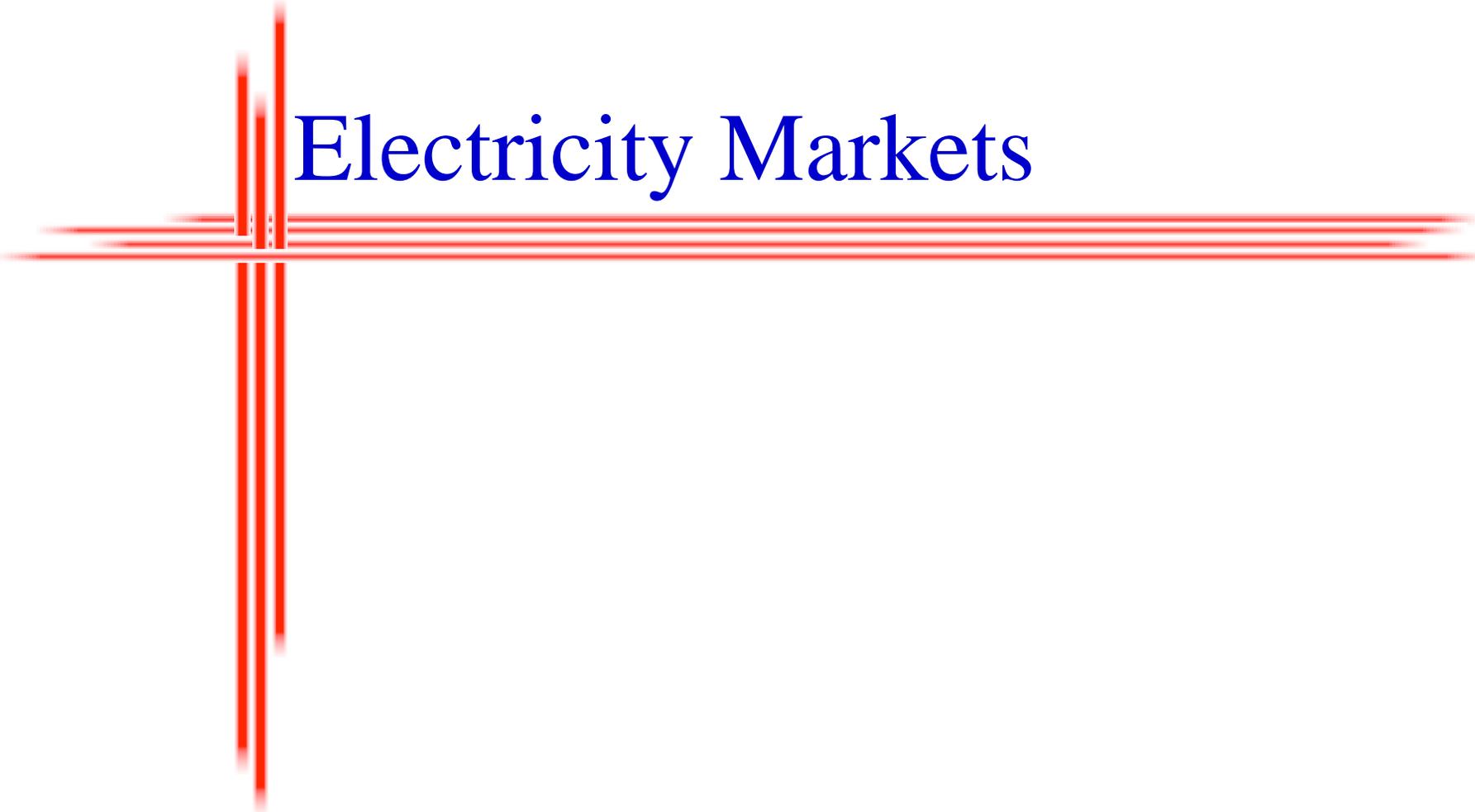
Updated October 4, 2011

NOAA's 3 Month Temperature Forecast Made September 15, 2011, Valid for Oct – Dec 2011



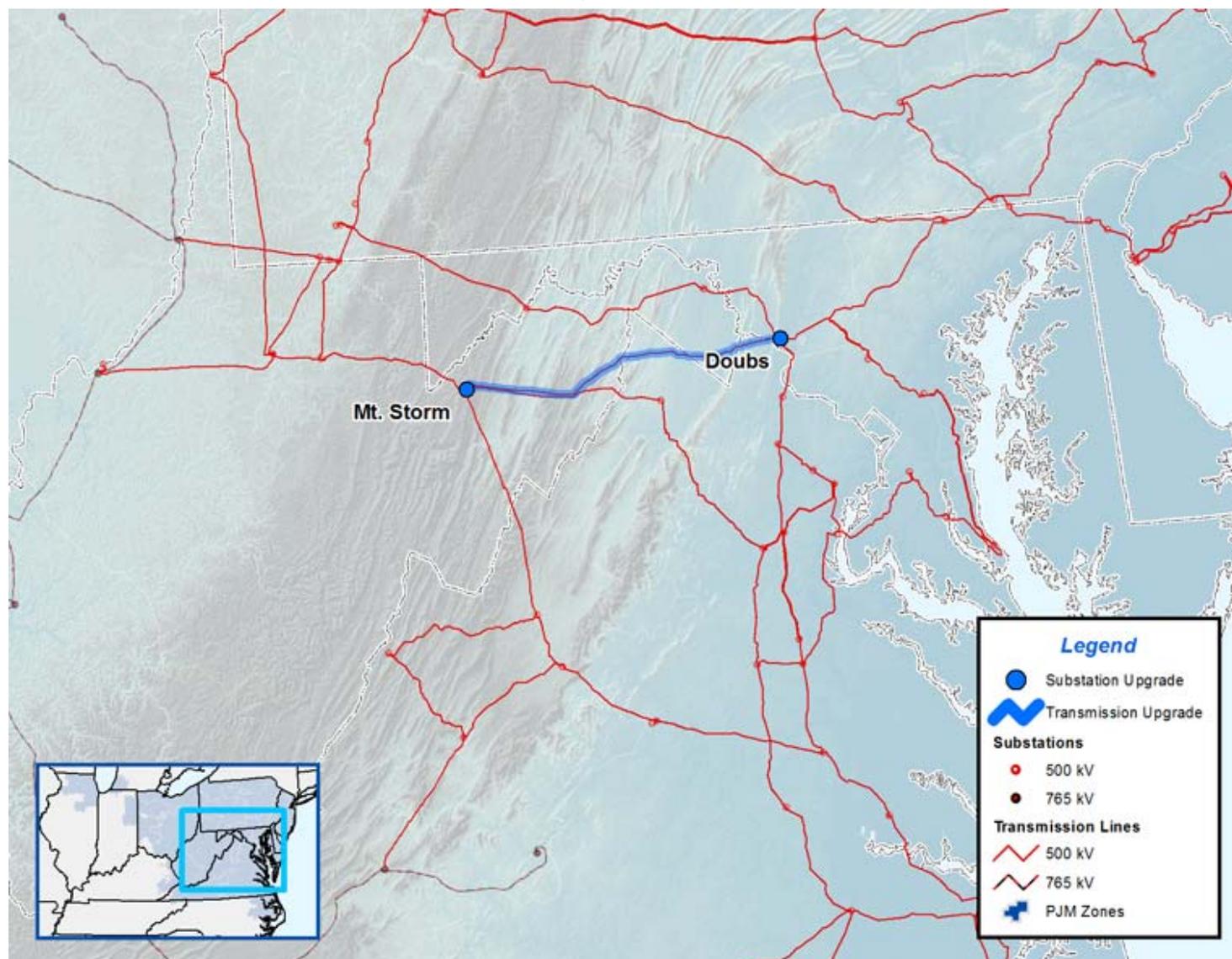
Note: "A" areas are above normal, "B" areas are below normal and "EC" means equal chance. Normal is based on the last 30 years of data.
Source: Derived from NOAA data.

Updated October 4, 2011

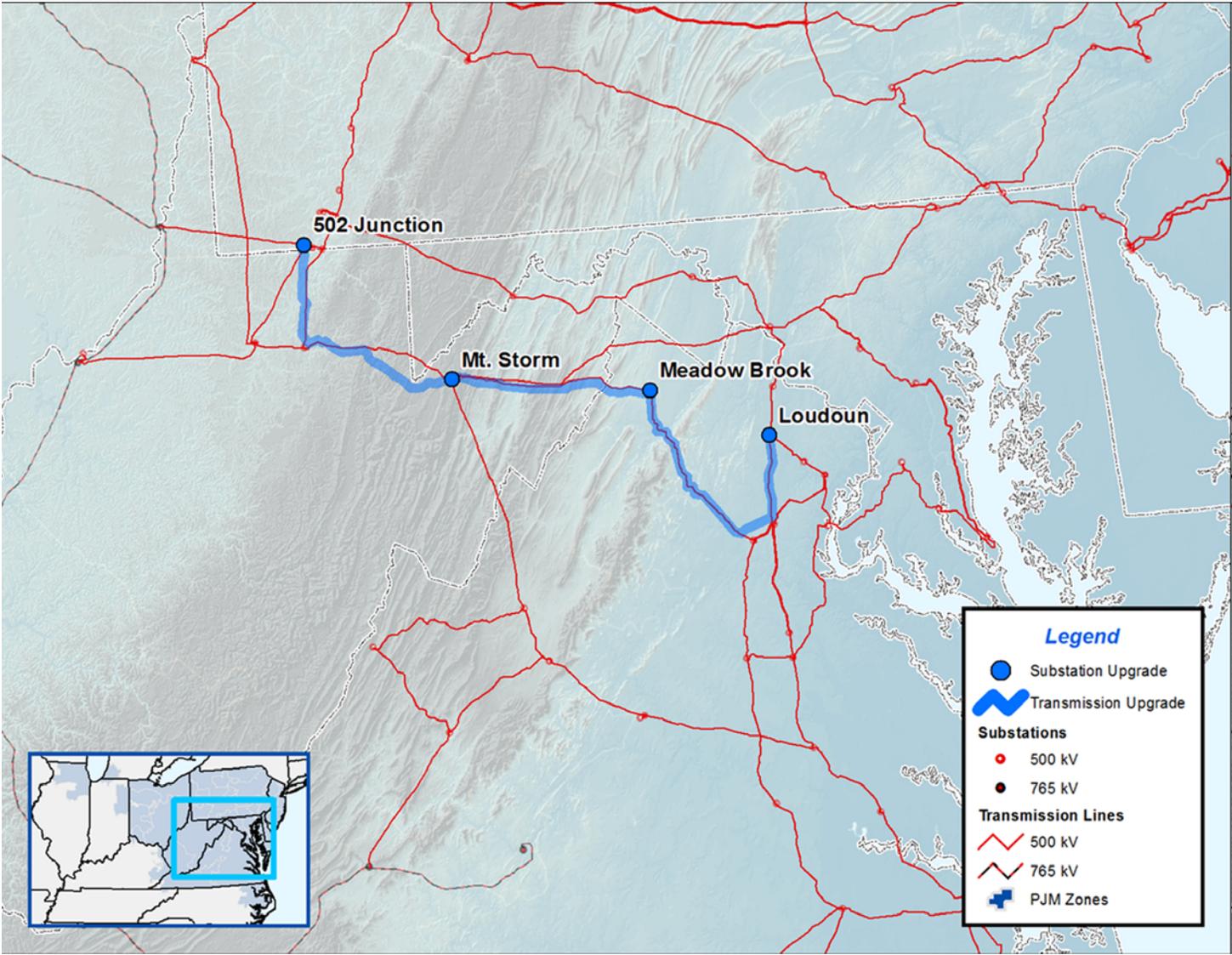


Electricity Markets

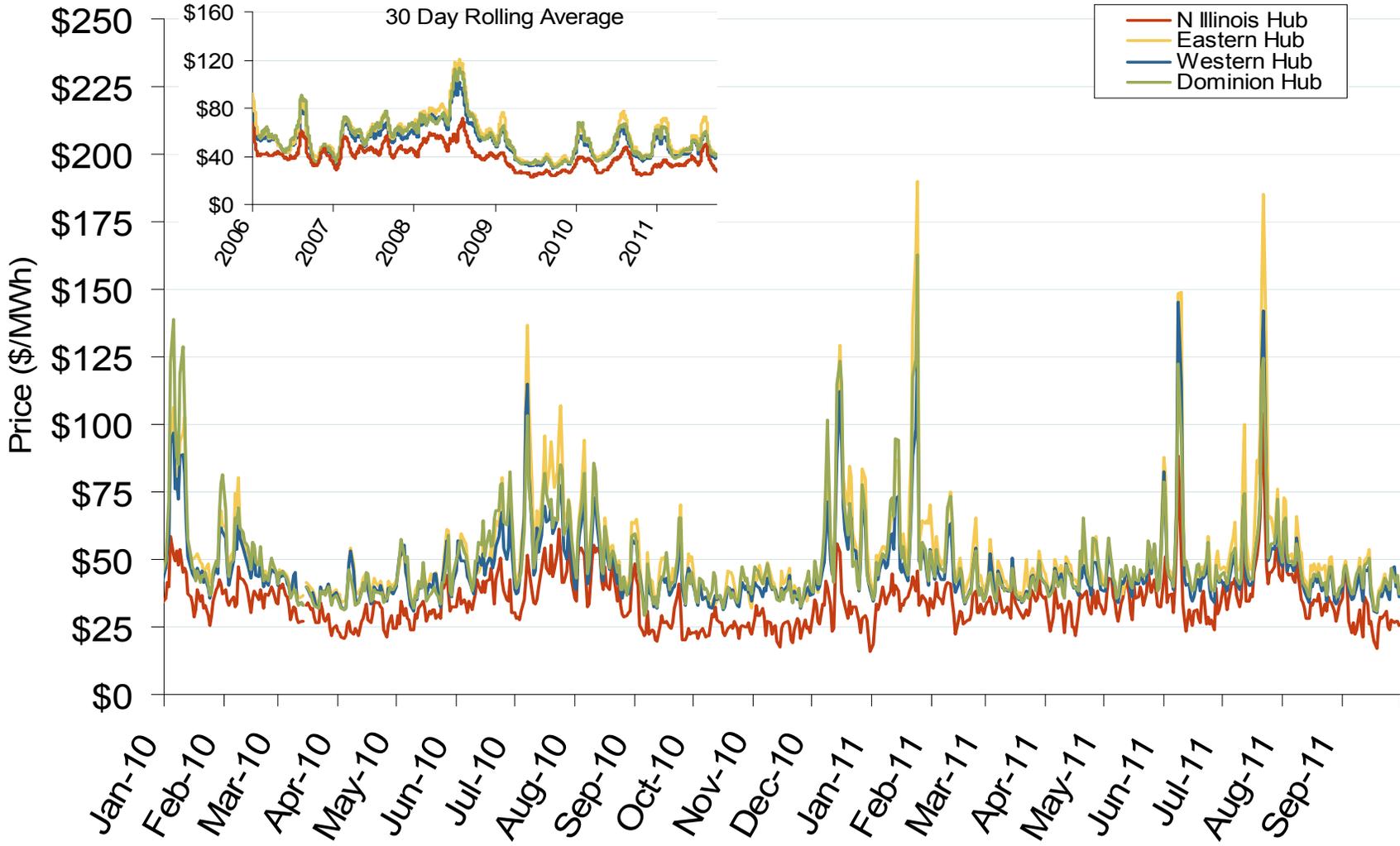
Mt Storm Doubs Is a Major PJM Transmission Path



TrAIL Parallels Mt. Storm Doubs Line



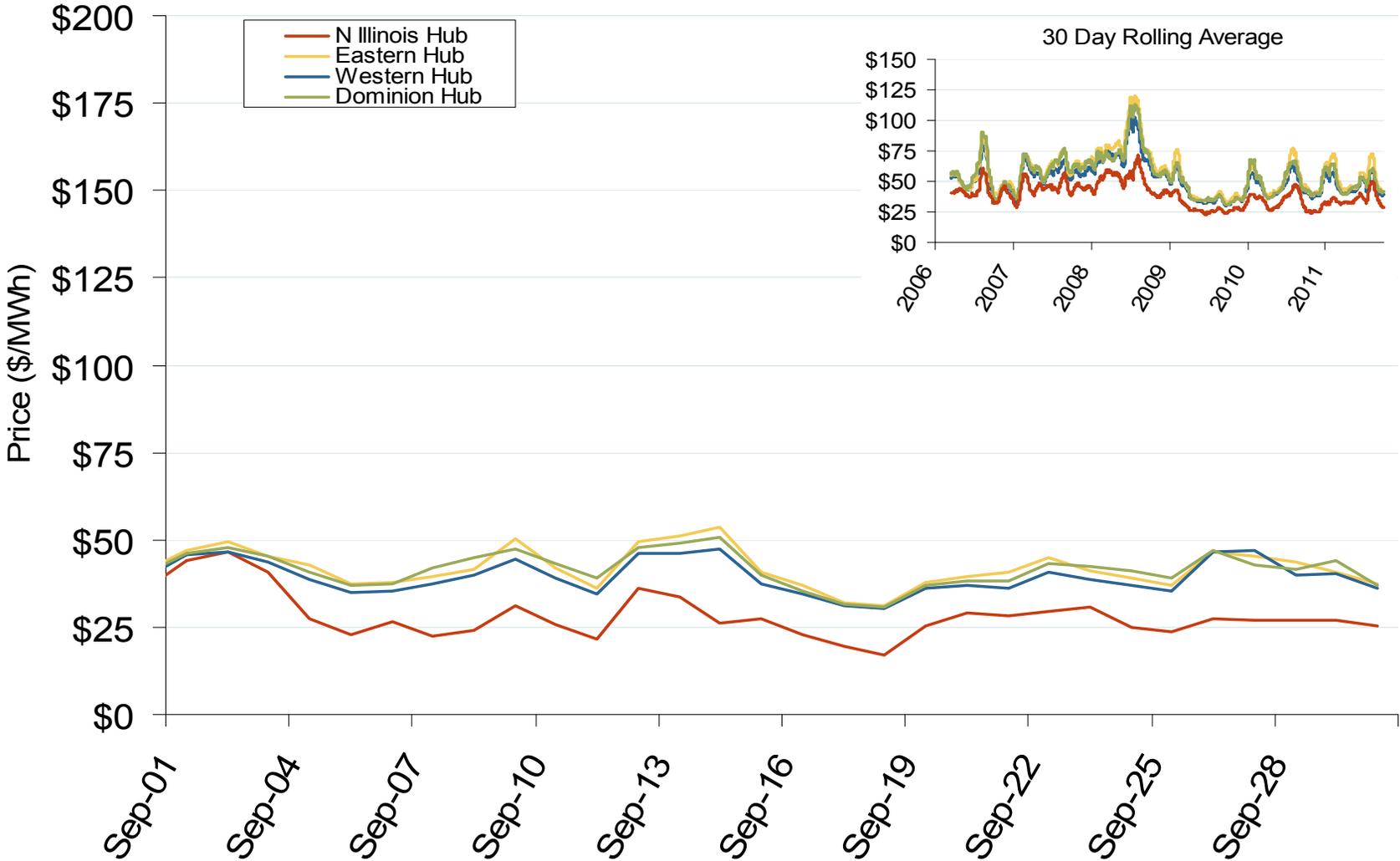
Daily Average of PJM Day-Ahead Prices - All Hours



Source: Derived from Bloomberg data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

Daily Average of PJM Day-Ahead Prices - All Hours



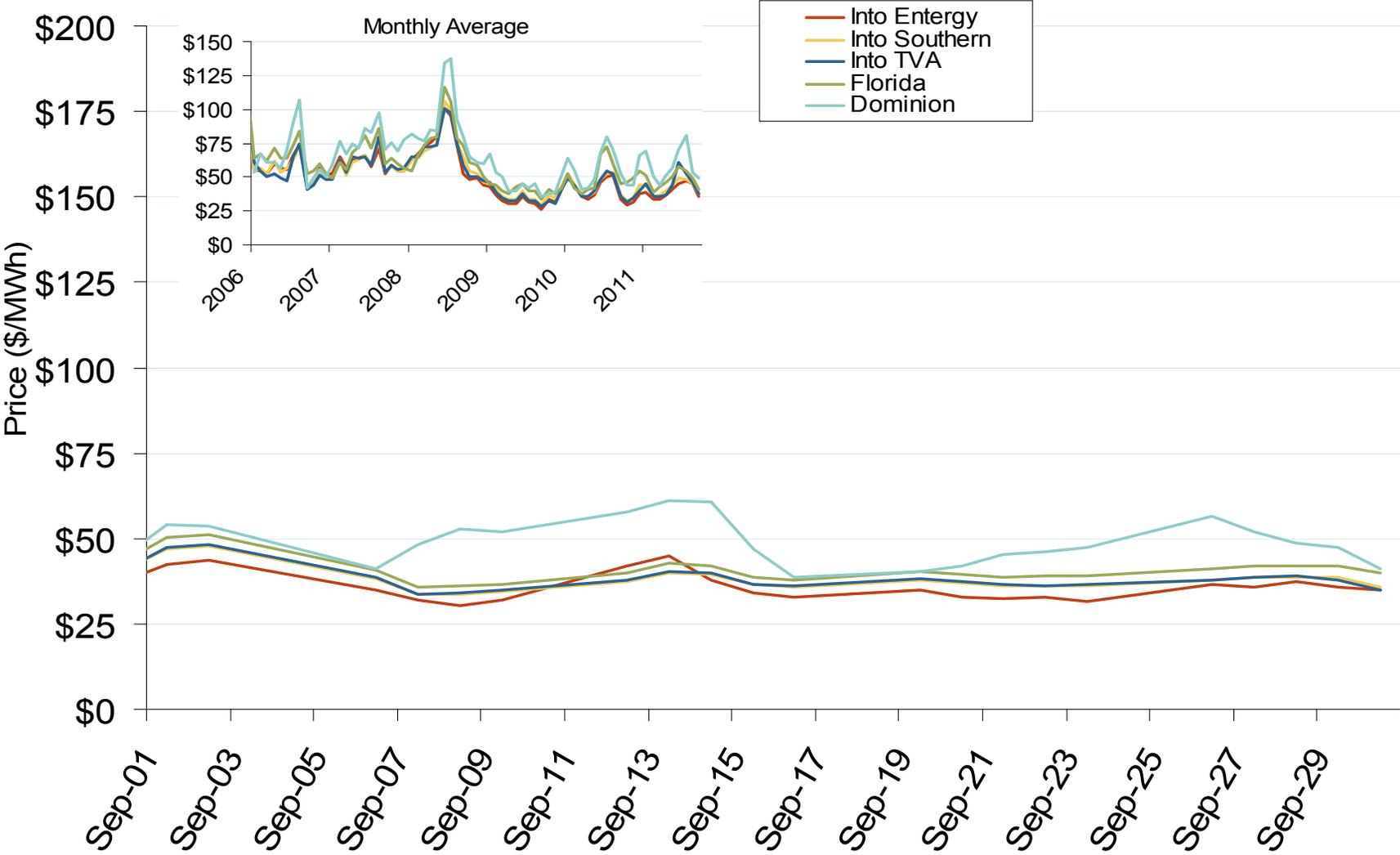
Source: Derived from *Bloomberg* data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

Southeast Electric Market: Last Month's Southeastern Bilateral Prices

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

Southeastern Daily Bilateral Day-Ahead On-Peak Prices



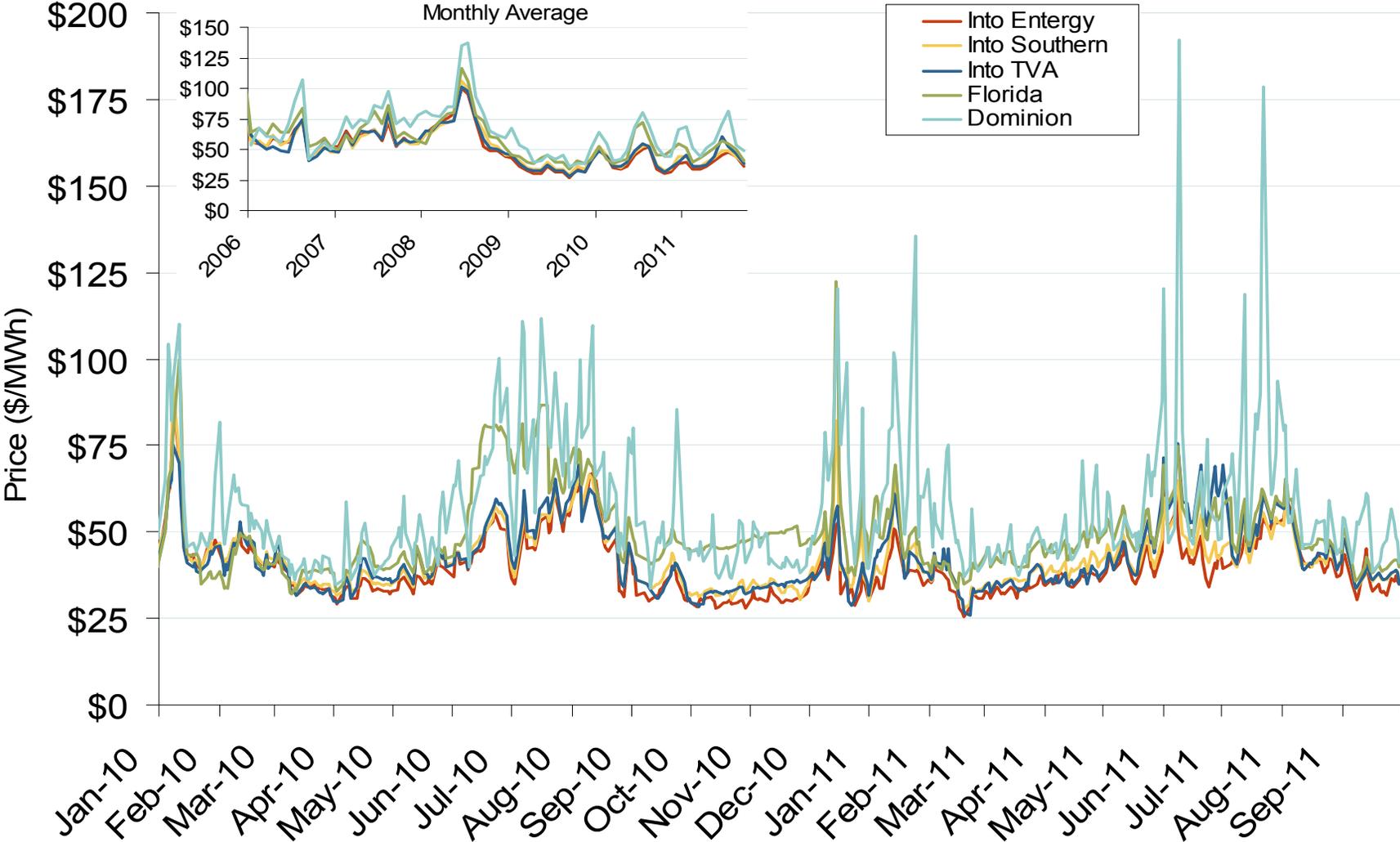
Source: Derived from *Platts* data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

Southeast Electric Market: Southeastern Bilateral Prices

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Southeastern Daily Bilateral Day-Ahead On-Peak Prices



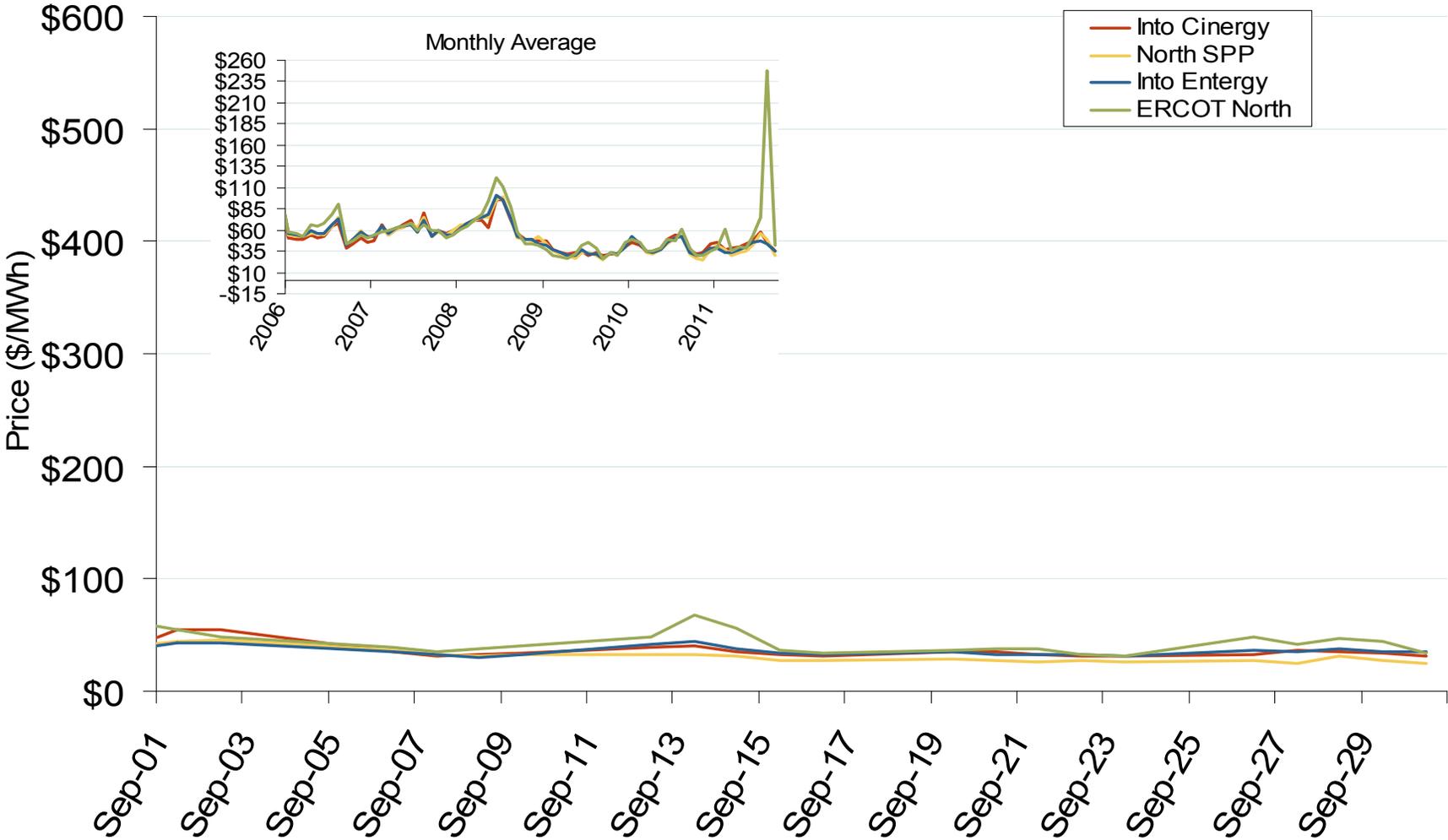
Source: Derived from *Platts* data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

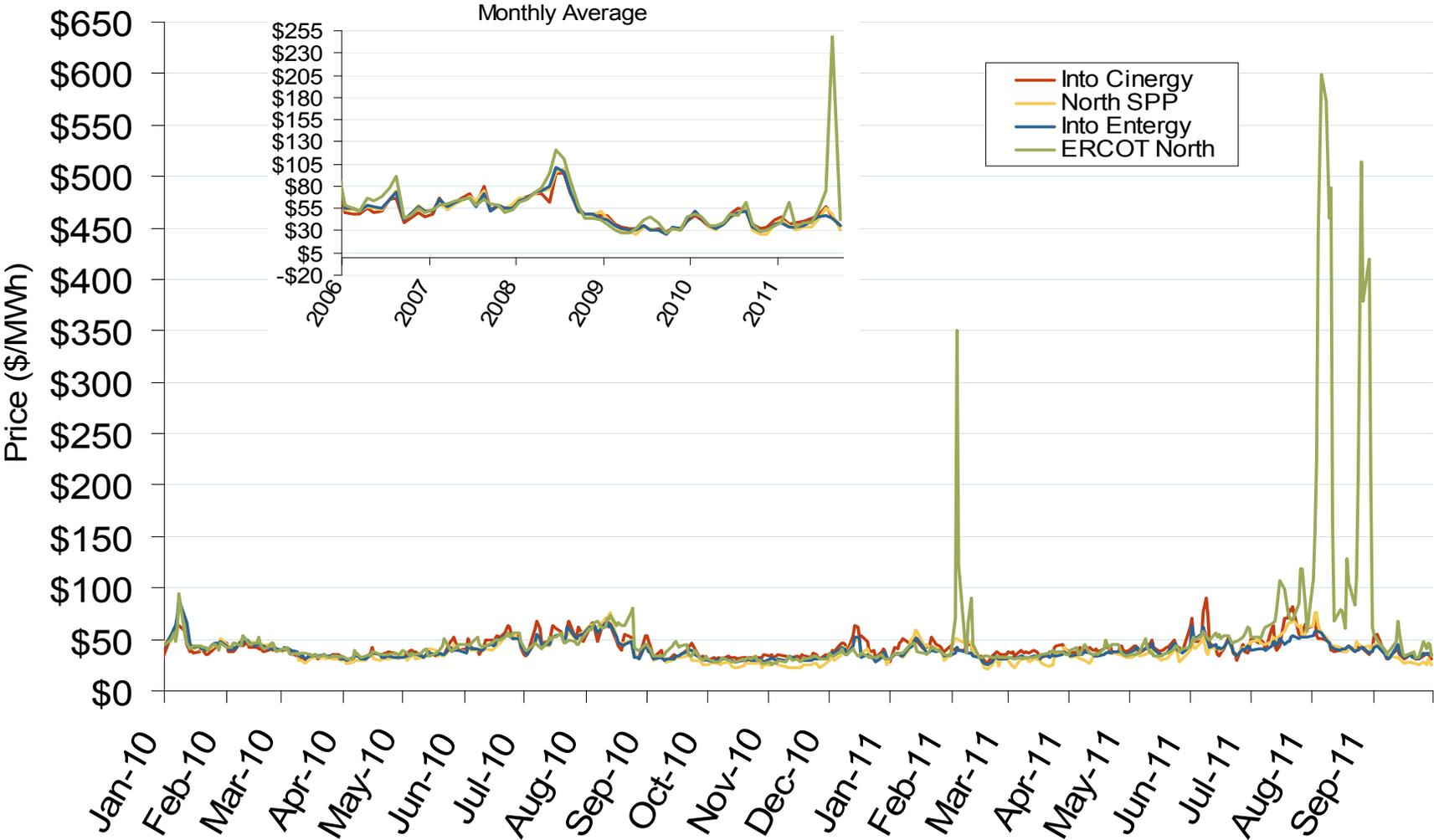
Southeast Electric Market: Last Month's Midwestern Bilateral Prices

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Midwestern Daily Bilateral Day-Ahead On-Peak Prices



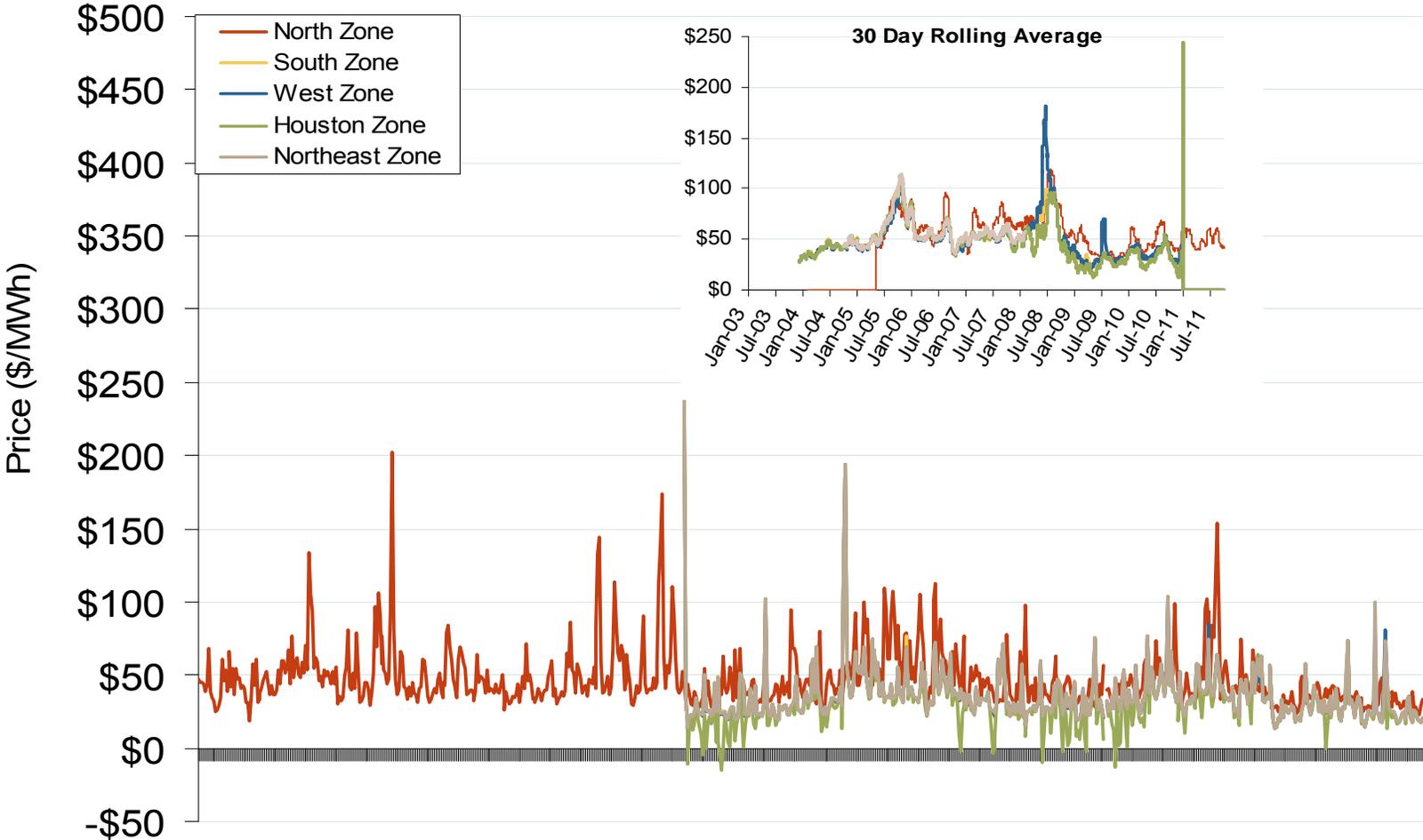
Midwestern Daily Bilateral Day-Ahead On-Peak Prices



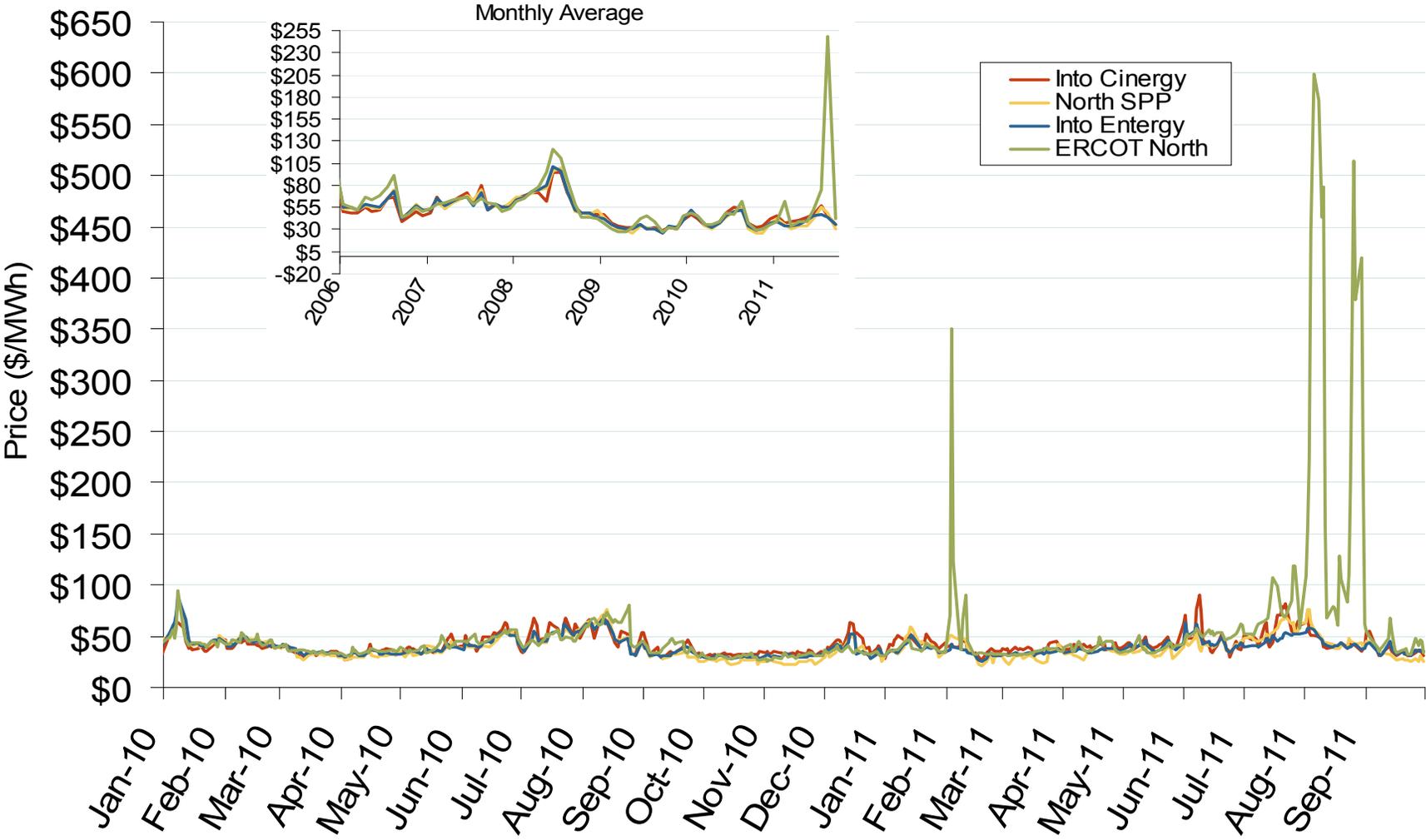
Source: Derived from *Platts* data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

Daily Average of ERCOT Real Time Prices - All Hours



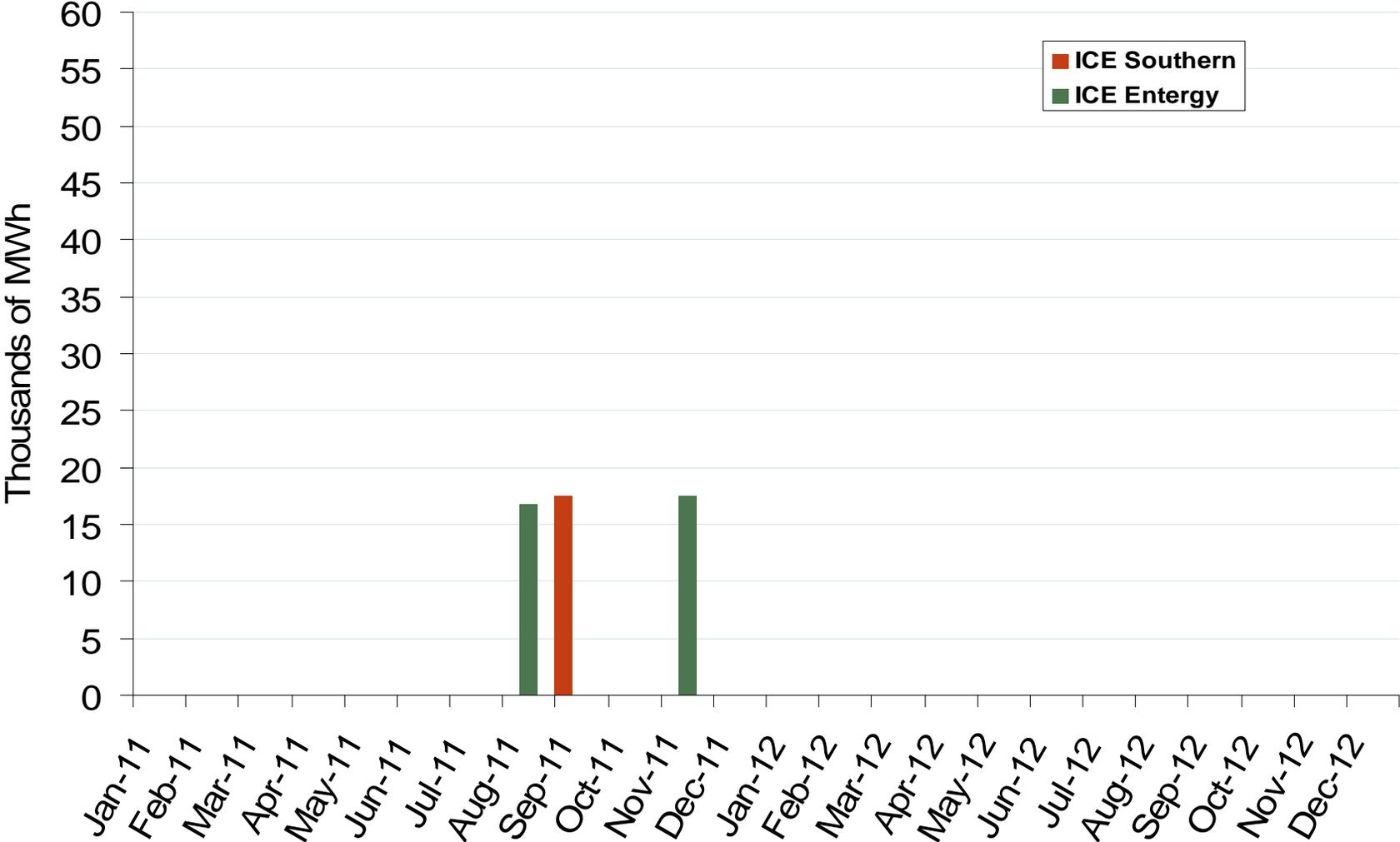
Midwestern Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from Platts data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

Southeast Forward Volumes



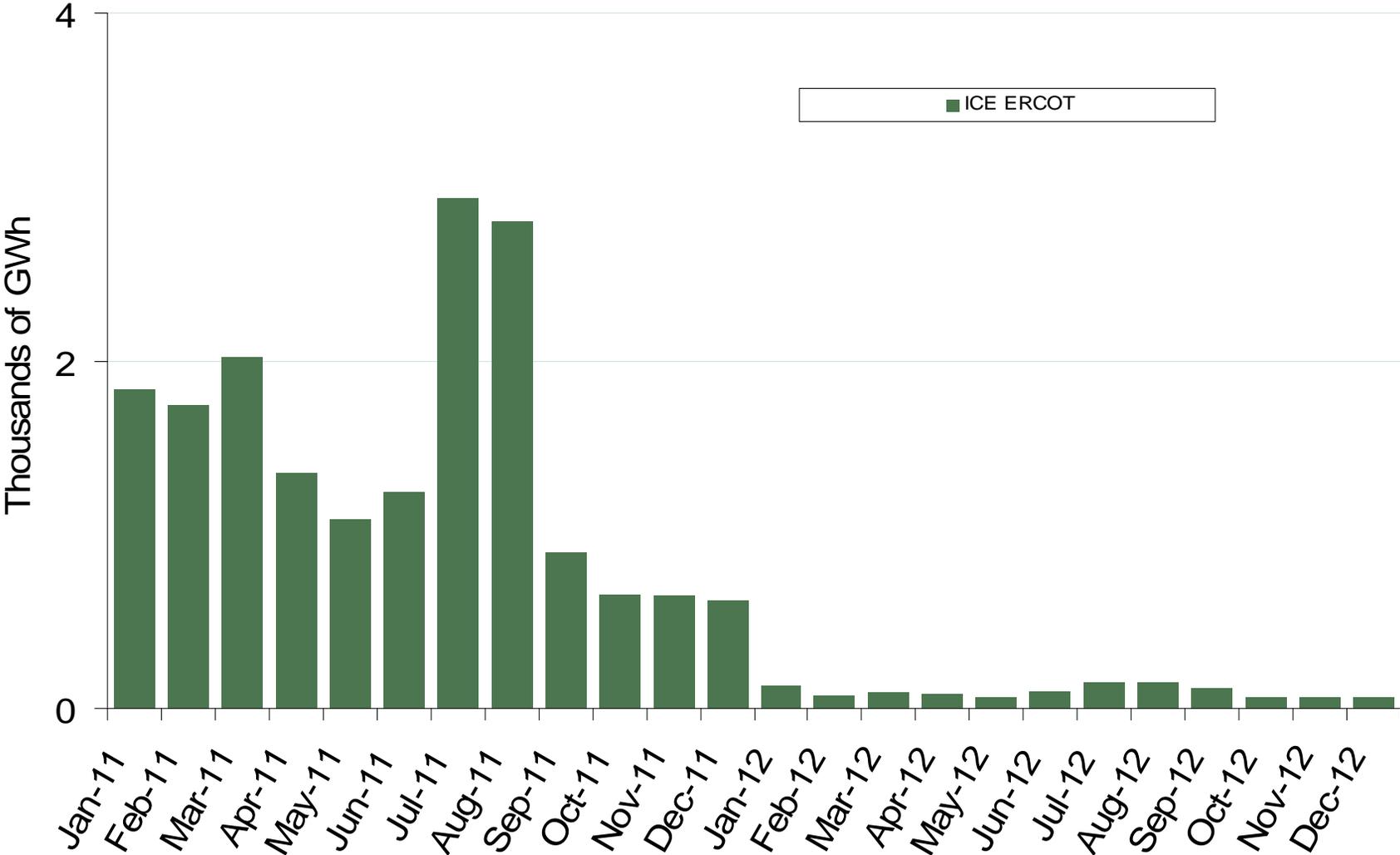
Notes: ICE on-peak forward (physical) volumes are for Entergy, Southern and TVA and include monthly, dual monthly, quarterly, and calendar year contracts traded for each month

Source: Derived from ICE data

October 2011 Southeastern Snapshot

Updated: October 05, 2011

ERCOT Forwards Volume



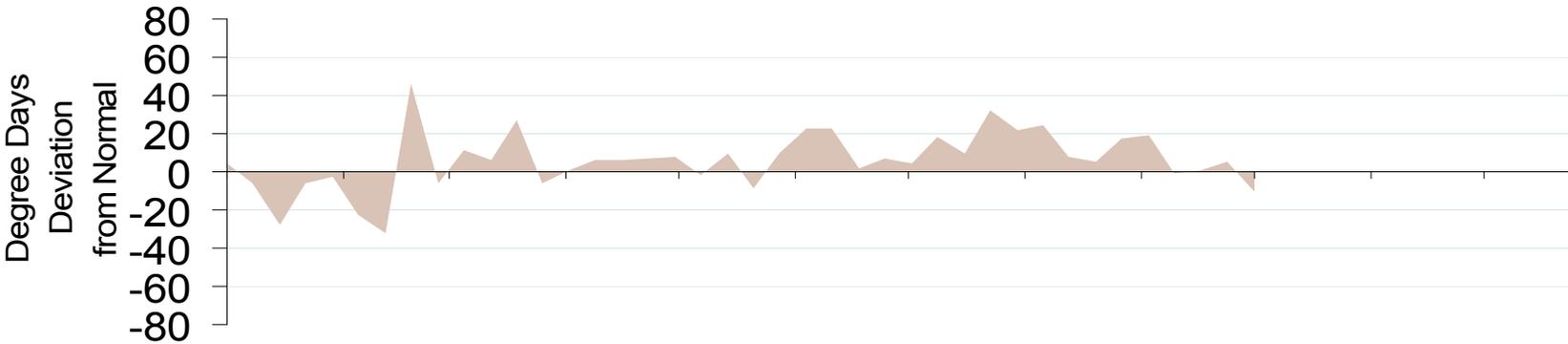
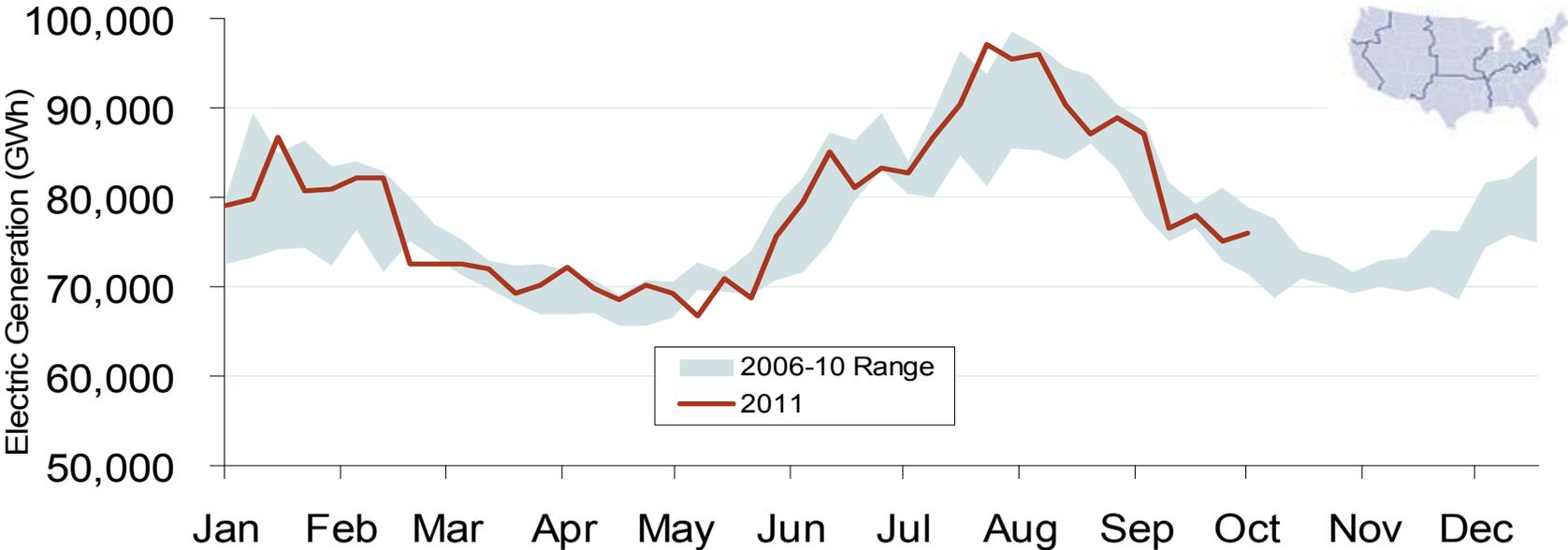
Notes: ICE forwards (physical) volume for ERCOT include on-peak monthly, dual month, quarterly, and calendar year contracts traded for each month

Source: Derived from ICE data

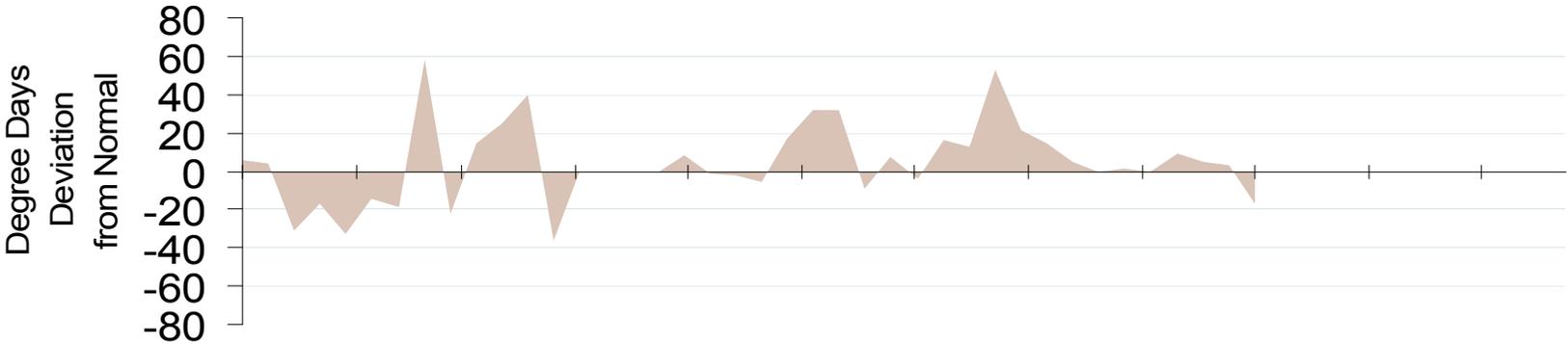
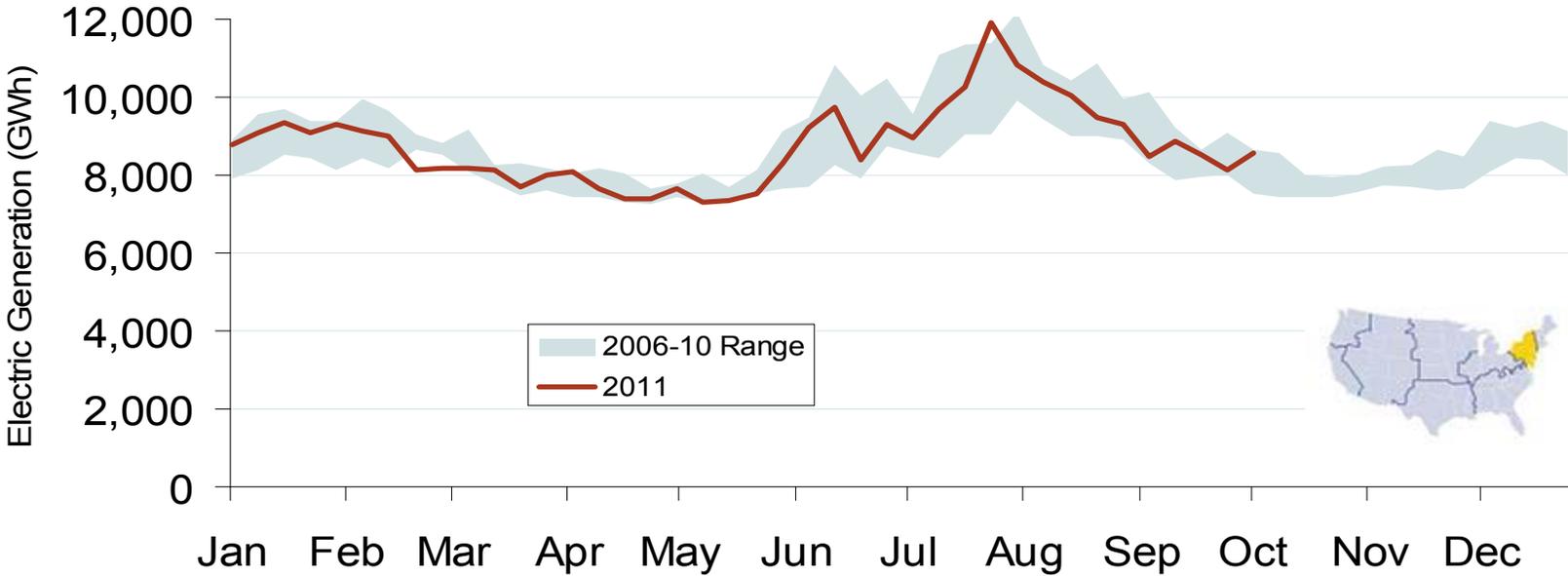
October 2011 Southeastern Snapshot

Updated: October 05, 2011

Weekly U.S. Electric Generation Output and Temperatures



Weekly Power Generation & Temps. - Mid Atlantic



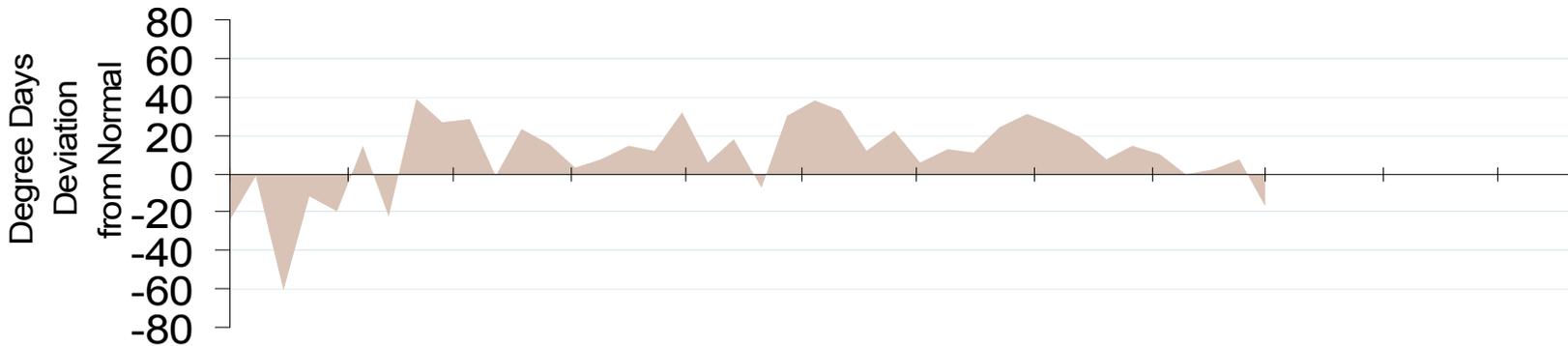
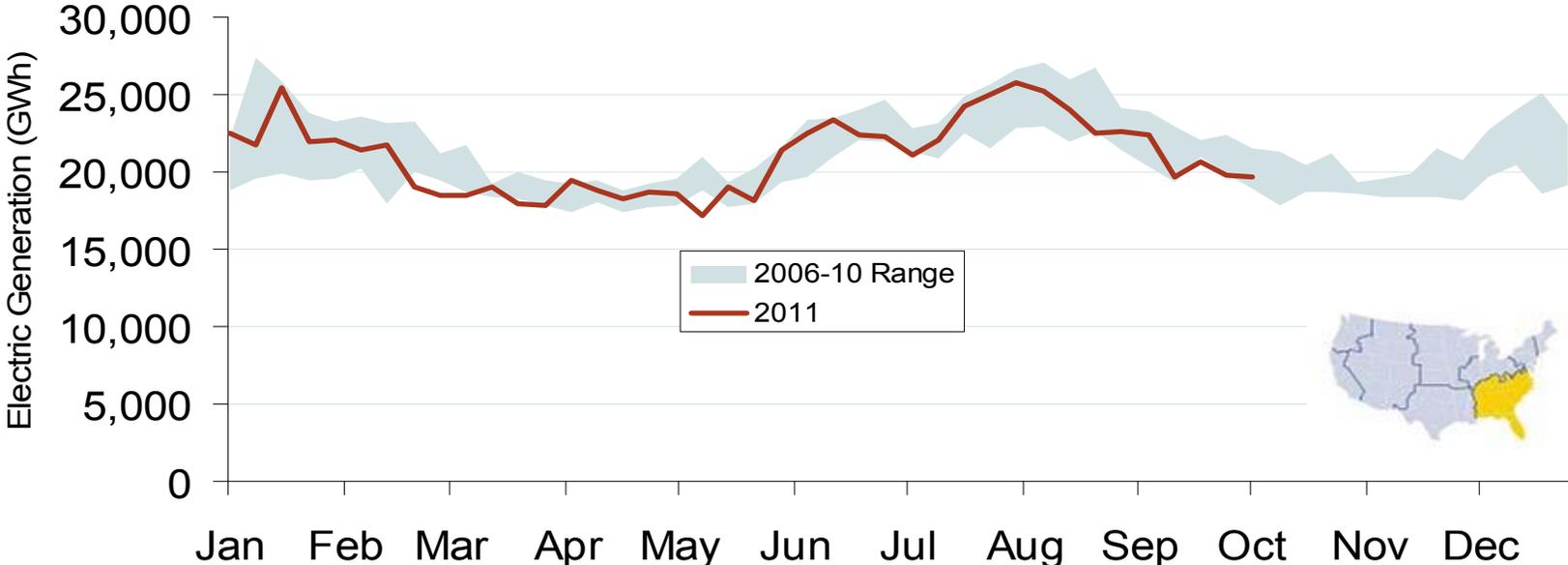
Source: Derived from *EEI* and *NOAA* data
October 2011 Southeastern Snapshot

Updated: October 06, 2011

Southeast Electric Market: Generation Output and Temperatures

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

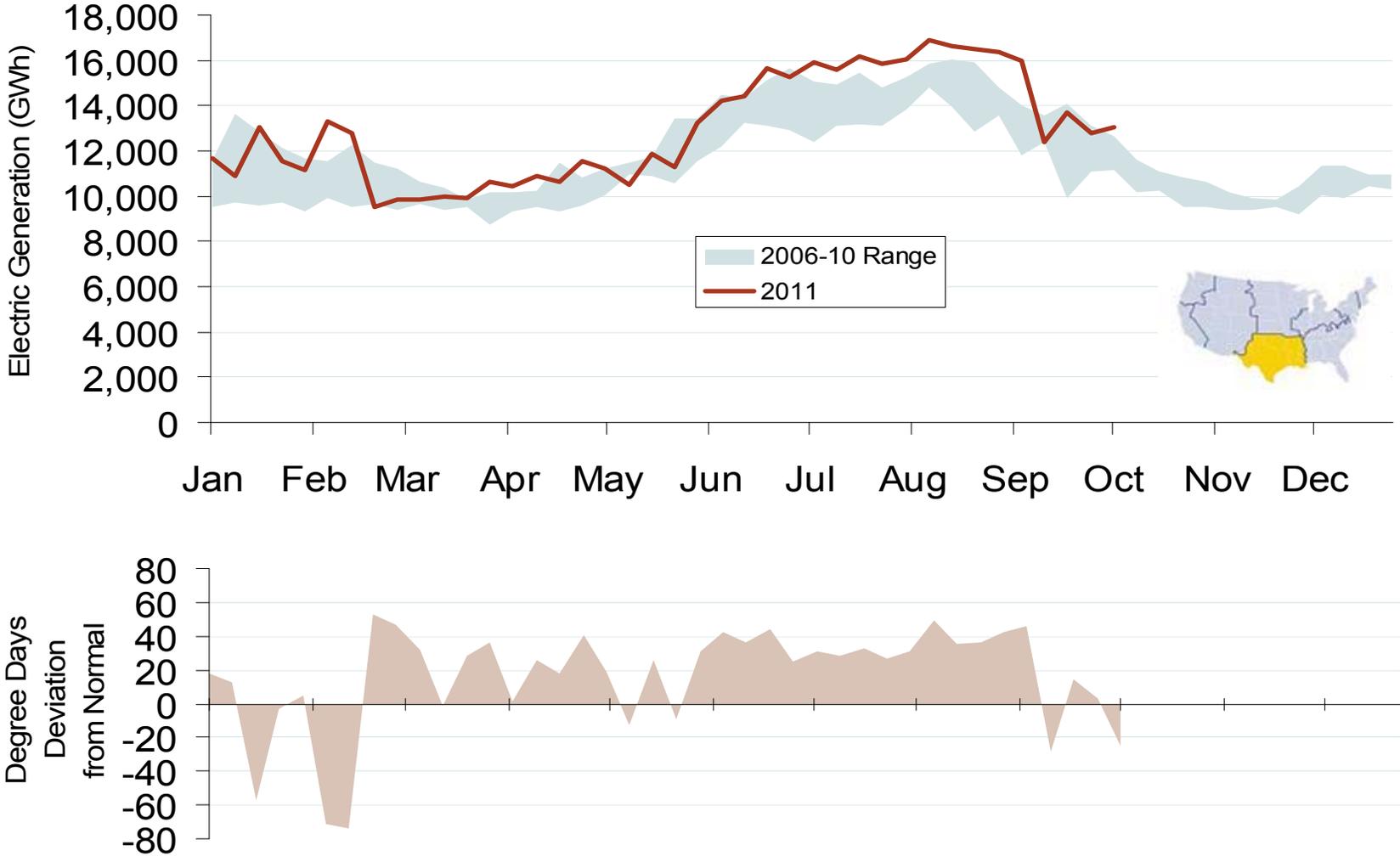
Weekly Power Generation & Temps. - Southeast



Source: Derived from EEI and NOAA data
October 2011 Southeastern Snapshot

Updated: October 06, 2011

Weekly Power Generation & Temps. - South Central



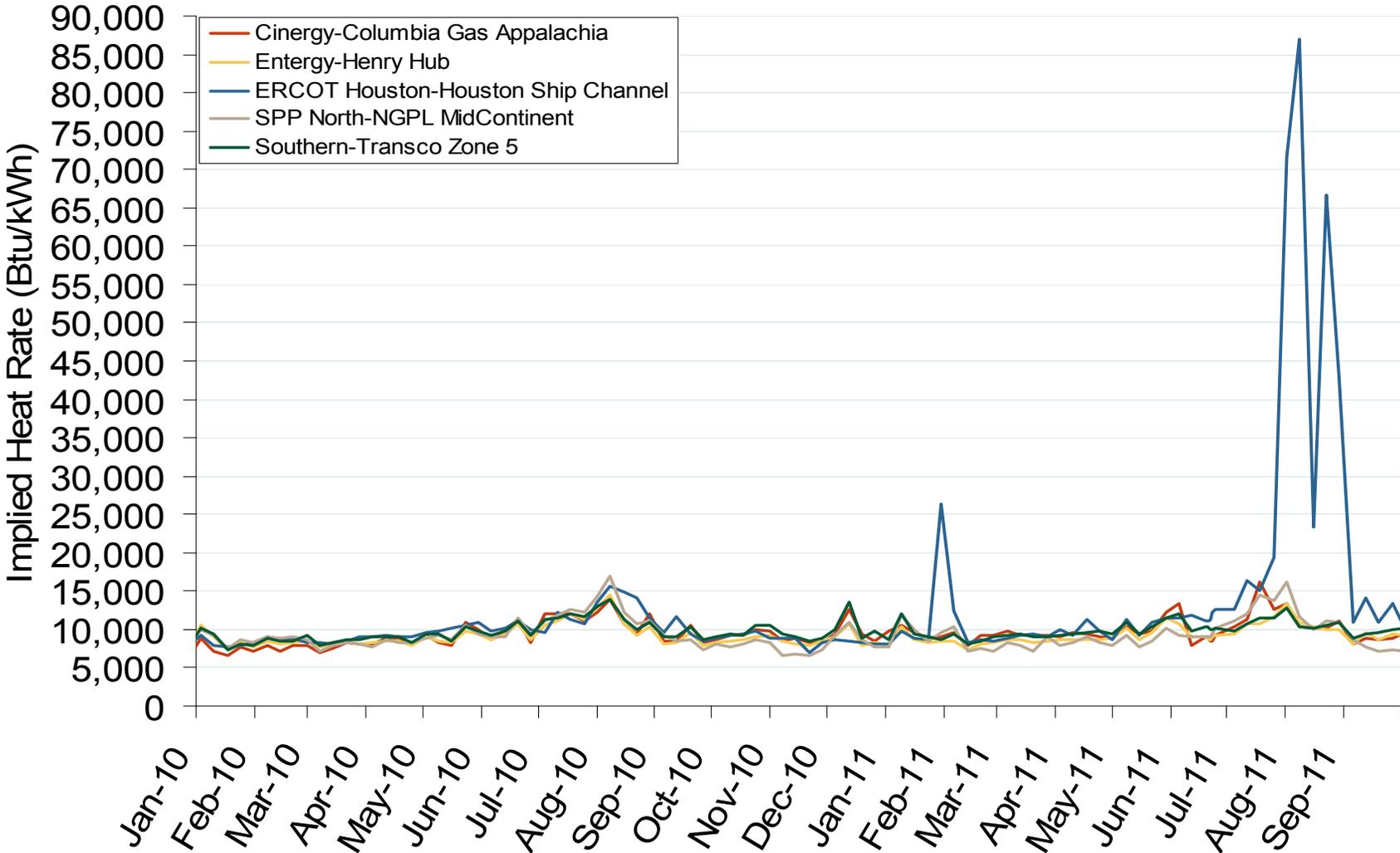
Source: Derived from *EEI* and *NOAA* data
October 2011 Southeastern Snapshot

Updated: October 06, 2011

Southeast Electric Market: South Central Implied Heat Rates

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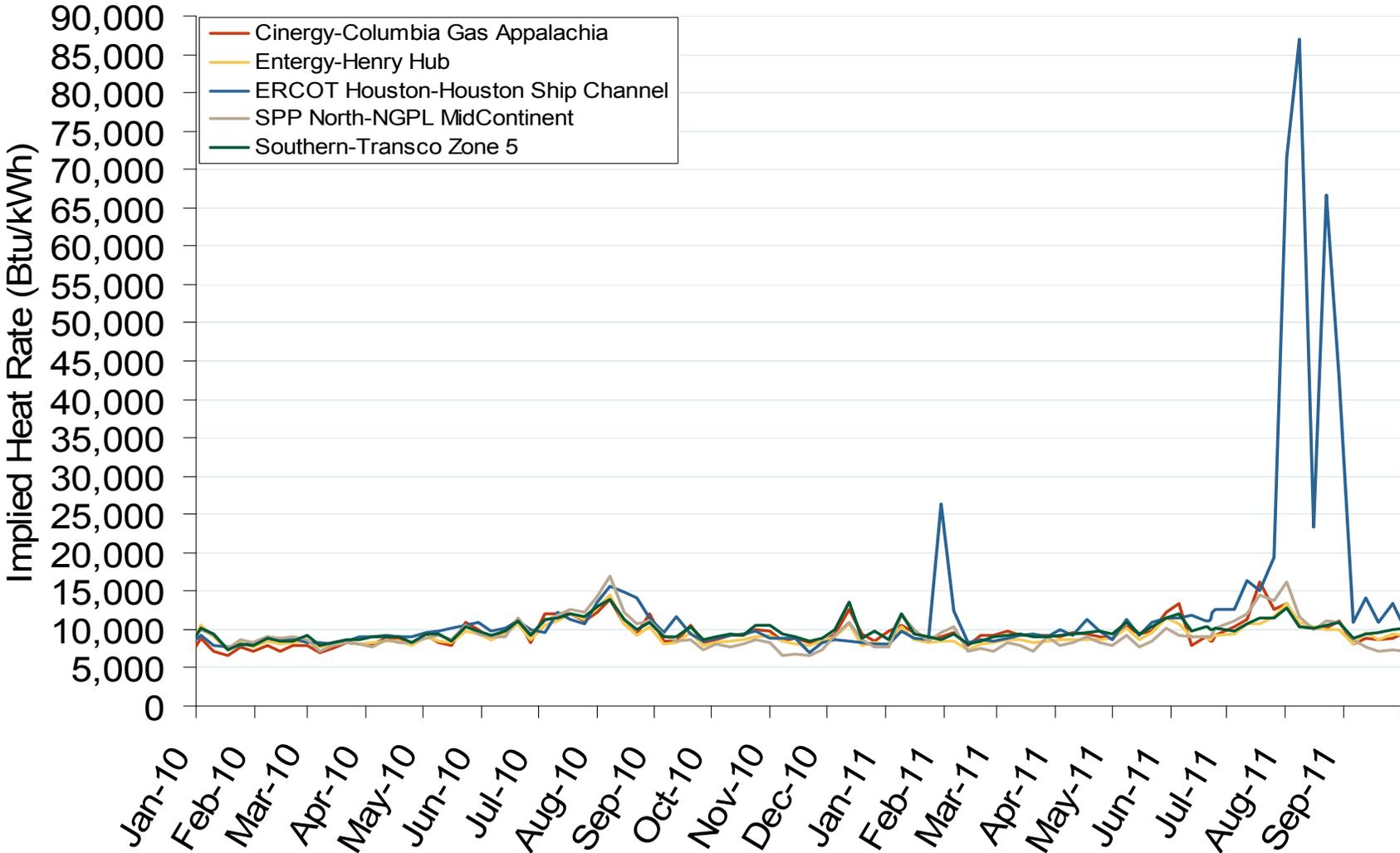
Implied Heat Rates at South Central Trading Points - Weekly Avgs.



Source: Derived from Platts on-peak electric and natural gas price data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

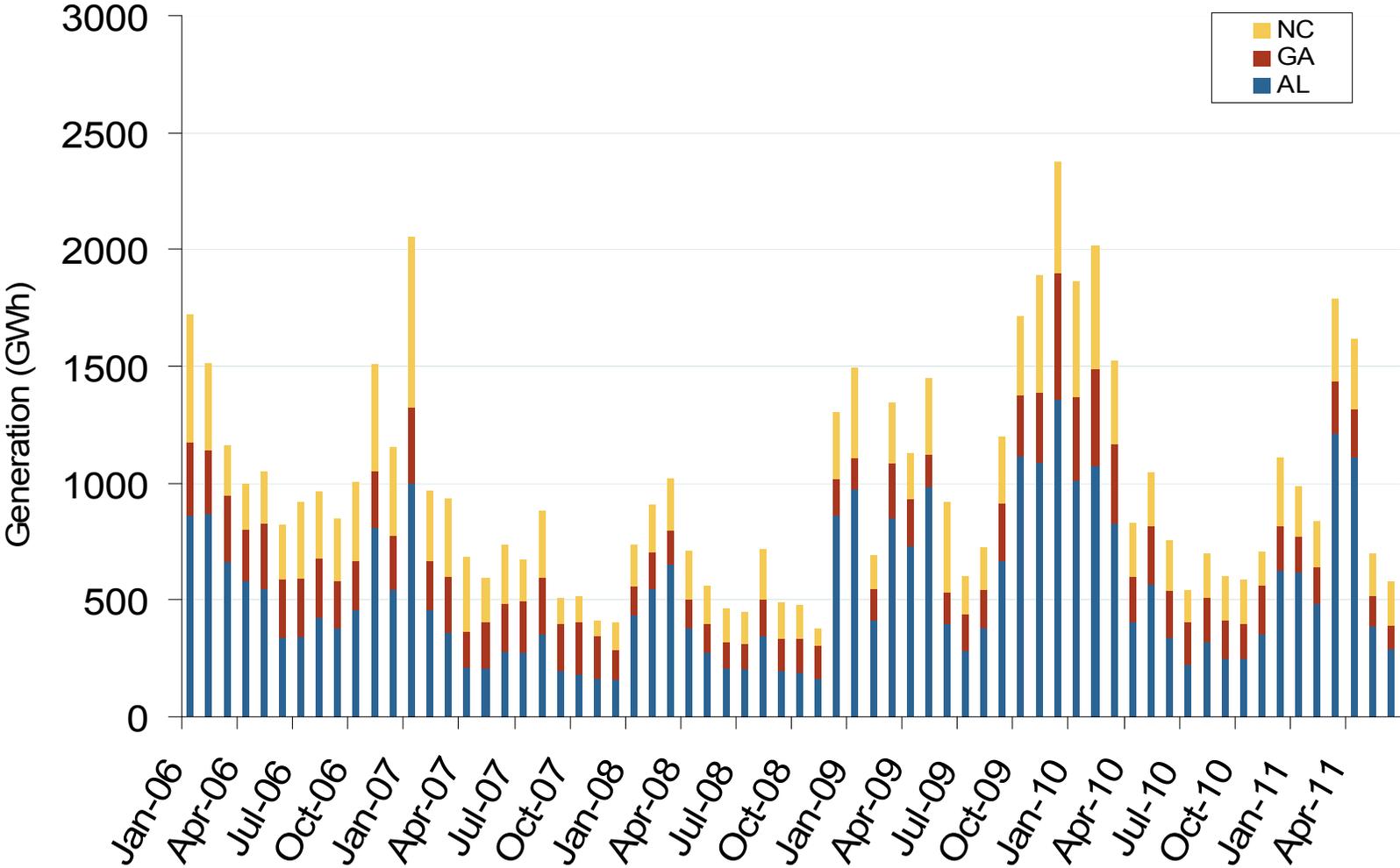
Implied Heat Rates at South Central Trading Points - Weekly Avgs.



Source: Derived from Platts on-peak electric and natural gas price data
October 2011 Southeastern Snapshot

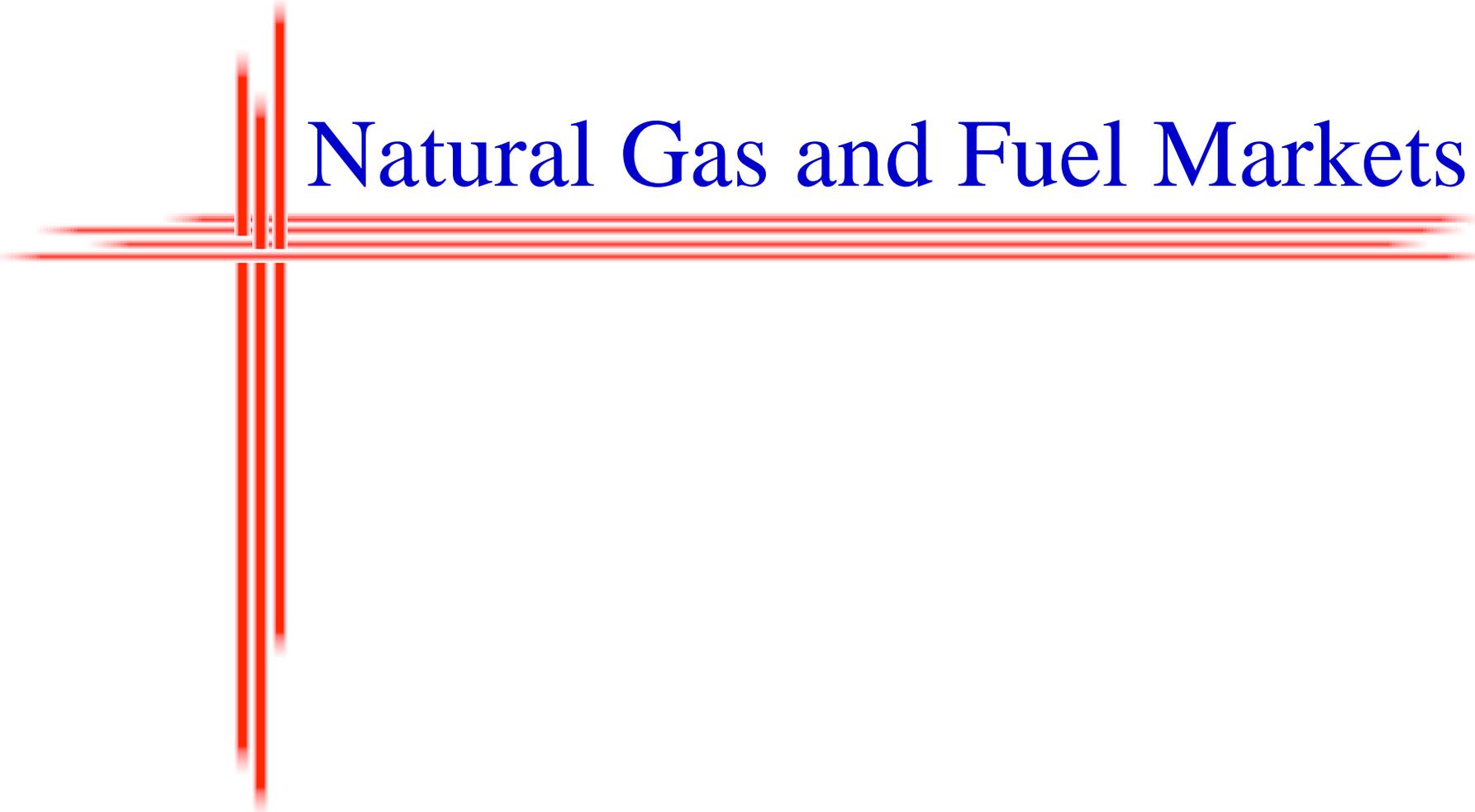
Updated: October 03, 2011

Monthly Southeastern Hydroelectric Generation



Source: Ventyx, derived from EIA and EPA data
October 2011 Southeastern Snapshot

Updated: October 04, 2011

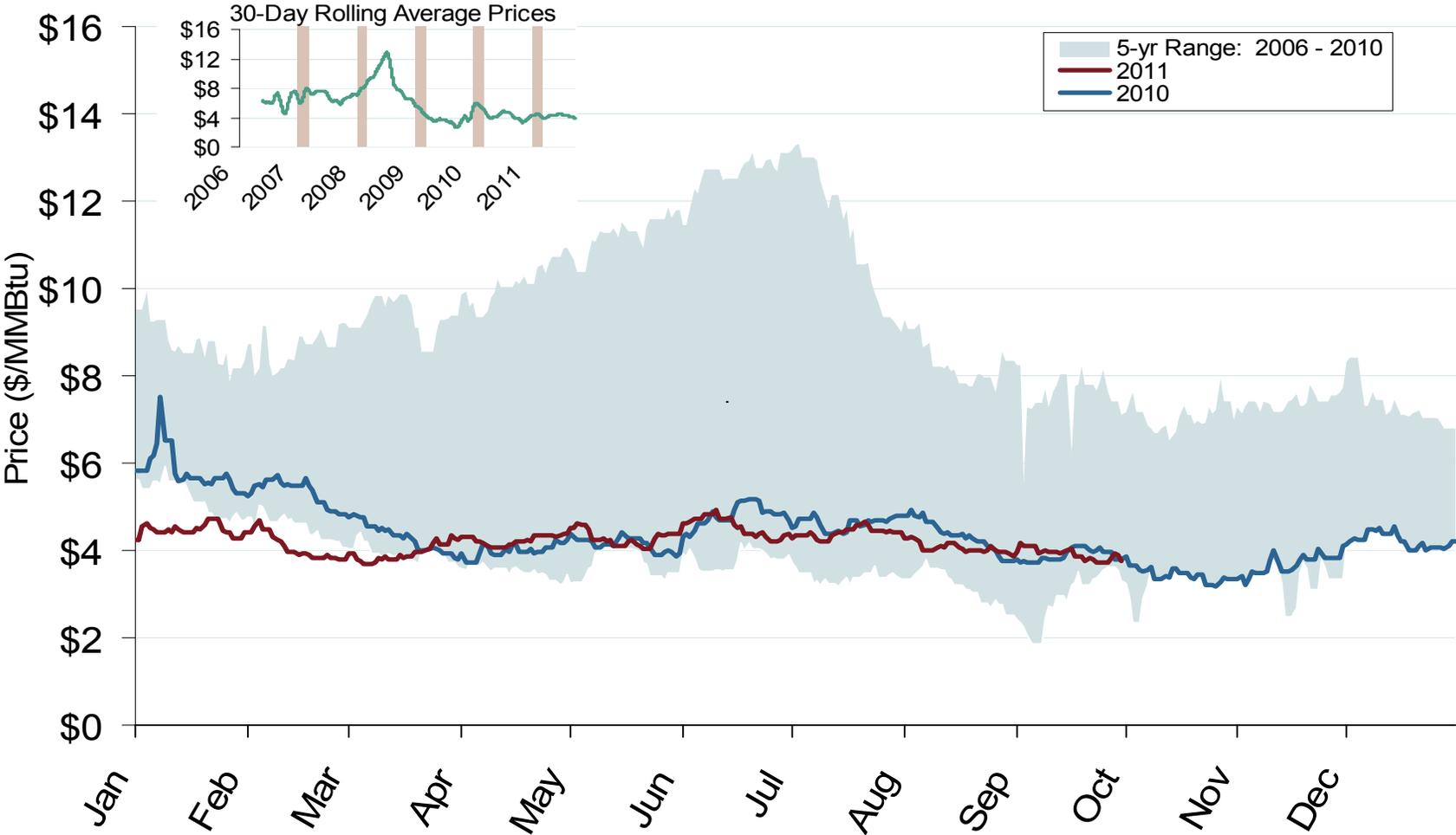


Natural Gas and Fuel Markets

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

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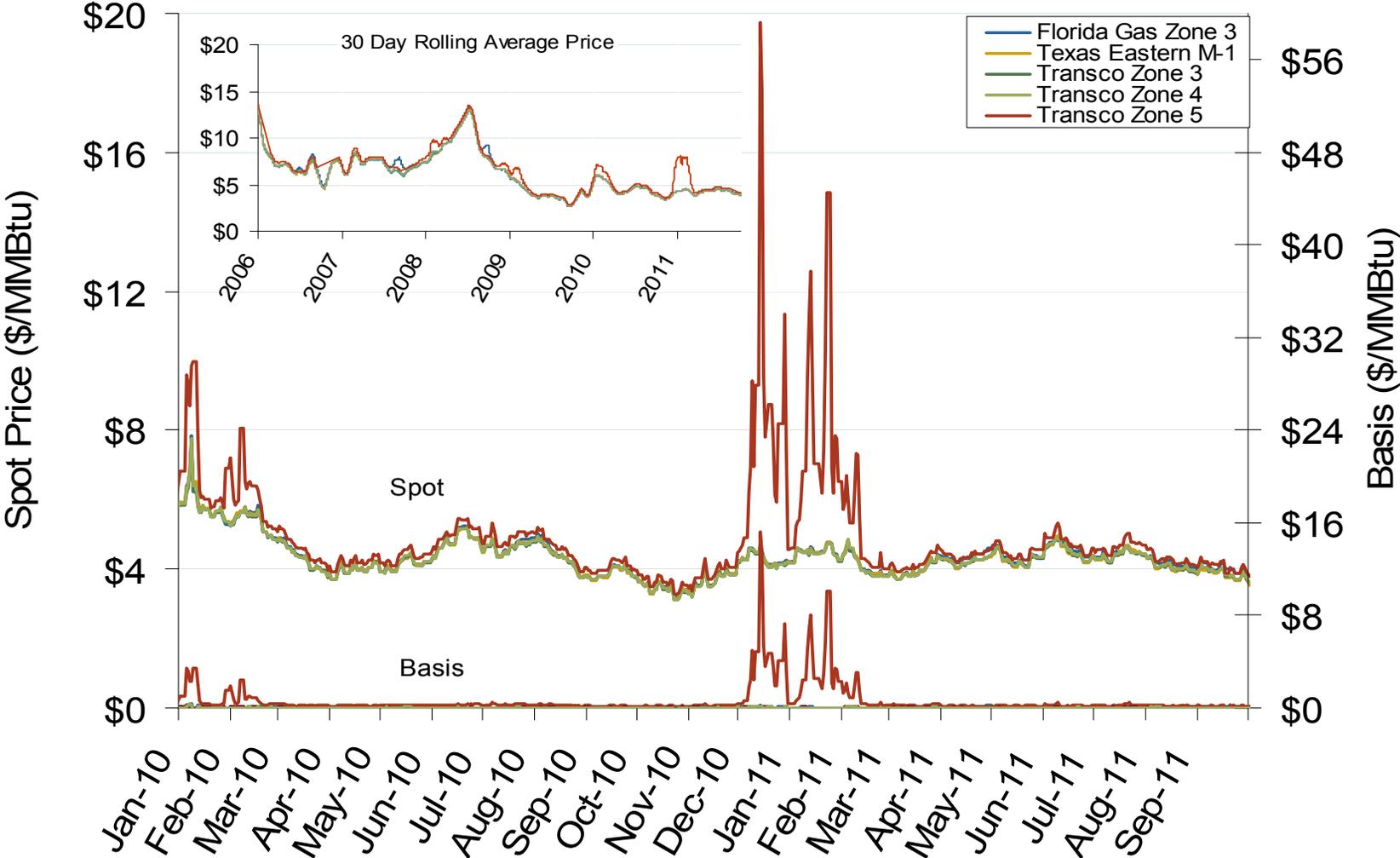
Henry Hub Natural Gas Daily Spot Prices



Source: Derived from *Platts* data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

Southeastern Day-Ahead Hub Spot Prices and Basis



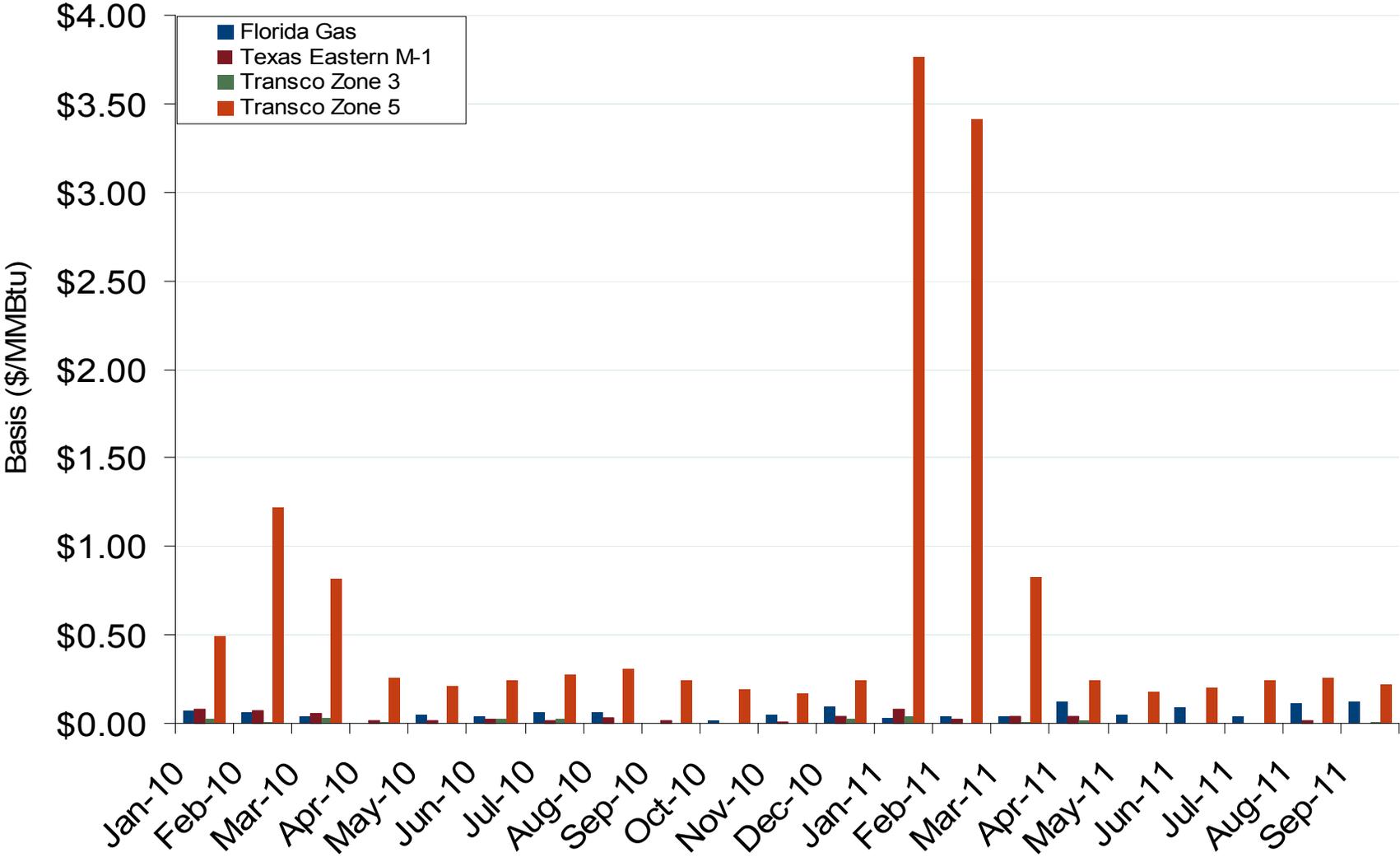
Source: Derived from Platts data
October 2011 Southeastern Snapshot

Updated: October 04, 2011

Southeast Natural Gas Market: Average Basis to Henry Hub

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Southeastern Monthly Average Basis Value to Henry Hub



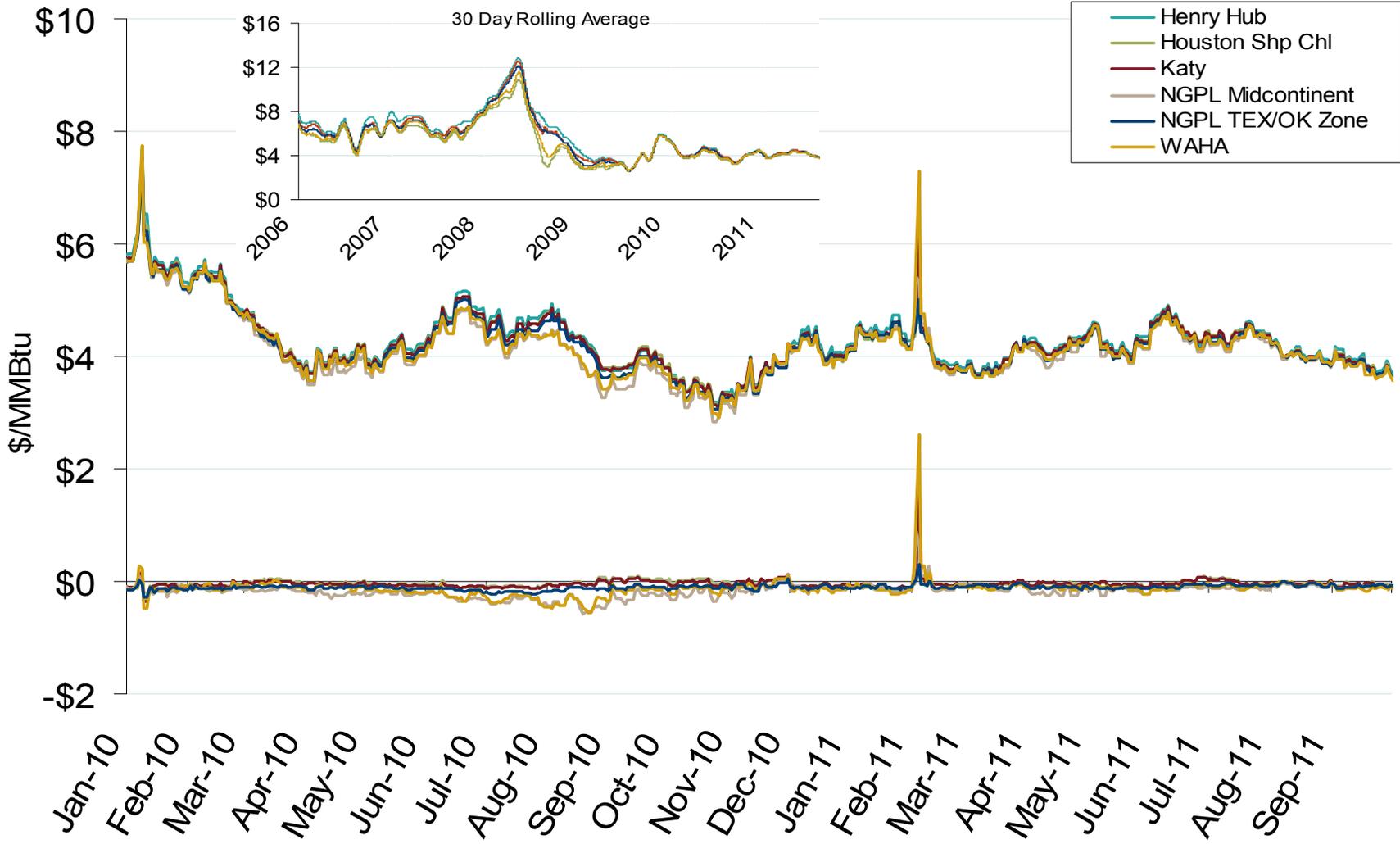
Source: Derived from Platts data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

South Central Natural Gas Market: Spot Prices and Basis

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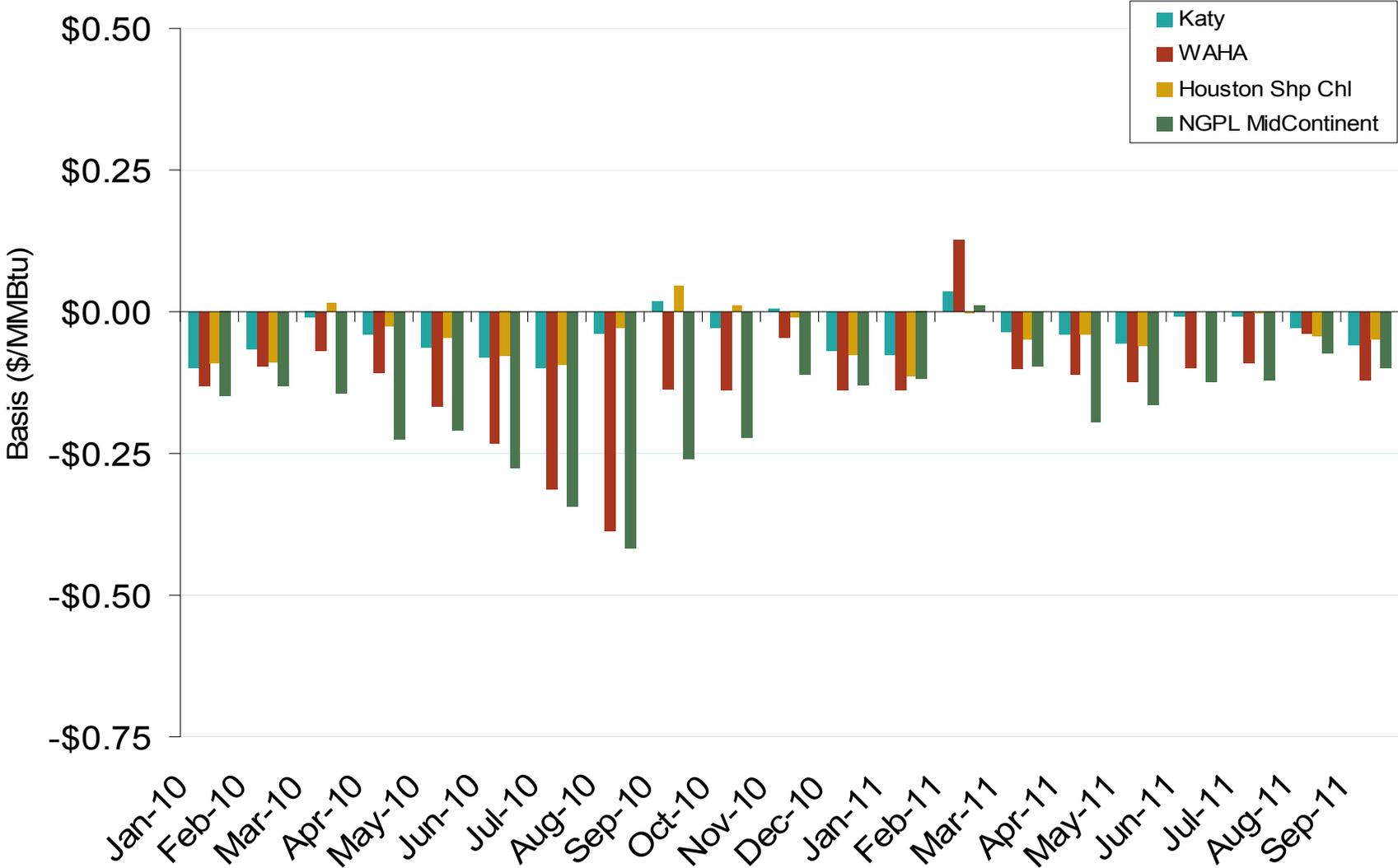
Gulf Day-Ahead Hub Spot Prices and Basis



Source: Derived from *Platts* data
October 2011 Southeastern Snapshot

Updated: October 04, 2011

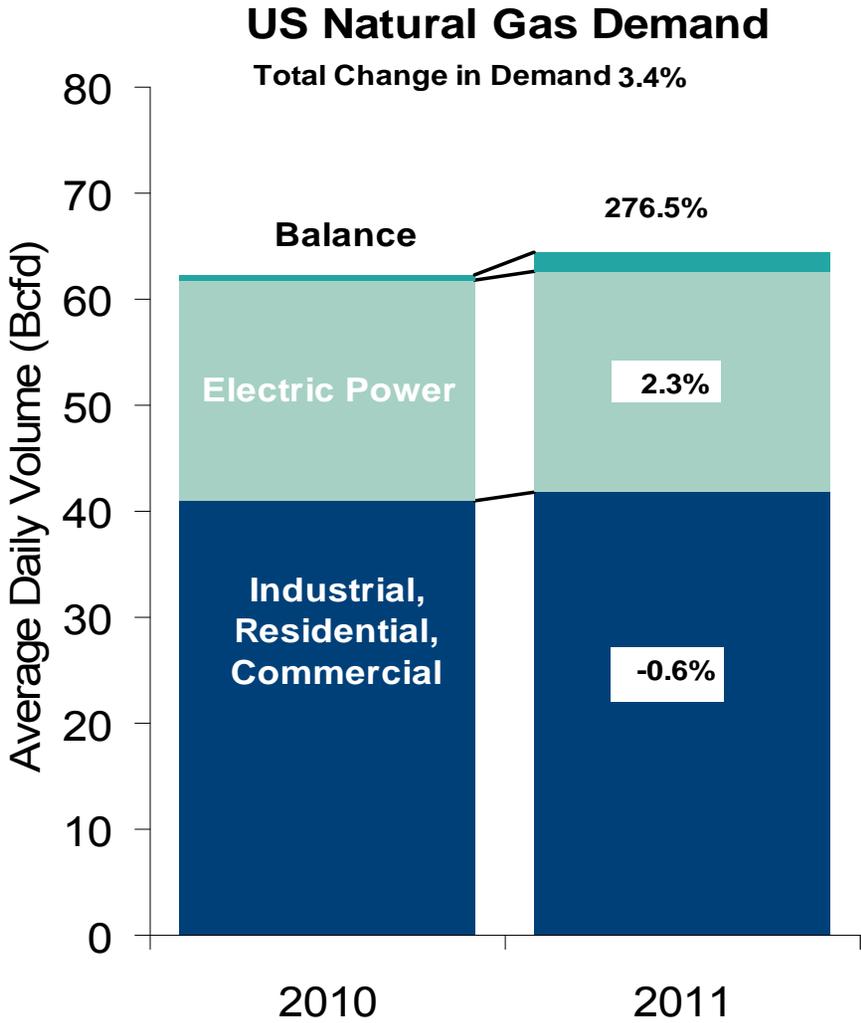
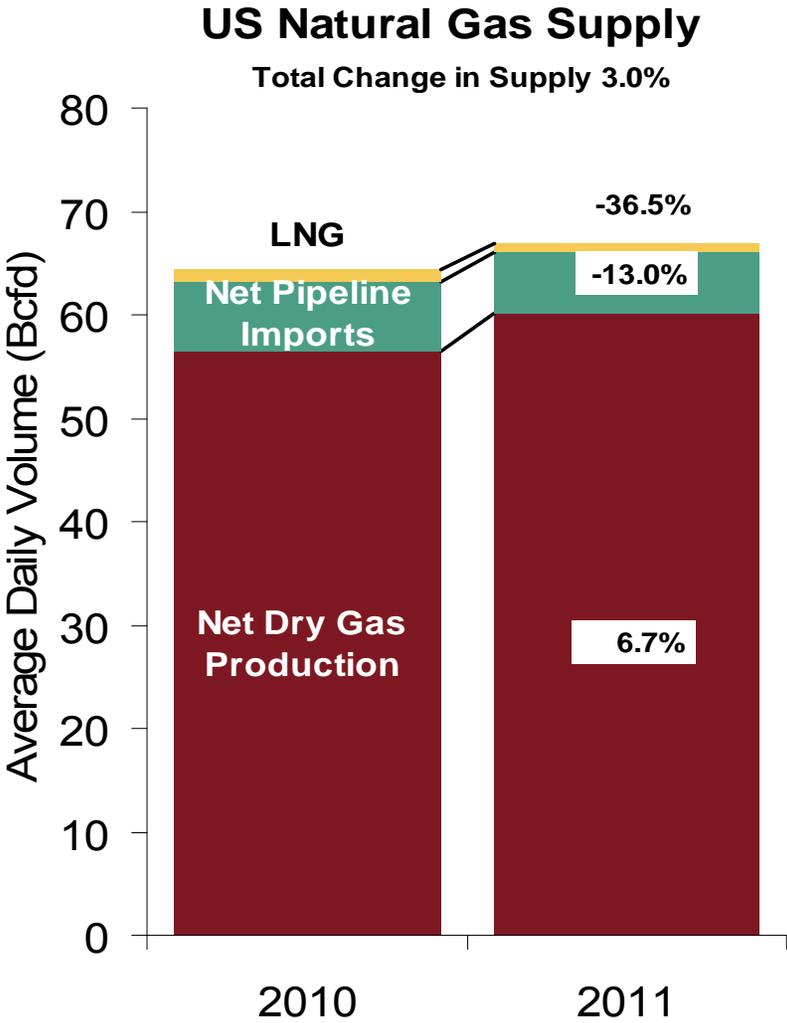
Gulf Monthly Average Basis Value to Henry Hub



Source: Derived from Platts data
October 2011 Southeastern Snapshot

Updated: October 03, 2011

U.S. NG Supply and Demand 2010 vs. 2011: January - September

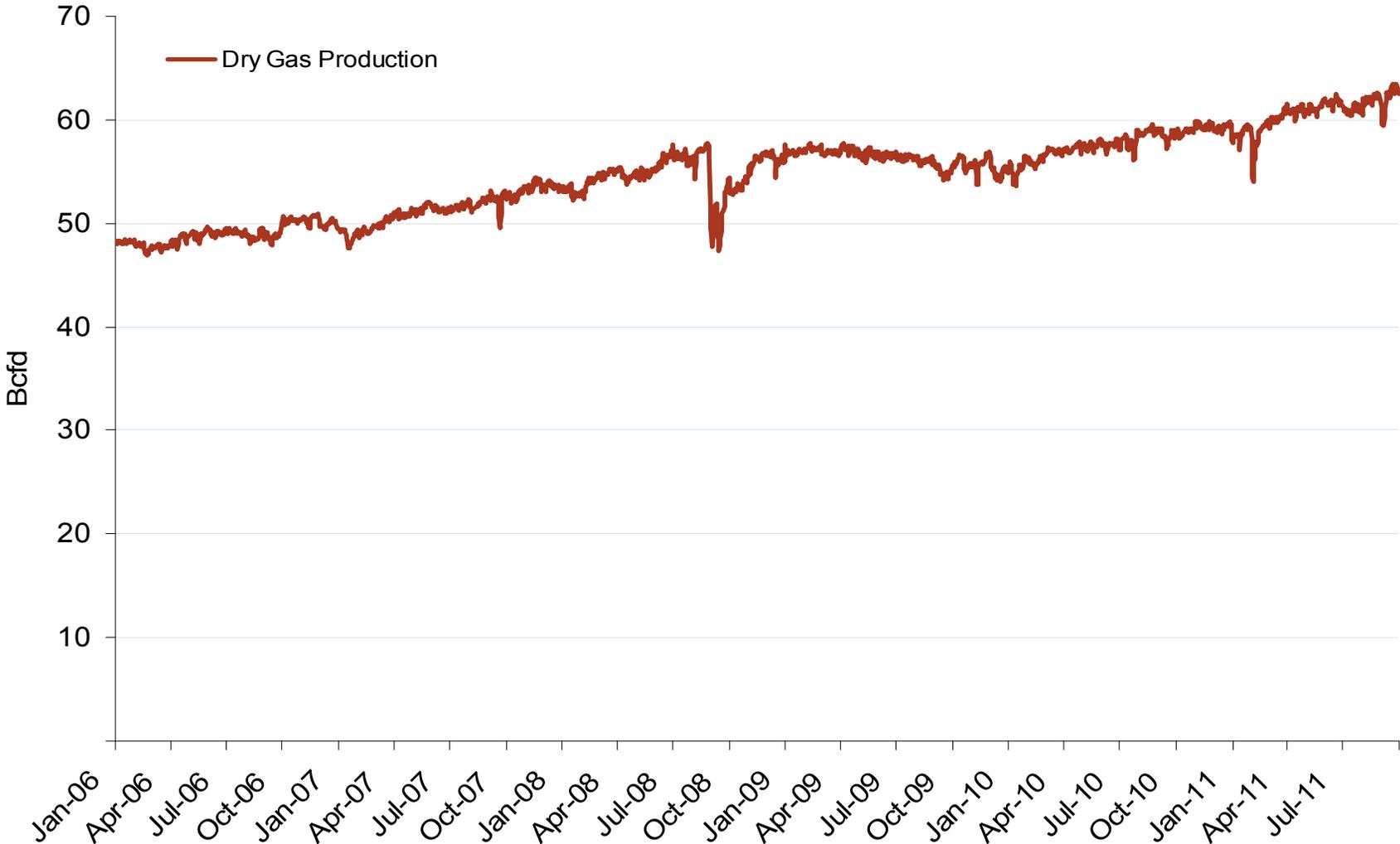


Source: Derived from Bentek Energy data
October 2011 Southeastern Snapshot

Updated: October 11, 2011

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



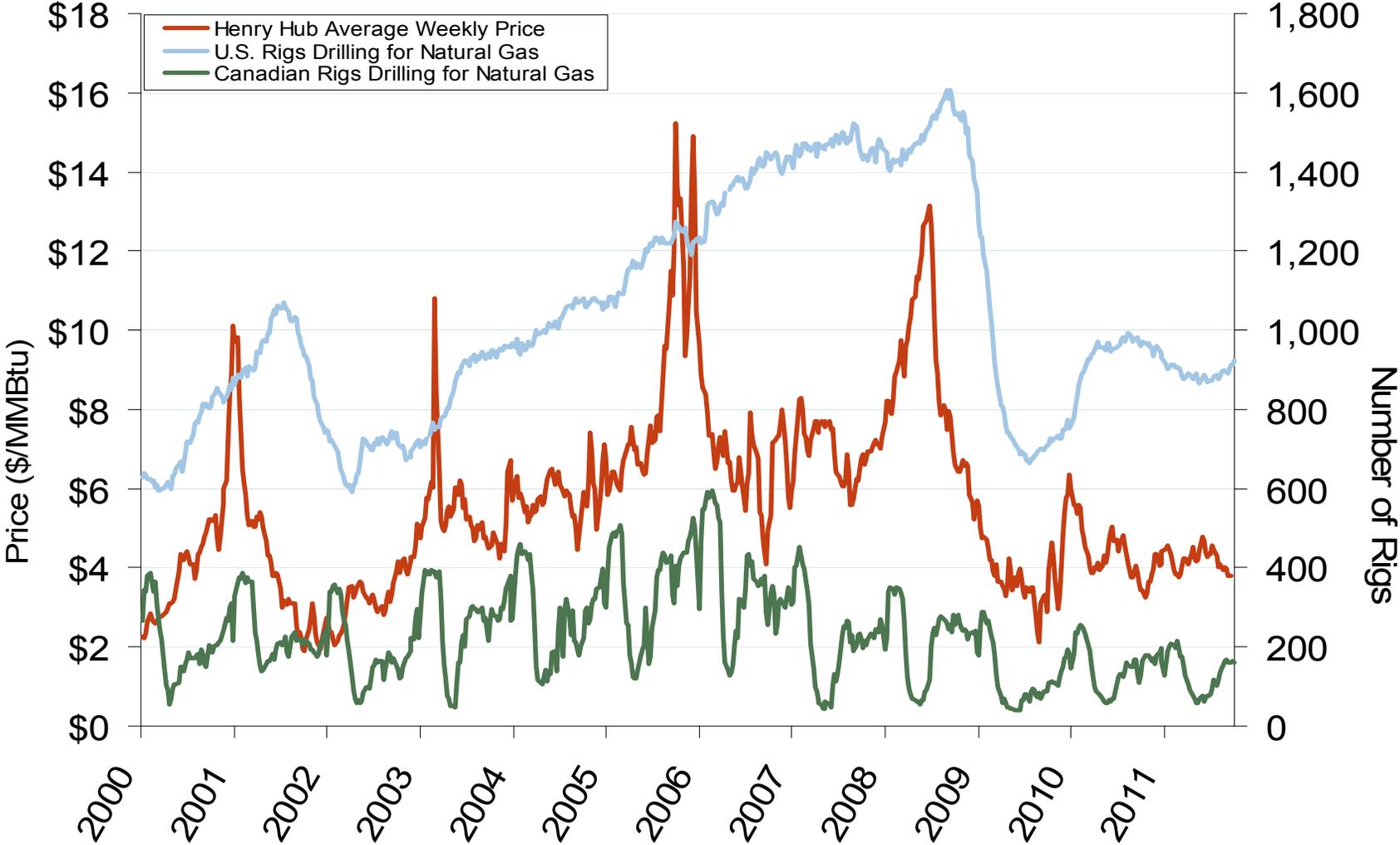
Note: Prior to July 2010, chart was derived from a combination of EIA and Bentek Energy data

Source: Derived from Bentek Energy data

October 2011 Southeastern Snapshot

Updated: October 05, 2011

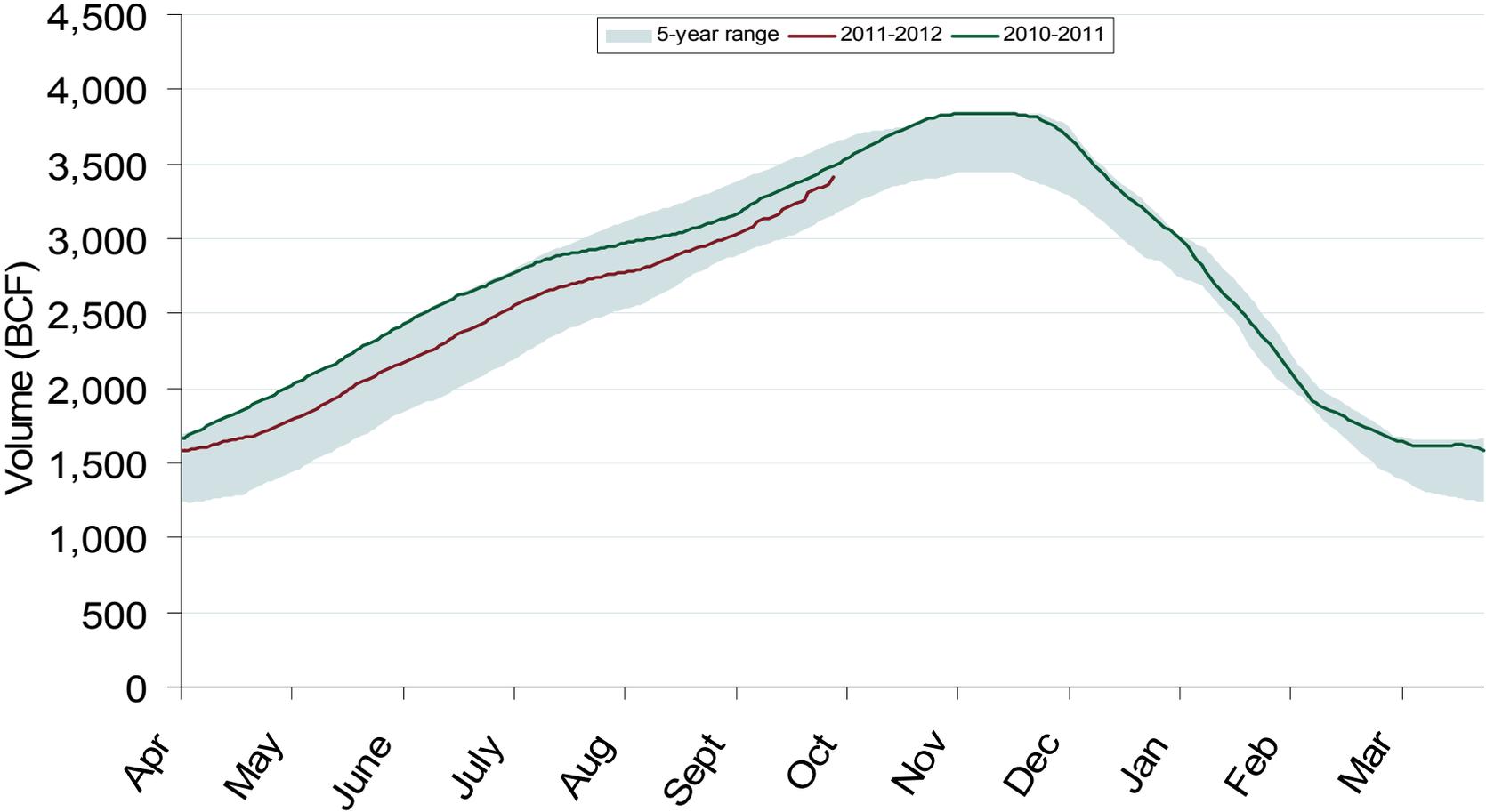
U.S. and Canadian NG Drilling Rig Count and Daily Spot Prices



Source: Derived from *Platts* and *Baker Hughes* data
October 2011 Southeastern Snapshot

Updated: October 04, 2011

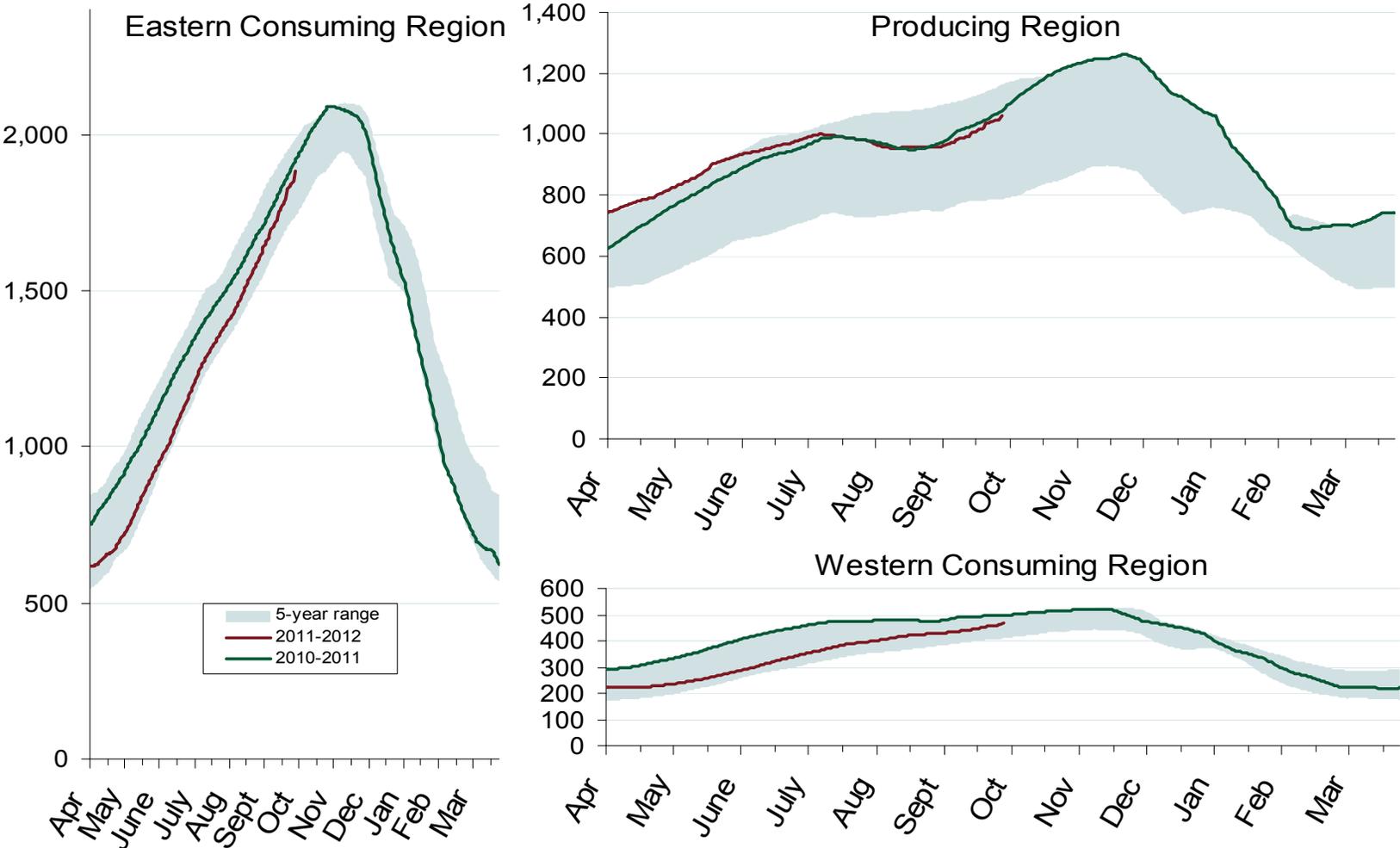
Total U.S. Working Gas in Storage



Source: Derived from EIA data
October 2011 Southeastern Snapshot

Updated: October 06, 2011

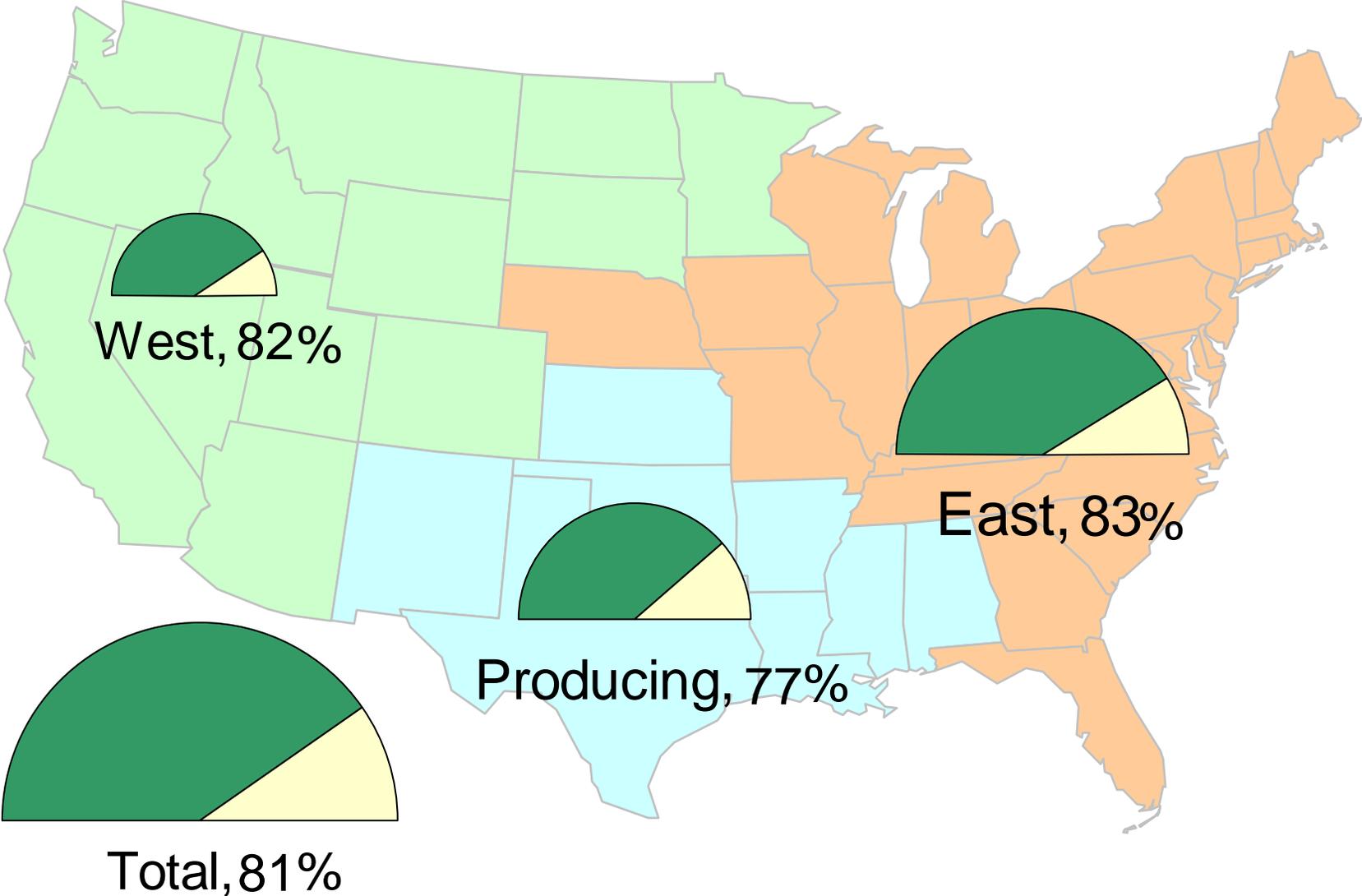
Regional Totals of Working Gas in Storage



Source: Derived from EIA data
October 2011 Southeastern Snapshot

Updated: October 06, 2011

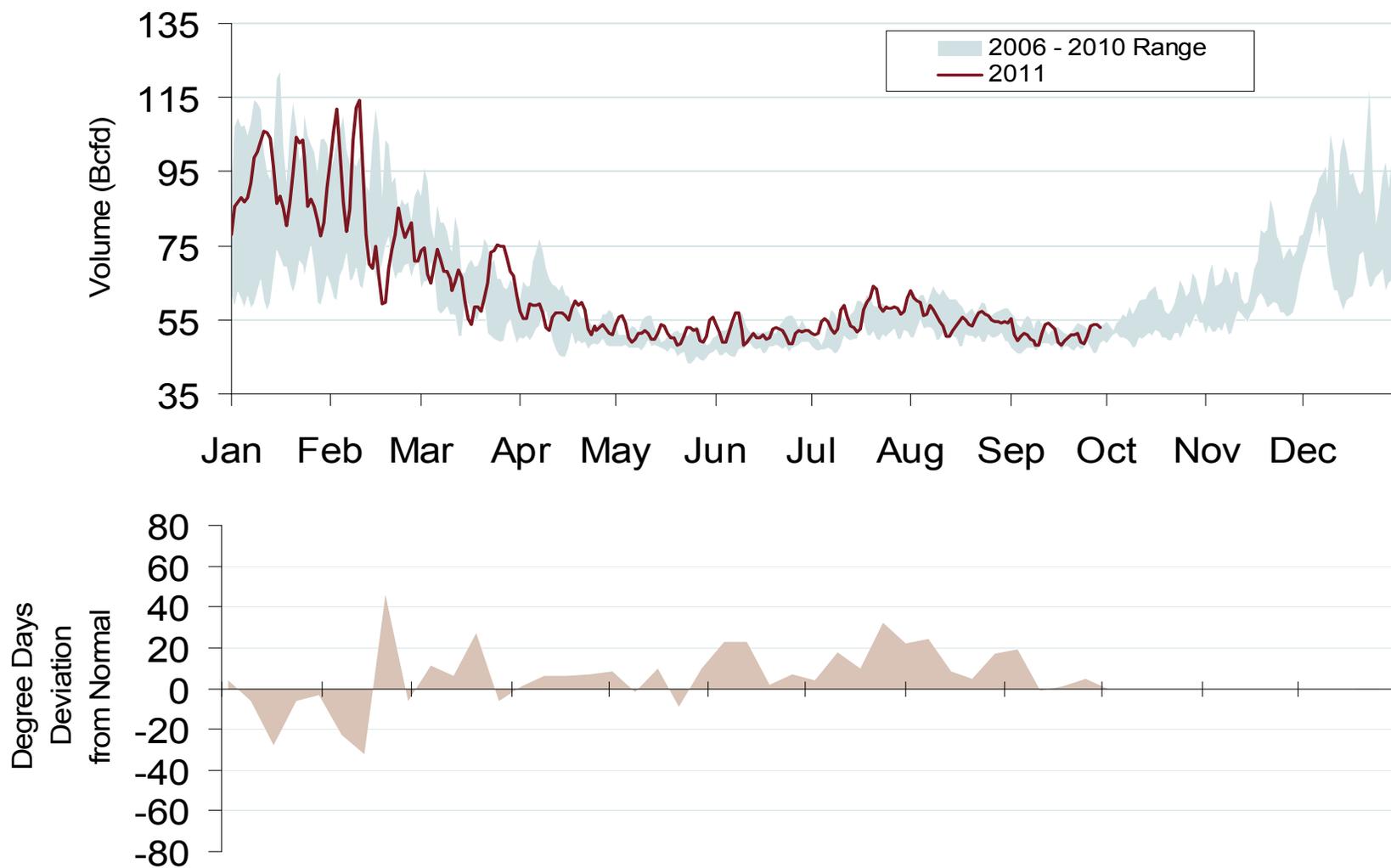
Natural Gas Storage Inventories – September 23, 2011



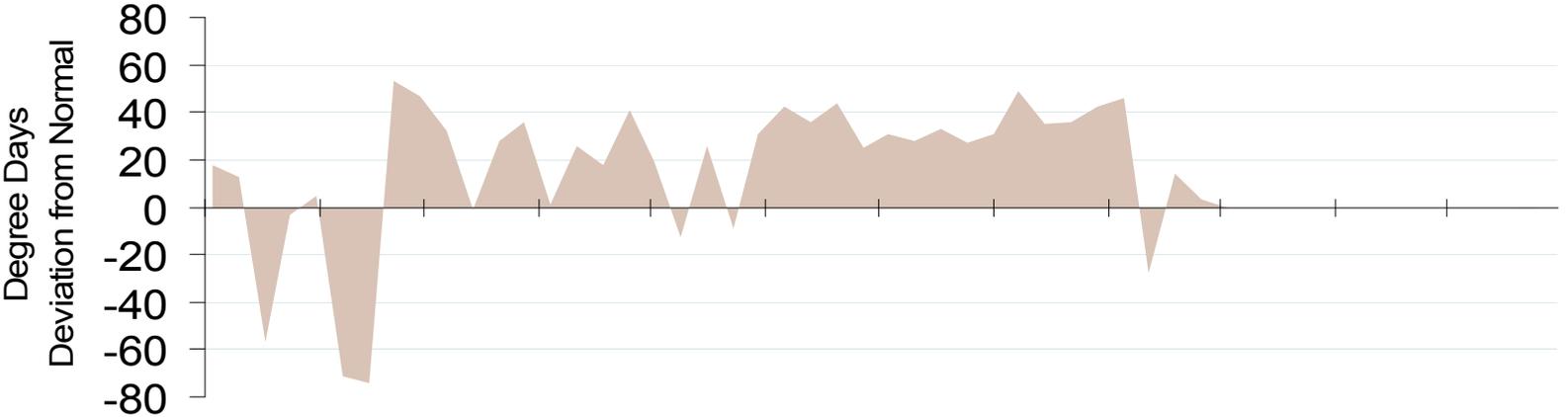
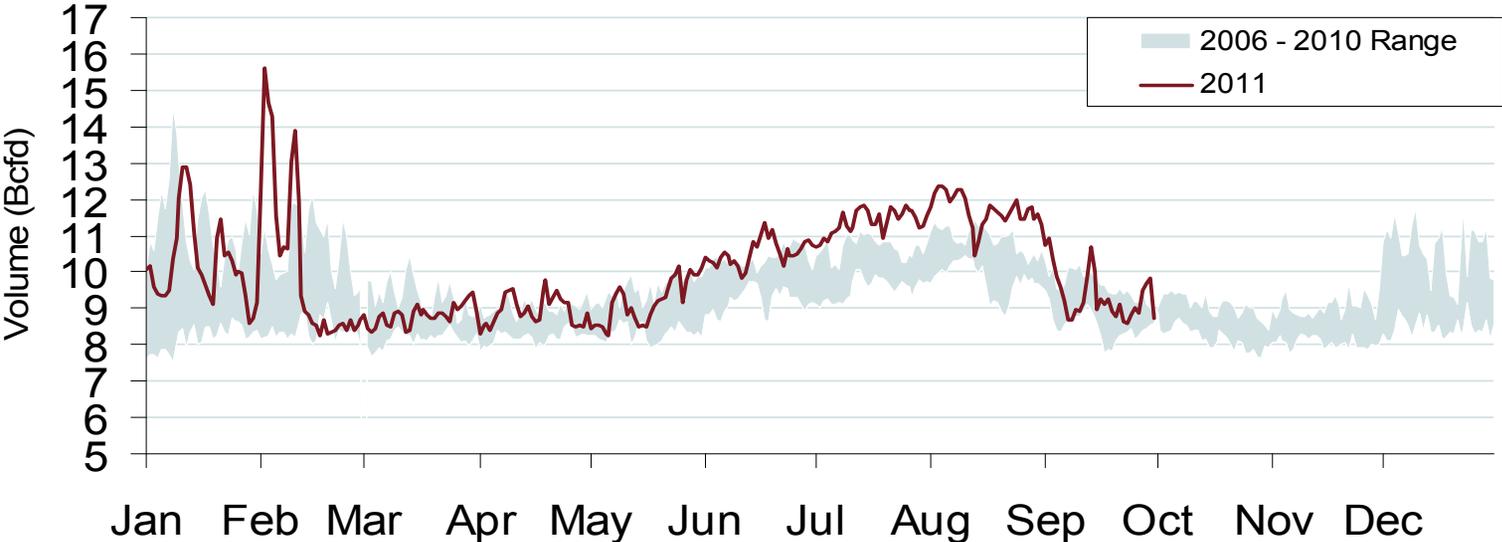
Source: Derived from EIA Storage and Estimated Working Gas Capacity data
October 2011 Southeastern Snapshot

Updated October 4, 2011
20022

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



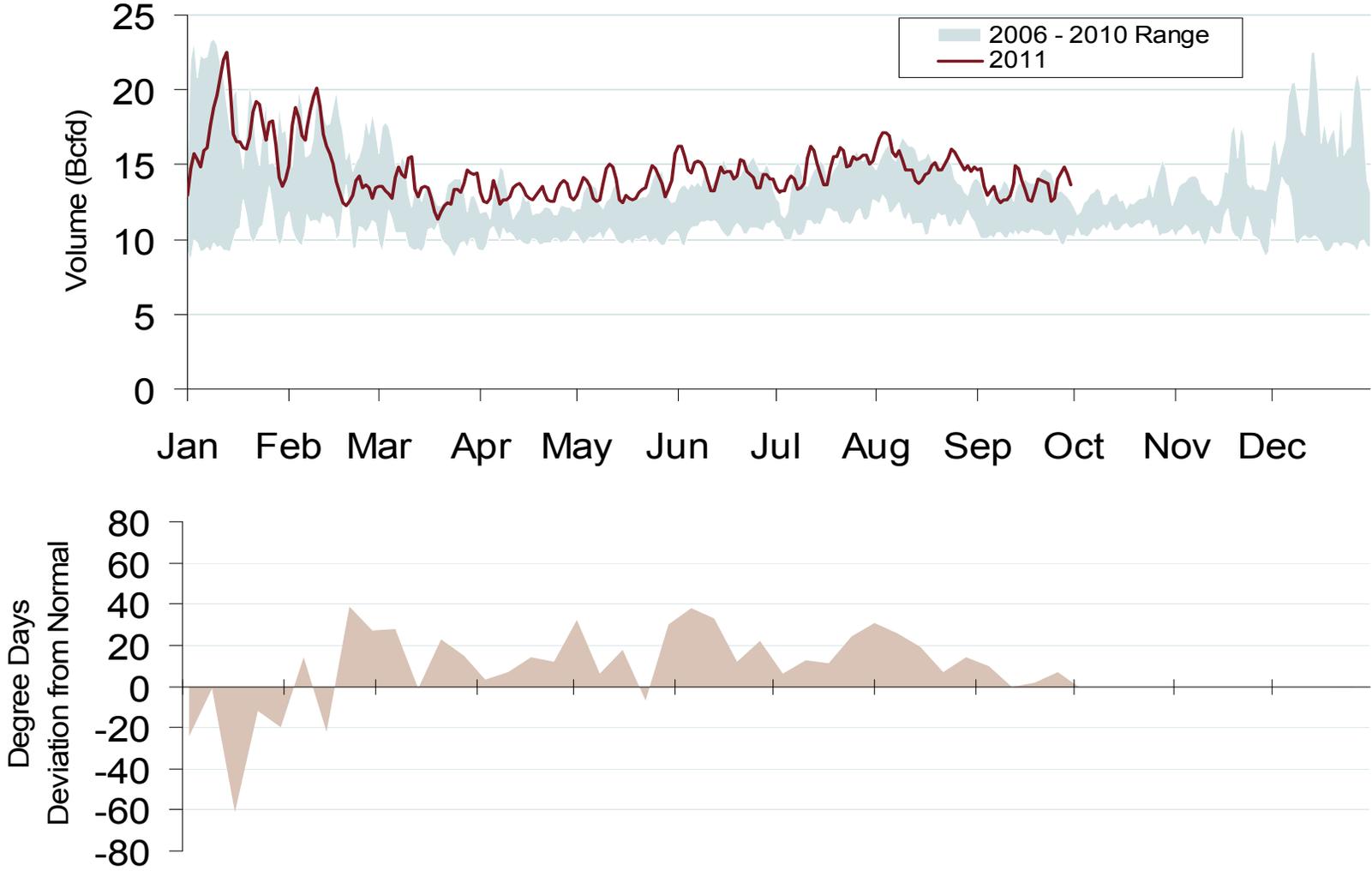
Daily Gulf Natural Gas Demand All Sectors



Source: Derived from *Bentek Energy* and Weekly NOAA data
October 2011 Southeastern Snapshot

Updated: October 05, 2011

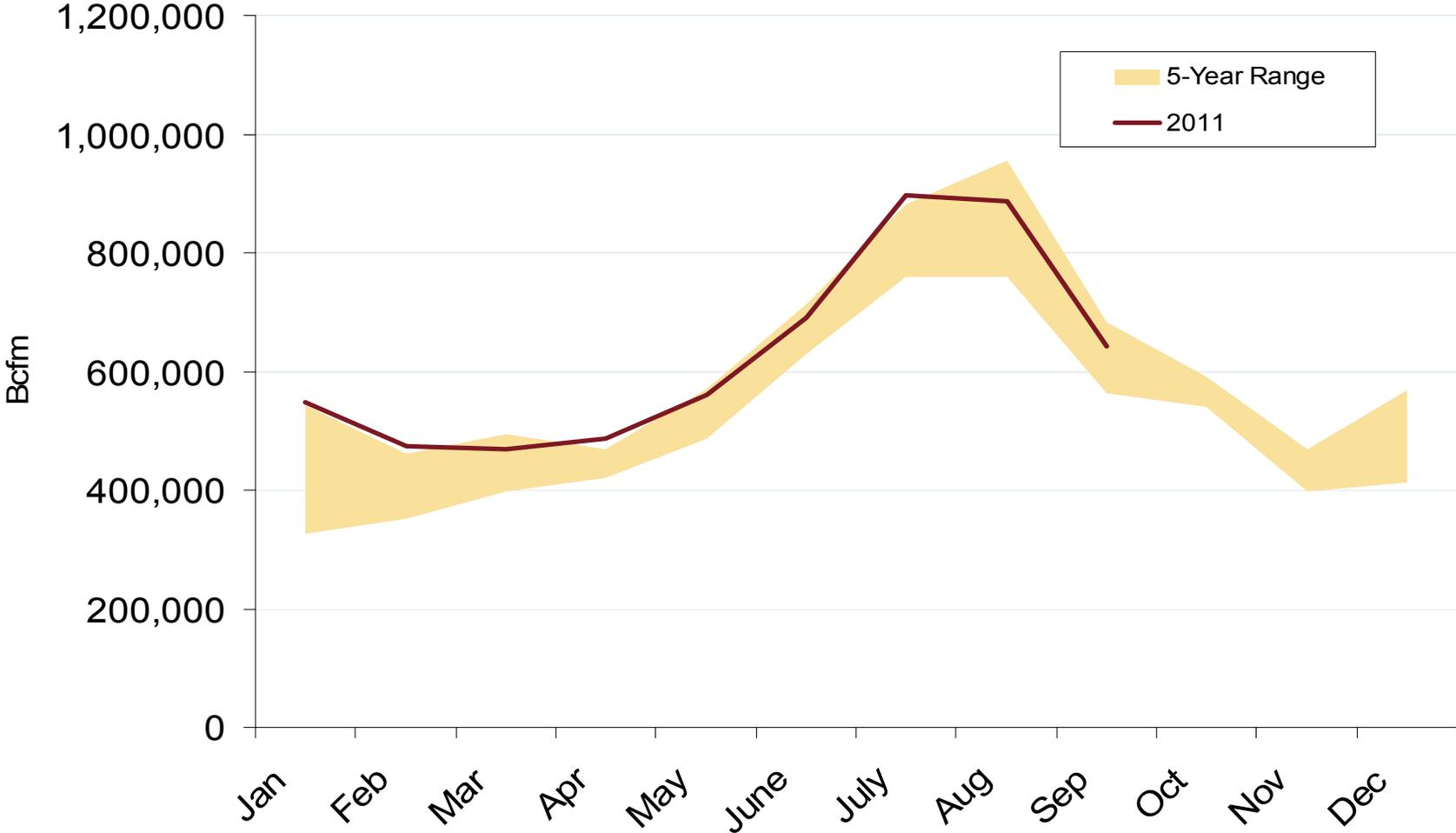
Daily Southeast Natural Gas Demand - All Sectors



Source: Derived from *Bentek Energy* and Weekly NOAA data
October 2011 Southeastern Snapshot

Updated: October 05, 2011

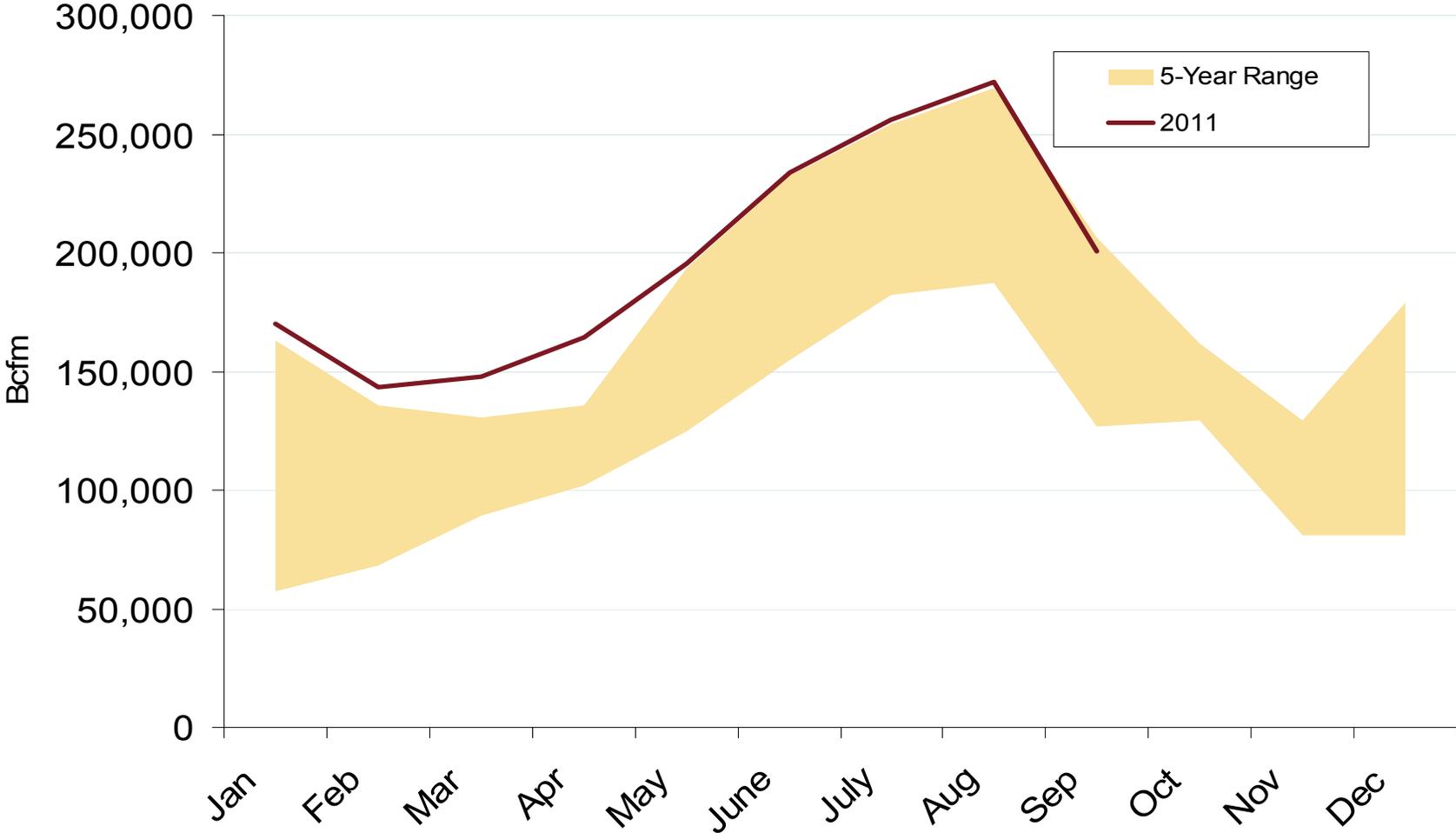
U.S. Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data
October 2011 Southeastern Snapshot

Updated: October 05, 2011

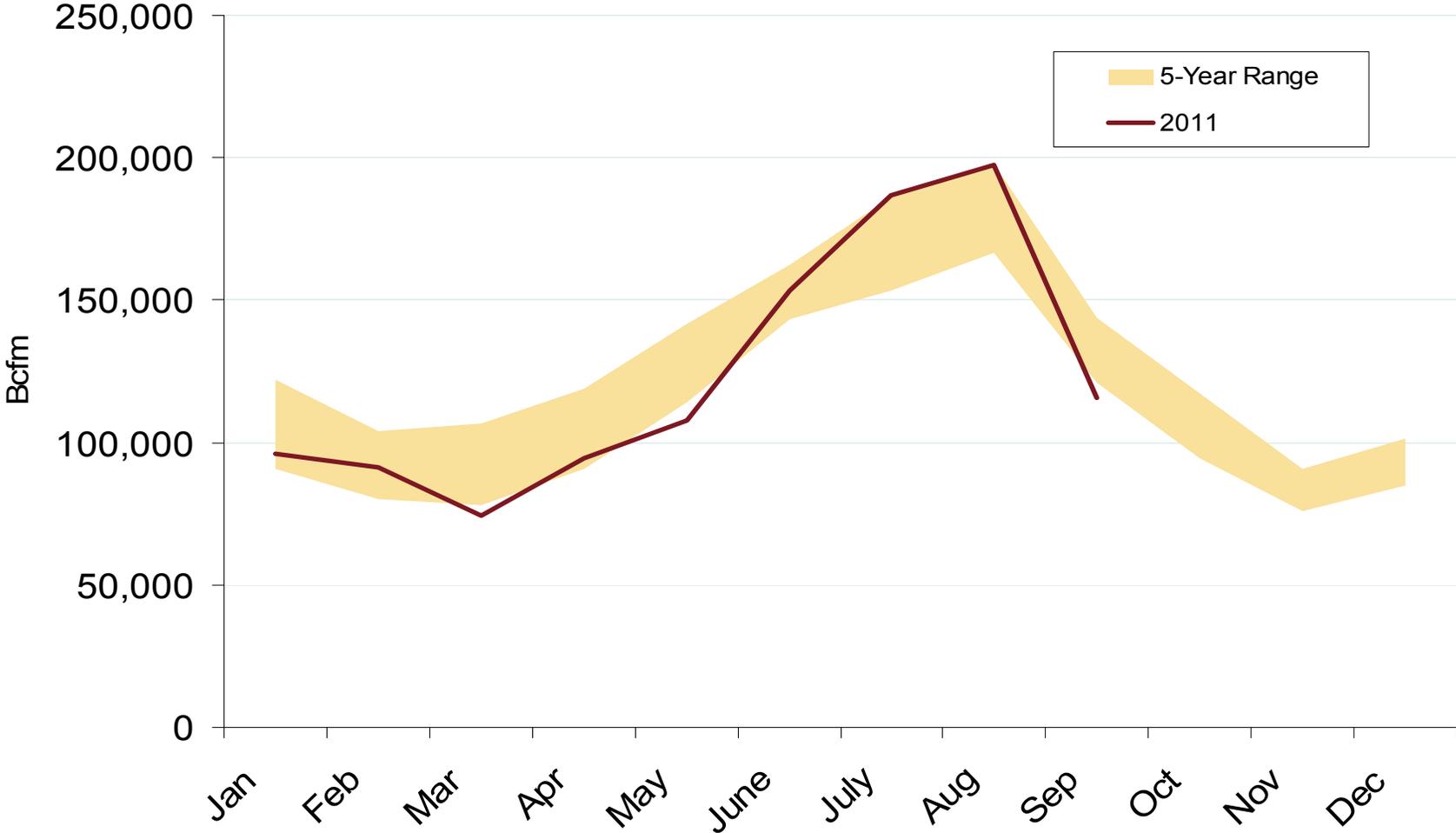
Southeast Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data
October 2011 Southeastern Snapshot

Updated: October 05, 2011

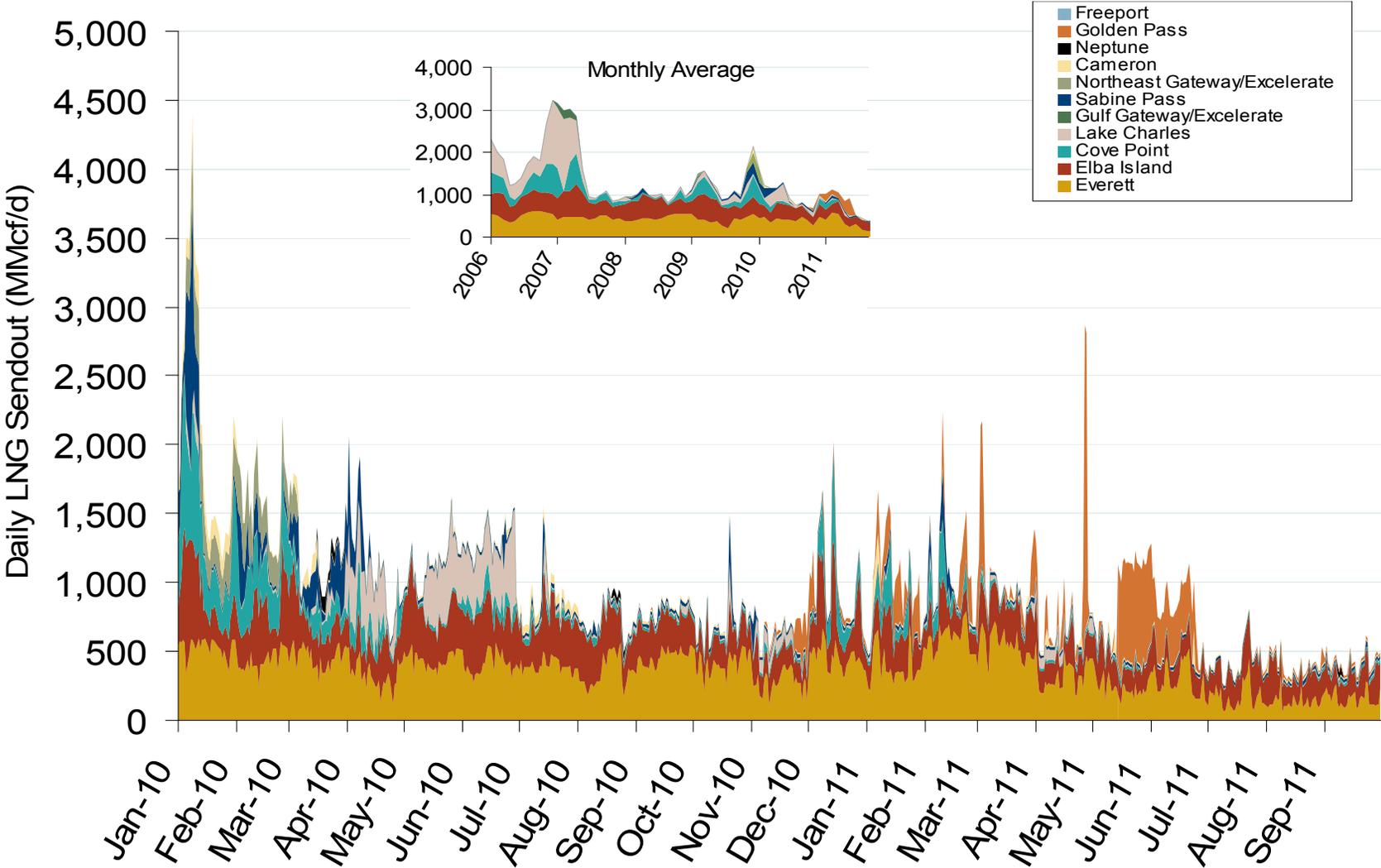
Gulf Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data
October 2011 Southeastern Snapshot

Updated: October 05, 2011

Daily Gas Sendout from Existing 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

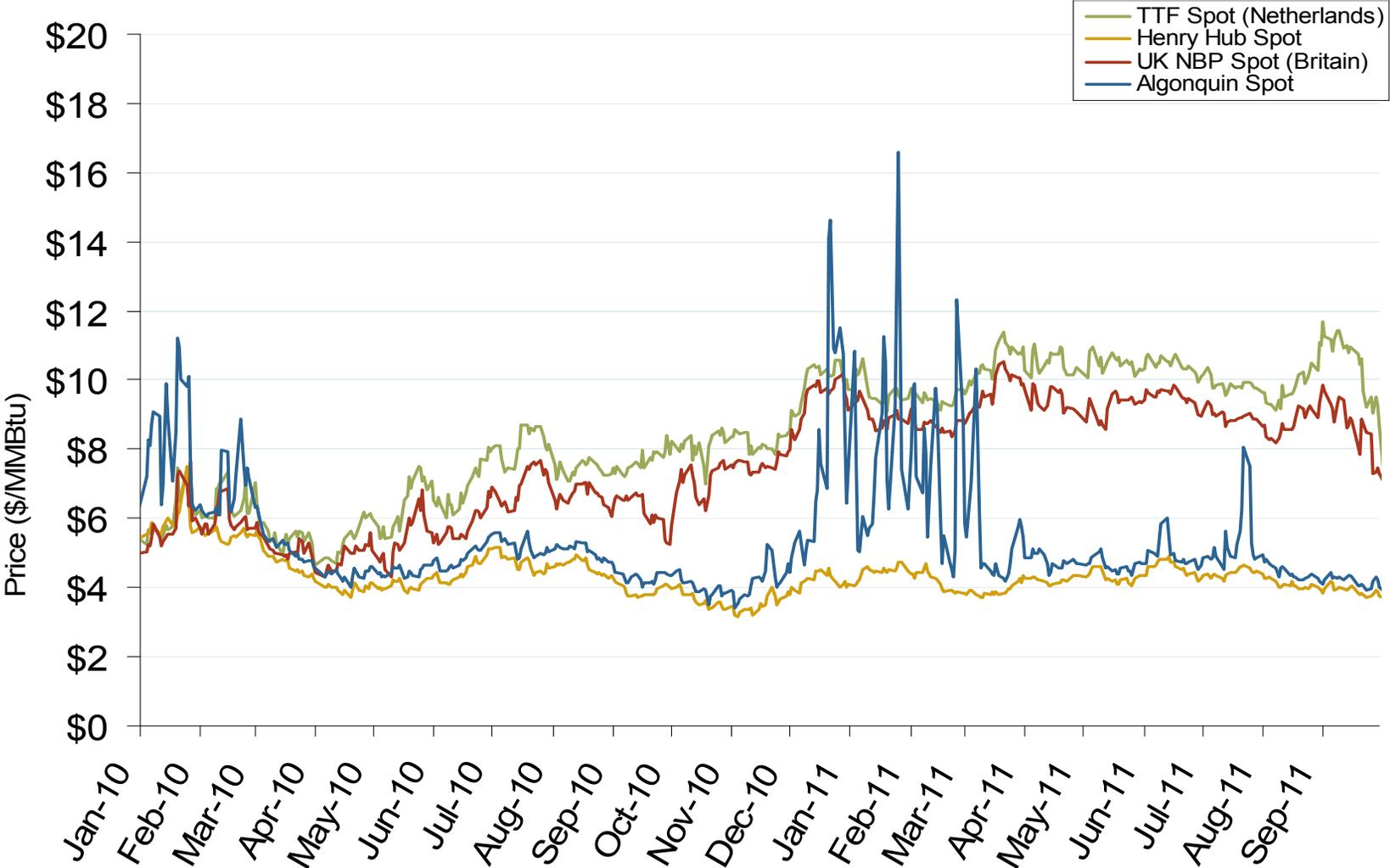
Source: Derived from Bentek data

October 2011 Southeastern Snapshot

Updated: October 05, 2011

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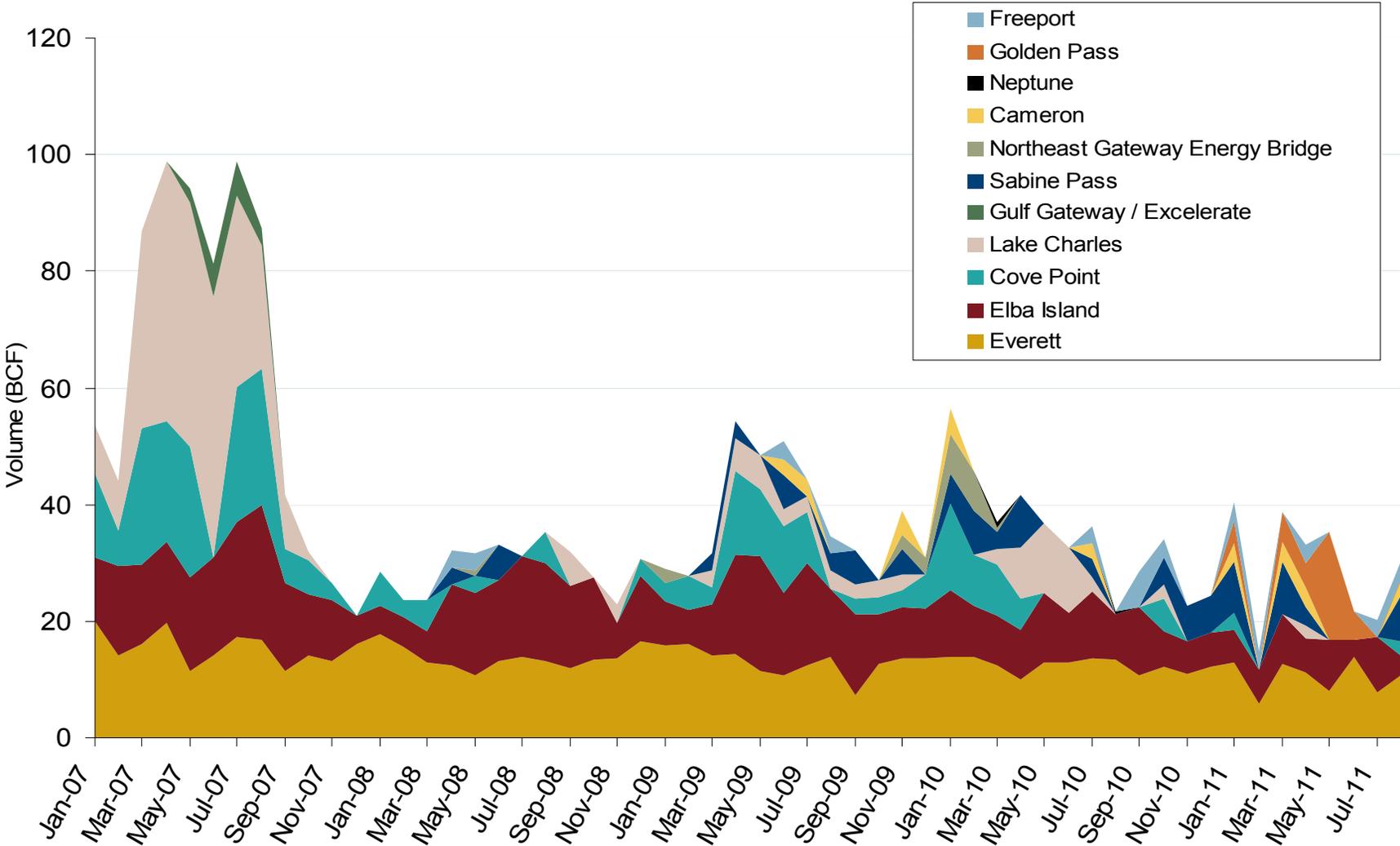
Atlantic Basin European and US Spot Natural Gas Prices



Source: Derived from Bloomberg and ICE data
October 2011 Southeastern Snapshot

Updated: October 05, 2011

Monthly Gas Imports at Existing U.S. LNG Facilities



Source: Derived from DOE Office of Fossil Energy data
October 2011 Southeastern Snapshot

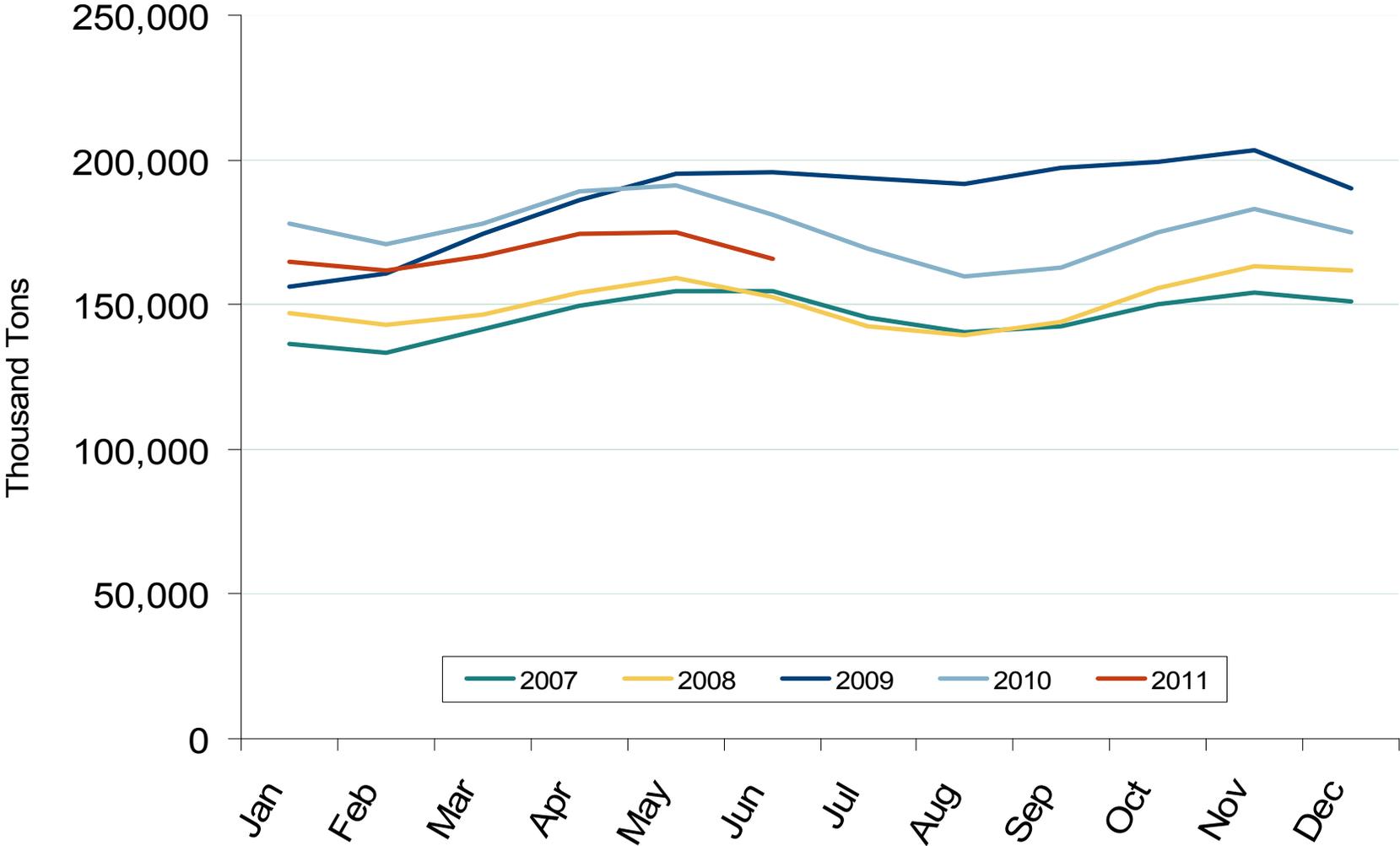
Updated: October 04, 2011

World LNG Estimated November 2011 Landed Prices



Source: Waterborne Energy, Inc. Data in \$US/MMBtu
October 2011 Southeastern Snapshot

U.S. Coal Stockpiles at Electric Power Generating Facilities



Source: Derived from EIA data. Excludes Industrial and Commercial Plants
October 2011 Southeastern Snapshot

Updated: October 04, 2011