

OE ENERGY MARKET SNAPSHOT

National Version – September 2011 Data

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

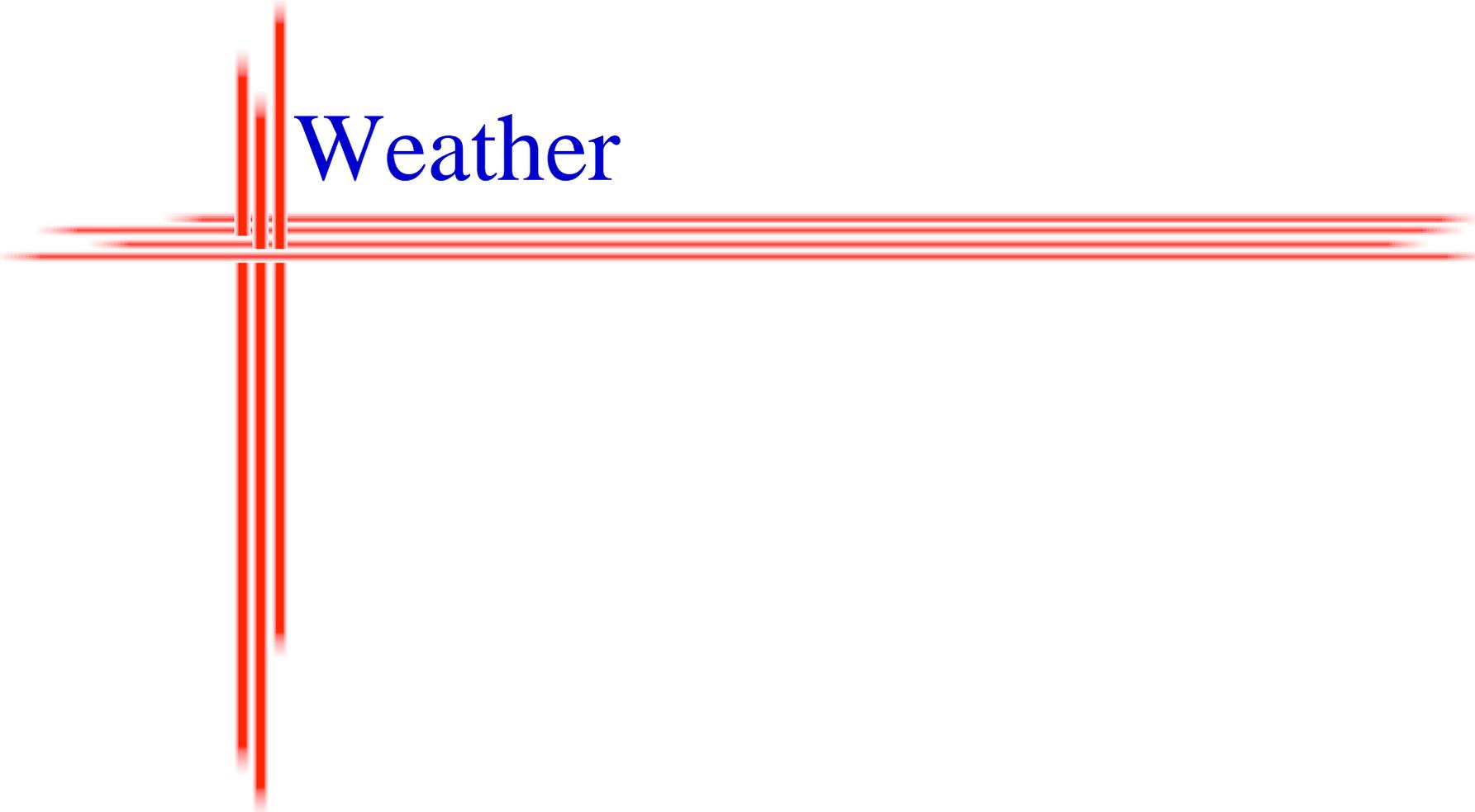
Office of Enforcement
Federal Energy Regulatory Commission
October 2011



Infrastructure Report

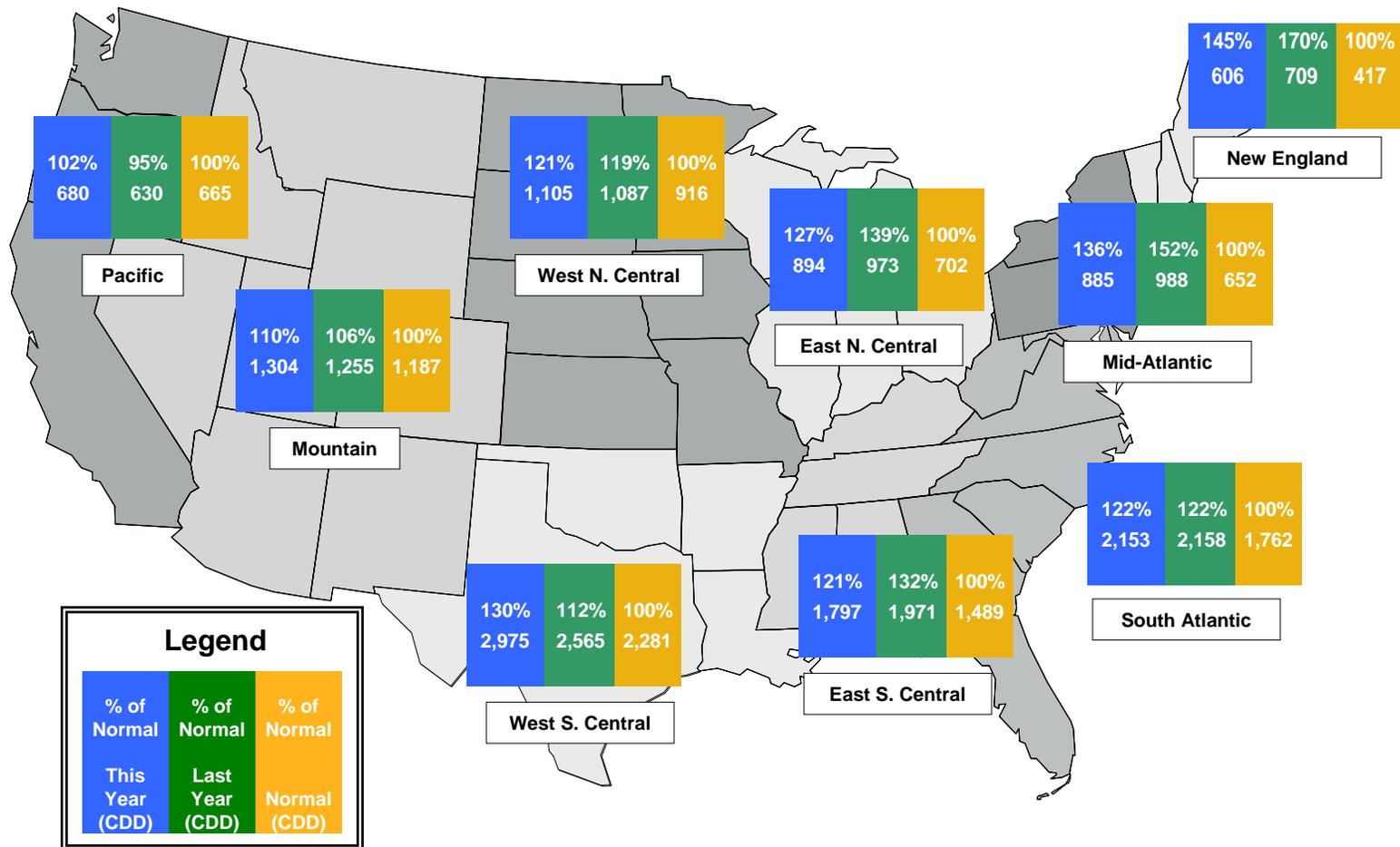
Infrastructure Report

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



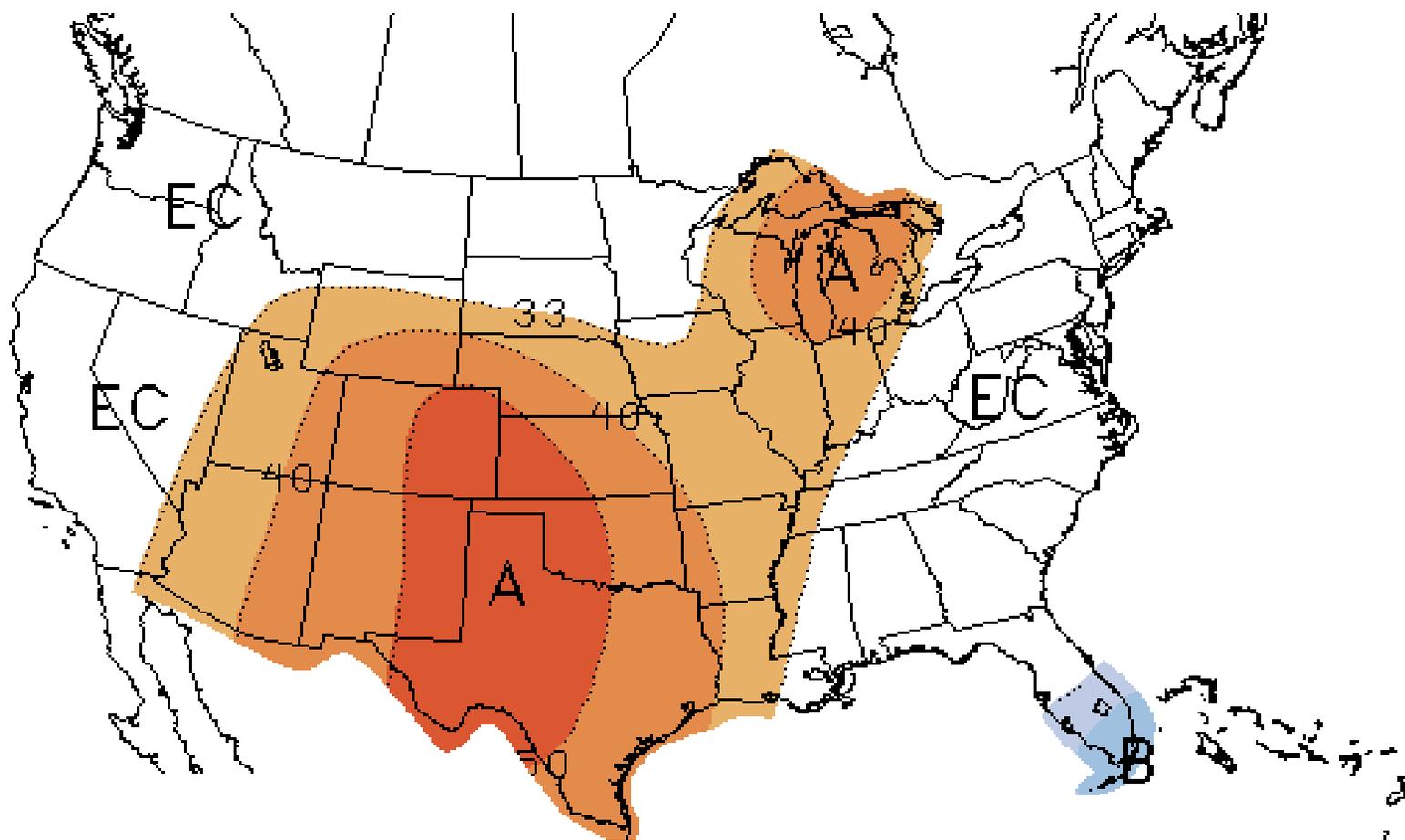
Weather

Regional Cooling Degree Days – January Through September 2011



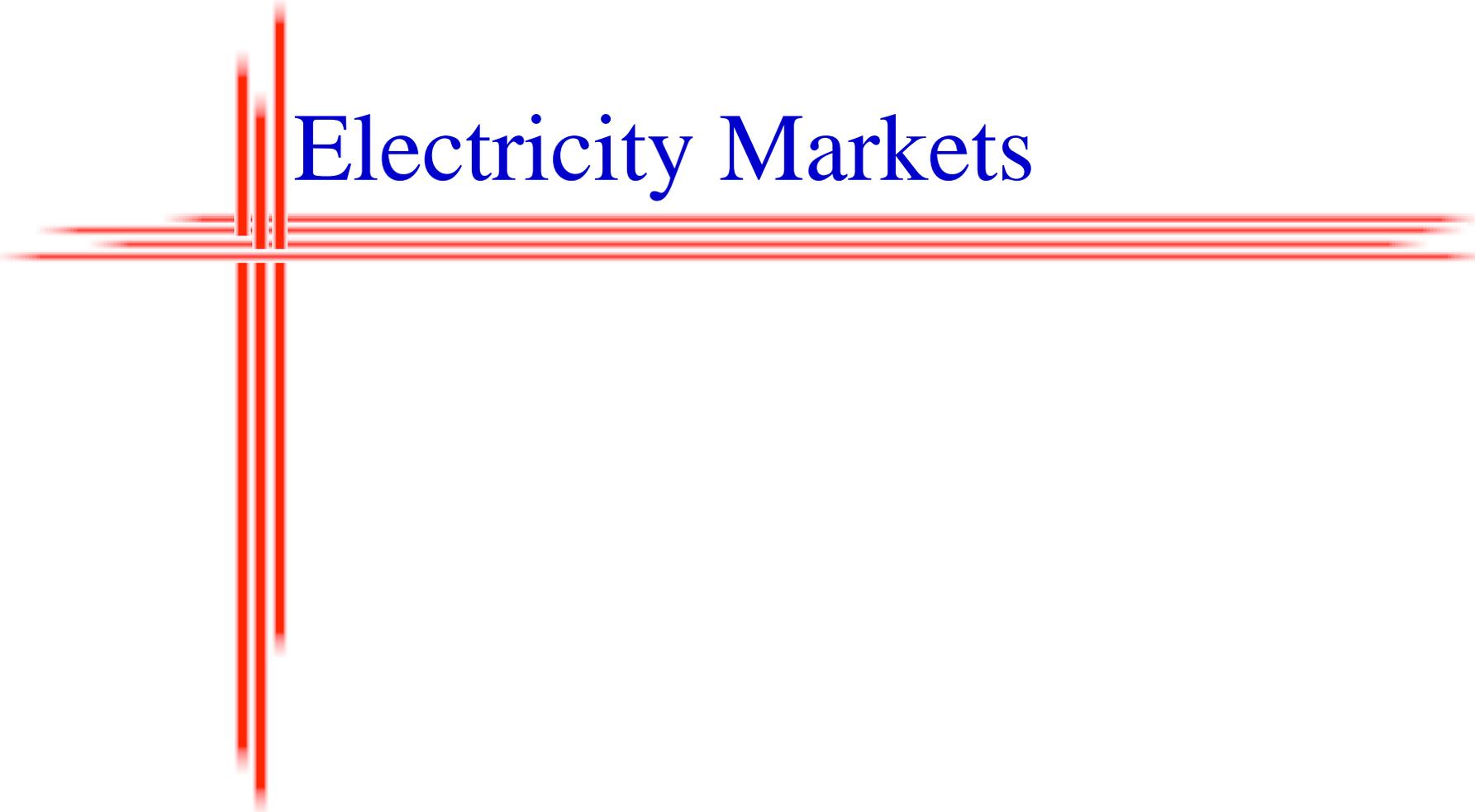
Source: Derived from NOAA data. Normal is based on a 30-year average of cooling degree day data.
 October 2011 National Snapshot

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



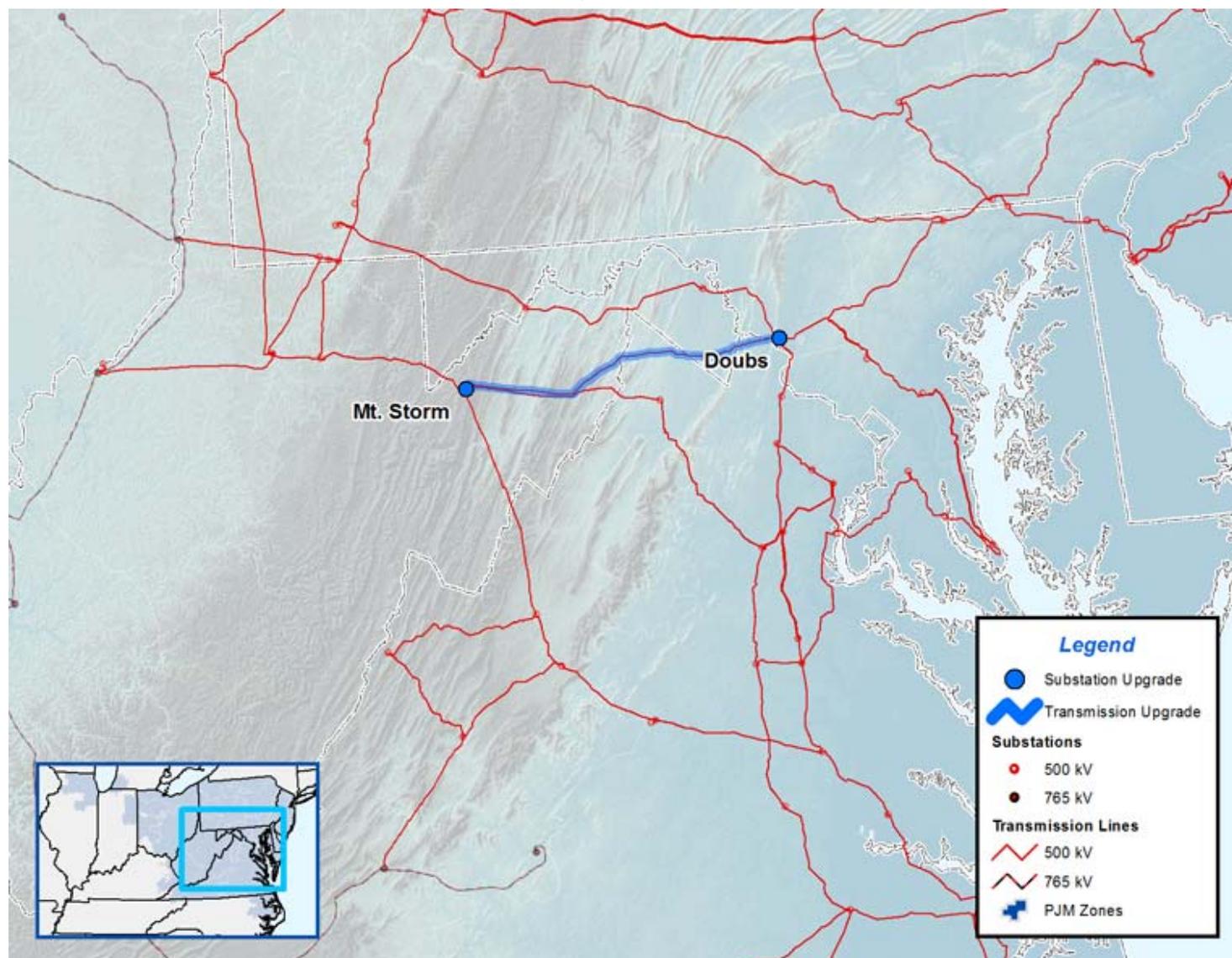
Note: "A" areas are above normal, "B" areas are below normal and "EC" means equal chance. Normal is based on the last 30 years of data.
Source: Derived from NOAA data.

Updated October 4, 2011

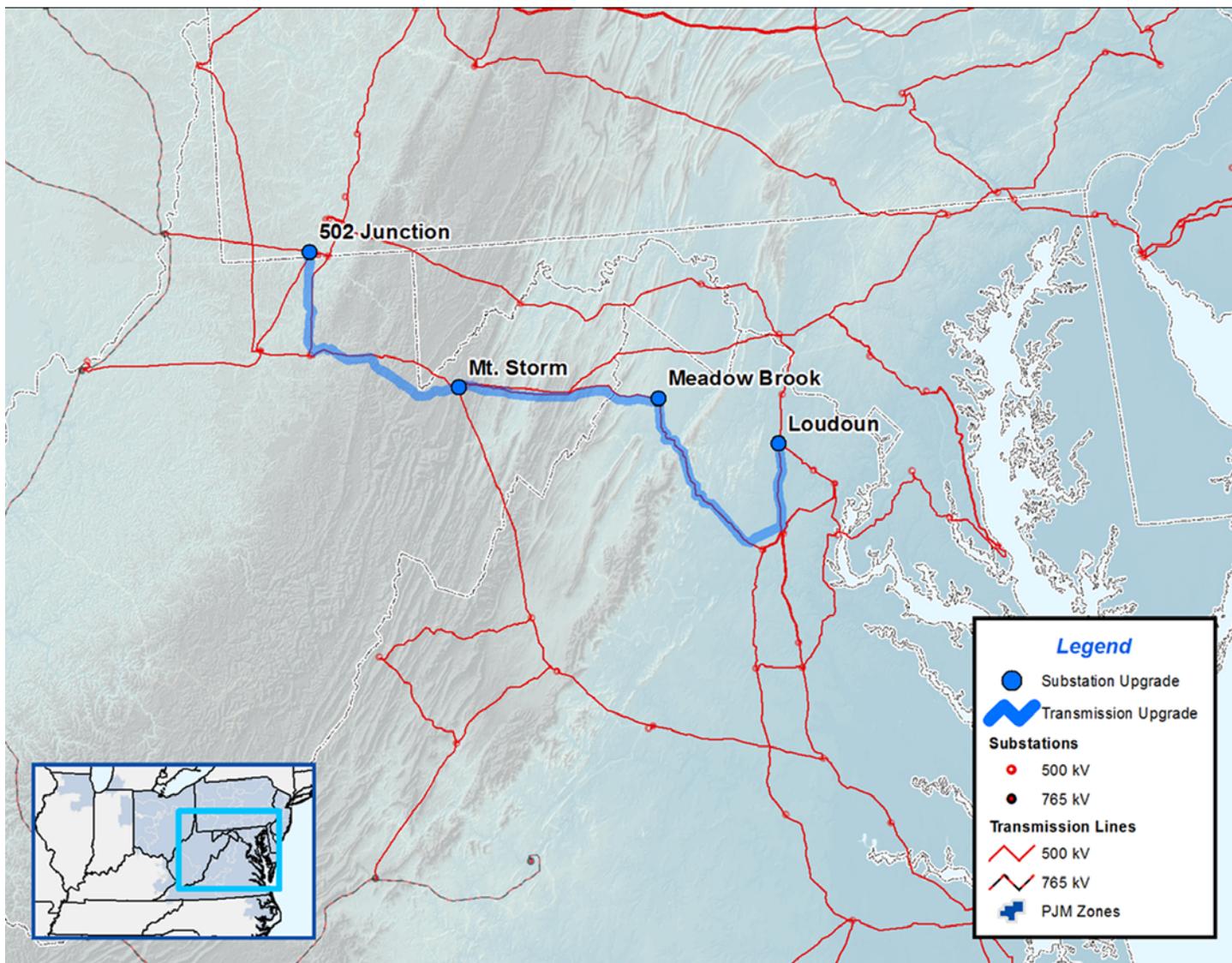


Electricity Markets

Mt Storm Doubs Is a Major PJM Transmission Path



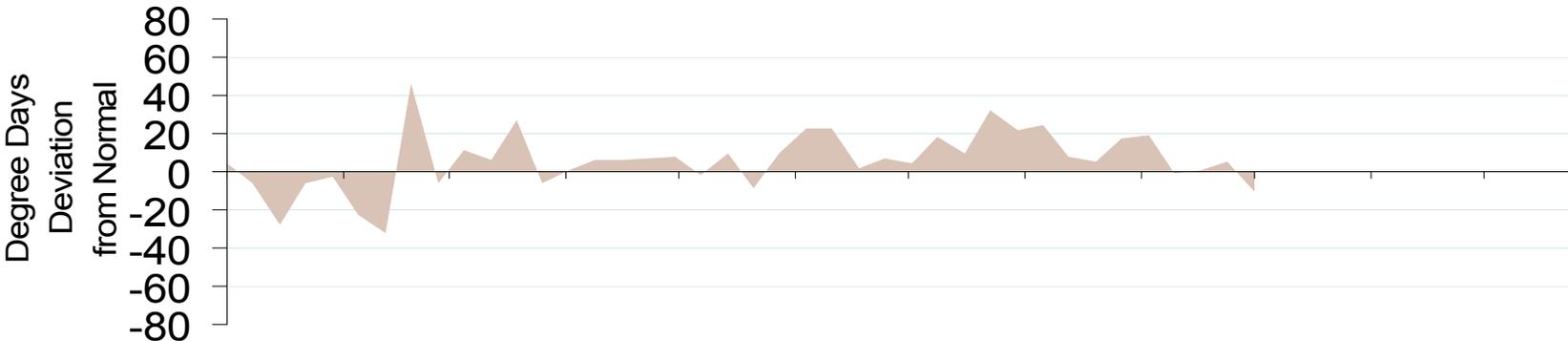
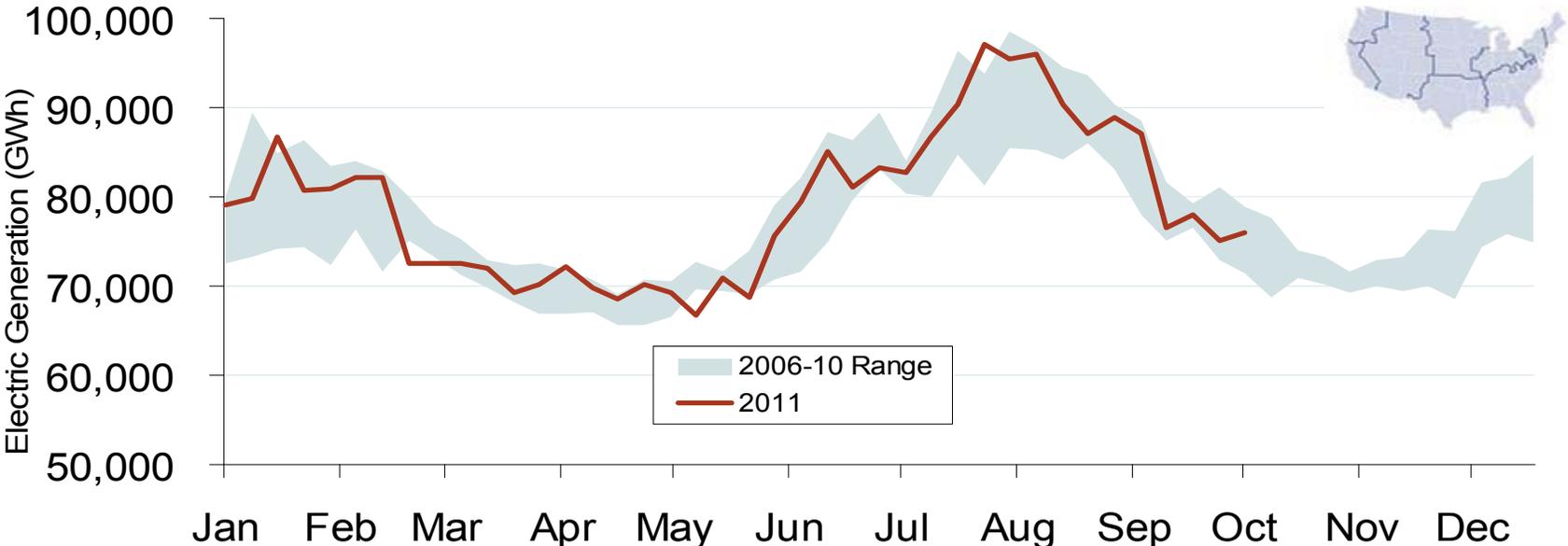
TrAIL Parallels Mt. Storm Doubs Line



MISO is Able to Dispatch More Wind Power

- MISO started a new program on June 1 for wind resources so they can be dispatched instead of manually curtailed.
- About 2,000 MW of the more than 10,000 MW of wind power capacity in MISO signed up for the program. More is expected to sign up each quarter.
- For the generators in the program, MISO can dispatch between zero and the generator's forecast output.
- Wind generation is often required to reduce output to control congestion and dispatch is much more efficient than manual curtailments.

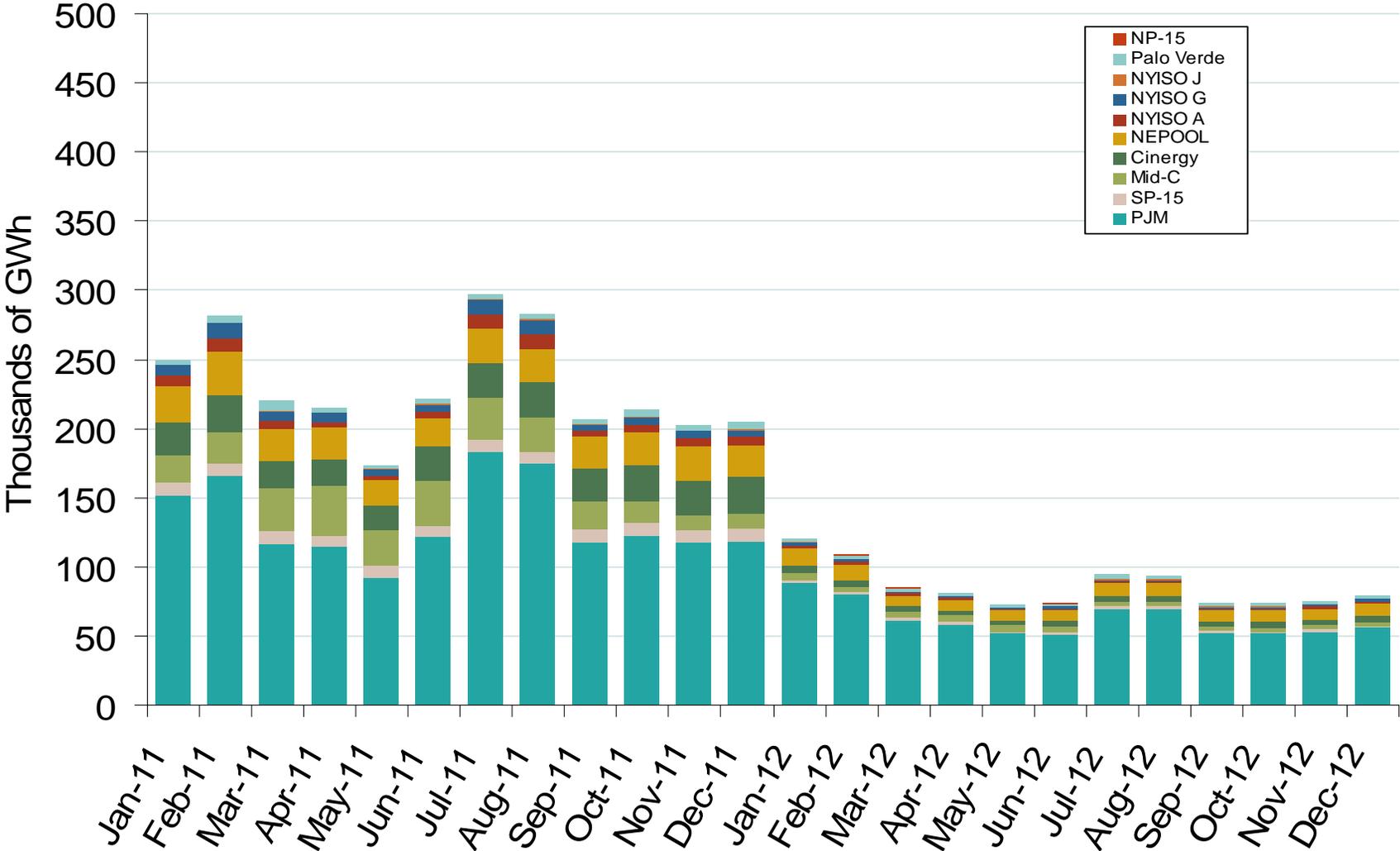
Weekly U.S. Electric Generation Output and Temperatures



Source: Derived from EEI and NOAA data
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Updated: October 06, 2011

Financial Trading on ICE by Contract Month



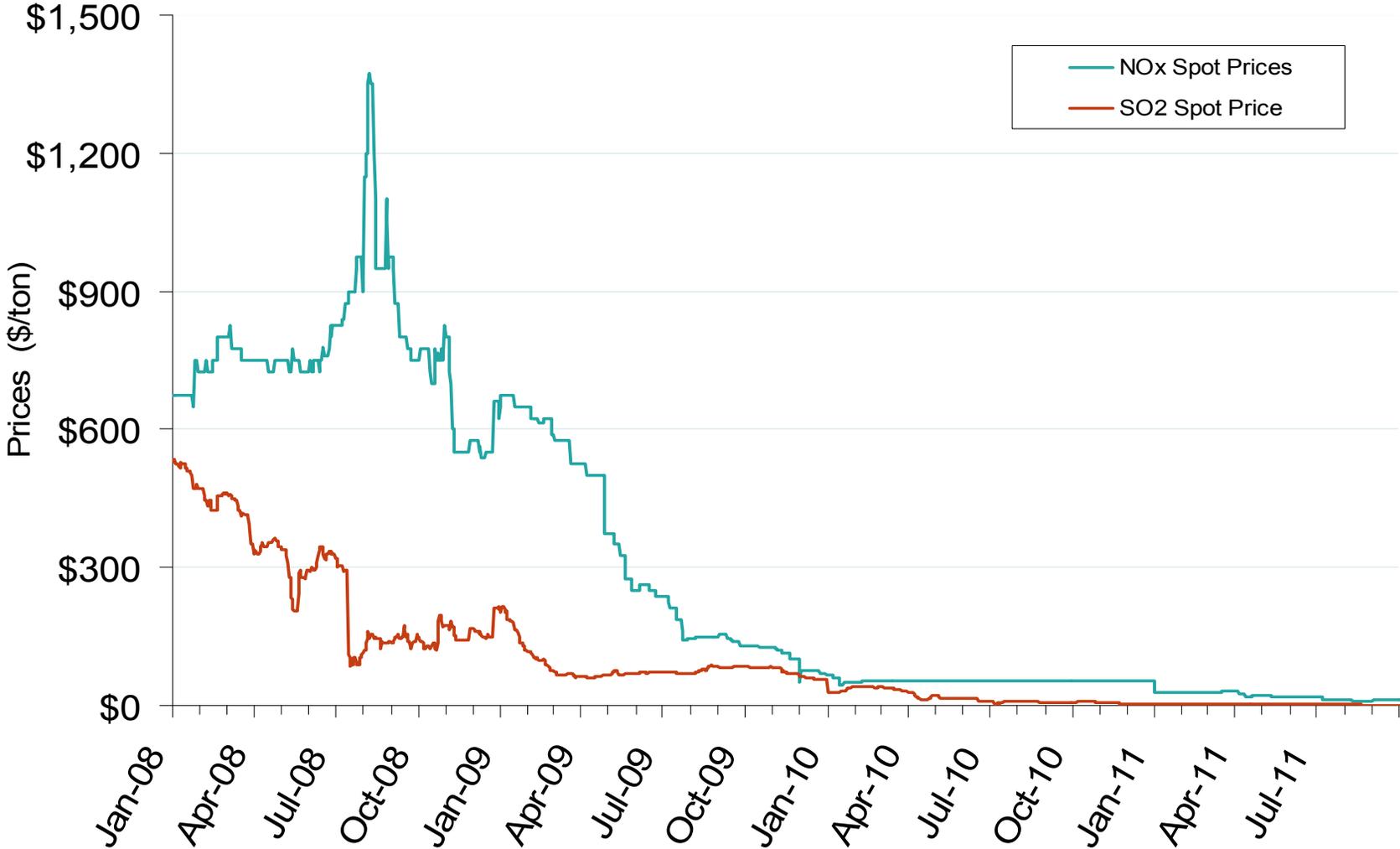
Notes: ICE on-peak swaps (financial) volume include monthly, dual monthly, quarterly, and calendar year contracts traded for each month

Source: Derived from ICE data

October 2011 National Snapshot

Updated: October 05, 2011

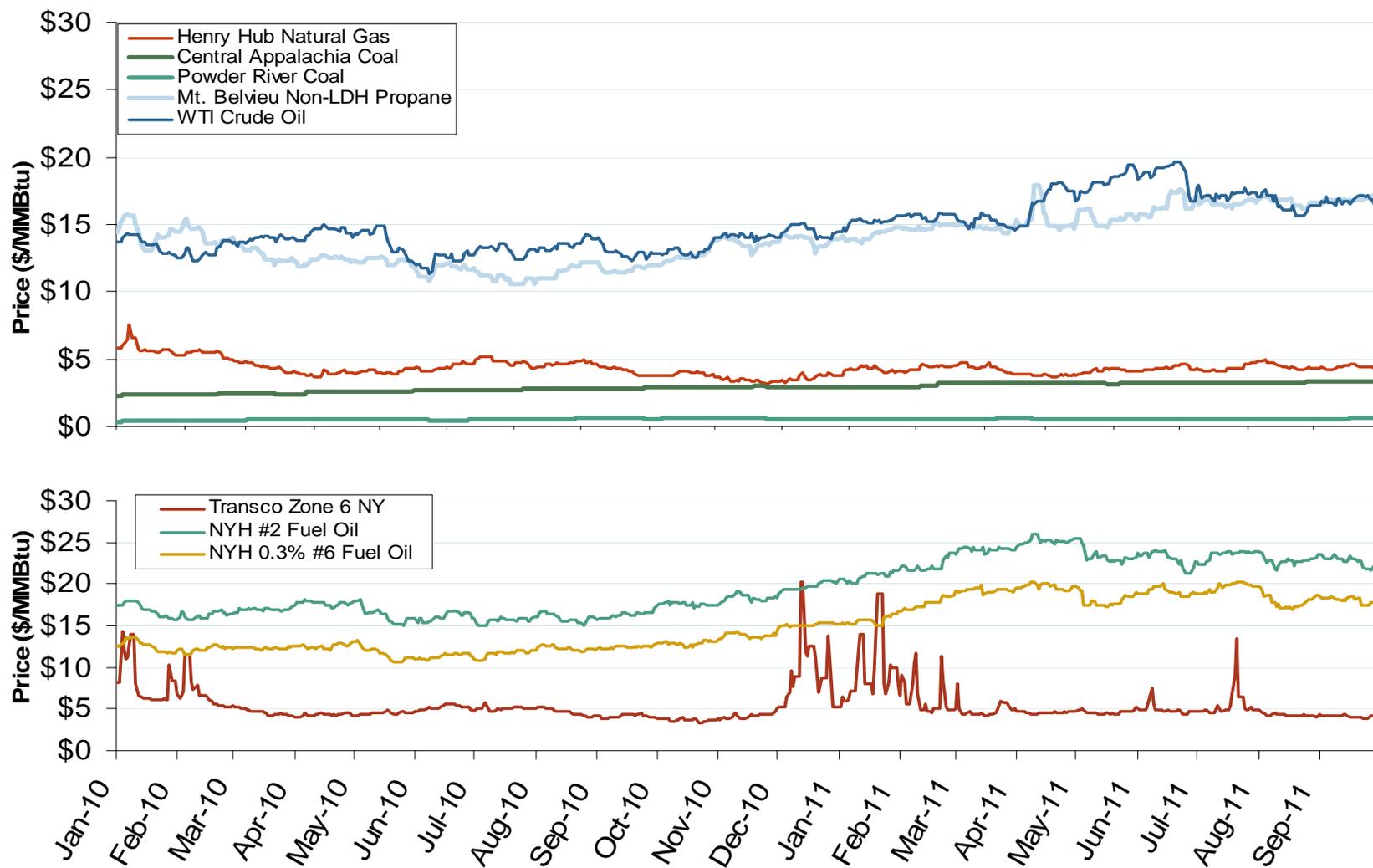
SO2 Allowance Spot Prices and NOx Allowance Spot Prices



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

Updated: October 05, 2011

Other Fuels Market: Fossil Fuel Prices

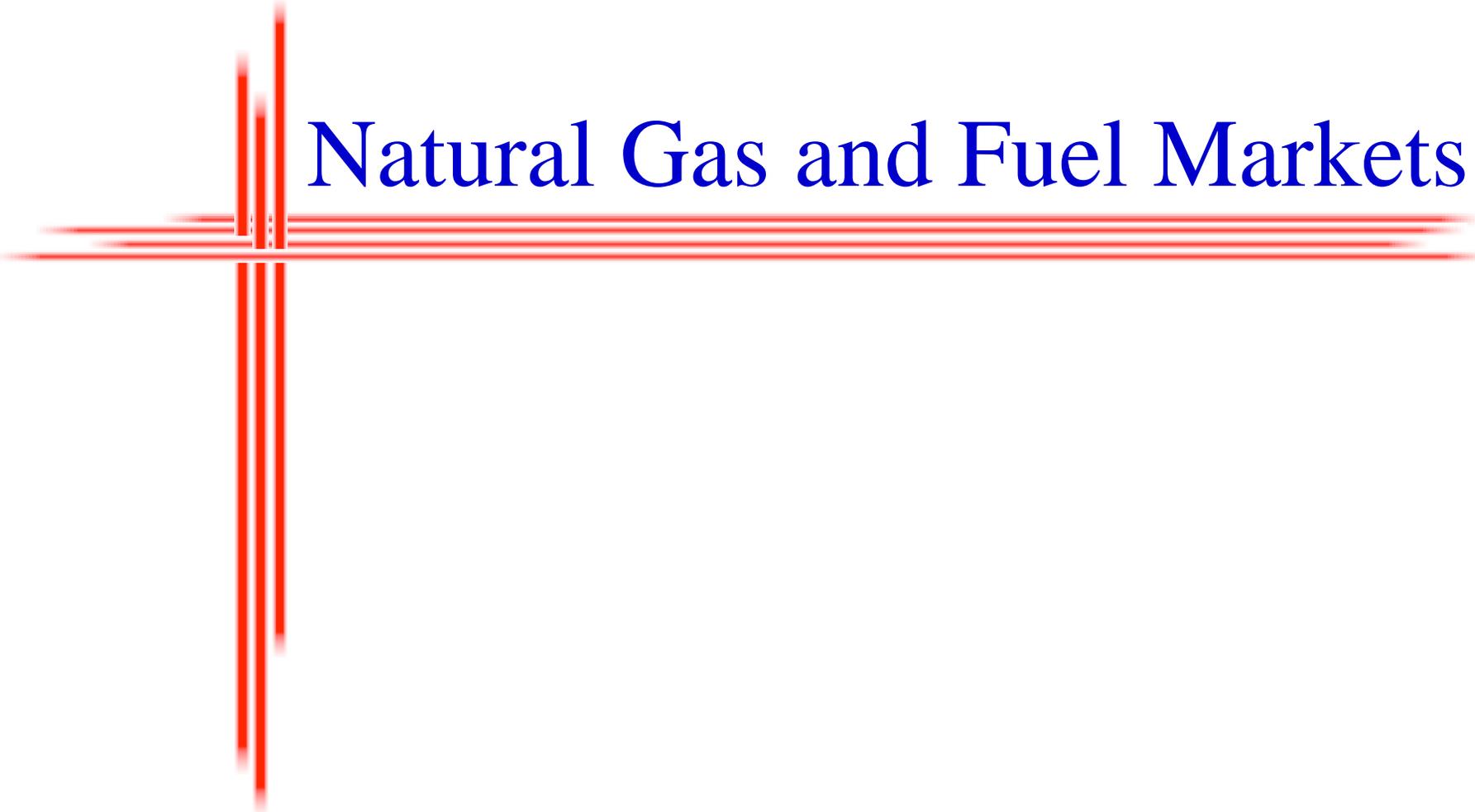
Federal Energy Regulatory Commission • Market Oversight • www.ferc.gov/oversight**Oil, Coal, Natural Gas and Propane Daily Spot Prices**

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

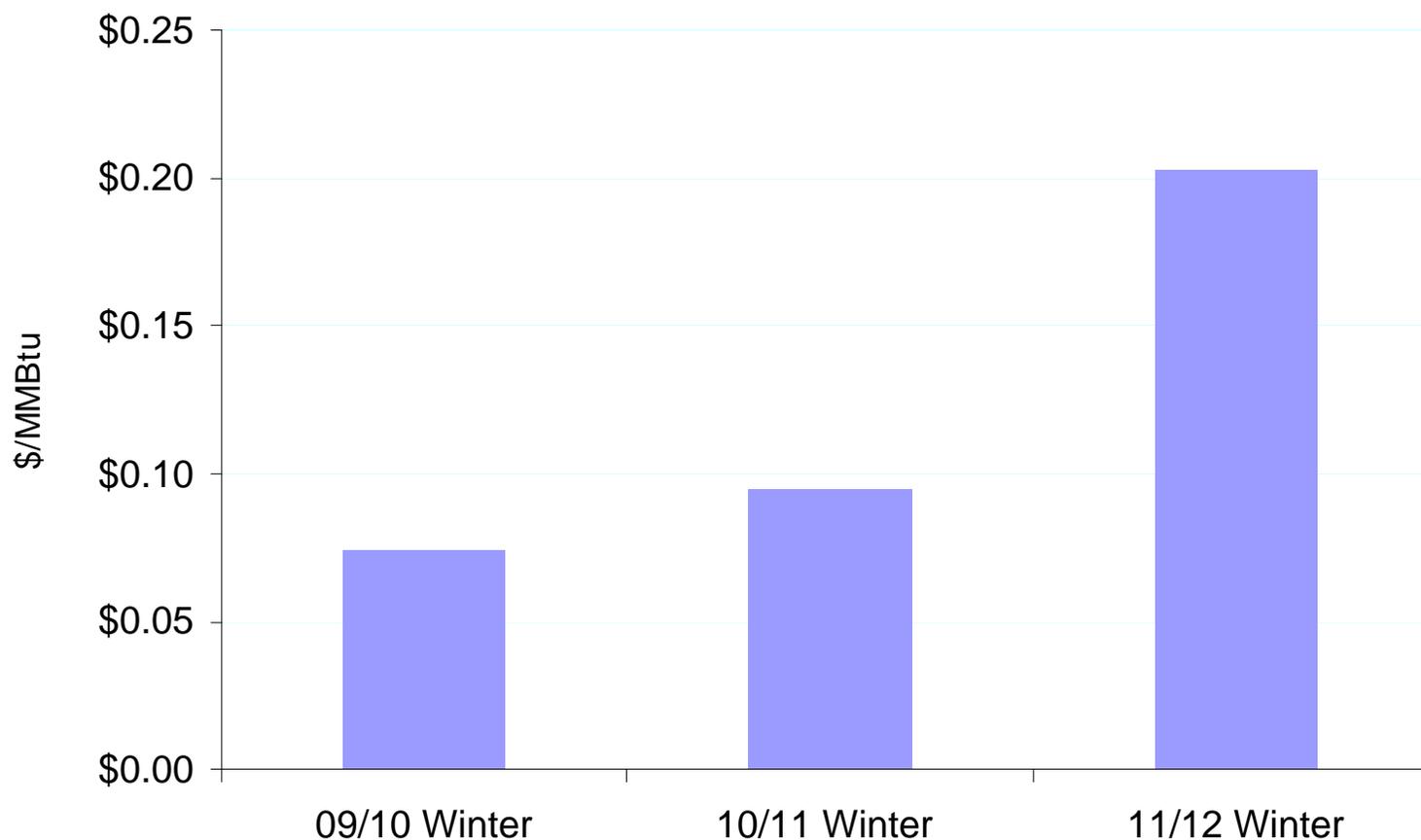
October 2011 National Snapshot

Updated: October 05, 2011



Natural Gas and Fuel Markets

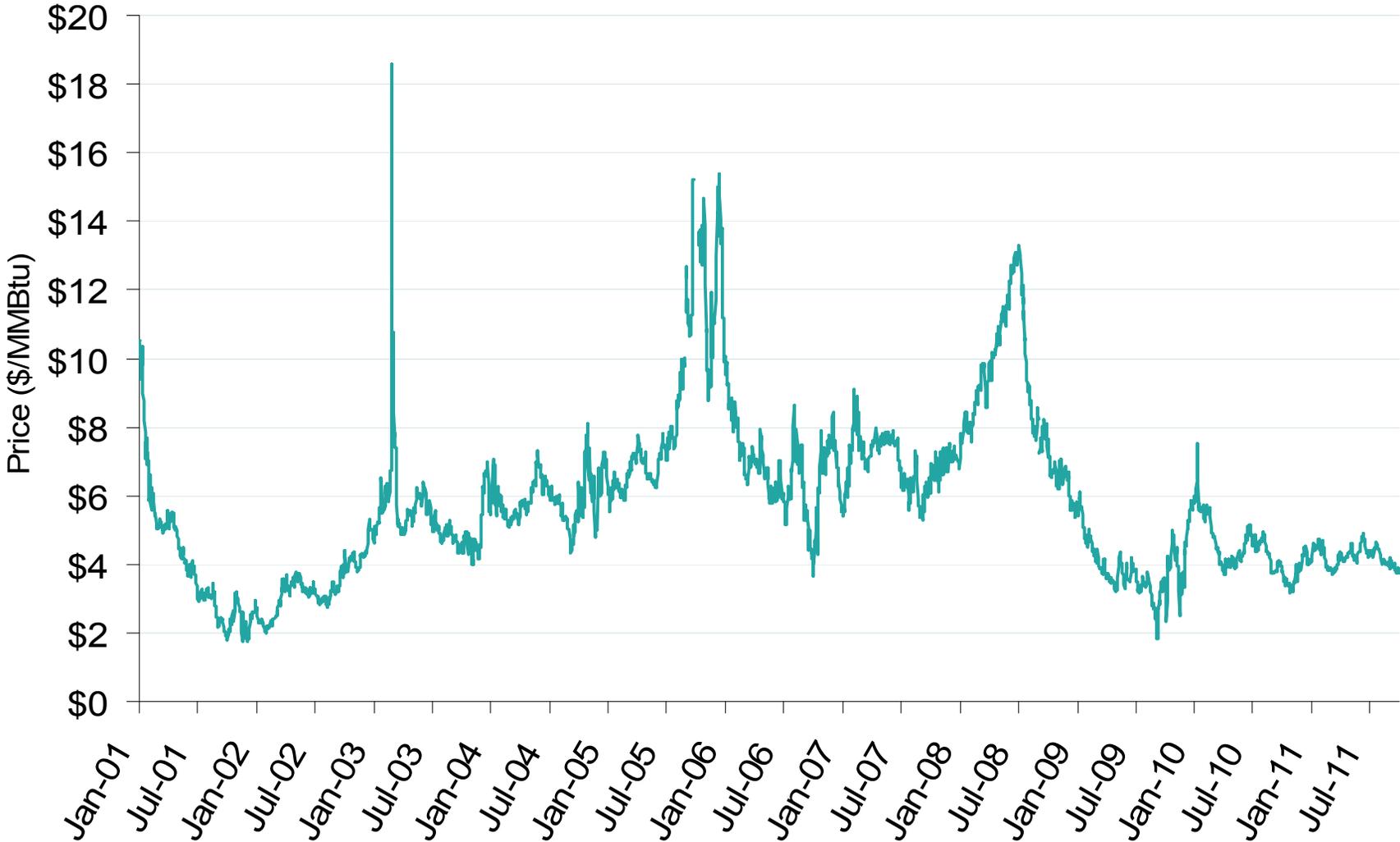
Chicago Citygate Basis Swap Price Doubles from Last Year



Natural Gas Market Overview: Henry Hub Spot Prices

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Henry Hub Natural Gas Daily Spot Prices, 2001-2011



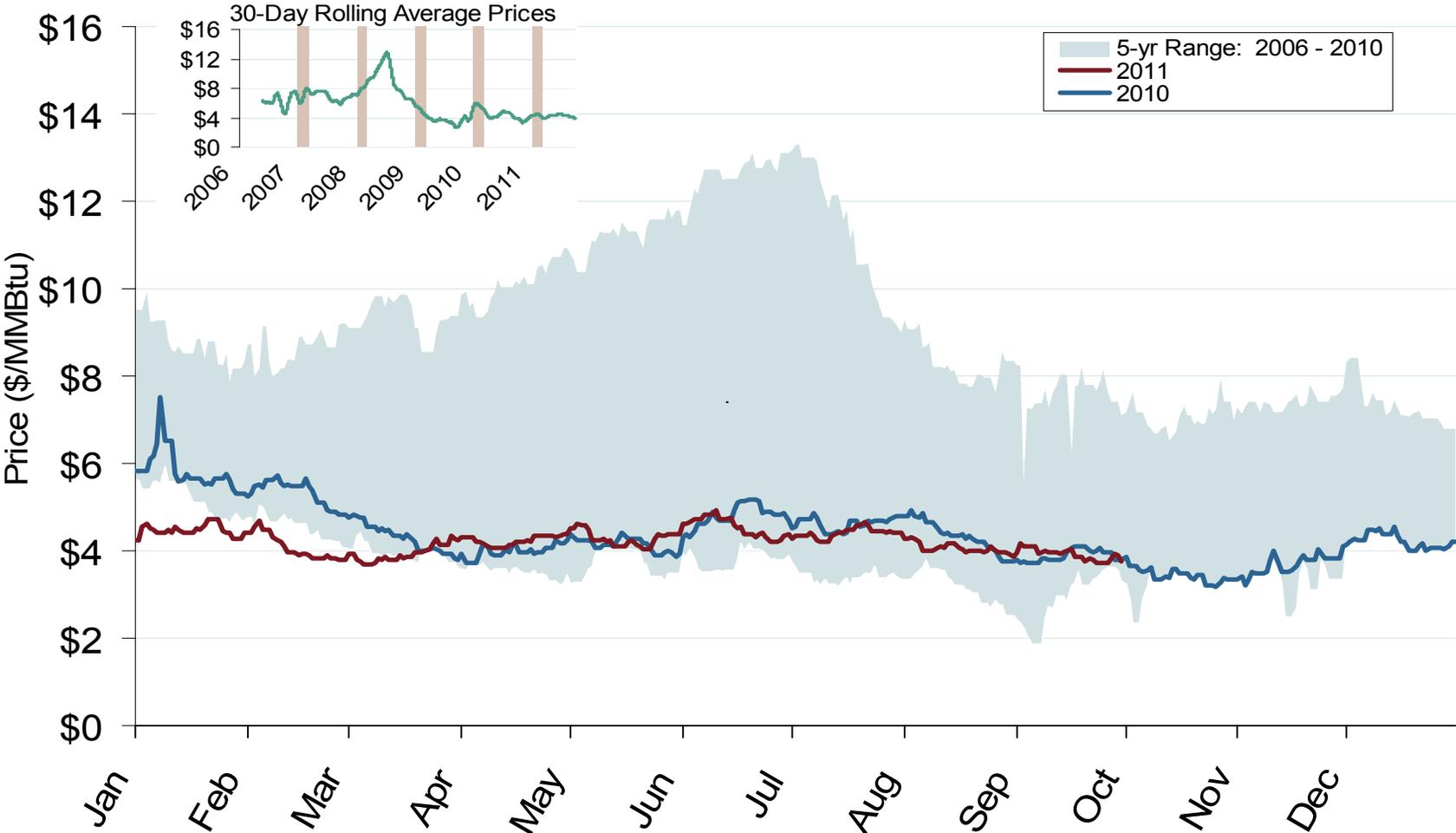
Source: Derived from *Platts* data
October 2011 National Snapshot

Updated: October 03, 2011

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

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Henry Hub Natural Gas Daily Spot Prices

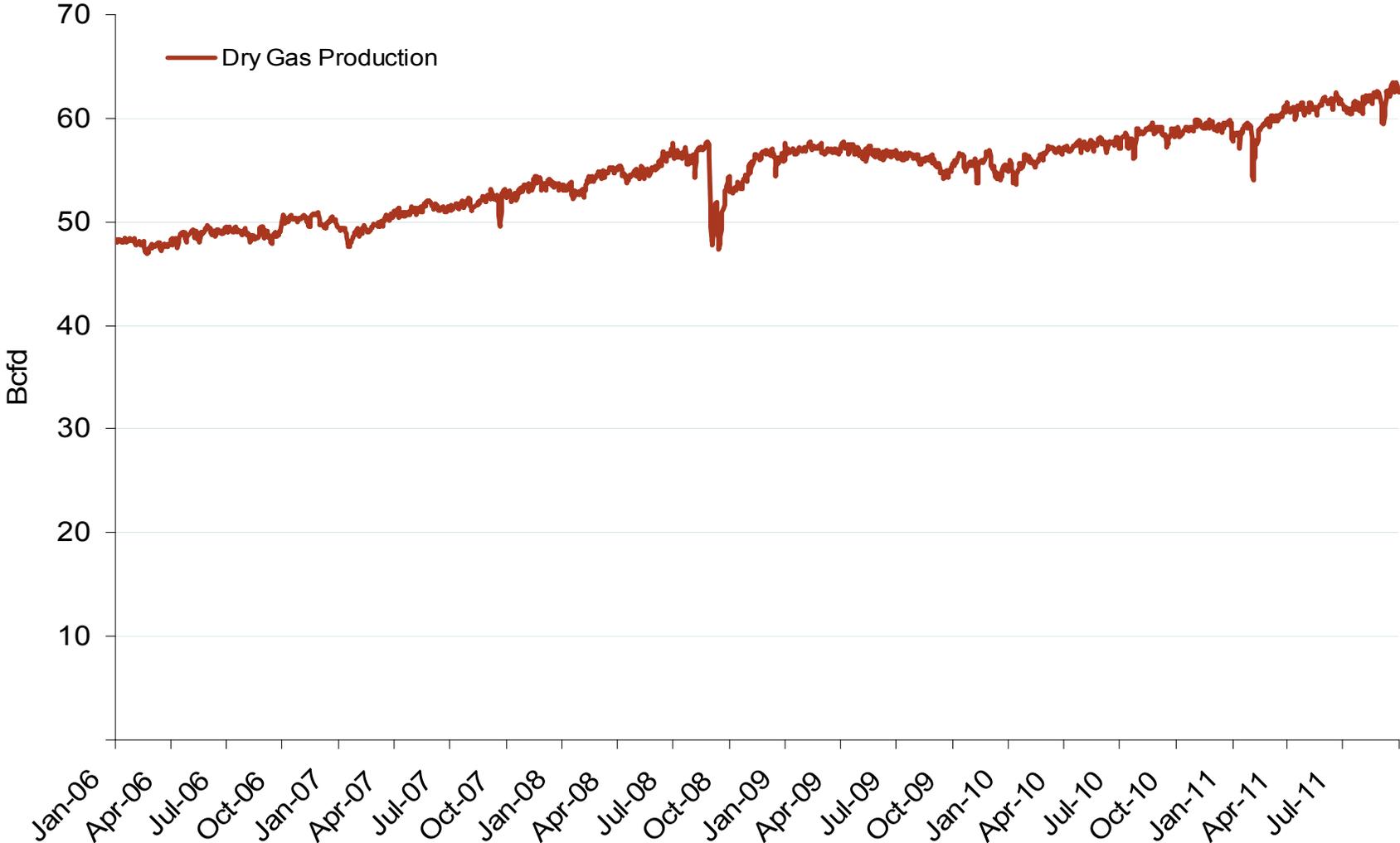


Source: Derived from *Platts* data
October 2011 National Snapshot

Updated: October 03, 2011

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



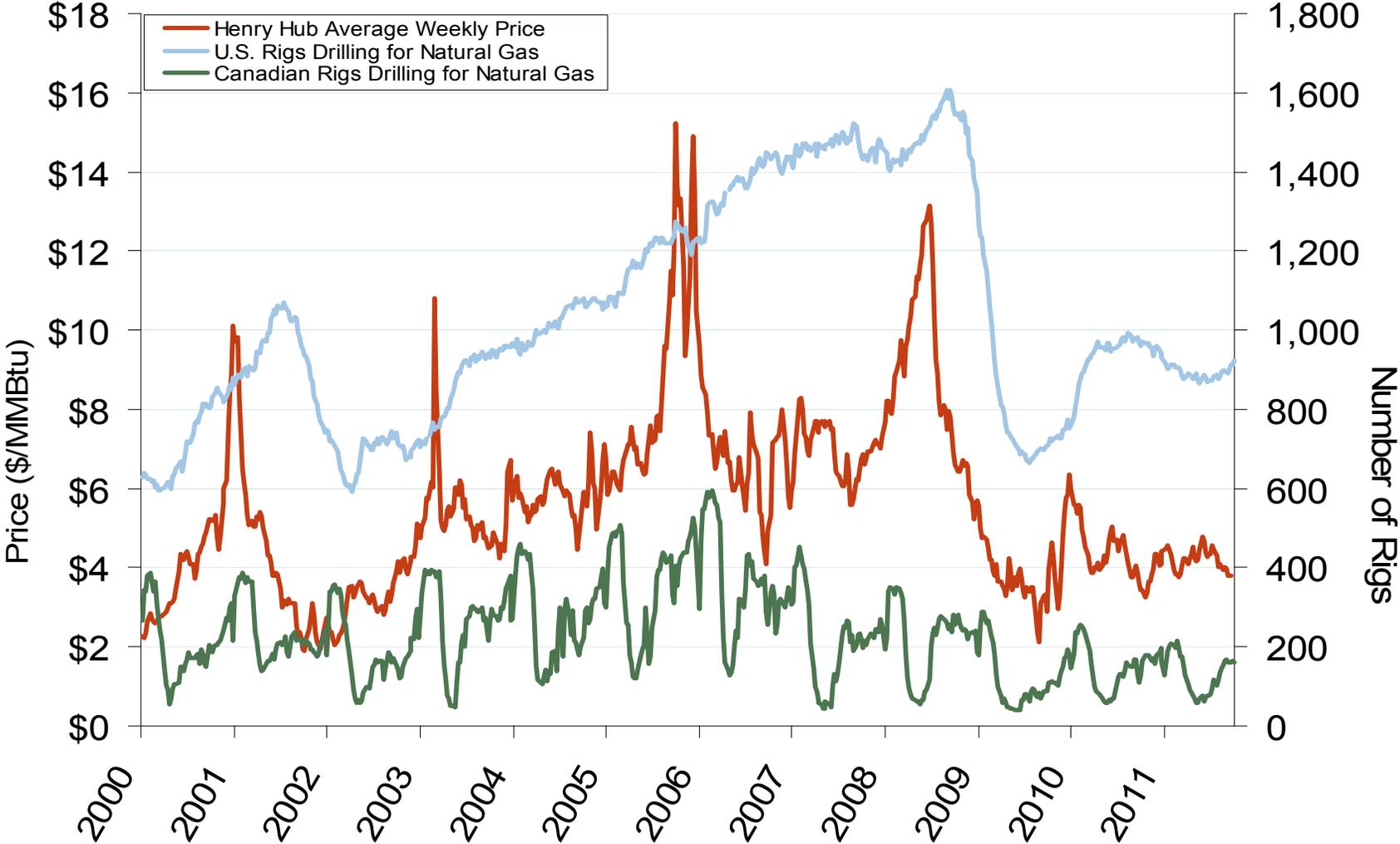
Note: Prior to July 2010, chart was derived from a combination of EIA and Bentek Energy data

Source: Derived from Bentek Energy data

October 2011 National Snapshot

Updated: October 05, 2011

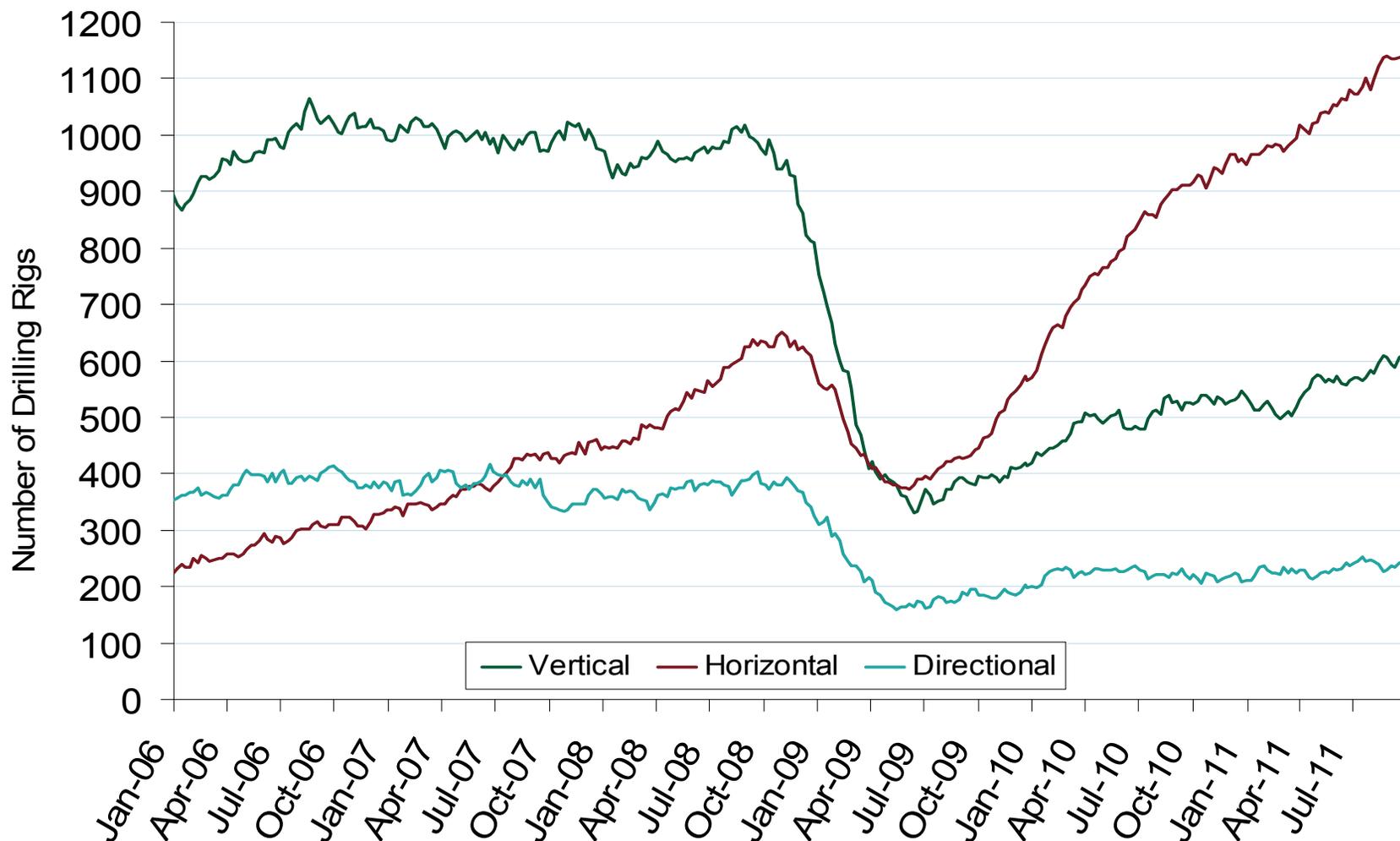
U.S. and Canadian NG Drilling Rig Count and Daily Spot Prices



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

Updated: October 04, 2011

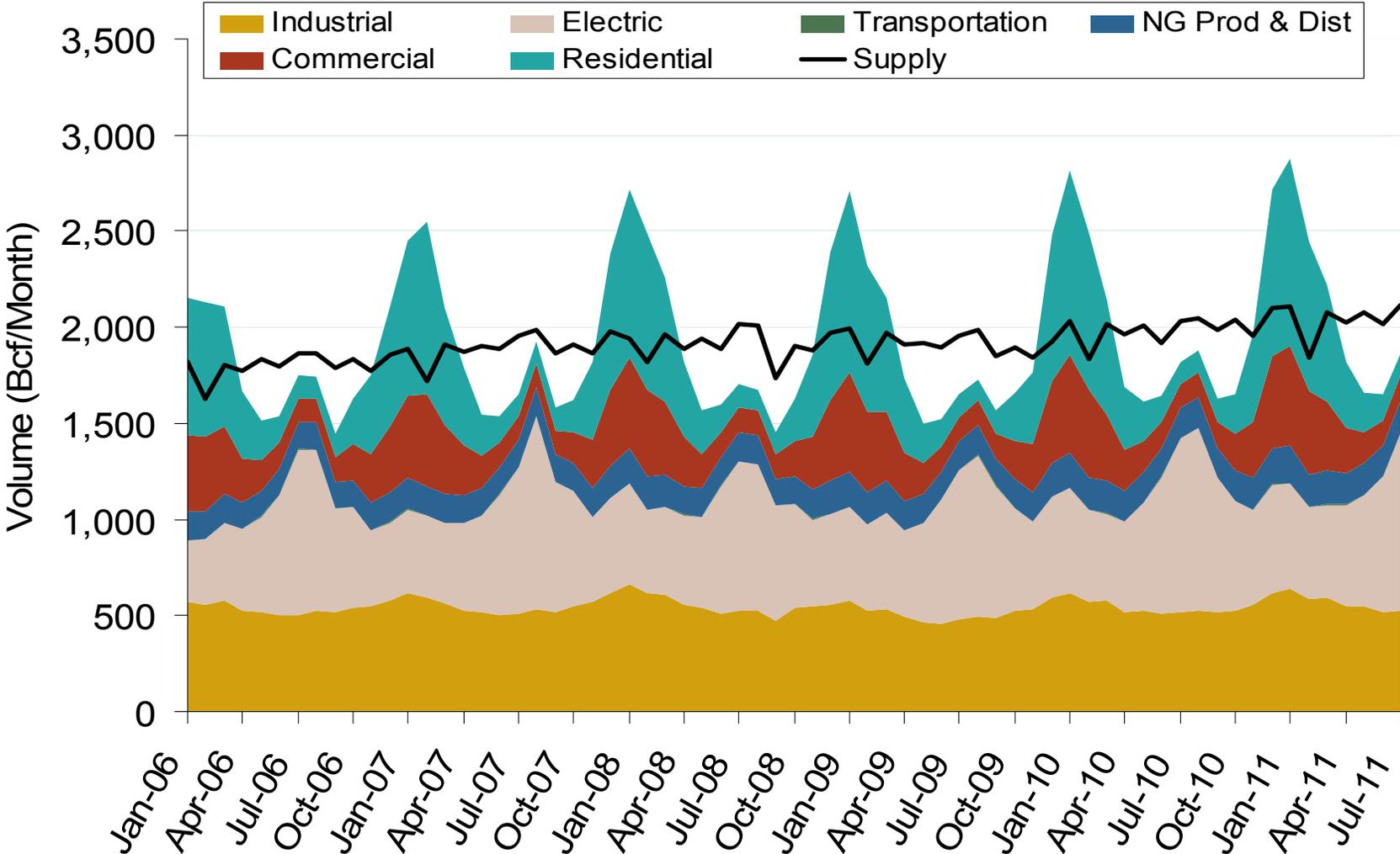
U.S. Oil and Natural Gas Drilling Rig Count by Type



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

Updated: October 04, 2011

Annual U.S. Natural Gas Consumption by Sector



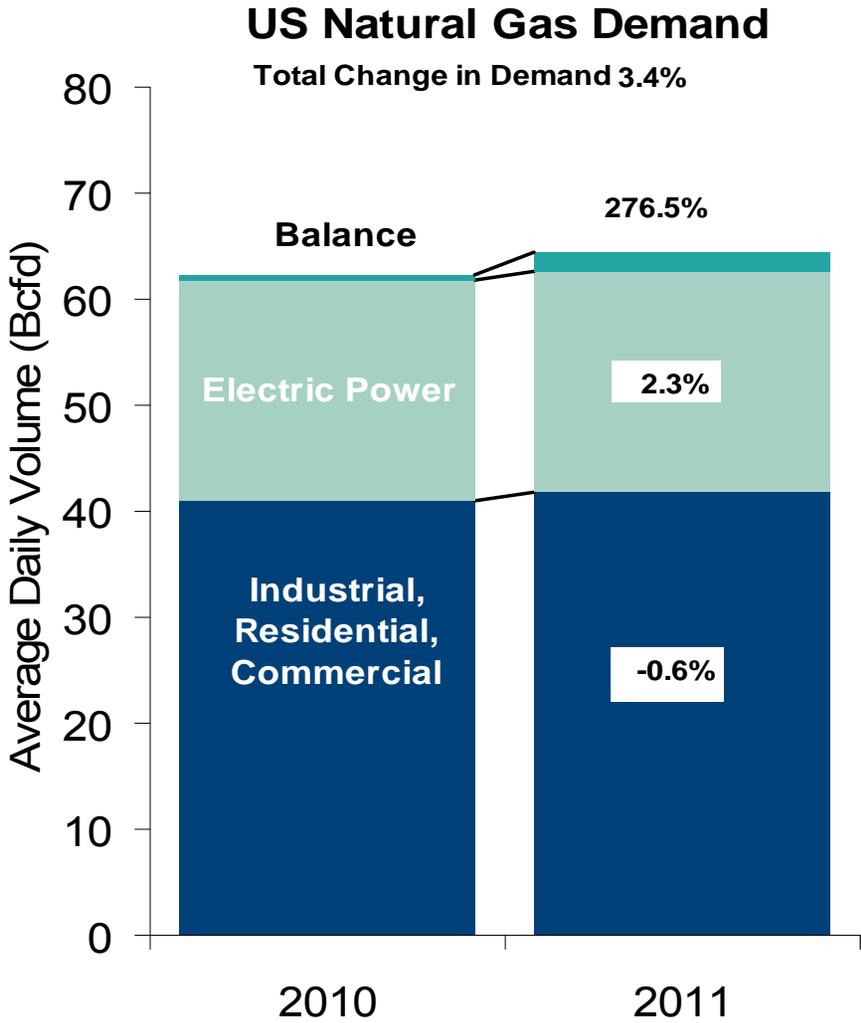
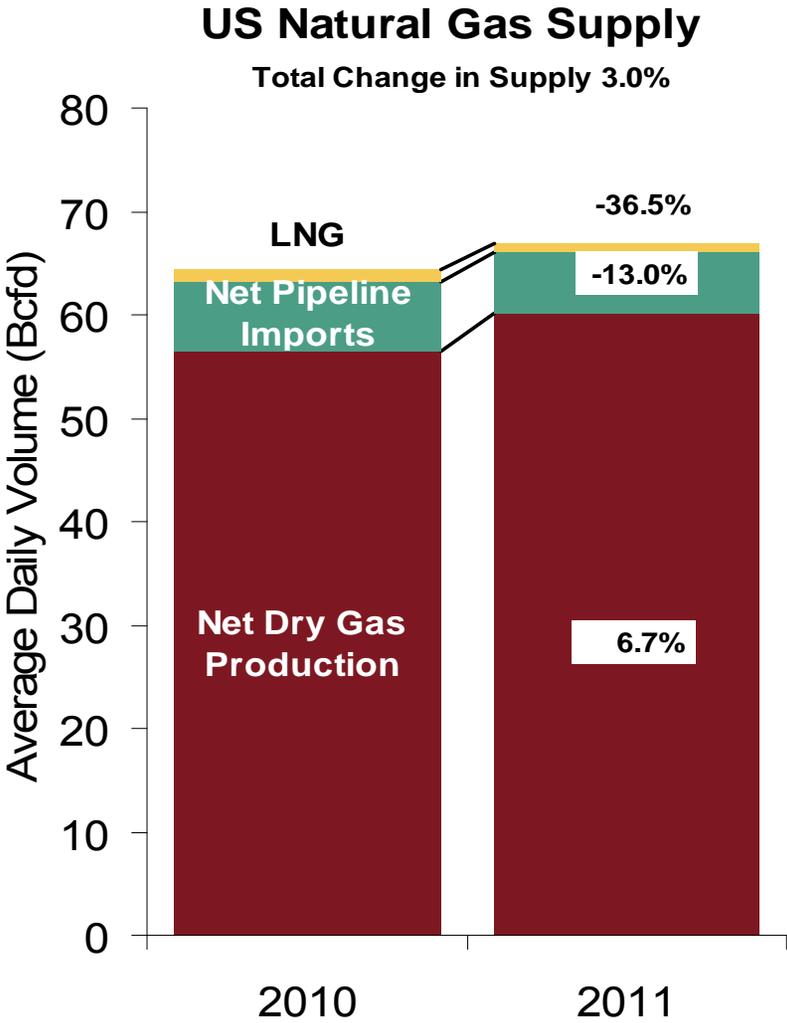
Notes: Supply includes lower 48 state production, net pipeline imports, and LNG imports

Source: Derived from EIA data

October 2011 National Snapshot

Updated: October 04, 2011

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

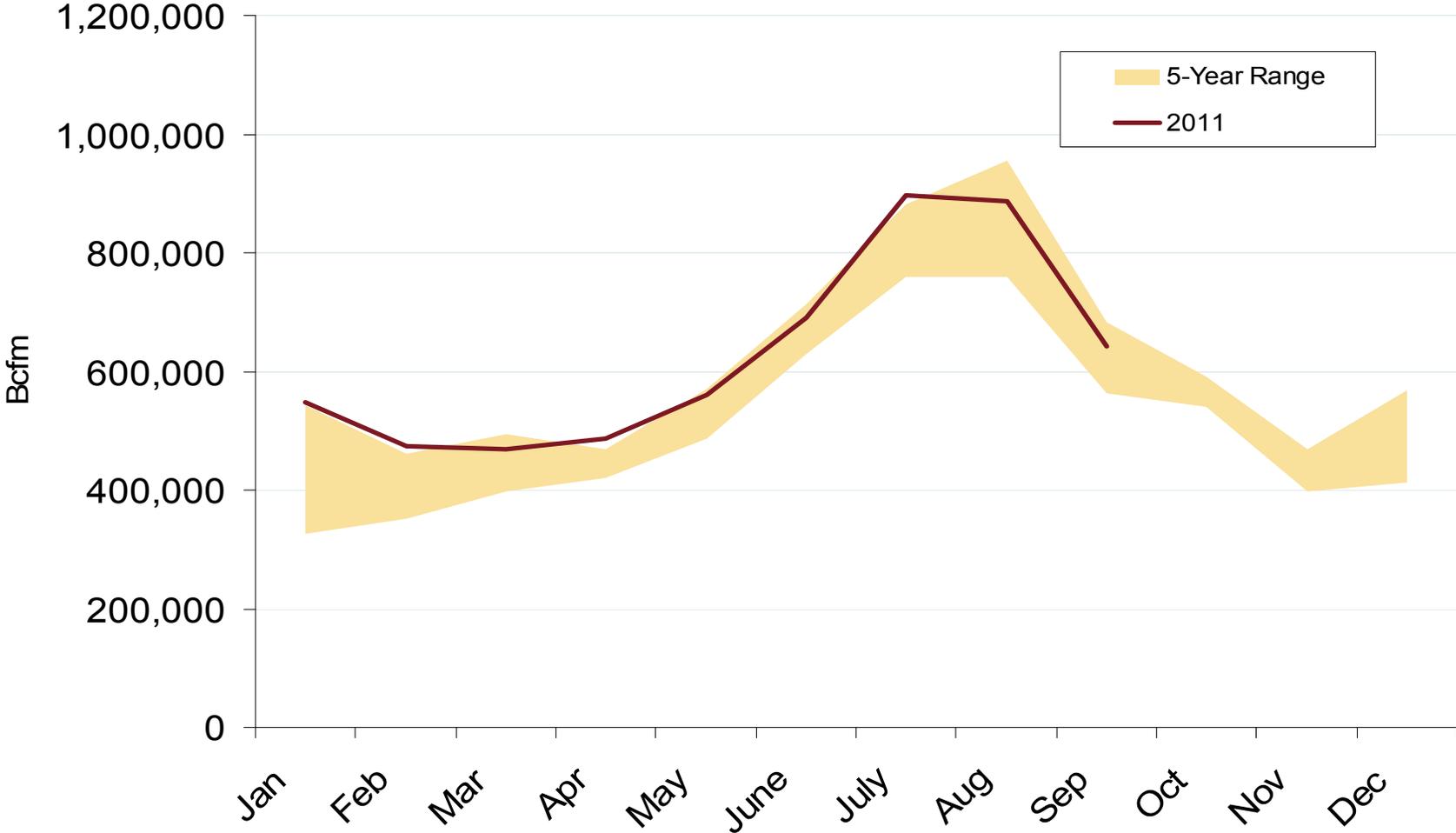


Source: Derived from *Bentek Energy* data
October 2011 National Snapshot

Updated: October 11, 2011

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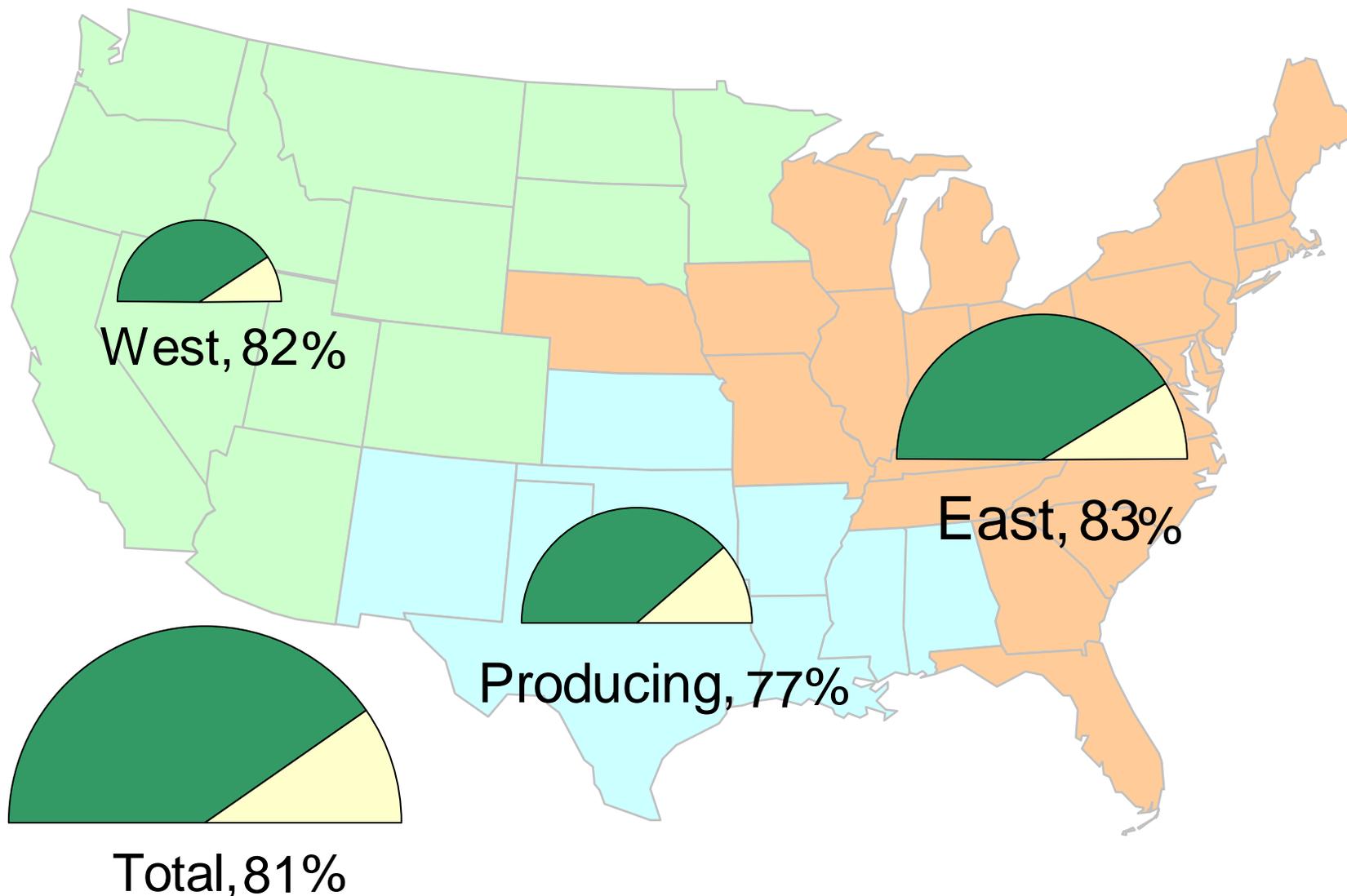
U.S. Natural Gas Consumption for Power Generation



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

Updated: October 05, 2011

Natural Gas Storage Inventories – September 23, 2011



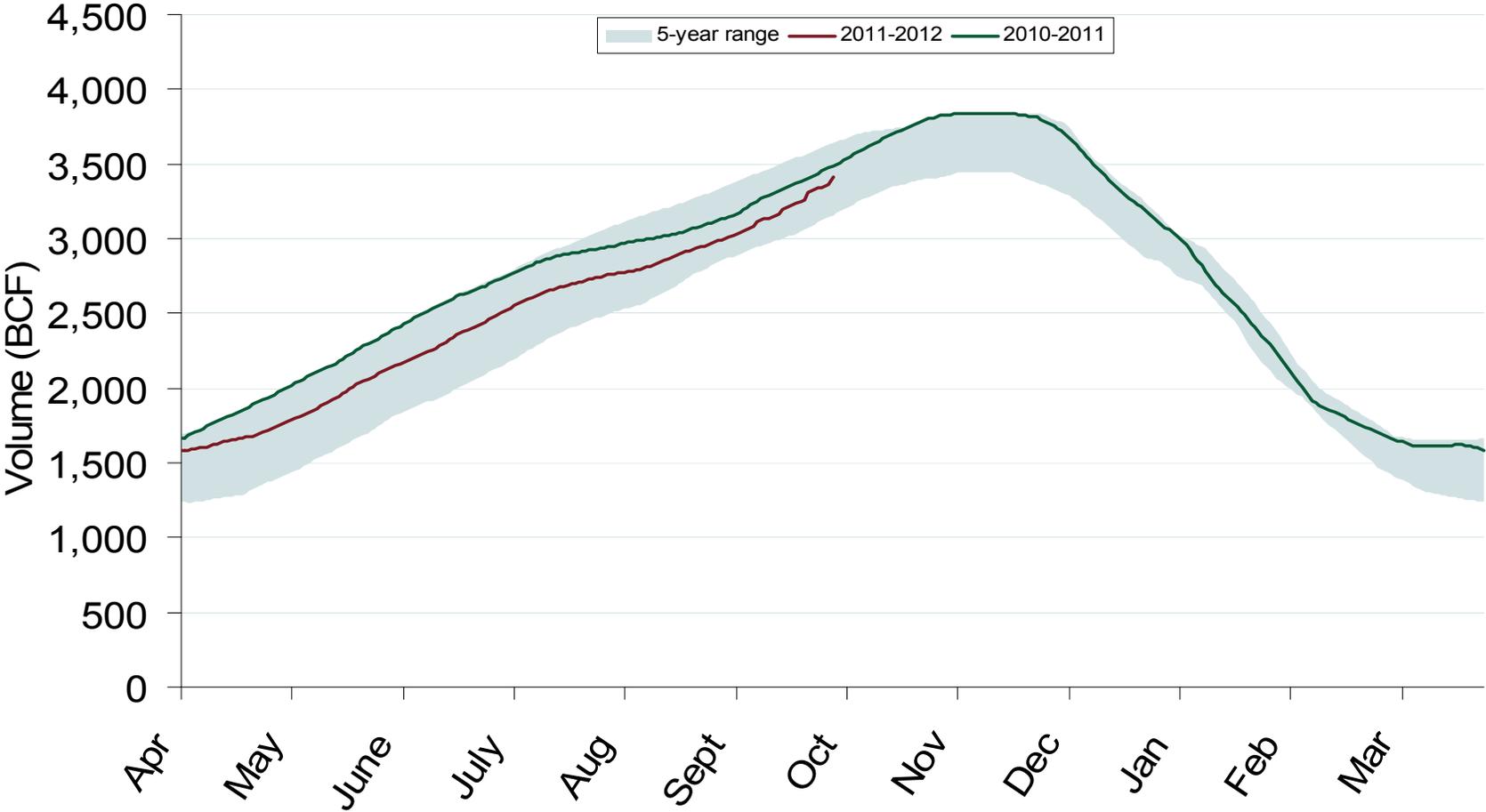
Source: Derived from *EIA Storage* and *Estimated Working Gas Capacity* data

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Updated October 4, 2011

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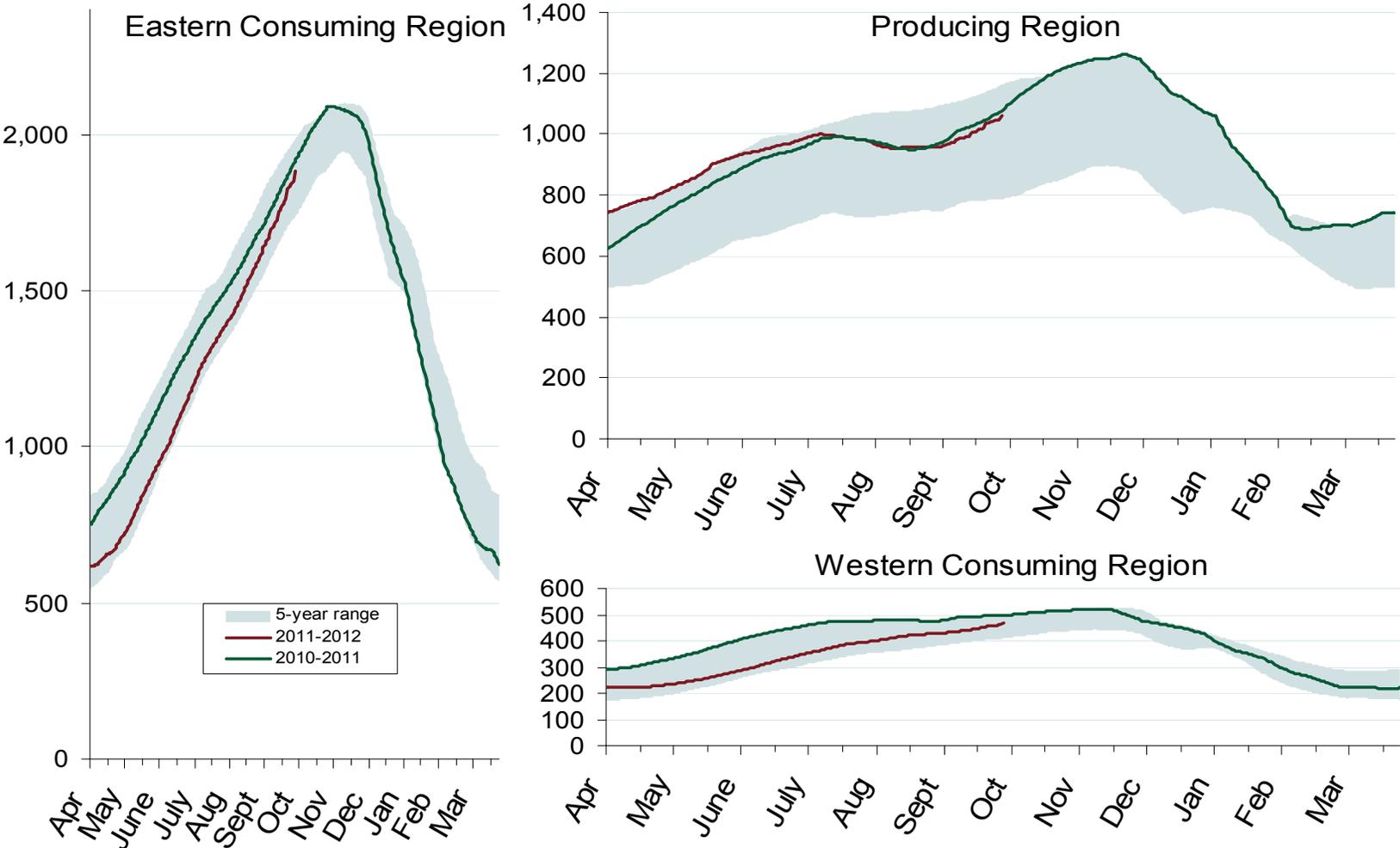
Total U.S. Working Gas in Storage



Source: Derived from EIA data
October 2011 National Snapshot

Updated: October 06, 2011

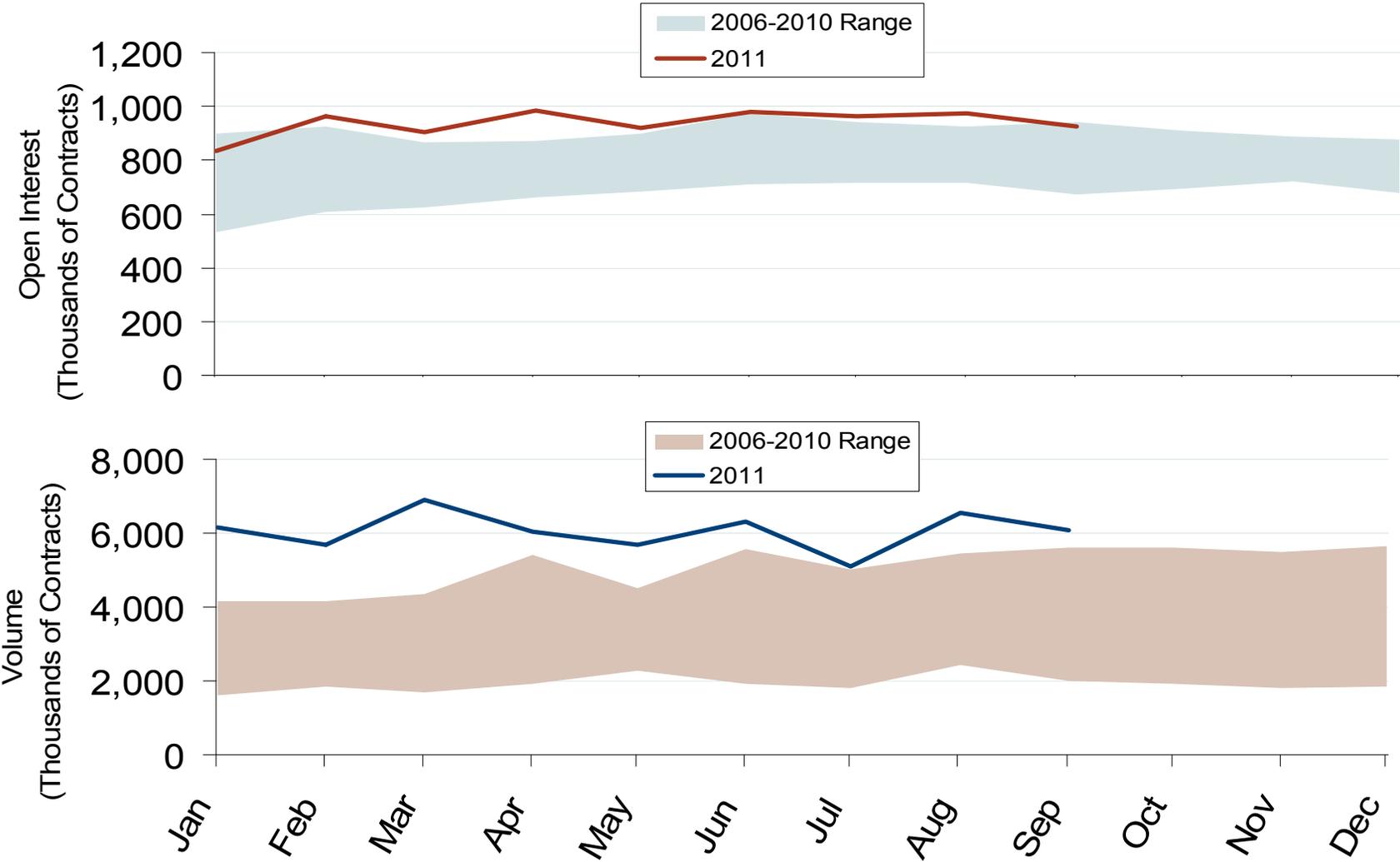
Regional Totals of Working Gas in Storage



Source: Derived from EIA data
October 2011 National Snapshot

Updated: October 06, 2011

Nymex NG Futures Month-End Open Interest and Monthly Volume

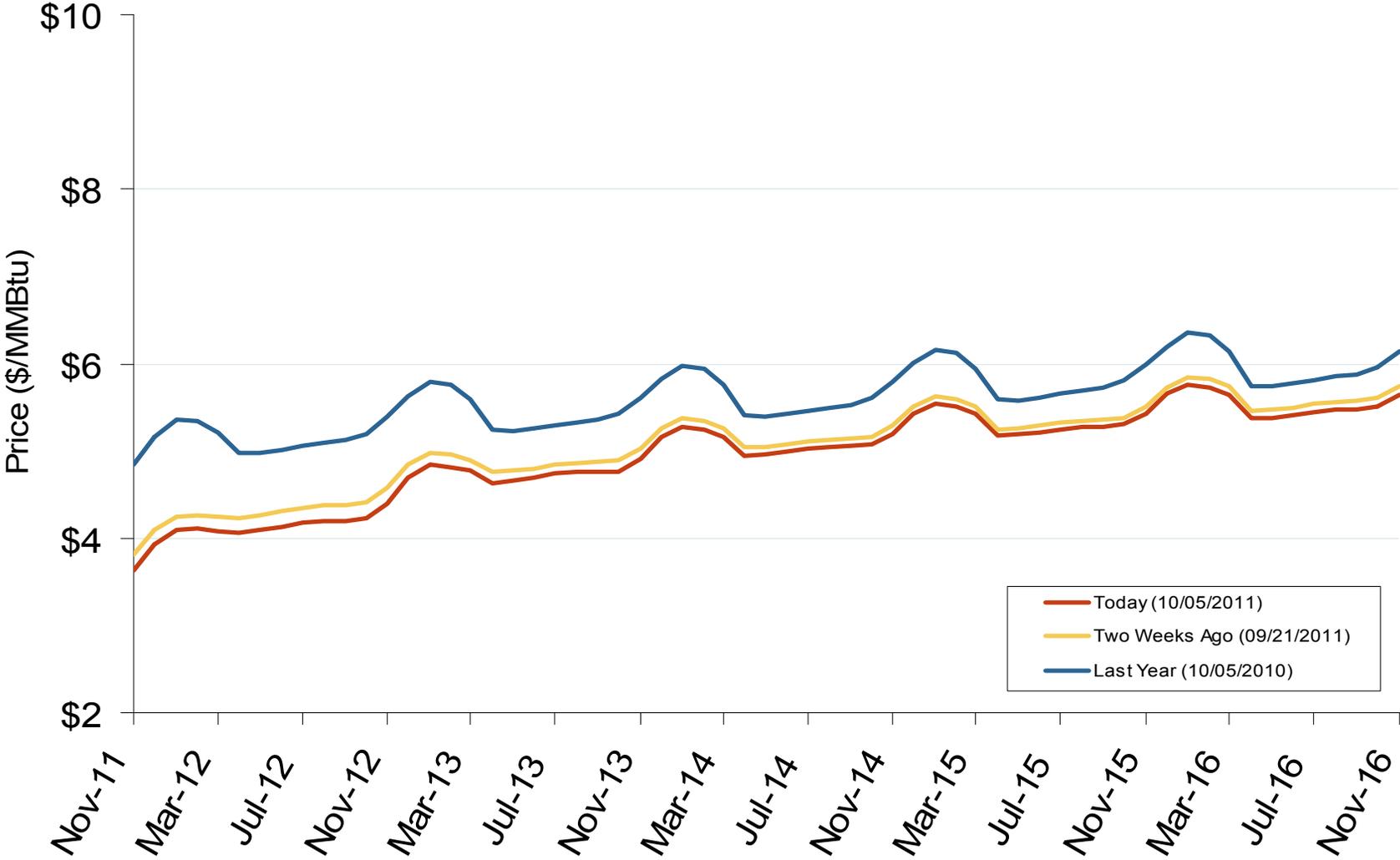


Source: Derived from Nymex data
October 2011 National Snapshot

Updated: October 04, 2011

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Nymex NG Futures Prompt Month Daily Settlement Price

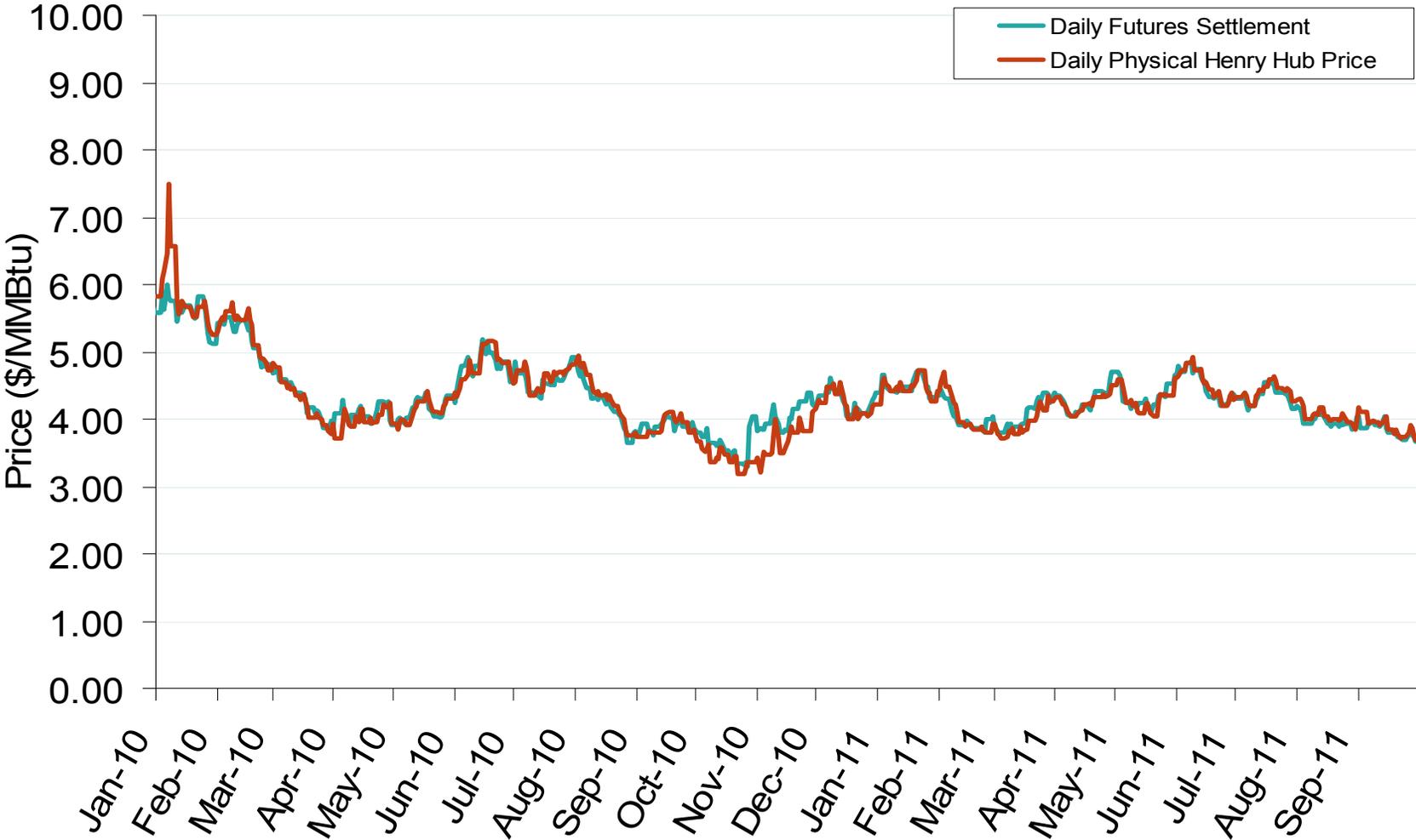


Source: Derived from Nymex data
October 2011 National Snapshot

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Daily Physical Index Price & Daily Futures Settlement Price

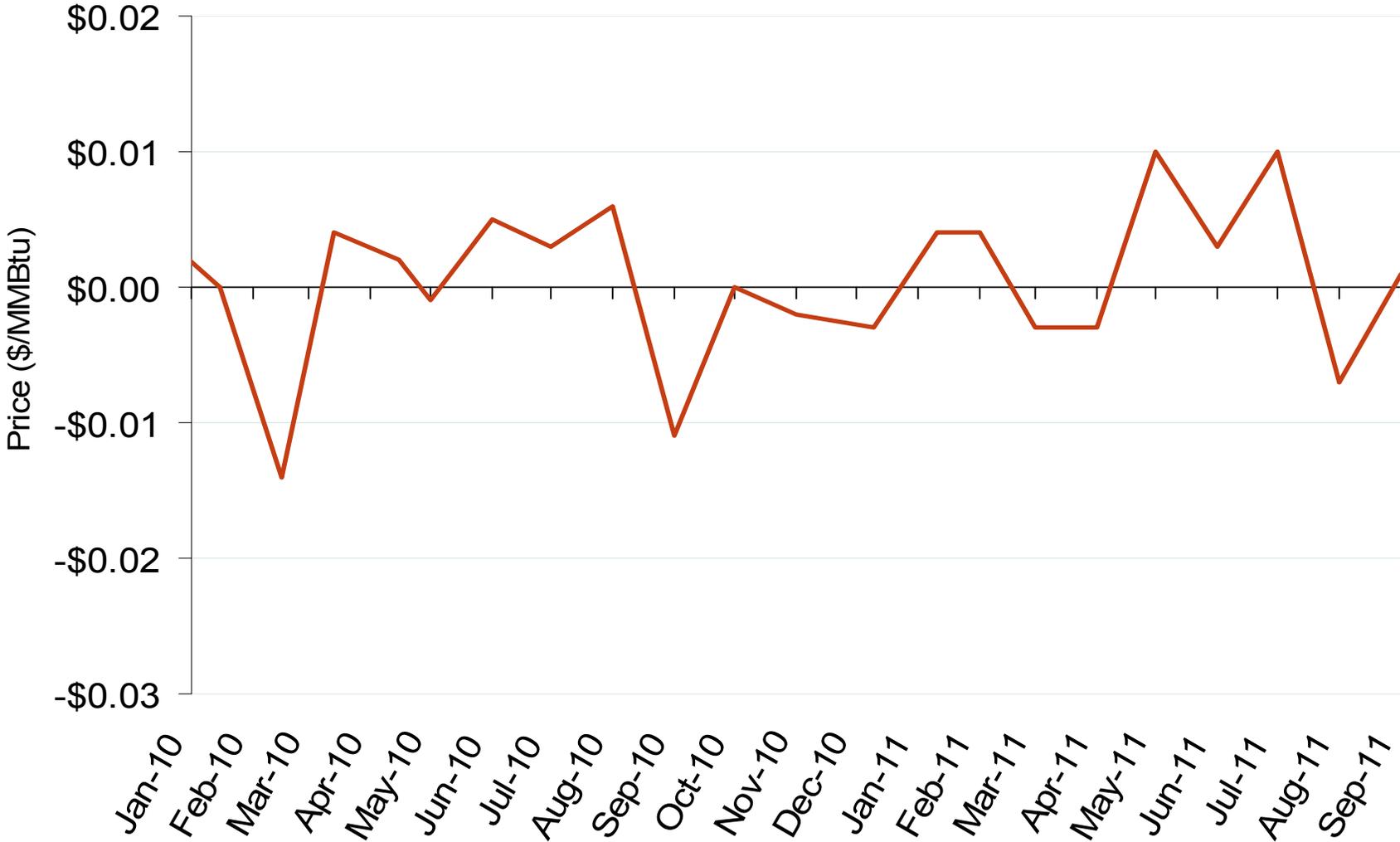


Source: Derived from *Bloomberg* data
October 2011 National Snapshot

Updated: October 05, 2011

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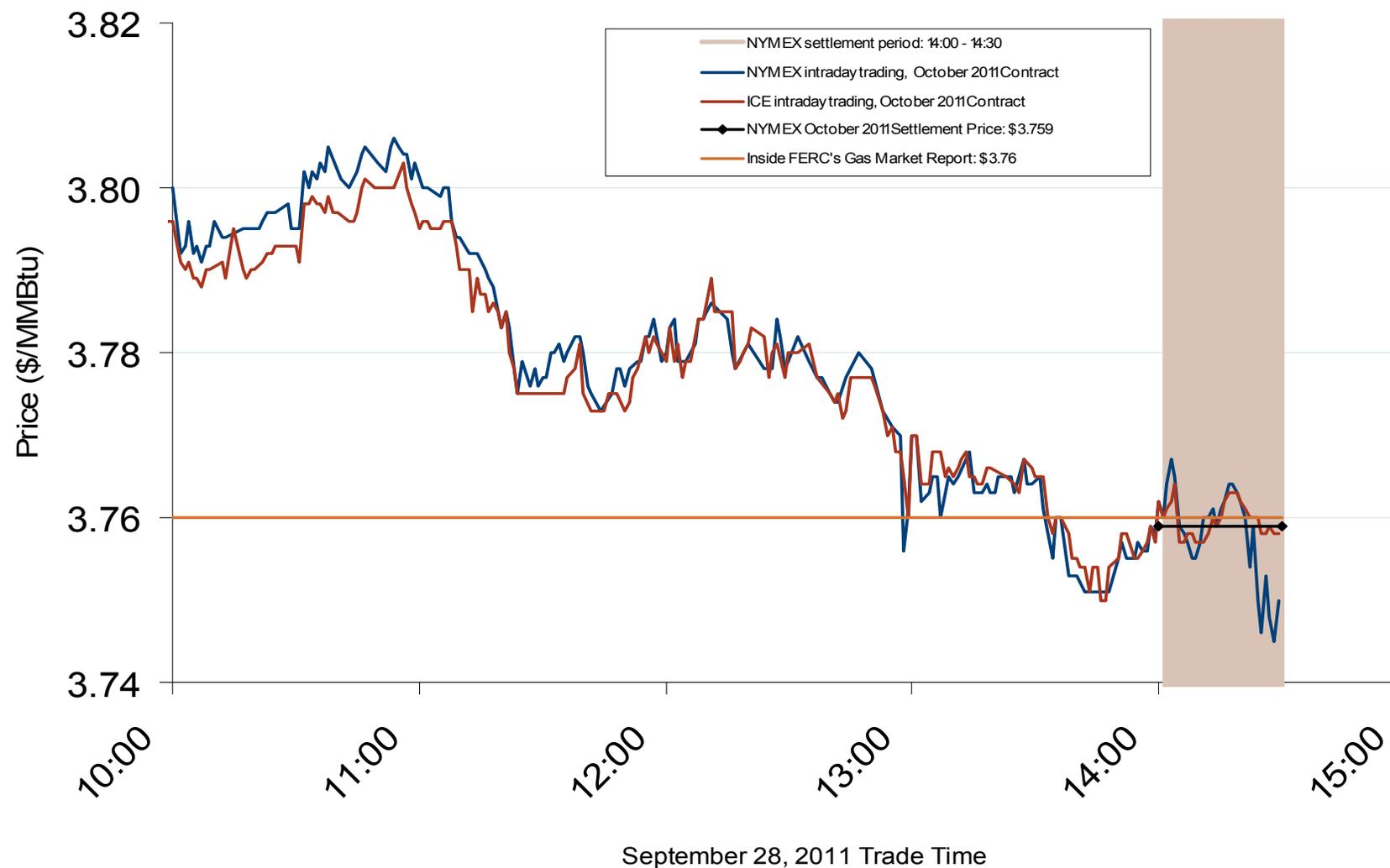
Monthly Phys. Index Minus Monthly Futures Expiration Price at HH



Source: Derived from *Platts* and *Bloomberg* data
October 2011 National Snapshot

Updated: October 04, 2011

Nymex and ICE Contract Final Settlement - October 2011



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

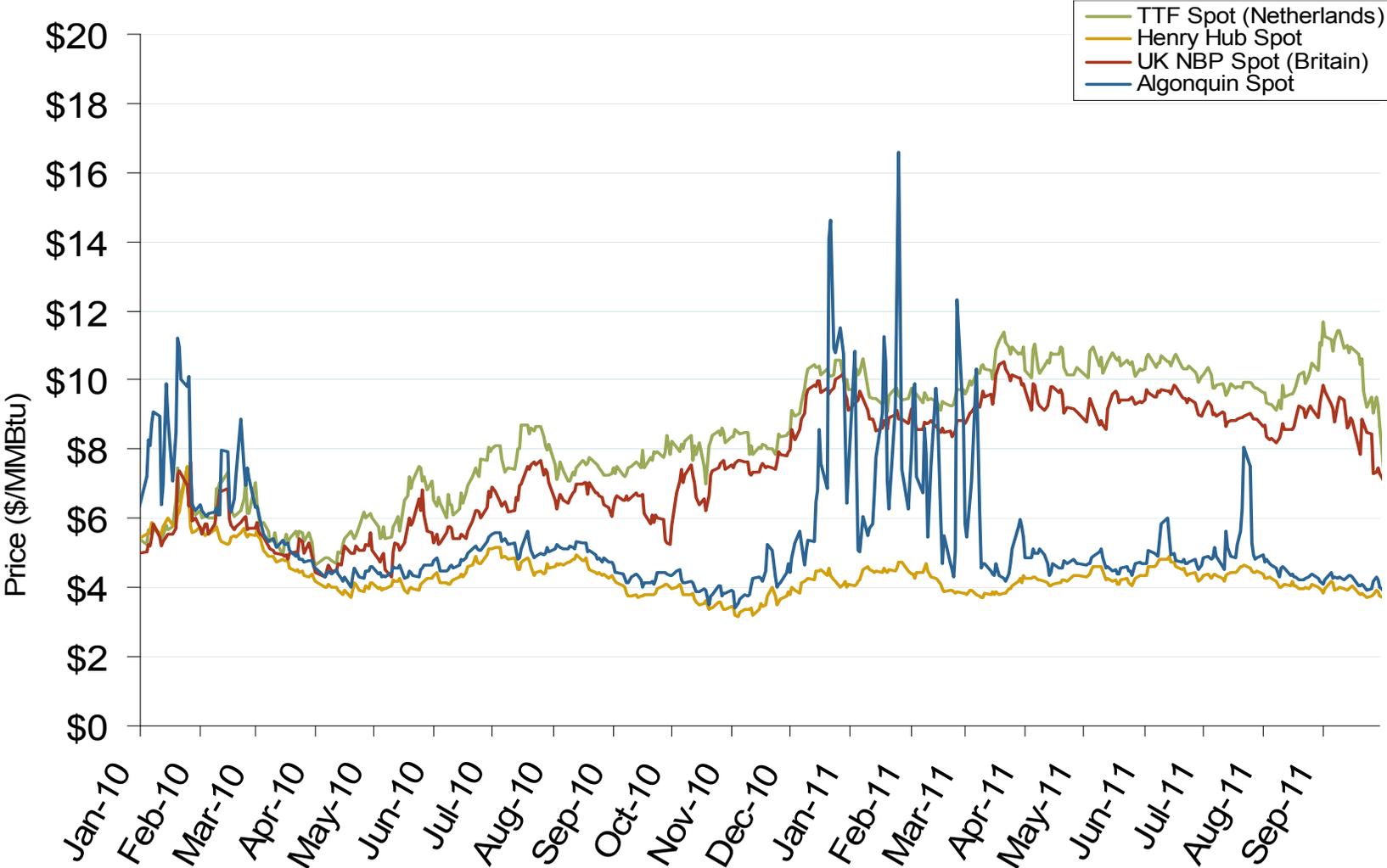
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Atlantic Basin European and US Spot Natural Gas Prices

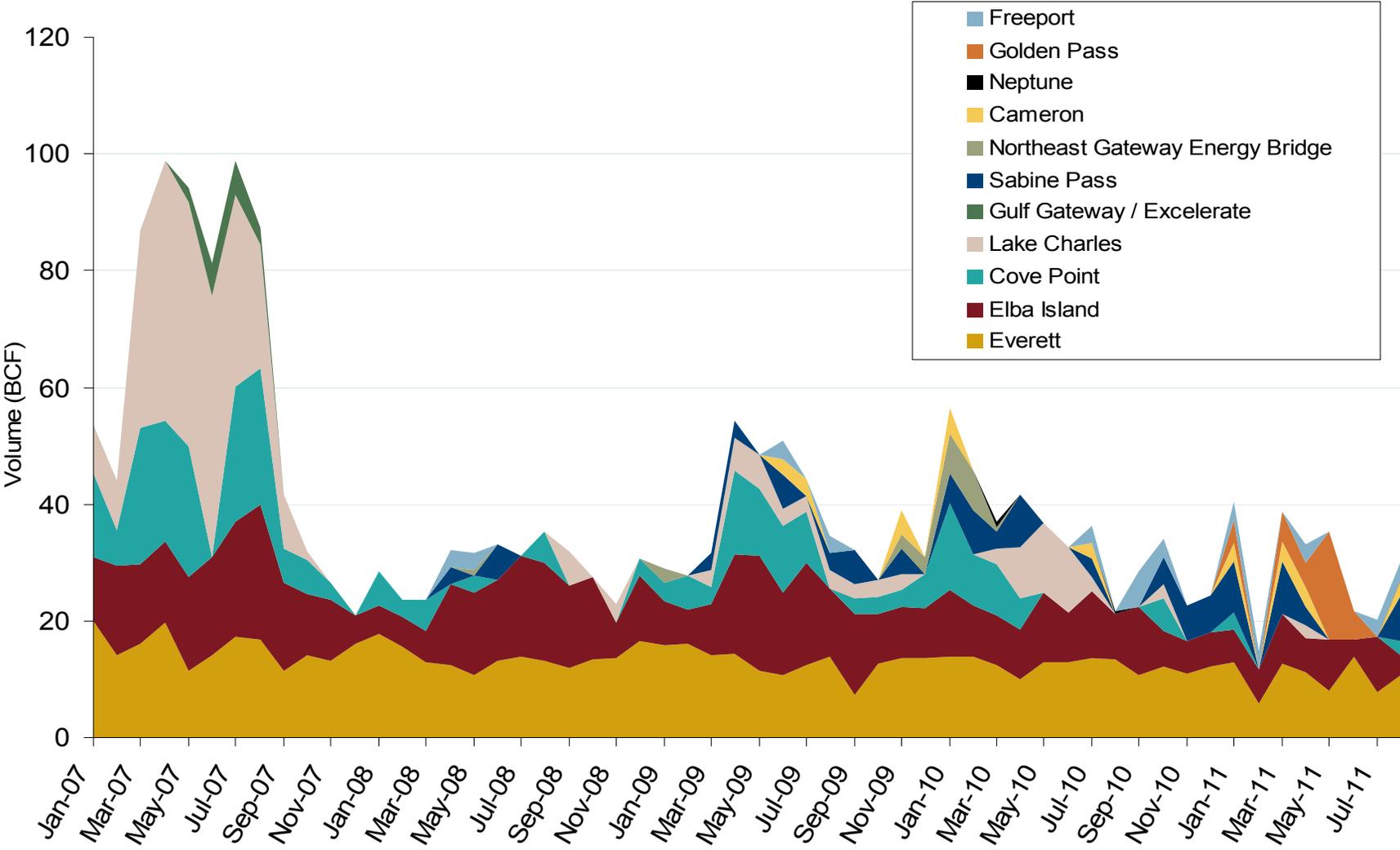


Source: Derived from *Bloomberg* and *ICE* data
October 2011 National Snapshot

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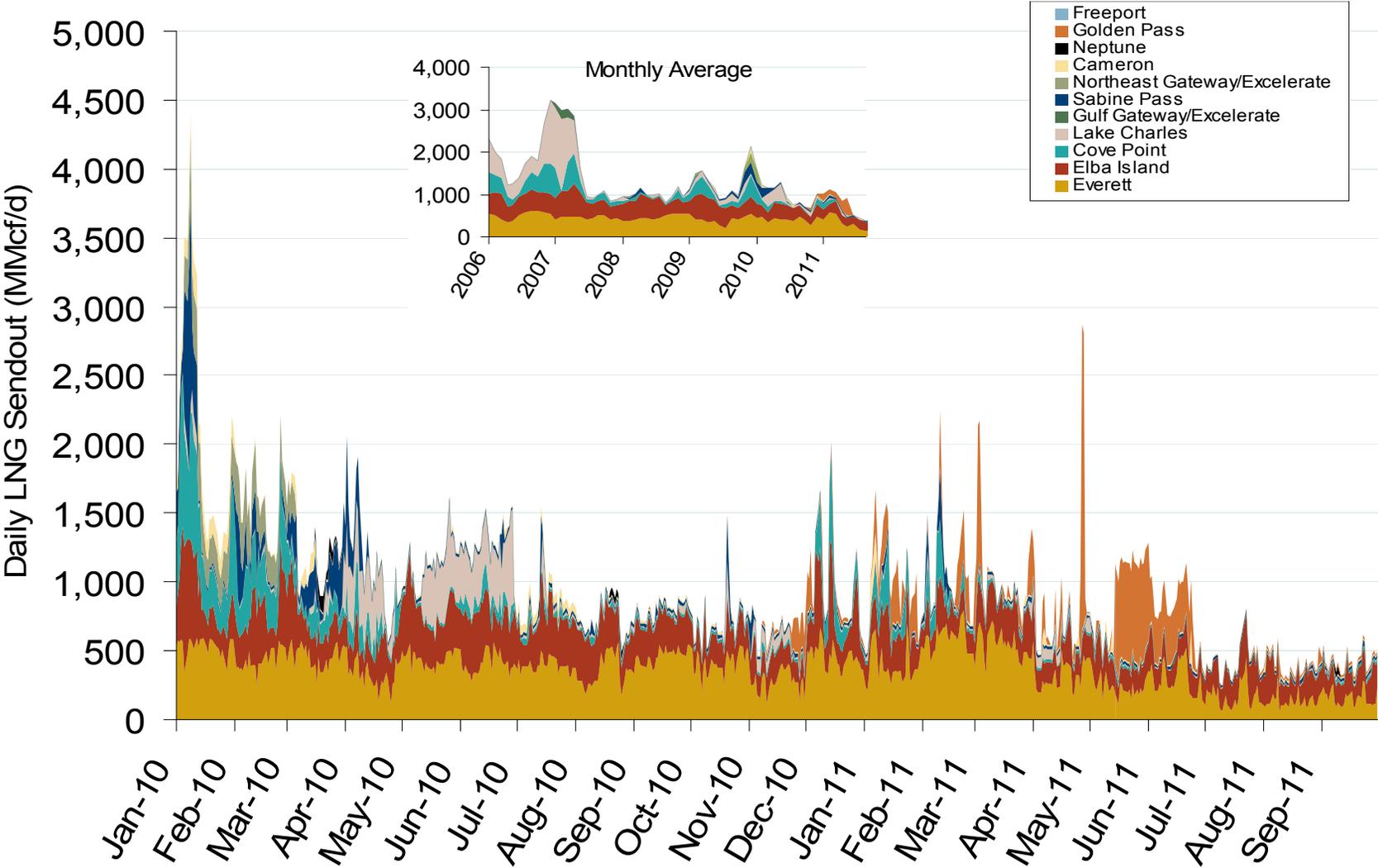
Monthly Gas Imports at Existing U.S. LNG Facilities



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

Updated: October 04, 2011

Daily Gas Sendout from Existing LNG Facilities



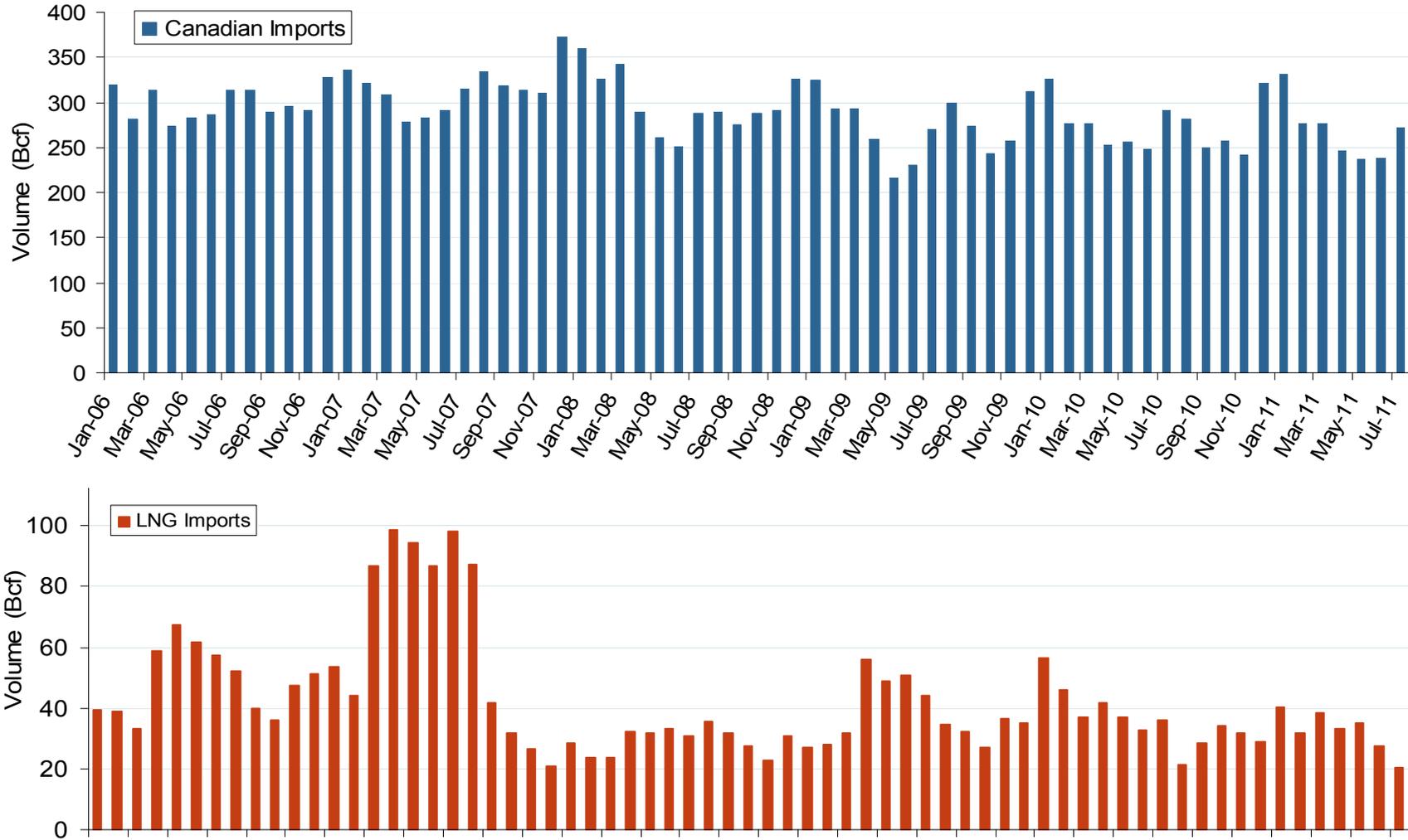
Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes Freeport LNG which flows via intrastate pipelines

Source: Derived from Bentek data
October 2011 National Snapshot

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

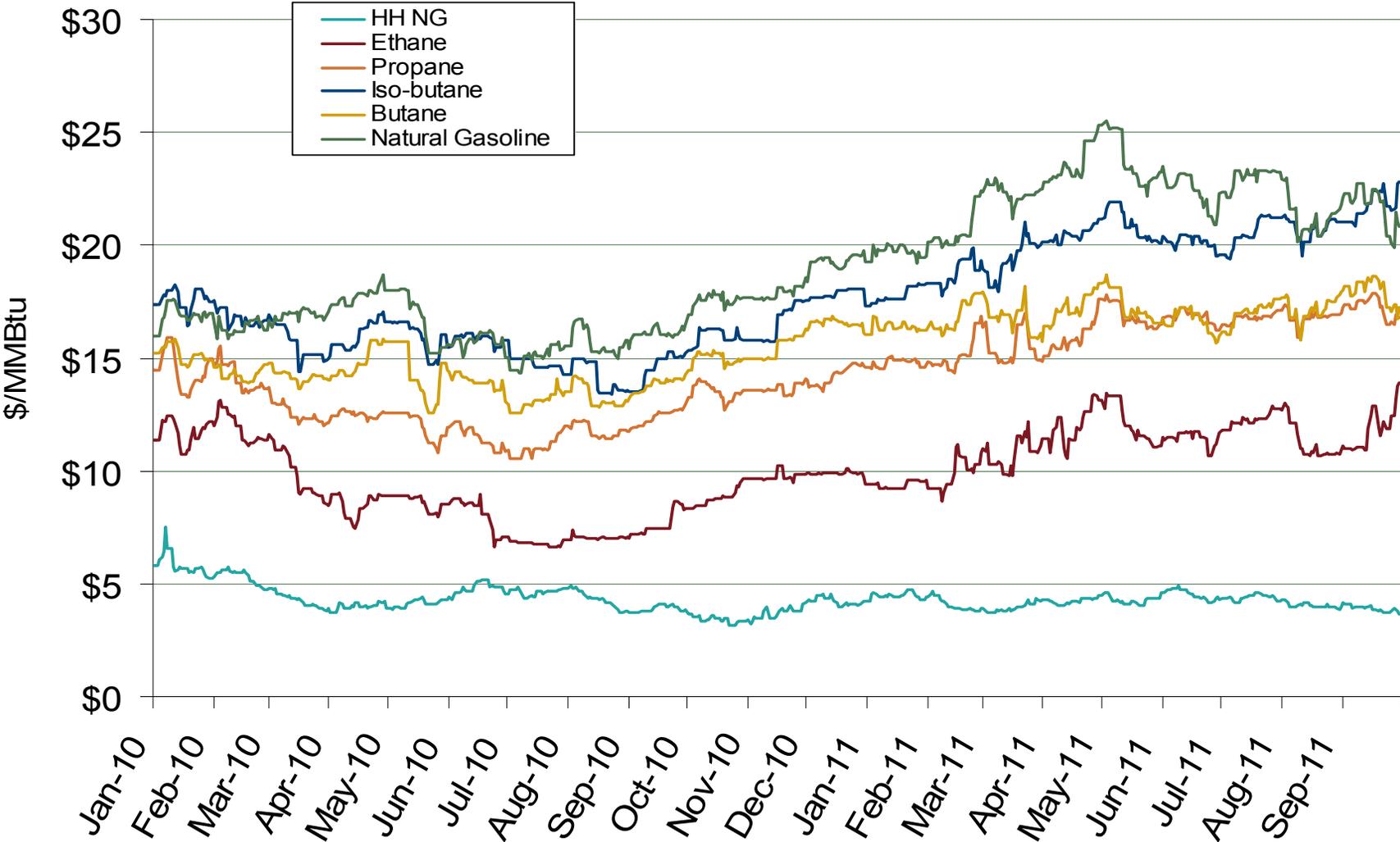


Source: EIA Natural Gas Monthly
October 2011 National Snapshot

Updated: October 04, 2011

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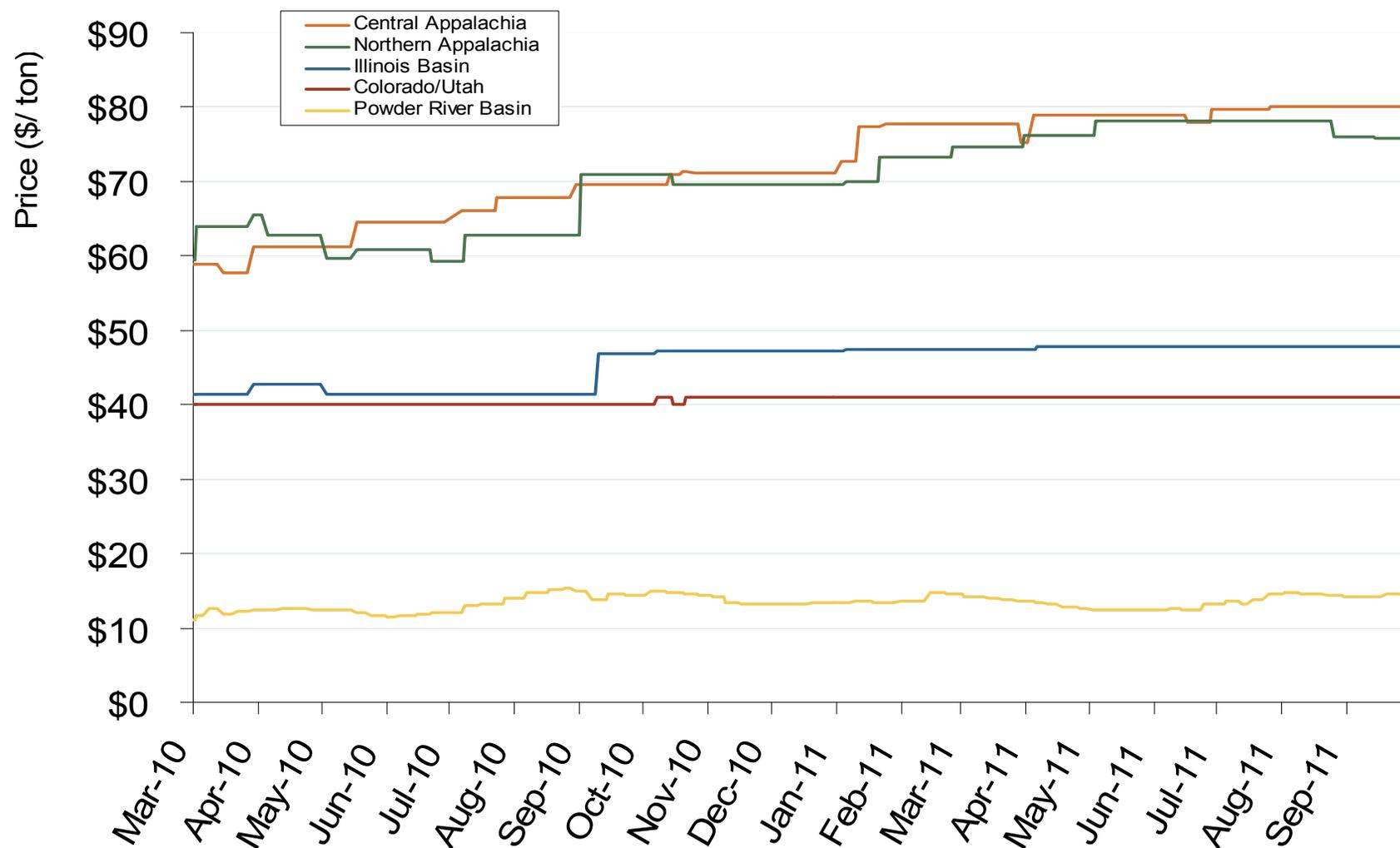
U.S. Natural Gas vs. Natural Gas Liquids (NGL) Prices



Source: Derived from Bloomberg Data
October 2011 National Snapshot

Updated: October 05, 2011

National Electric Market Overview: Coal Prices

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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

October 2011 National Snapshot

Updated: October 05, 2011

U.S. Coal Stockpiles at Electric Power Generating Facilities

