

OE ENERGY MARKET SNAPSHOT

Western States Version – October 2012 Data

Office of Enforcement
Federal Energy Regulatory Commission
November 2012



Infrastructure Report

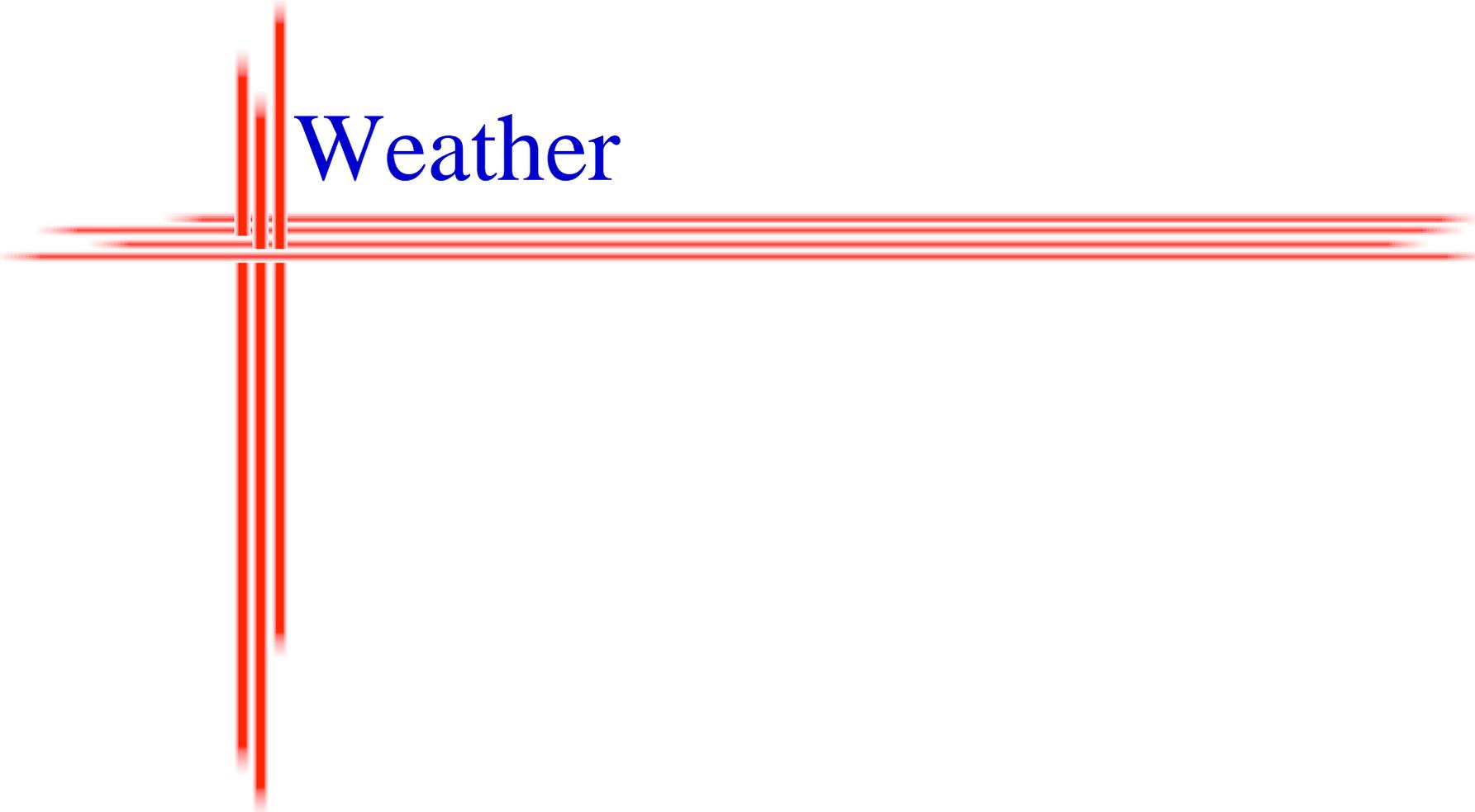
October Infrastructure Report



Winter 2012-13 Energy Market Assessment

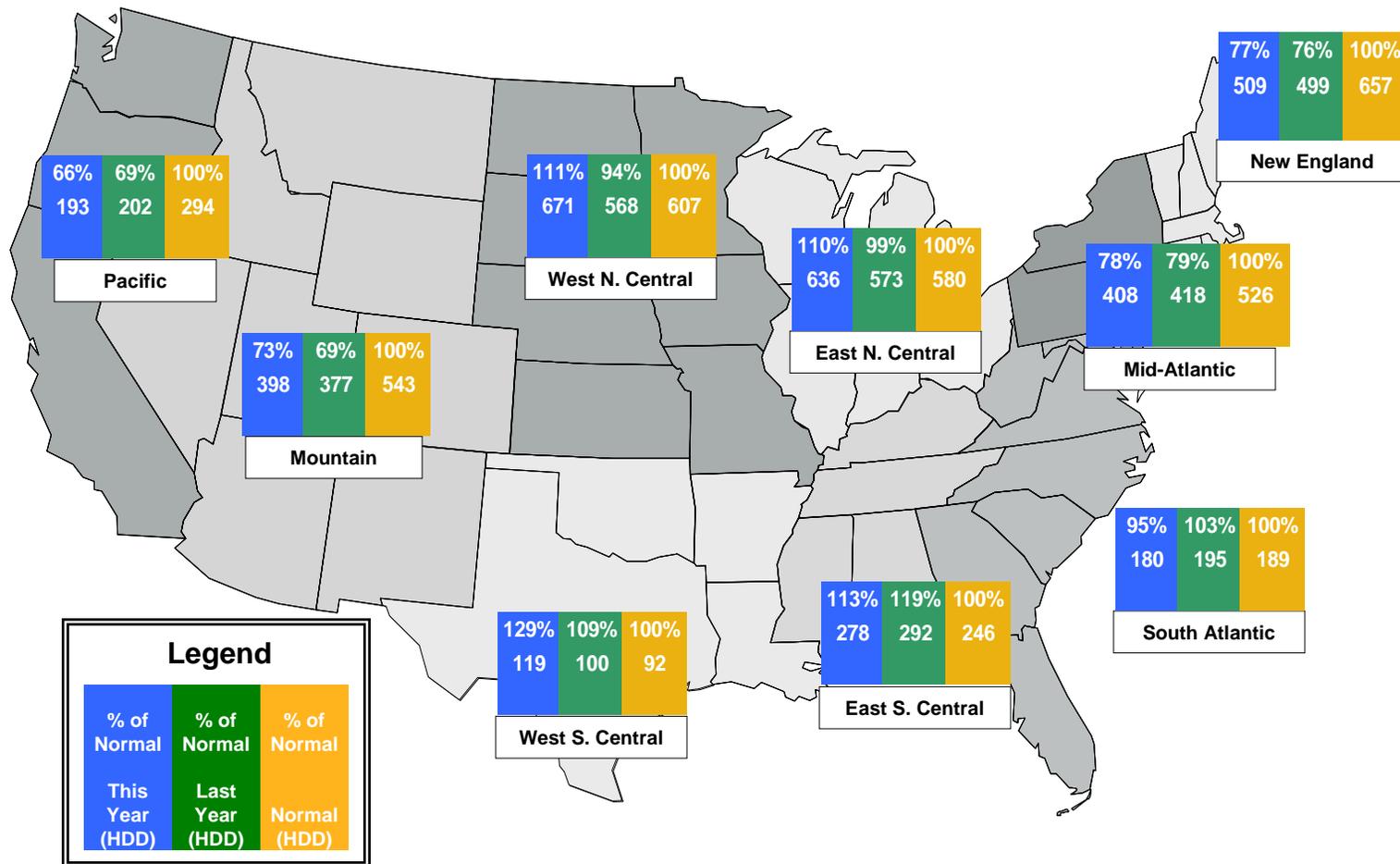
**Item No. A-3
November 15, 2012**

<http://www.ferc.gov/market-oversight/reports-analyses/mkt-views/2012/11-15-12.pdf>



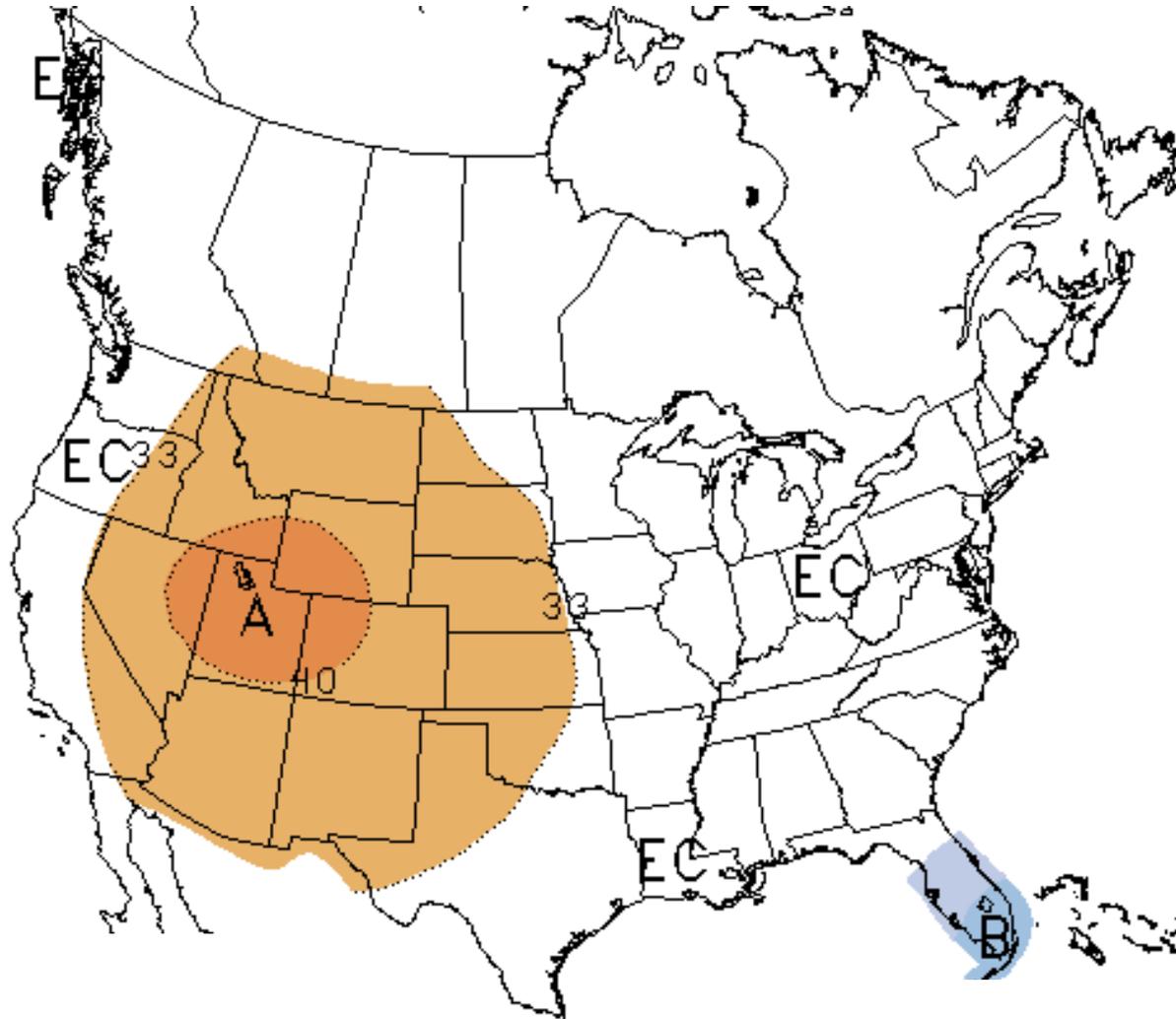
Weather

Regional Heating Degree Days – July 2012 to October 2012



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

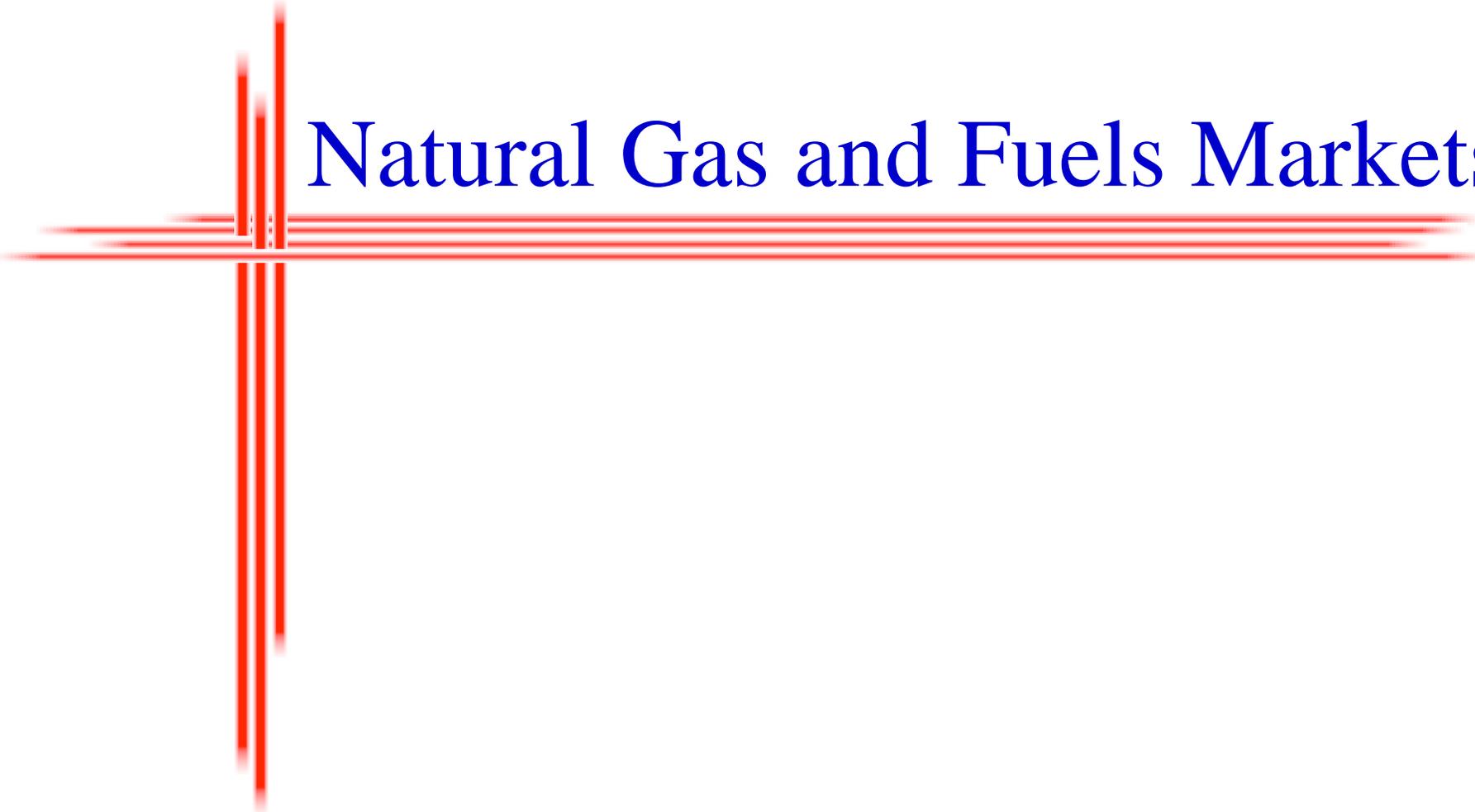
NOAA's 3 Month Temperature Forecast Made October 18, 2012, Valid for November 2012 – January 2013



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.

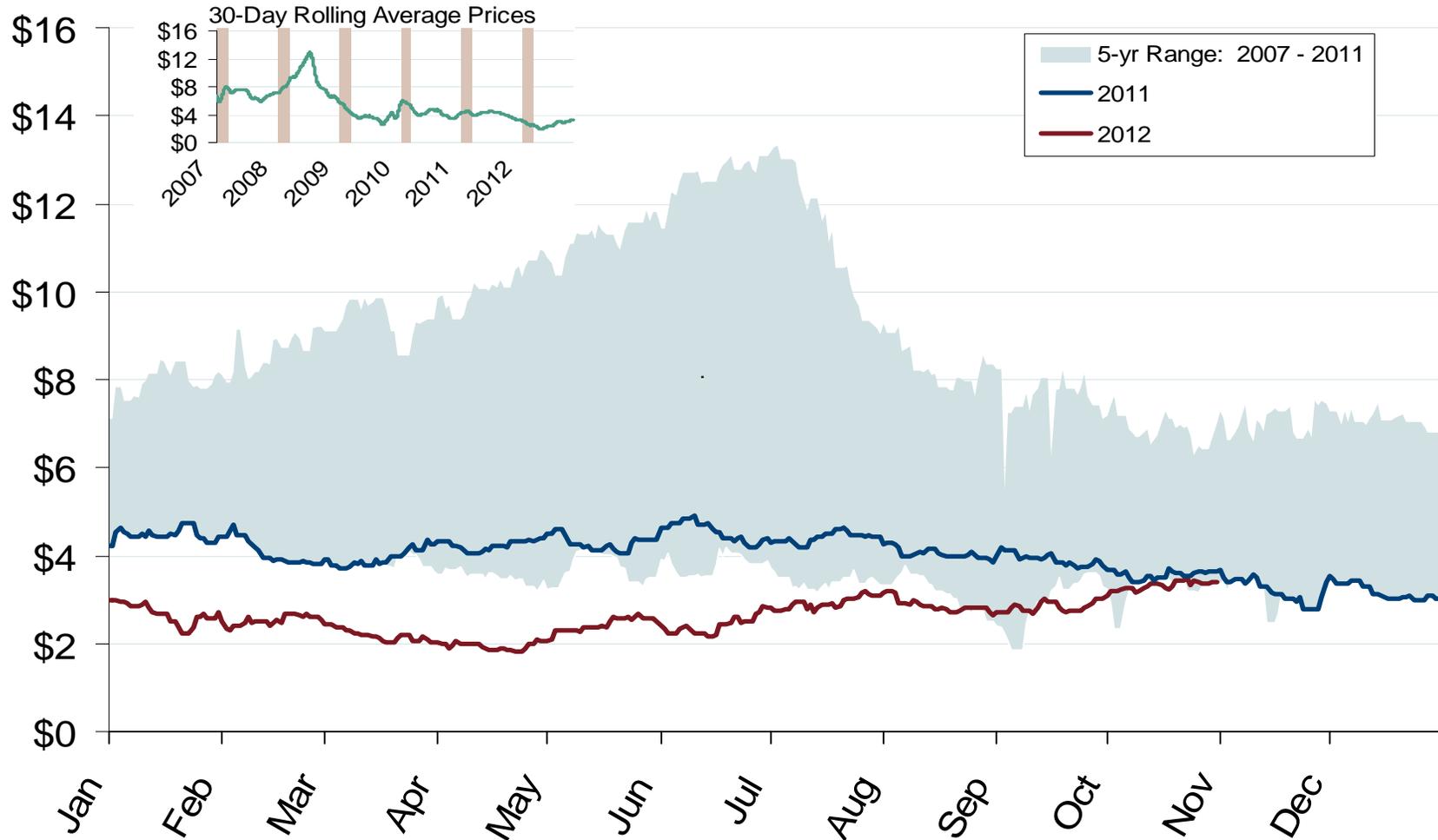
Updated: November 6, 2012



Natural Gas and Fuels Markets

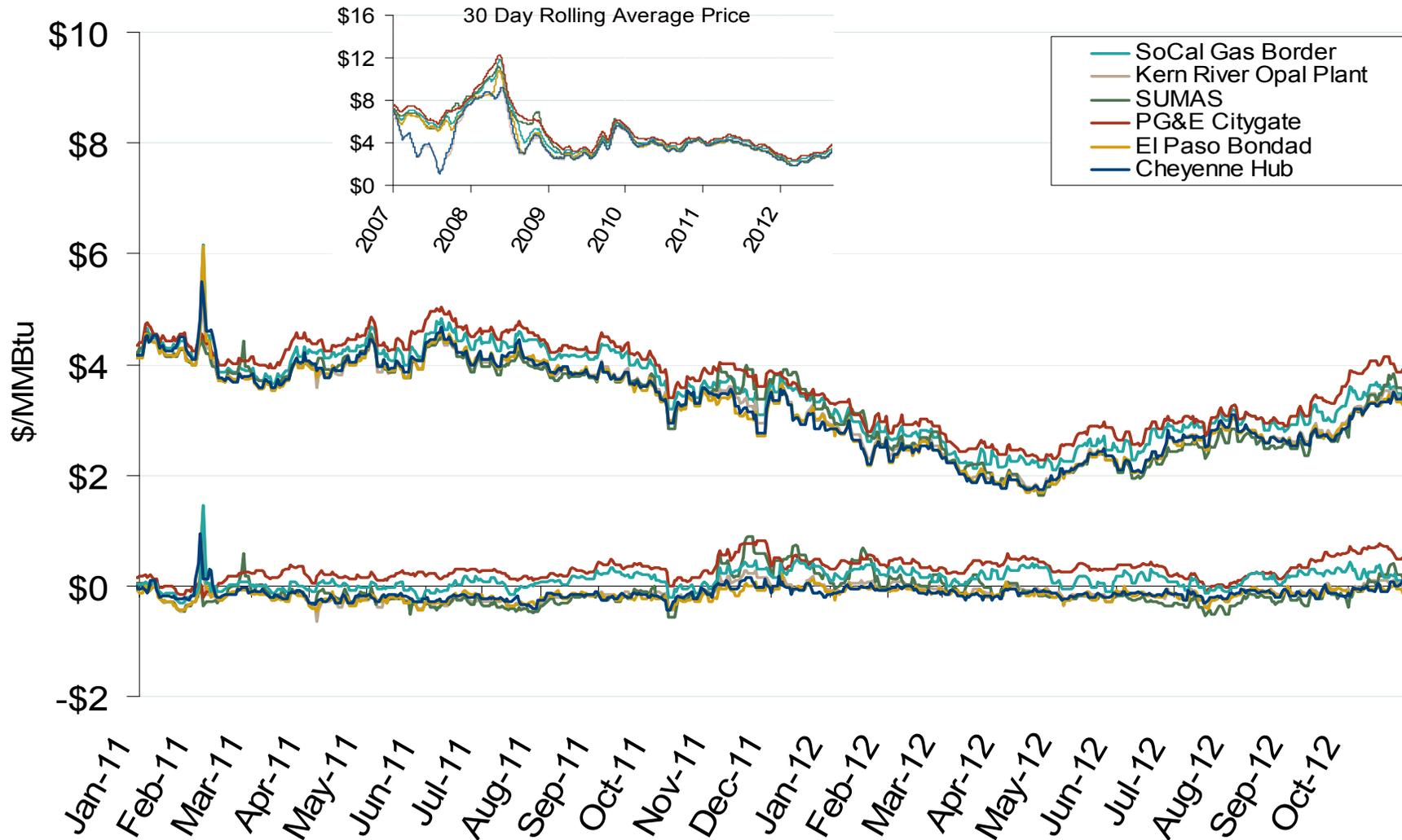
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Henry Hub Natural Gas Daily Spot Prices



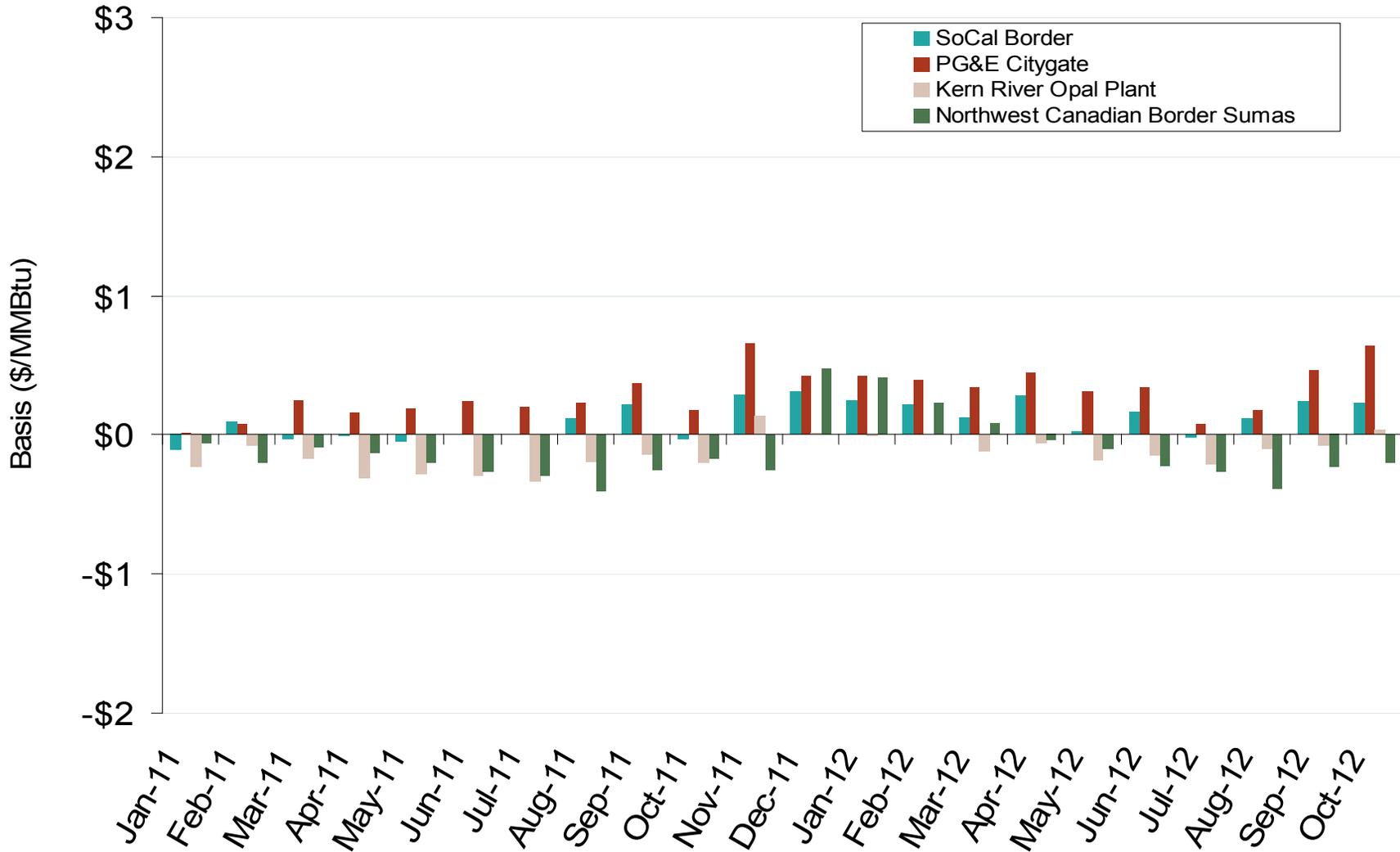
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Western Day-Ahead Hub Spot Prices and Basis



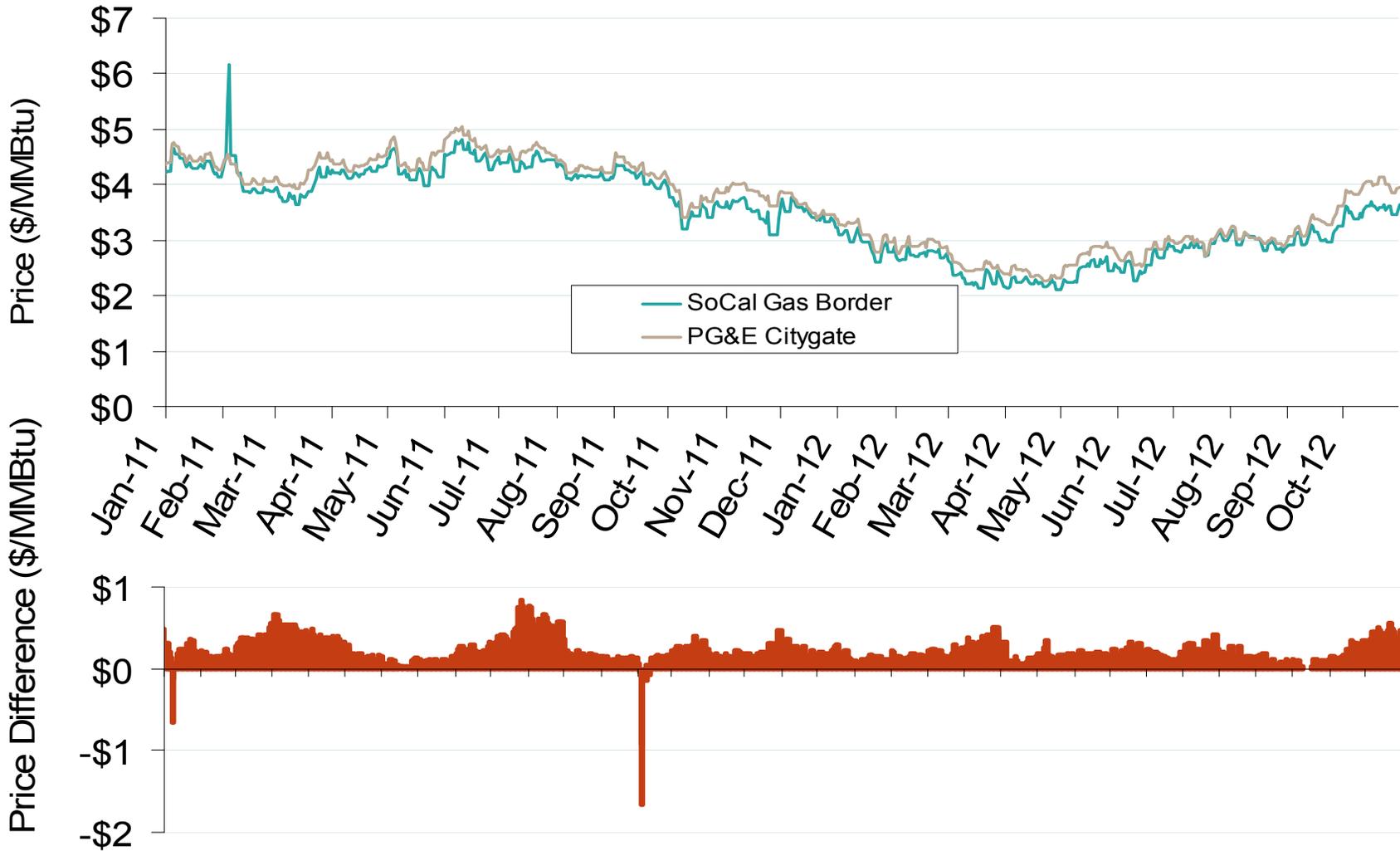
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Western Monthly Average Basis Value to Henry Hub

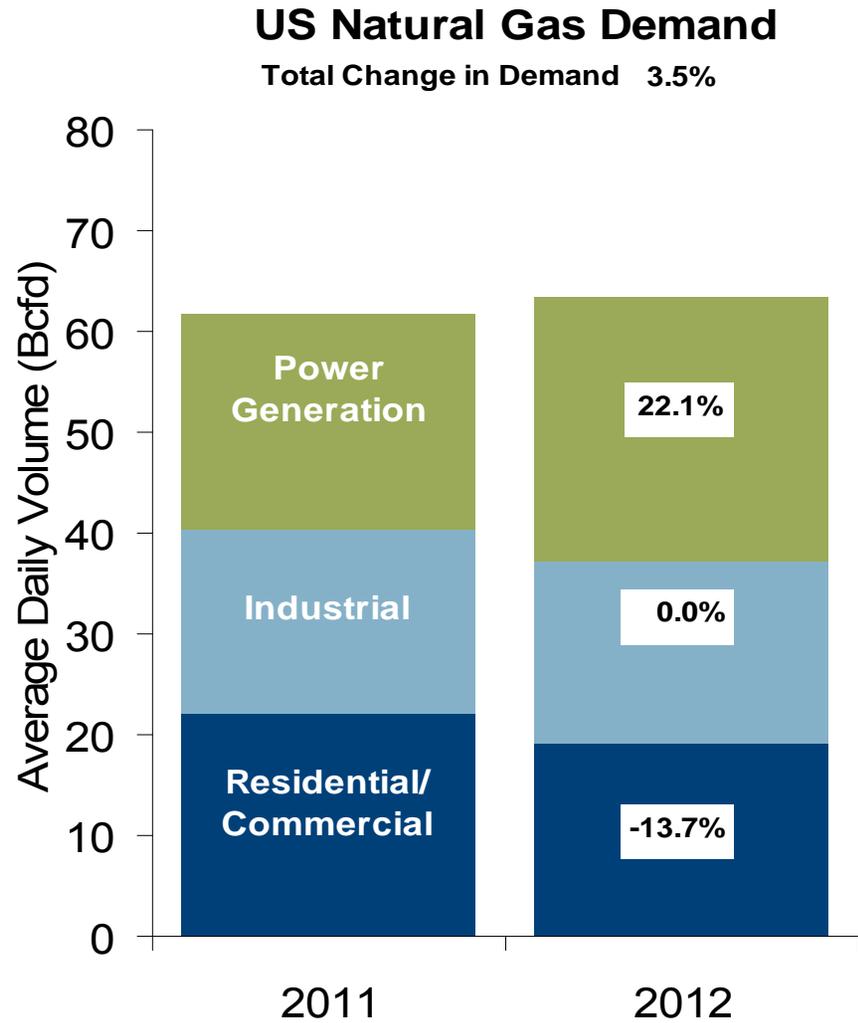
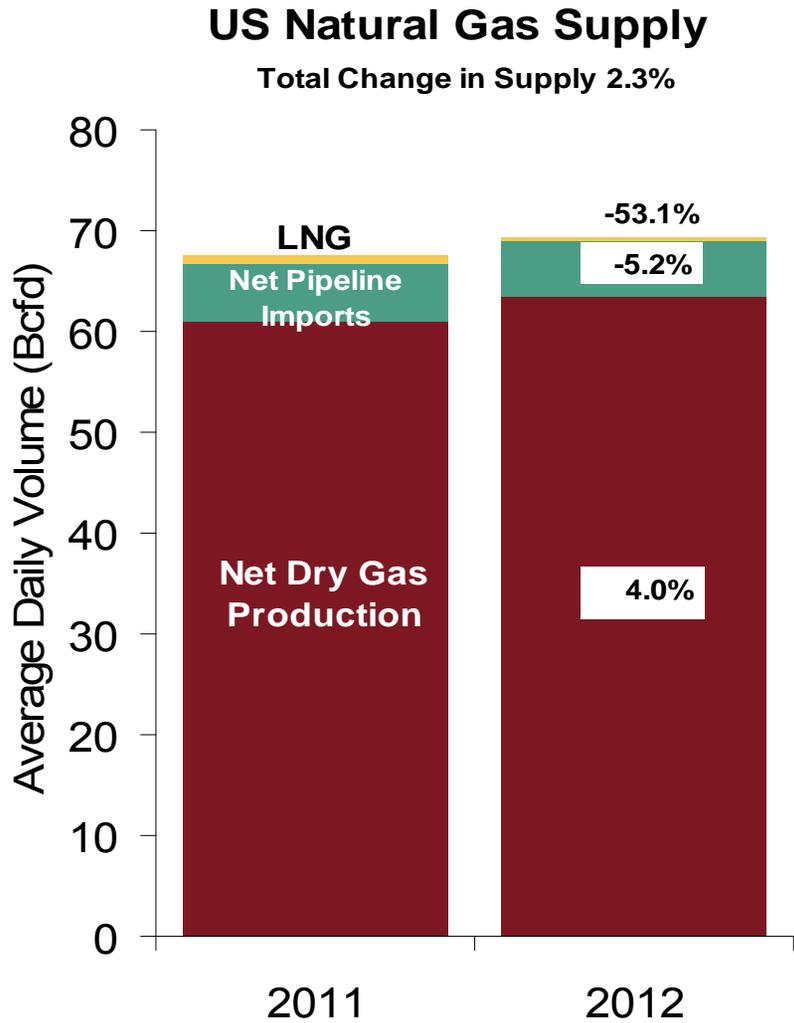


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Difference in Northern and Southern California Daily Spot Prices



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



Note: Balance includes all amounts not attributable to other categories.

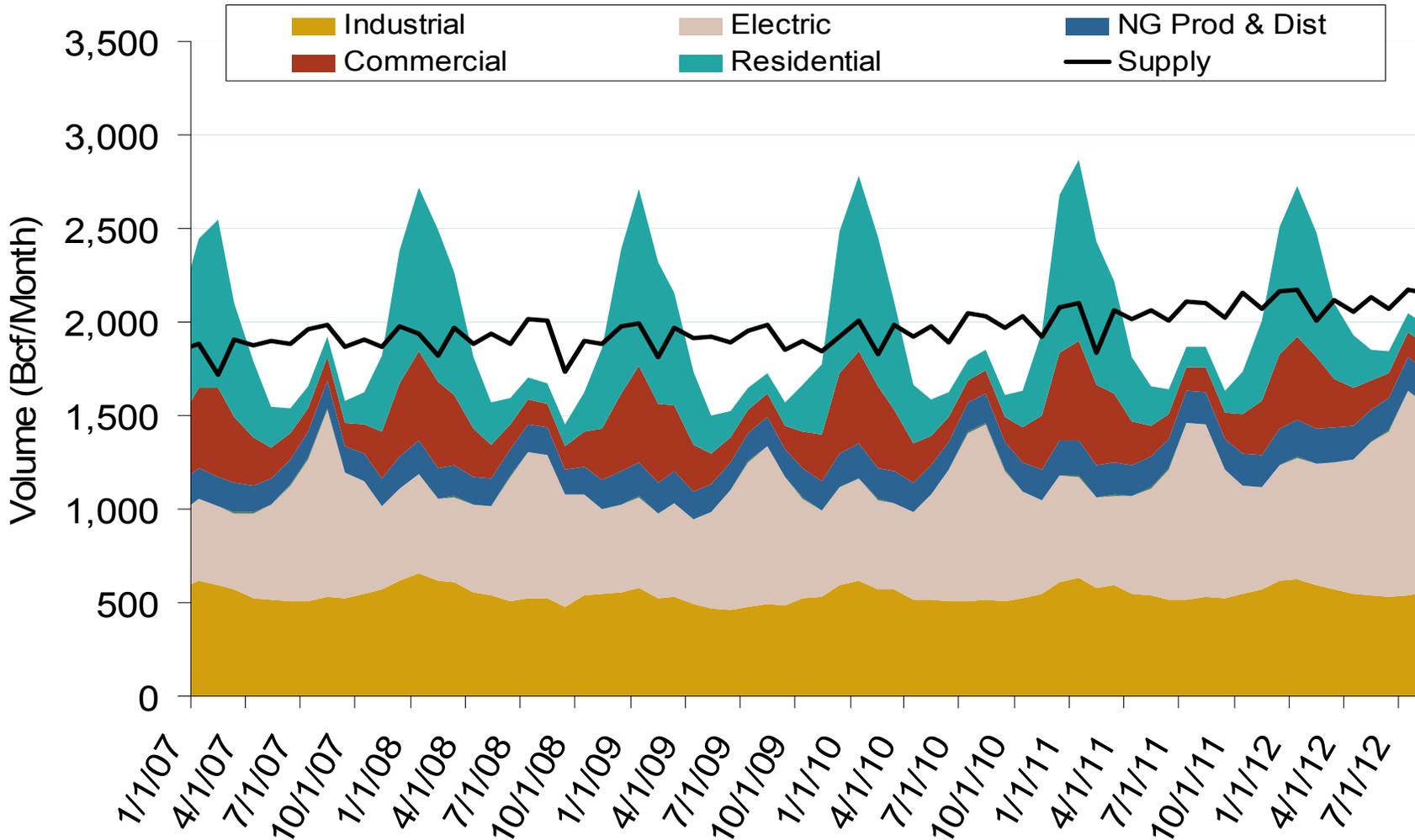
Source: Derived from *Bentek Energy* data

November 2012 West Snapshot Report

Updated: November 02, 2012

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Annual U.S. Natural Gas Consumption by Sector



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

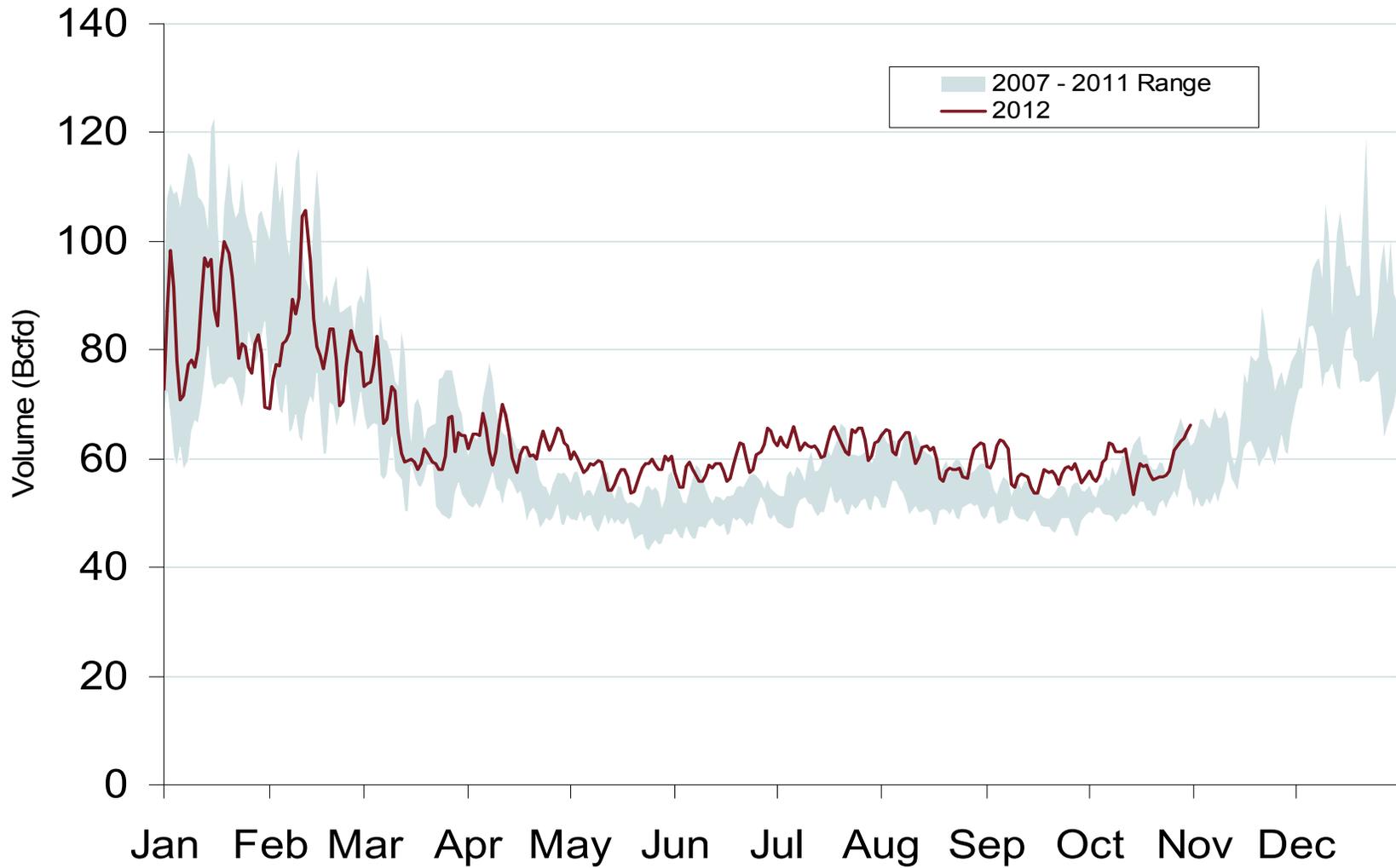
Source: Derived from EIA data

November 2012 West Snapshot Report

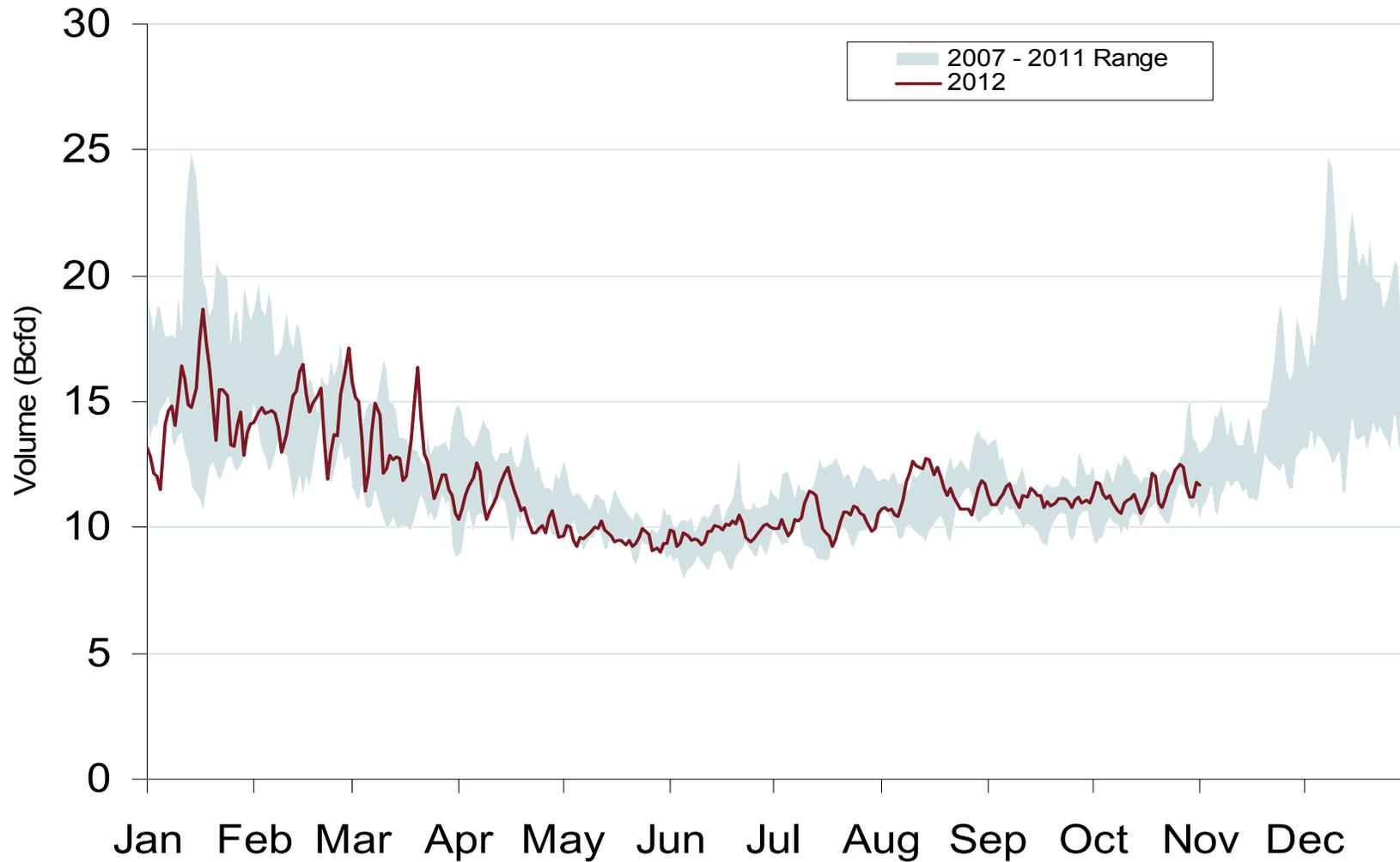
Updated: November 06, 2012

20013

Total U.S. Natural Gas Demand All Sectors

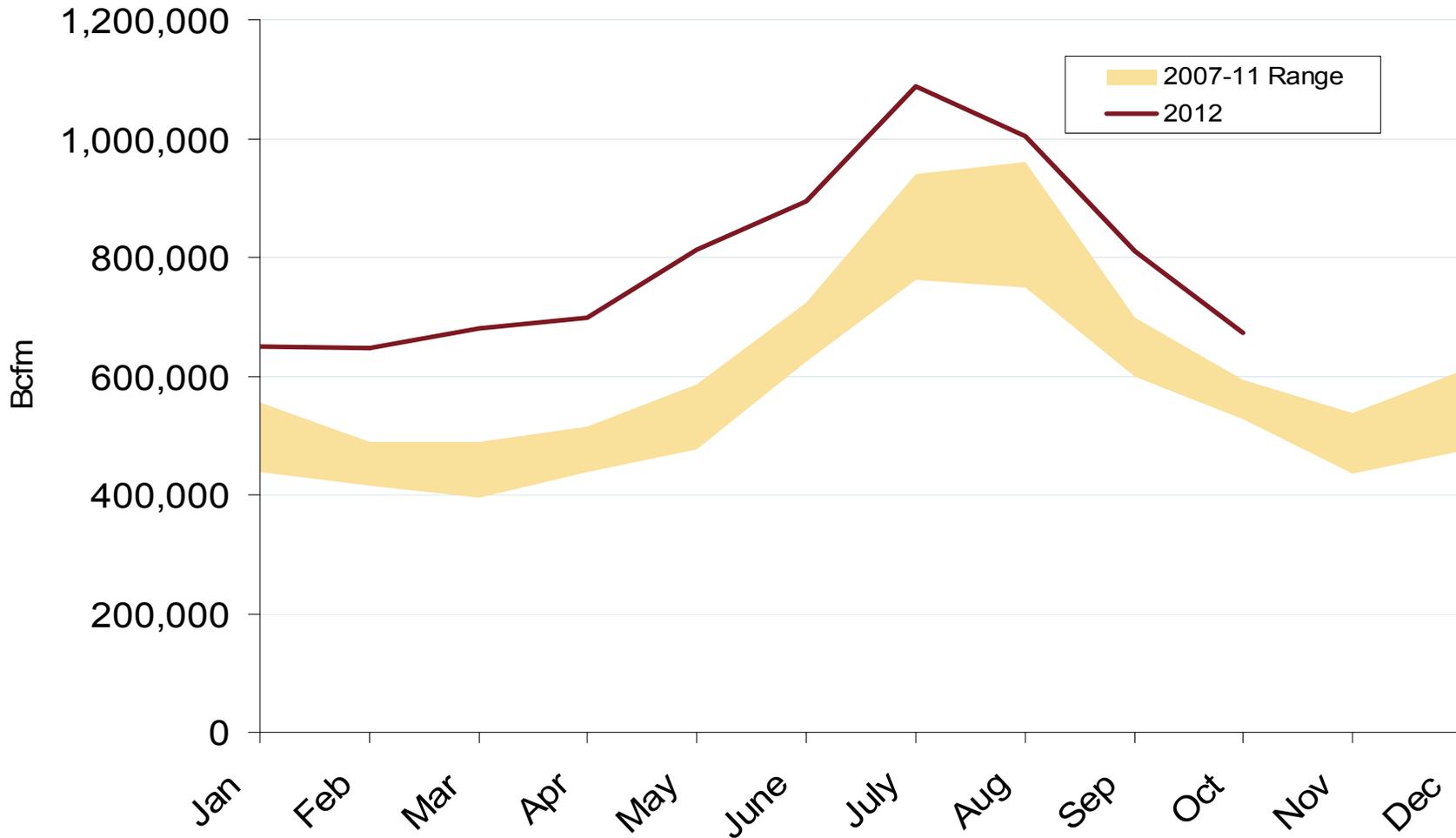


Daily Western Natural Gas Demand All Sectors



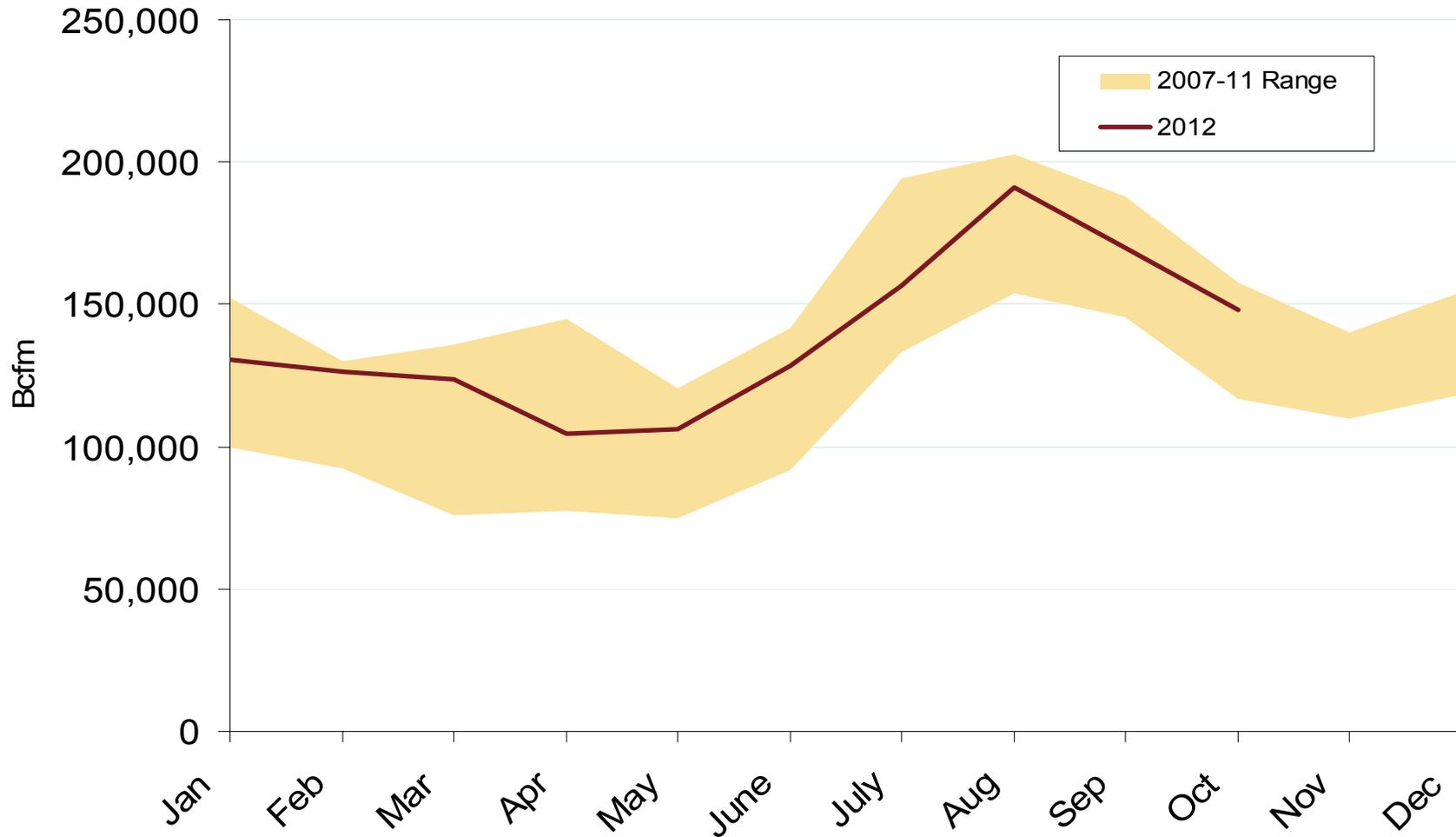
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U.S. Natural Gas Consumption for Power Generation



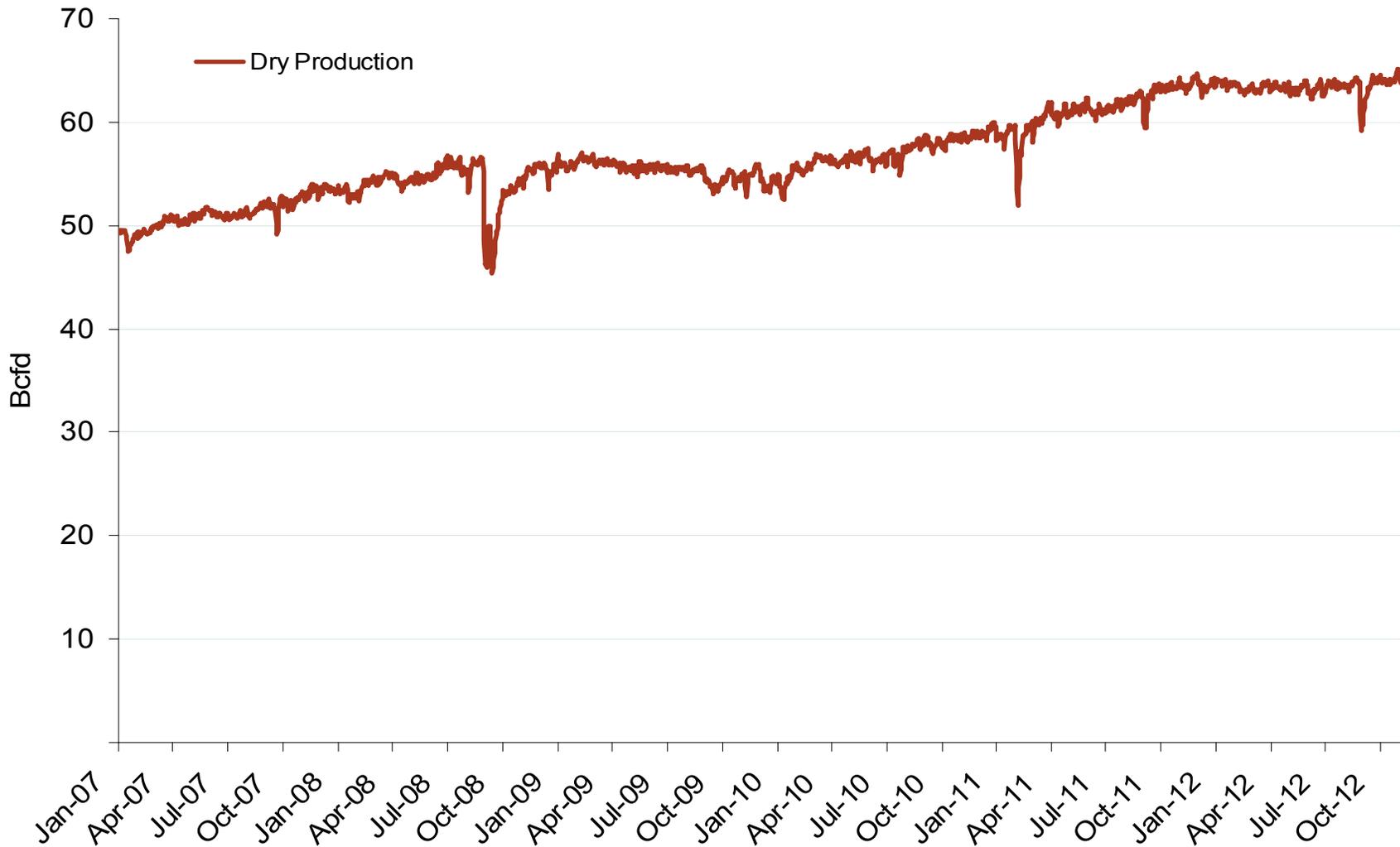
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Western Natural Gas Consumption for Power Generation



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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

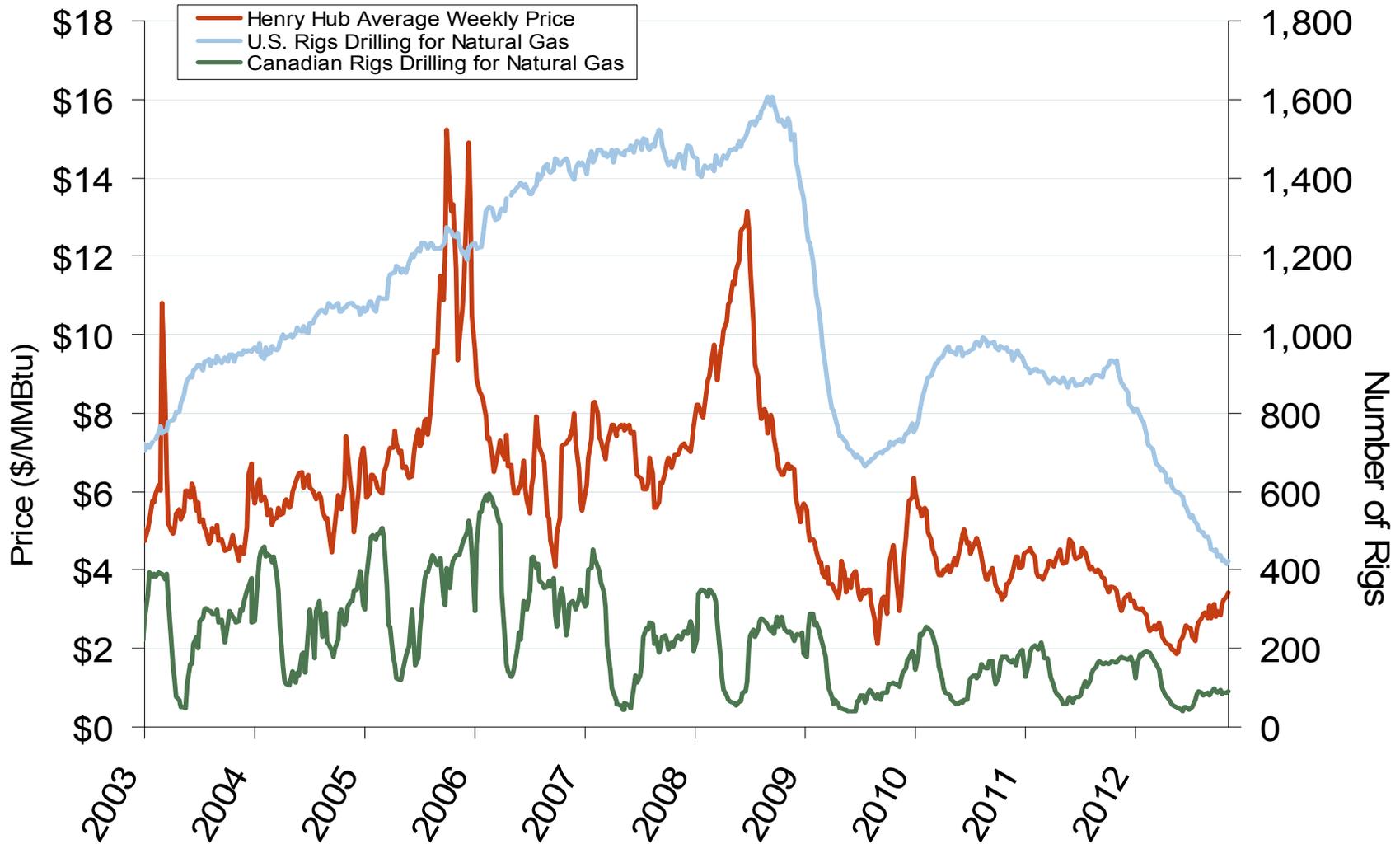
Source: Derived from *Bentek Energy* data

November 2012 West Snapshot Report

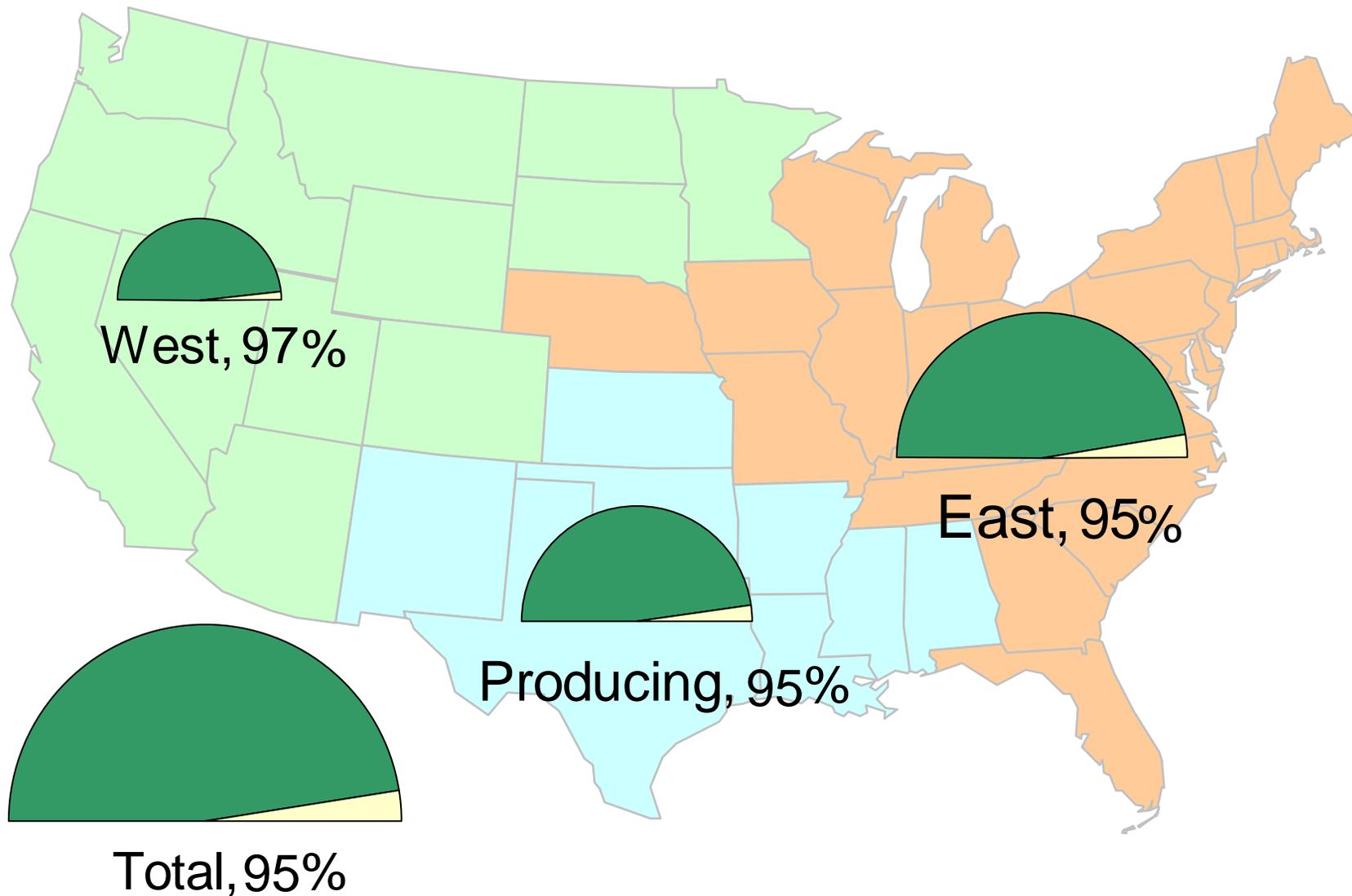
Updated: November 02, 2012

20021

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

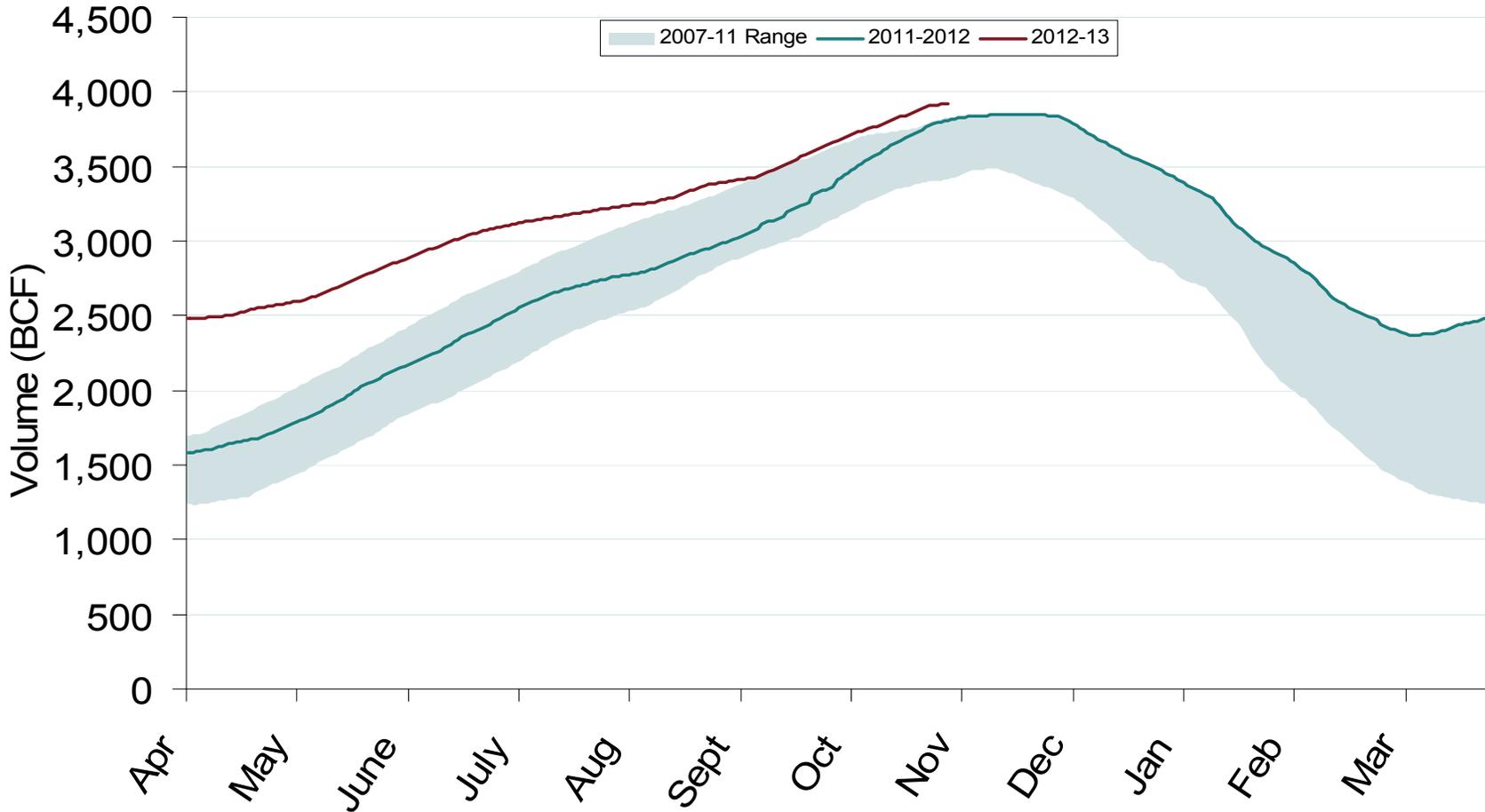


Natural Gas Storage Inventories – November 2, 2012

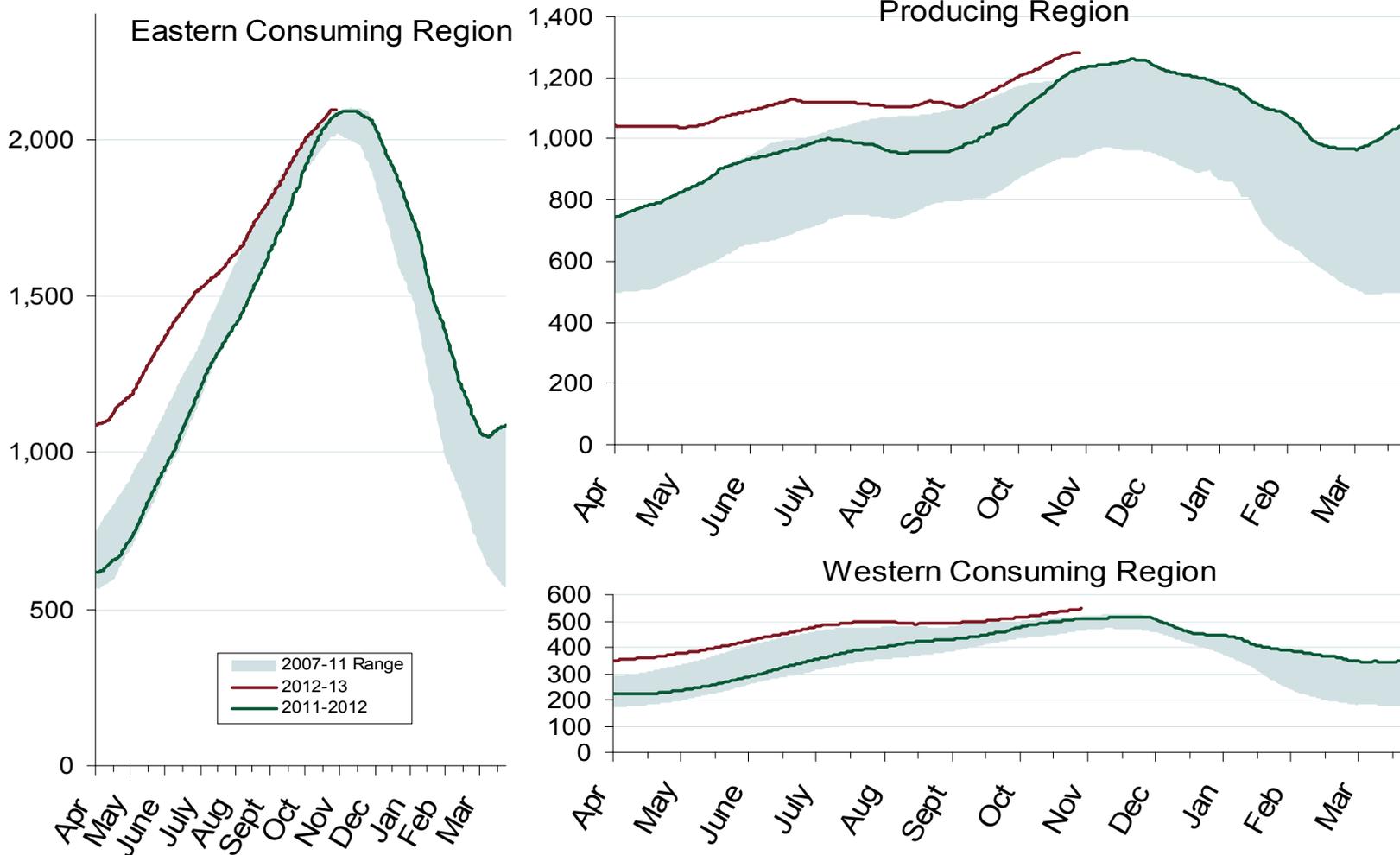


Source: Derived from *EIA Storage* and *Estimated Working Gas Capacity* data

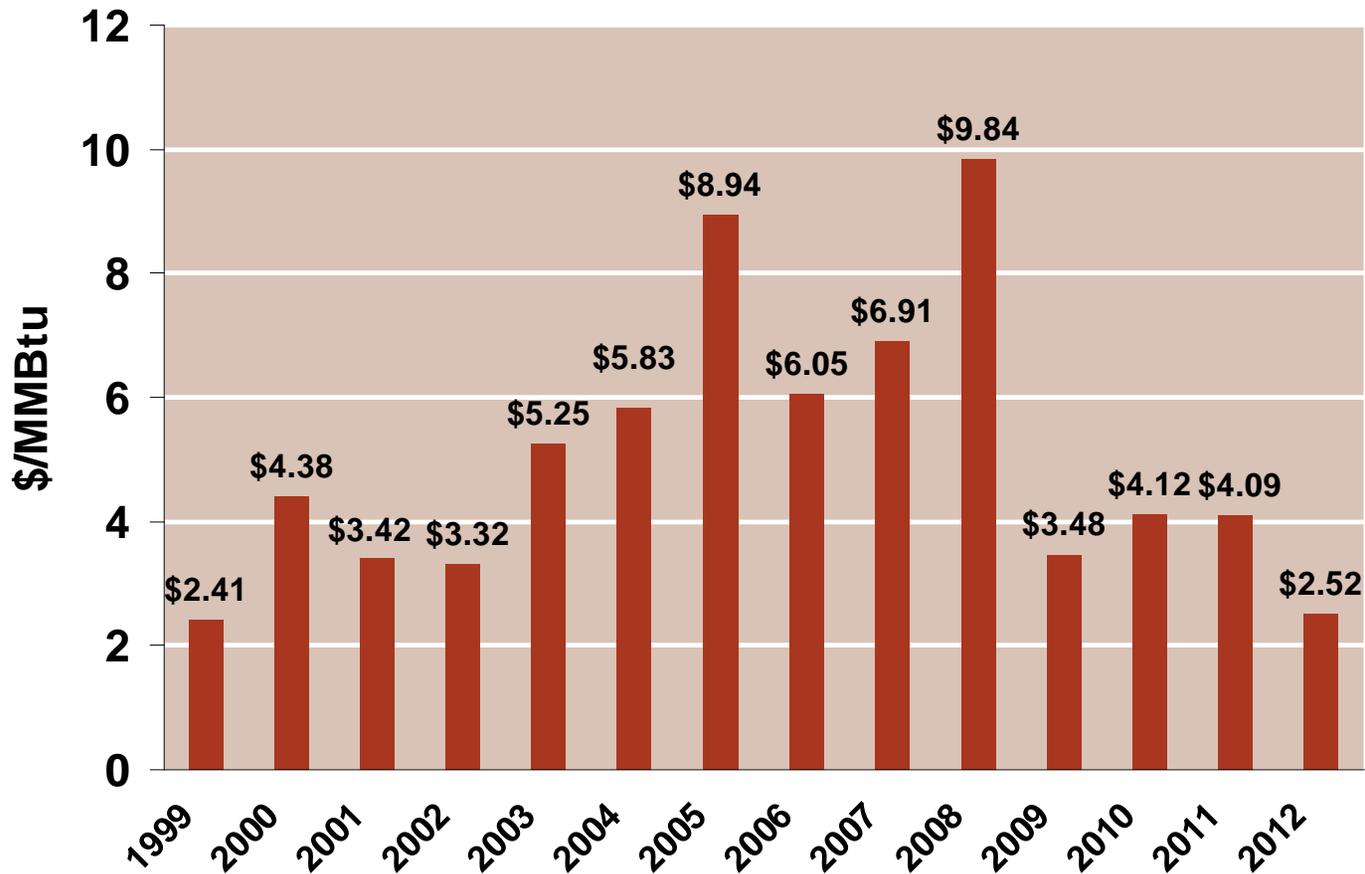
Total U.S. Working Gas in Storage



Regional Totals of Working Gas in Storage



Average Cost of Injecting Gas into Storage Nears a 13-year Low

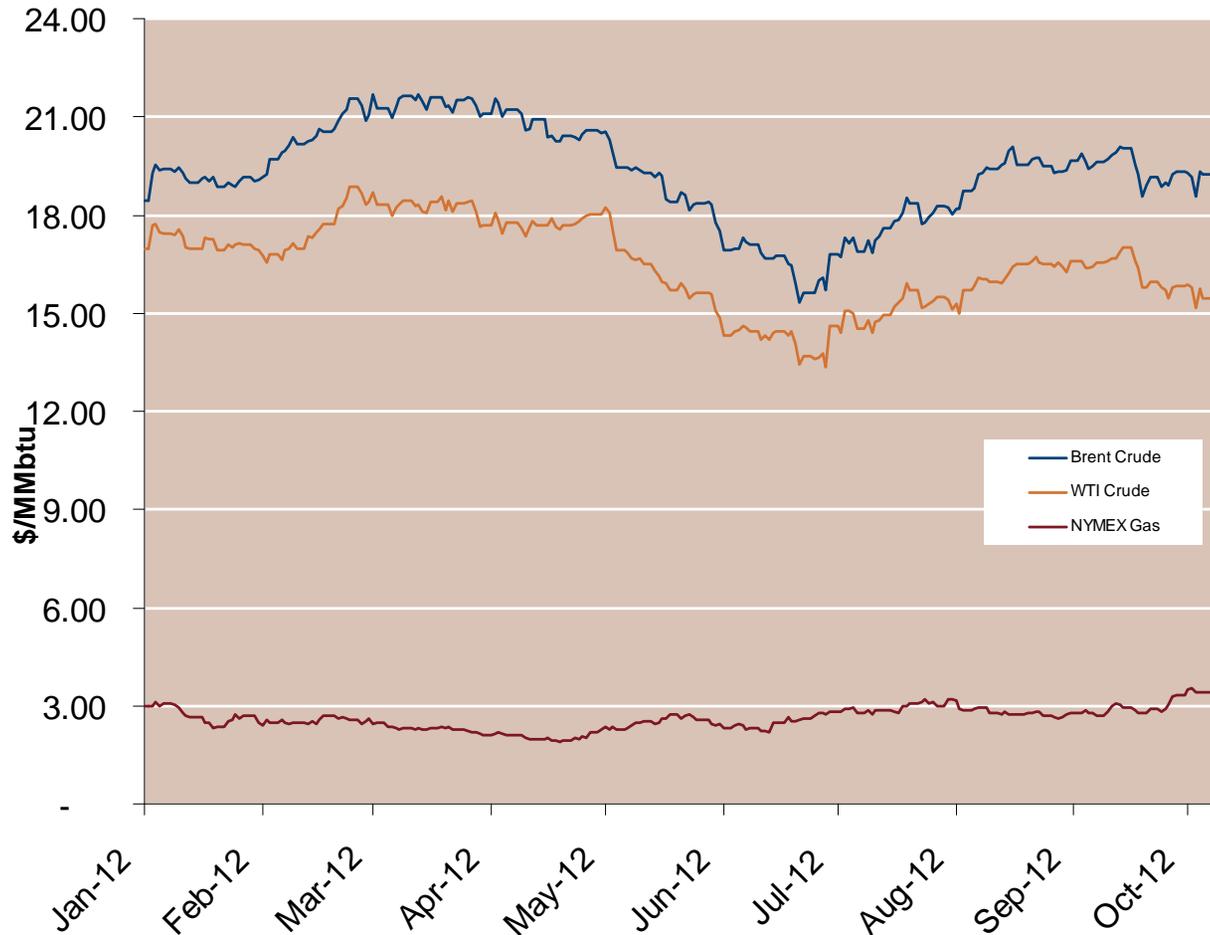


Source: Derived from Platts Gas Daily weekly weighted average prices, NGI's Daily Gas Price Index, and EIA Weekly Natural Gas Storage Report

November 2012 West Snapshot Report

Updated October 2012

Prices of Crude Oil and Natural Gas Incent Oil Producers to Increase Rail Shipments to East Coast Refineries While Gas Pipelines Eye Conversion



Source: Derived from Bloomberg data

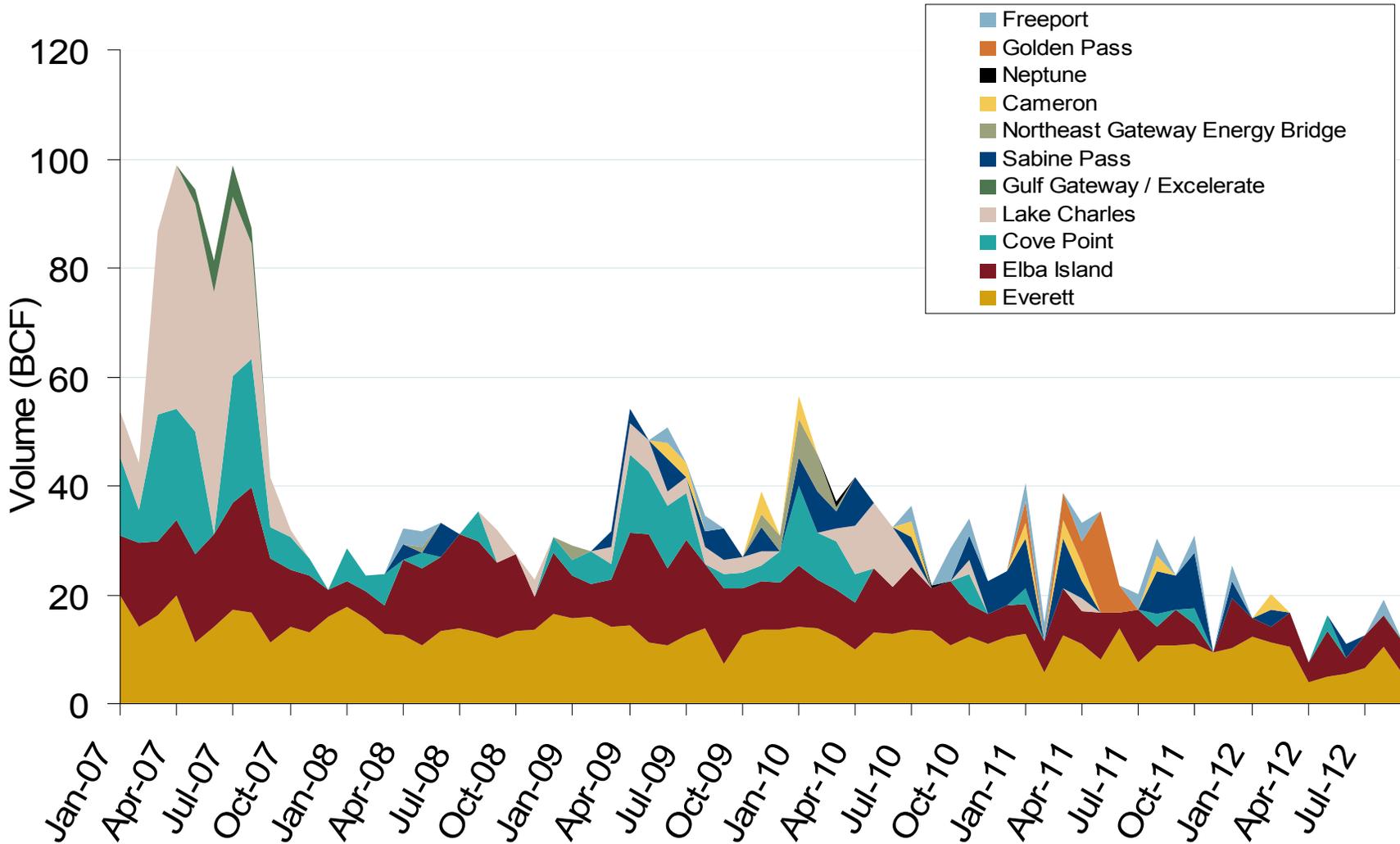
Updated October 2012

World LNG Estimated December 2012 Landed Prices



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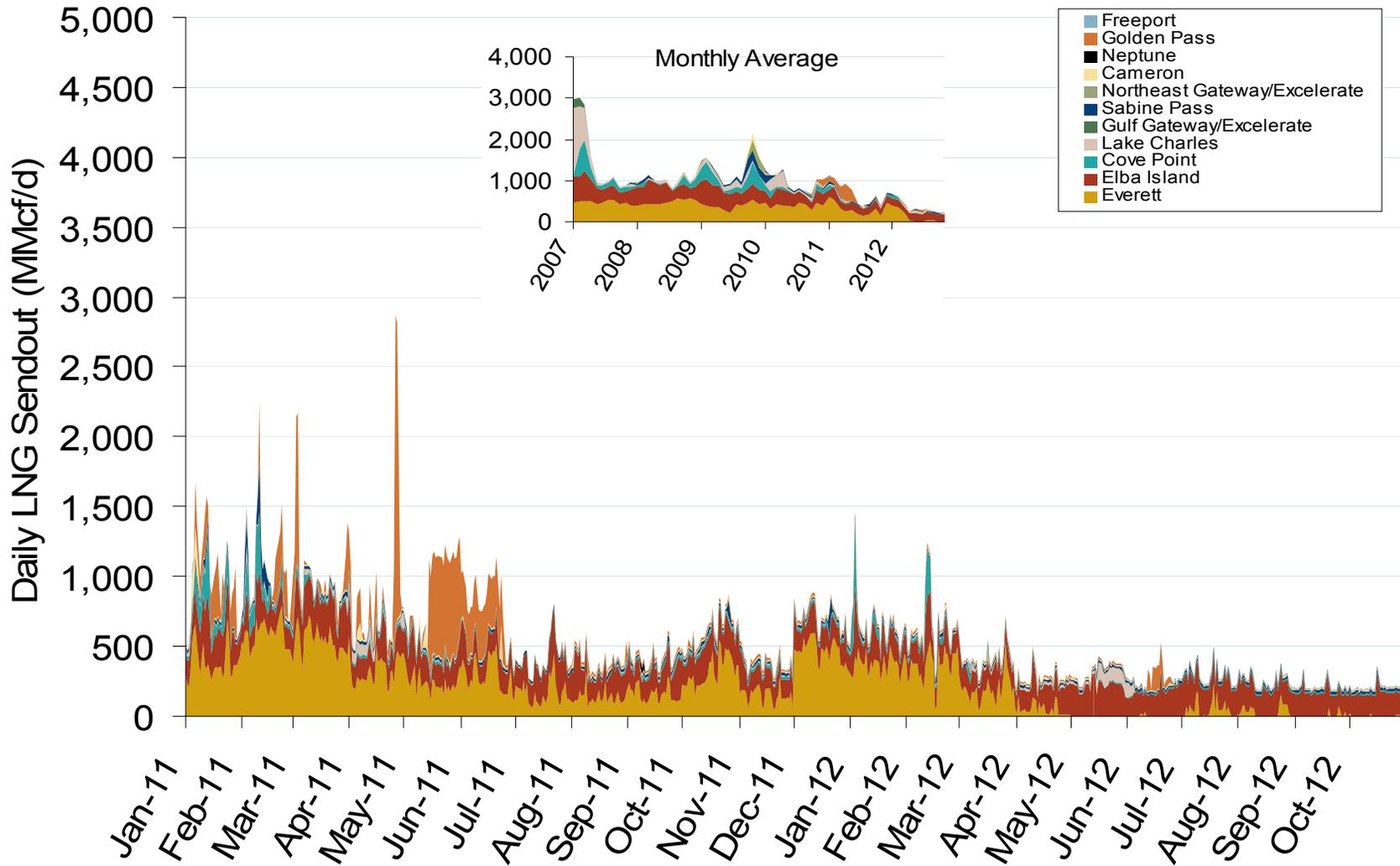
Monthly Gas Imports at Existing U.S. LNG Facilities



Source: Derived from DOE Office of Fossil Energy data
November 2012 West Snapshot Report

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Daily Gas Sendout from Existing U.S. LNG Facilities

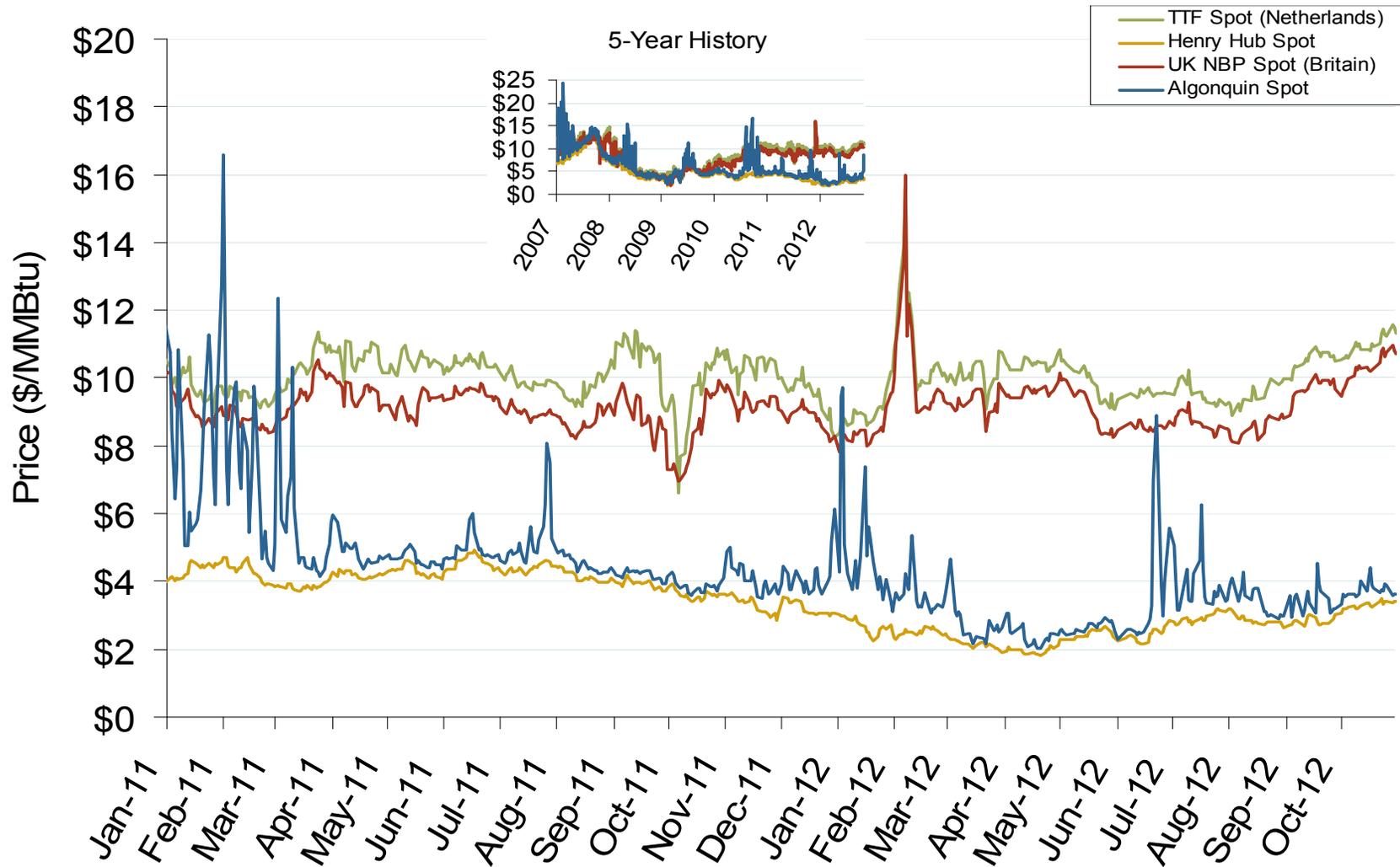


Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes flows to the Freeport LNG which flows via intrastate pipelines and flows to the Mystic 8 and 9 power plants.

Source: Derived from *Bentek Energy* data
November 2012 West Snapshot Report

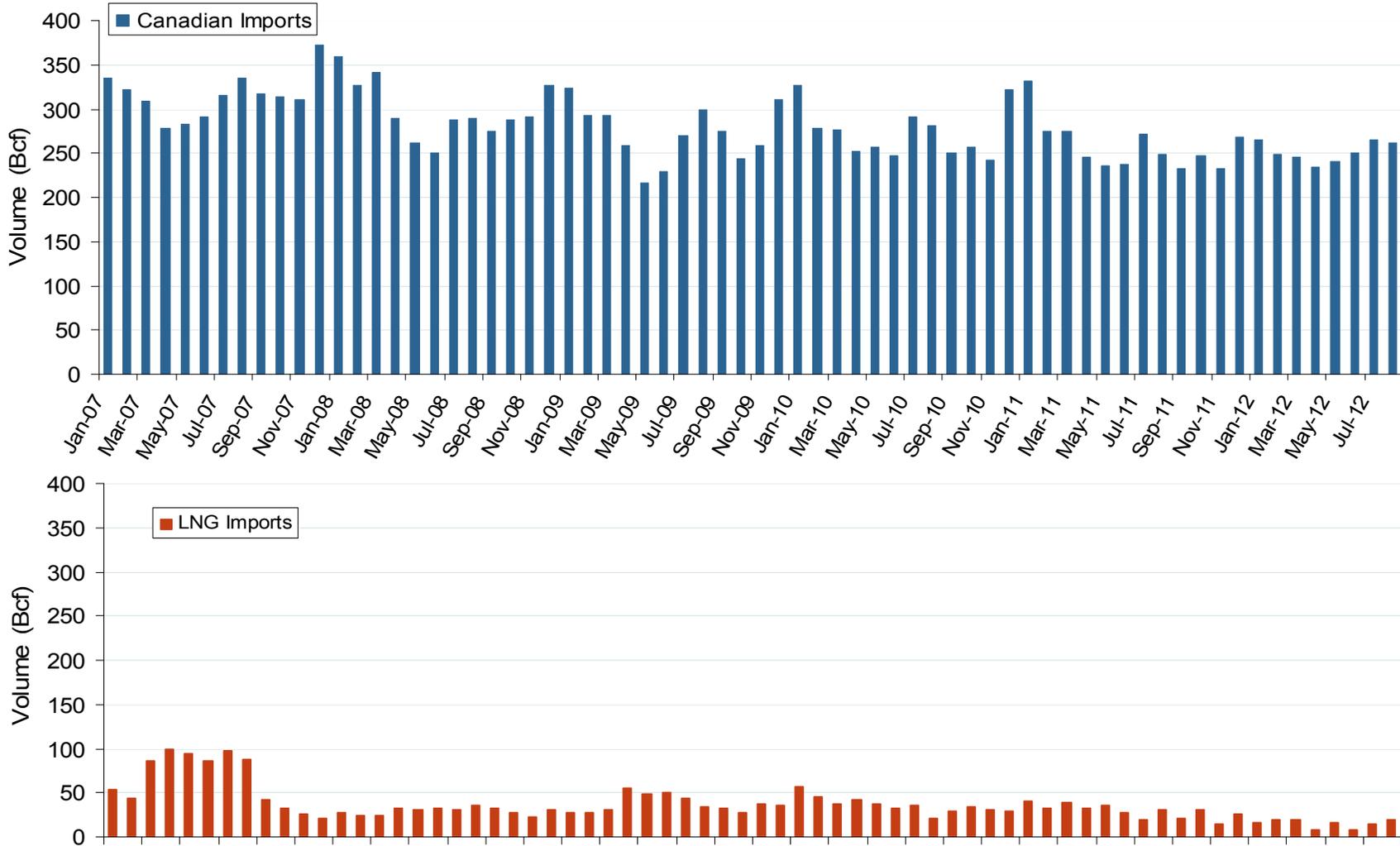
Updated: November 02, 2012

Atlantic Basin European and US Spot Natural Gas Prices

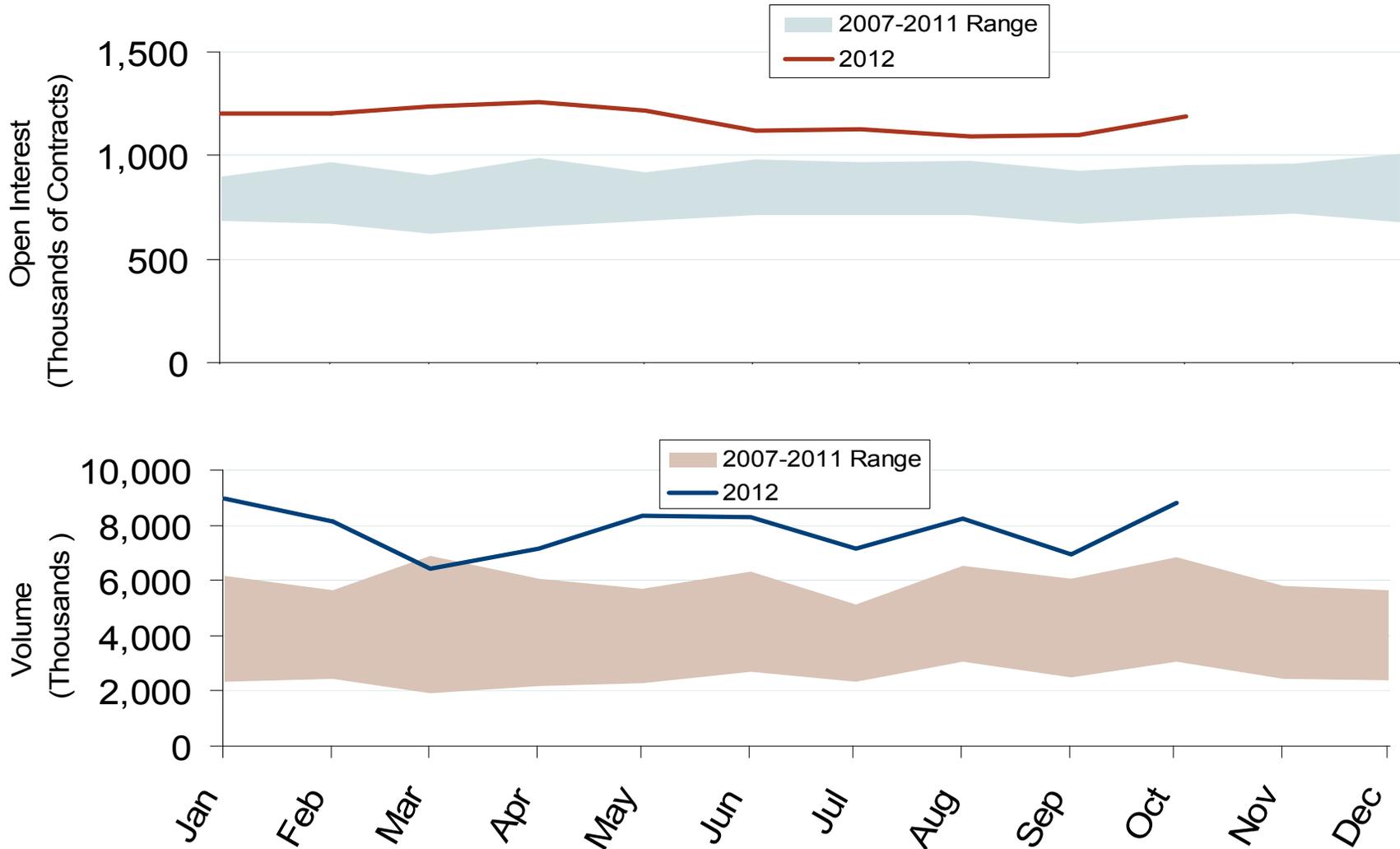


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Canadian and LNG Natural Gas Imports Into the U.S.

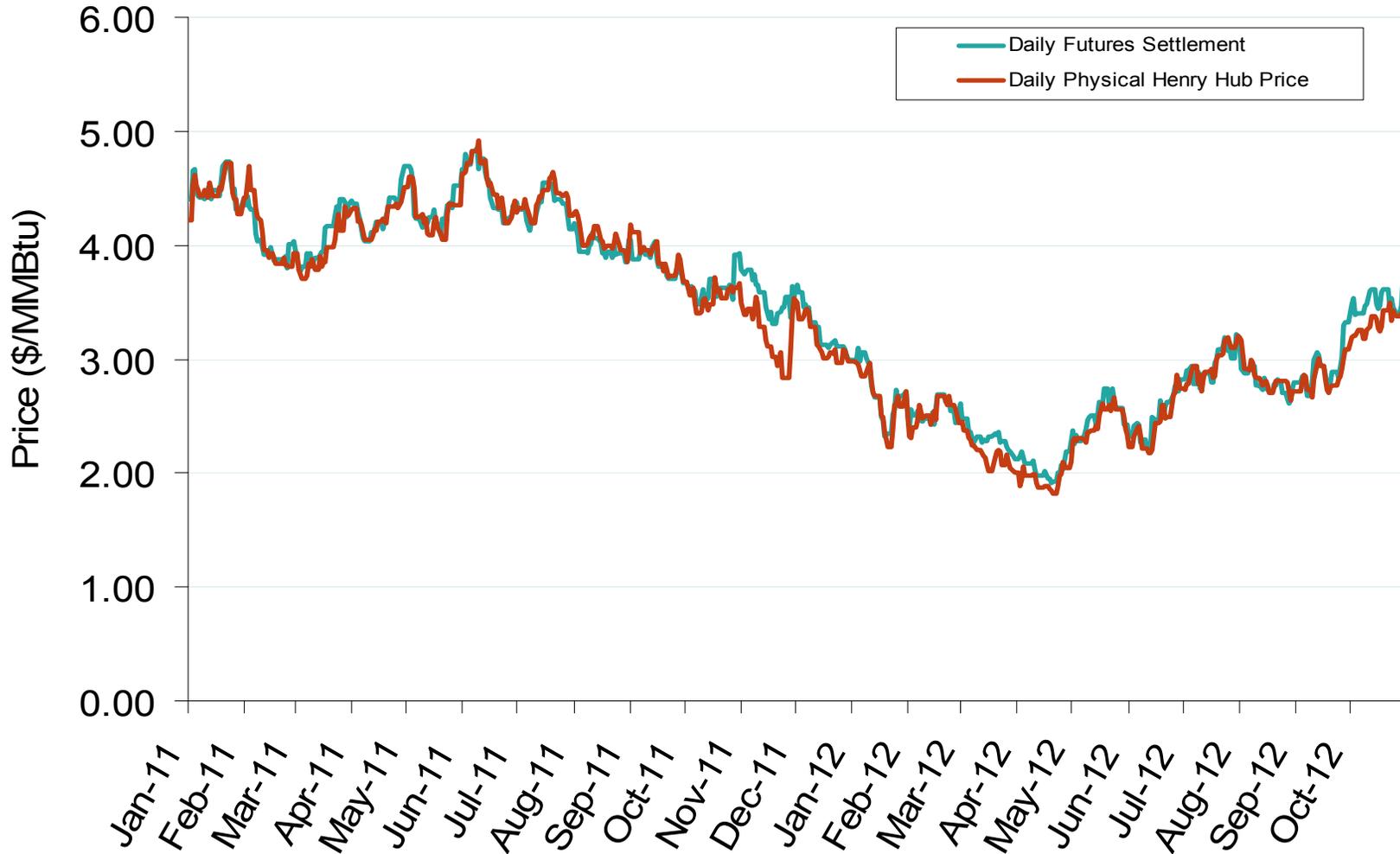


Nymex NG Futures Month-End Open Interest and Monthly Volume



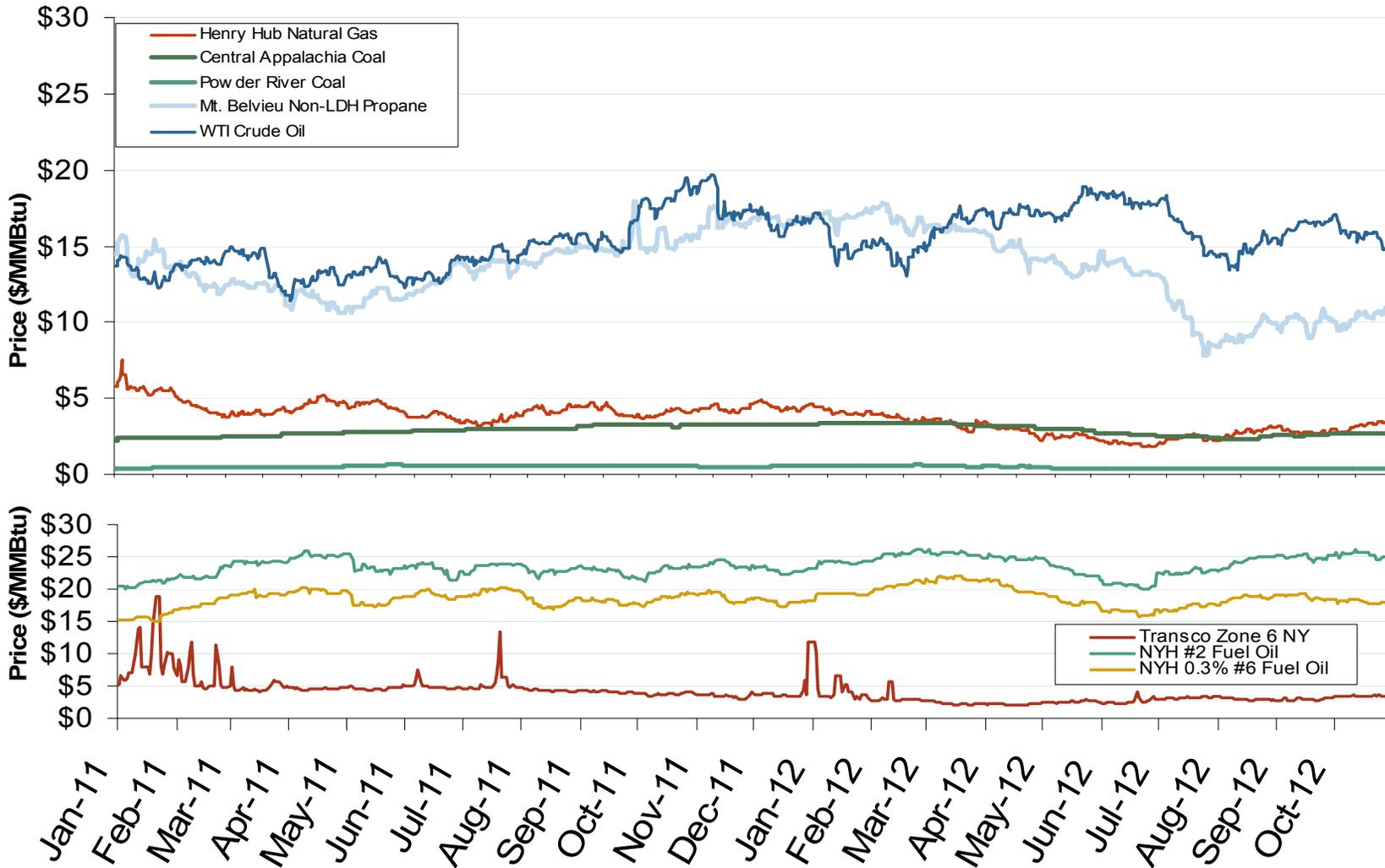
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Daily Physical Index Price & Daily Futures Settlement Price



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Oil, Coal, Natural Gas and Propane Daily Spot Prices



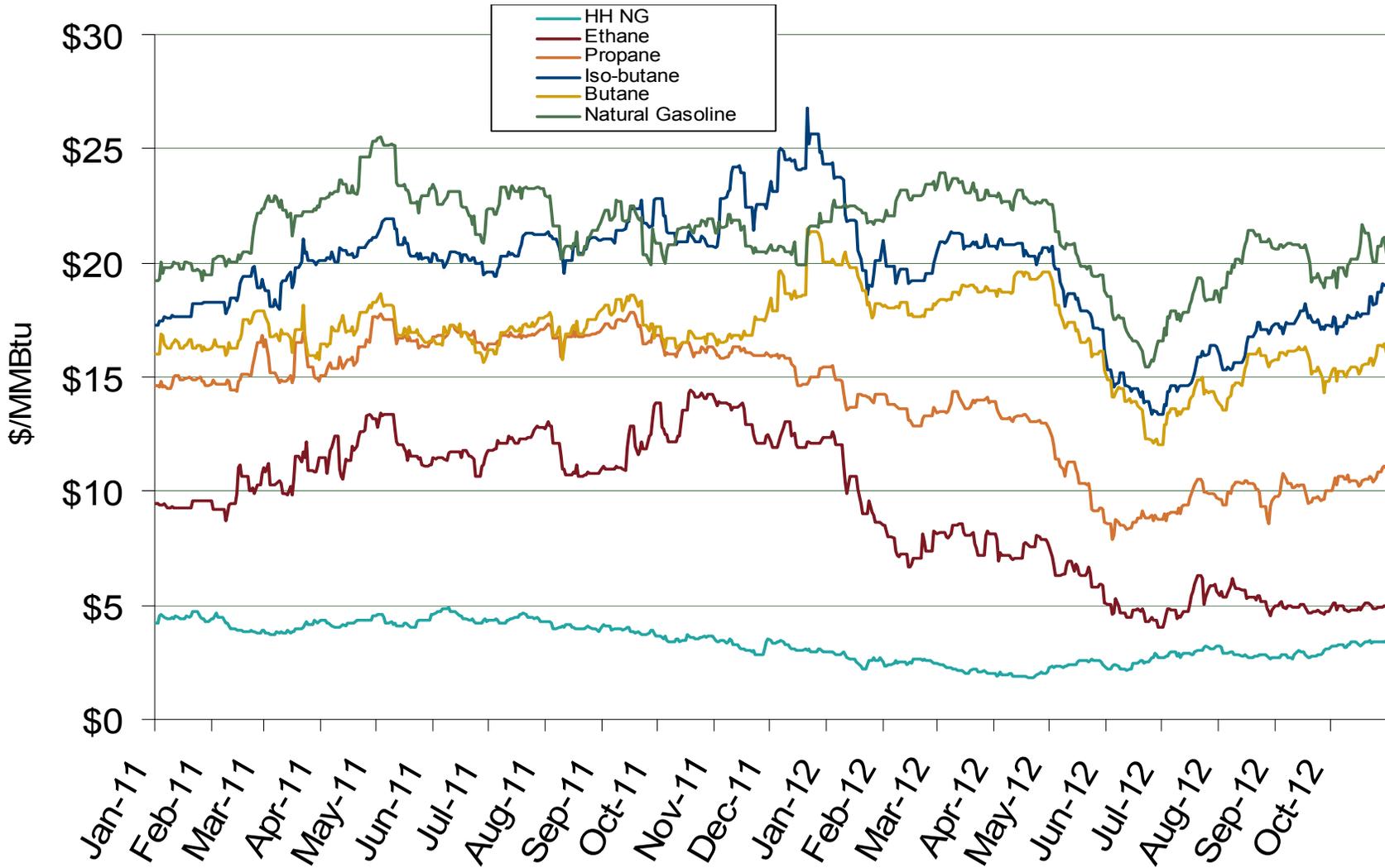
Notes: Coal prices are quoted in \$/ton. Conversion factors to \$/MMBtu are based on contract specifications of 12,000 btus/pound for Central Appalachian coal and 8800 btus/pound for Powder River Basin coal

Source: Derived from ICE and Bloomberg data

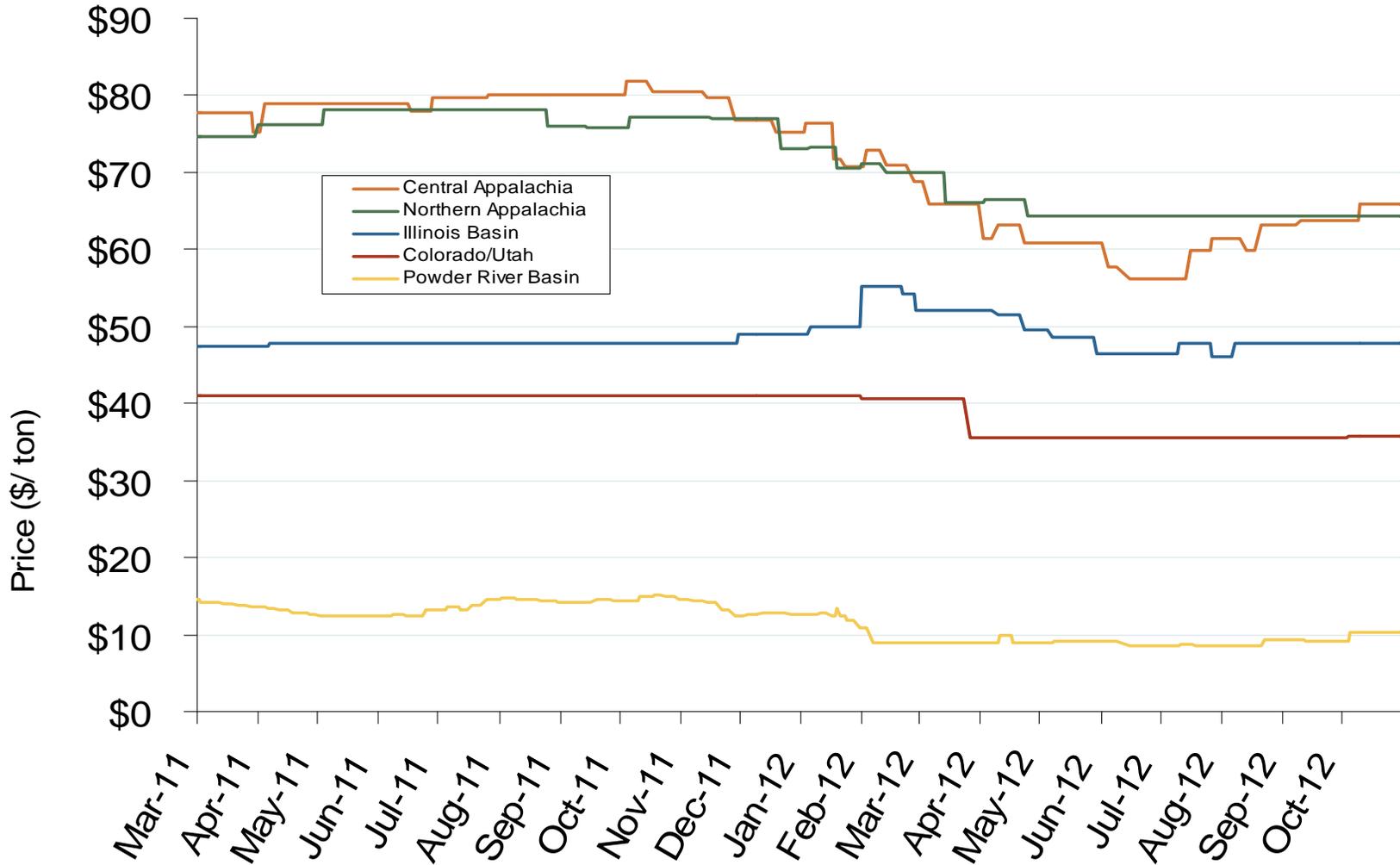
Updated: November 09, 2012

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



Central Appalachian and Powder River Basin Coal Prices



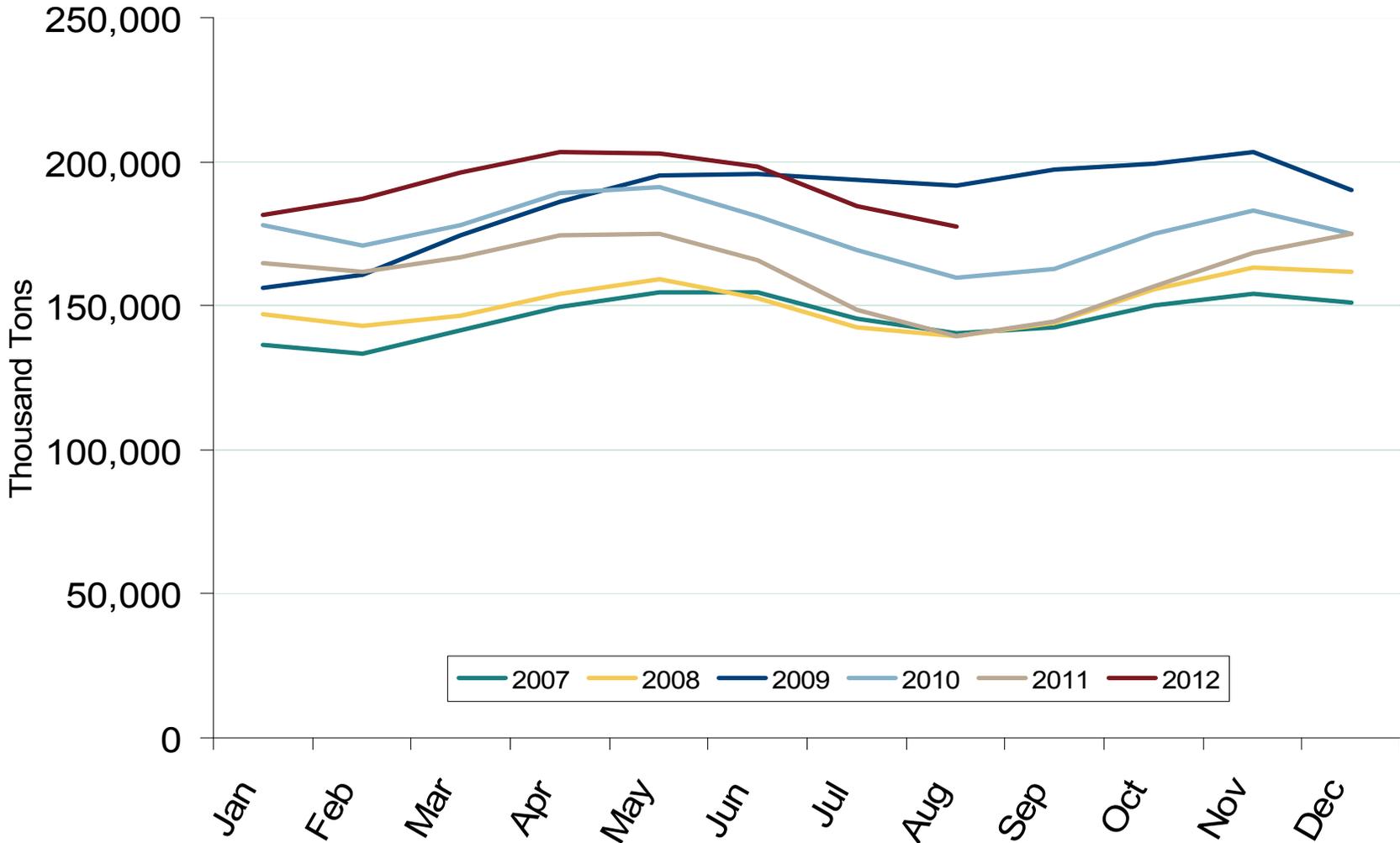
Notes: The Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances

Source: Derived from Bloomberg data

Updated: November 09, 2012

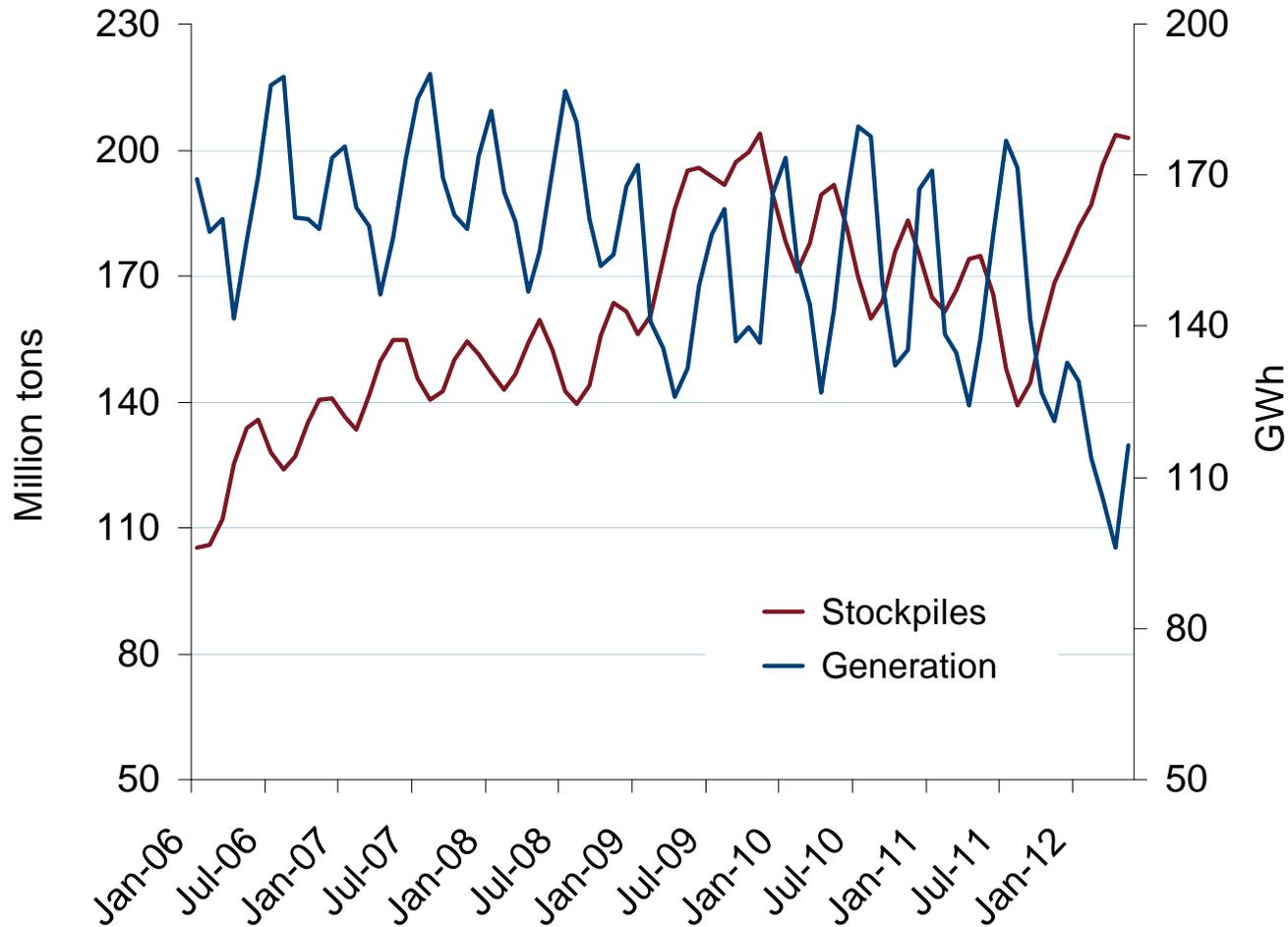
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U.S. Coal Stockpiles at Electric Power Generating Facilities



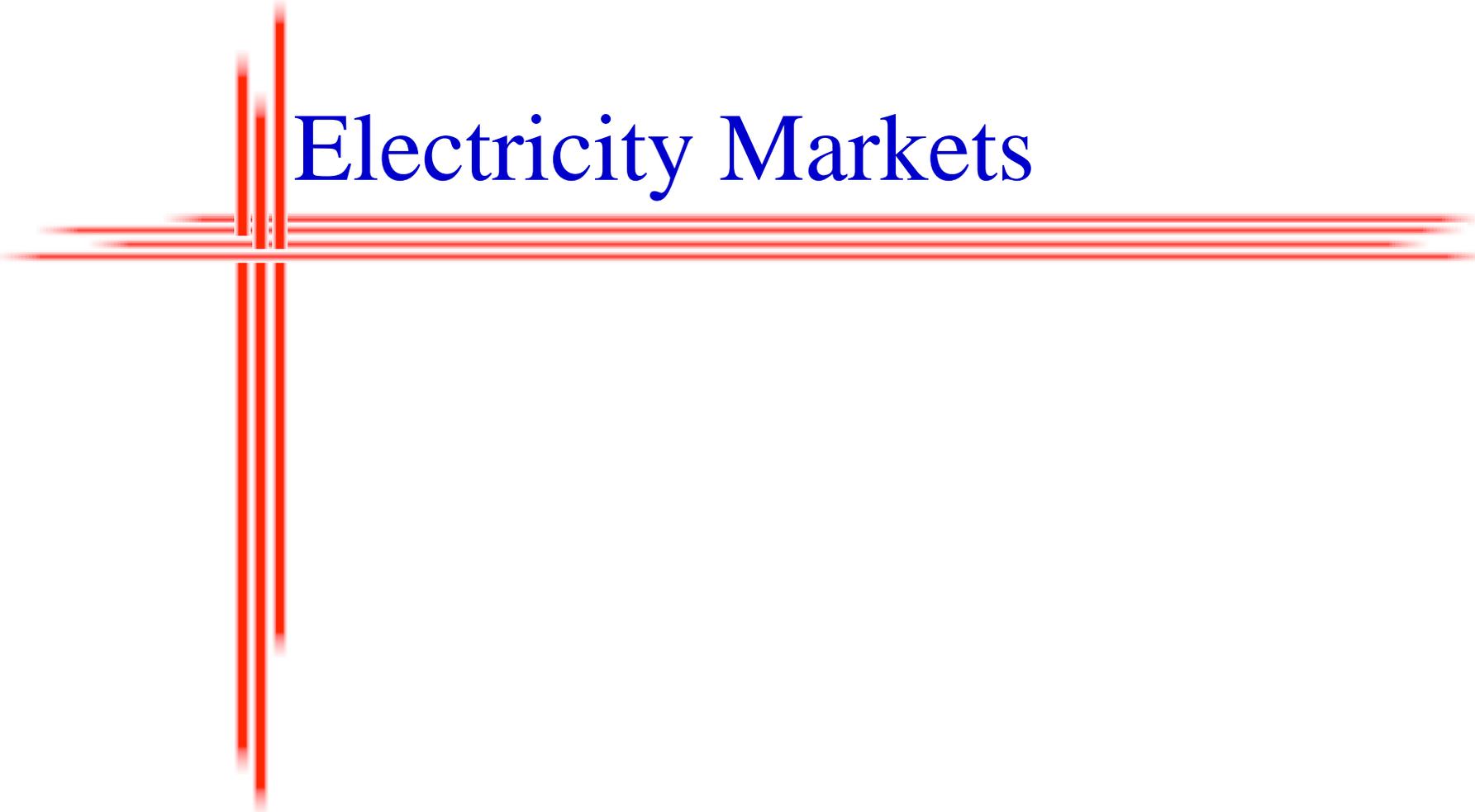
Source: Derived from EIA data. Excludes Industrial and Commercial Plants
November 2012 West Snapshot Report

U.S. Coal Stockpiles and Generation



Source: Derived from Energy Information Administration data

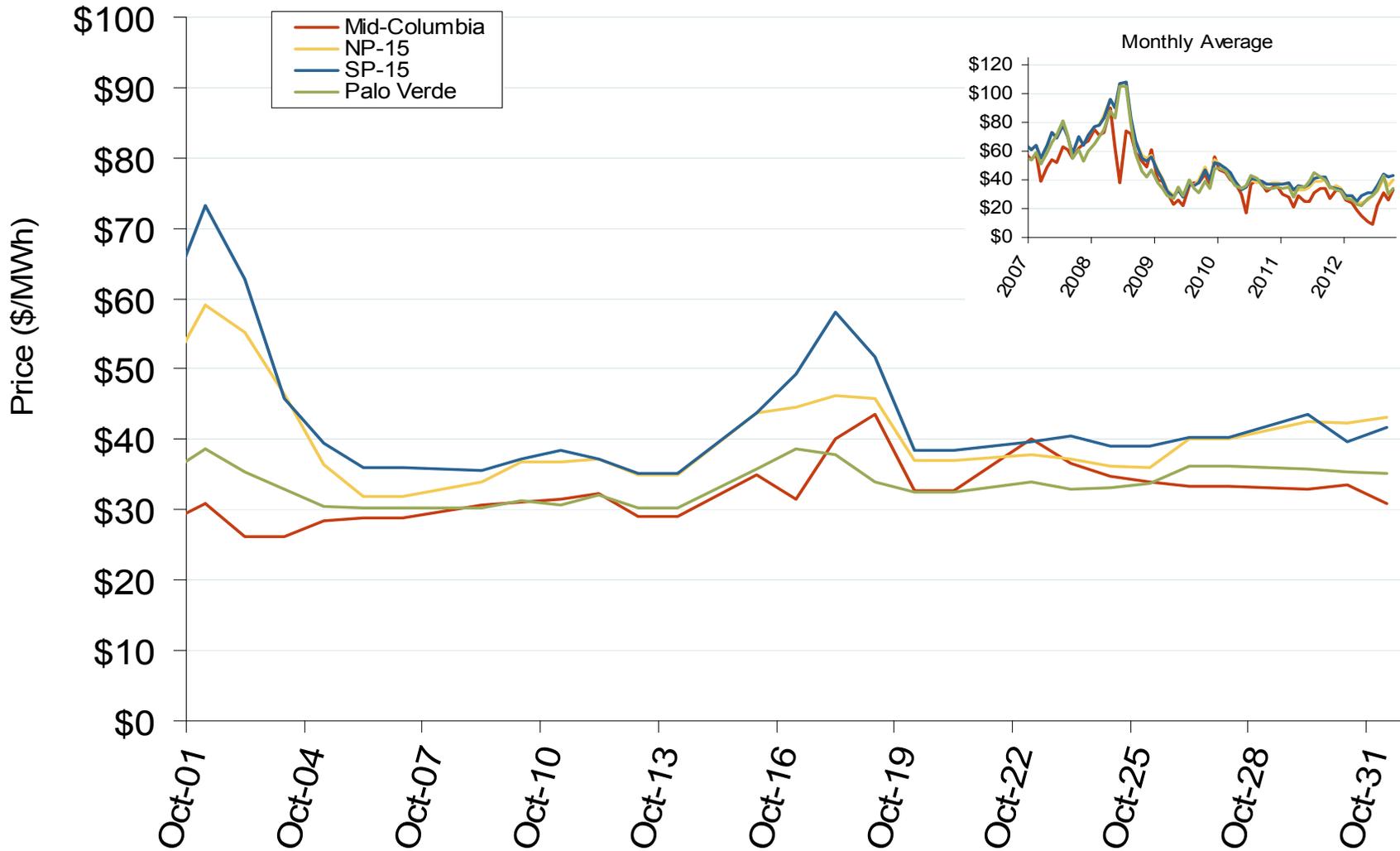
Updated October 2012



Electricity Markets

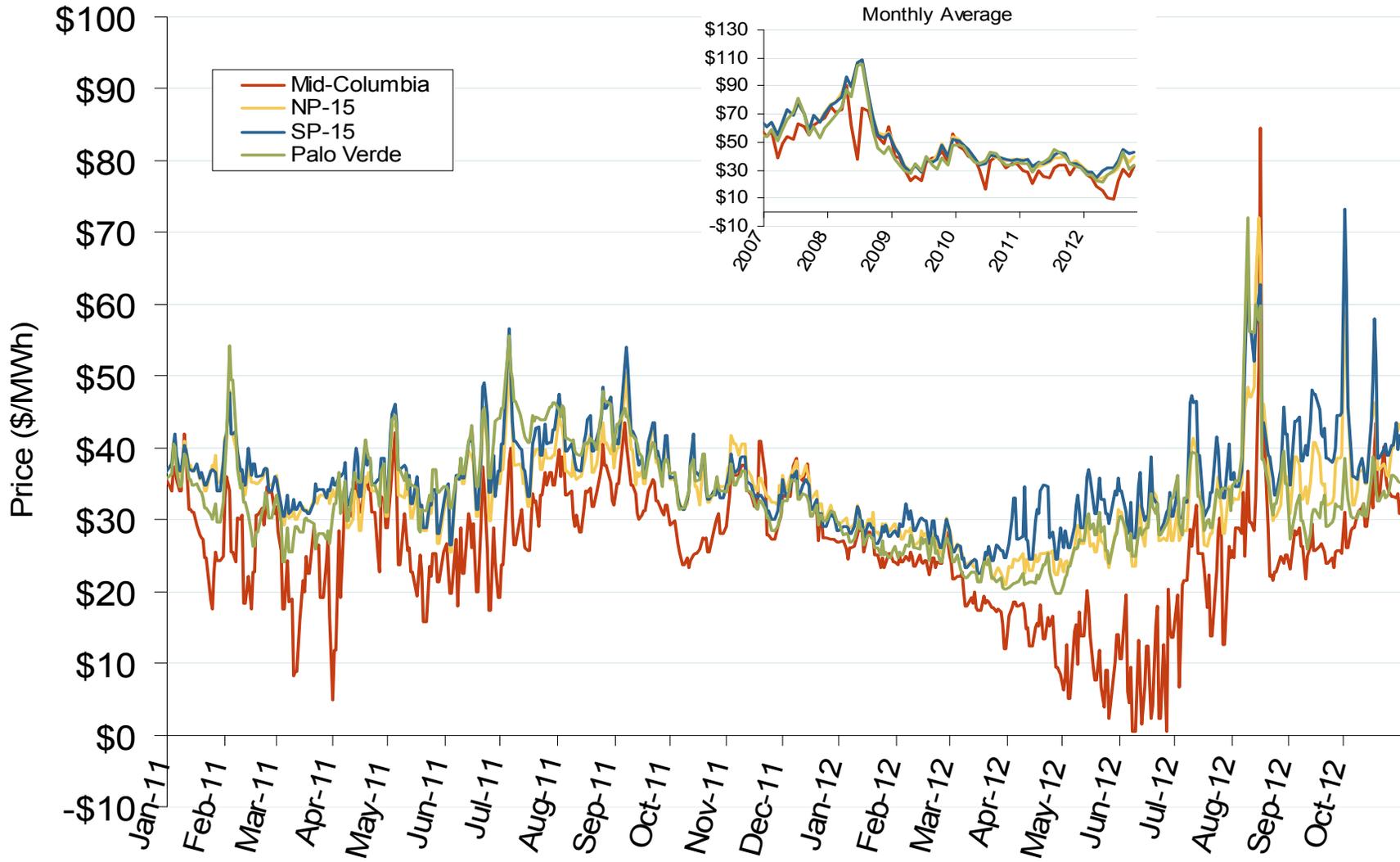
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Western Daily Index Day-Ahead On-Peak Prices



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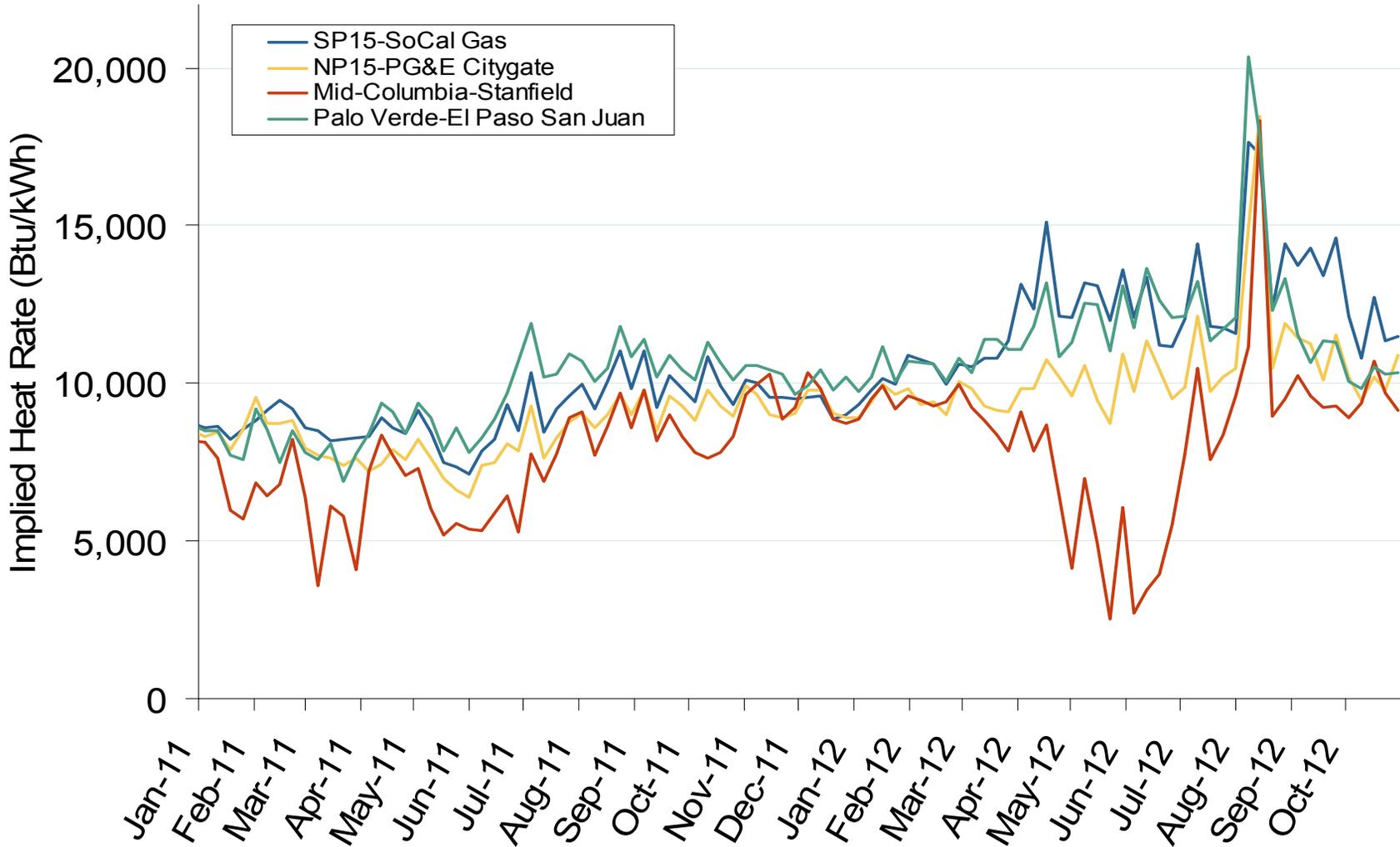
Western Daily Index Day-Ahead On-Peak Prices



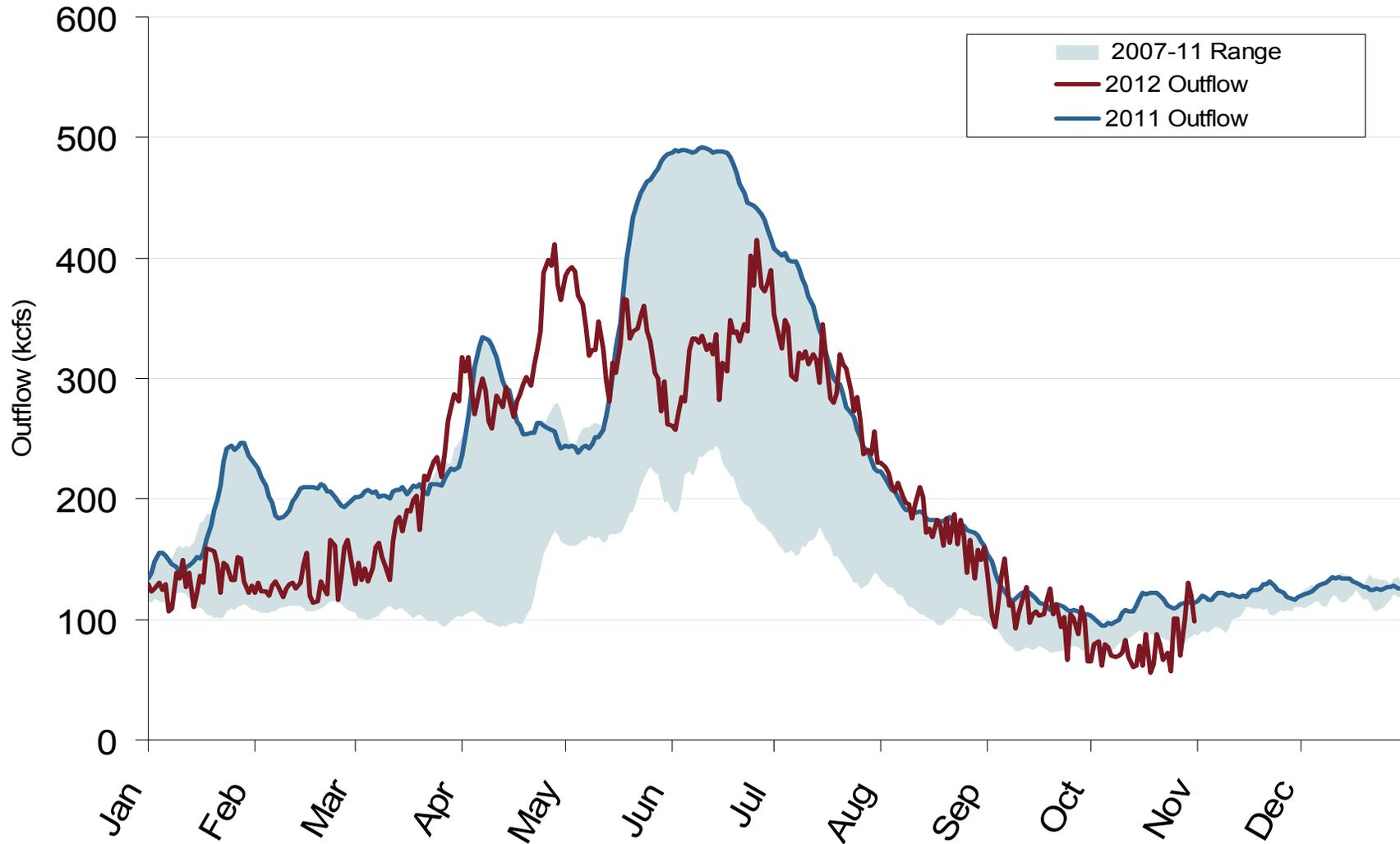
Source: Derived from *Platts* data

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Implied Heat Rates at Western Trading Points - Weekly Avgs.



Stream Flows at the Dalles Dam



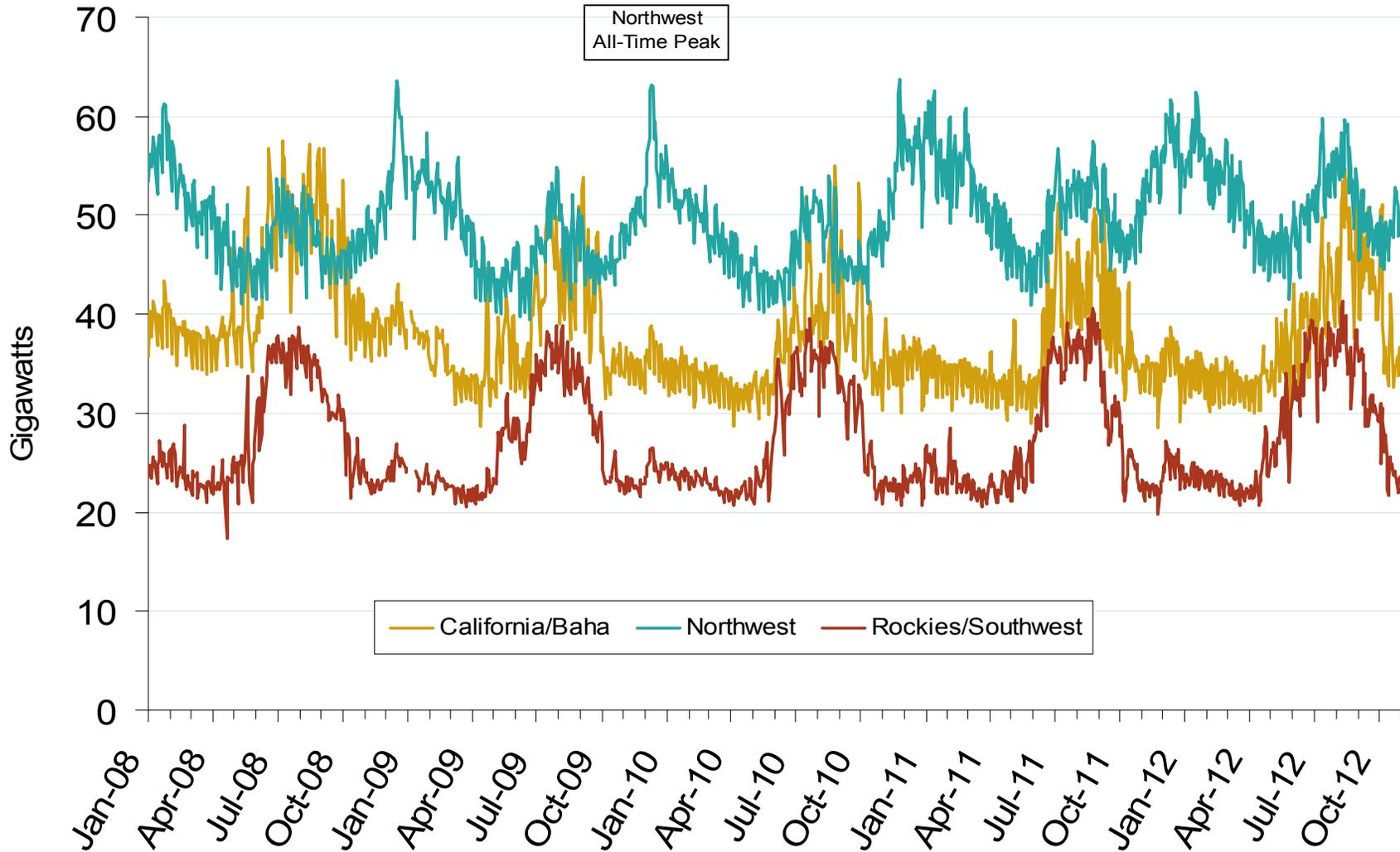
Notes: Trend lines are 7-day moving averages

Source: Derived from USACE data

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Updated: November 06, 2012

Western Daily Actual Peak Demand

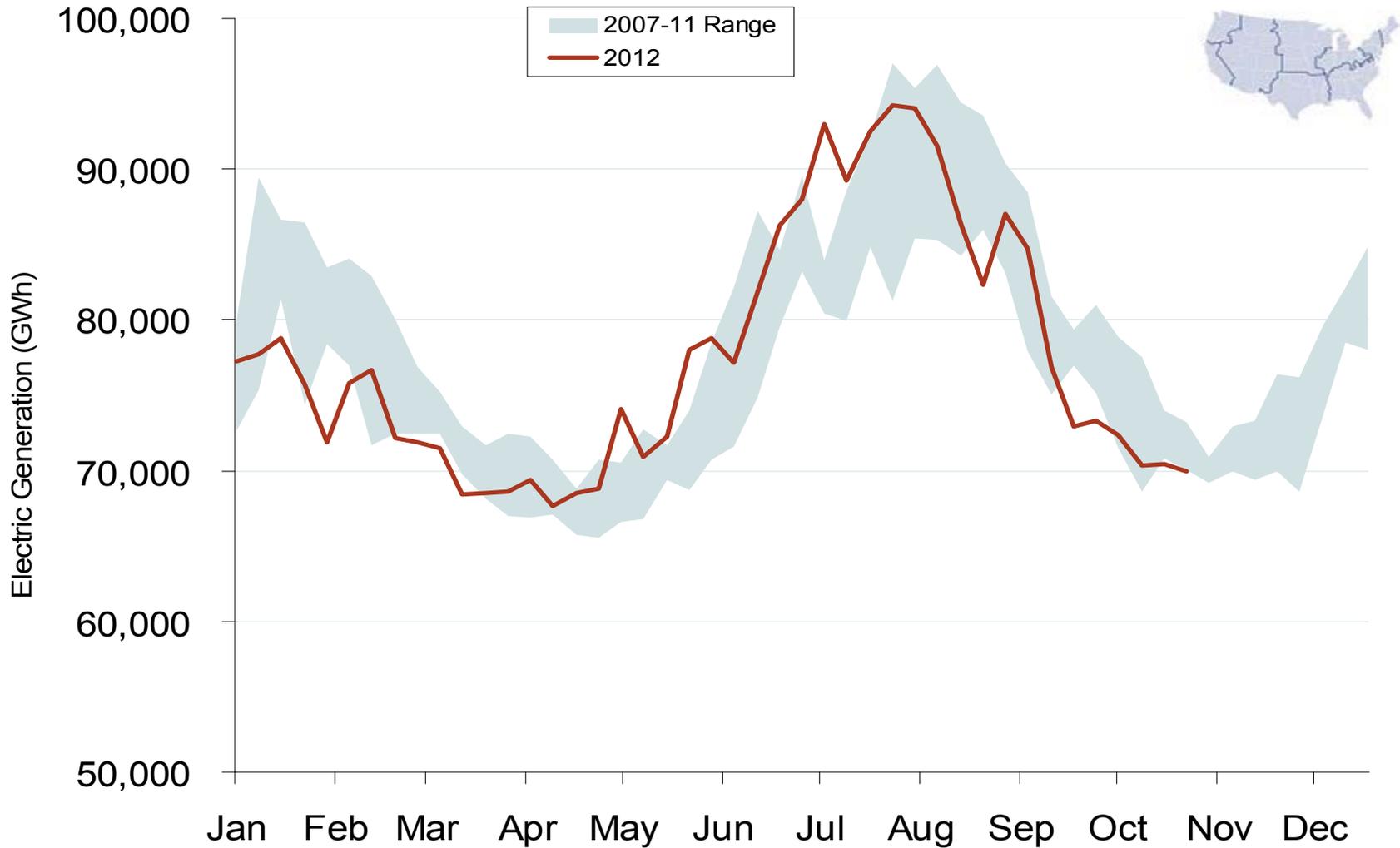


Notes: Data prior to 9/14/2010 does not include weekends and holidays. Some data for 12/31/2008 – 1/9/2009 are not available from WECC

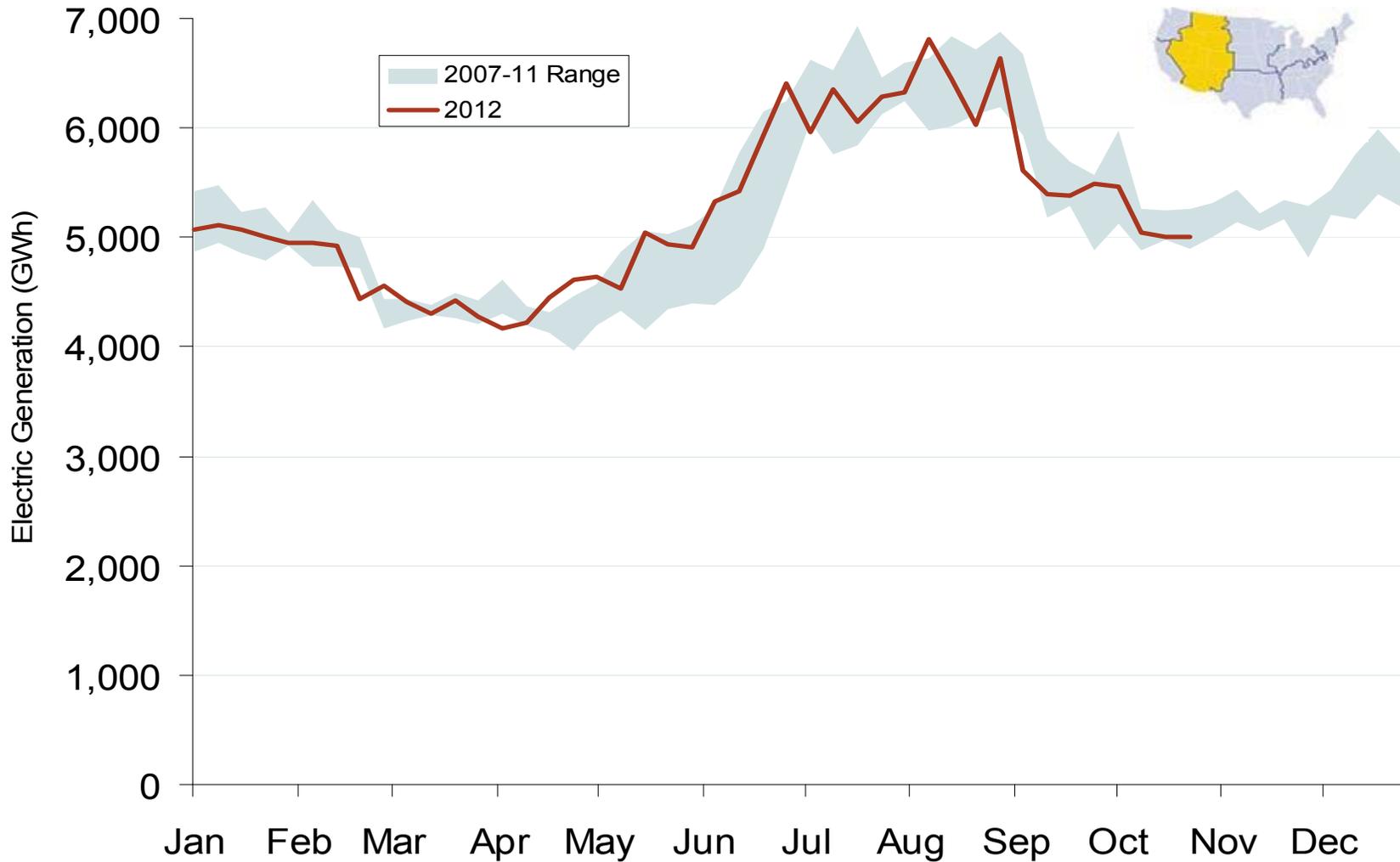
Source: Derived from WECC Daily Report data available at <http://wecc.biz>

Updated: November 07, 2012

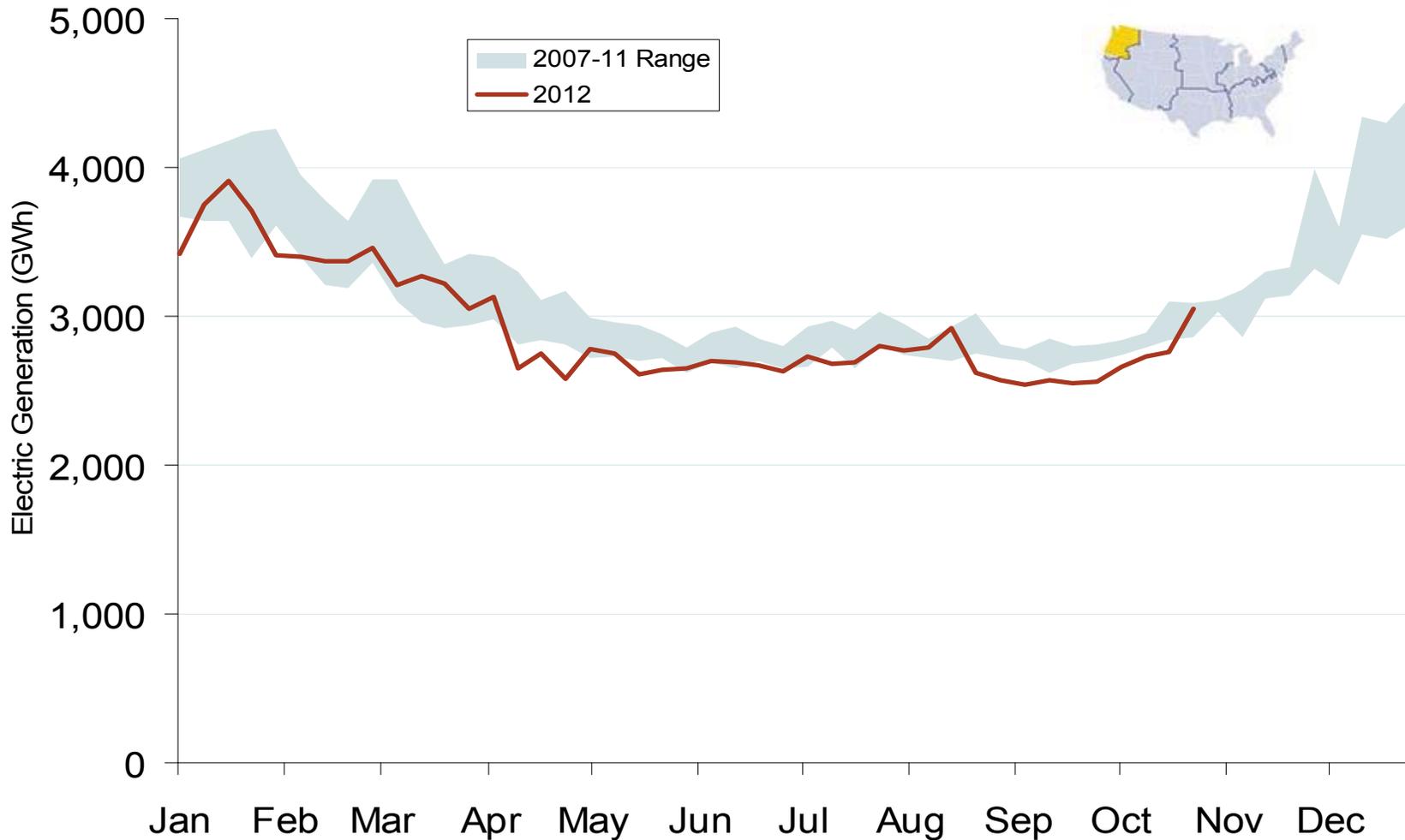
Weekly U.S. Electric Generation Output



Weekly Generation Output - Rocky Mountains



Weekly Generation Output - Pacific Northwest



Weekly Generation Output - California

