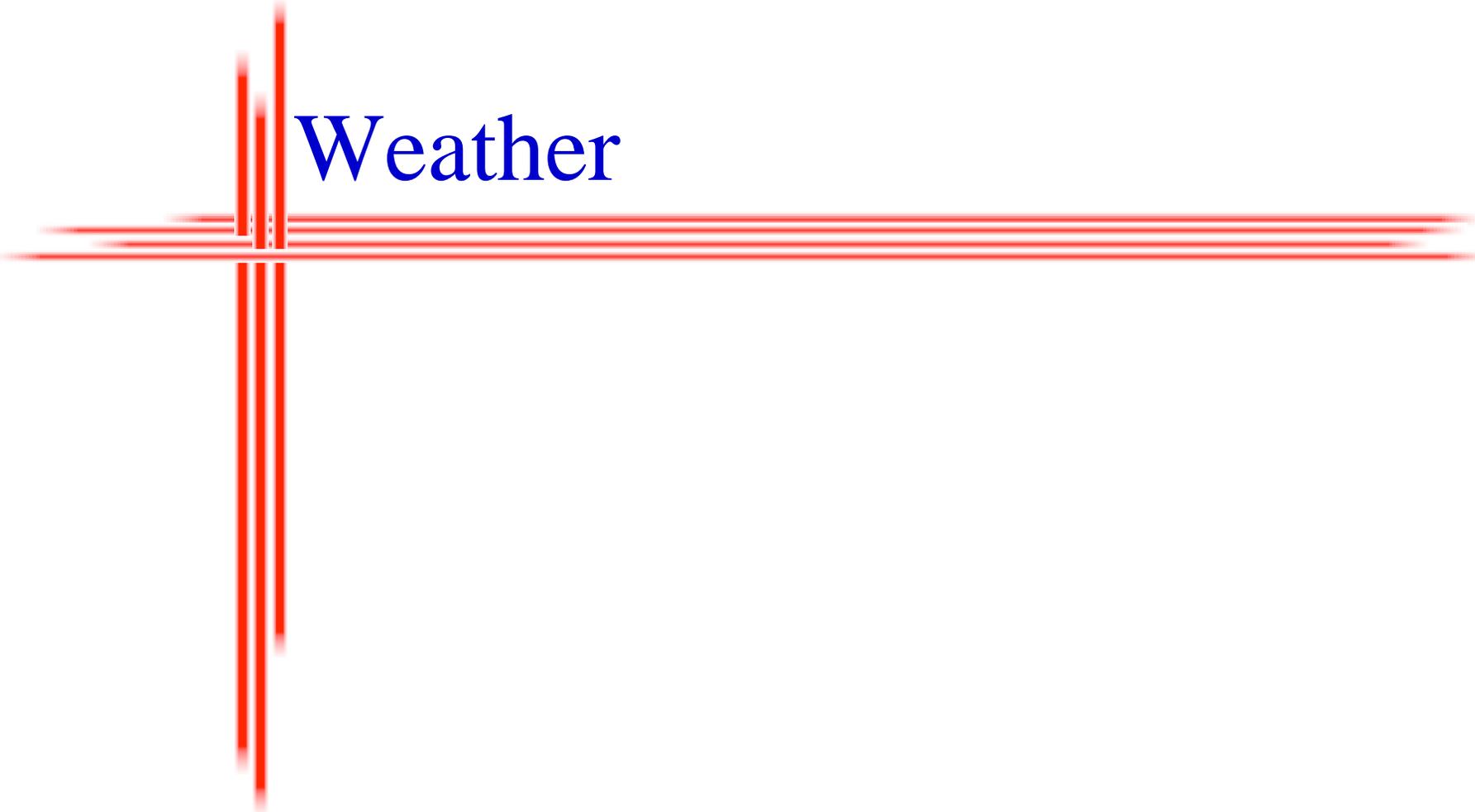


# **OE ENERGY MARKET SNAPSHOT**

## **Western States Version – May 2012 Data**

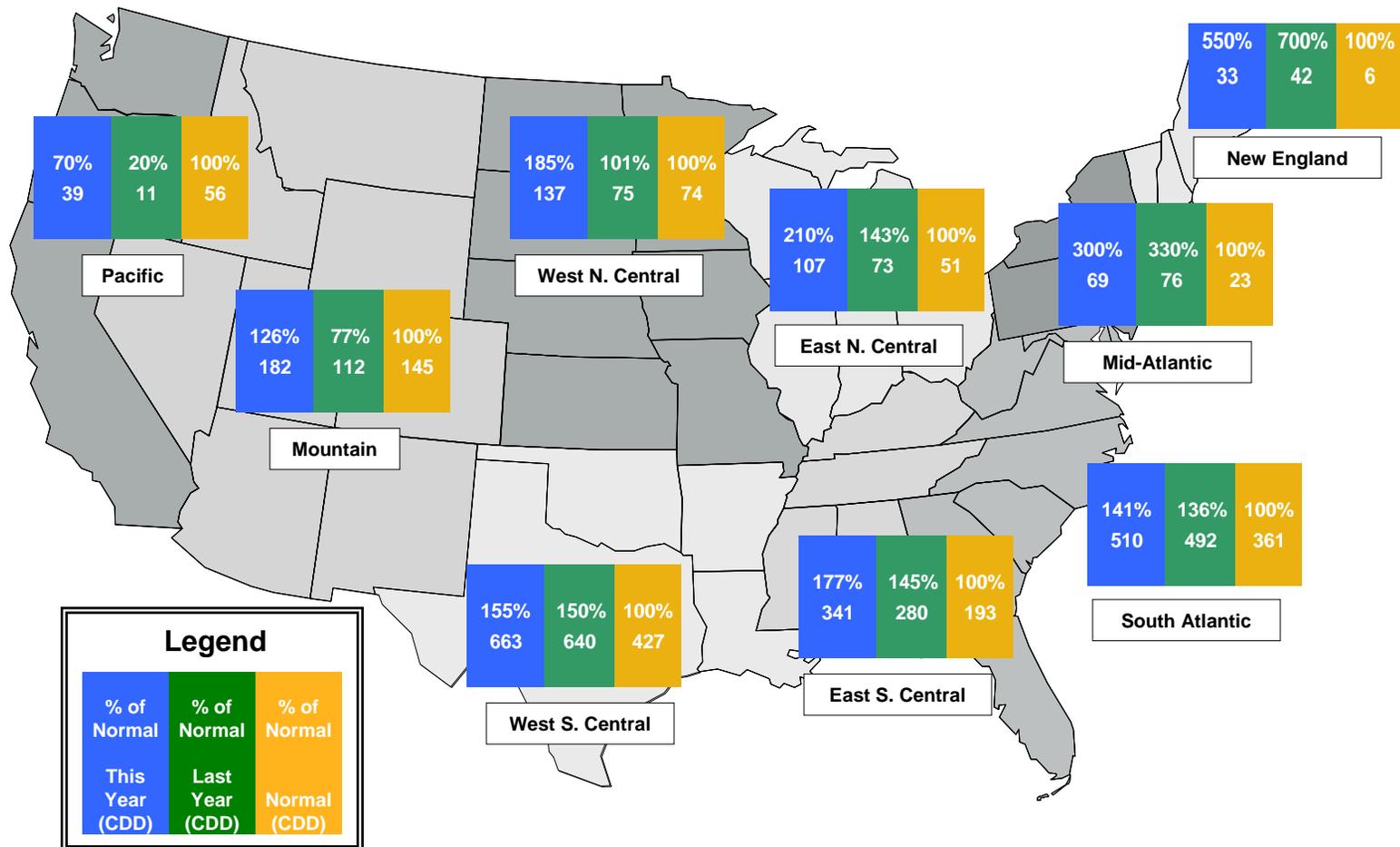
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Office of Enforcement  
Federal Energy Regulatory Commission  
June 2012



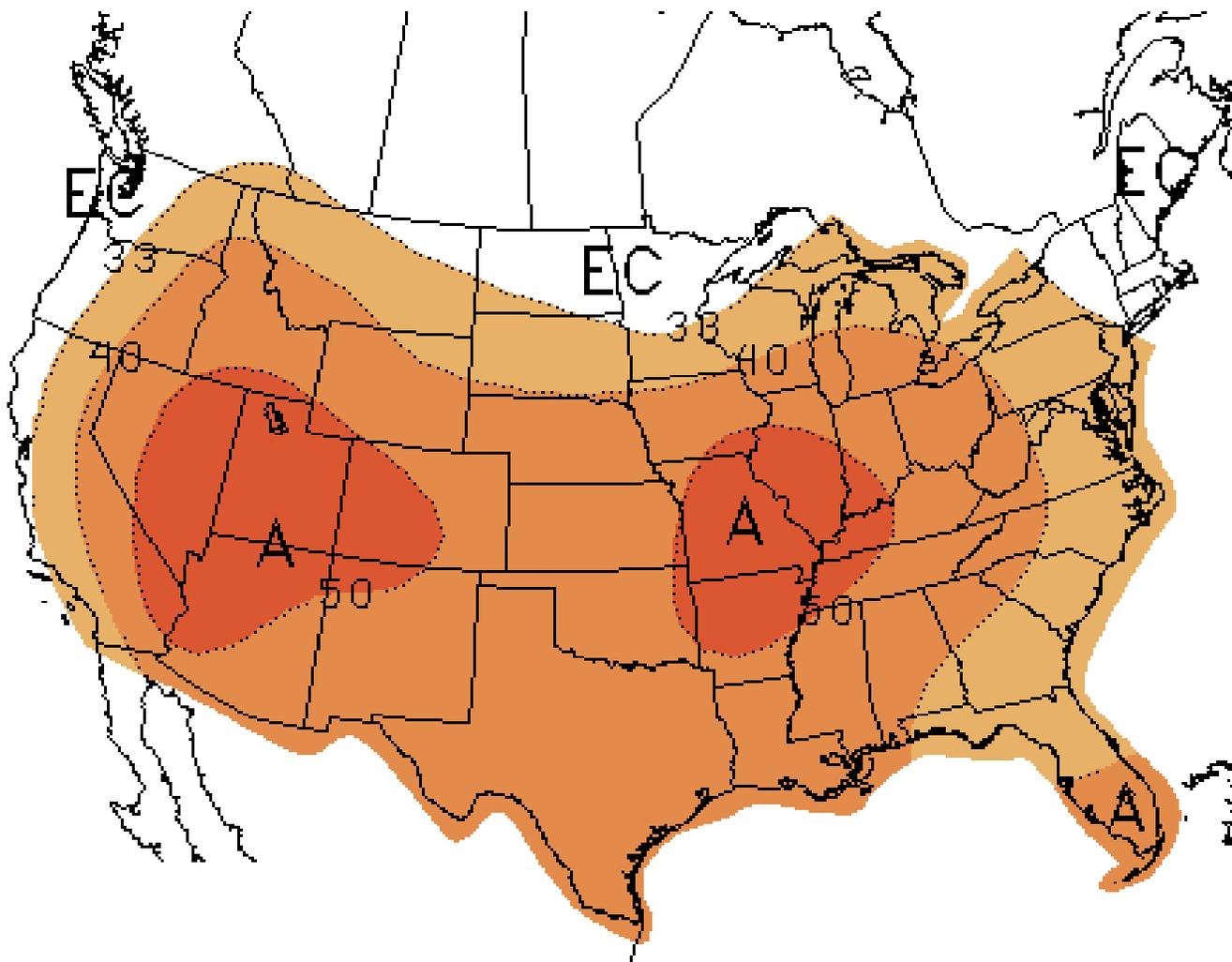
# Weather

## Regional Cooling Degree Days – January to May 2012



Source: Derived from NOAA data. Normal is based on a 30-year average of cooling degree day data.  
June 2012 Western Snapshot Report

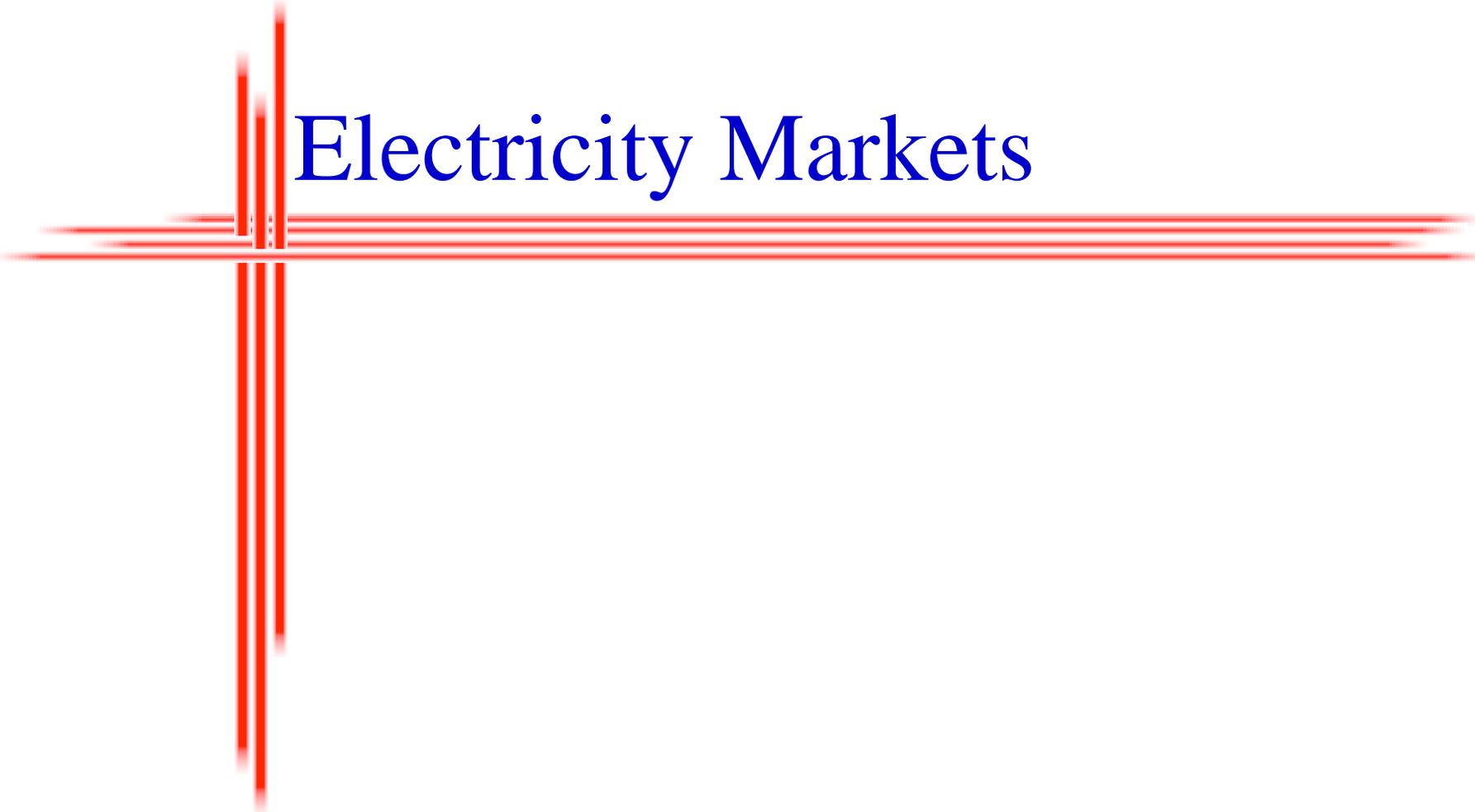
## NOAA's 3 Month Temperature Forecast Made June 19, 2012, Valid for July 2012 – August 2012



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.

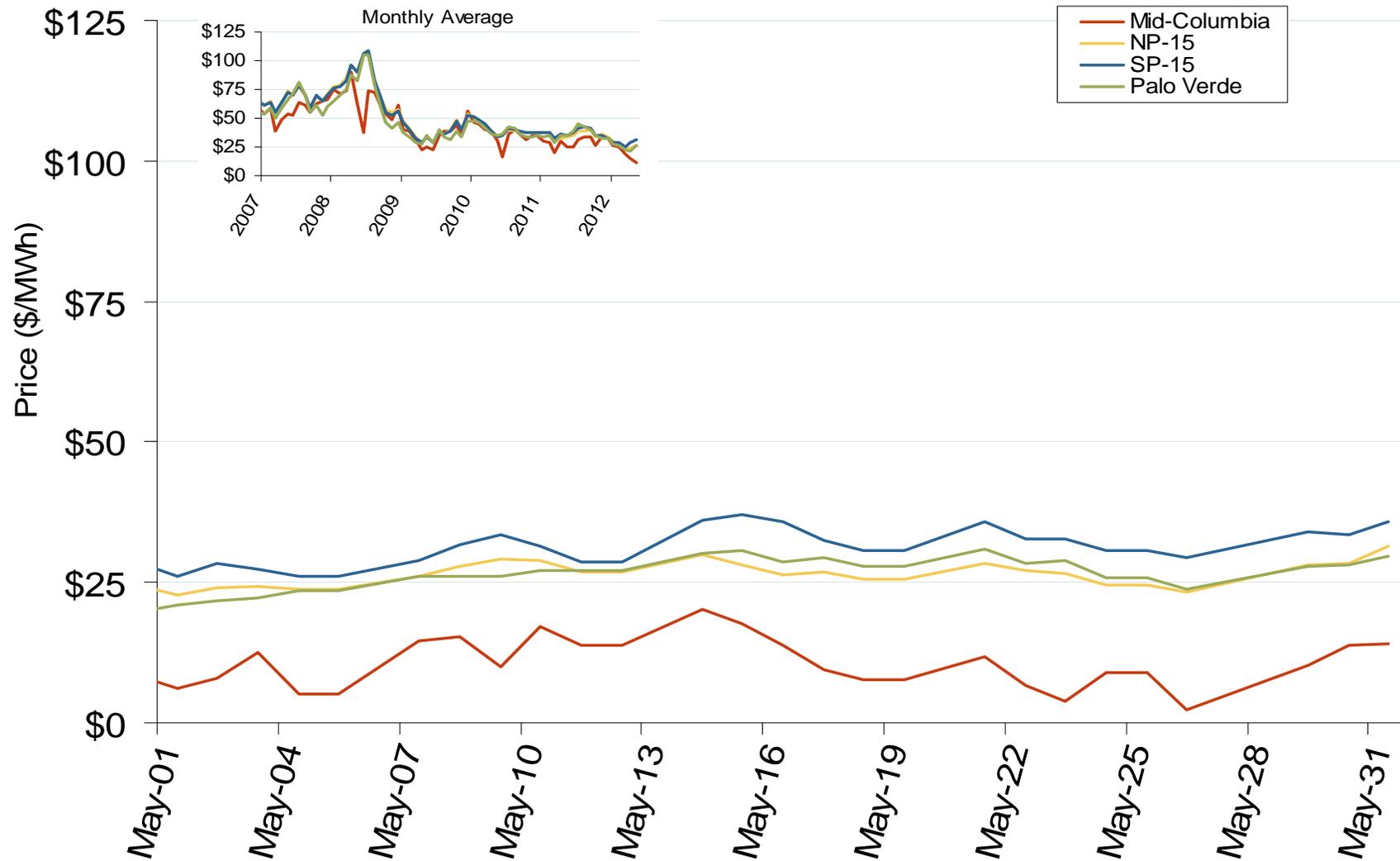
Source: Derived from NOAA data.

Updated: June 23, 2012

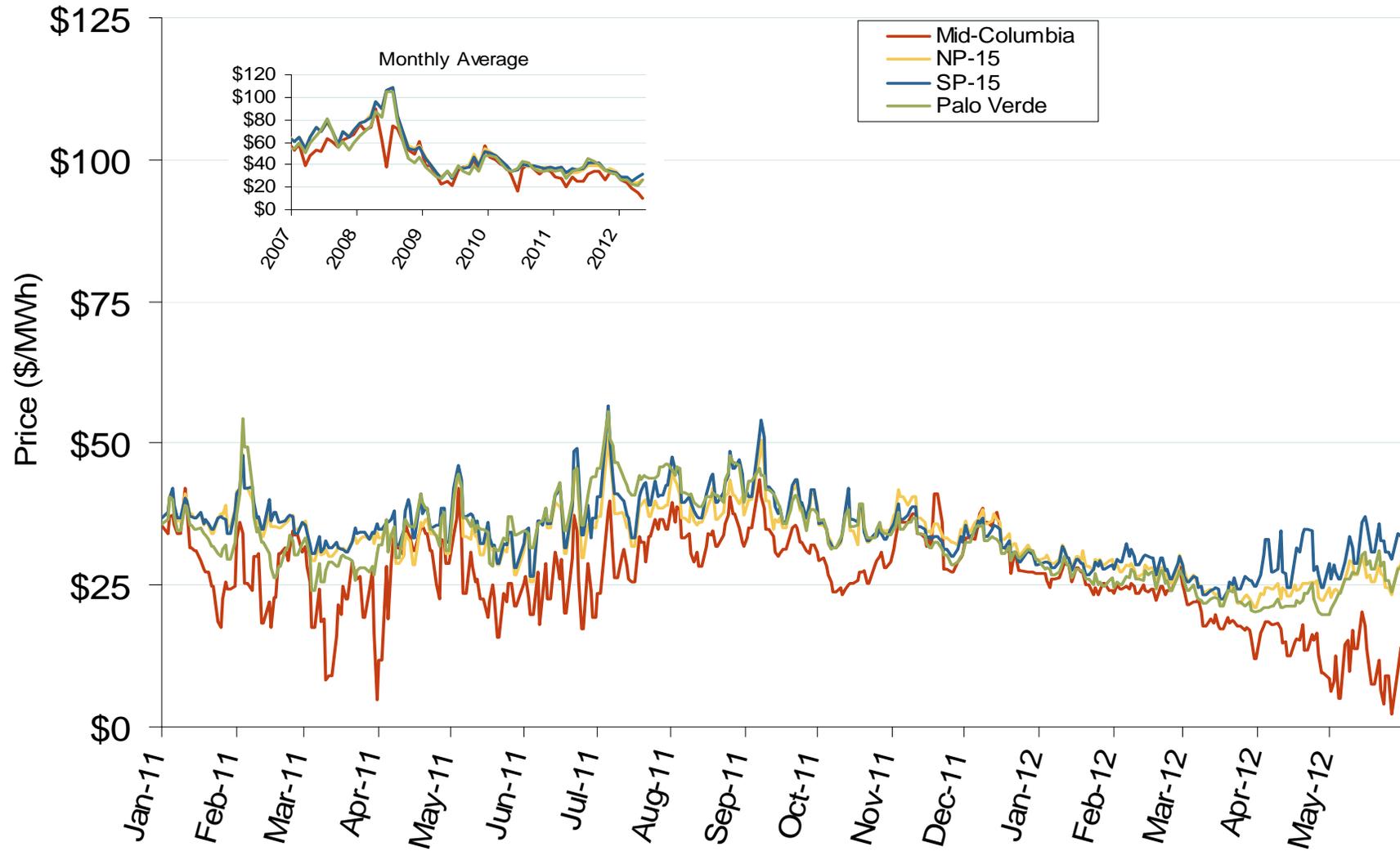


# Electricity Markets

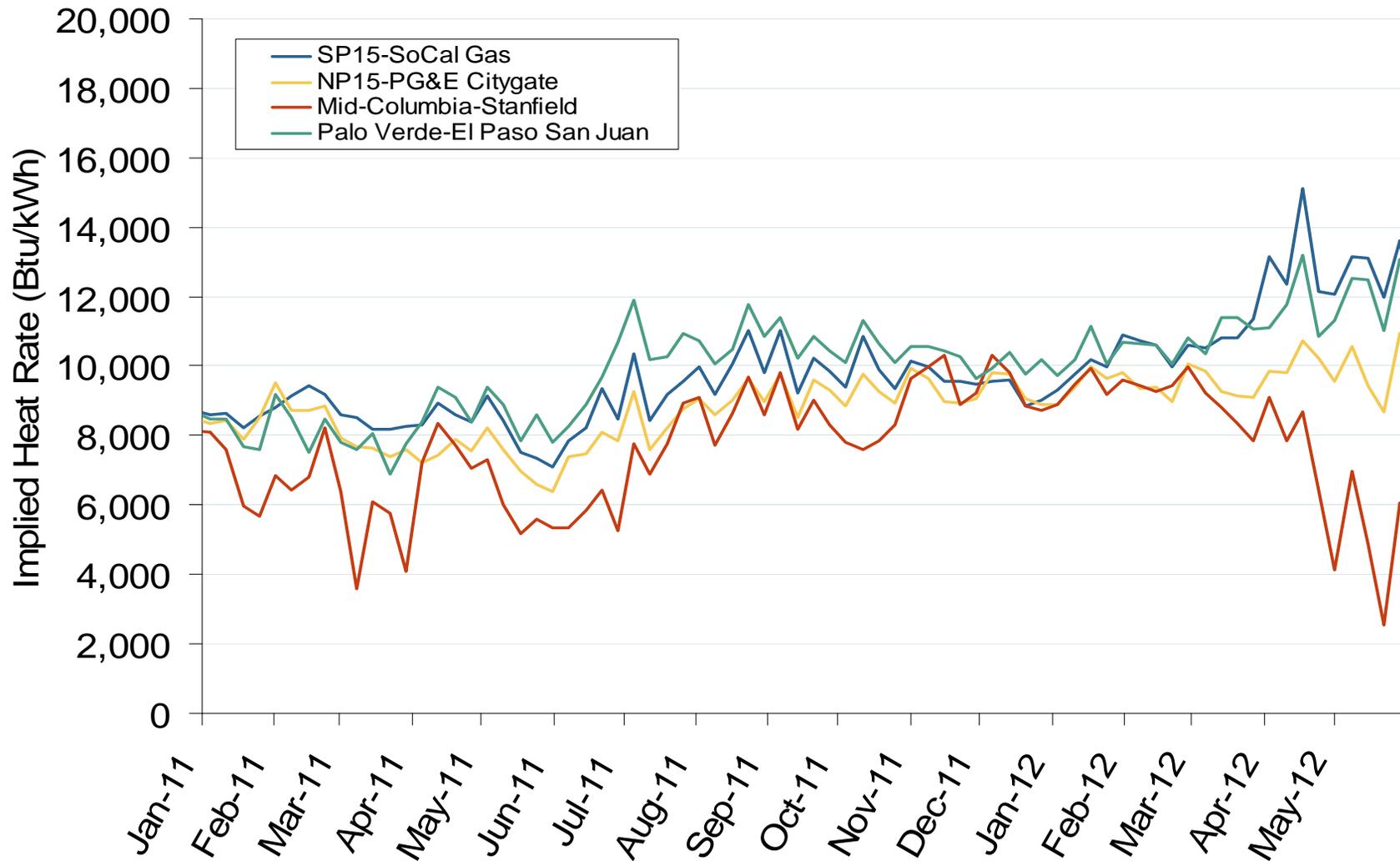
## Western Daily Index Day-Ahead On-Peak Prices



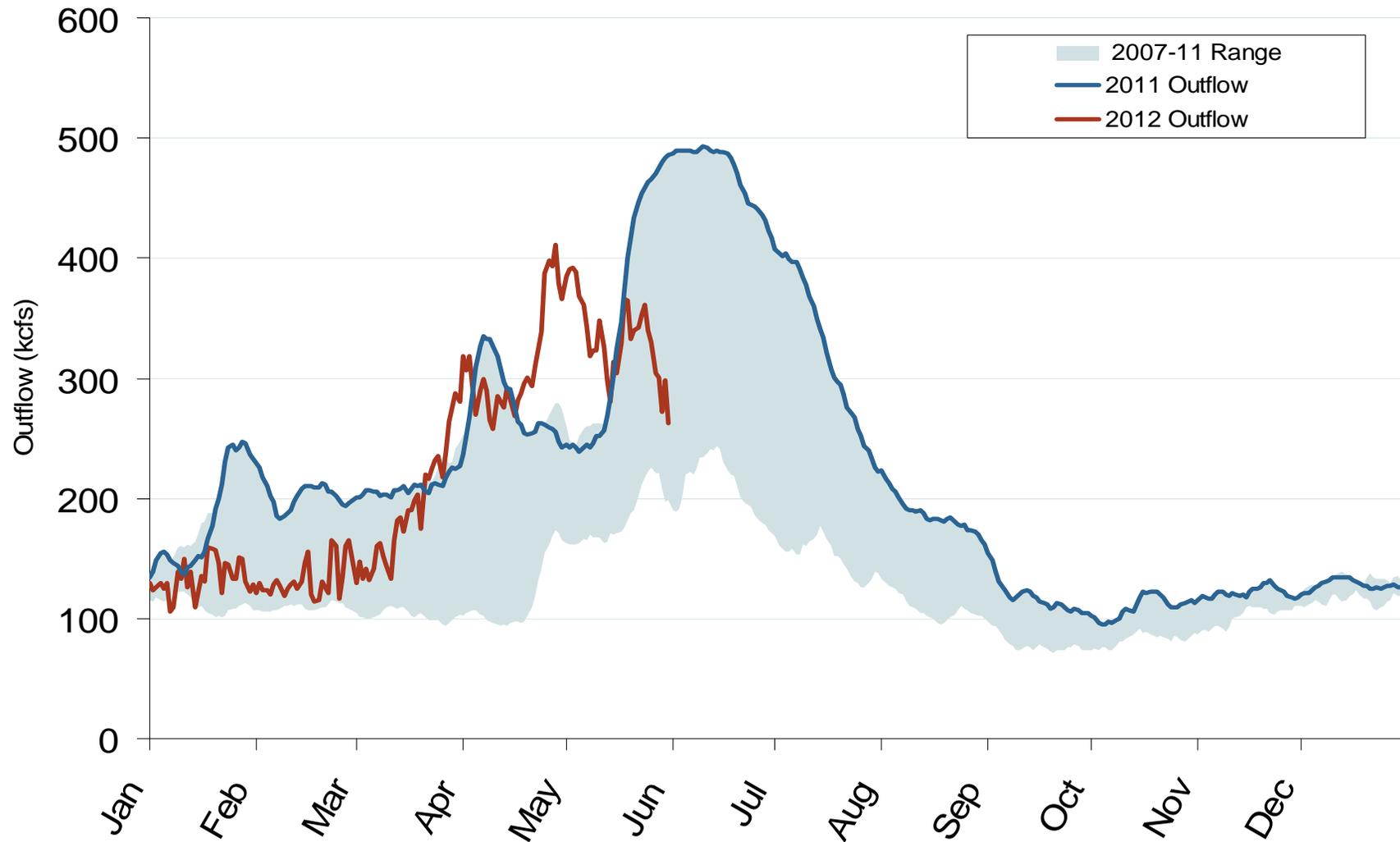
## Western Daily Index Day-Ahead On-Peak Prices



## Implied Heat Rates at Western Trading Points - Weekly Avgs.



## Stream Flows at the Dalles Dam



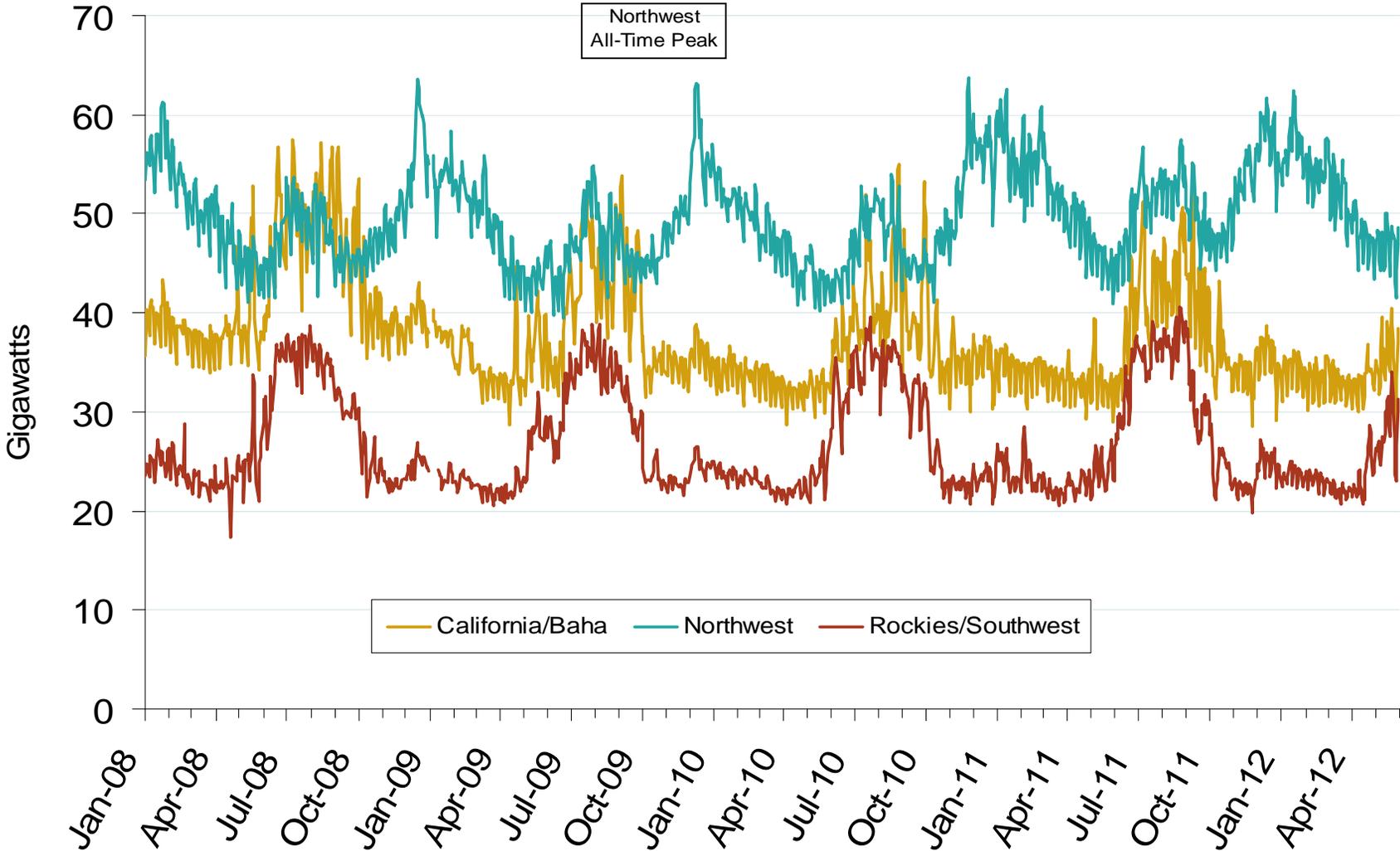
Notes: Trend lines are 7-day moving averages

Source: Derived from USACE data

June 2012 Western Snapshot Report

Updated: June 19, 2012

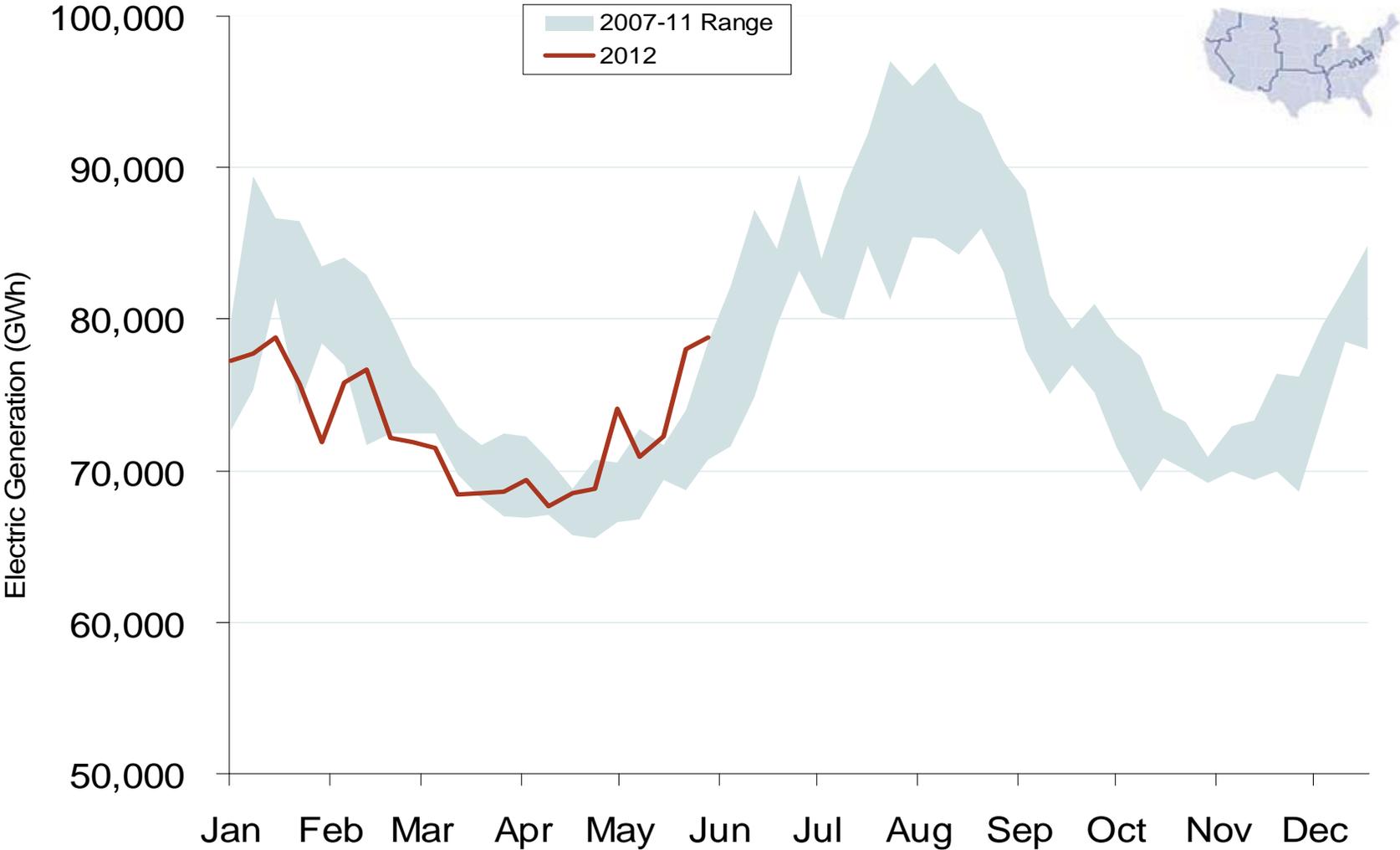
### Western Daily Actual Peak Demand



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>

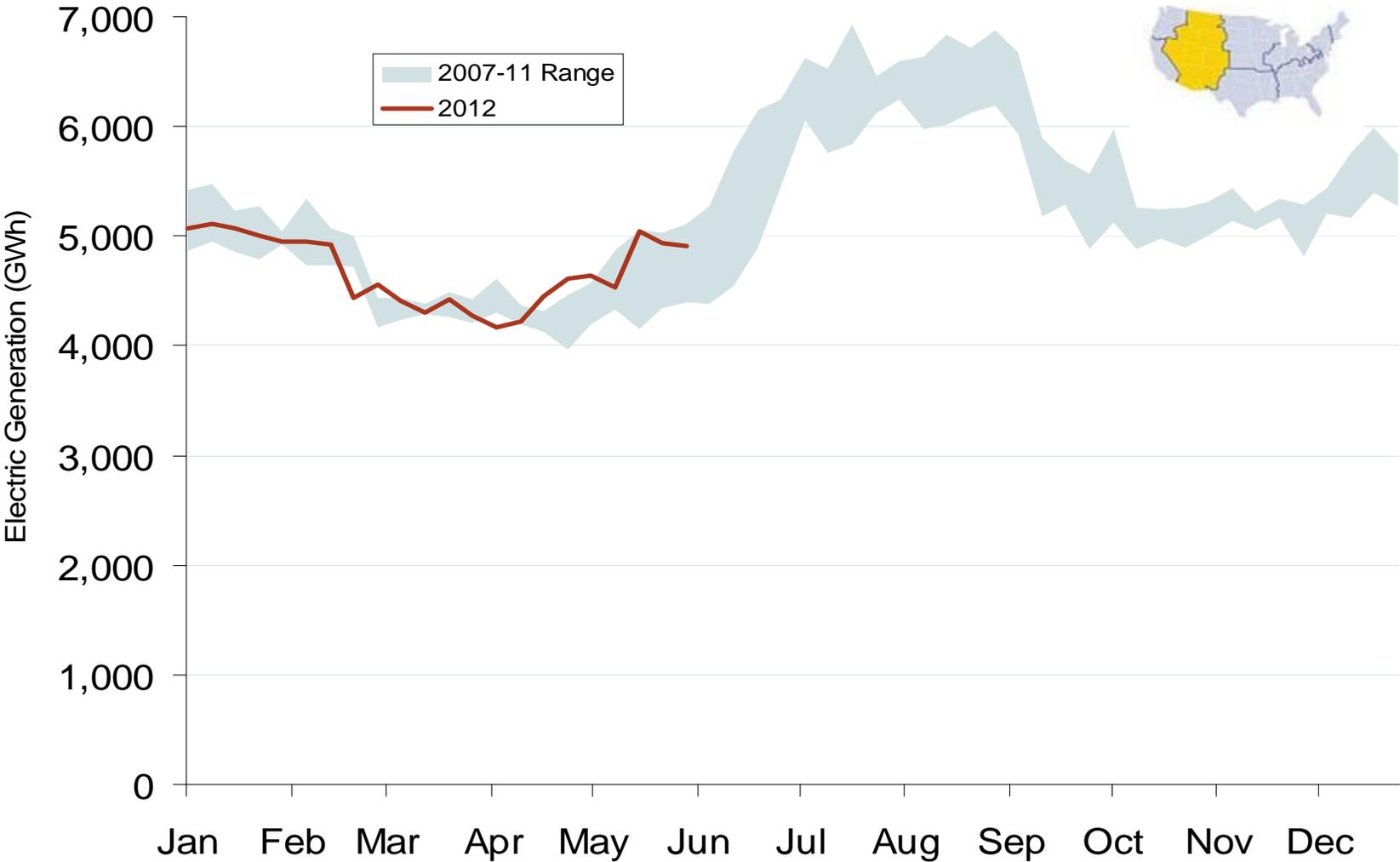
# Weekly U.S. Electric Generation Output



Source: Derived from *EEI* data  
June 2012 Western Snapshot Report

Updated: June 14, 2012

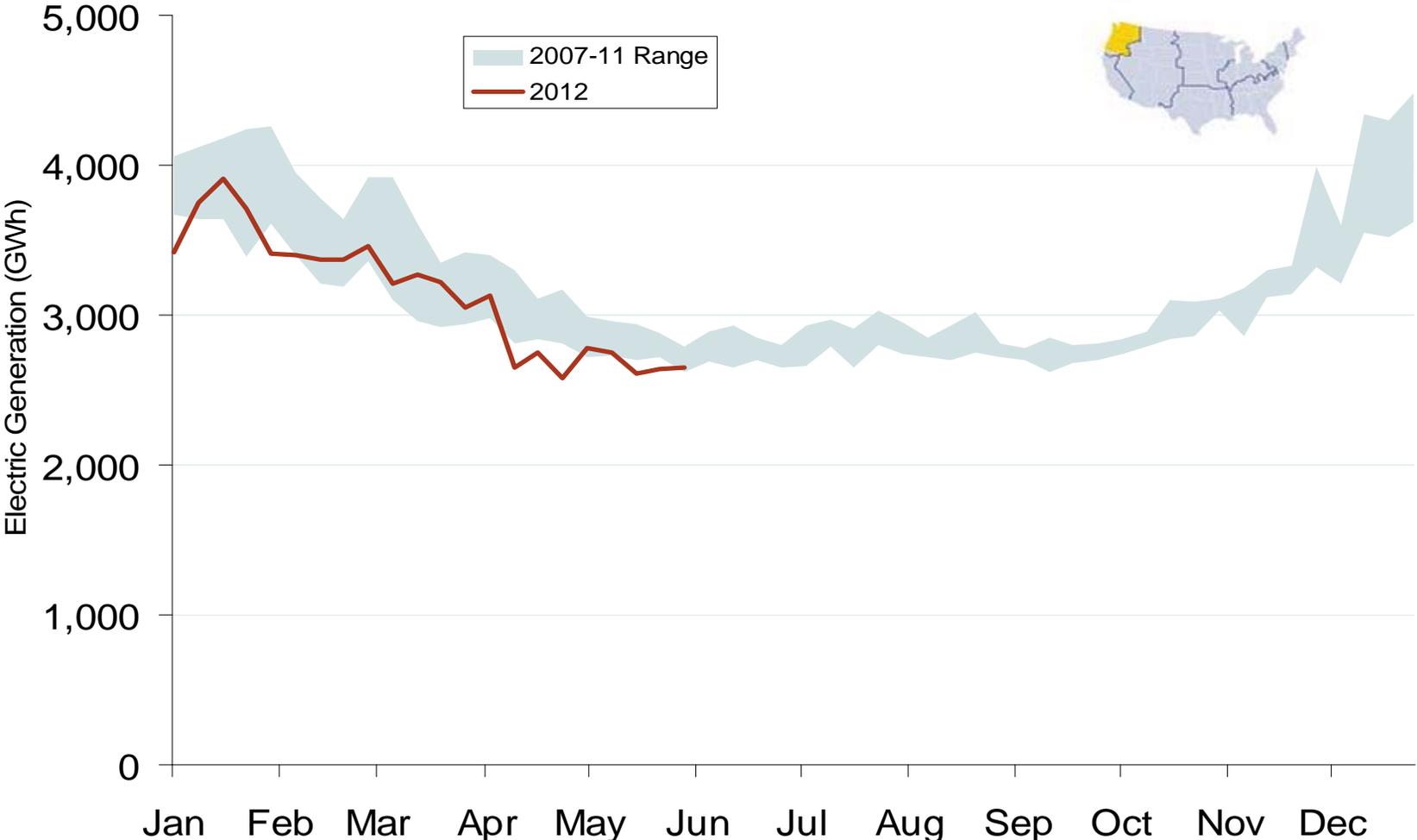
### Weekly Generation Output - Rocky Mountains



Source: Derived from *EEI* data  
June 2012 Western Snapshot Report

Updated: June 14, 2012

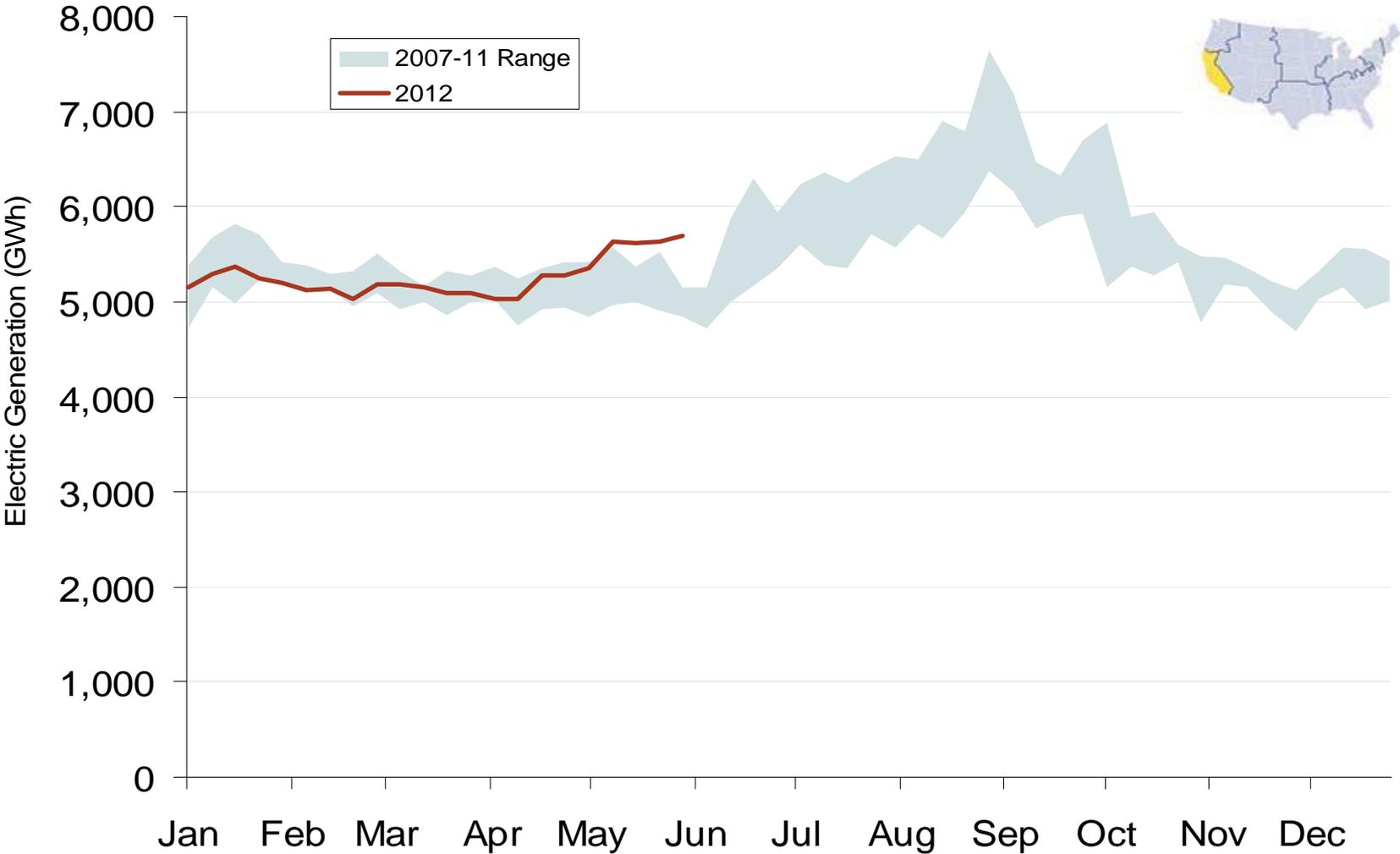
# Weekly Generation Output - Pacific Northwest



Source: Derived from *EEI* data  
June 2012 Western Snapshot Report

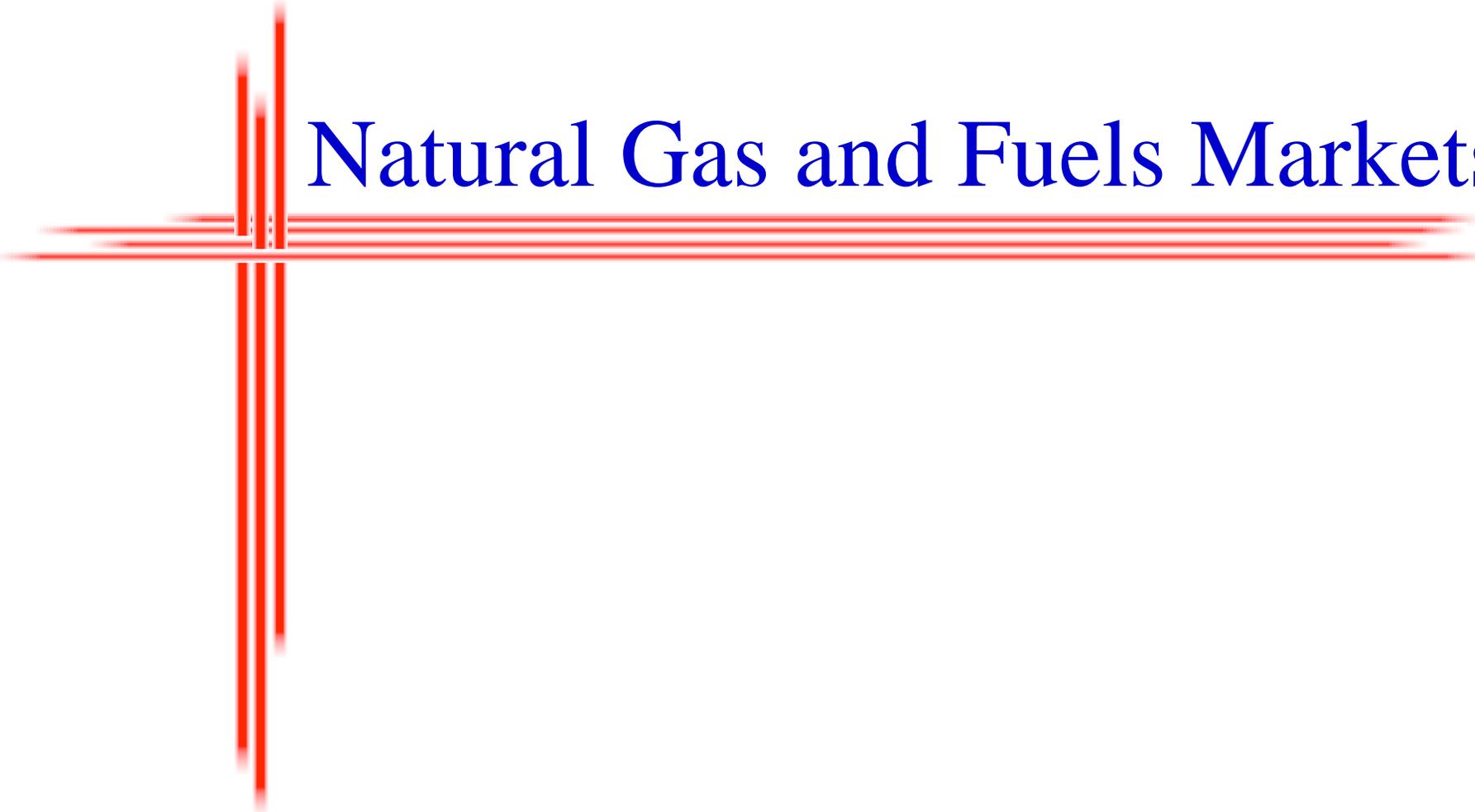
Updated: June 14, 2012

# Weekly Generation Output - California



Source: Derived from *EEI* data  
June 2012 Western Snapshot Report

Updated: June 14, 2012

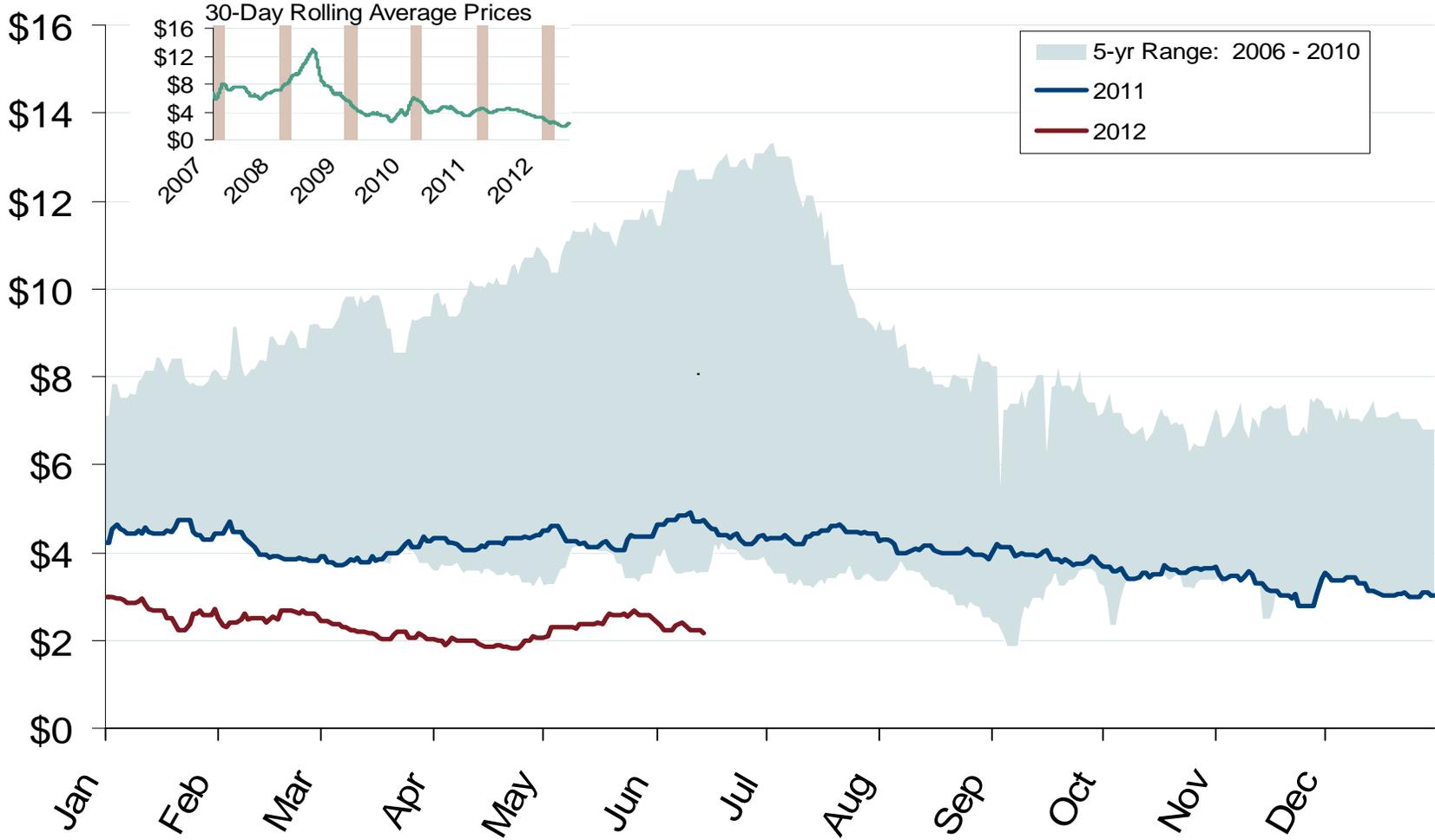


# Natural Gas and Fuels Markets

# 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  
June 2012 Western Snapshot Report

Updated: June 14, 2012

# Western Day-Ahead Hub Spot Prices and Basis

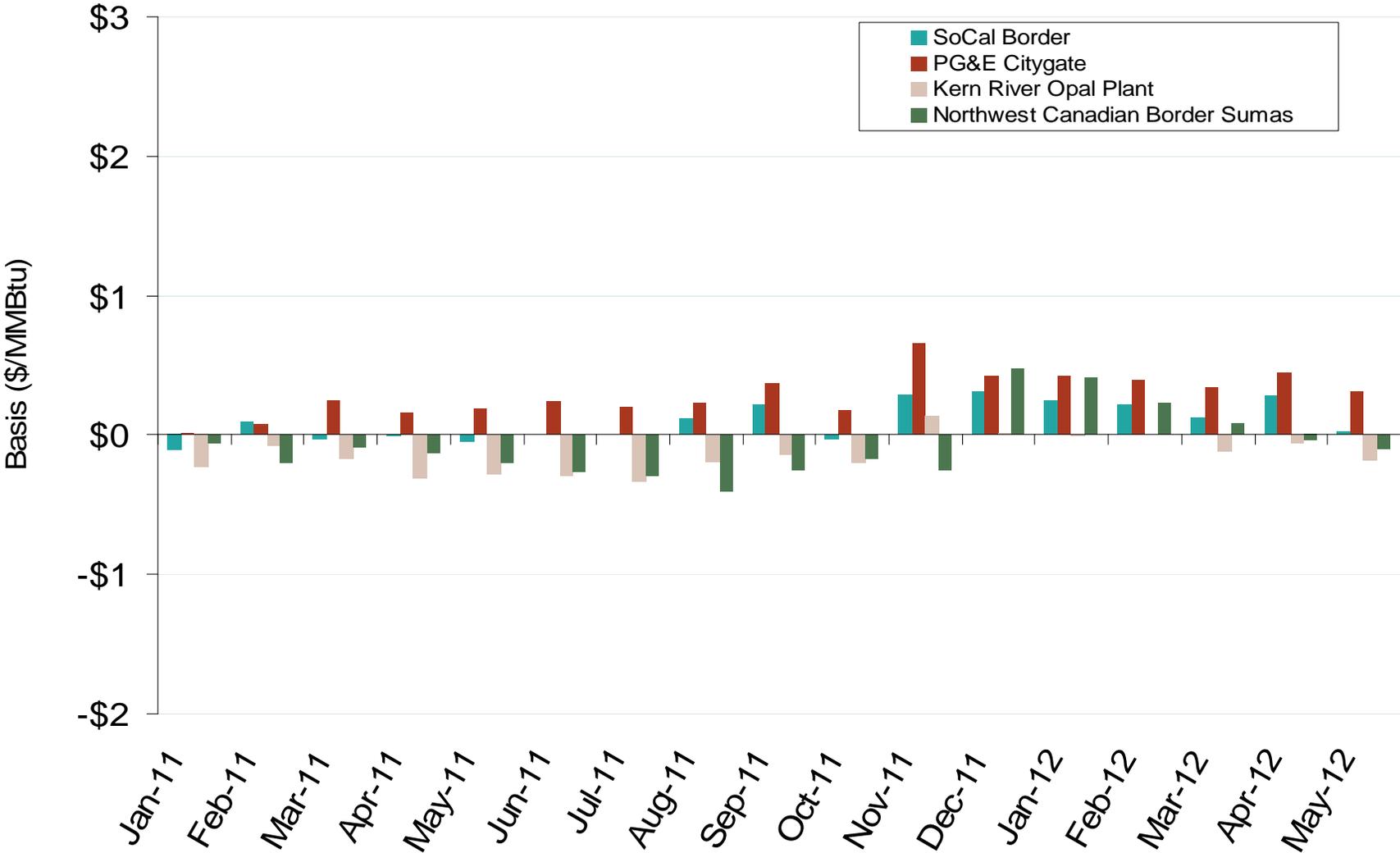


Source: Derived from *Platts* data  
June 2012 Western Snapshot Report

Updated: June 06, 2012

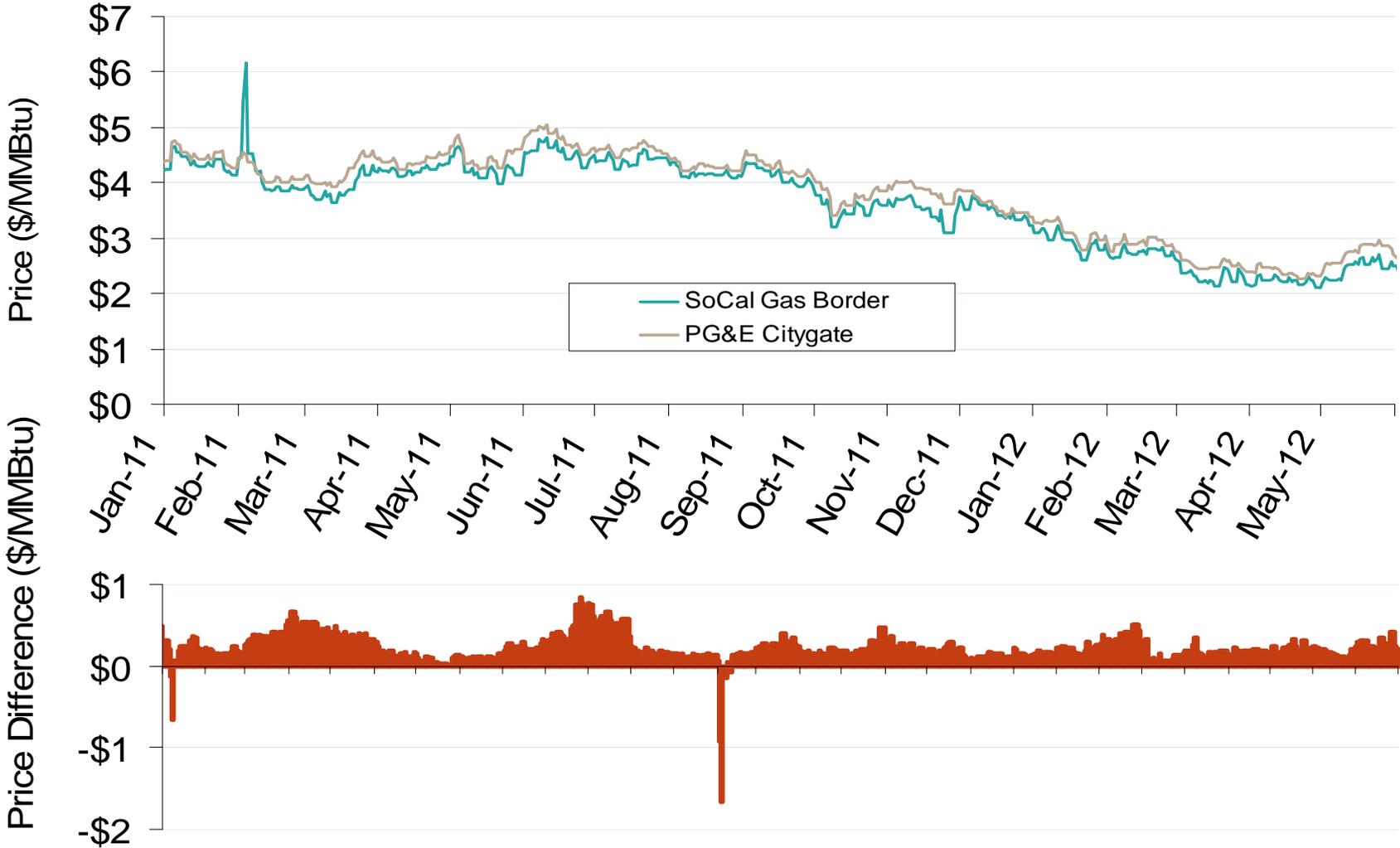
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### Western Monthly Average Basis Value to Henry Hub



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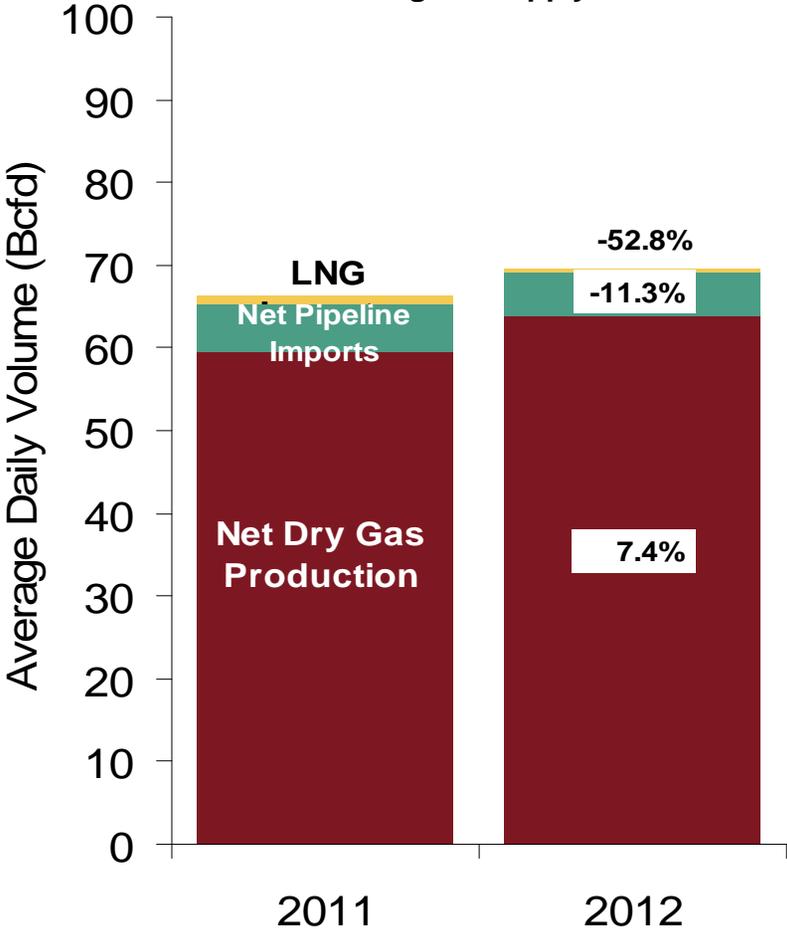
### Difference in Northern and Southern California Daily Spot Prices



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

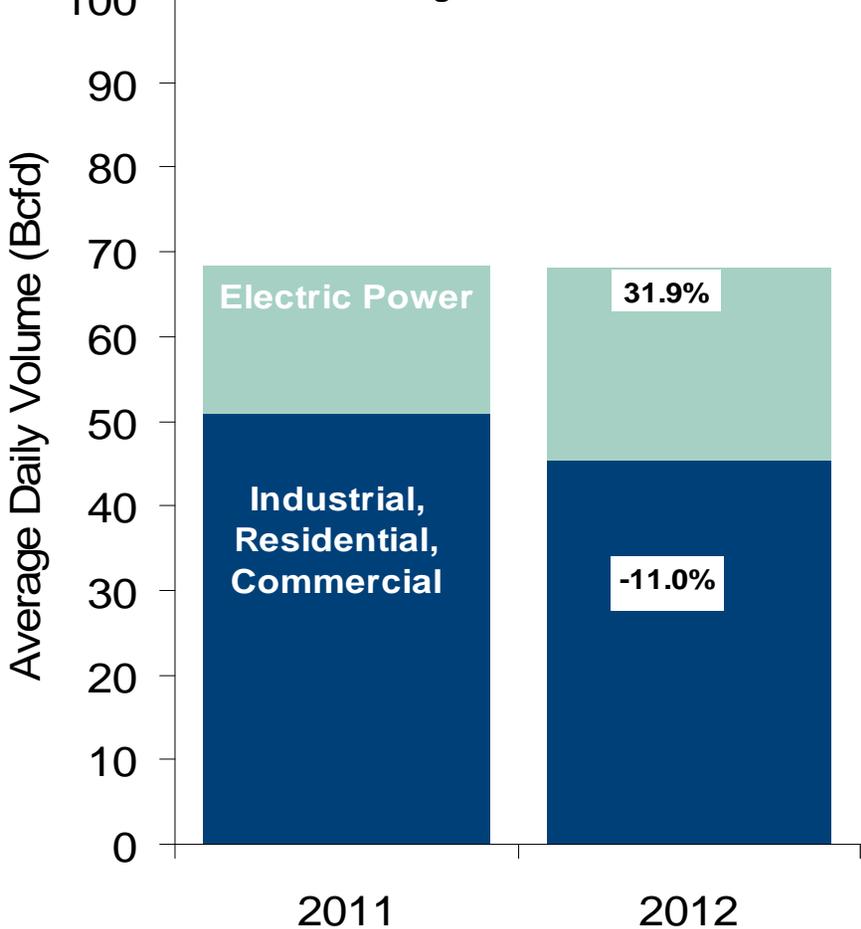
## US Natural Gas Supply

Total Change in Supply 4.9%



## US Natural Gas Demand

Total Change in Demand 1.2%



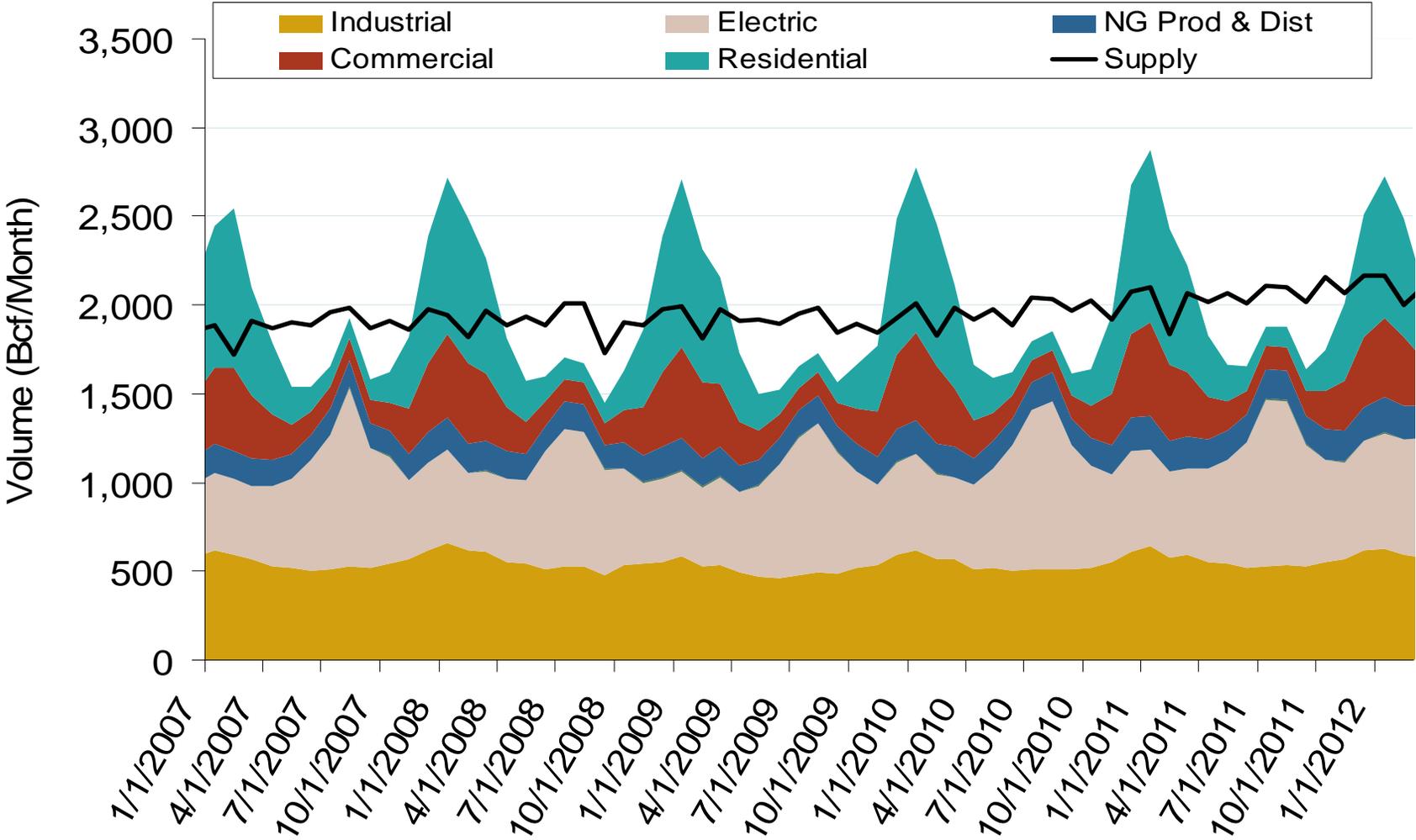
Note: Balance includes all amounts not attributable to other categories.

Source: Derived from Bentek Energy data

June 2012 Western Snapshot Report

Updated: June 14, 2012

# Annual U.S. Natural Gas Consumption by Sector



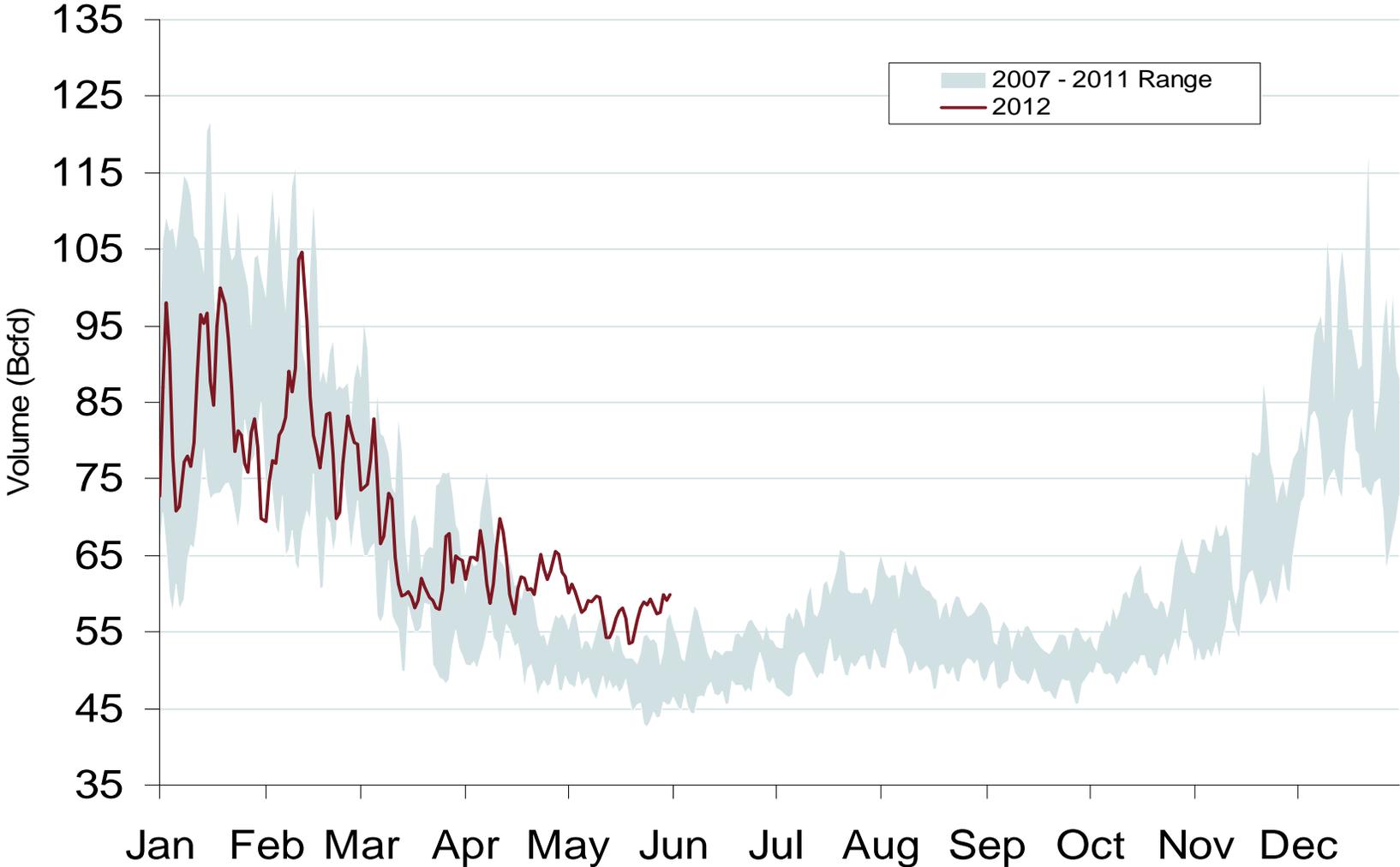
Notes: Supply includes lower 48 state production, net pipeline imports, and LNG imports

Source: Derived from EIA data

June 2012 Western Snapshot Report

Updated: June 18, 2012

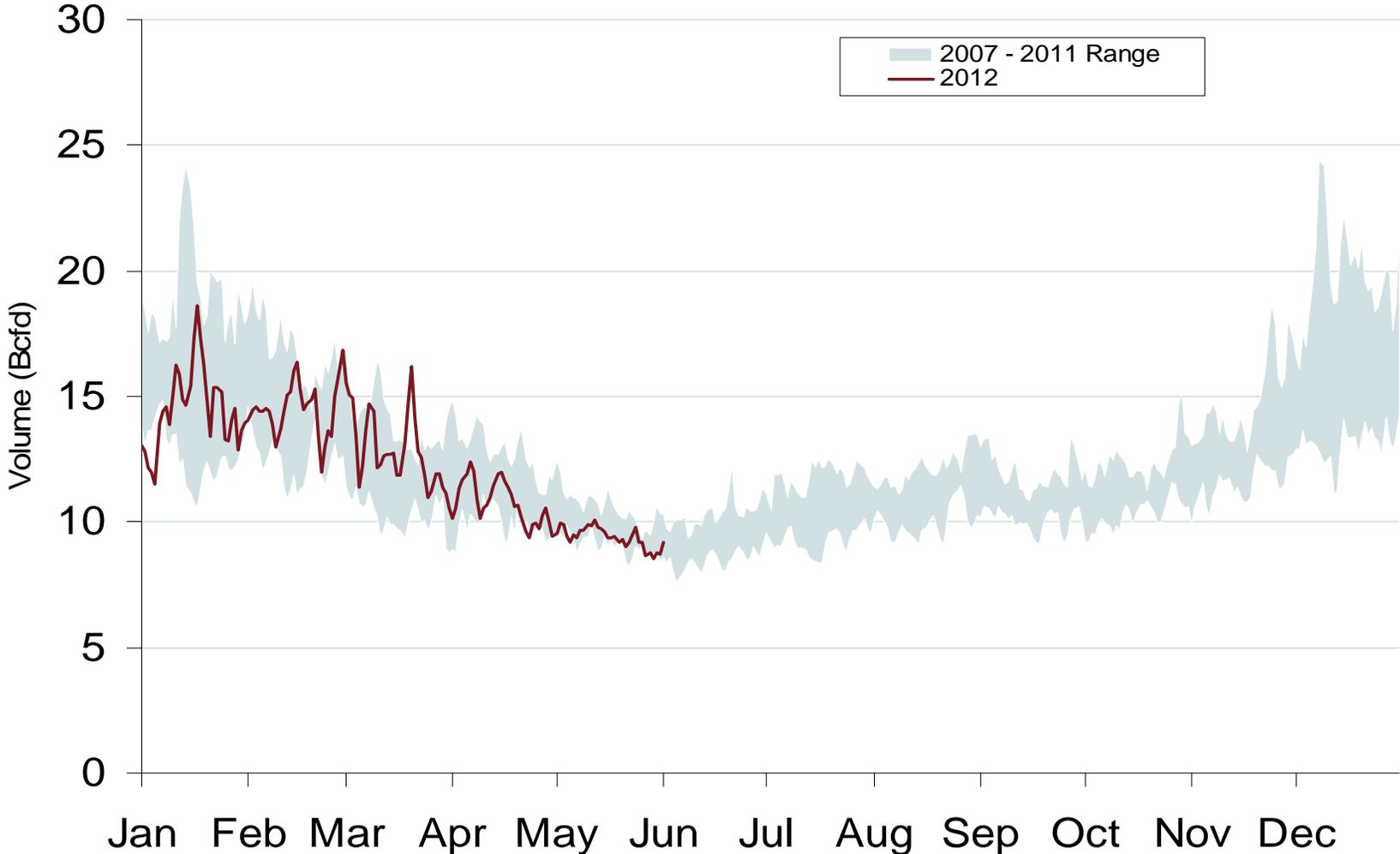
### Total U.S. Natural Gas Demand All Sectors



Source: Derived from *Bentek Energy* data  
June 2012 Western Snapshot Report

Updated: June 14, 2012

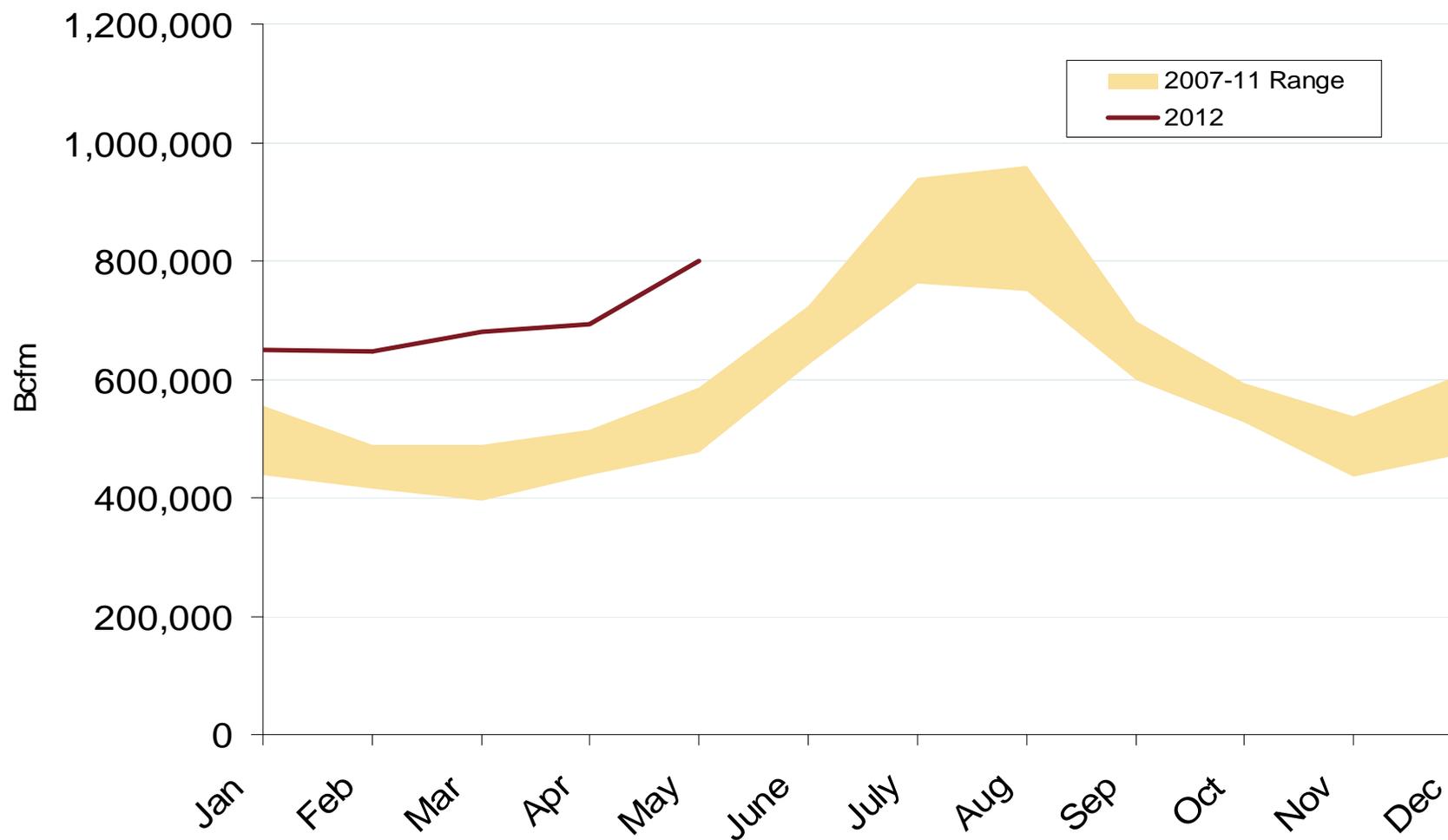
### Daily Western Natural Gas Demand All Sectors



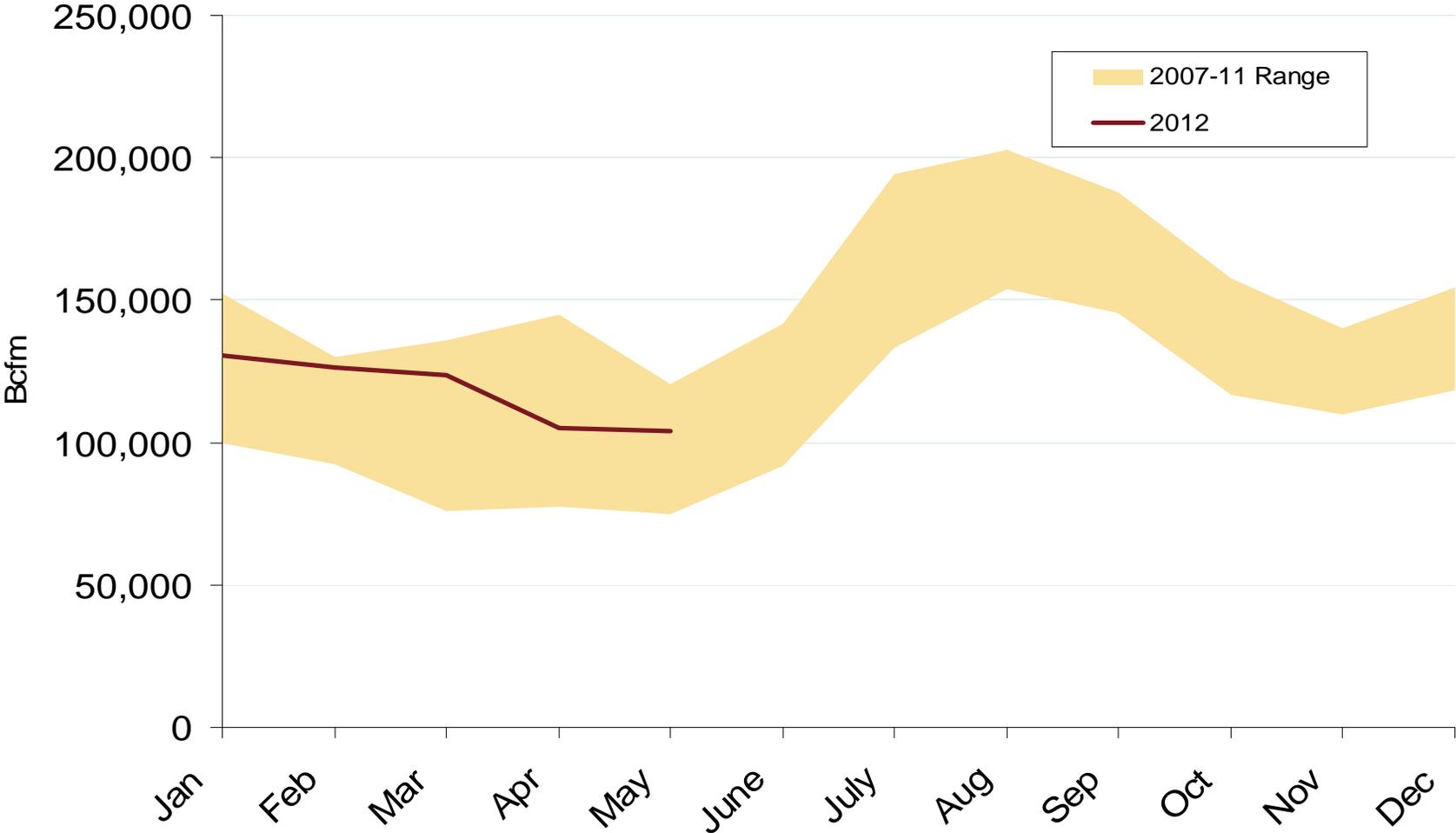
Source: Derived from *Bentek Energy* data  
June 2012 Western Snapshot Report

Updated: June 14, 2012

## U.S. Natural Gas Consumption for Power Generation



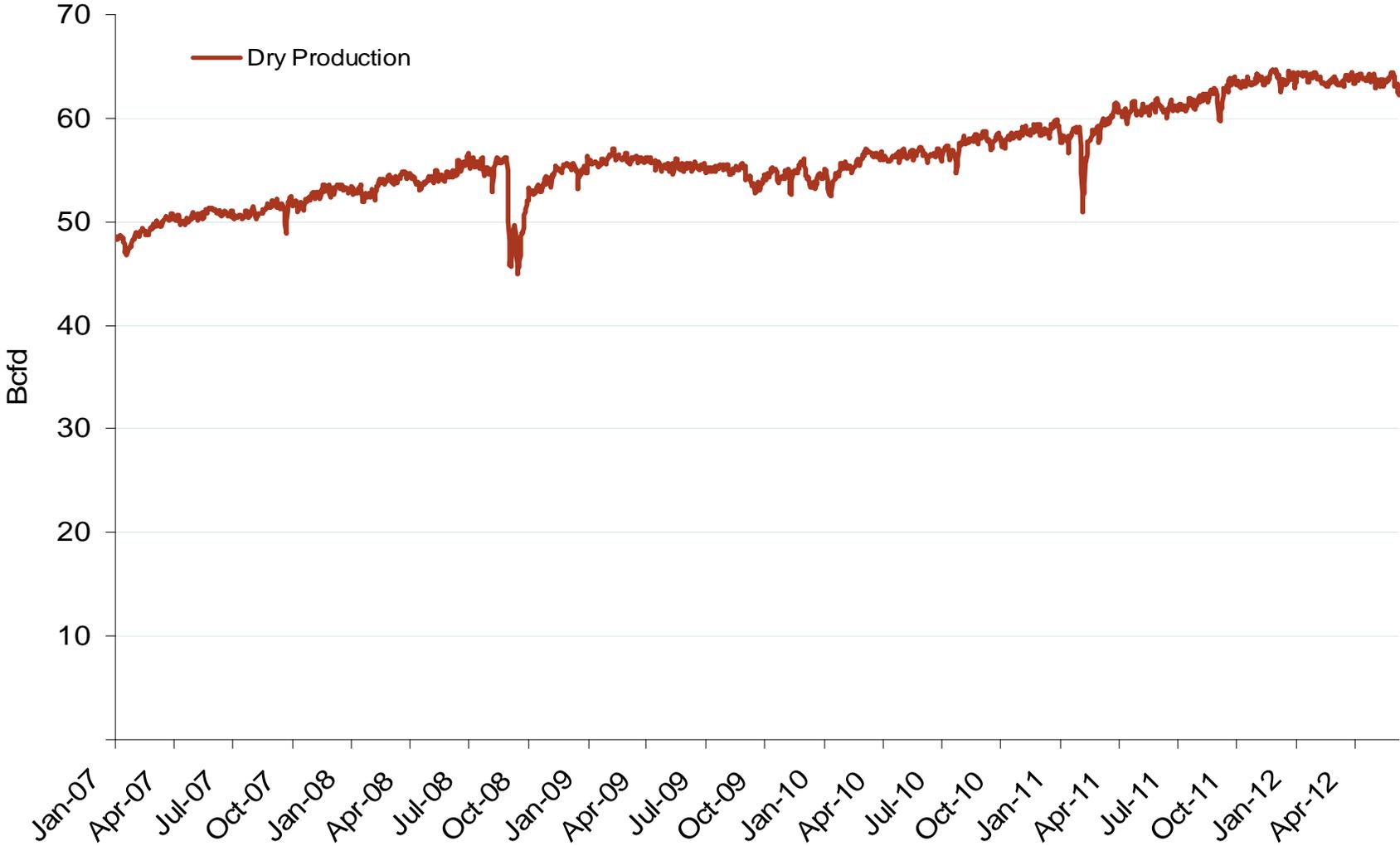
# Western Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data  
June 2012 Western Snapshot Report

Updated: June 14, 2012

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



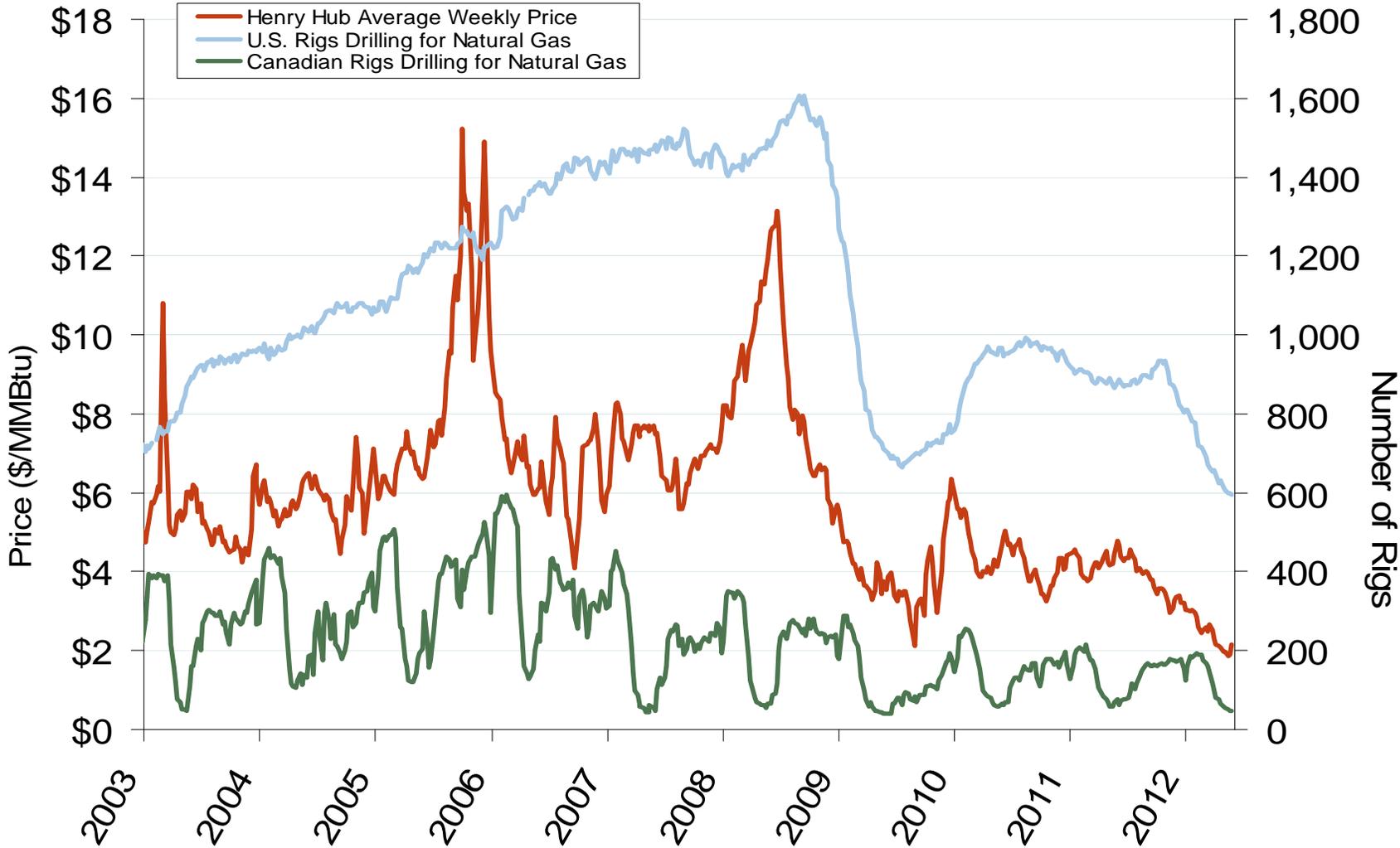
Note: Prior to July 2010, chart was derived from a combination of EIA and Bentek Energy data

Source: Derived from Bentek Energy data

June 2012 Western Snapshot Report

Updated: June 14, 2012

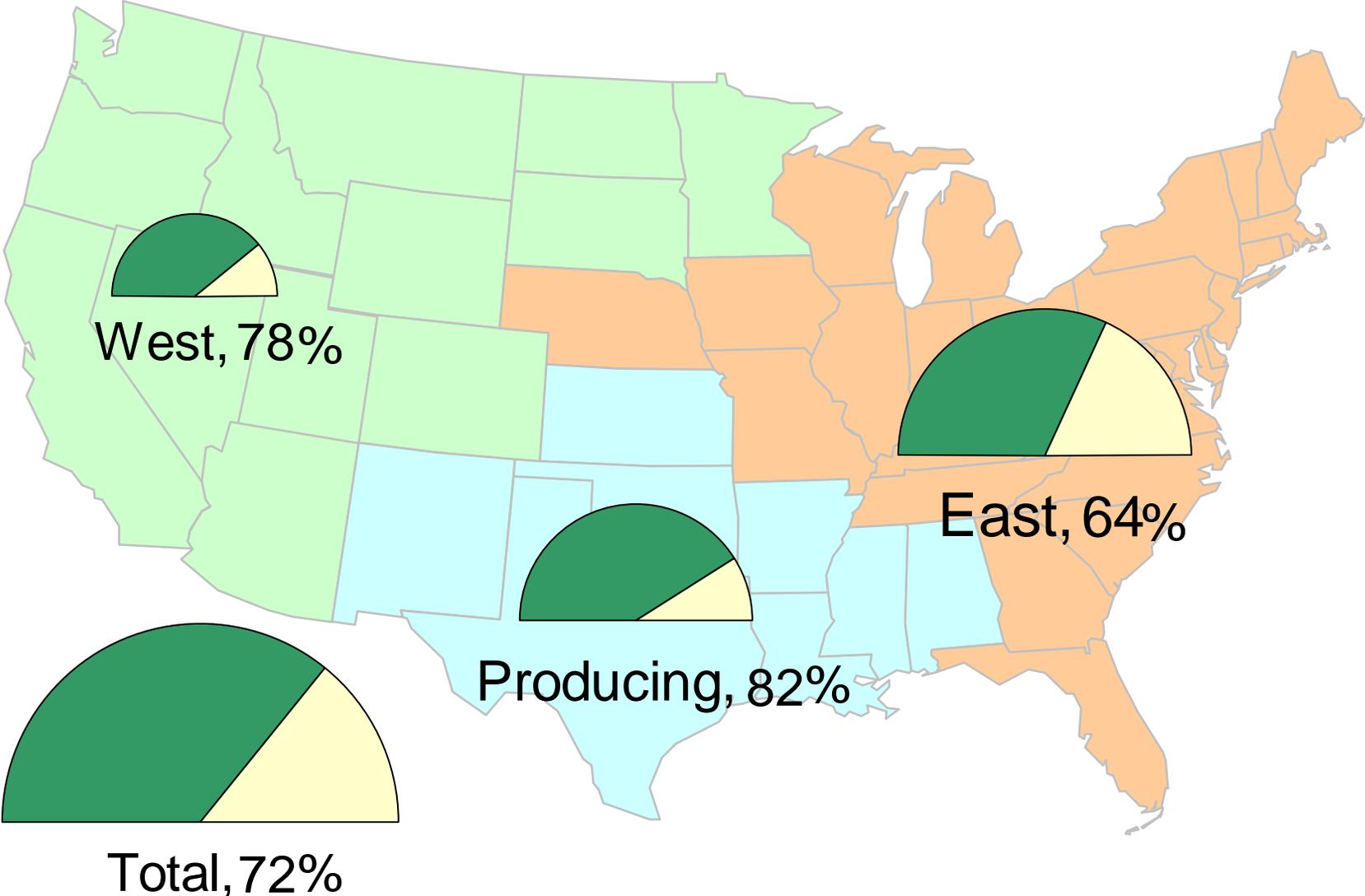
# U.S. and Canadian NG Drilling Rig Count and Daily Spot Prices



Source: Derived from *Platts* and *Baker Hughes* data  
June 2012 Western Snapshot Report

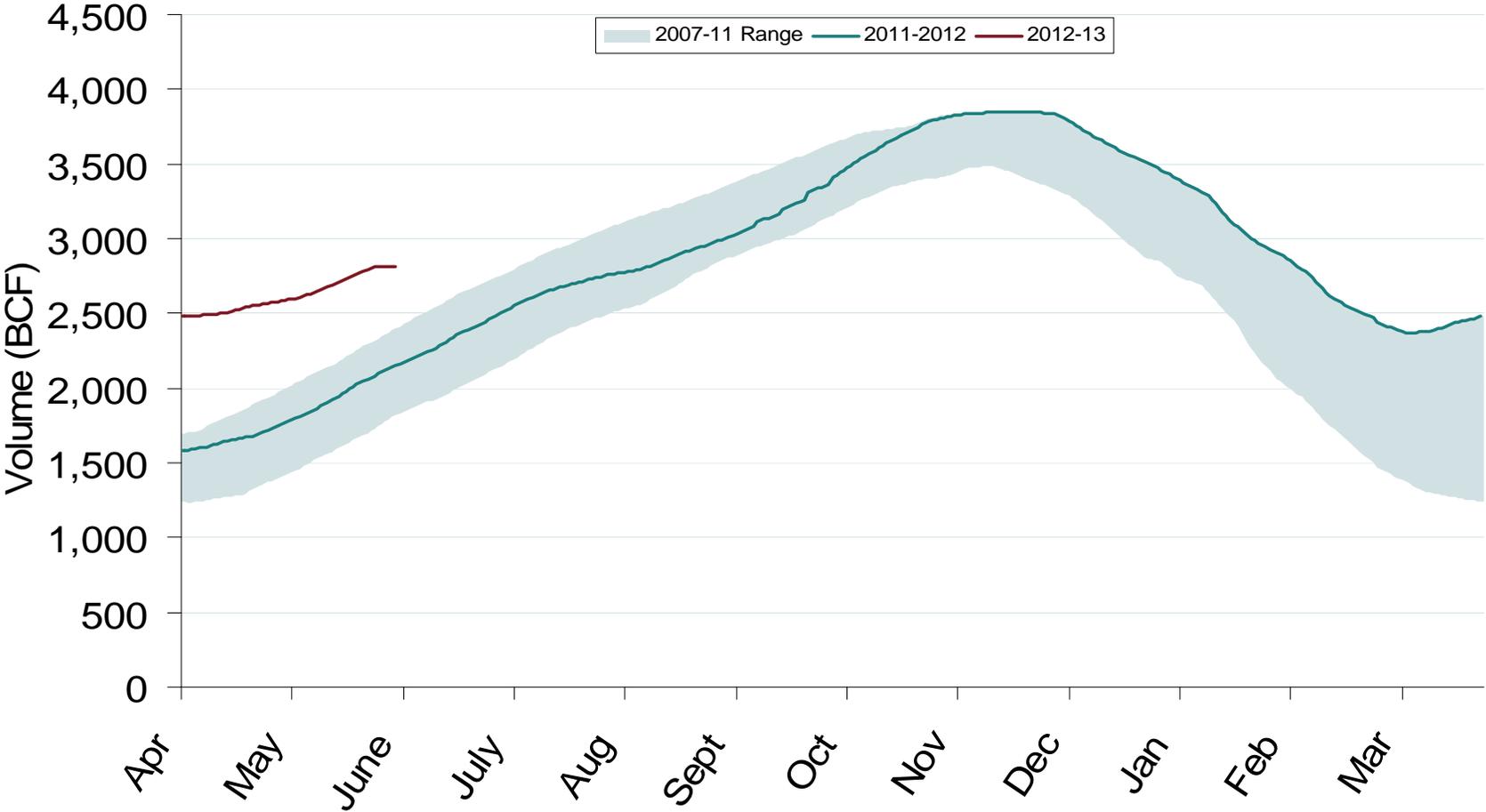
Updated: June 18, 2012

# Natural Gas Storage Inventories – June 15, 2012



Source: Derived from *EIA Storage* and *Estimated Working Gas Capacity* data  
June 2012 Western Snapshot Report

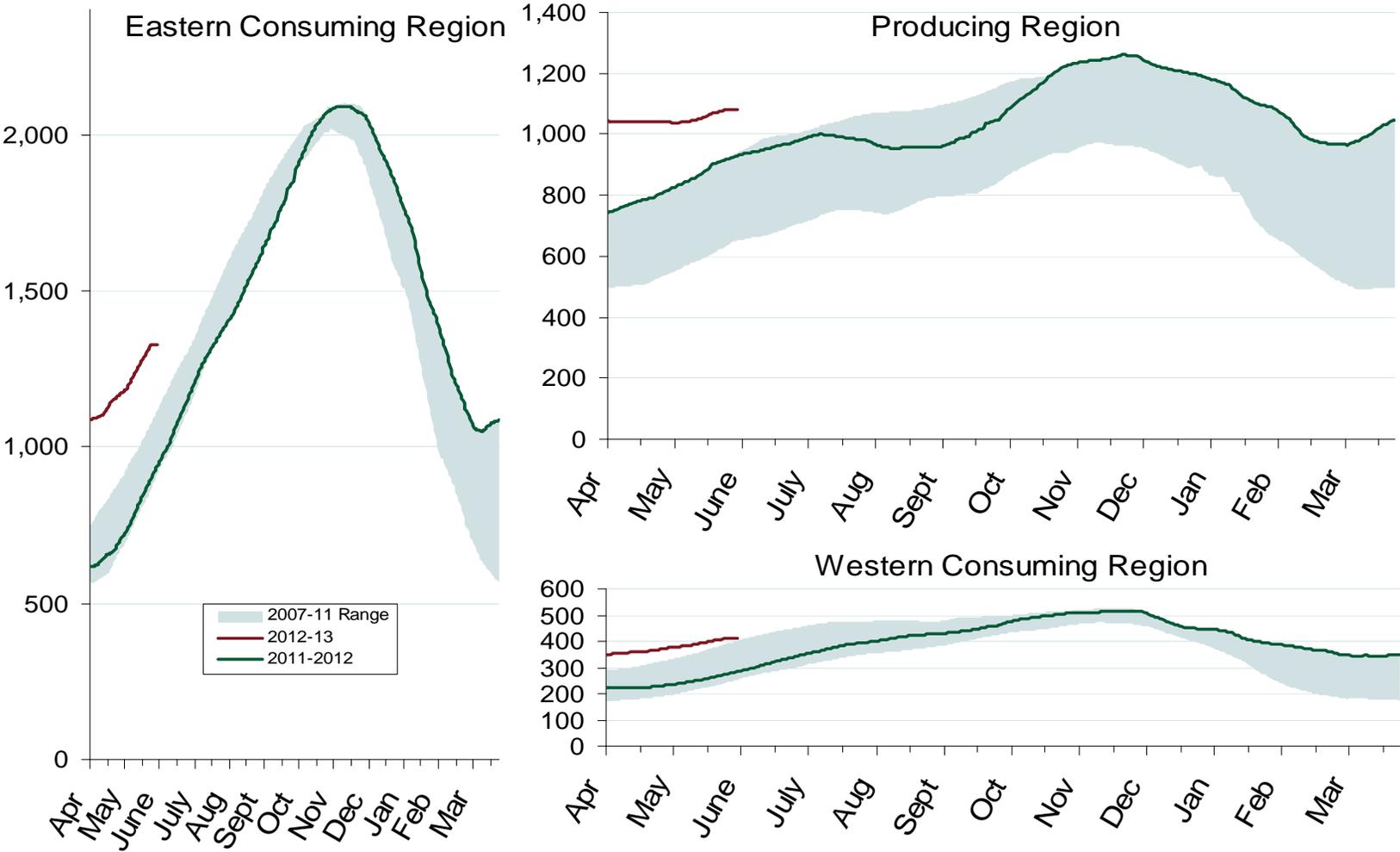
### Total U.S. Working Gas in Storage



Source: Derived from EIA data  
June 2012 Western Snapshot Report

Updated: June 18, 2012

# Regional Totals of Working Gas in Storage



Source: Derived from EIA data  
June 2012 Western Snapshot Report

Updated: June 18, 2012

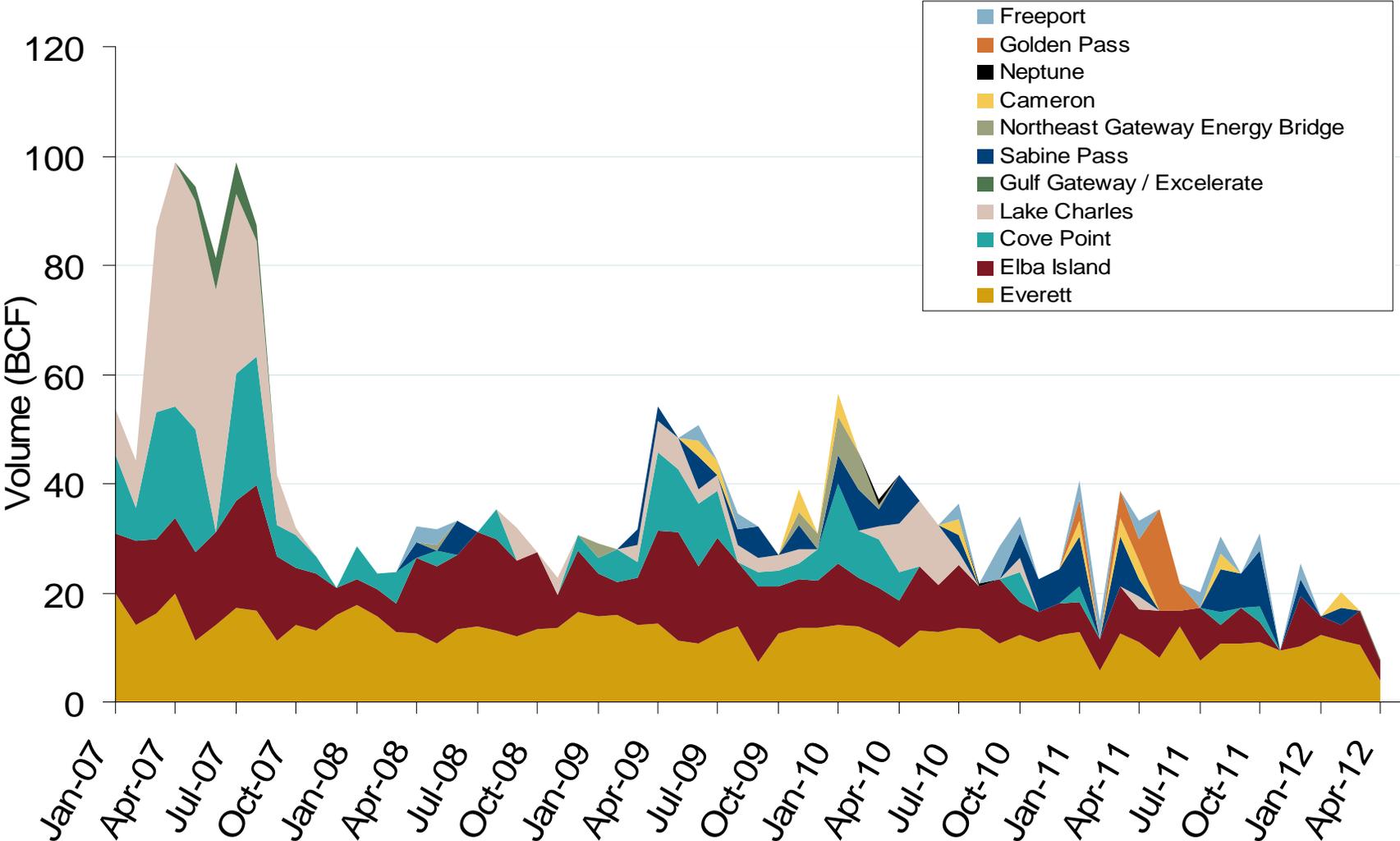
Federal Energy Regulatory Commission • Market Oversight • [www.ferc.gov/oversight](http://www.ferc.gov/oversight)

# World LNG Estimated July 2012 Landed Prices



Source: Waterborne Energy, Inc. Data in \$US/MMBtu  
June 2012 Western Snapshot Report

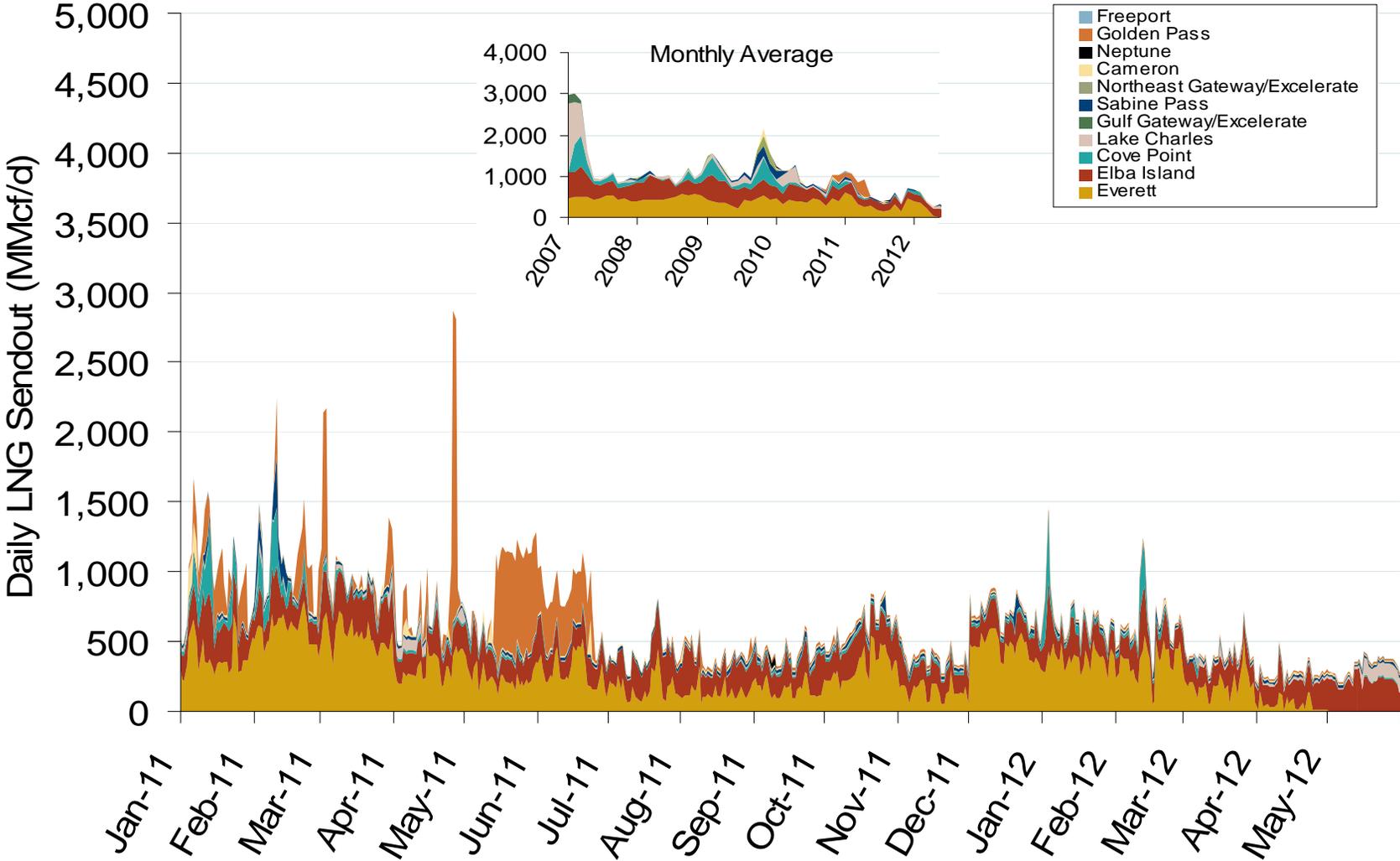
### Monthly Gas Imports at Existing U.S. LNG Facilities



Source: Derived from DOE Office of Fossil Energy data  
June 2012 Western Snapshot Report

Updated: June 14, 2012

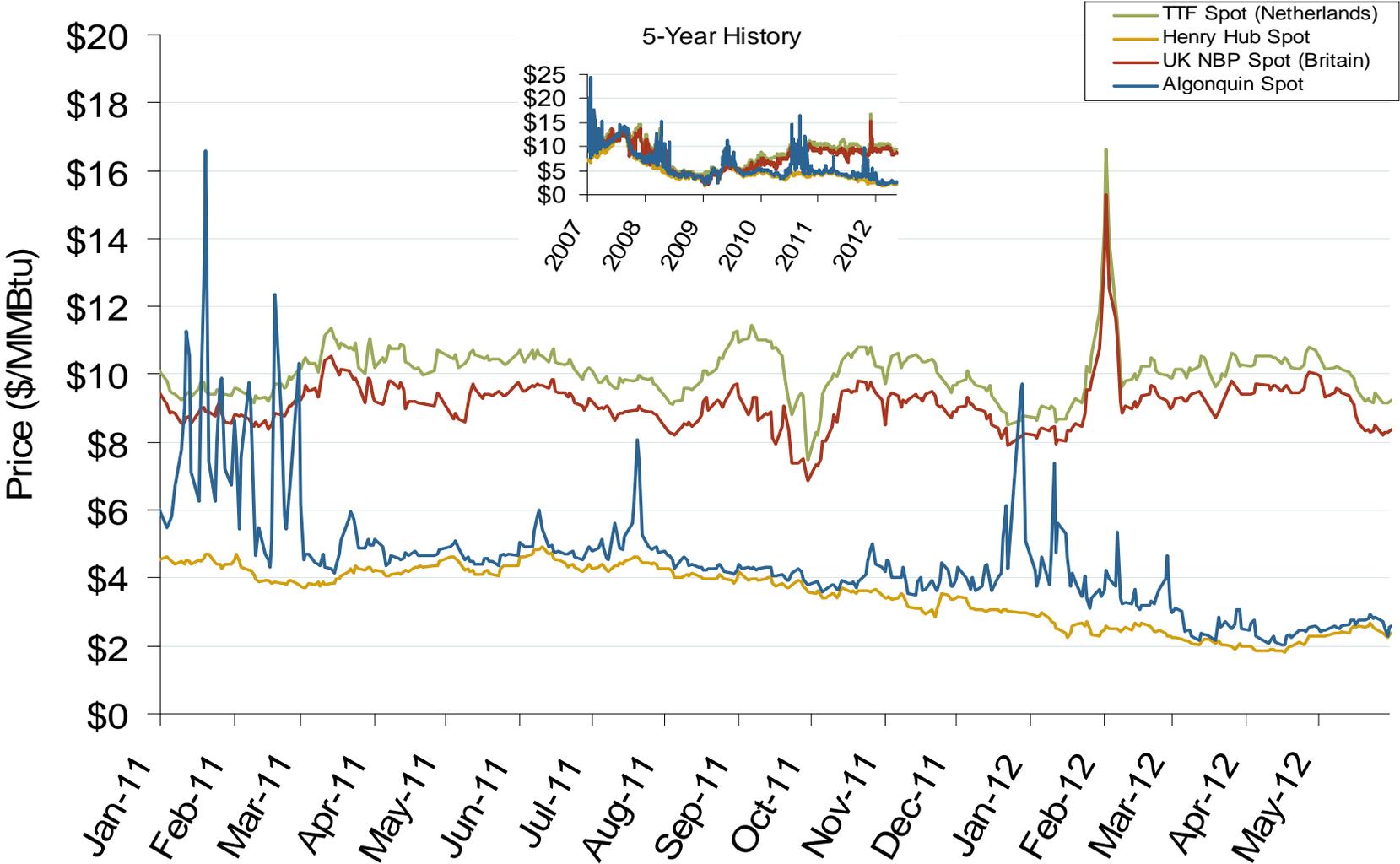
# Daily Gas Sendout from Existing U.S. LNG Facilities



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

Source: Derived from Bentek Energy data

# Atlantic Basin European and US Spot Natural Gas Prices

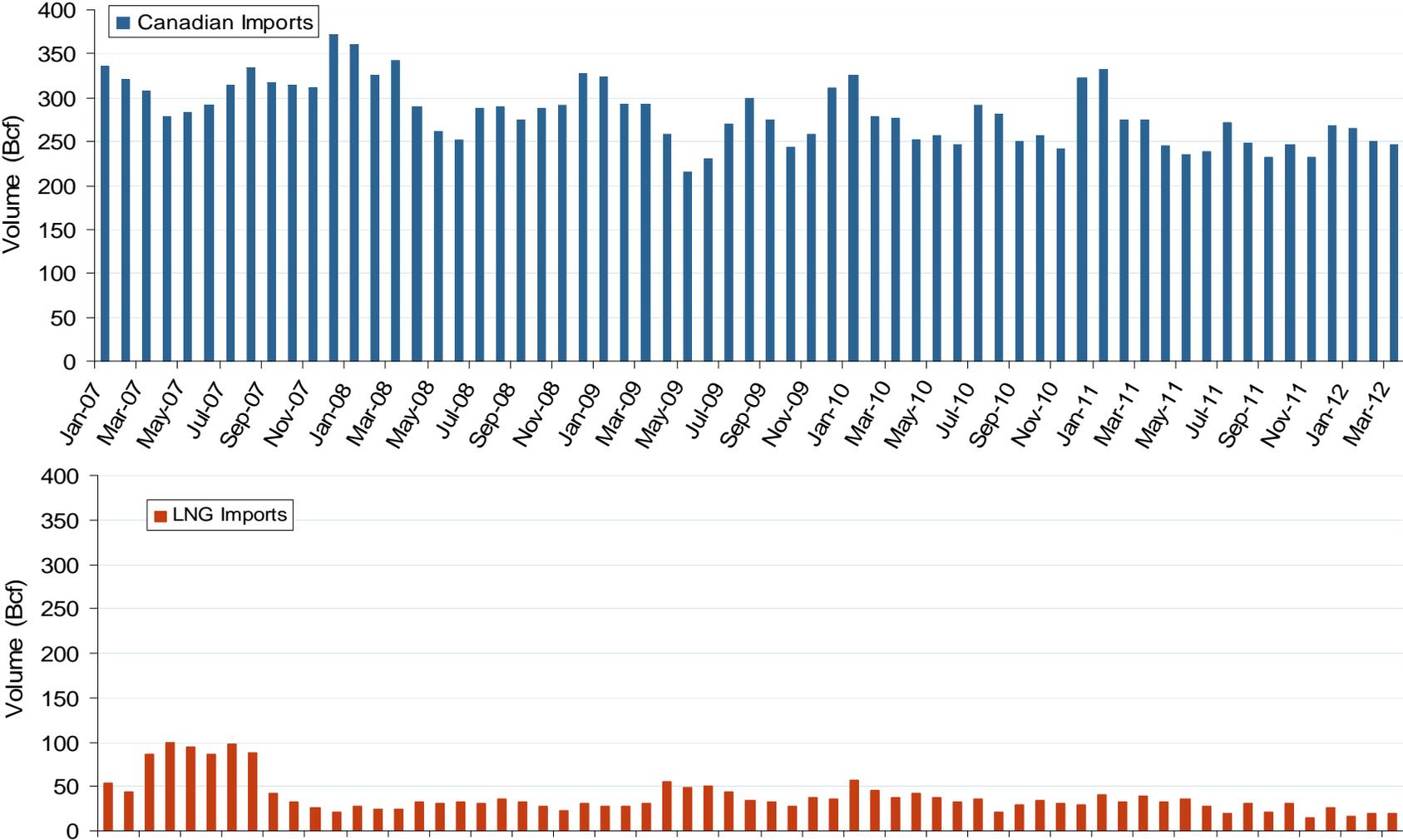


Source: Derived from *Bloomberg* and *ICE* data  
June 2012 Western Snapshot Report

Updated: June 18, 2012

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

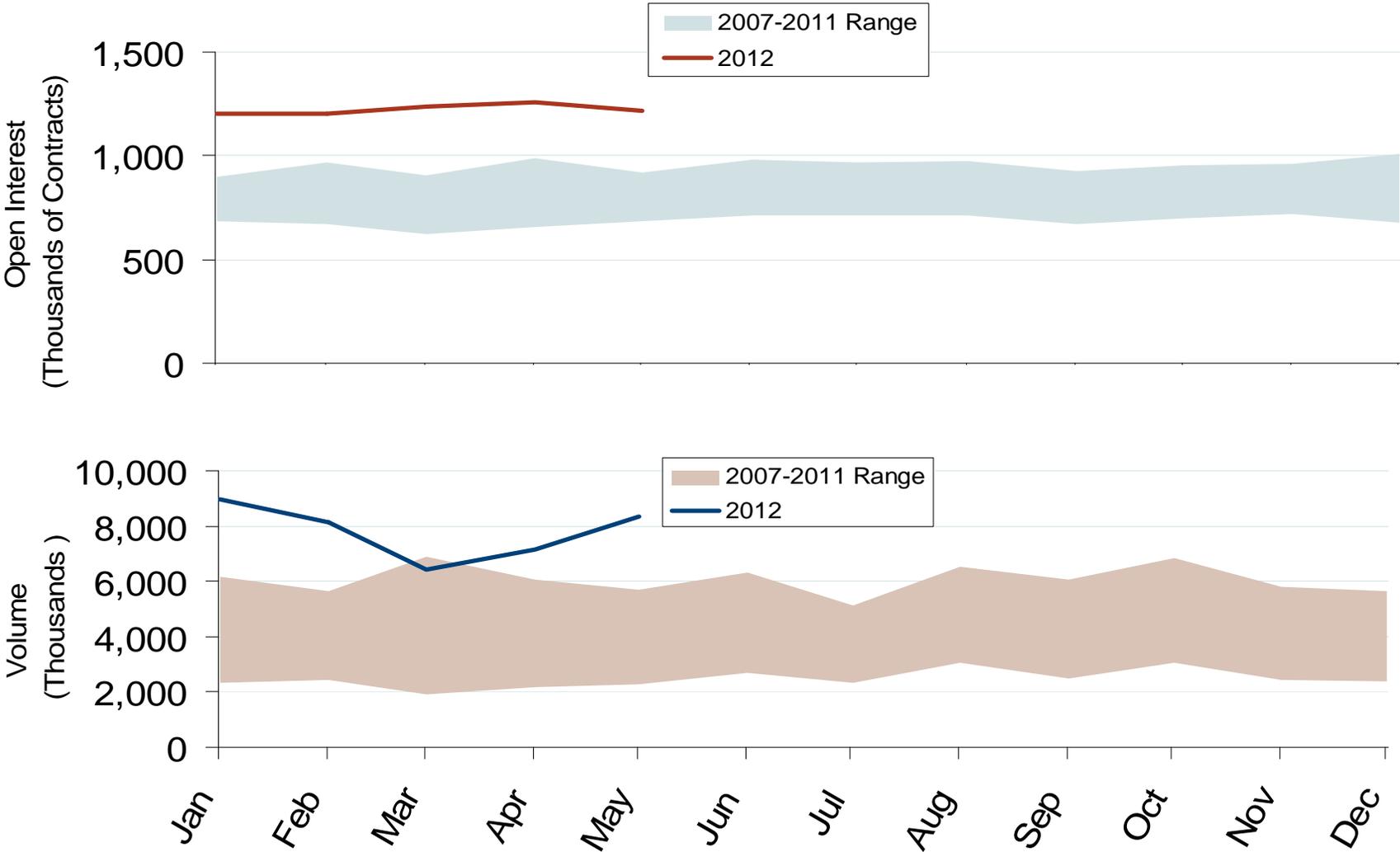
### Canadian and LNG Natural Gas Imports Into the U.S.



Source: EIA Natural Gas Monthly  
June 2012 Western Snapshot Report

Updated: June 18, 2012

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

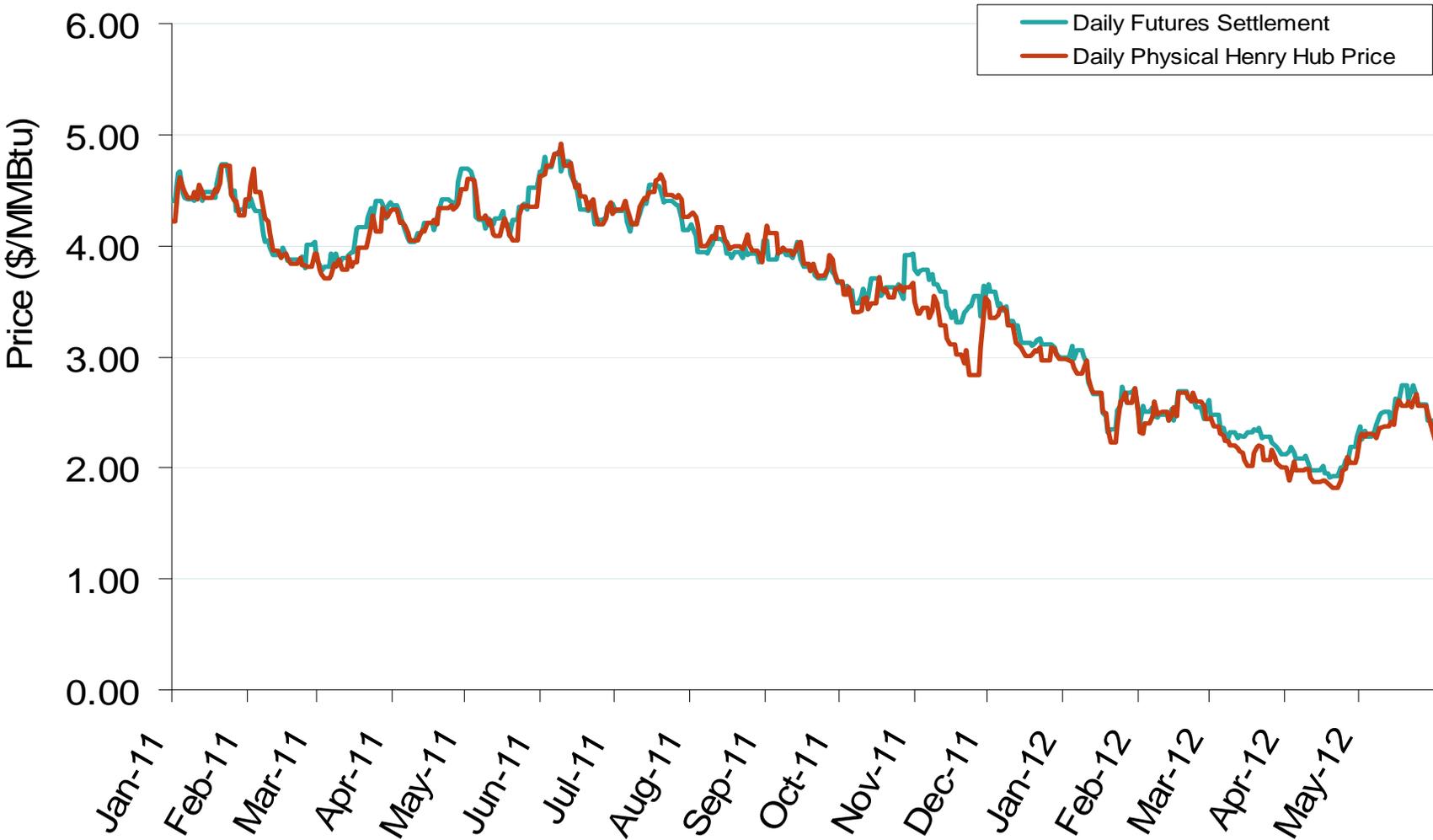


Source: Derived from Nymex data  
June 2012 Western Snapshot Report

Updated: June 21, 2012

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

### Daily Physical Index Price & Daily Futures Settlement Price

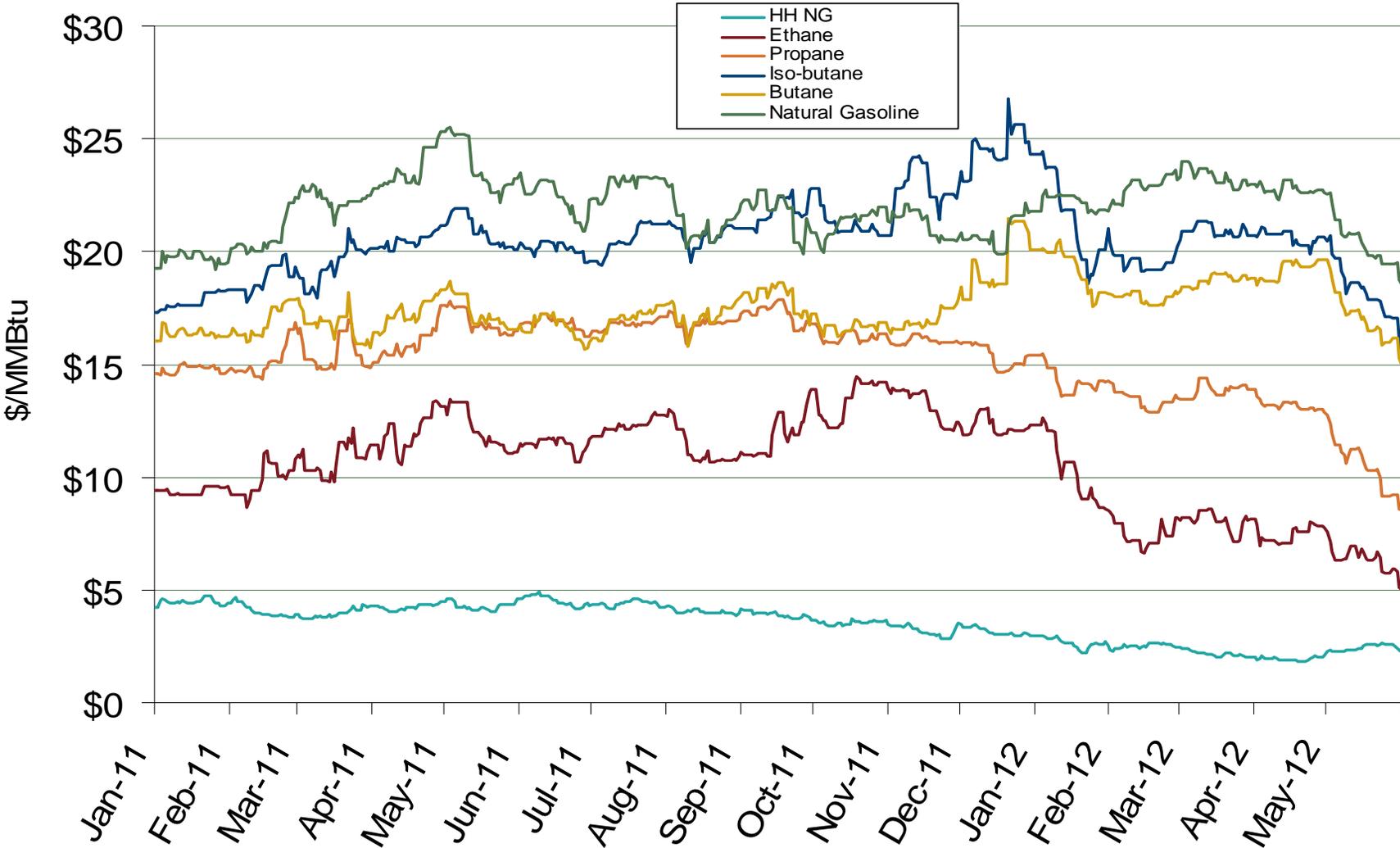


Source: Derived from *Bloomberg* data  
June 2012 Western Snapshot Report

Updated: June 18, 2012

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

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



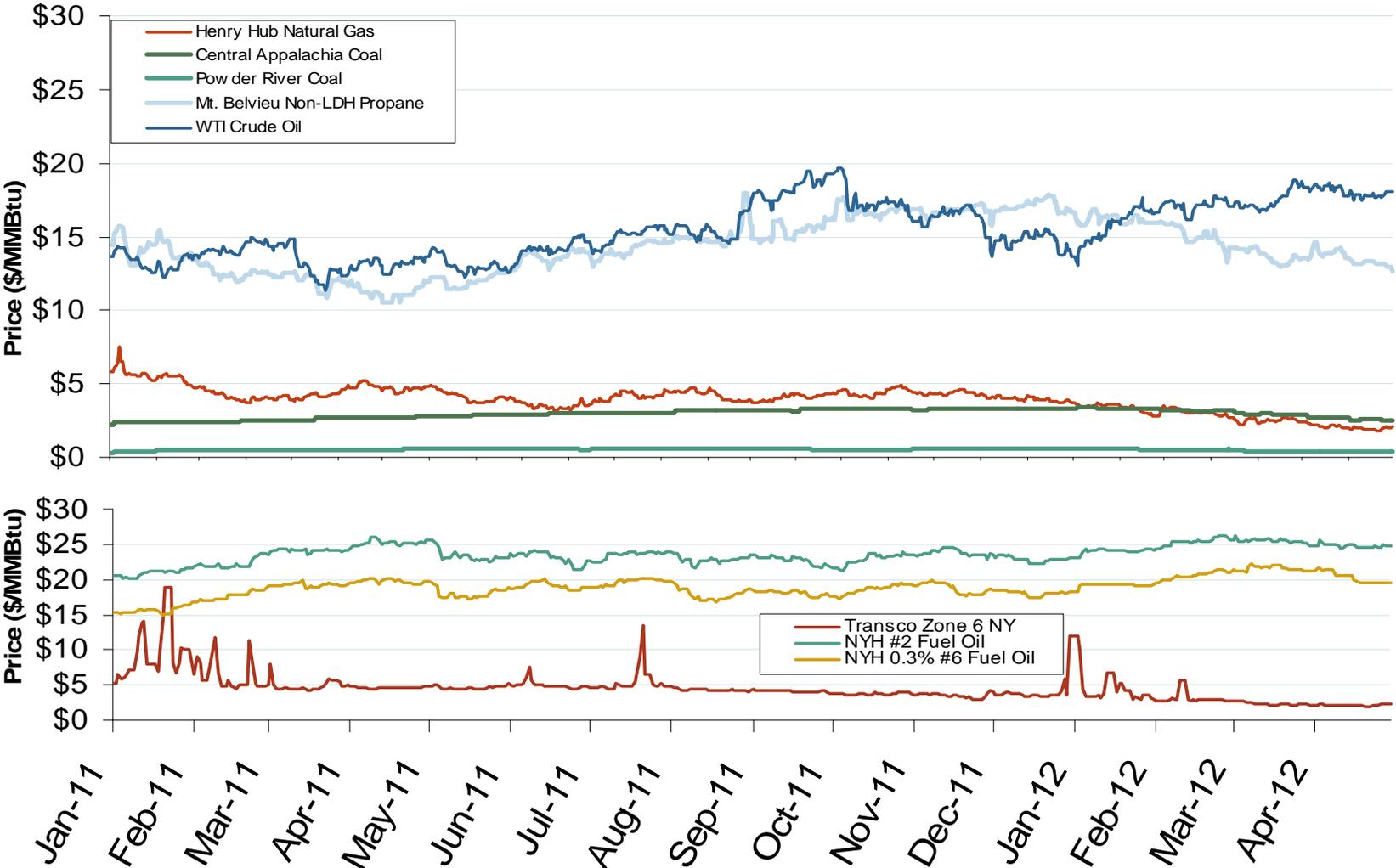
Source: Derived from *Bloomberg* Data  
June 2012 Western Snapshot Report

Updated: June 18, 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



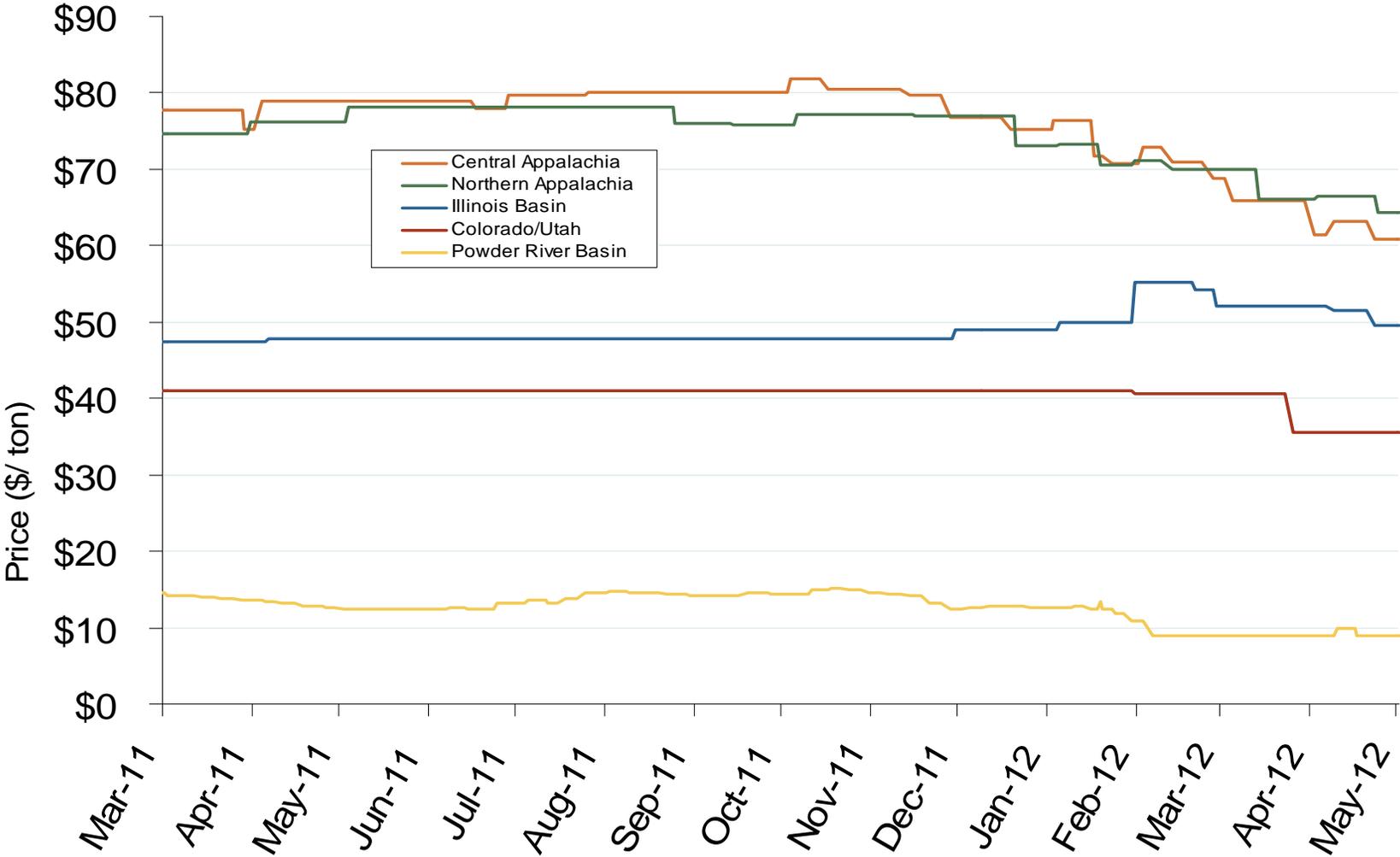
Notes: Coal prices are quoted in \$/ton. Conversion factors to \$/MMBtu are based on contract specifications of 12,000 btus/pound for Central Appalachian coal and 8800 btus/pound for Powder River Basin coal

Source: Derived from ICE and Bloomberg data

June 2012 Western Snapshot Report

Updated: June 18, 2012

# Central Appalachian and Powder River Basin Coal Prices



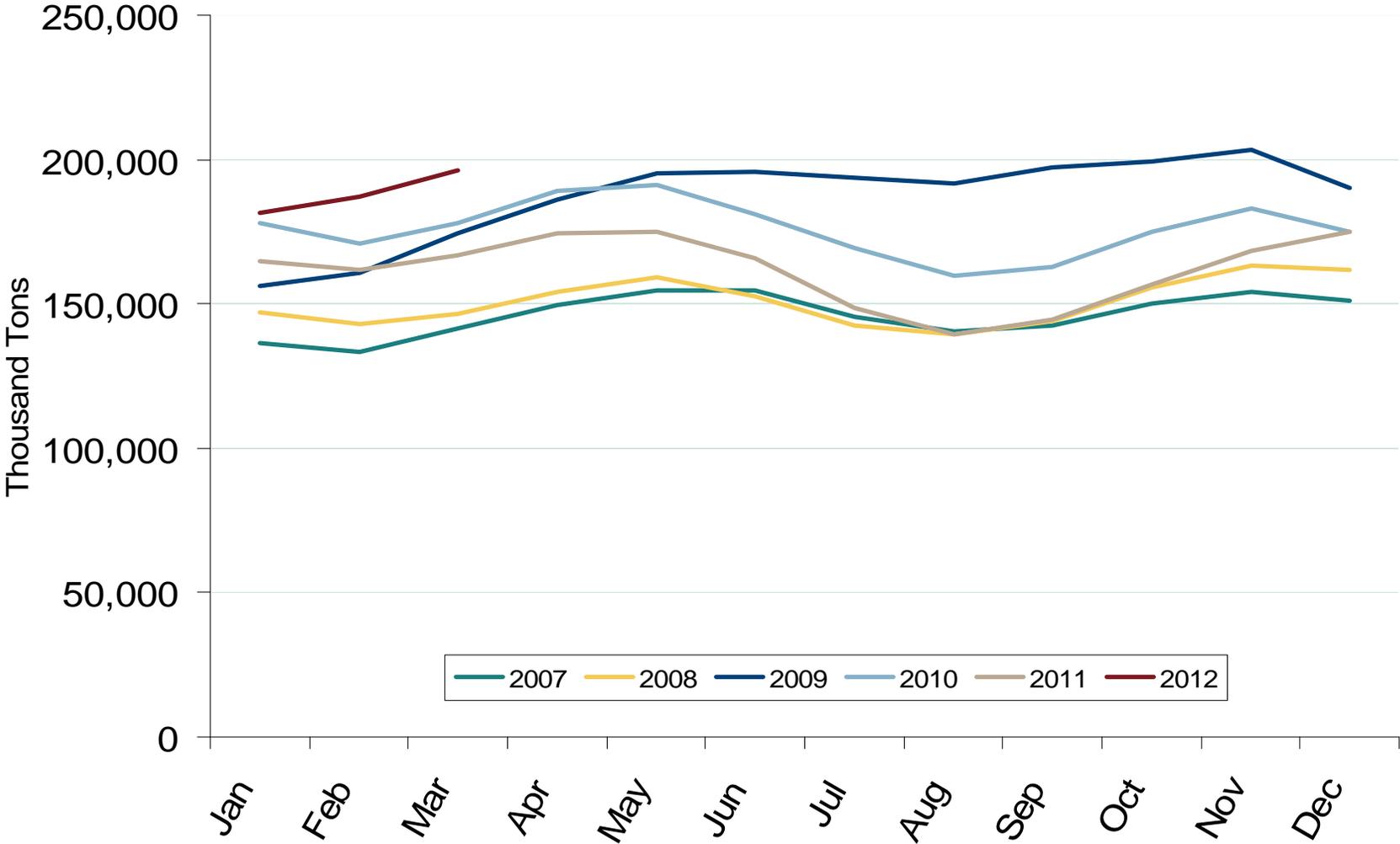
Notes: The Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances

Source: Derived from Bloomberg data

June 2012 Western Snapshot Report

Updated: June 18, 2012

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



Source: Derived from EIA data. Excludes Industrial and Commercial Plants  
June 2012 Western Snapshot Report

Updated: June 14, 2012