

OE ENERGY MARKET SNAPSHOT

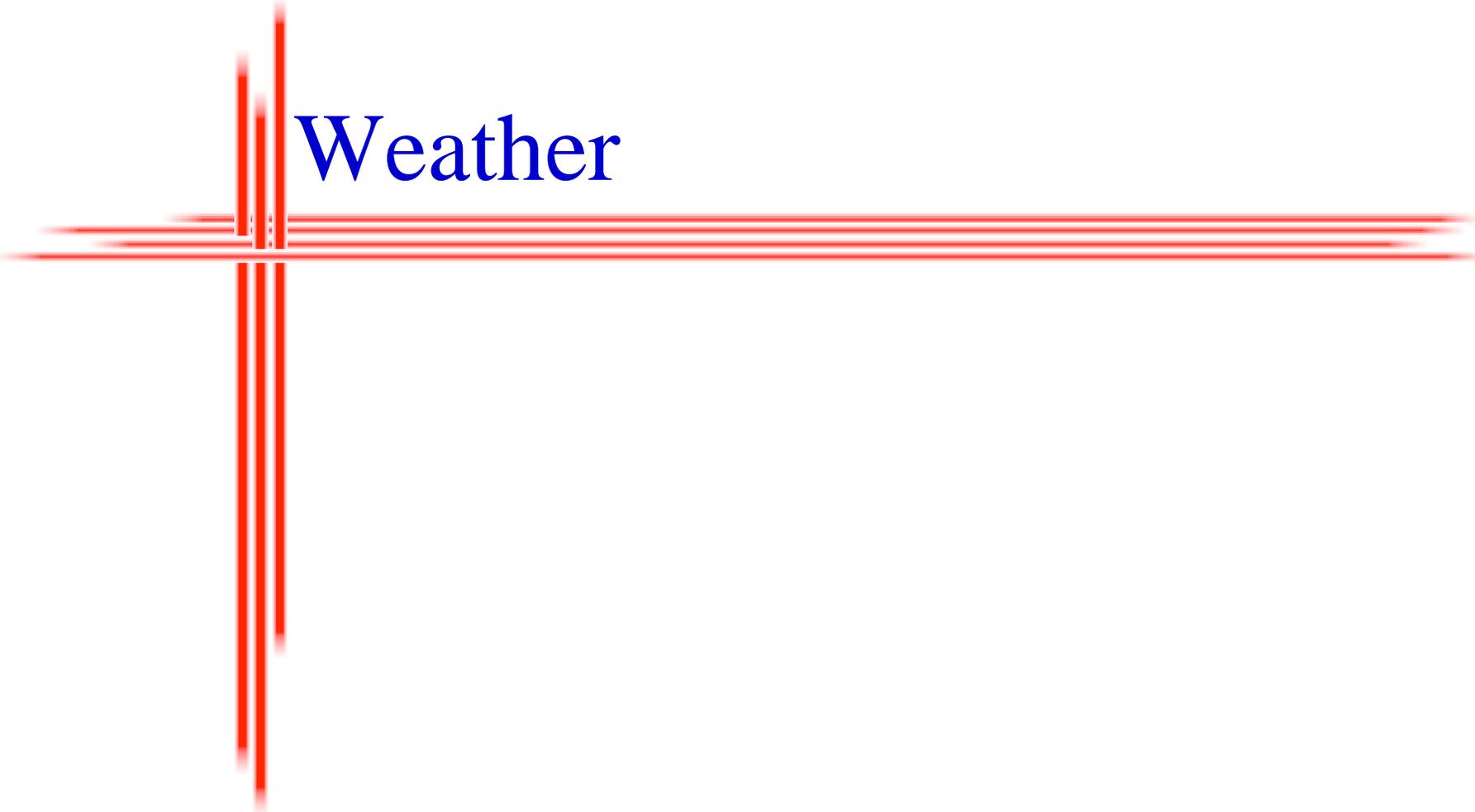
Western States Version – June 2012 Data

Office of Enforcement
Federal Energy Regulatory Commission
July 2012



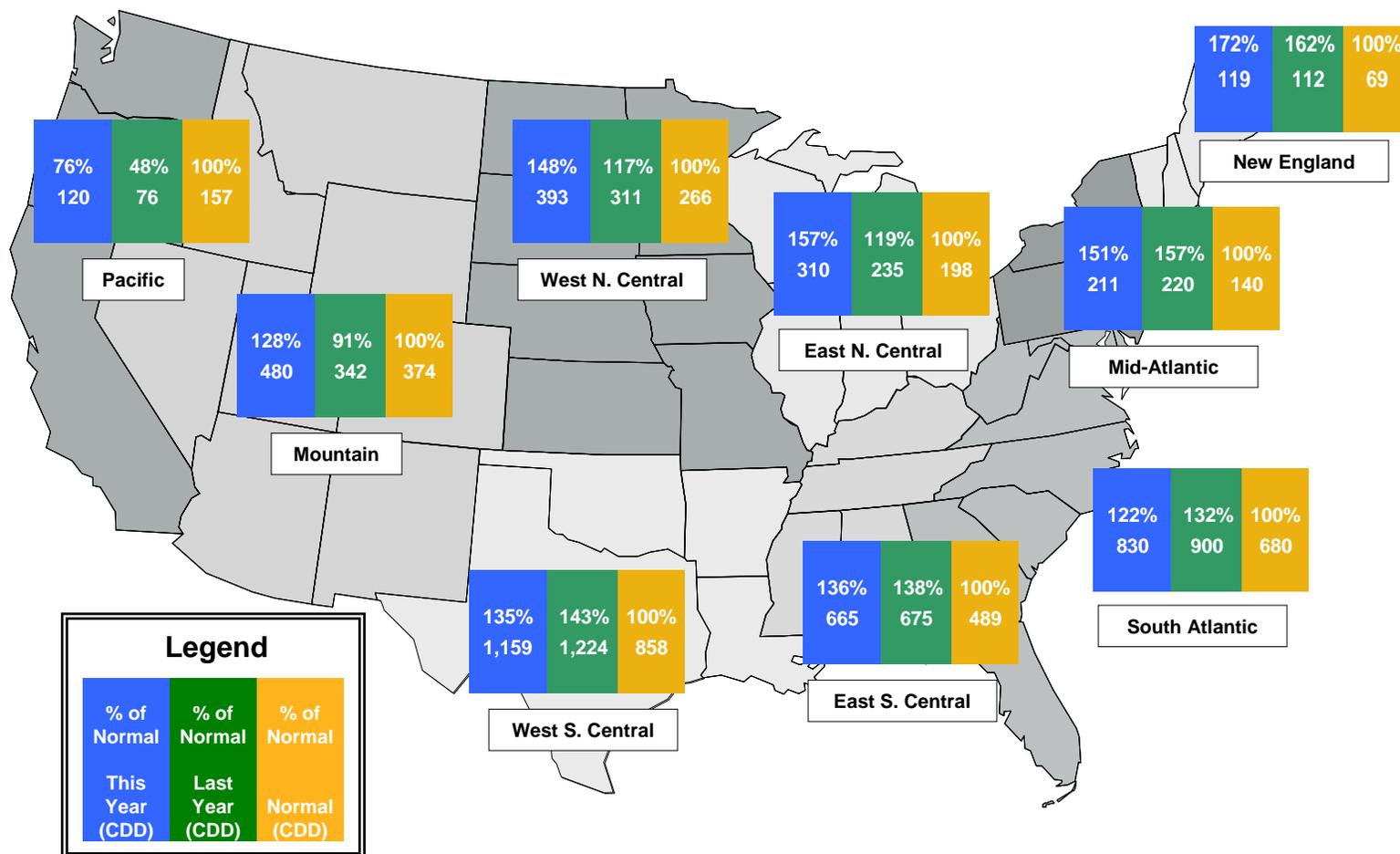
Infrastructure Report

May Infrastructure Report



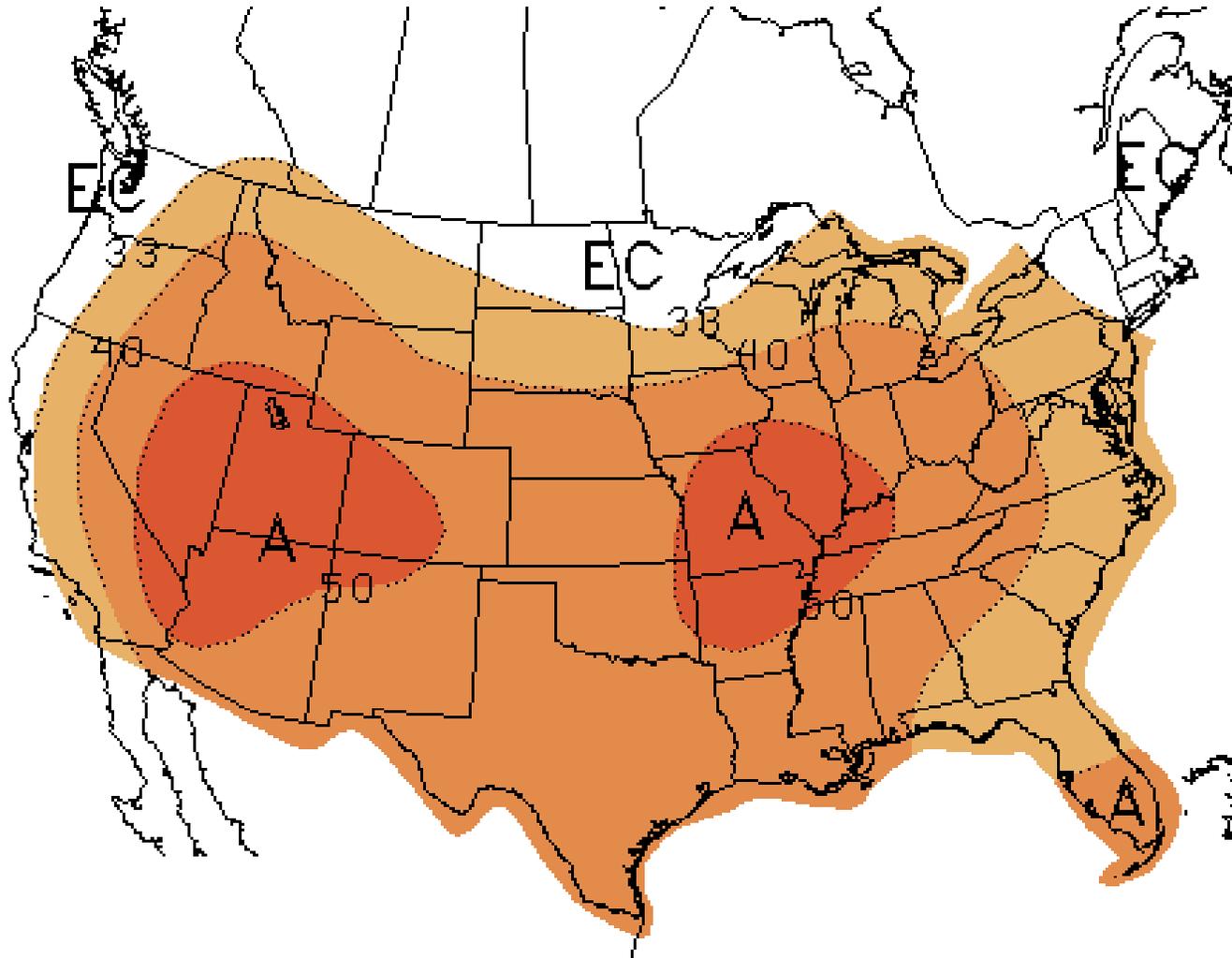
Weather

Regional Cooling Degree Days – January to June 2012



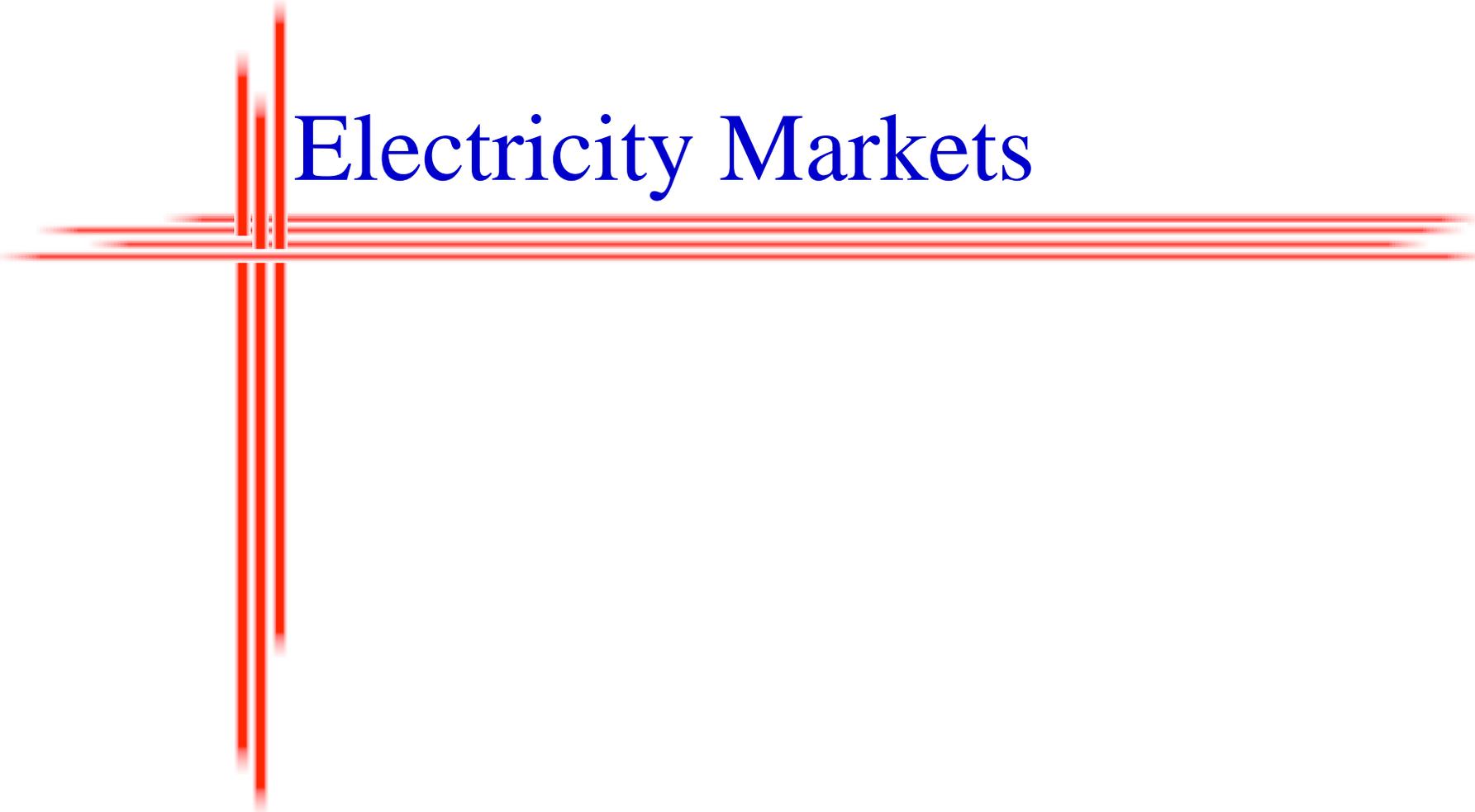
Source: Derived from NOAA data. Normal is based on a 30-year average of cooling degree day data.
 July 2012 Western Snapshot Report

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

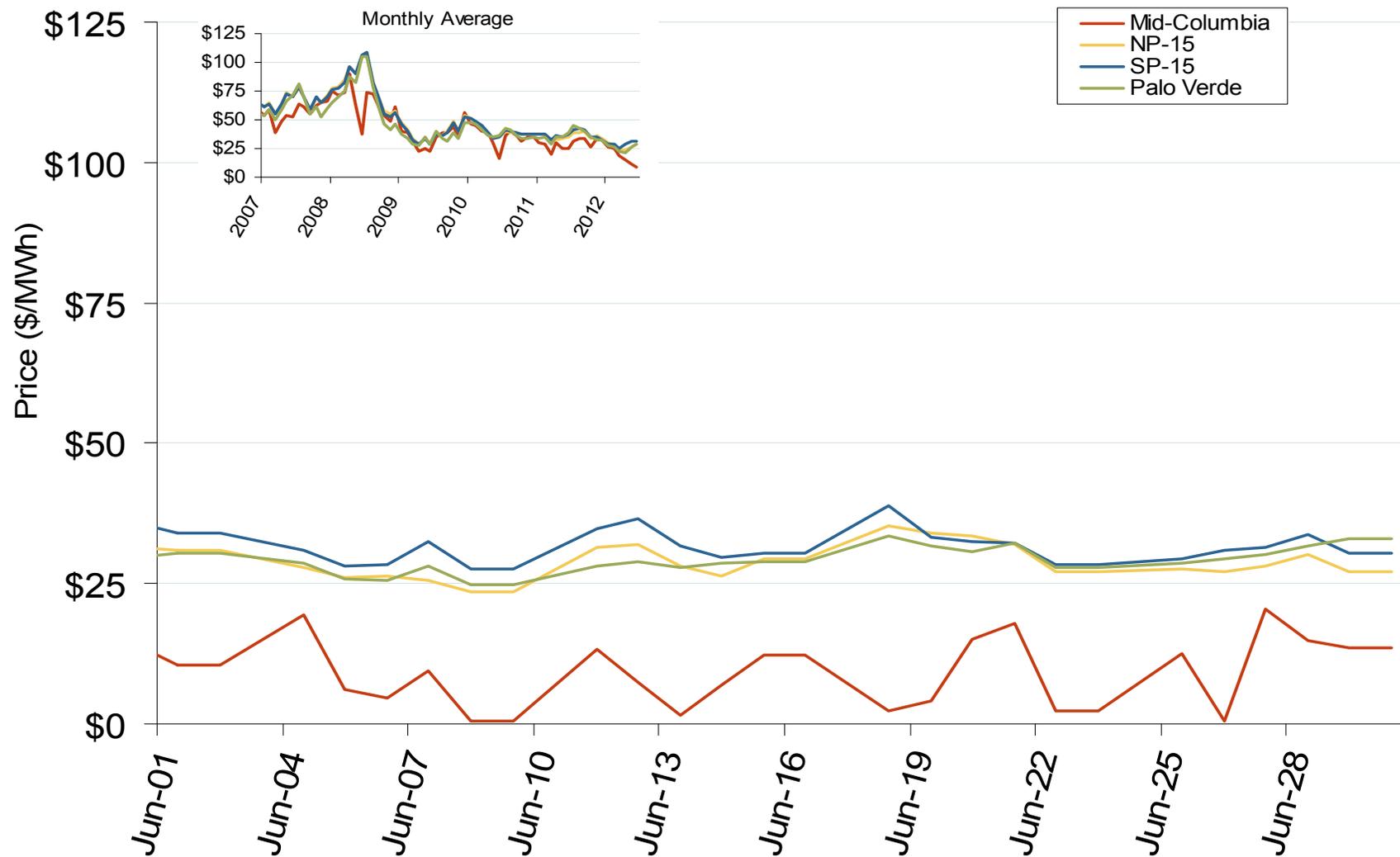


Electricity Markets

California Electric Market: Last Month's Western Index Prices

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

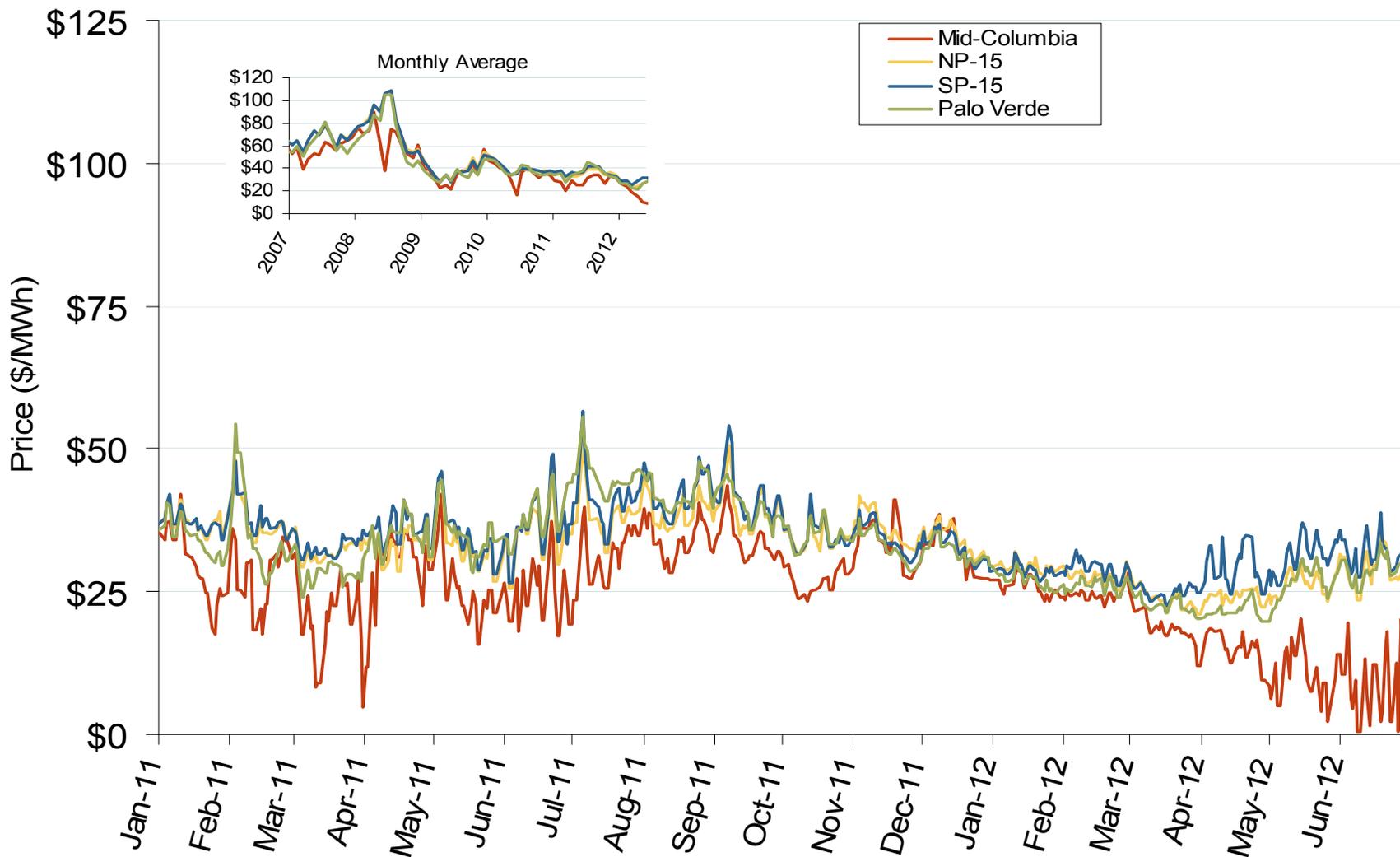
Western Daily Index Day-Ahead On-Peak Prices



California Electric Market: Western Index Prices

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

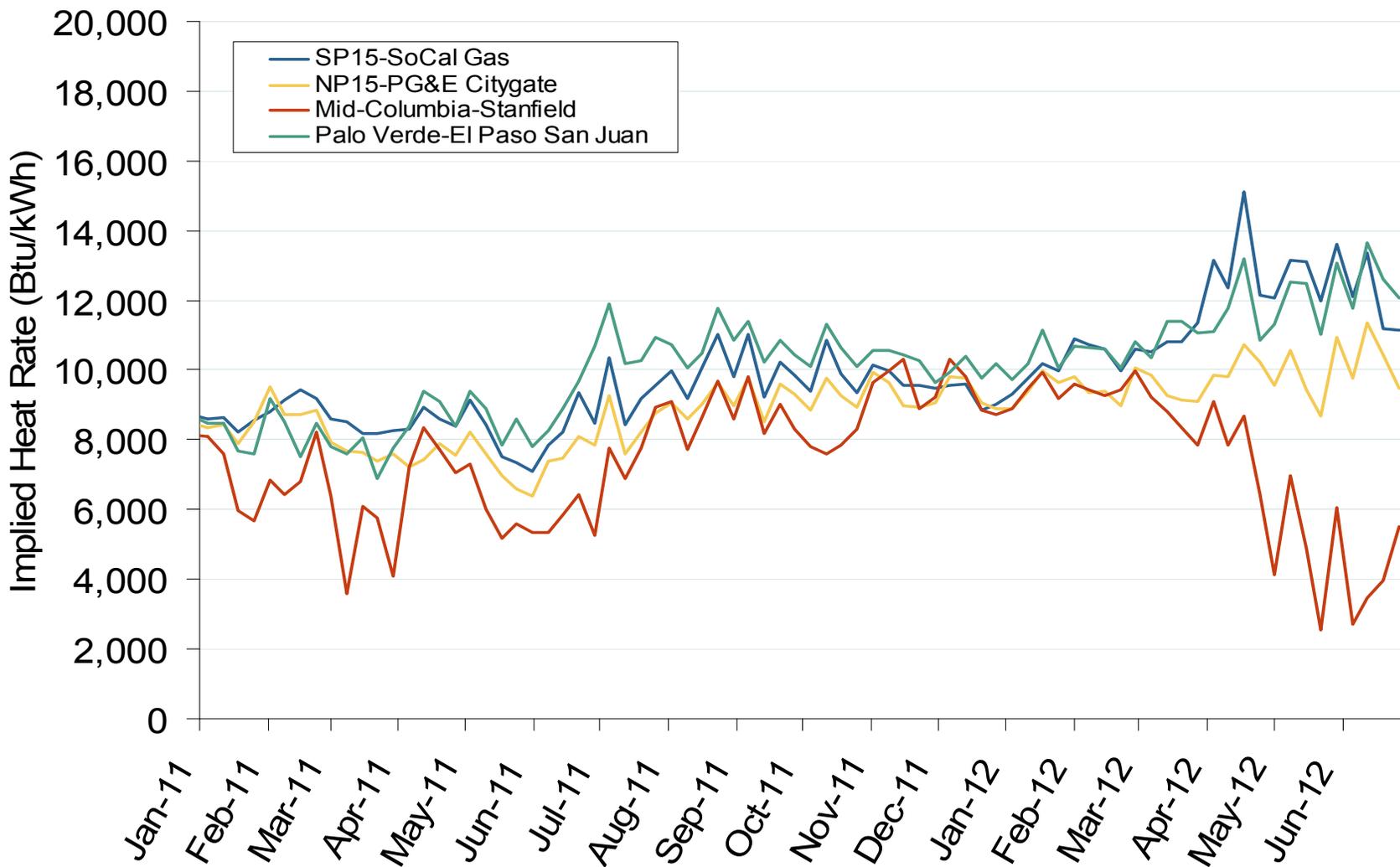
Western Daily Index Day-Ahead On-Peak Prices



Southwest Electric Market: Western Implied Heat Rates

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Implied Heat Rates at Western Trading Points - Weekly Avgs.



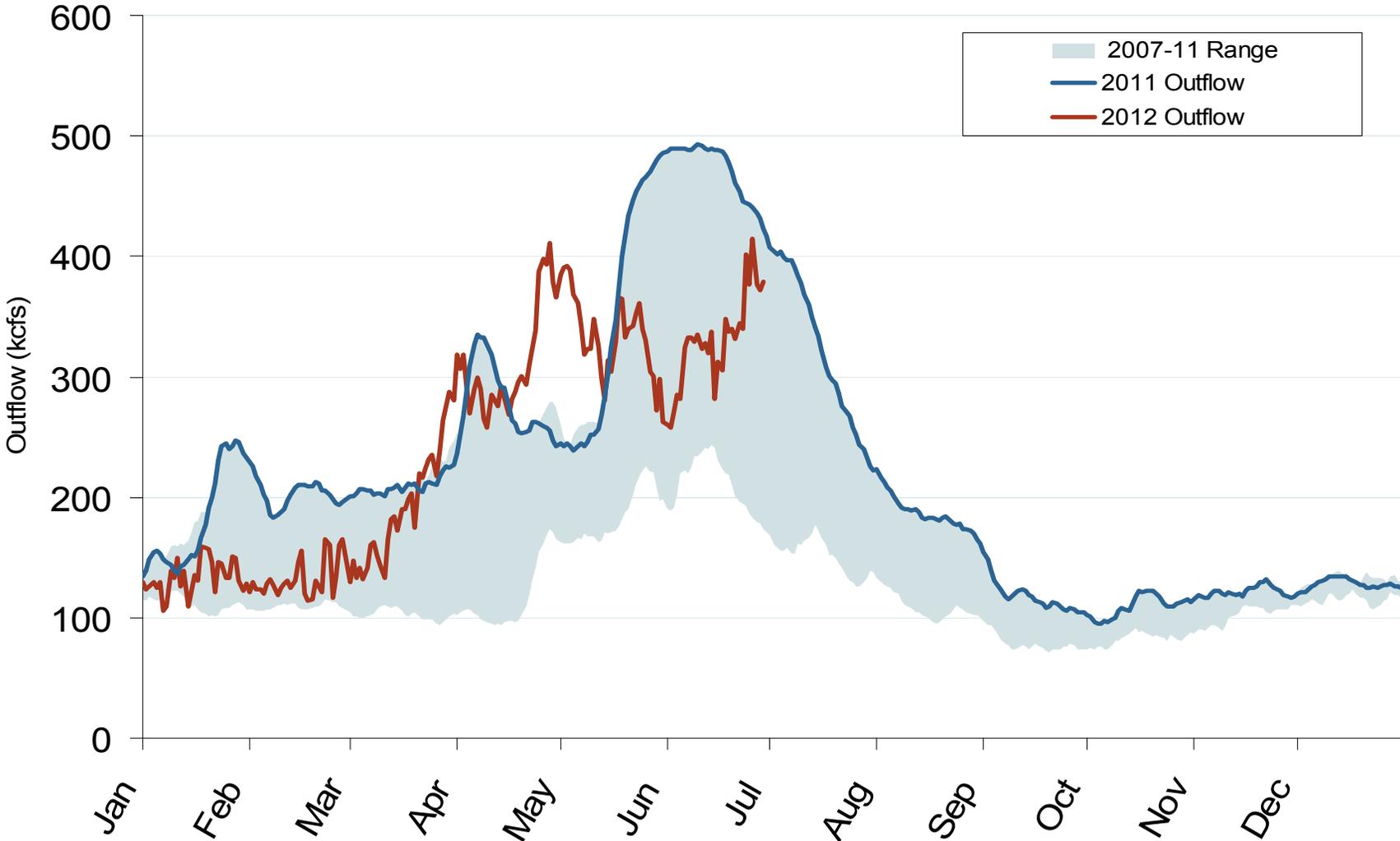
Source: Derived from Platts on-peak electric and natural gas price data
 July 2012 Western Snapshot Report

Updated: July 10, 2012

Northwest Electric Market: The Dalles Dam Stream Flow

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

Stream Flows at the Dalles Dam

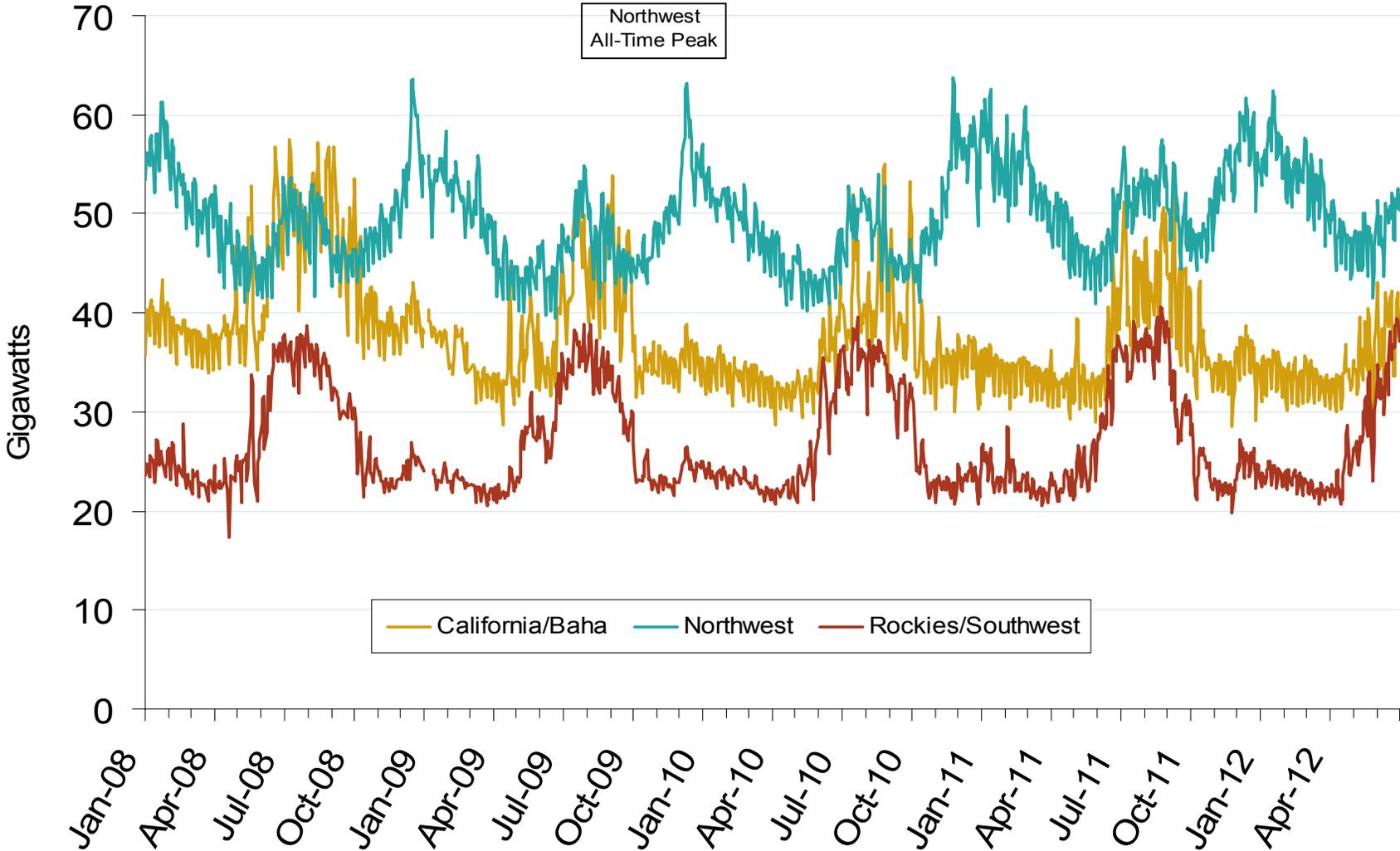


Notes: Trend lines are 7-day moving averages
Source: Derived from USACE data
July 2012 Western Snapshot Report

California Electric Market: Daily Peak Demand

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Western Daily Actual Peak Demand

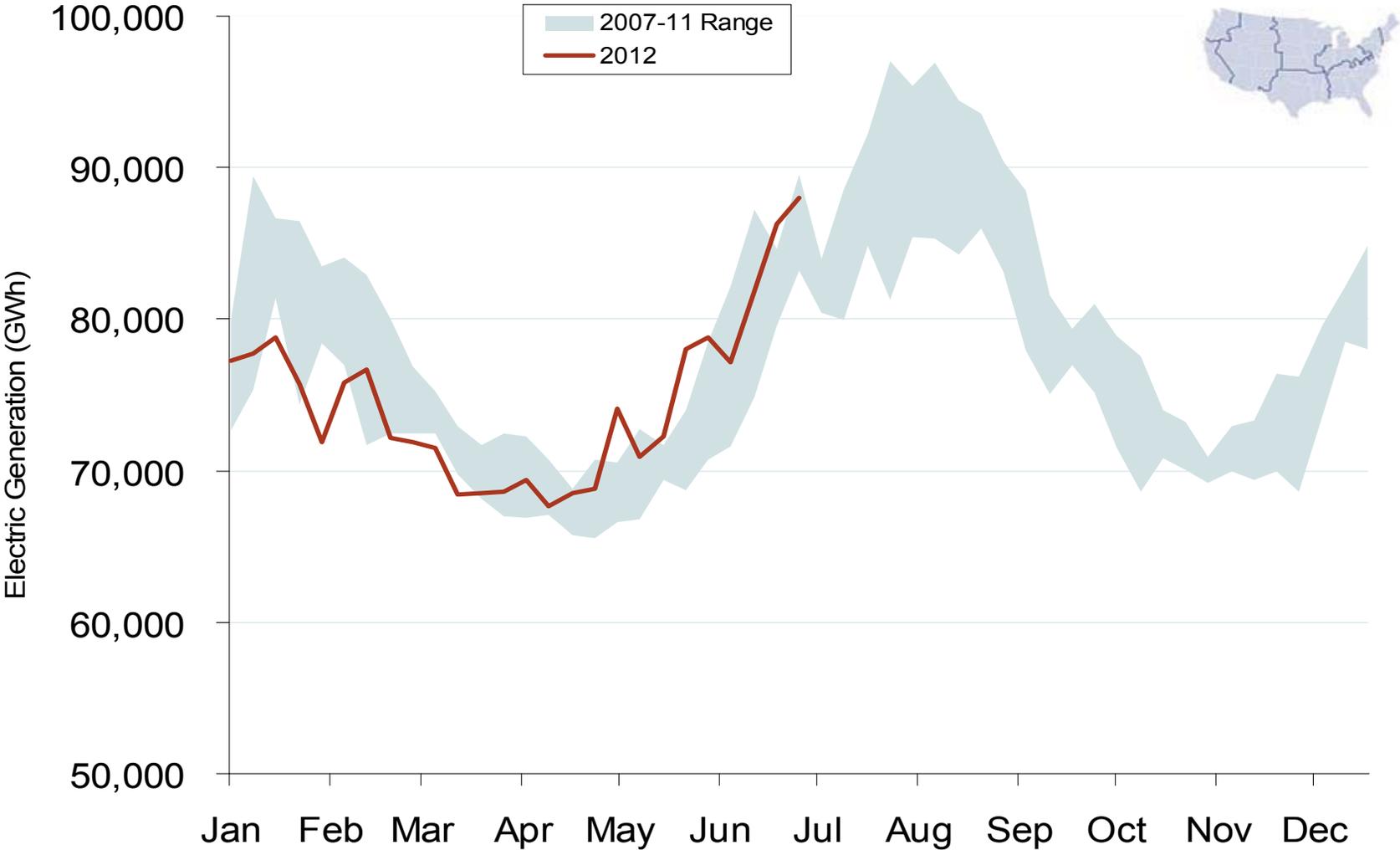


Notes: Data prior to 9/14/2010 does not include weekends and holidays. Some data for 12/31/2008 – 1/9/2009 are not available from WECC

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

Updated: July 12, 2012

Weekly U.S. Electric Generation Output



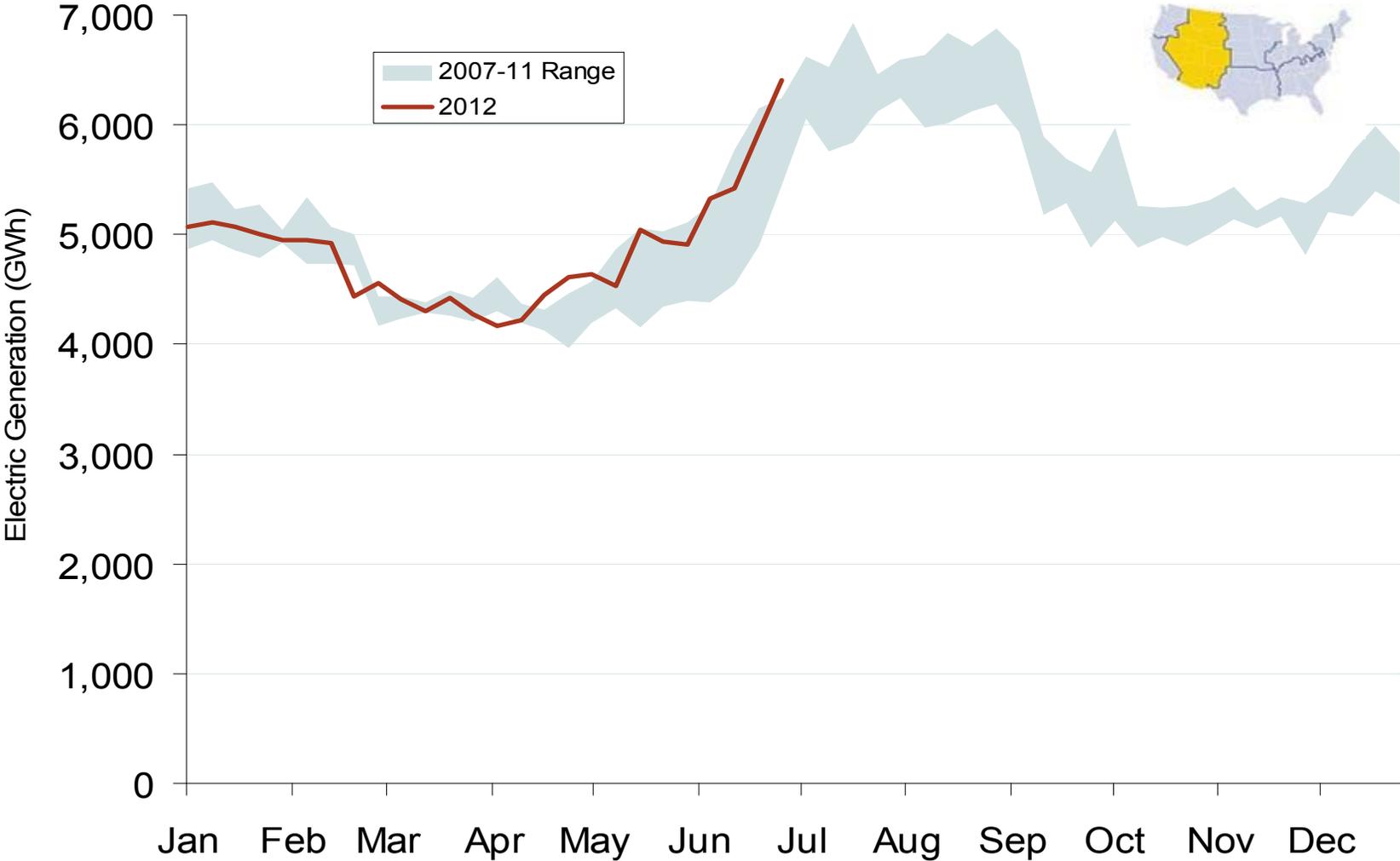
Source: Derived from *EEI* data
July 2012 Western Snapshot Report

Updated: July 11, 2012

Southwest Electric Market: Generation Output

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

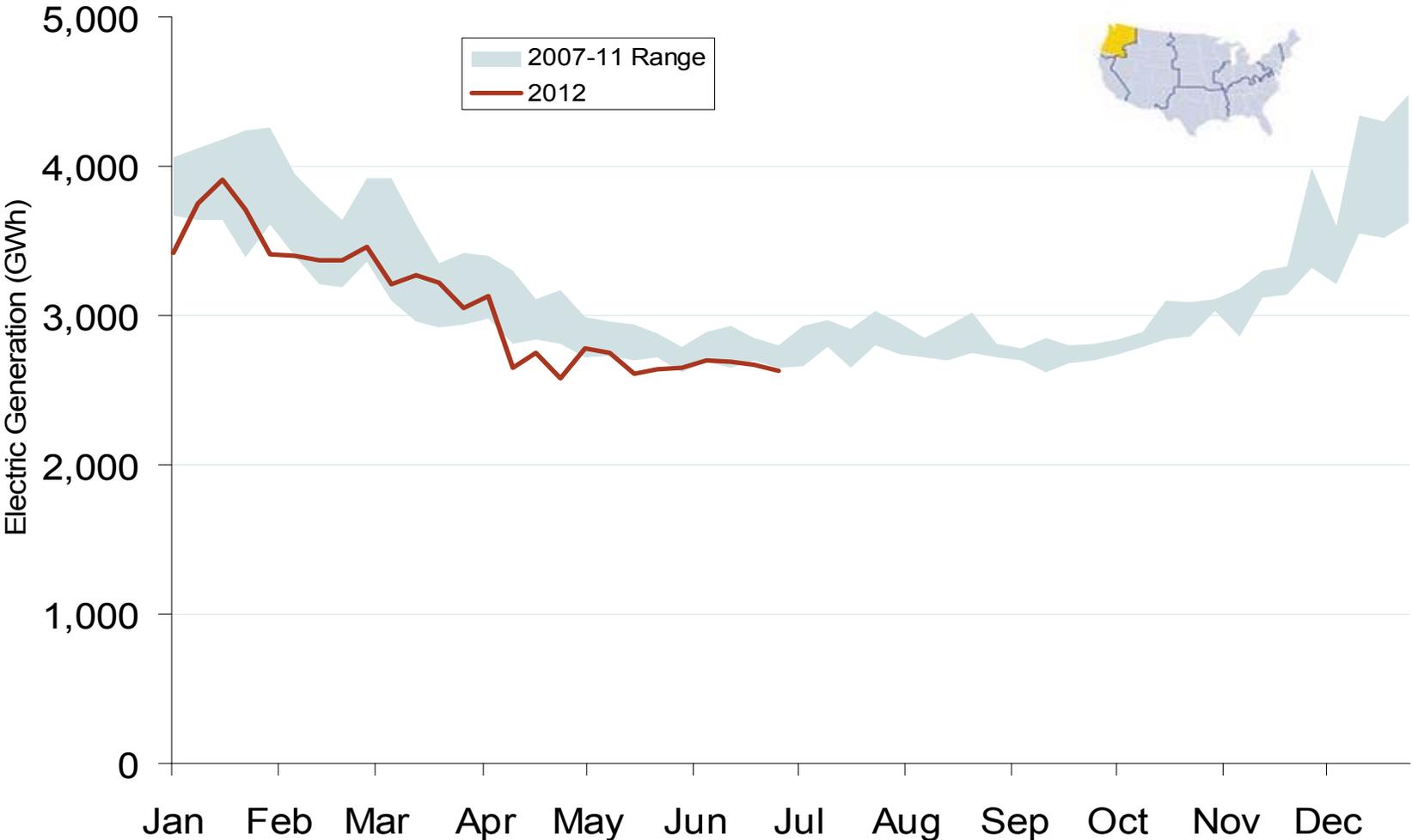
Weekly Generation Output - Rocky Mountains



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

Updated: July 23, 2012

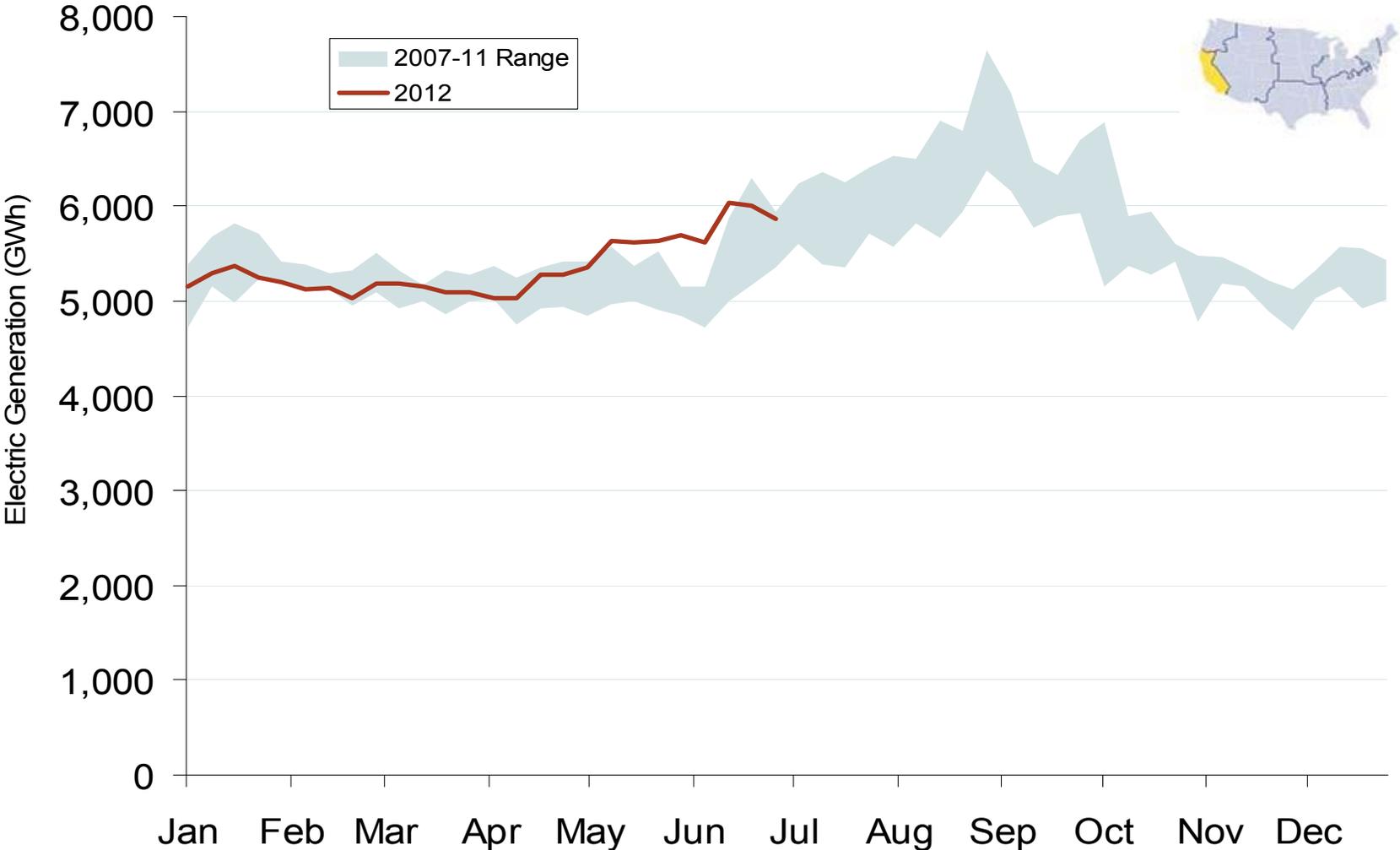
Weekly Generation Output - Pacific Northwest



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

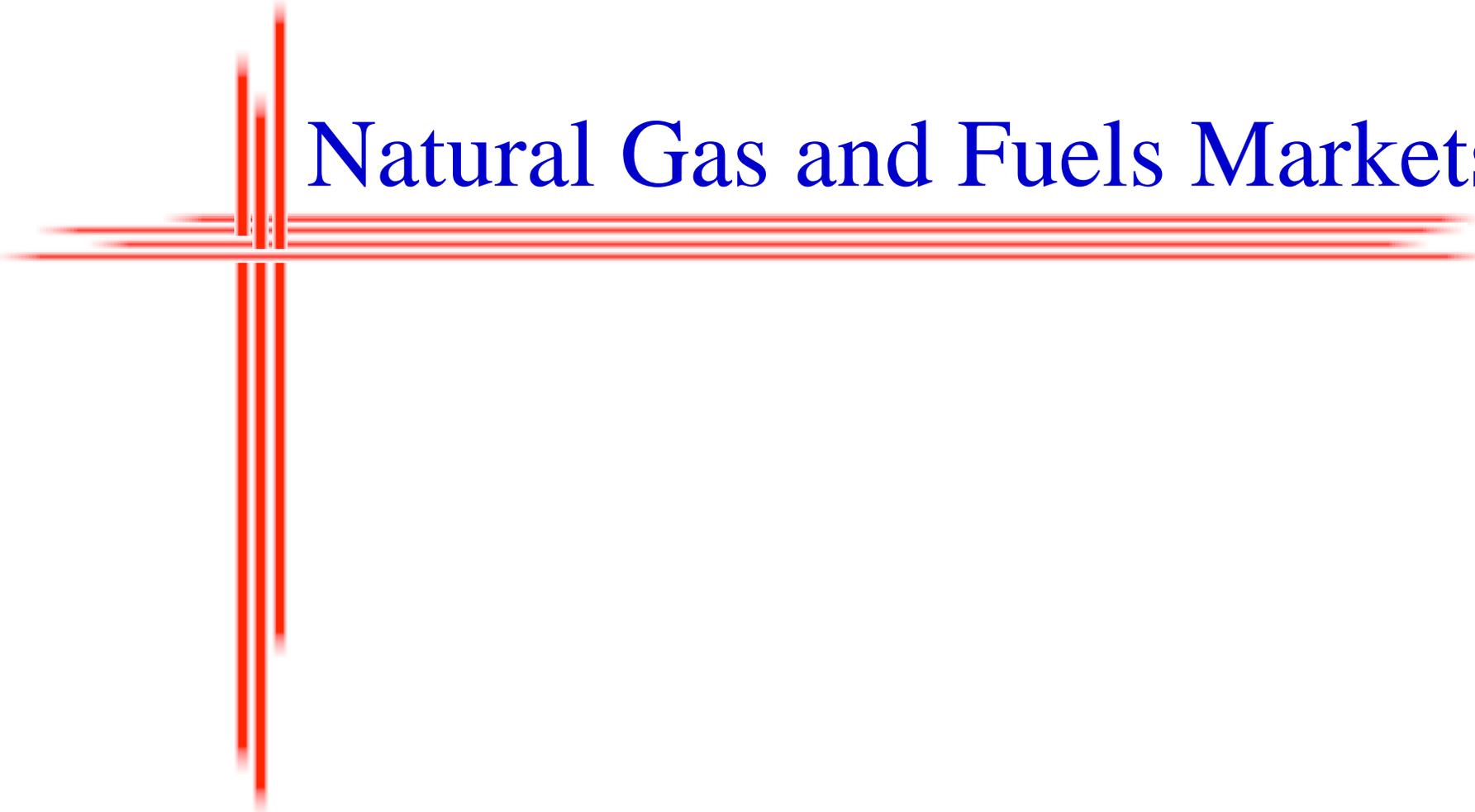
Updated: July 11, 2012

Weekly Generation Output - California



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

Updated: July 11, 2012

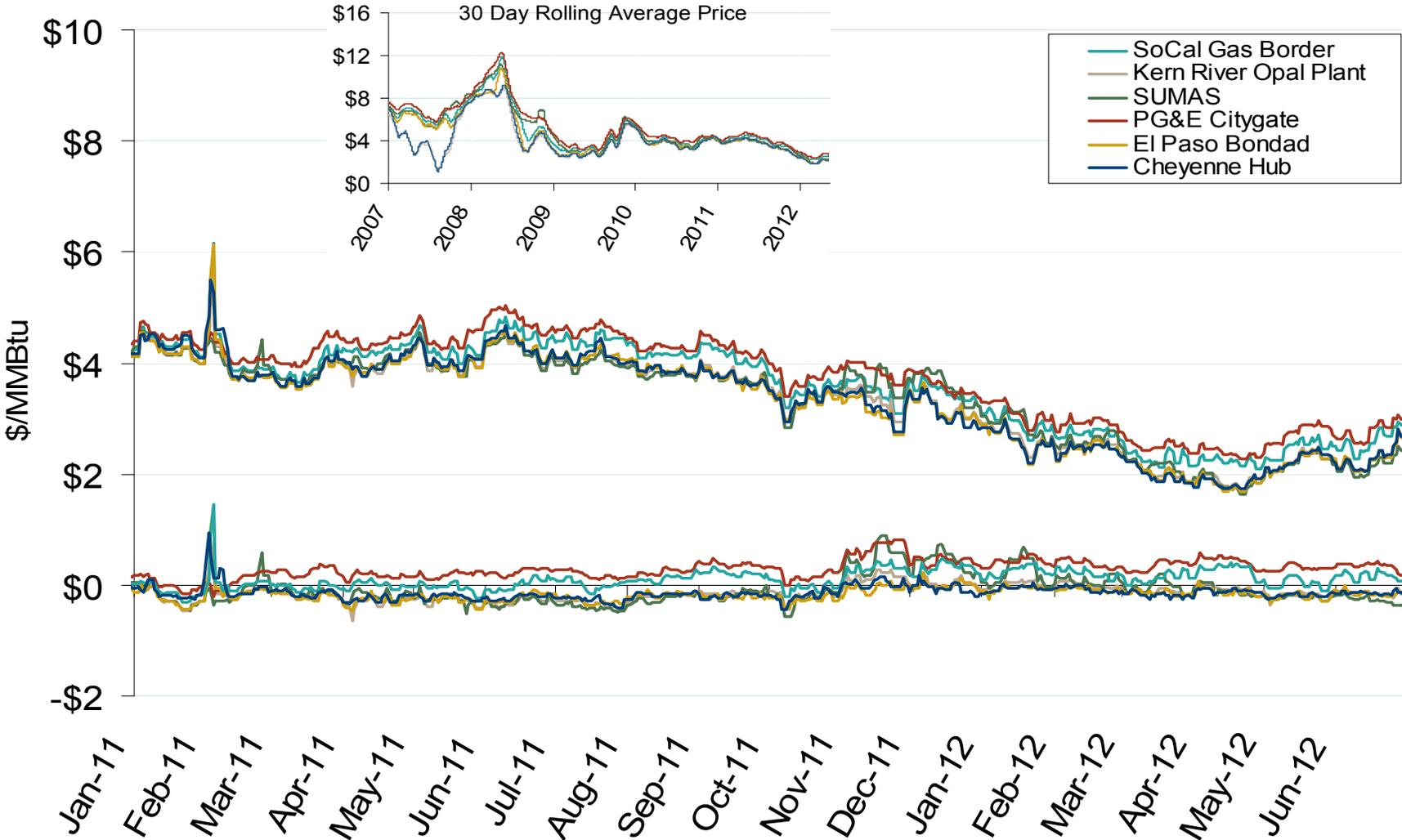


Natural Gas and Fuels Markets

Western Natural Gas Market: Spot Prices and Basis

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Western Day-Ahead Hub Spot Prices and Basis



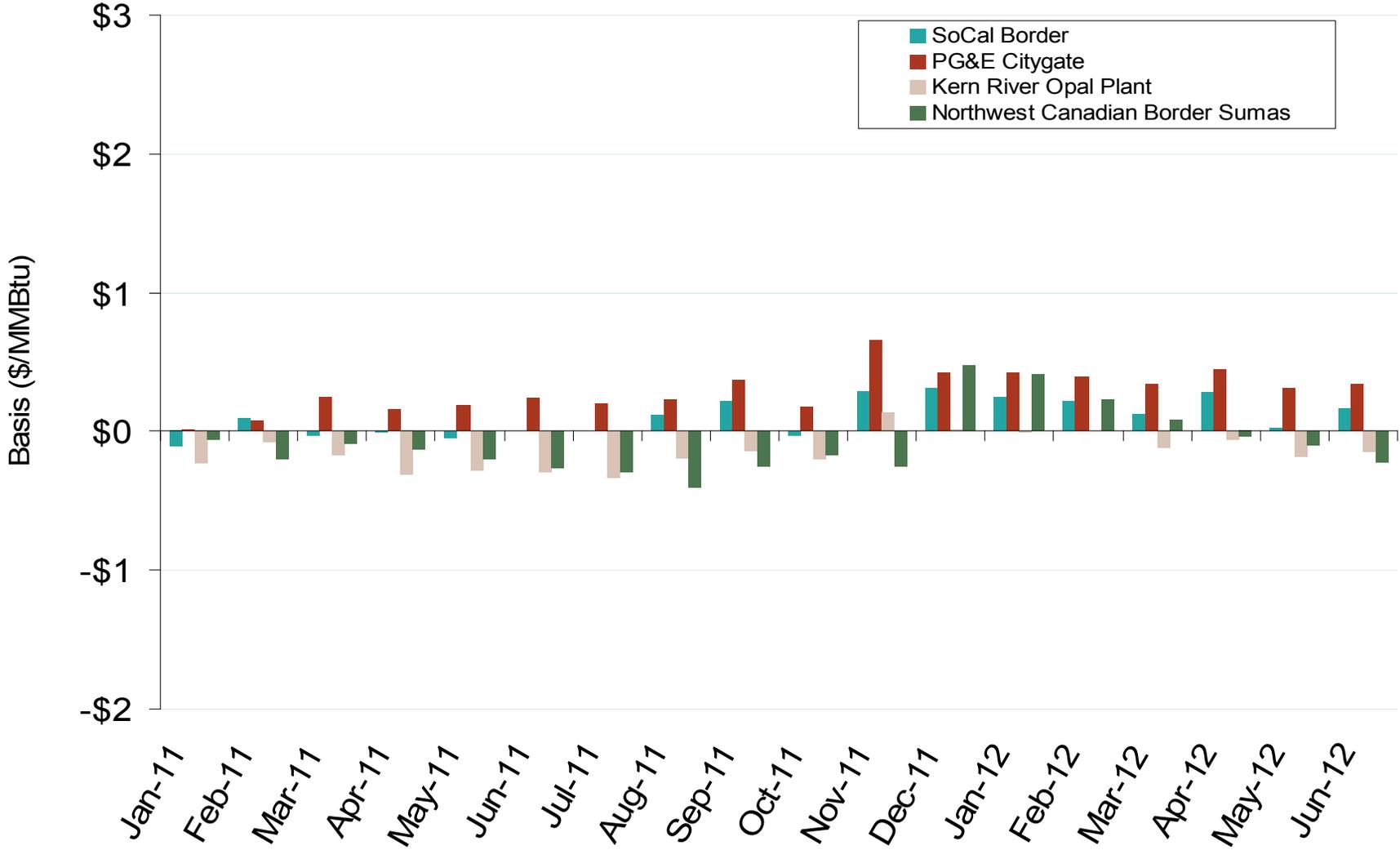
Source: Derived from *Platts* data
July 2012 Western Snapshot Report

Updated: July 06, 2012

Western Natural Gas Market: Average Basis to Henry Hub

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Western Monthly Average Basis Value to Henry Hub

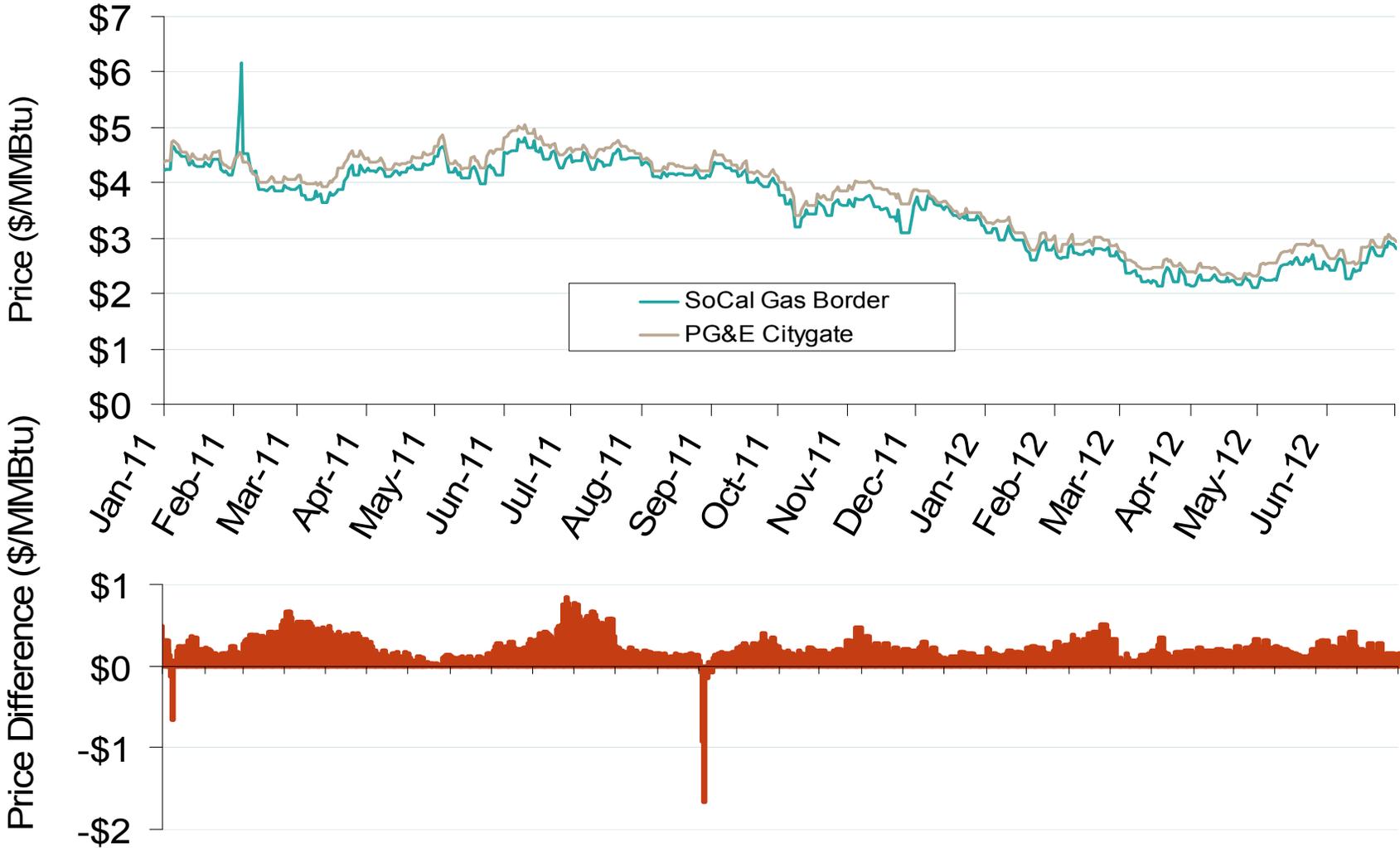


Source: Derived from Platts data
July 2012 Western Snapshot Report

Updated: July 06, 2012

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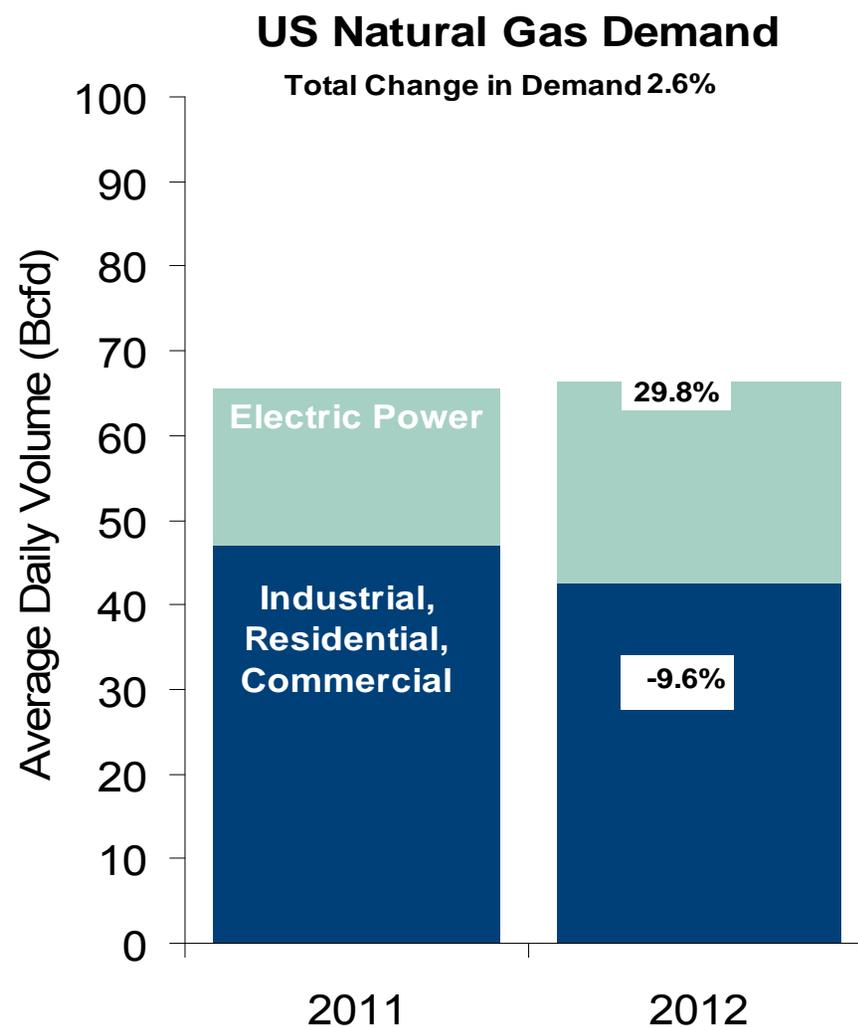
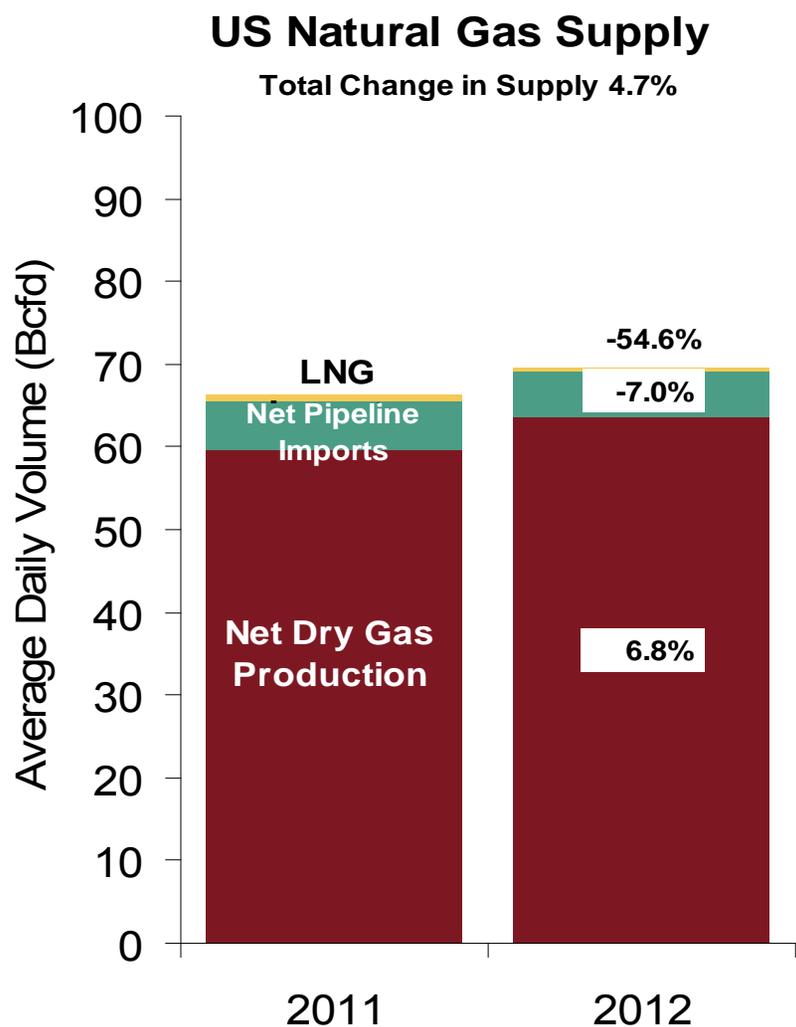
Difference in Northern and Southern California Daily Spot Prices



Source: Derived from Platts data
July 2012 Western Snapshot Report

Updated: July 06, 2012

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



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

Source: Derived from *Bentek Energy* data

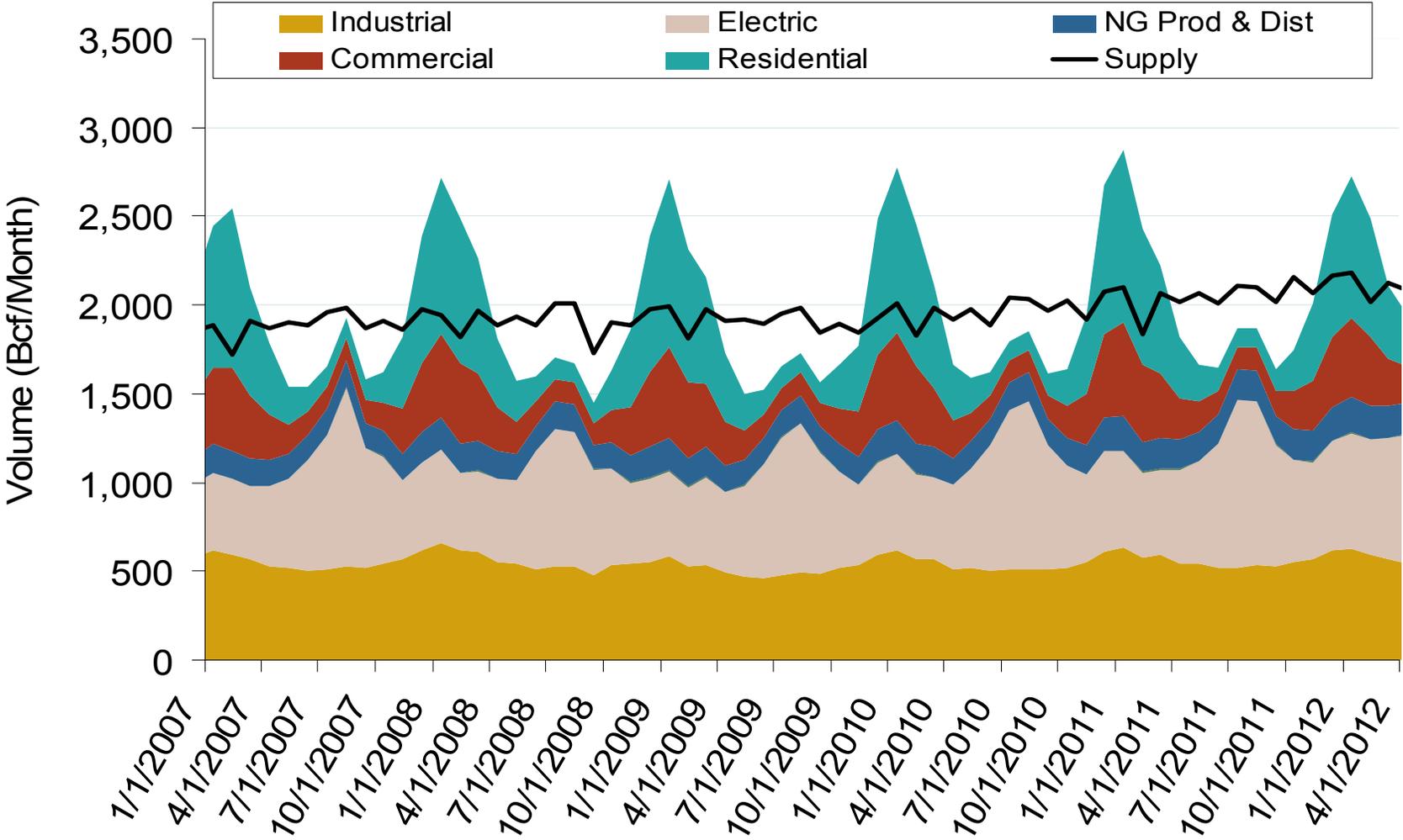
July 2012 Western Snapshot Report

Updated: July 11, 2012

Natural Gas market Overview: Consumption by Sector

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

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

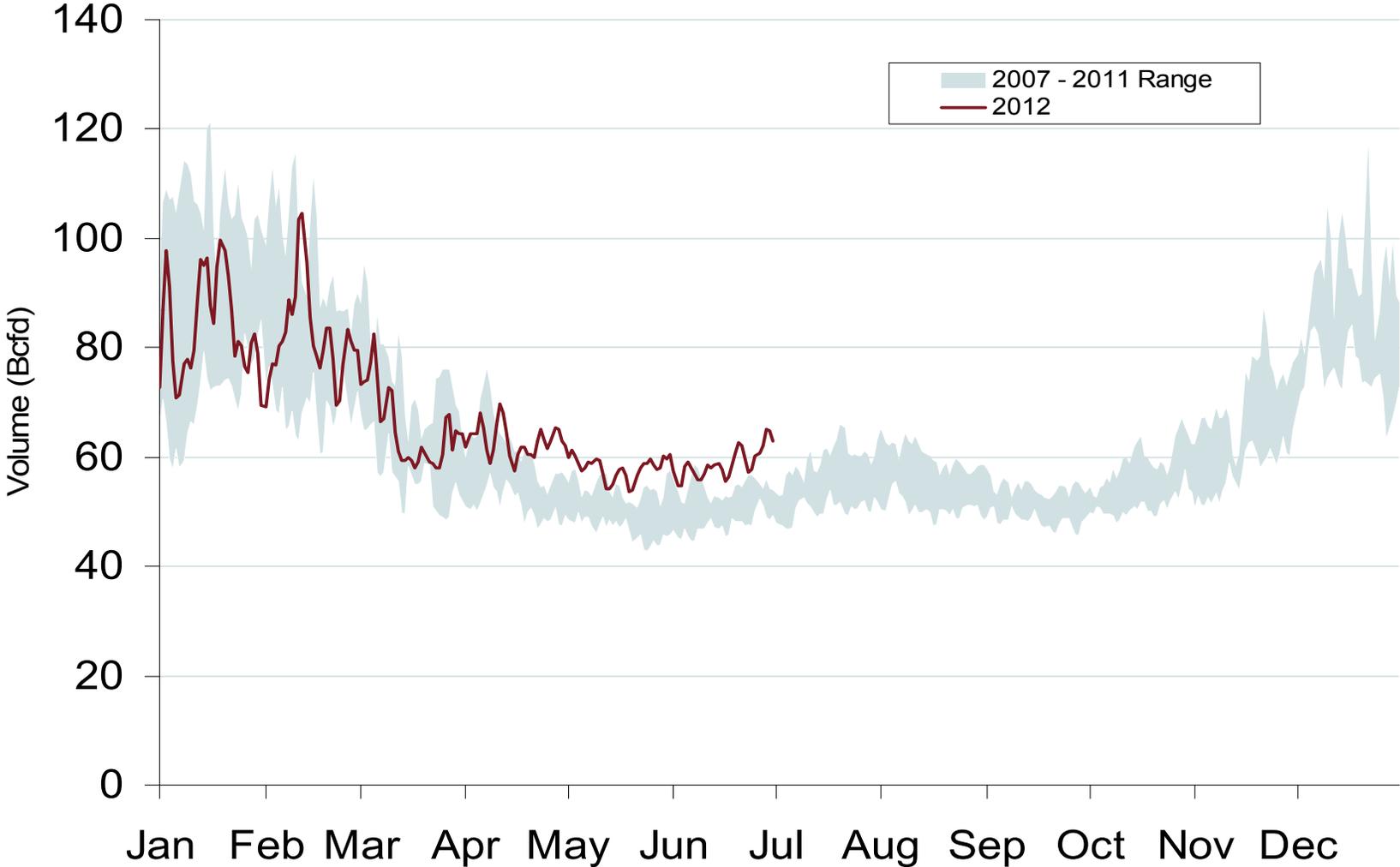
July 2012 Western Snapshot Report

Updated: July 12, 2012

Natural Gas Market Overview: Total US Gas Demand

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

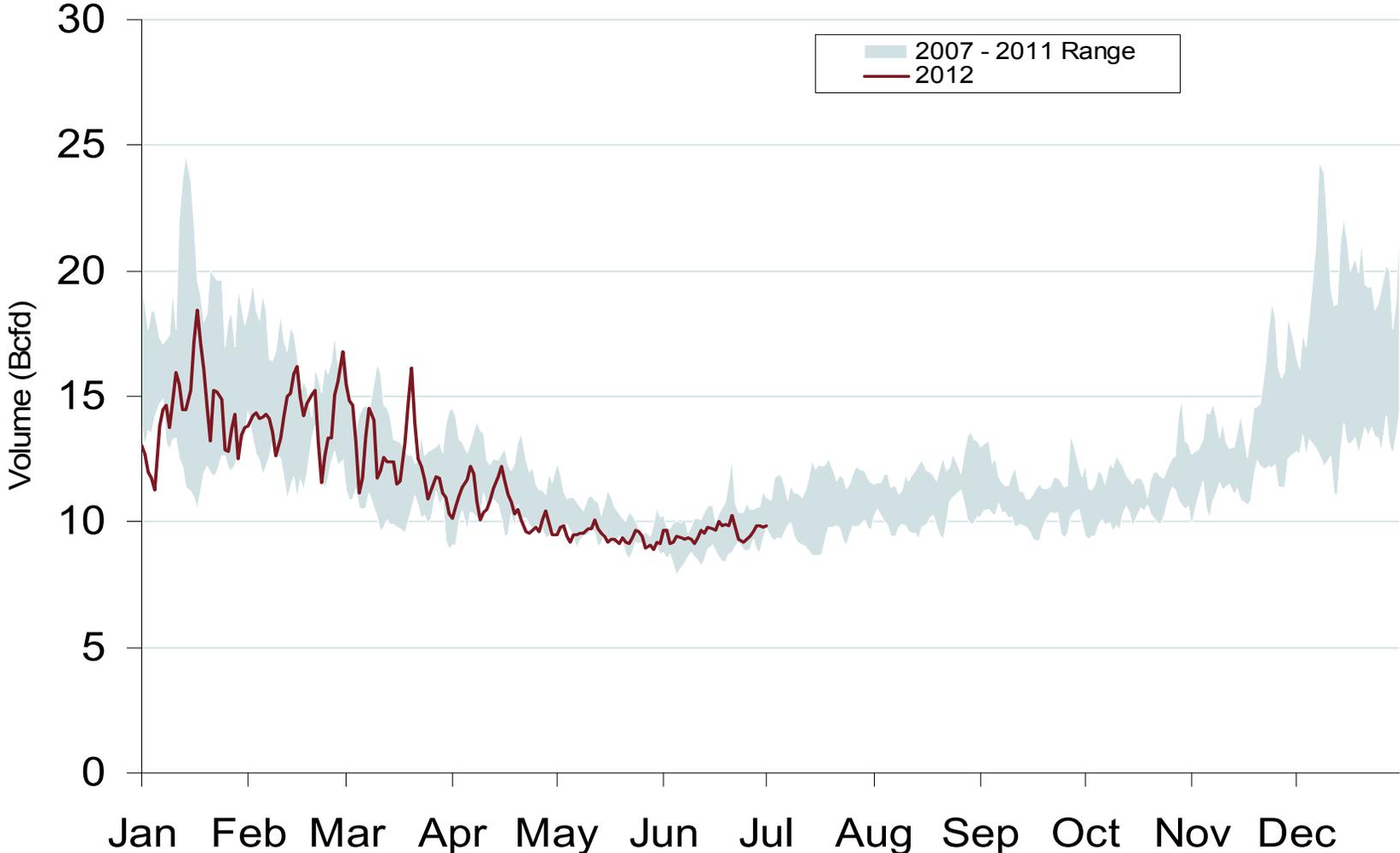
Total U.S. Natural Gas Demand All Sectors



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

Updated: July 17, 2012

Daily Western Natural Gas Demand All Sectors



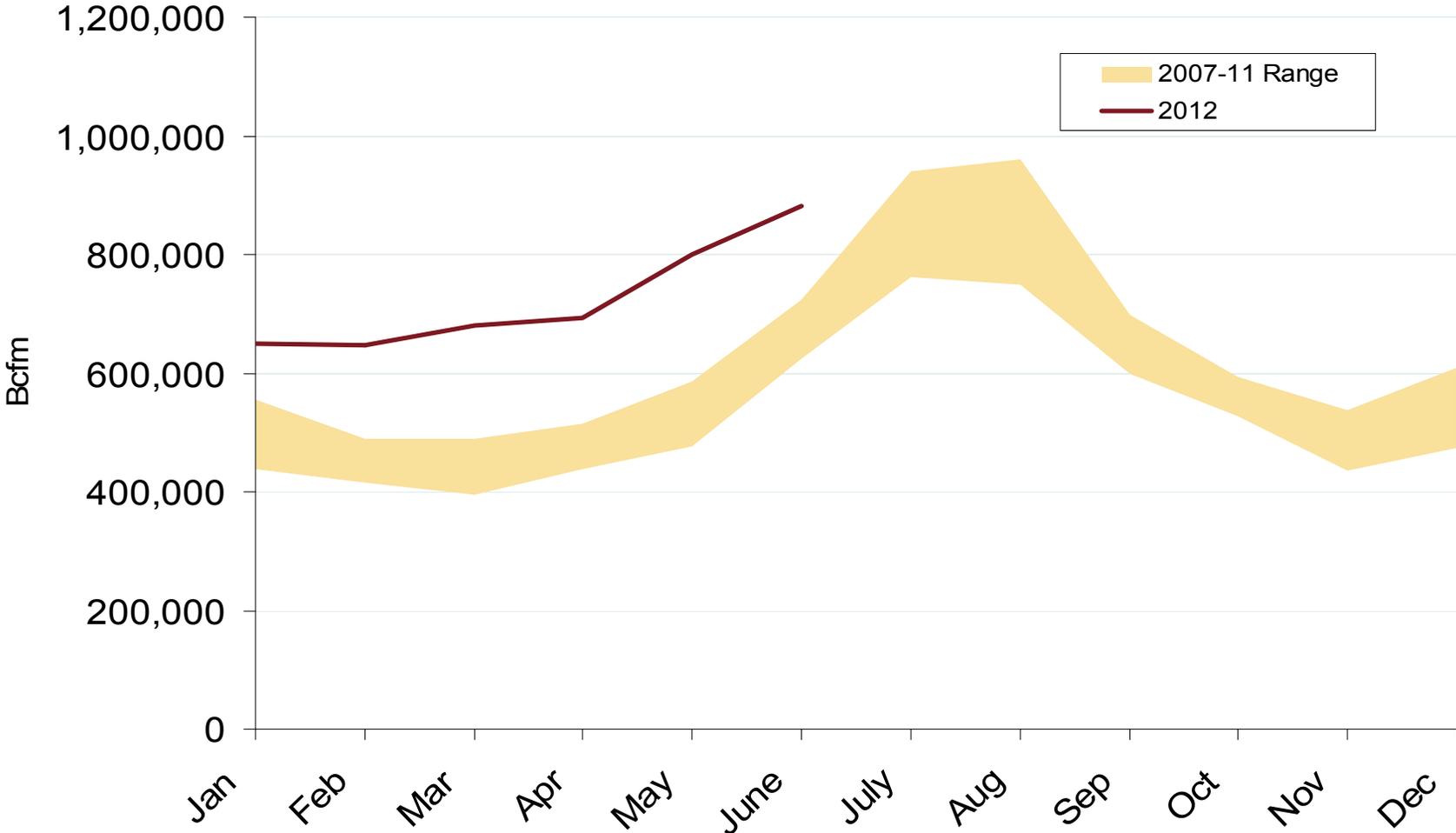
Source: Derived from *Bentek Energy* data
July 2012 Western Snapshot Report

Updated: July 17, 2012

Natural Gas Market Overview: NG Consumption for Power Generation

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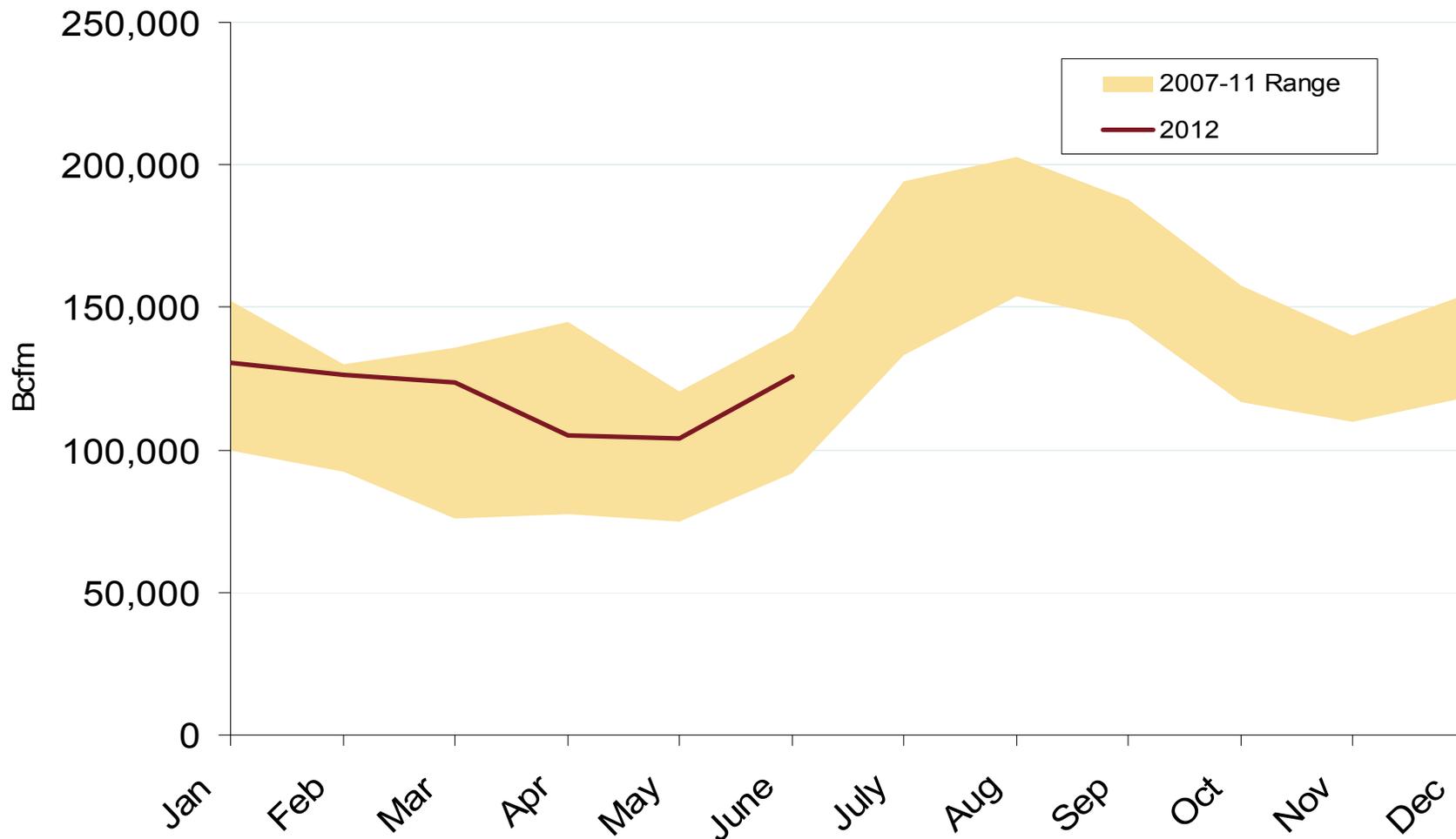
U.S. Natural Gas Consumption for Power Generation



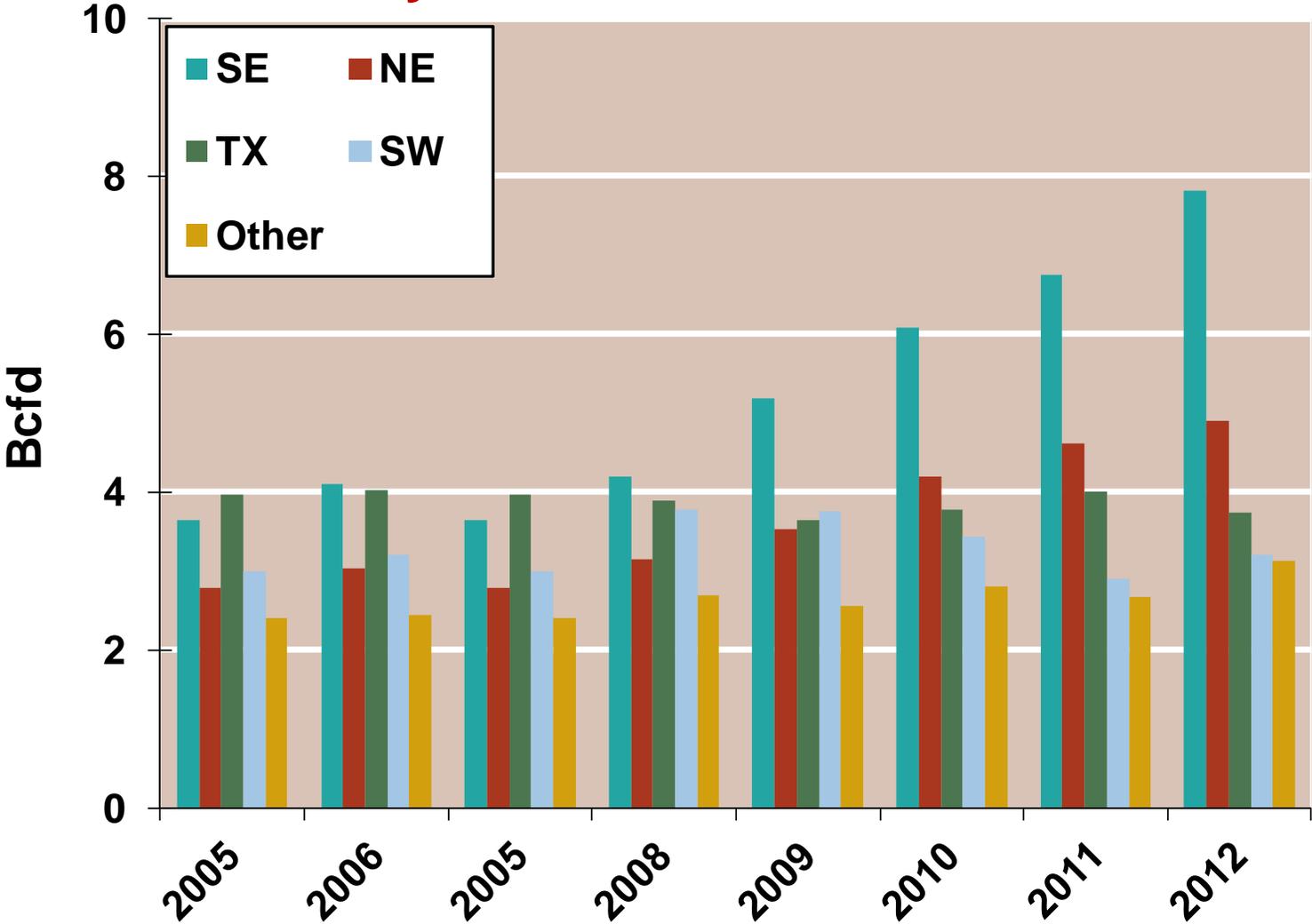
Source: Derived from *Bentek Energy* data
July 2012 Western Snapshot Report

Updated: July 11, 2012

Western Natural Gas Consumption for Power Generation



The Southeast Drives Gas Power Burn by U.S. Power Generators



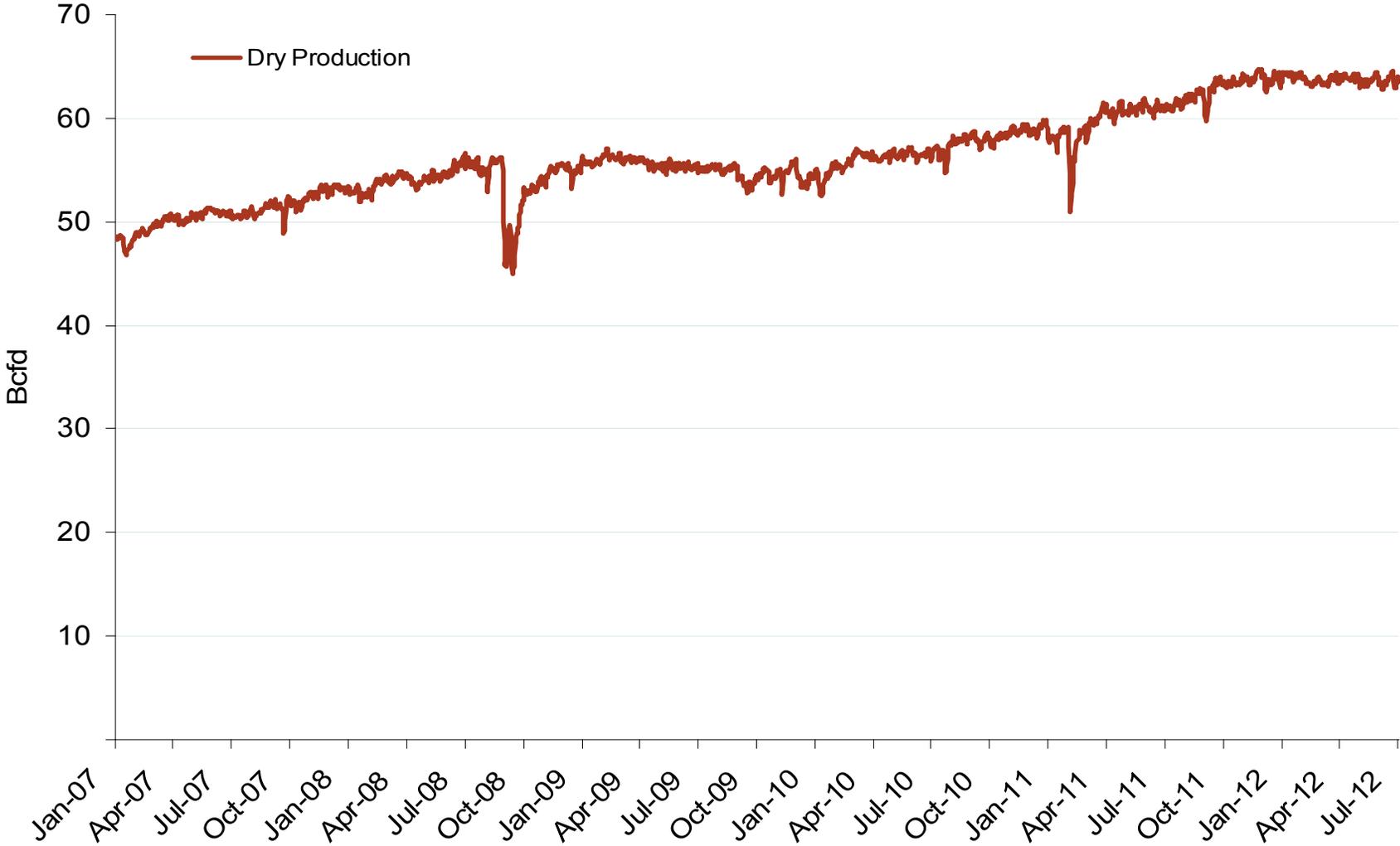
Source: Derived from Bentek Energy data.

Updated June 2012

Natural Gas Markets: Monthly U.S. Dry Gas Production

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



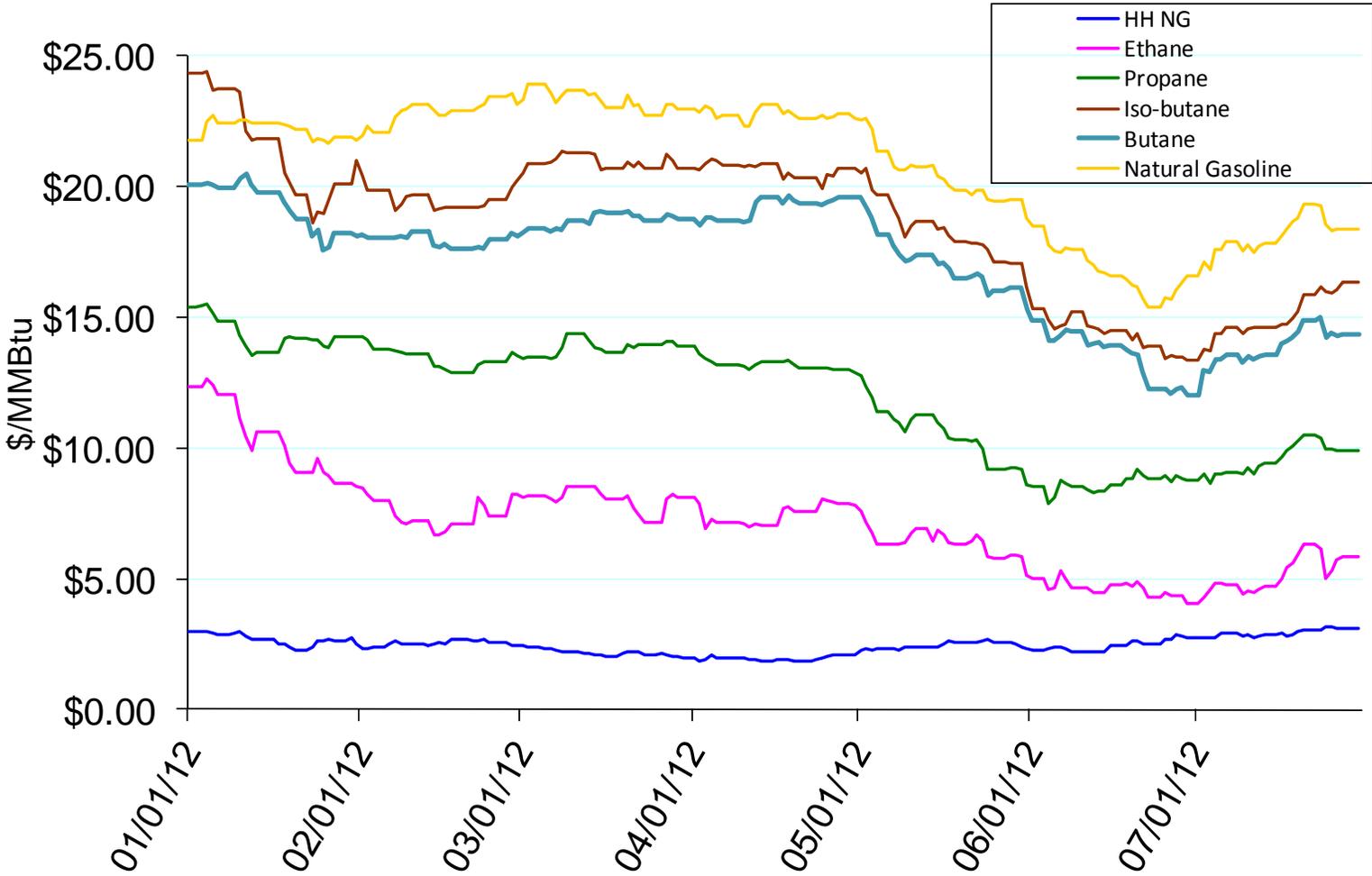
Note: Prior to July 2010, chart was derived from a combination of EIA and Bentek Energy data

Source: Derived from Bentek Energy data

July 2012 Western Snapshot Report

Updated: July 11, 2012

Natural Gas and Natural Gas Liquids Prices



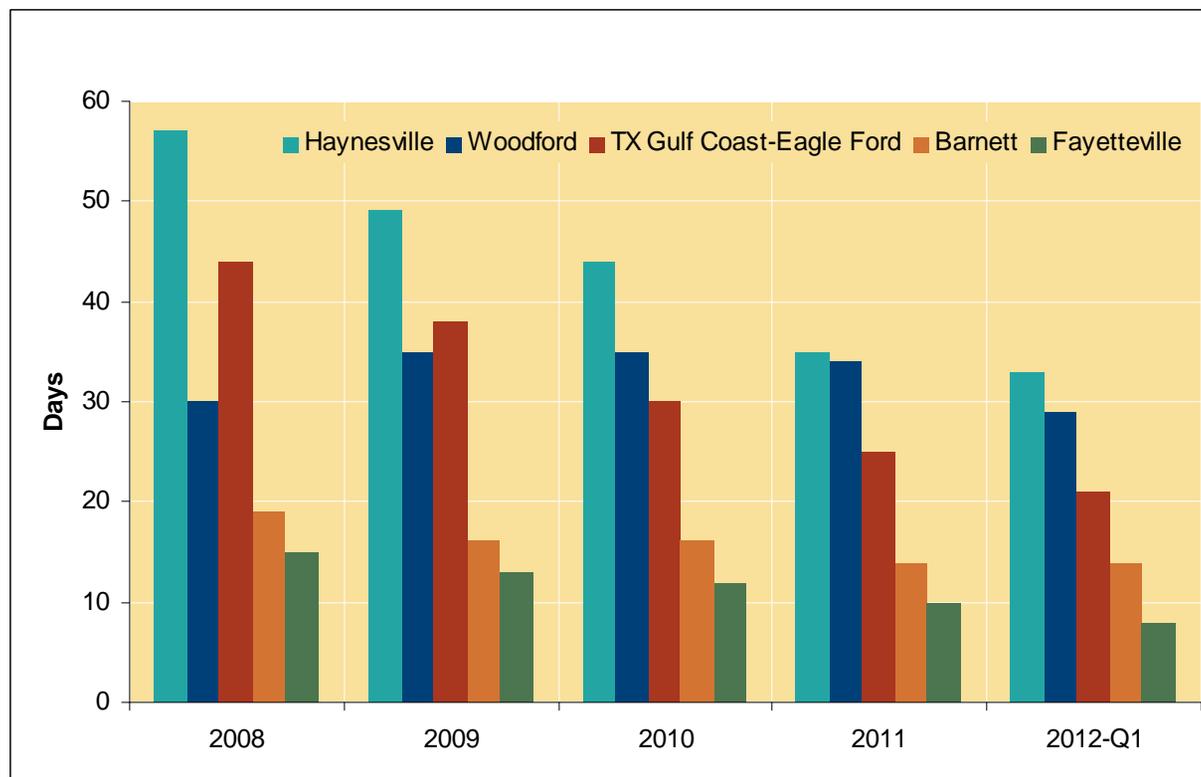
Source: Derived from Bloomberg data

Updated July 30, 2012

Despite Recent NGL Price Drops, NGL Content Still Makes a Strong Contribution to Production Revenues

Estimated Value Added to 1 Mmbtu of NG based on NGL Content Based on 7-30-2012 Prices				
	% of NGL Barrel	Wet Shale Well 75% NGL Content	Wet Shale Well 50% NGL Content	Wet Shale Well 25% NGL Content
Henry Hub Natural Gas		3.09	3.09	3.09
Ethane	40%	1.76	1.17	0.59
Propane	29%	2.16	1.44	0.72
Iso-butane	10%	1.23	0.82	0.41
Butane	6%	0.65	0.43	0.22
Natural Gasoline (Condensate)	15%	2.07	1.38	0.69
Natural Gas + NGLs		\$10.94	\$8.33	\$5.71

Well Drill Times Continue to Decline



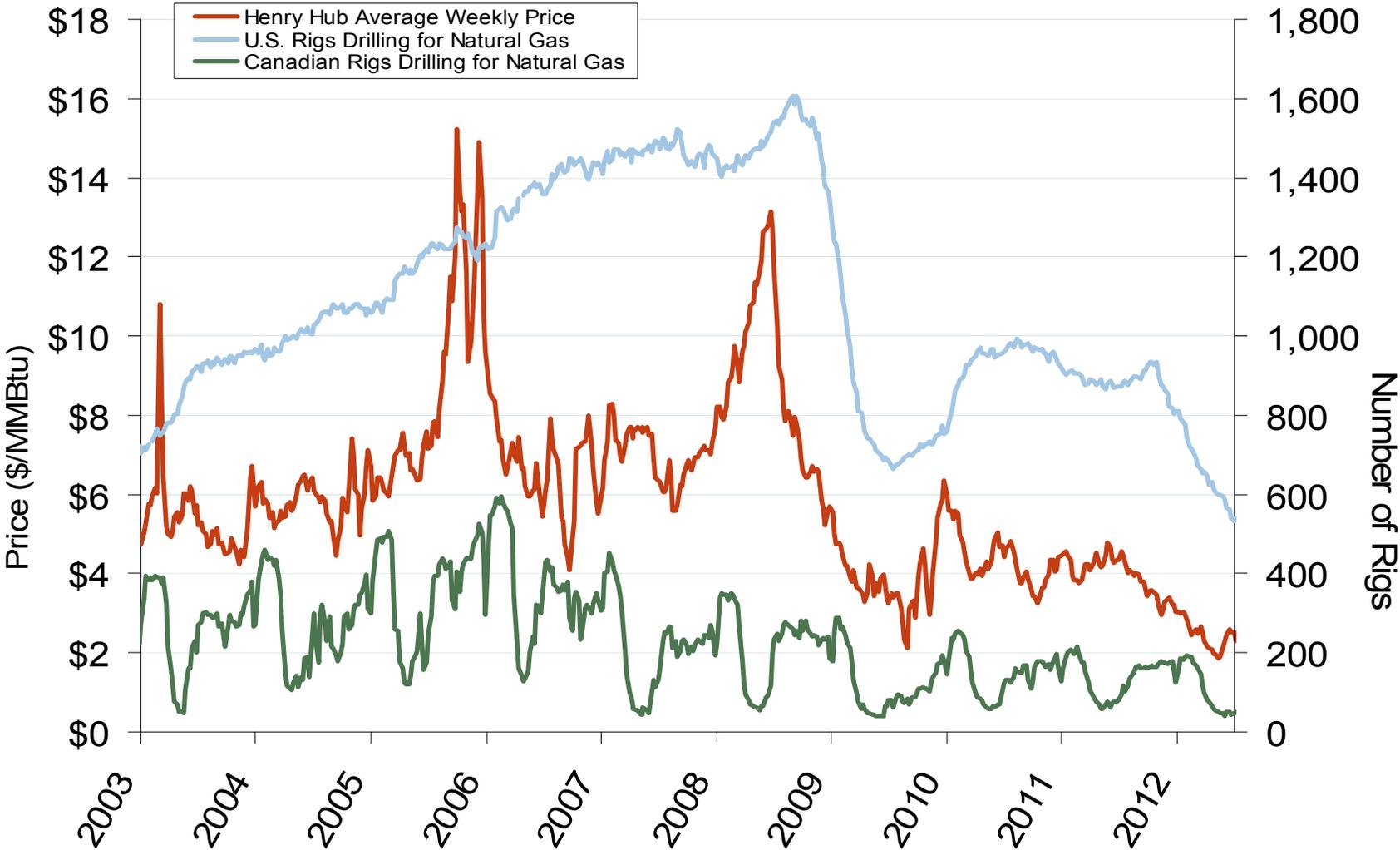
Source: Derived from Bentek Southeast/Gulf Production Monitor

Updated March 5, 2010

Natural Gas Market Overview: Drilling Rig Count

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

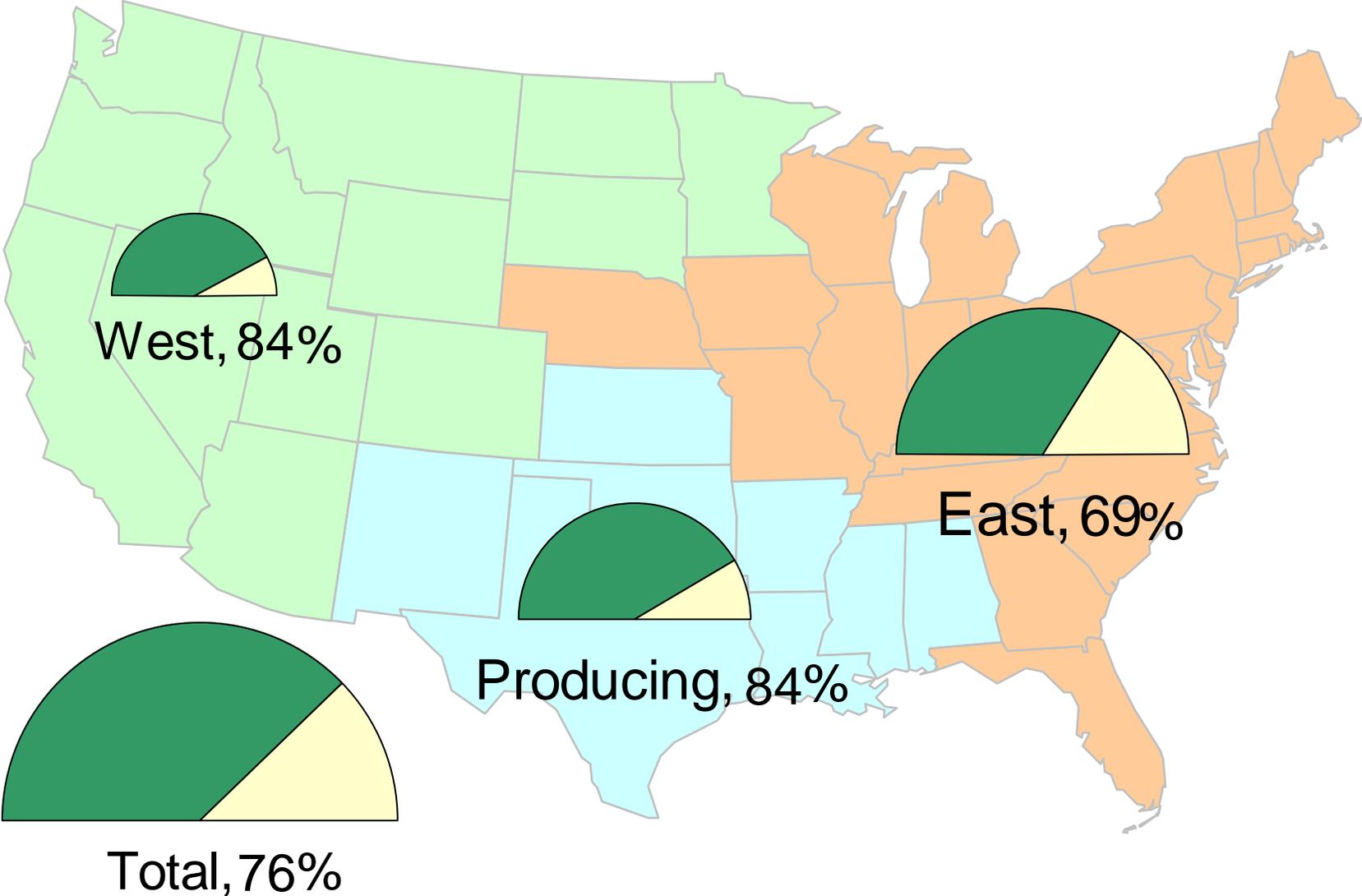
U.S. and Canadian NG Drilling Rig Count and Daily Spot Prices



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

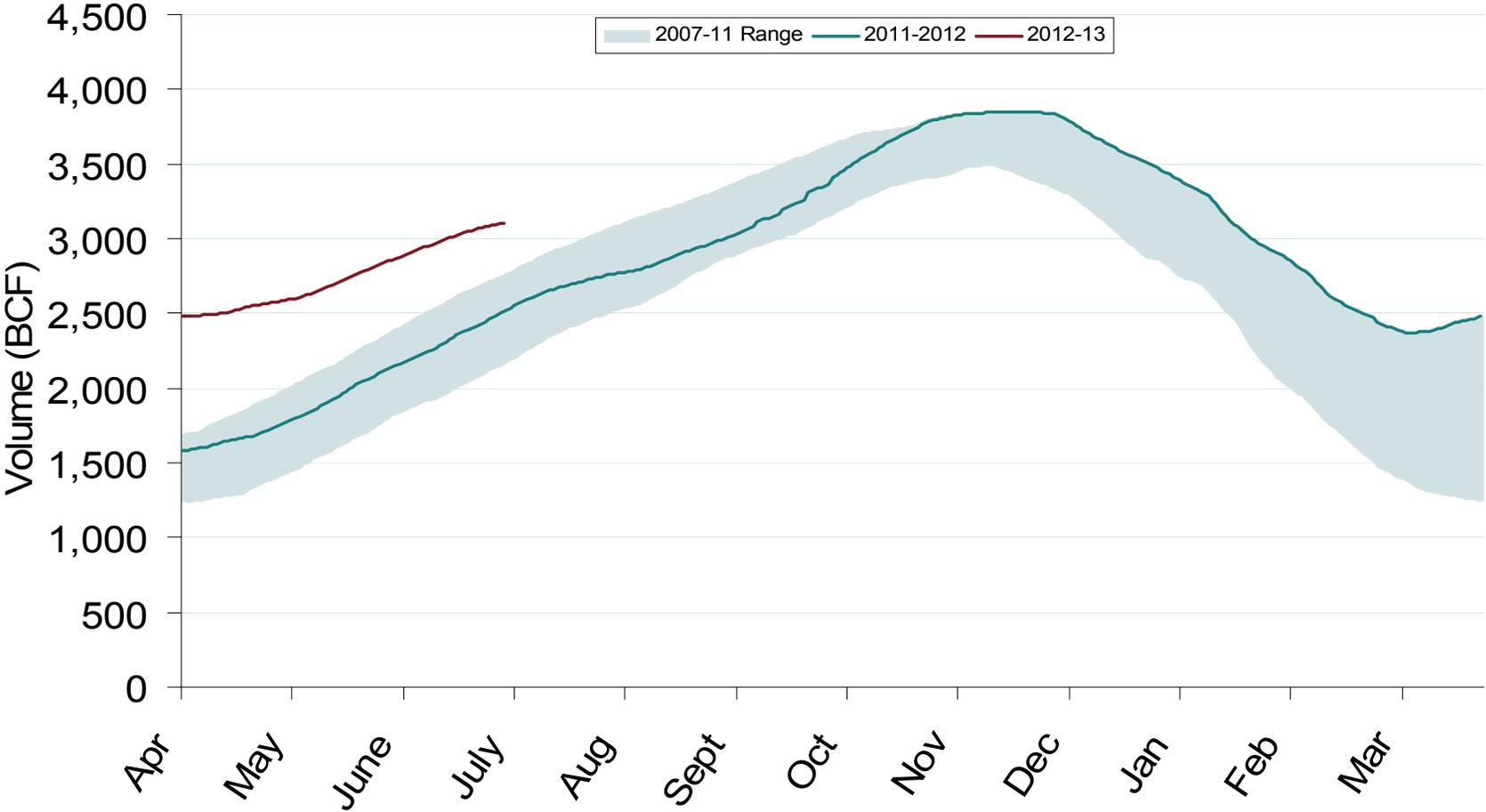
Updated: July 17, 2012

Natural Gas Storage Inventories – July 6, 2012



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

Total U.S. Working Gas in Storage



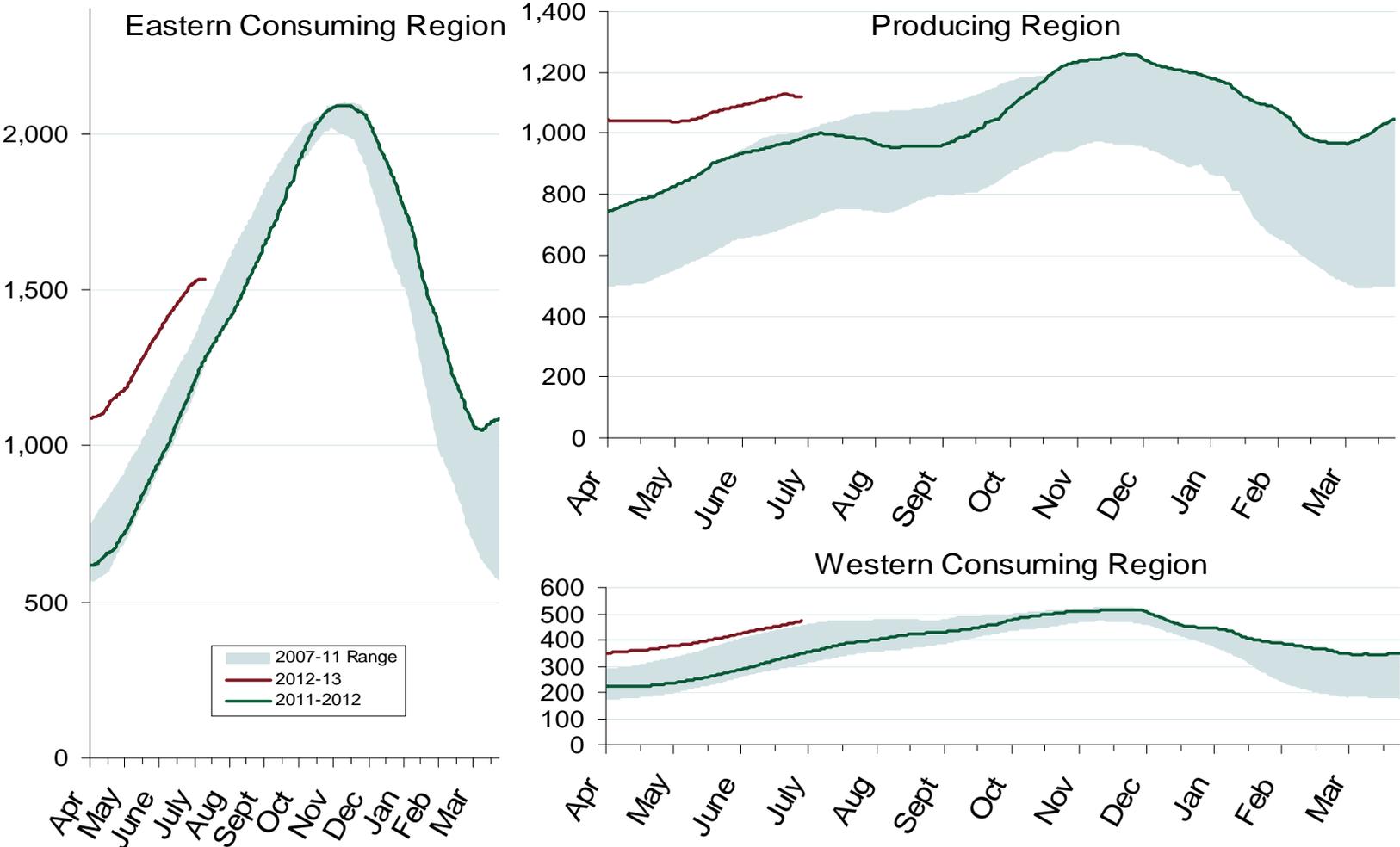
Source: Derived from EIA data
July 2012 Western Snapshot Report

Updated: July 12, 2012

Natural Gas Market Overview: Regional Storage

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Regional Totals of Working Gas in Storage



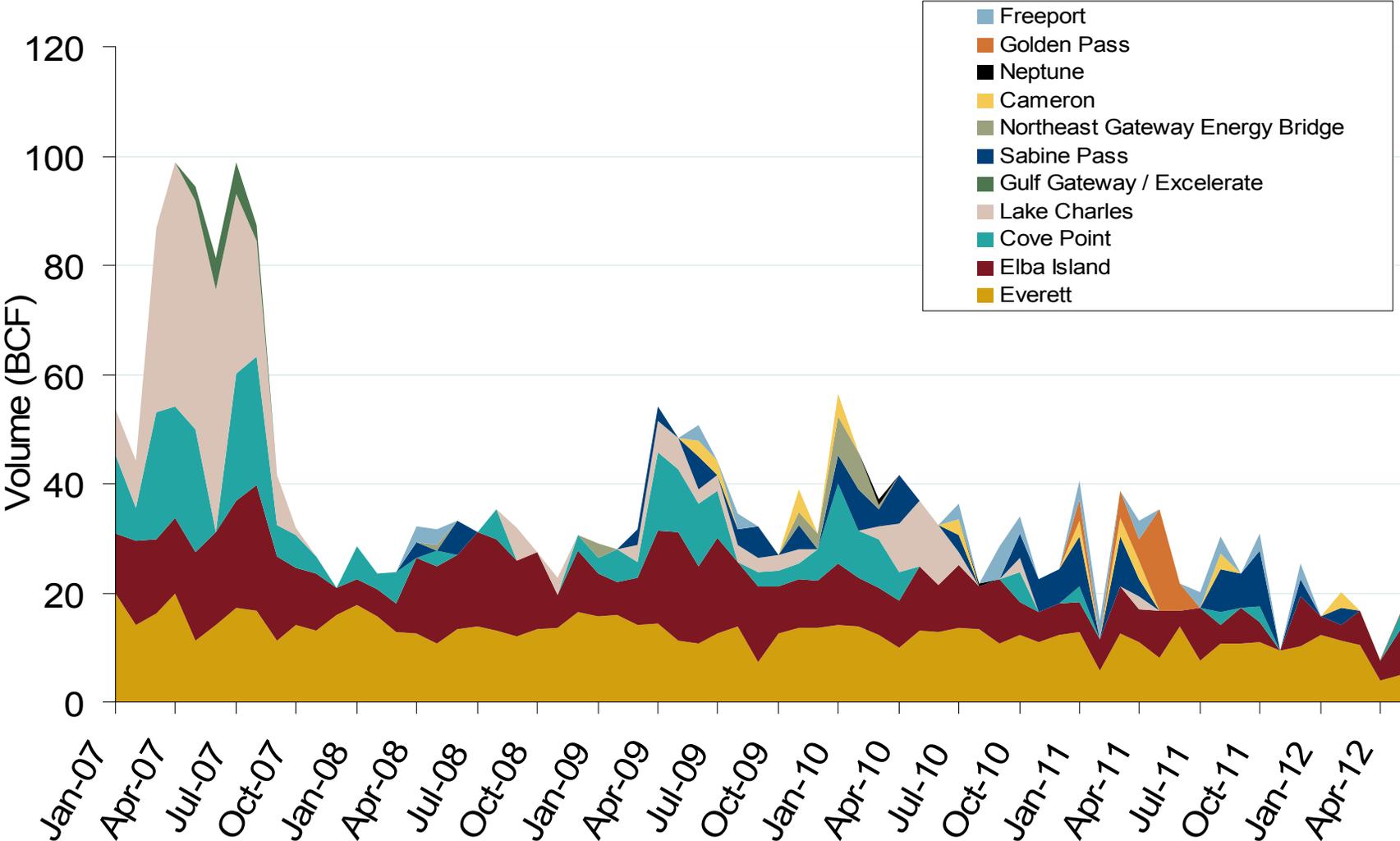
Source: Derived from EIA data
July 2012 Western Snapshot Report

Updated: July 12, 2012

World LNG Estimated August 2012 Landed Prices



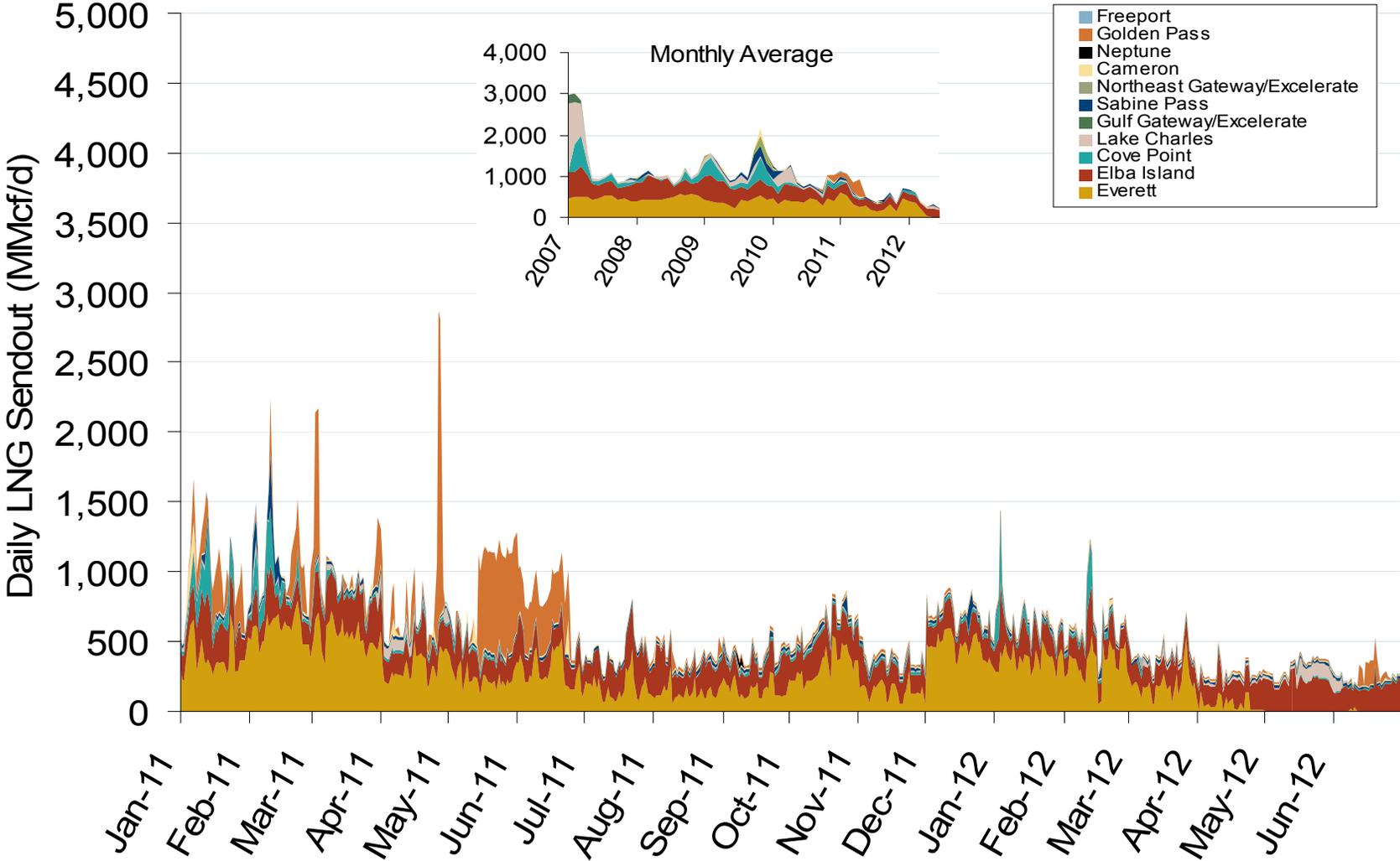
Monthly Gas Imports at Existing U.S. LNG Facilities



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

Updated: July 12, 2012

Daily Gas Sendout from Existing U.S. LNG Facilities



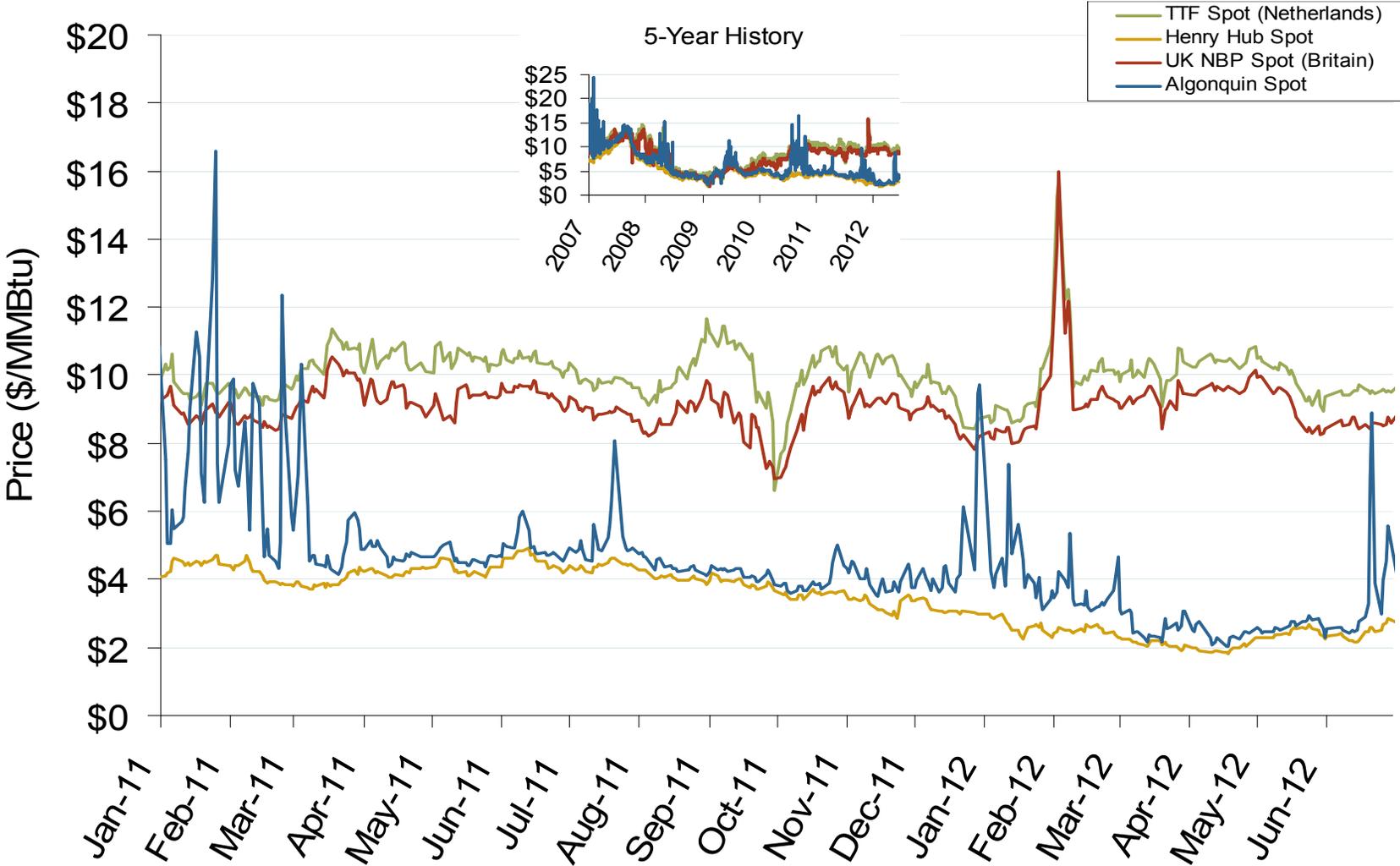
Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes Freeport LNG which flows via intrastate pipelines

Source: Derived from Bentek Energy data

July 2012 Western Snapshot Report

Updated: July 11, 2012

Atlantic Basin European and US Spot Natural Gas Prices



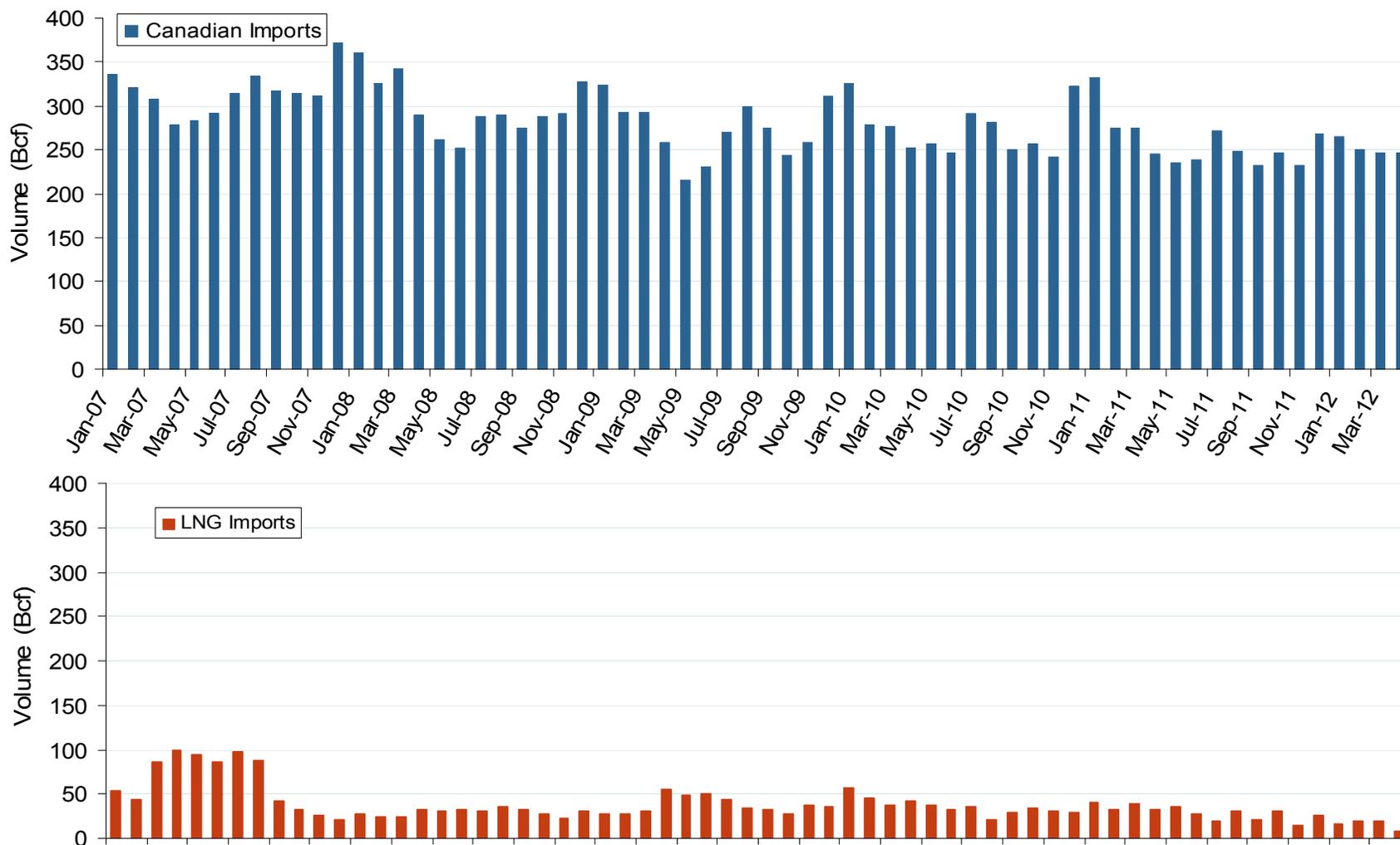
Source: Derived from *Bloomberg* and *ICE* data
July 2012 Western Snapshot Report

Updated: July 13, 2012

Natural Gas Overview: Natural Gas Imports

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

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



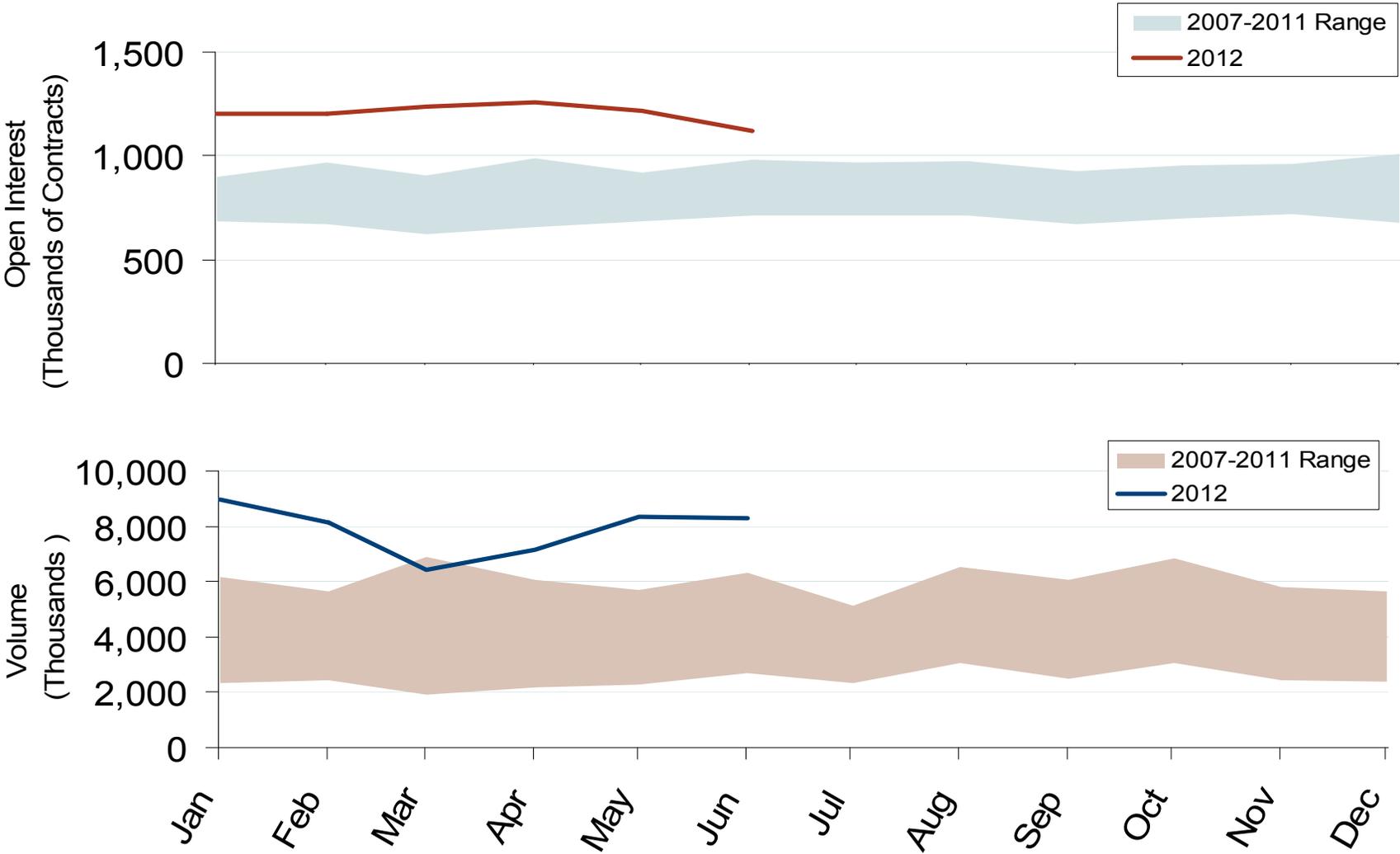
Source: EIA Natural Gas Monthly
 July 2012 Western Snapshot Report

Updated: July 12, 2012

Natural Gas Trading: Futures Open Interest and Volume

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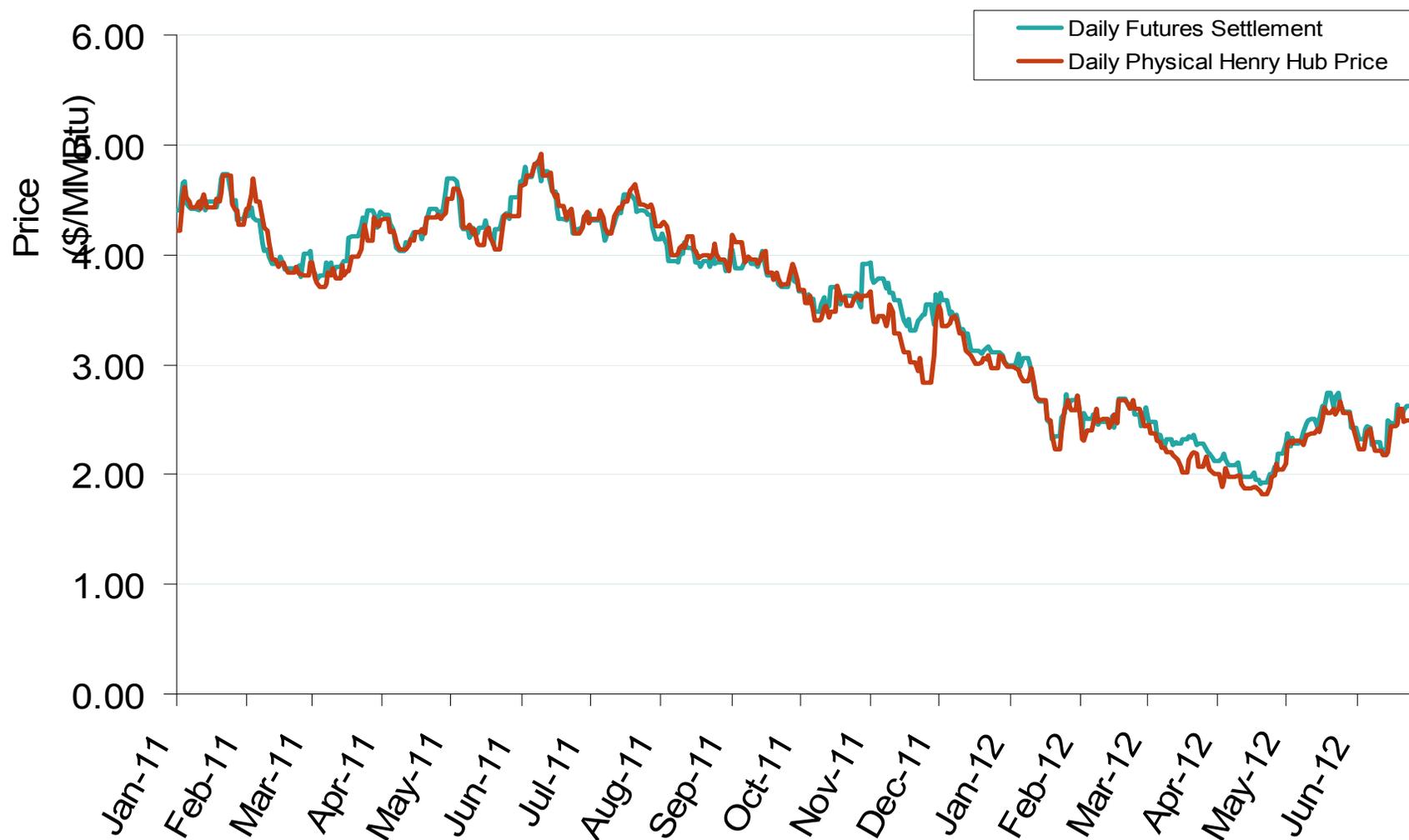
Nymex NG Futures Month-End Open Interest and Monthly Volume



Source: Derived from Nymex data
July 2012 Western Snapshot Report

Updated: July 16, 2012

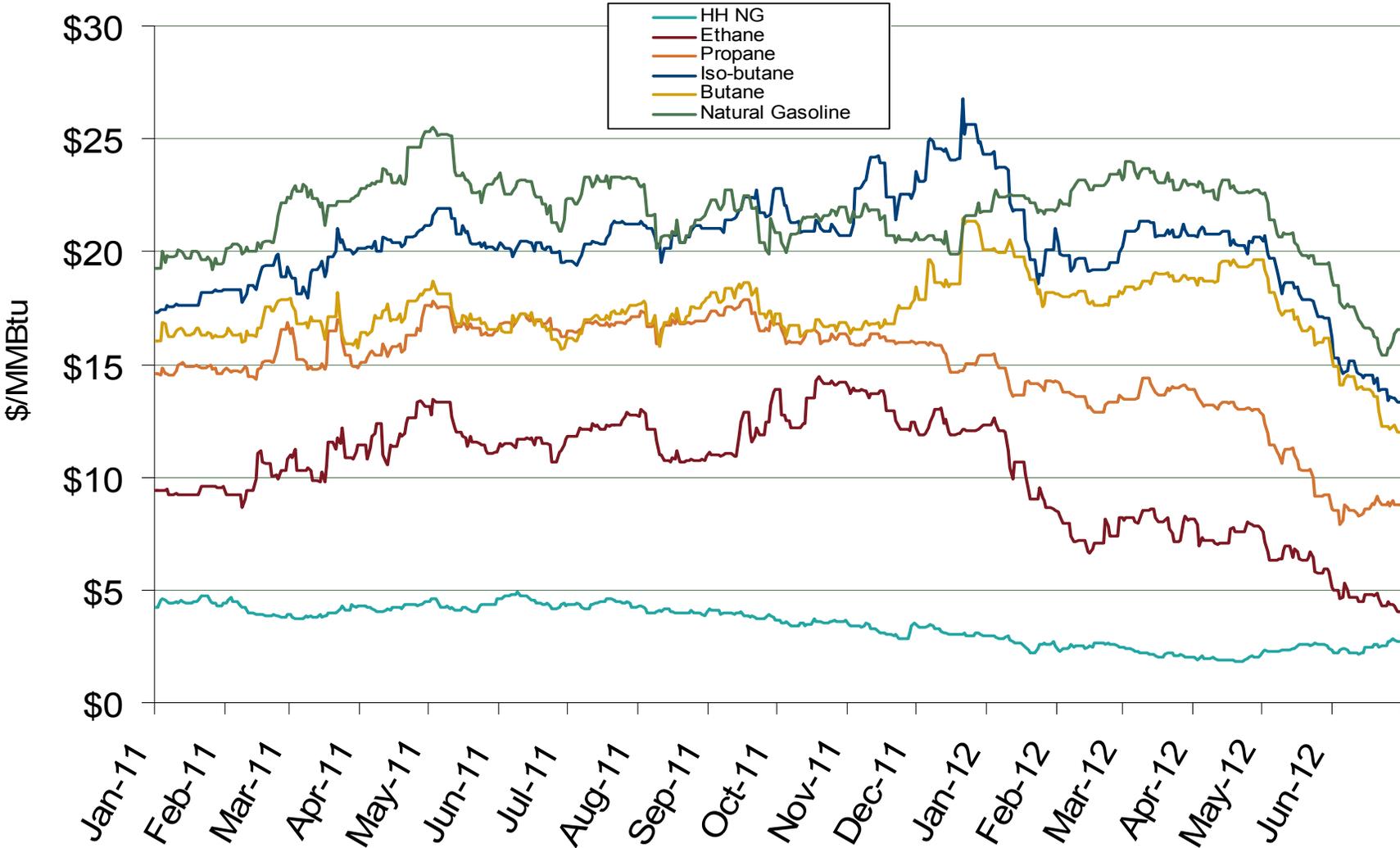
Natural Gas Trading: Physical and Futures Prices

Federal Energy Regulatory Commission • Market Oversight • www.ferc.gov/oversight**Daily Physical Index Price & Daily Futures Settlement Price**

Natural Gas Market Overview: NGL Prices

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



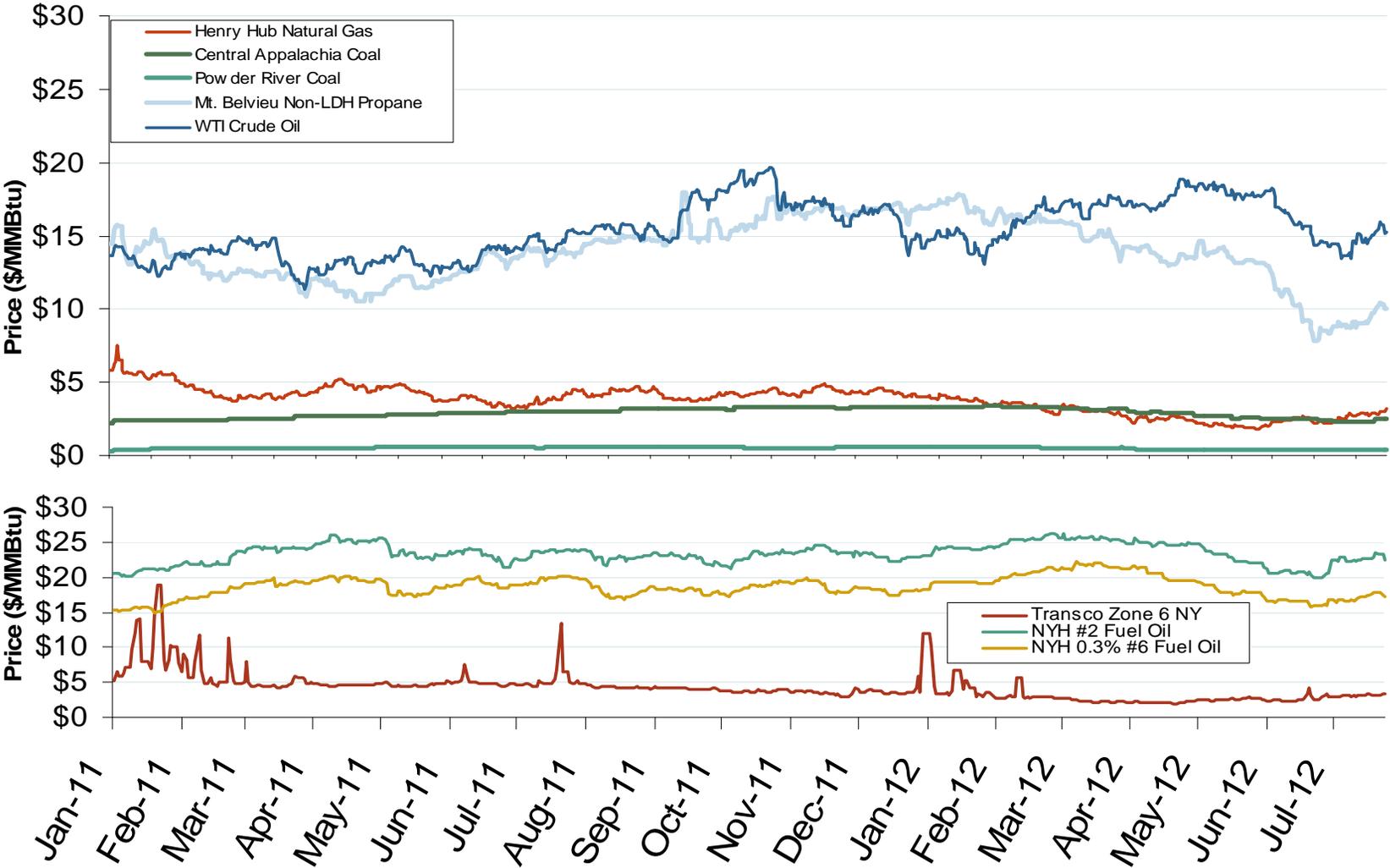
Source: Derived from Bloomberg Data
July 2012 Western Snapshot Report

Updated: July 13, 2012

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



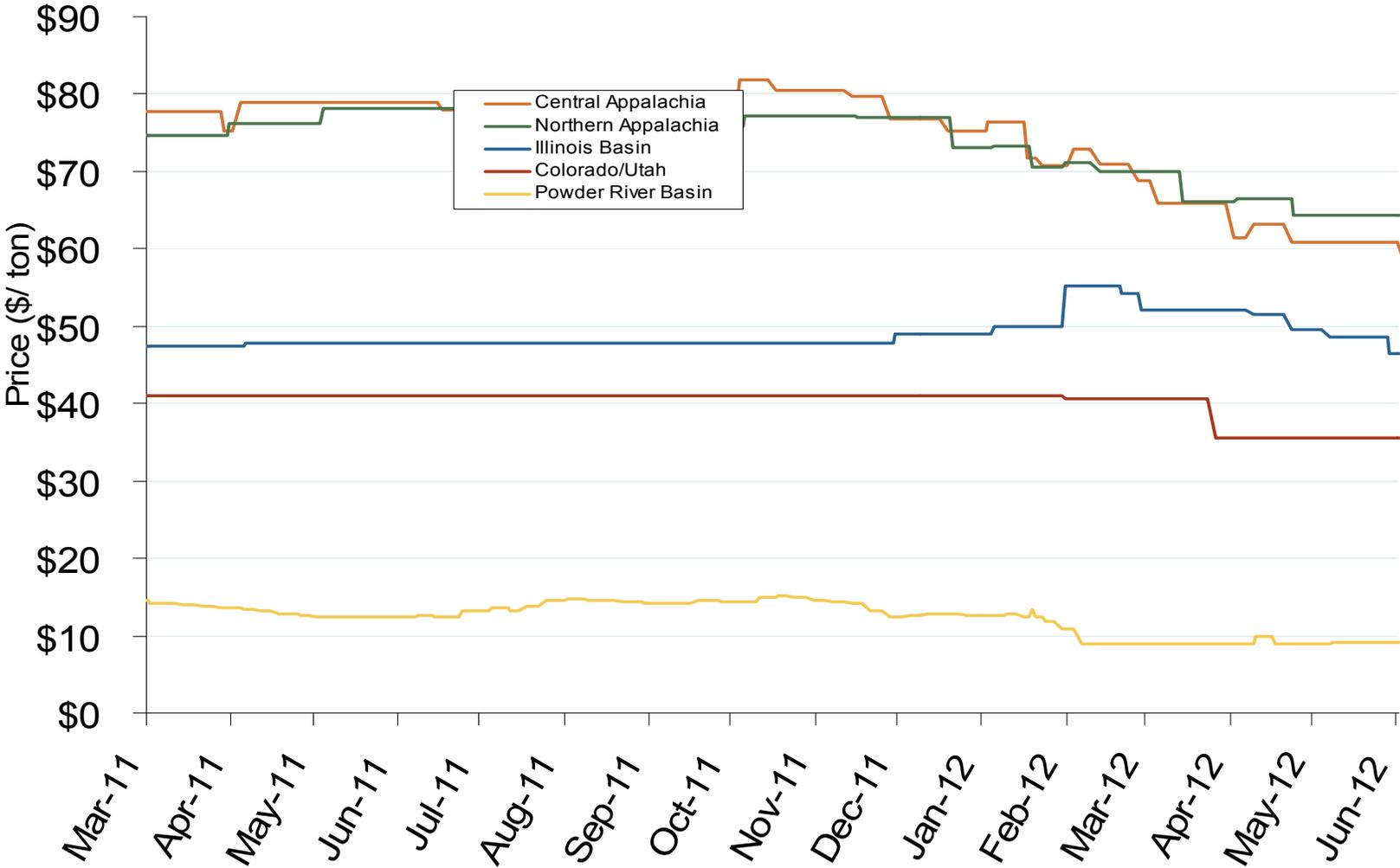
Notes: Coal prices are quoted in \$/ton. Conversion factors to \$/MMBtu are based on contract specifications of 12,000 btus/pound for Central Appalachian coal and 8800 btus/pound for Powder River Basin coal

Source: Derived from ICE and Bloomberg data

National Electric Market Overview: Coal Prices

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Central Appalachian and Powder River Basin Coal Prices



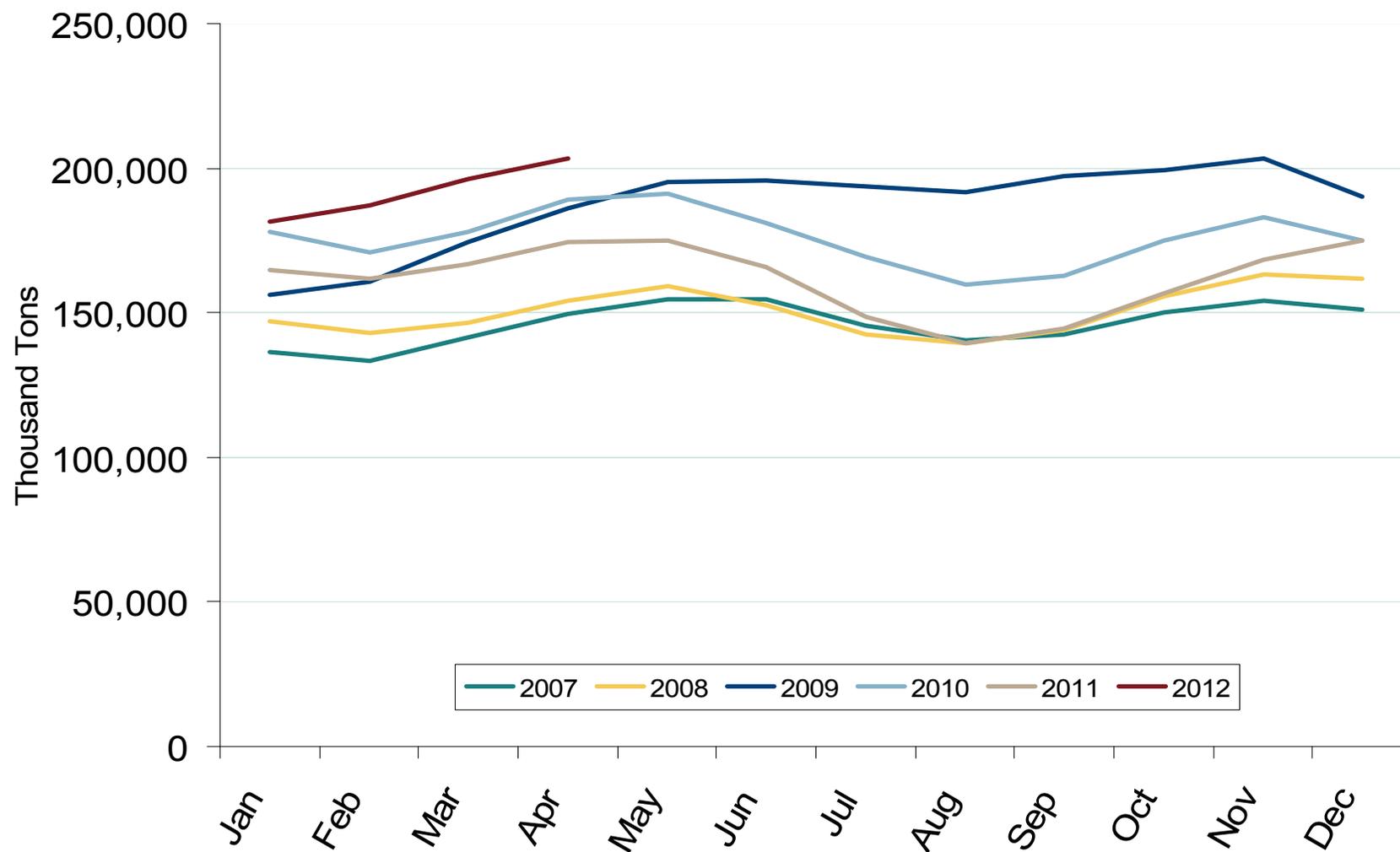
Notes: The Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances

Source: Derived from Bloomberg data

July 2012 Western Snapshot Report

Updated: July 13, 2012

Other Fuels Market: U.S. Coal Stockpiles

Federal Energy Regulatory Commission • Market Oversight • www.ferc.gov/oversight**U.S. Coal Stockpiles at Electric Power Generating Facilities**

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

Updated: July 12, 2012

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