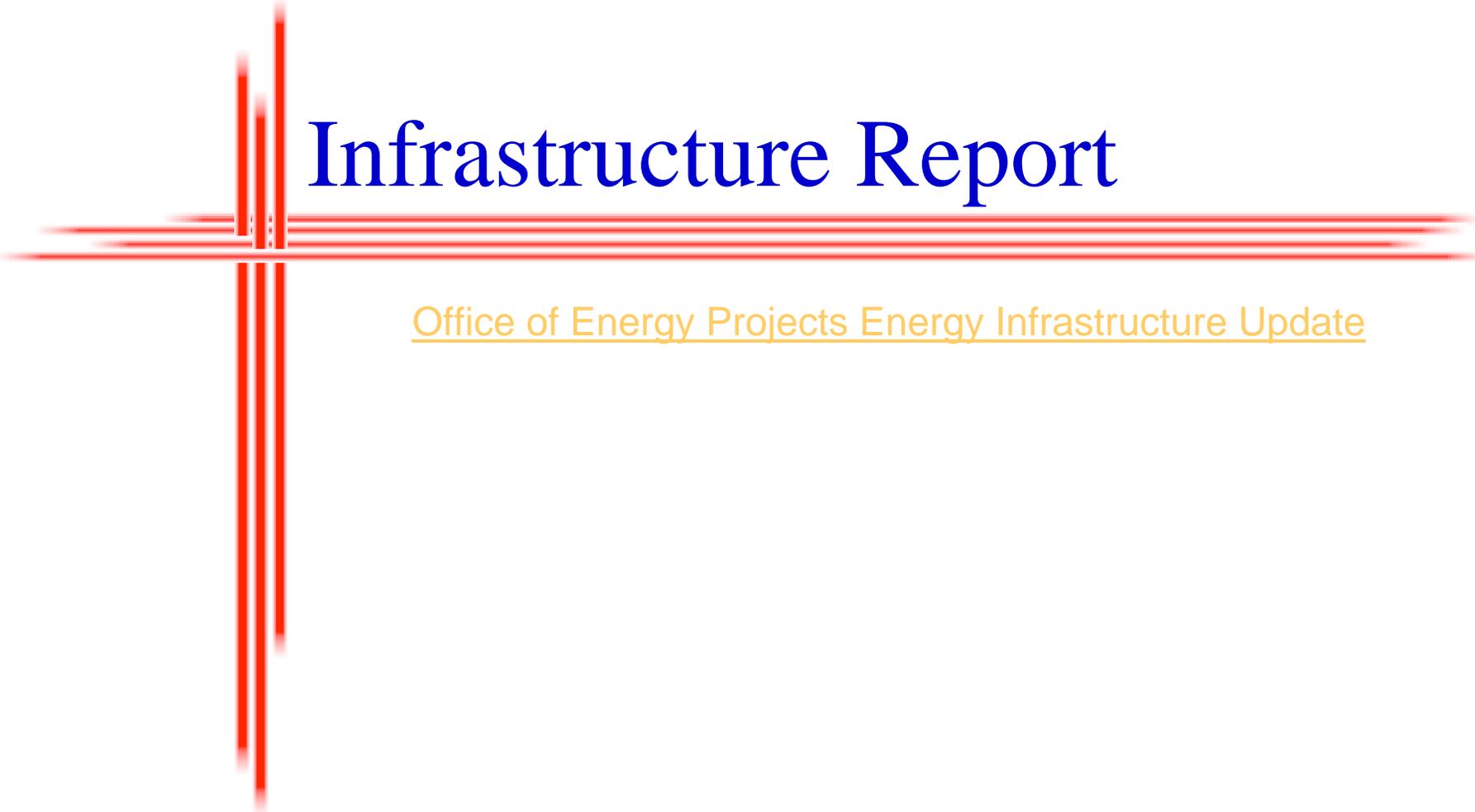


OE ENERGY MARKET SNAPSHOT

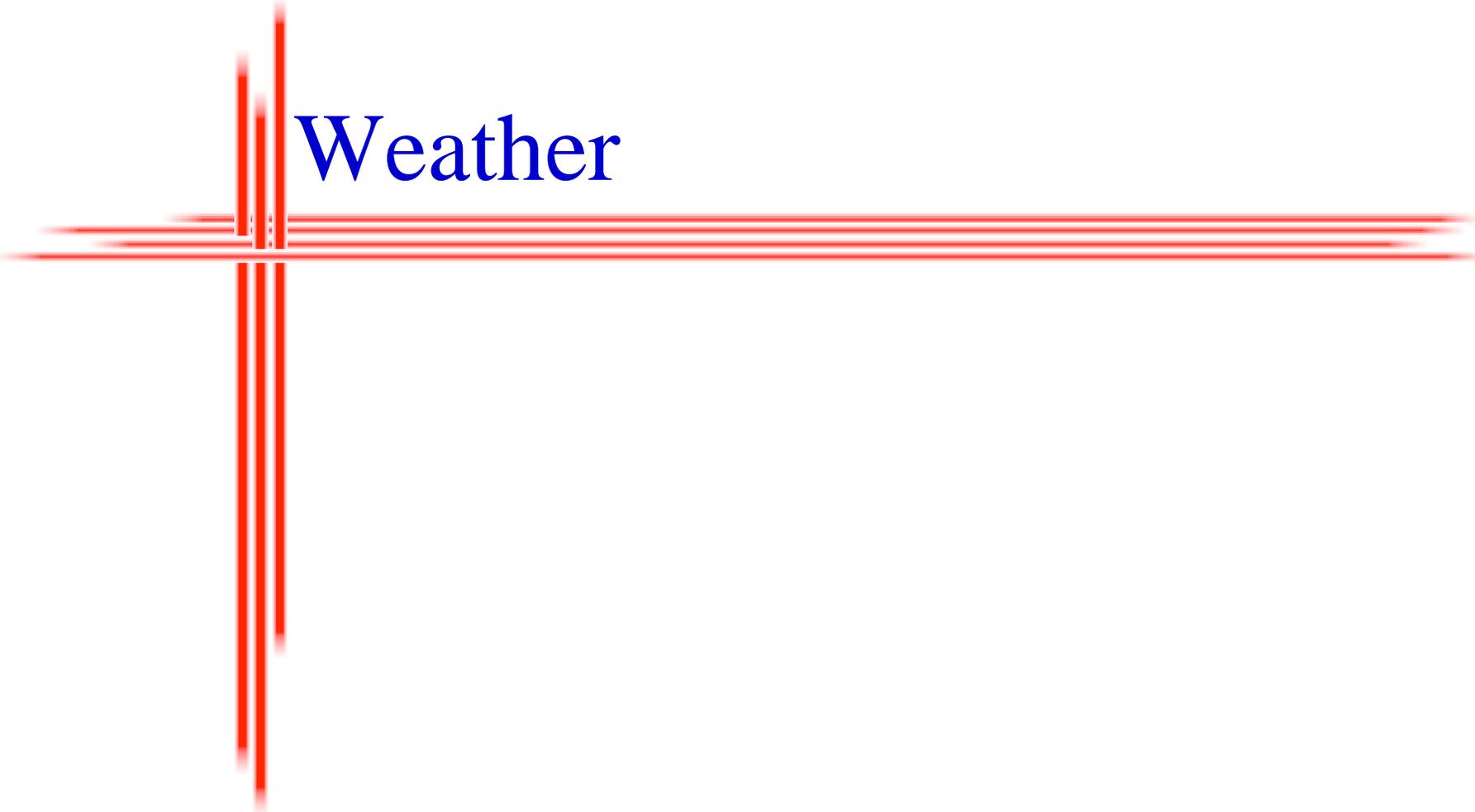
Western States Version – February 2013 Data

Office of Enforcement
Federal Energy Regulatory Commission
March 2013



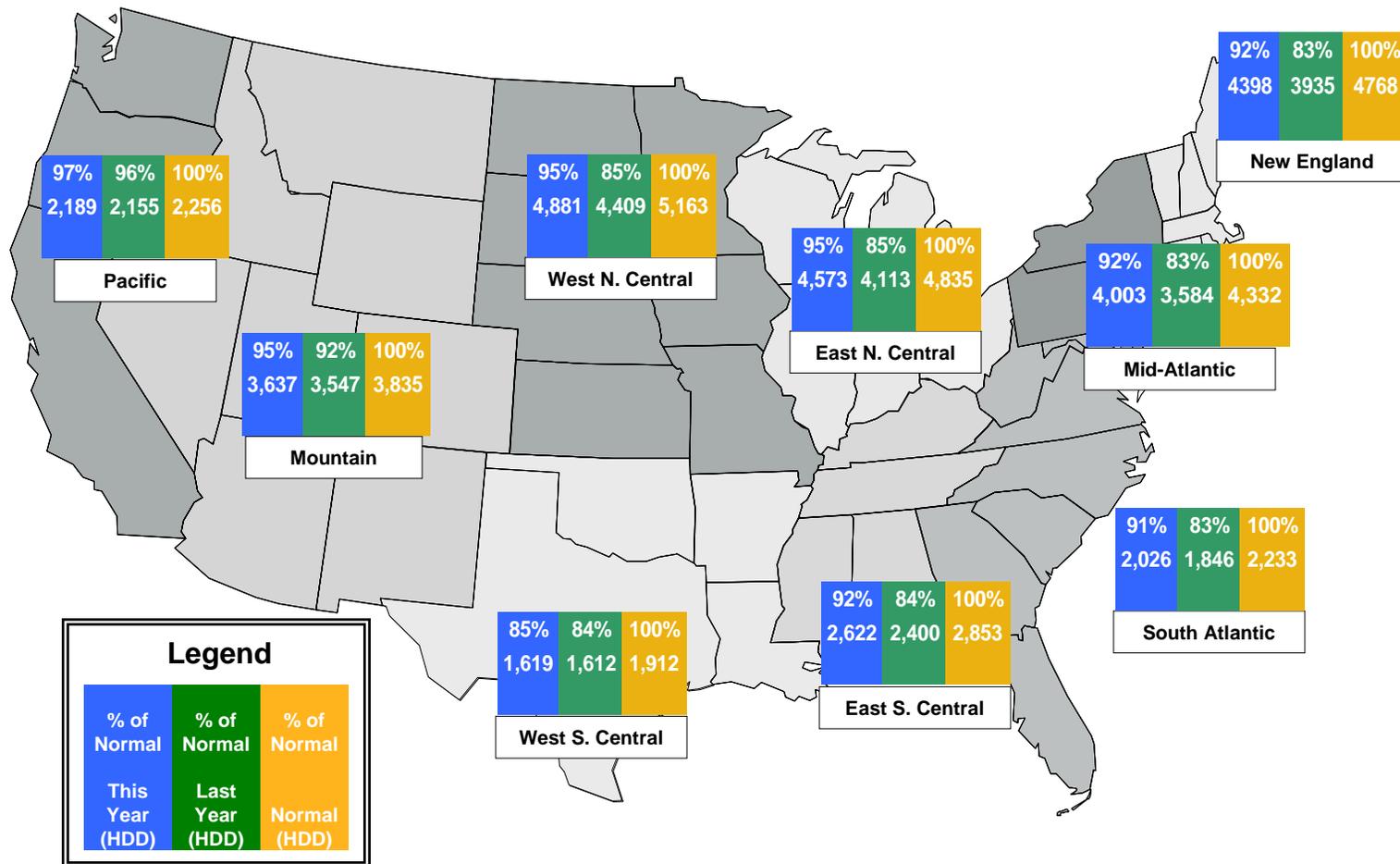
Infrastructure Report

Office of Energy Projects Energy Infrastructure Update



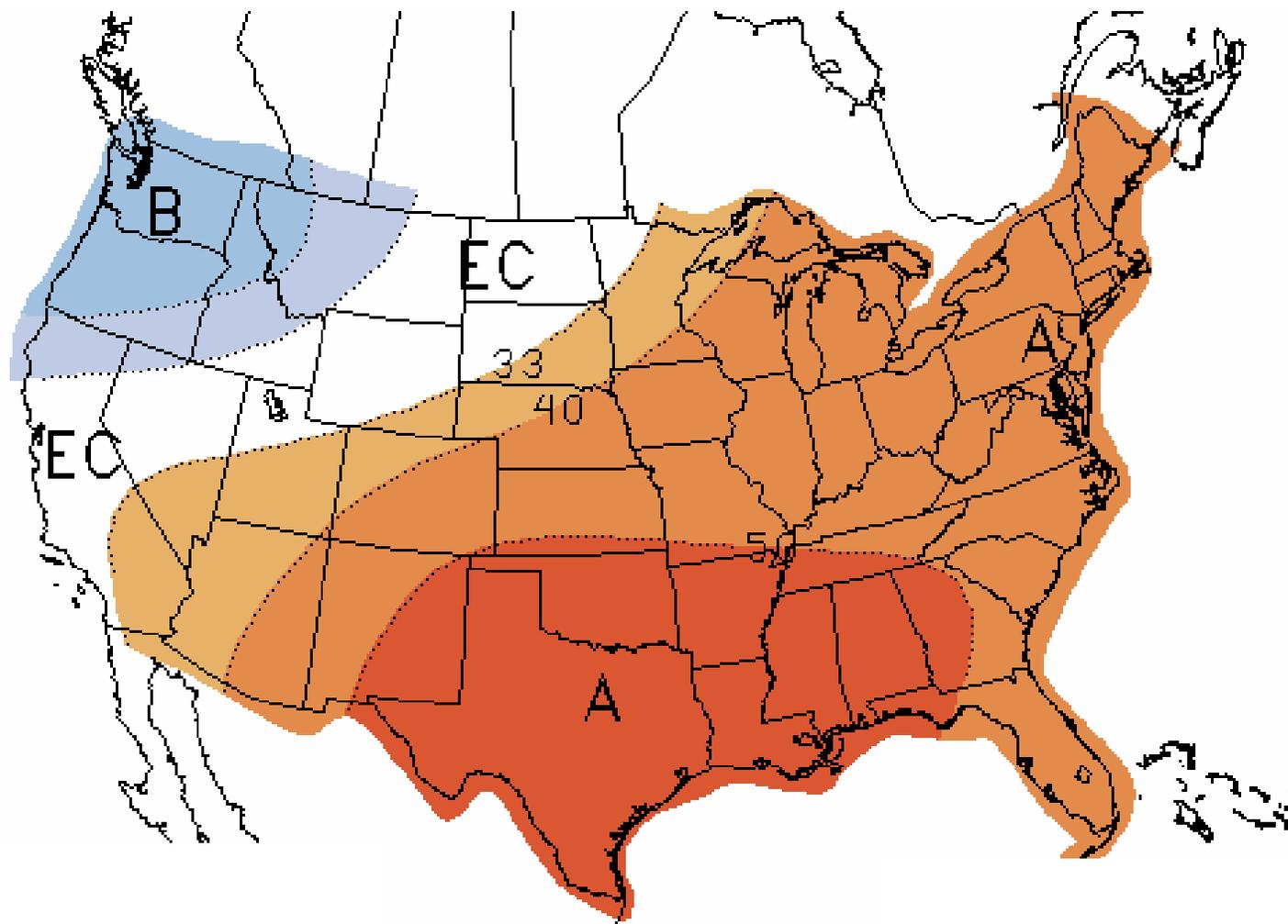
Weather

Regional Heating Degree Days – July 2012 to March 2013



Source: Derived from NOAA data. Normal is based on a 30-year average of heating degree day data.
 March 2013 Western Snapshot Report

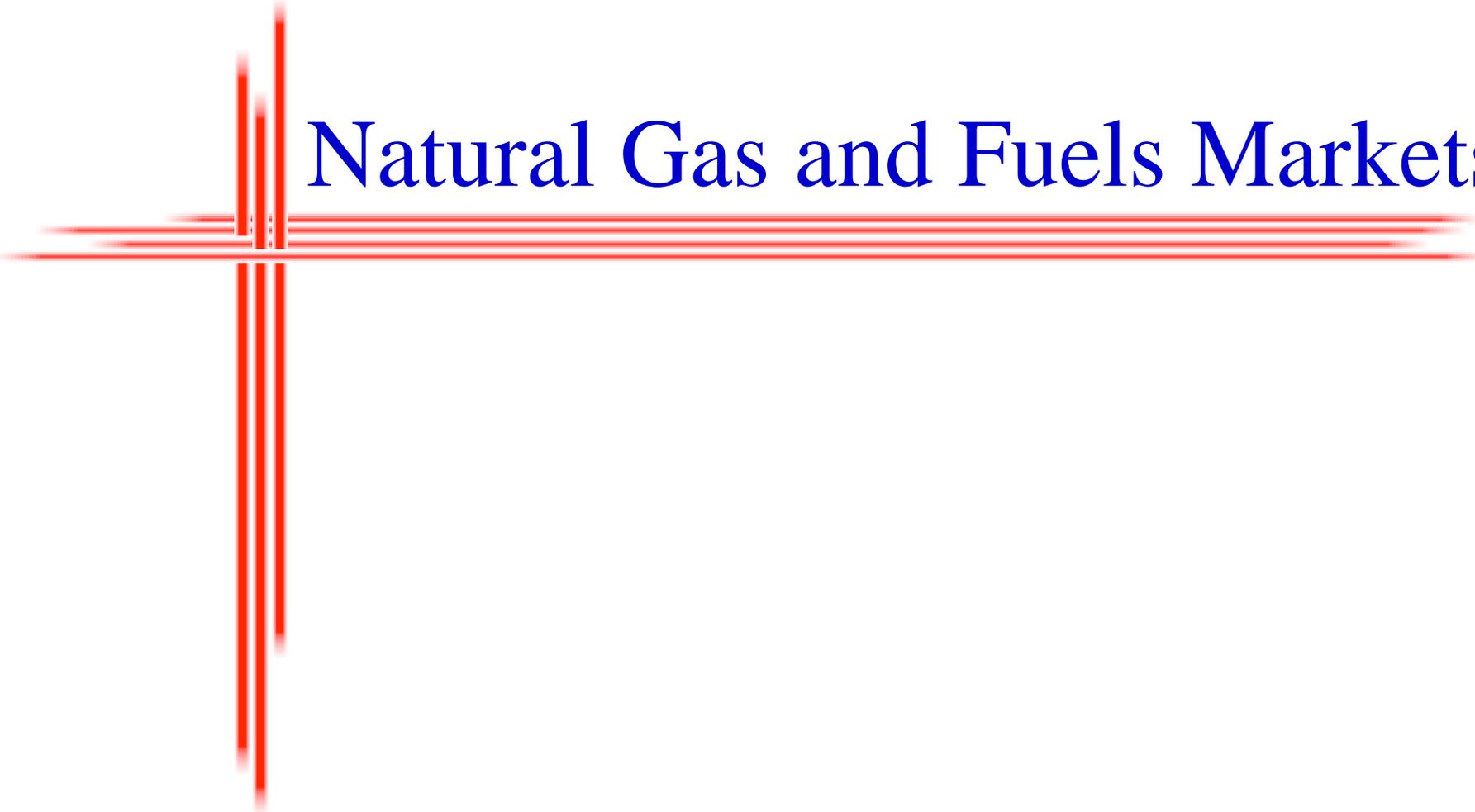
NOAA's 3 Month Temperature Forecast Made February 21, 2013, Valid for March 2013 – May 2013



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.

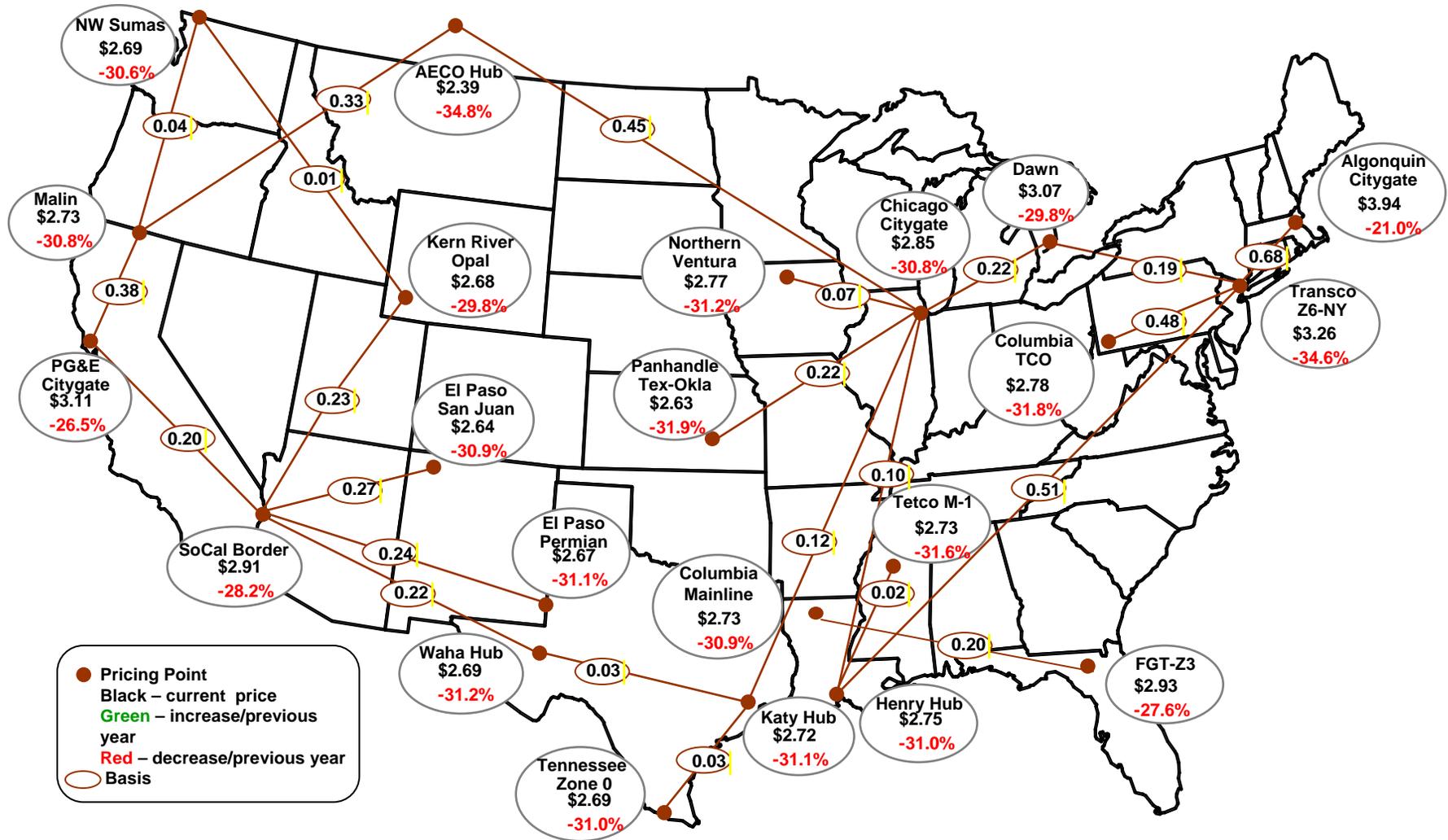
Source: Derived from NOAA data.

Updated: March 7, 2013

A decorative graphic consisting of several thick, parallel red lines. One vertical line runs down the left side of the page, and several horizontal lines cross it, creating a grid-like structure. The lines are slightly blurred and have a glowing effect.

Natural Gas and Fuels Markets

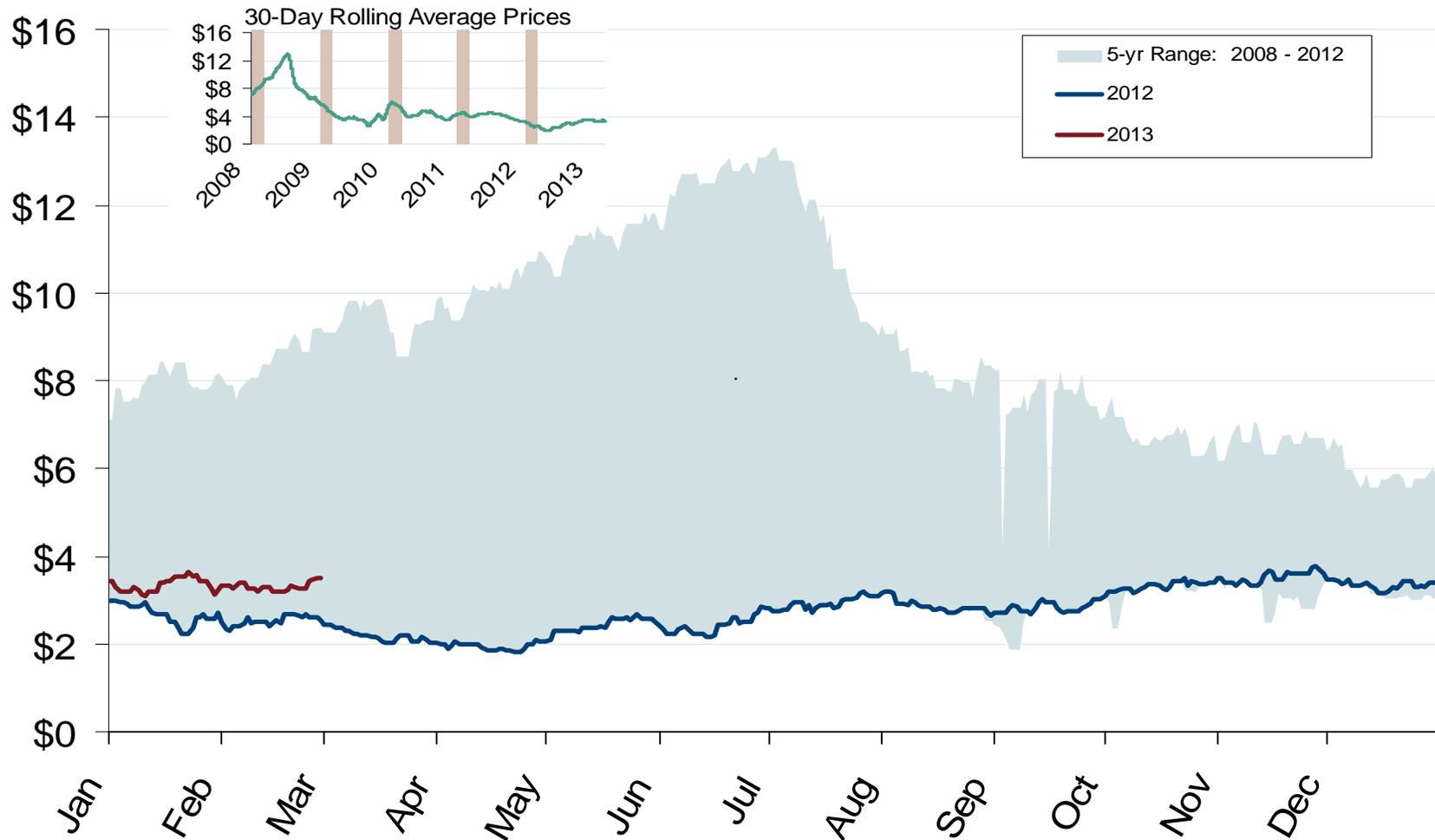
Average Spot Gas Prices, 2012 (\$MMBtu)



Source: Derived from *Platts* data.
March 2013 Western Snapshot Report

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Henry Hub Natural Gas Daily Spot Prices

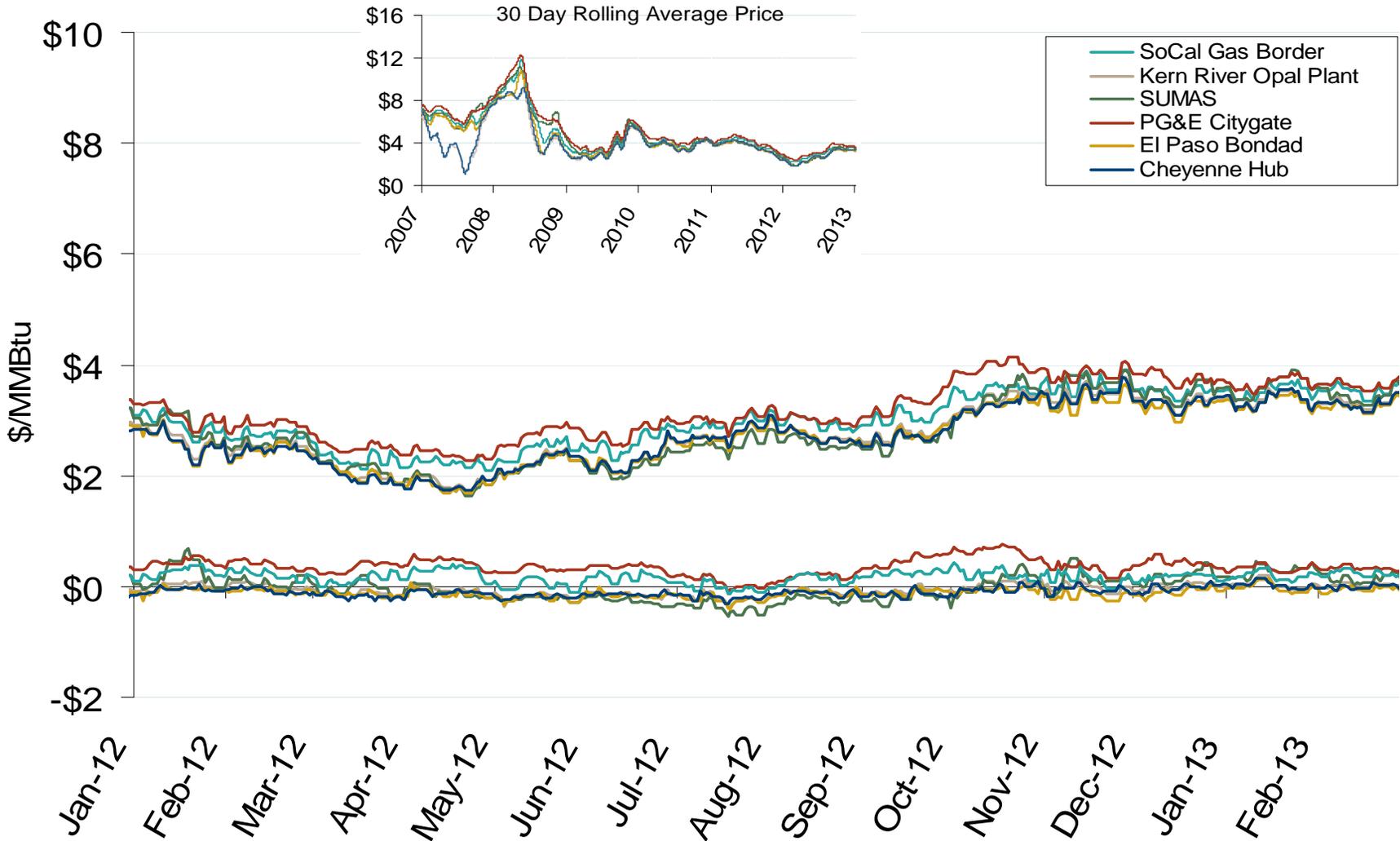


Western Annual Average Spot Hub Prices

Annual Average Day Ahead Prices (\$/MMBtu)						
	2008	2009	2010	2011	2012	5-Year Avg
Socal Border	\$7.80	\$3.61	\$4.25	\$4.05	\$2.91	\$4.53
PG&E Citygate	\$8.59	\$4.13	\$4.53	\$4.24	\$3.11	\$4.92
Opal	\$6.48	\$3.13	\$3.94	\$3.81	\$2.68	\$4.01
Sumas (Huntington)	\$8.14	\$3.76	\$4.10	\$3.87	\$2.69	\$4.51
El Paso Bondad	\$6.99	\$3.28	\$4.02	\$3.80	\$2.62	\$4.14
El Paso San Juan	\$7.16	\$3.33	\$4.07	\$3.82	\$2.64	\$4.20
Malin	\$8.17	\$3.76	\$4.21	\$3.94	\$2.73	\$4.56

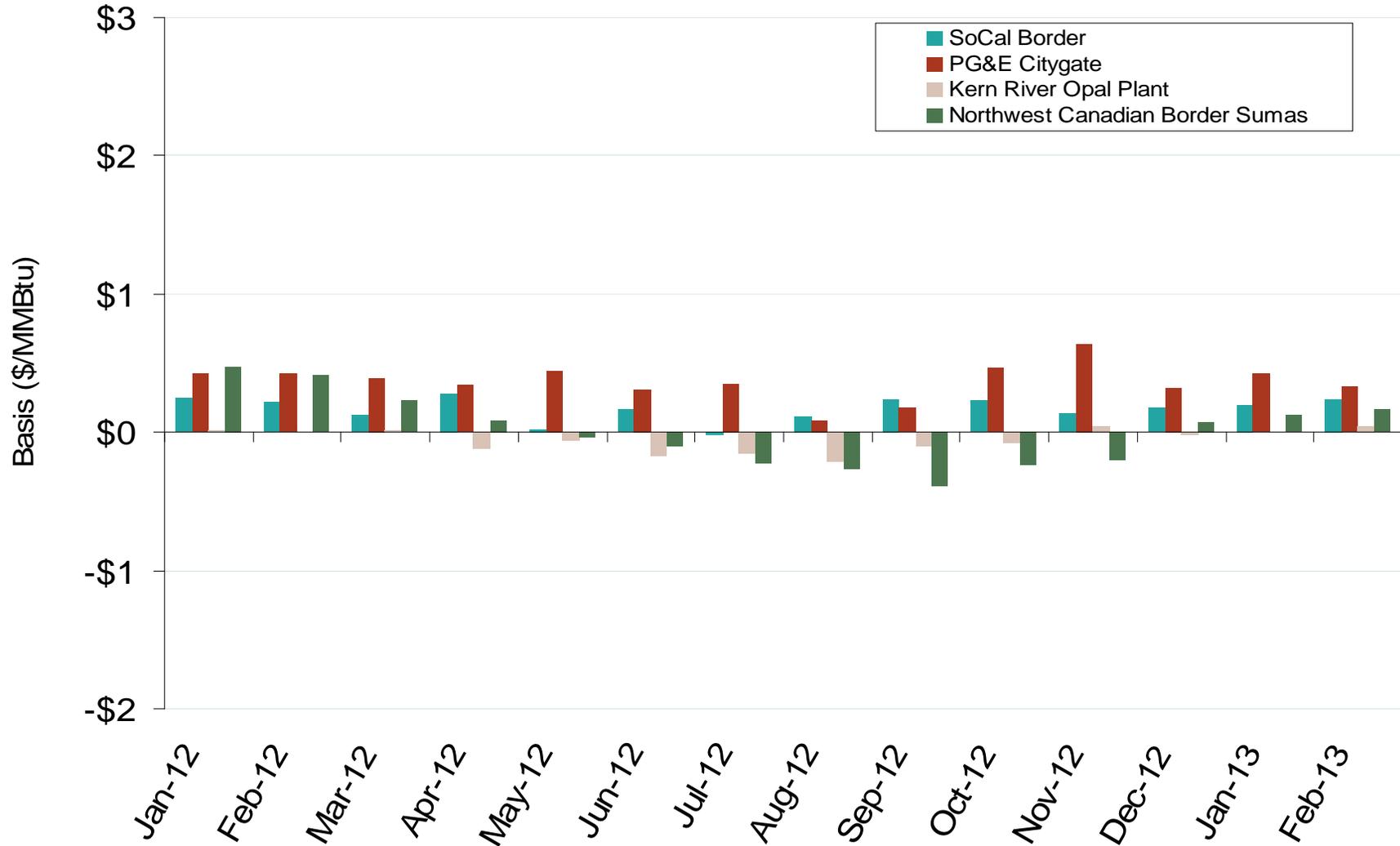
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Western Day-Ahead Hub Spot Prices and Basis



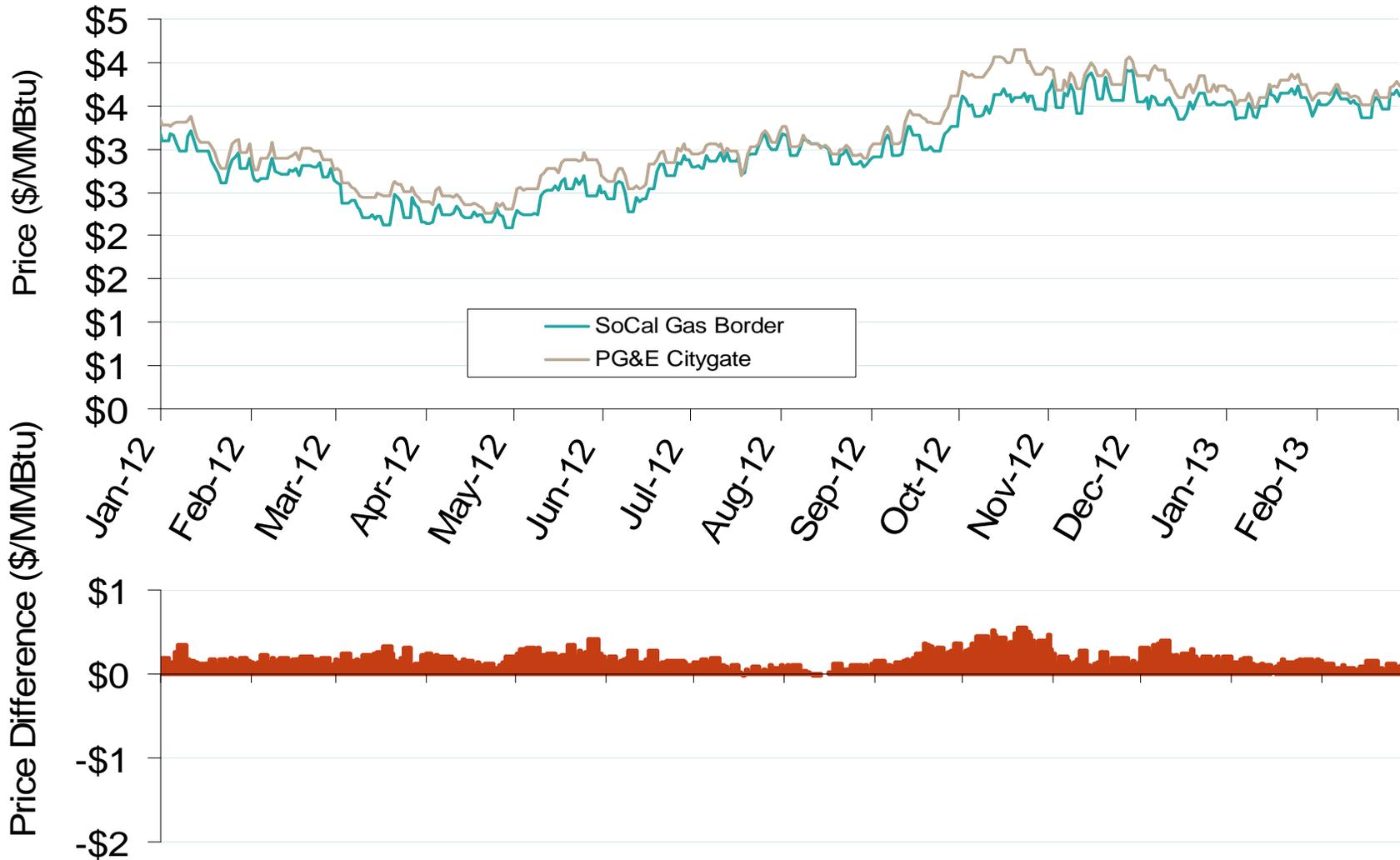
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Western Monthly Average Basis Value to Henry Hub

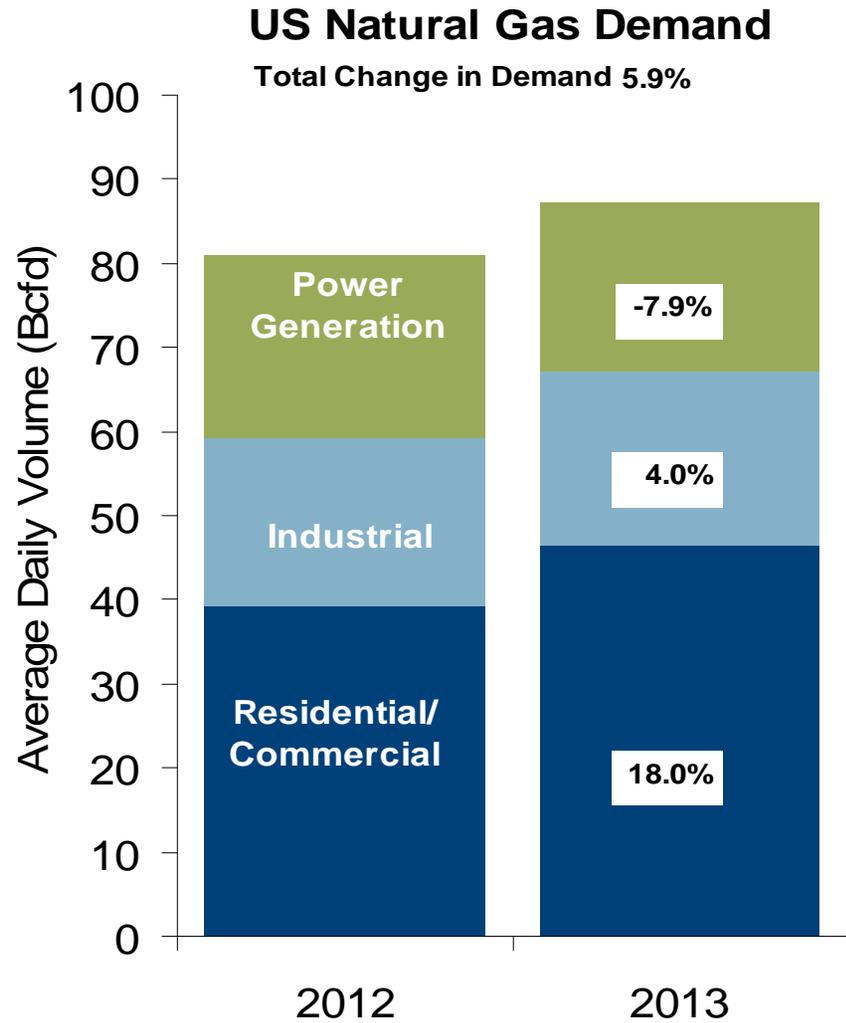
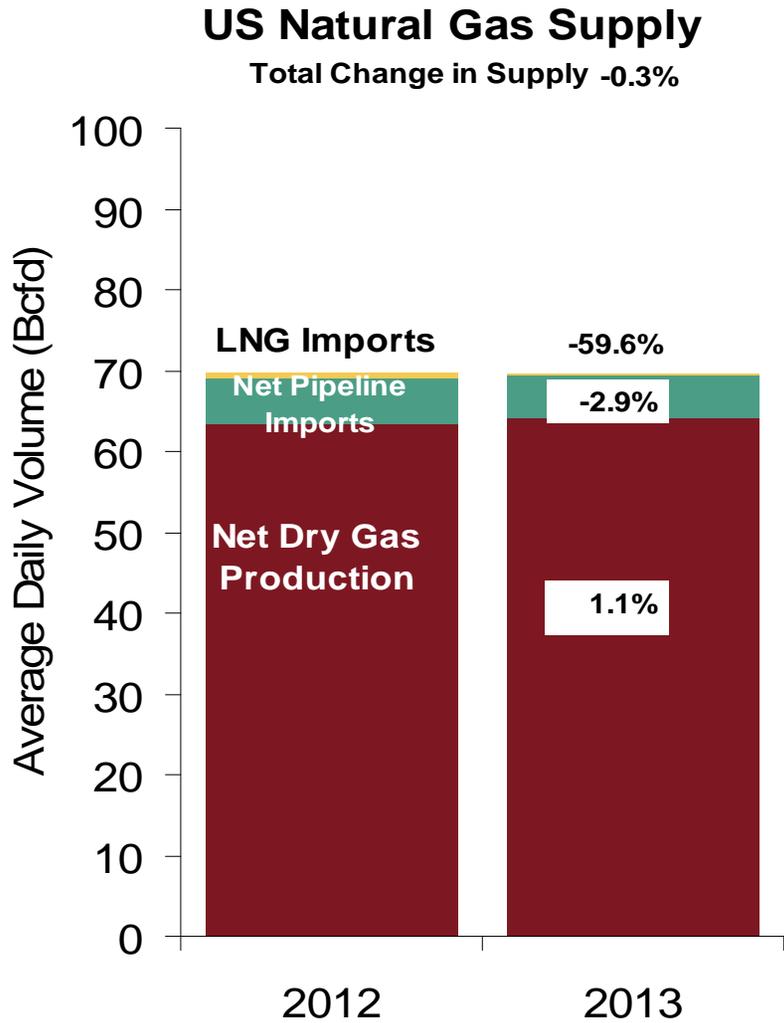


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Difference in Northern and Southern California Daily Spot Prices



U.S. NG Supply and Demand 2012 vs. 2013: January - February



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

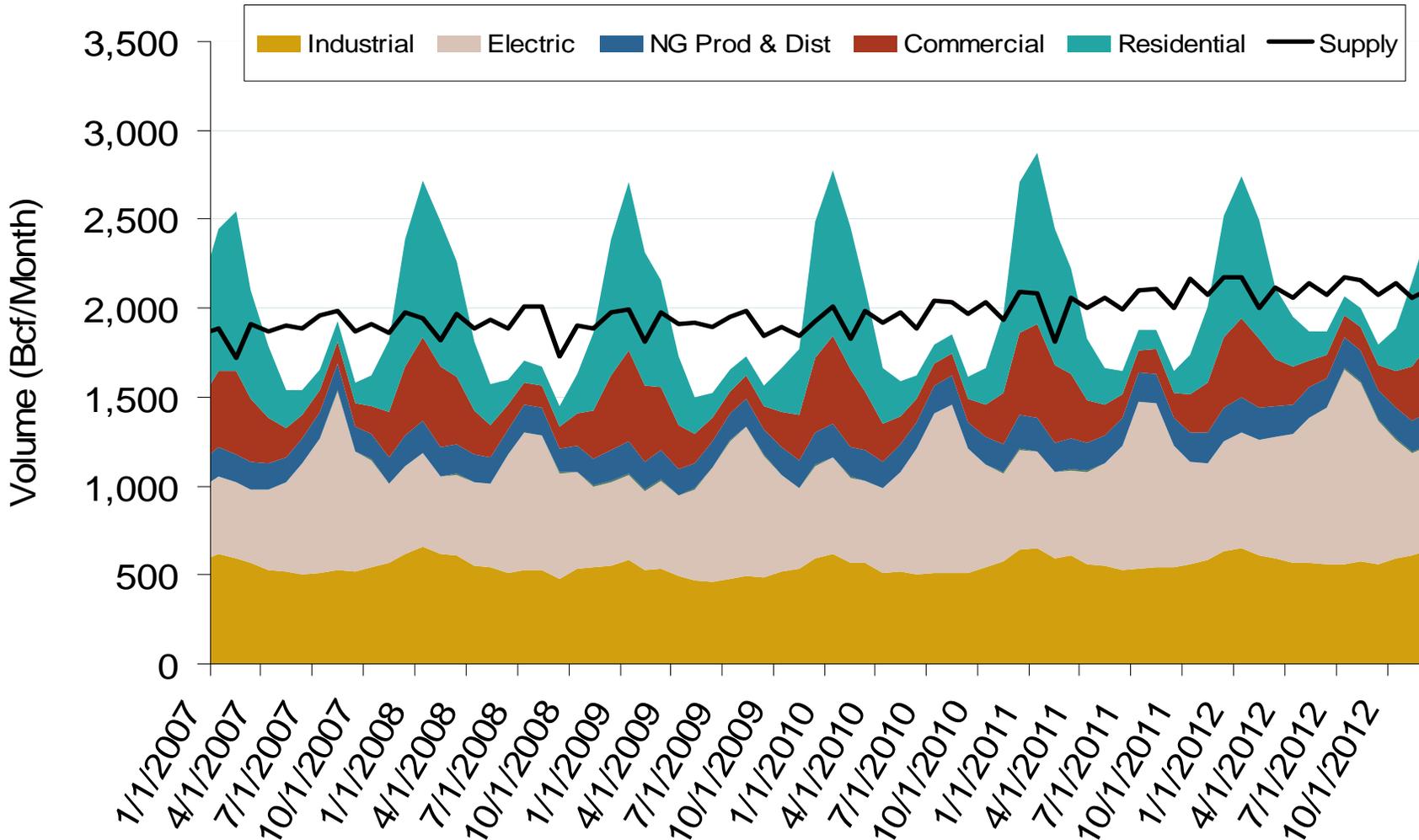
Source: Derived from *Bentek Energy* data

March 2013 Western Snapshot Report

Updated: March 13, 2013

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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

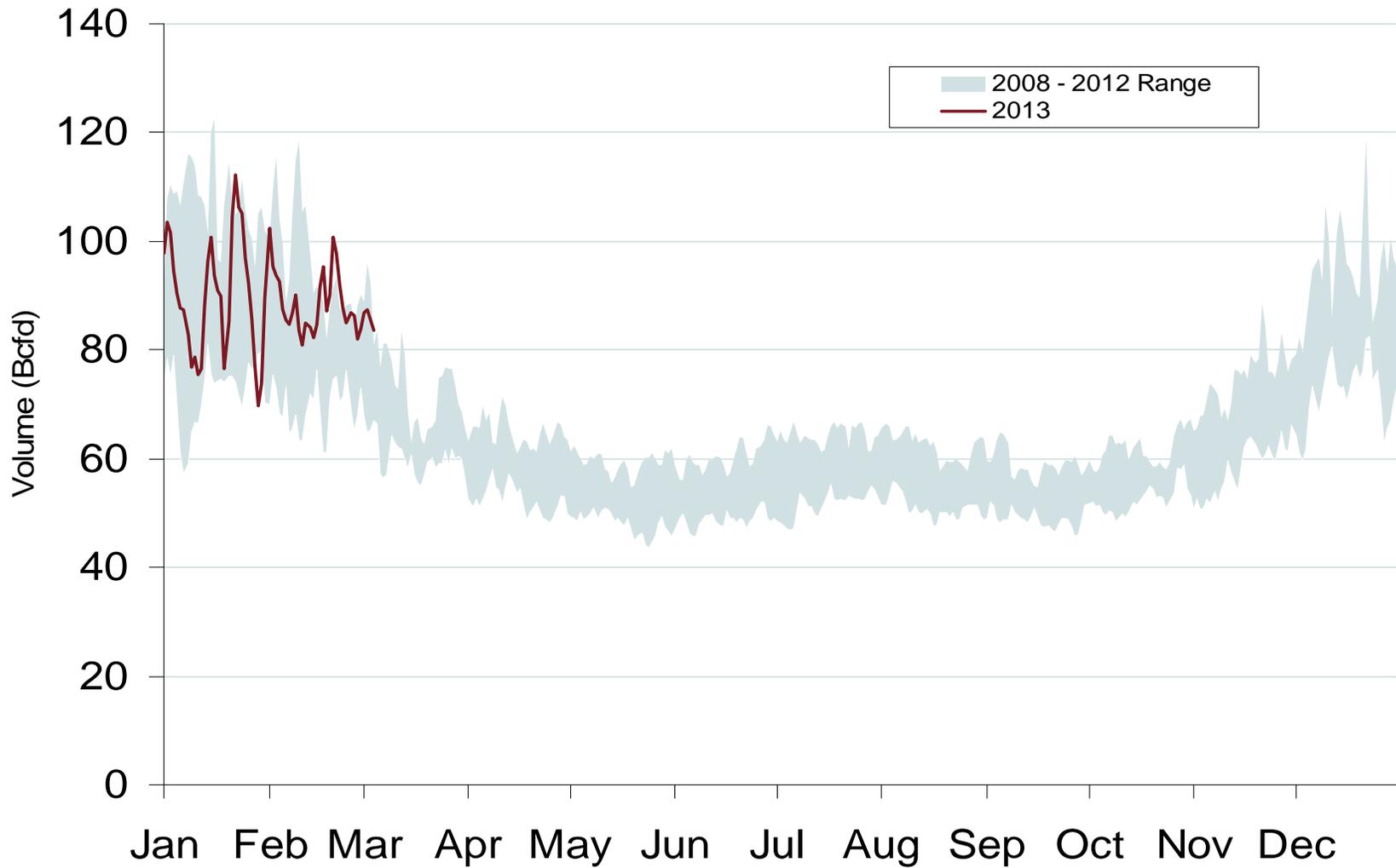
March 2013 Western Snapshot Report

Updated: March 12, 2013

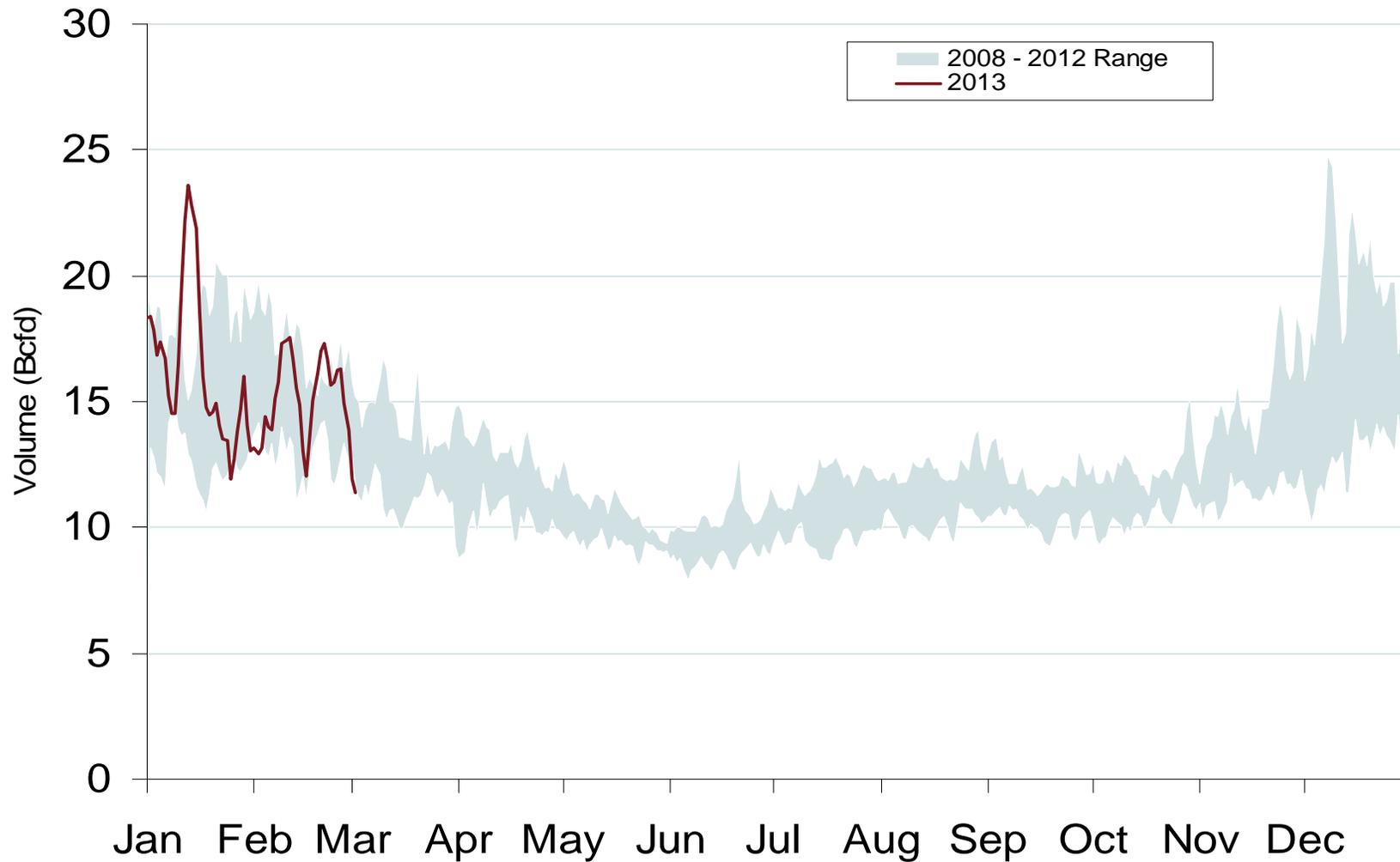
20013

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Total U.S. Natural Gas Demand All Sectors

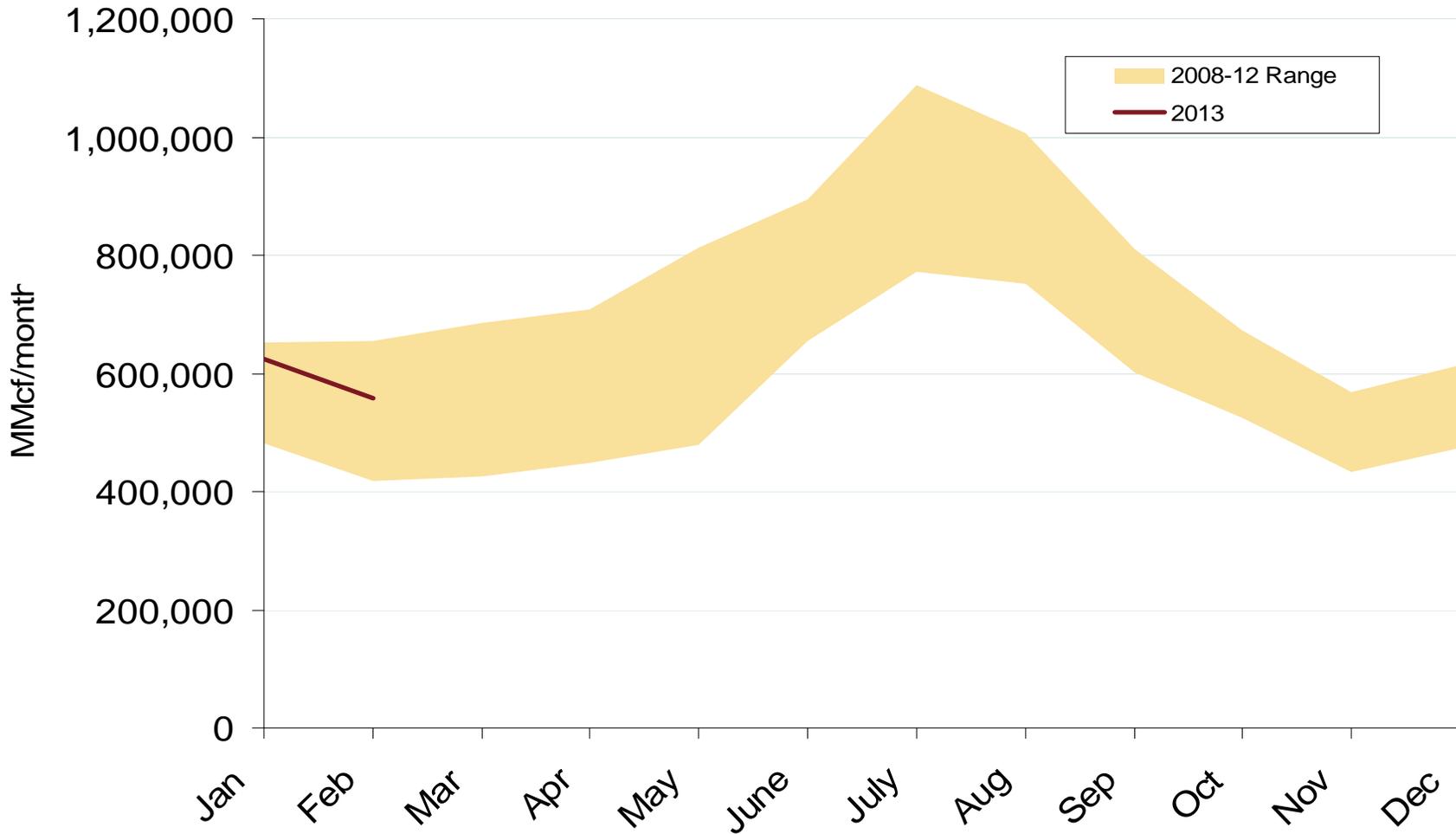


Daily Western Natural Gas Demand All Sectors



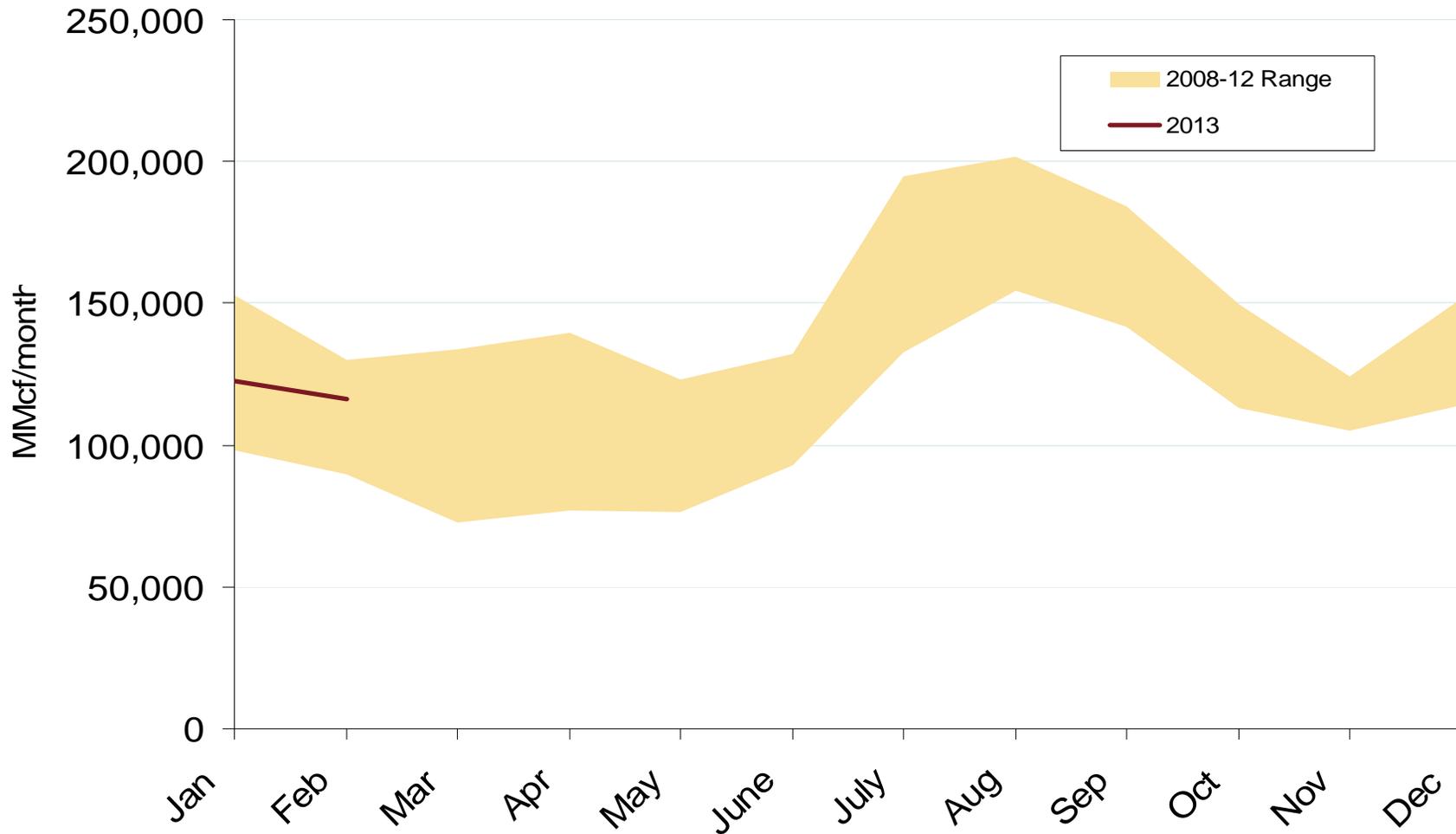
Federal Energy Regulatory Commission • Market Oversight • www.ferc.gov/oversight

U.S. Natural Gas Consumption for Power Generation



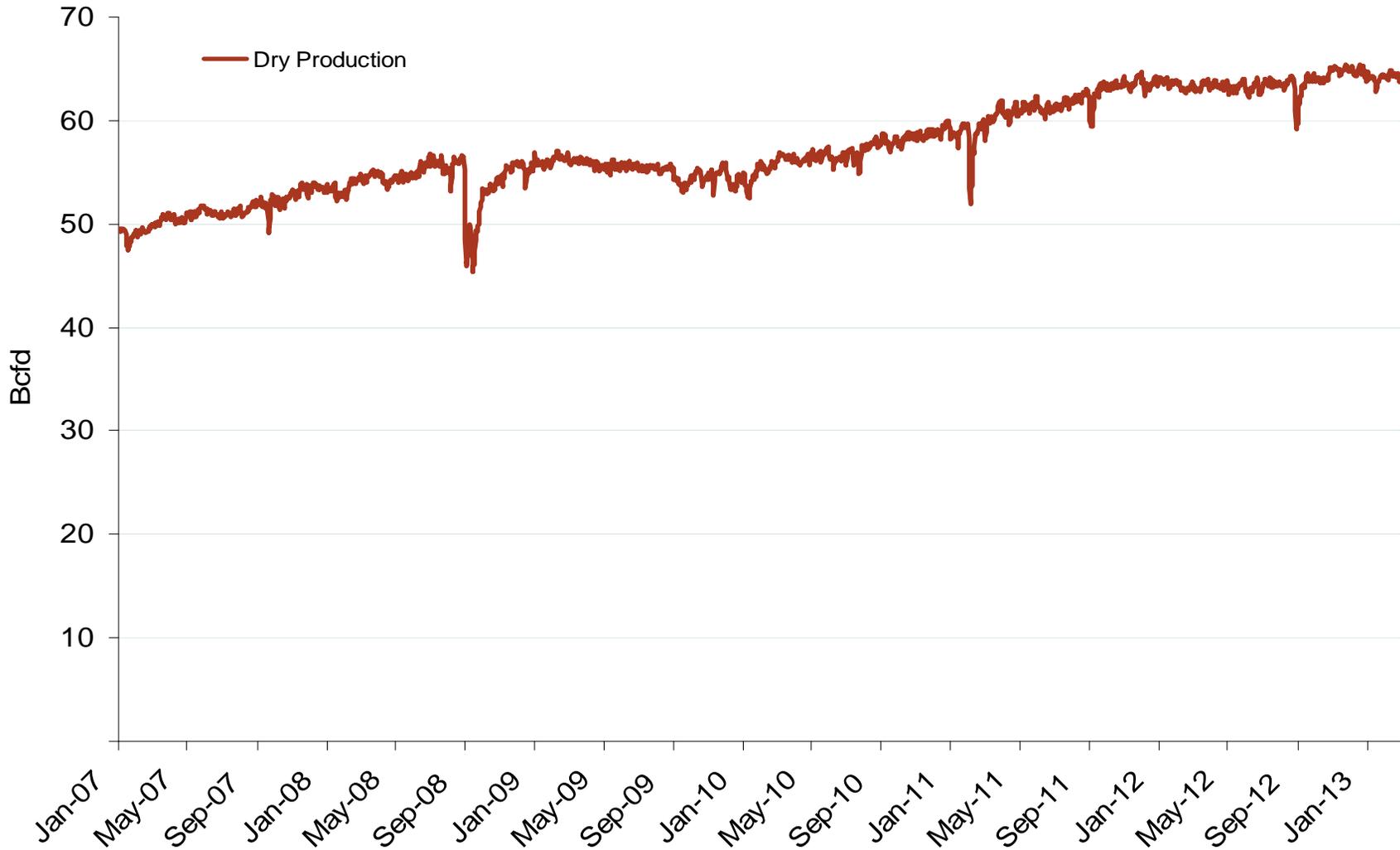
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Western Natural Gas Consumption for Power Generation



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



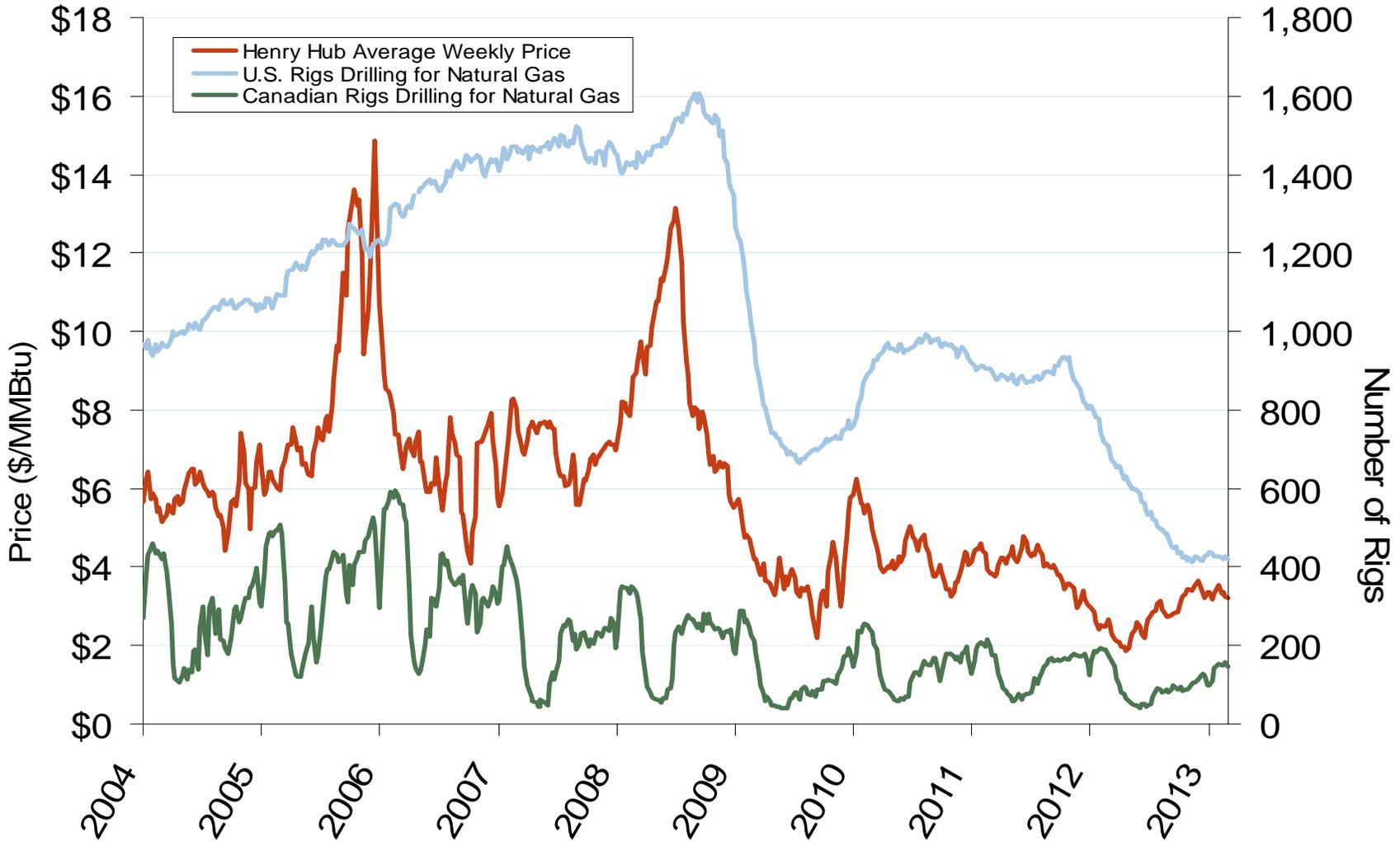
Note: Prior to July 2010, chart was derived from a combination of *EIA* and *Bentek Energy* data

Source: Derived from *Bentek Energy* data

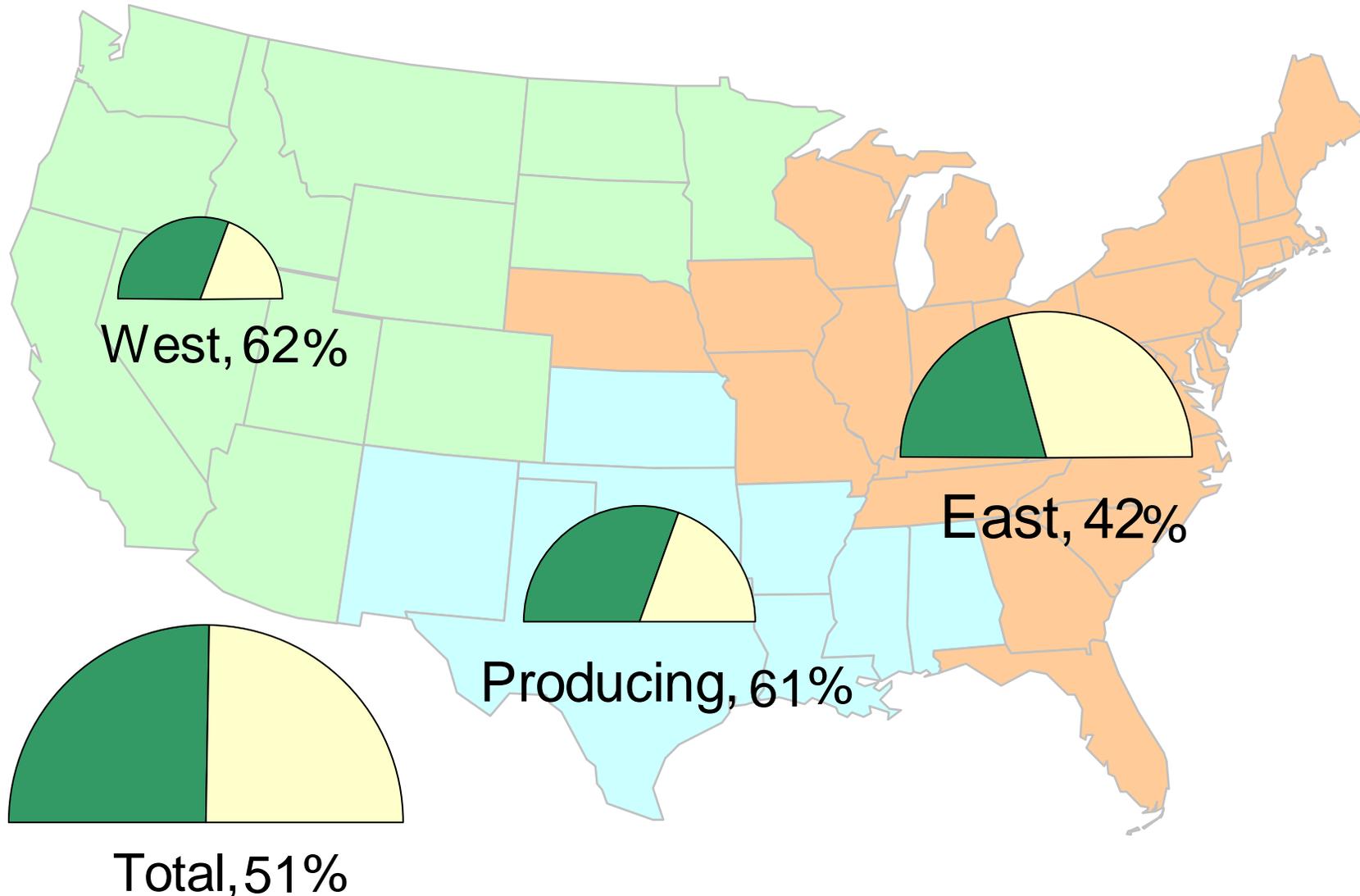
March 2013 Western Snapshot Report

Updated: March 07, 2013

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

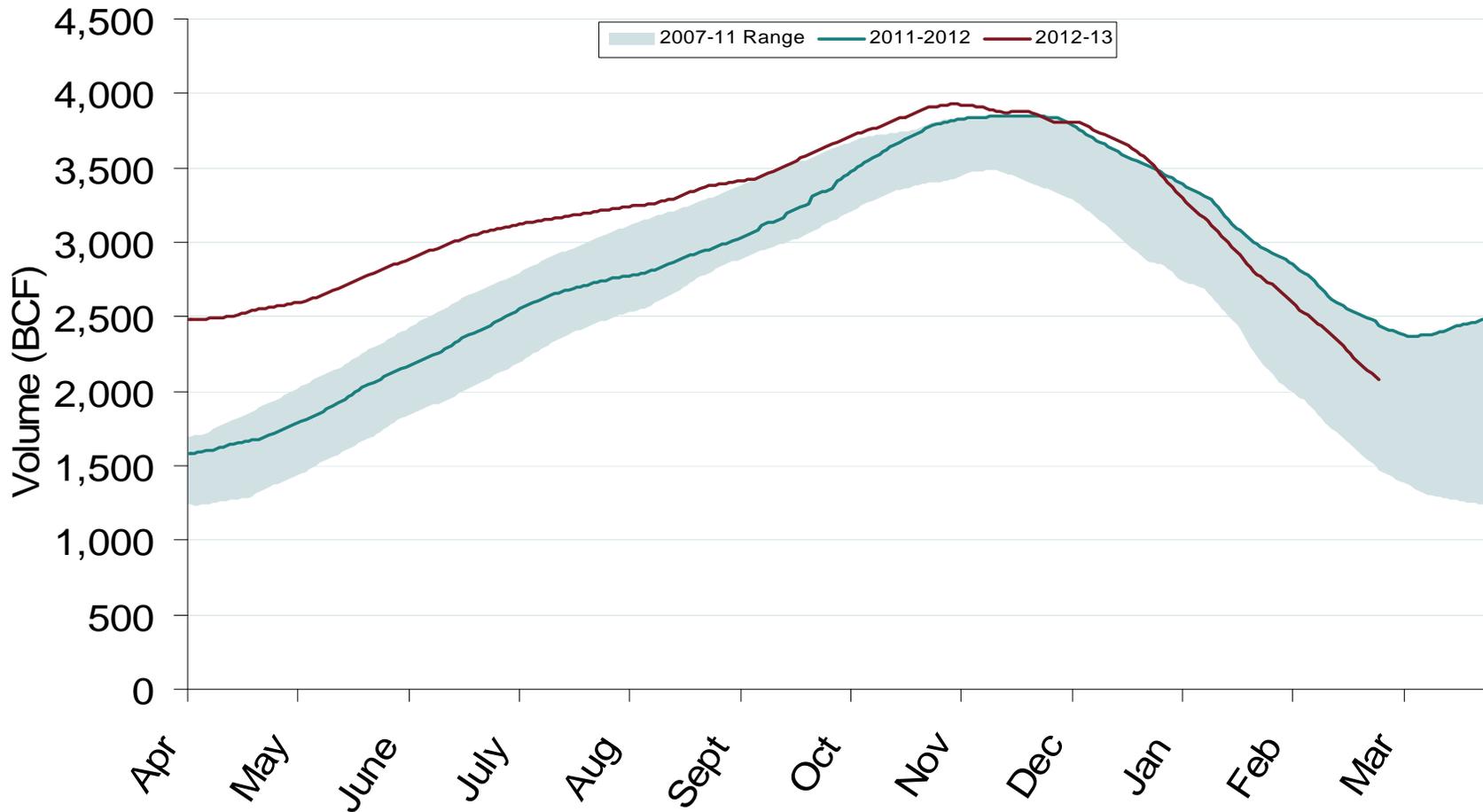


Natural Gas Storage Inventories – March 1, 2013

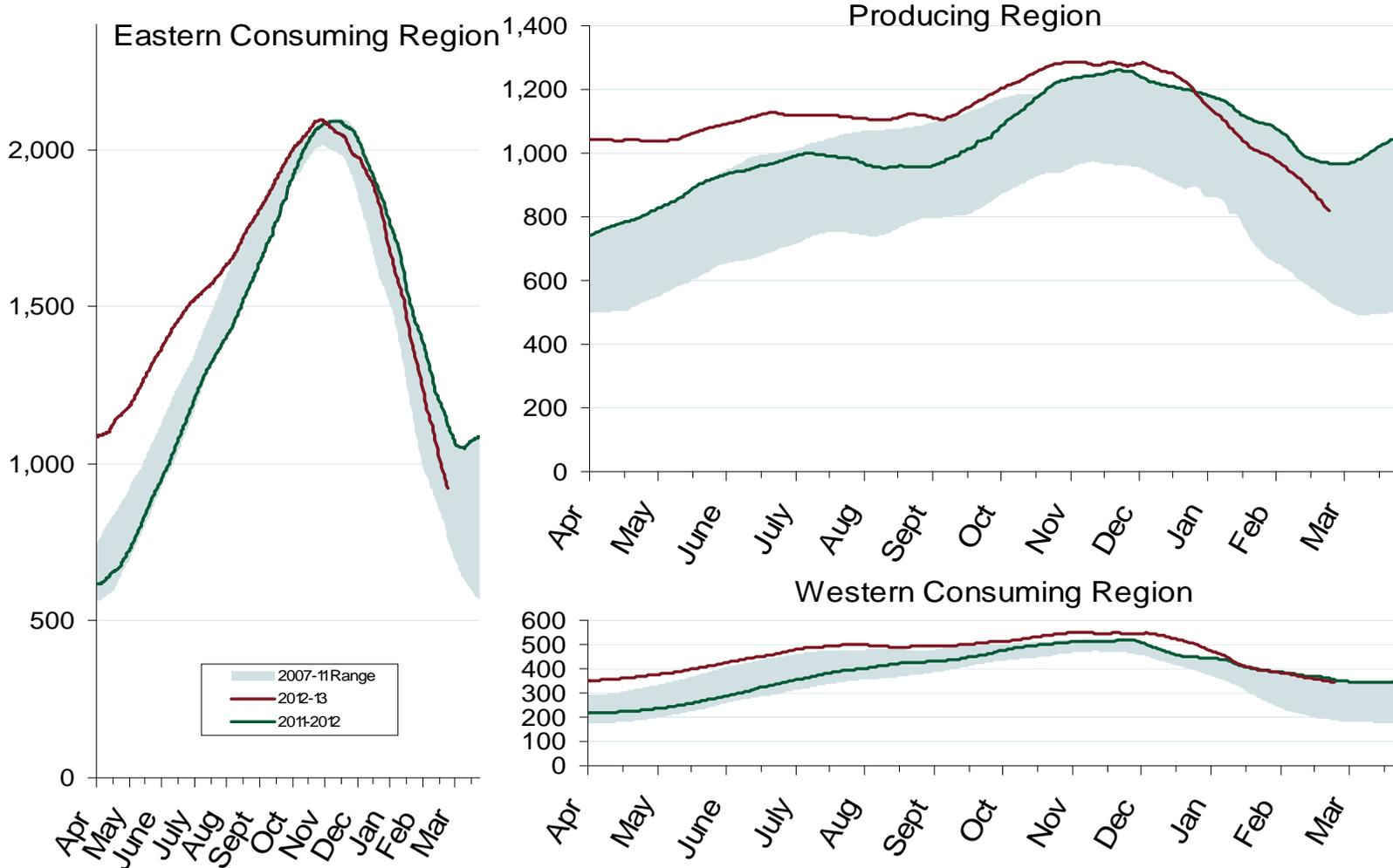


Source: Derived from *EIA Storage* and *Estimated Working Gas Capacity* data

Total U.S. Working Gas in Storage



Regional Totals of Working Gas in Storage

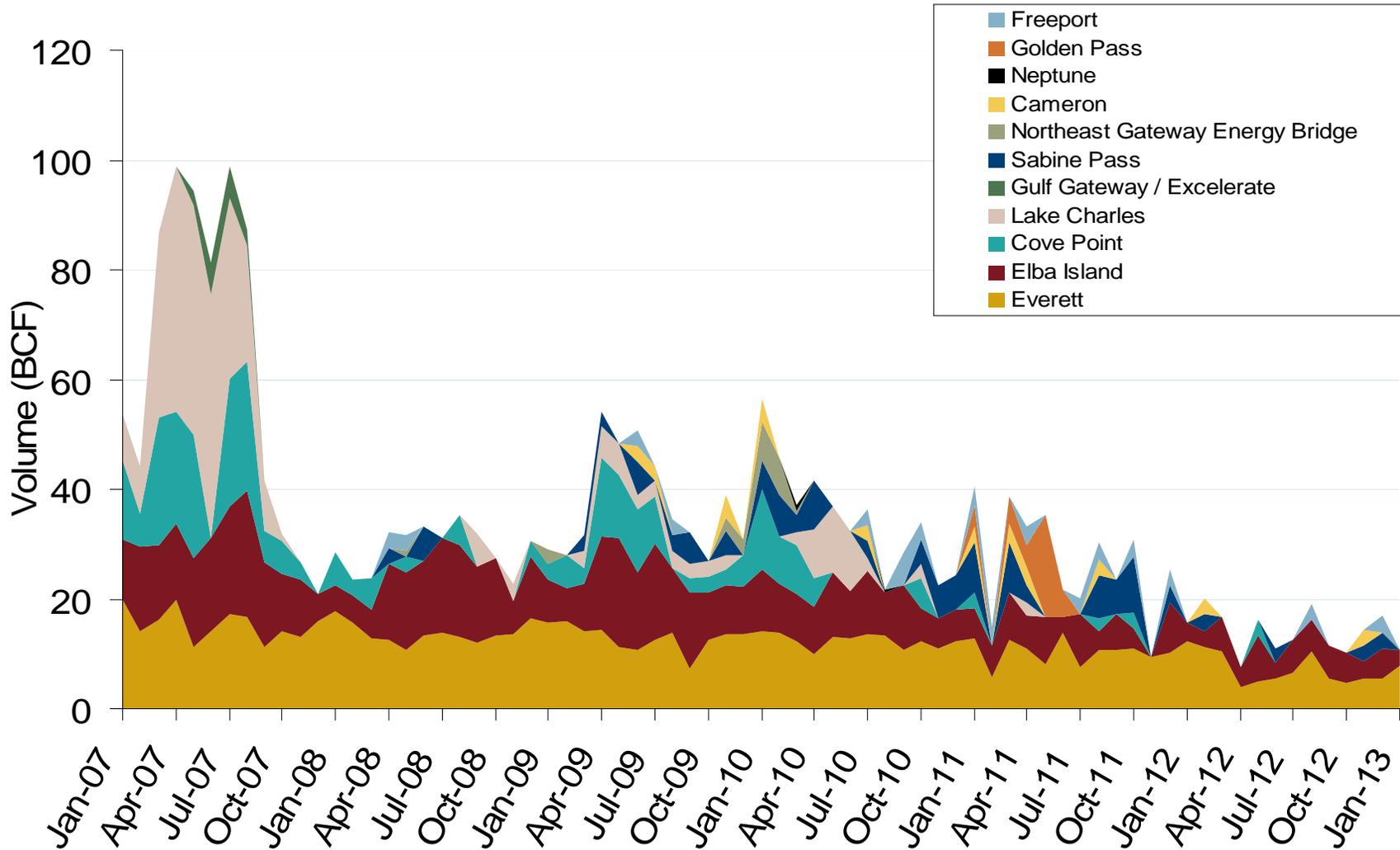


World LNG Estimated April 2013 Landed Prices



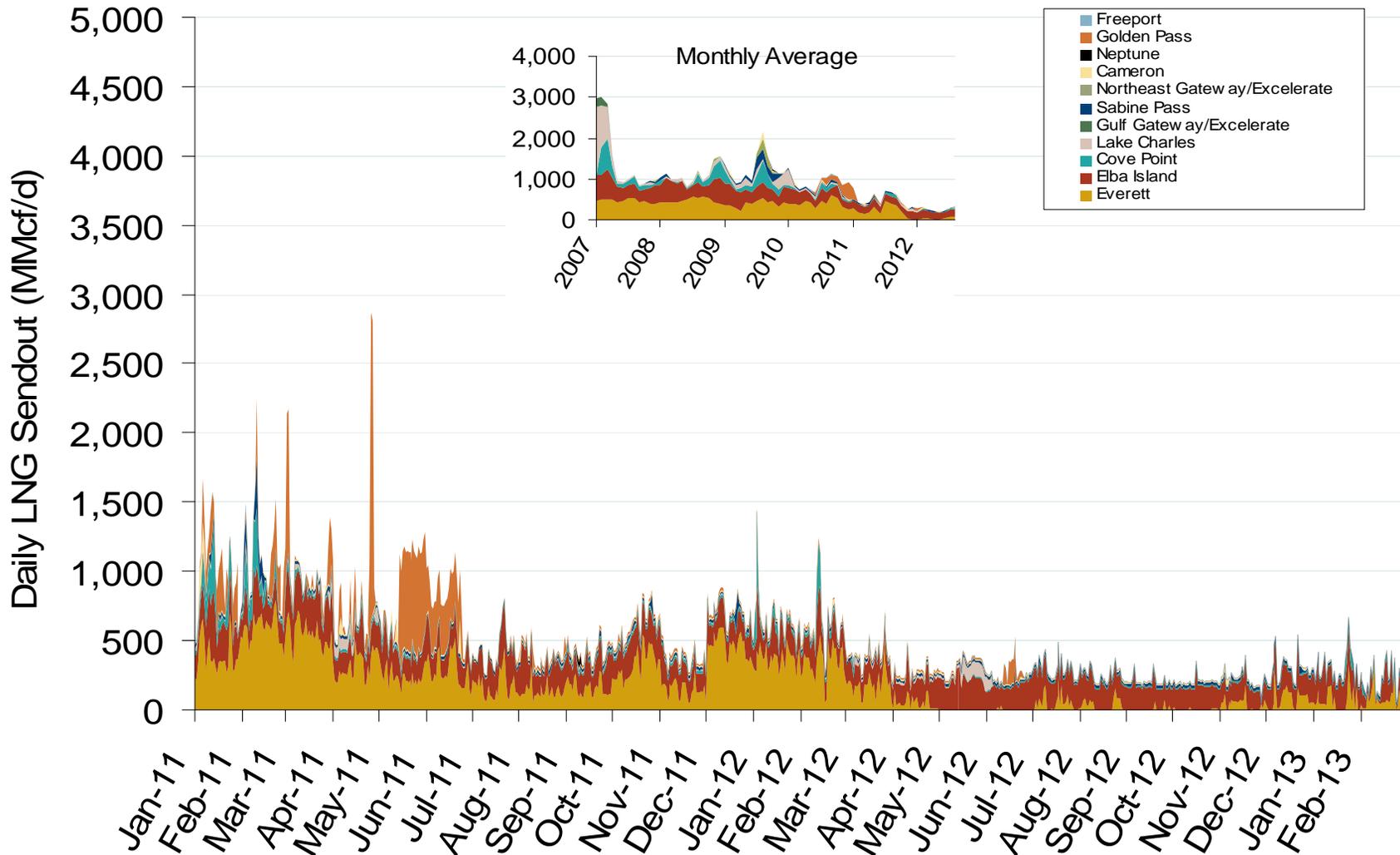
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Monthly Gas Imports at Existing U.S. LNG Facilities



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Daily Gas Sendout from Existing U.S. LNG Facilities

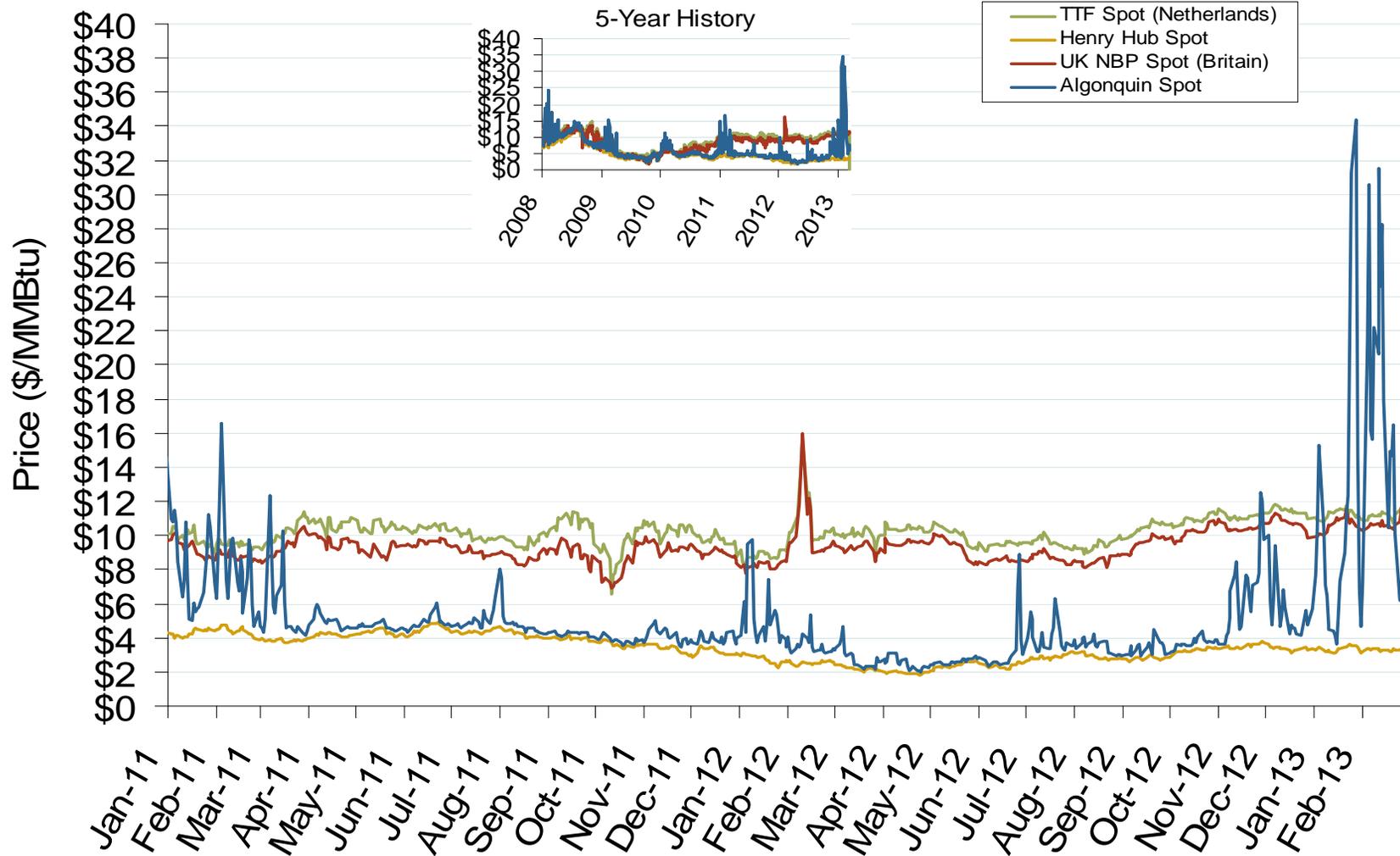


Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes flows to the Freeport LNG which flows via intrastate pipelines and flows to the Mystic 8 and 9 power plants.

Source: Derived from *Bentek Energy* data
 March 2013 Western Snapshot Report

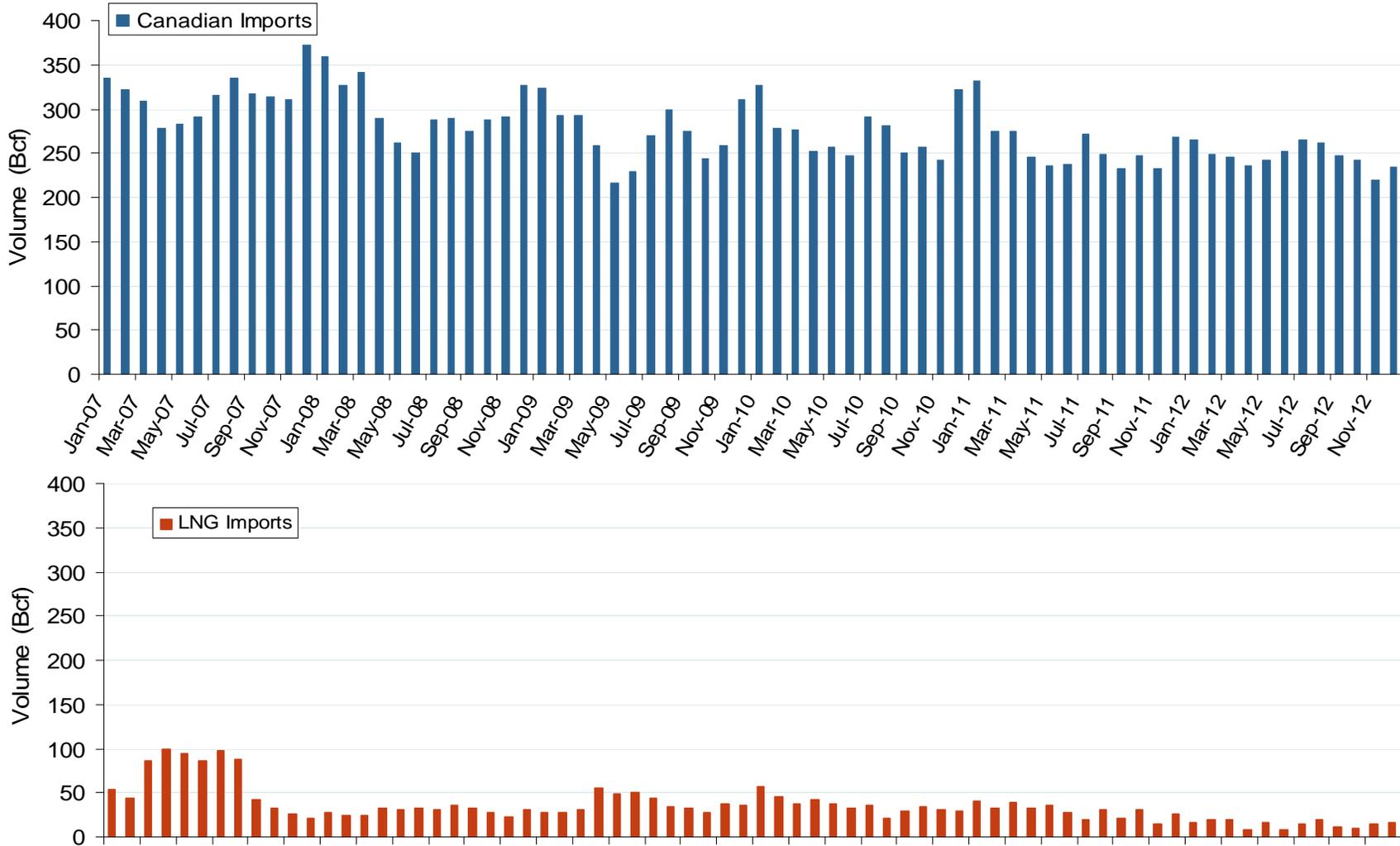
Updated: March 07, 2013

Atlantic Basin European and US Spot Natural Gas Prices



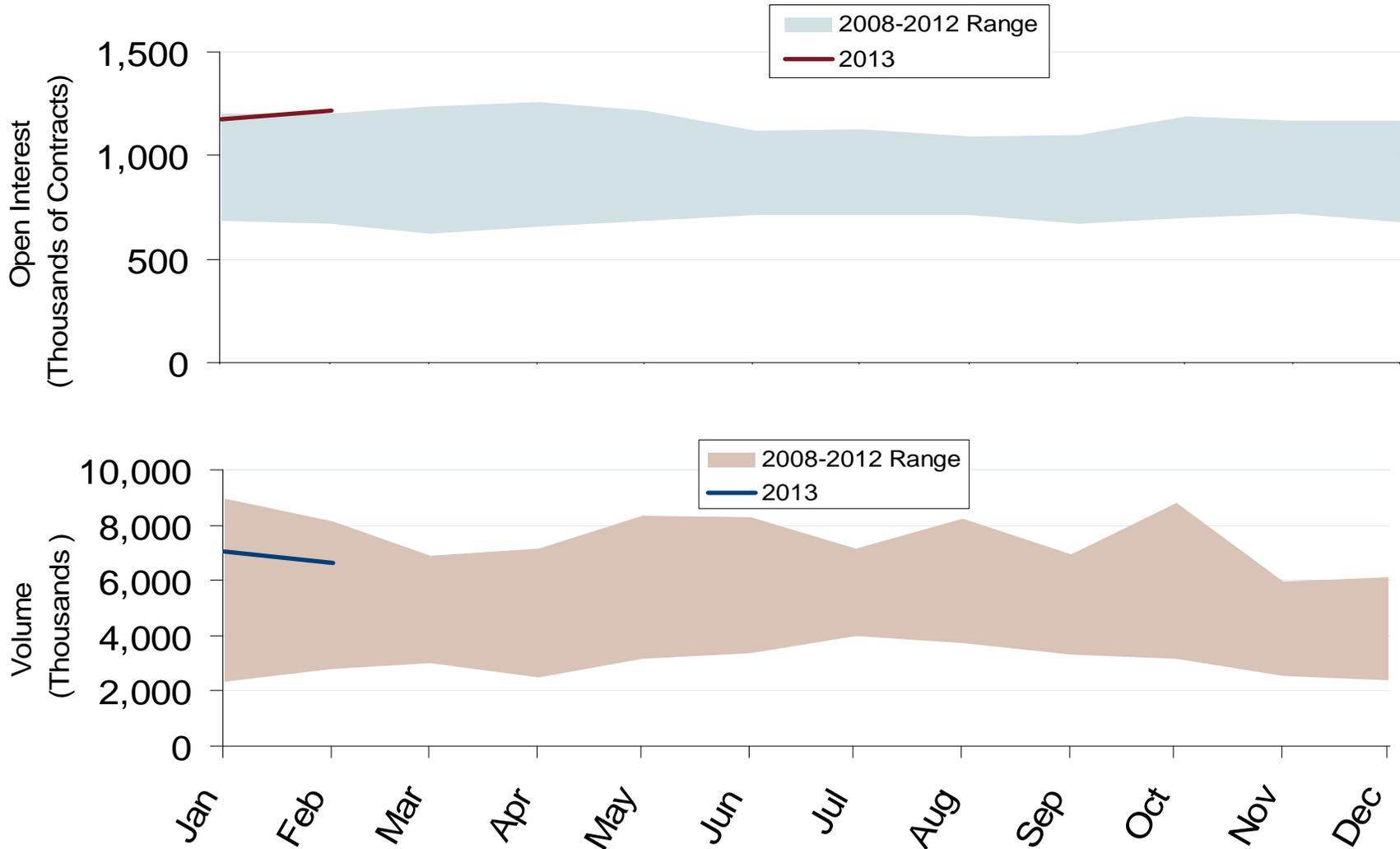
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Canadian and LNG Natural Gas Imports Into the U.S.

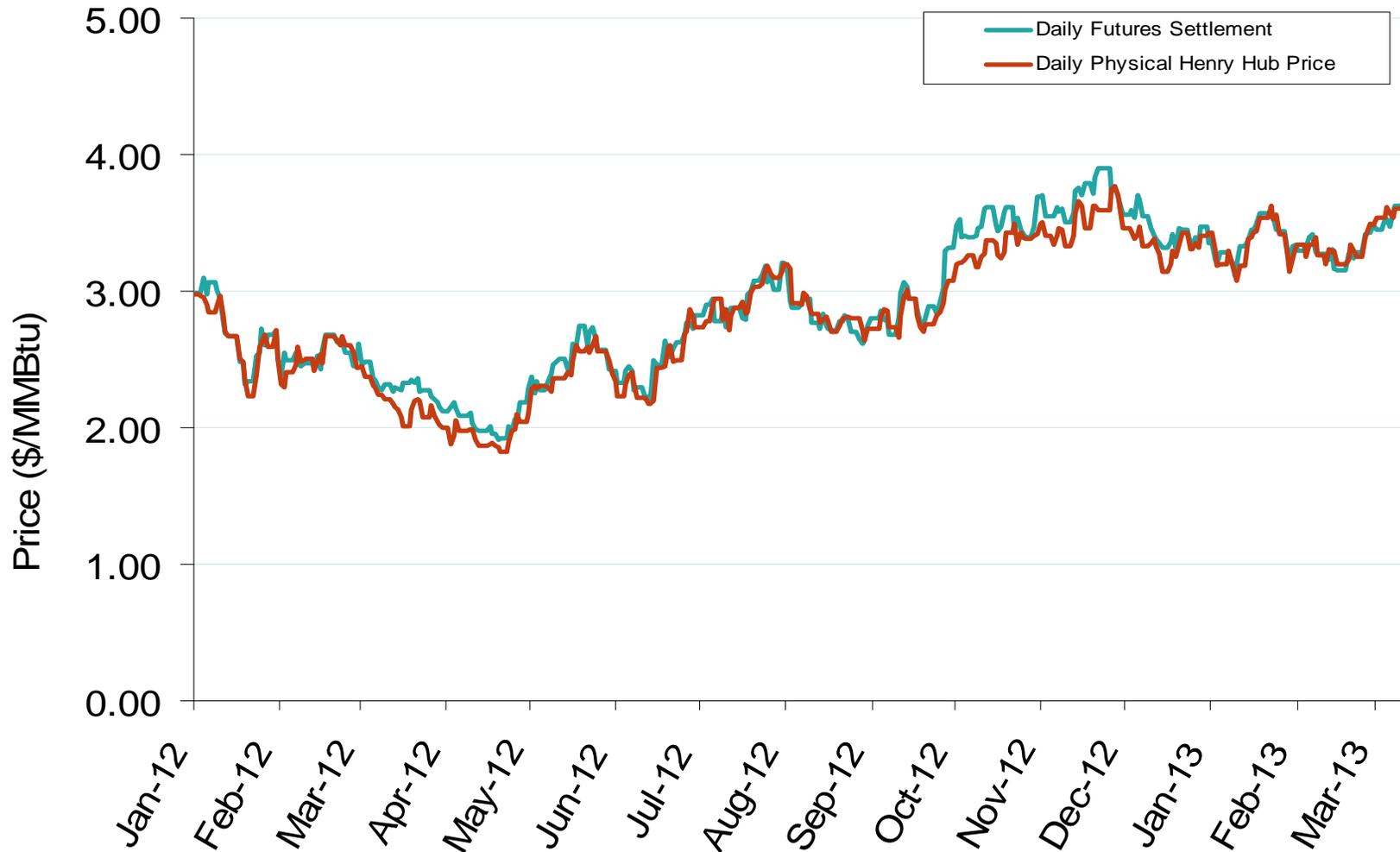


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Nymex NG Futures Month-End Open Interest and Monthly Volume

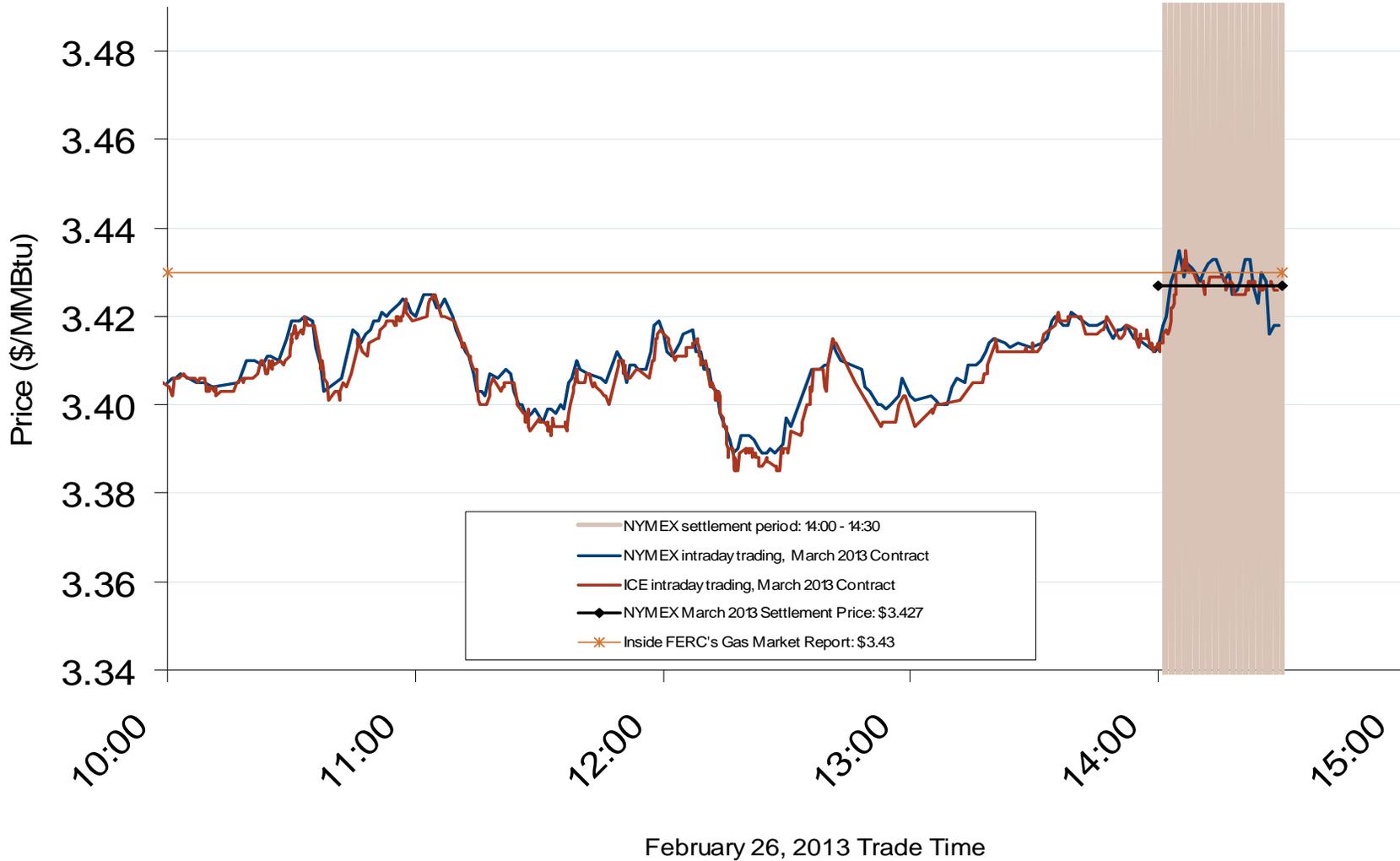


Daily Physical Index Price & Daily Futures Settlement Price



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Nymex and ICE Contract Final Settlement - March 2013



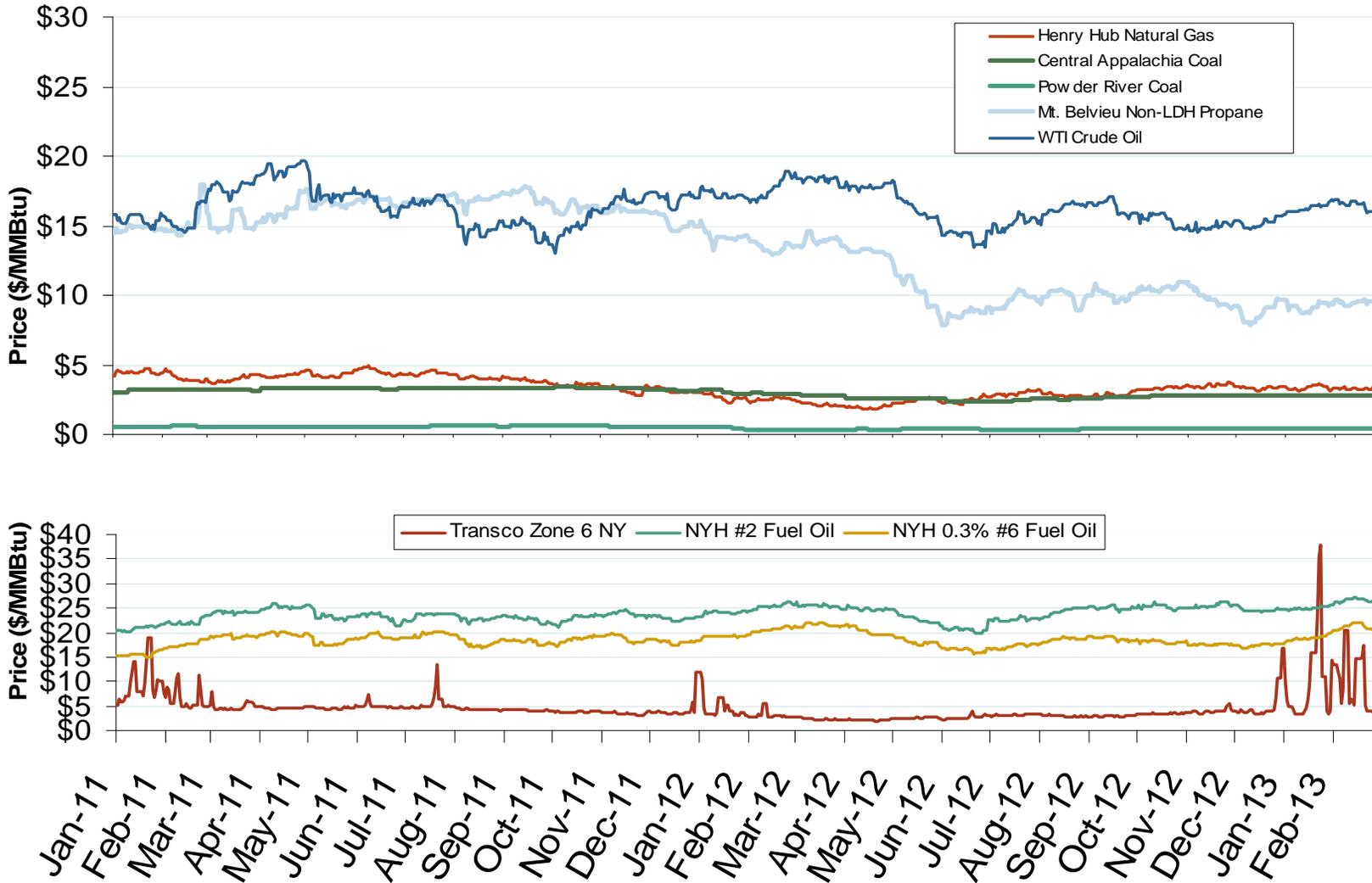
Notes: The final settlement day for this Nymex contract is three business days before the start of the contract term (which is the 1st day of the month)

Source: Derived from *Nymex* and *ICE* data
March 2013 Western Snapshot Report

Updated: March 13, 2013

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Oil, Coal, Natural Gas and Propane Daily Spot Prices



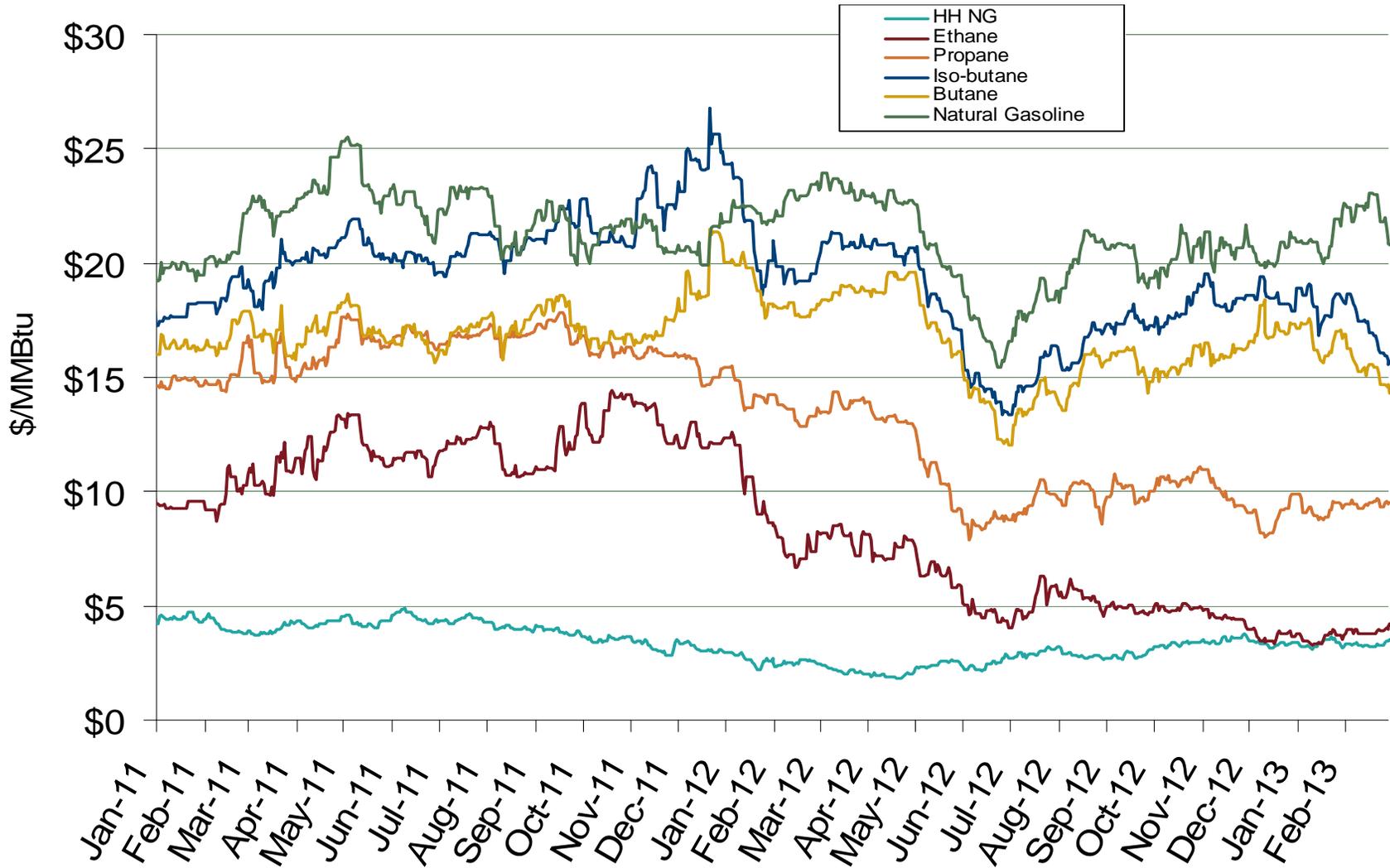
Notes: Coal prices are quoted in \$/ton. Conversion factors to \$/MMBtu are based on contract specifications of 12,000 btus/pound for Central Appalachian coal and 8800 btus/pound for Powder River Basin coal

Source: Derived from ICE and Bloomberg data

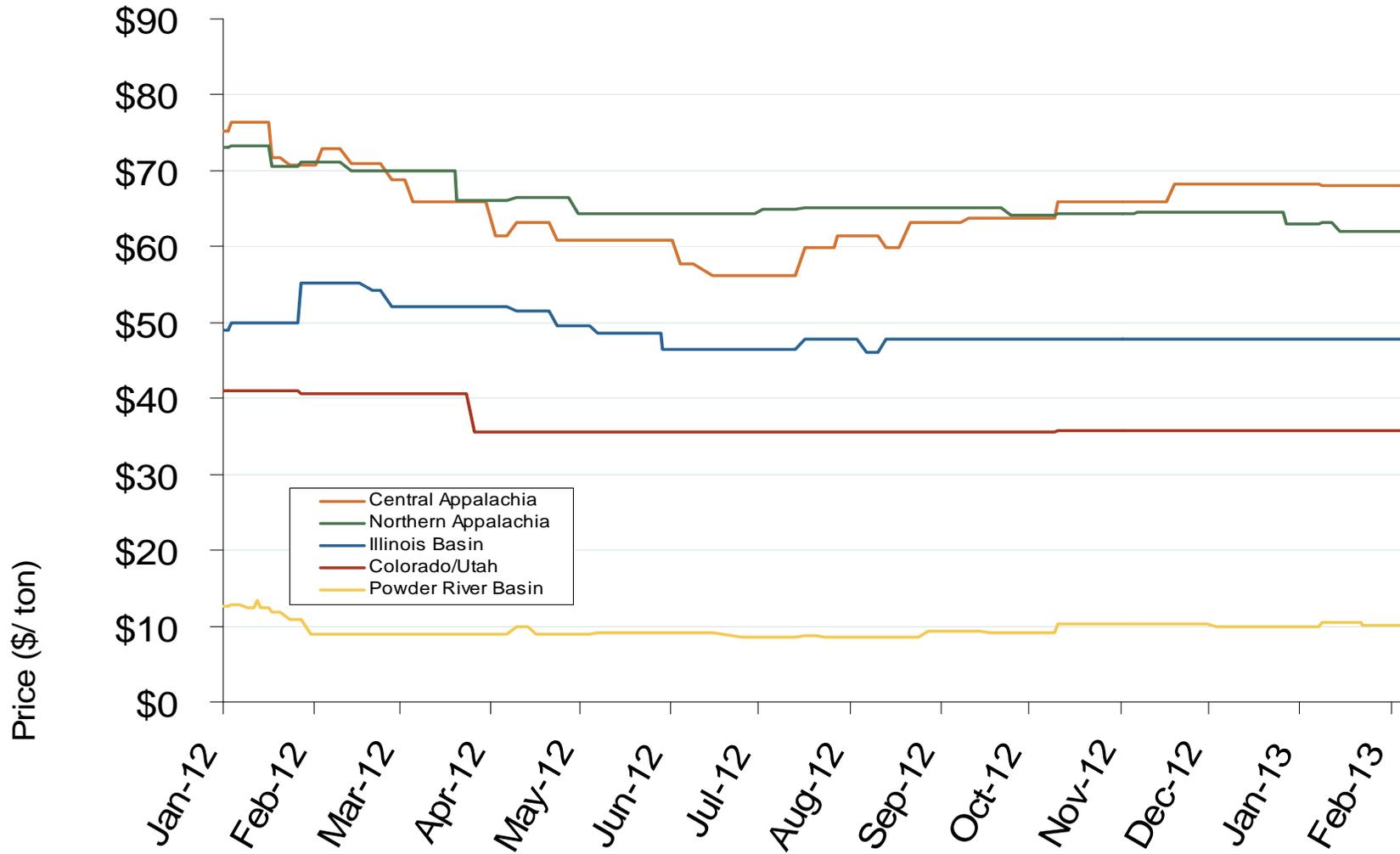
Updated: March 12, 2013

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



Central Appalachian and Powder River Basin Coal Prices



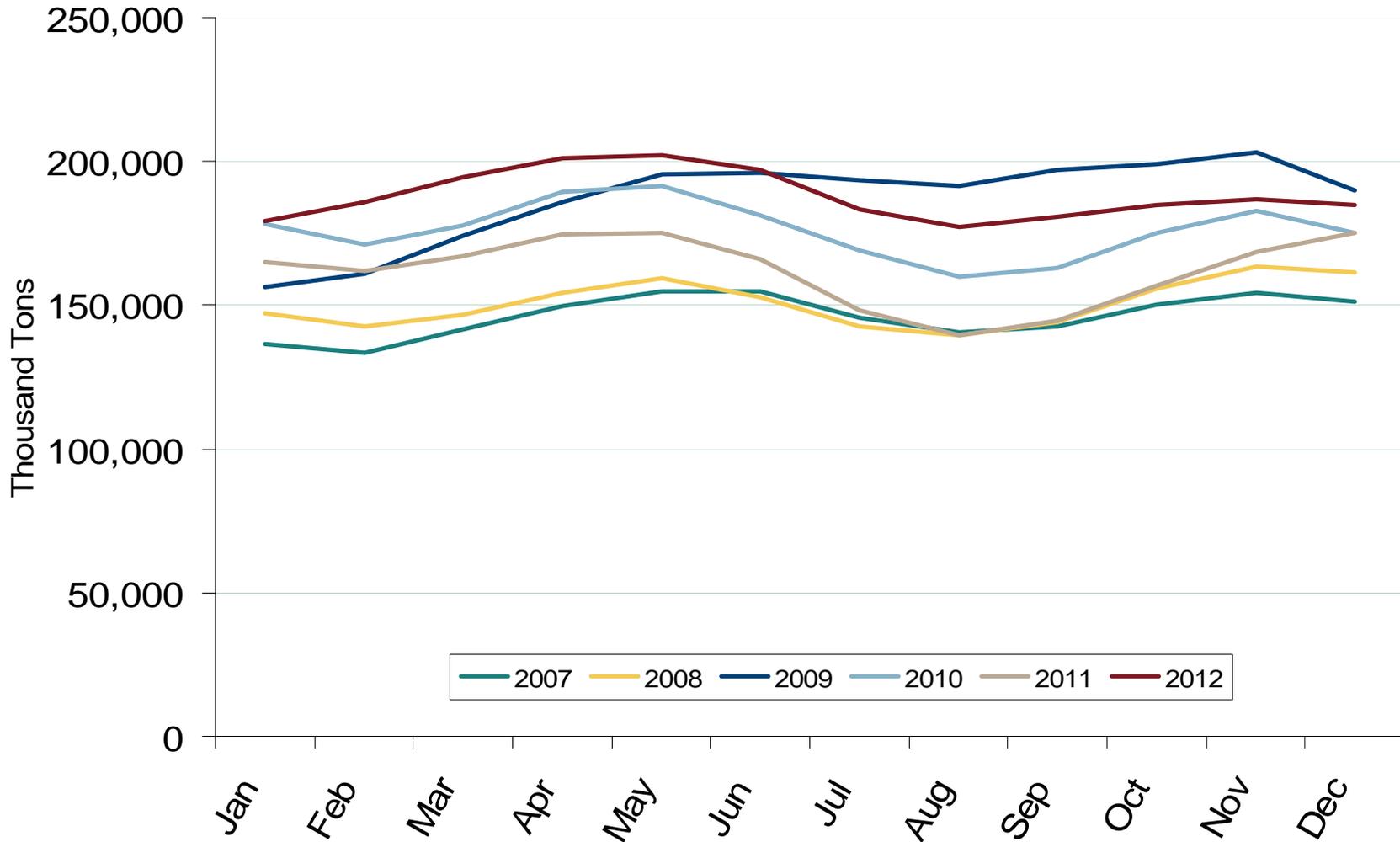
Notes: The Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances

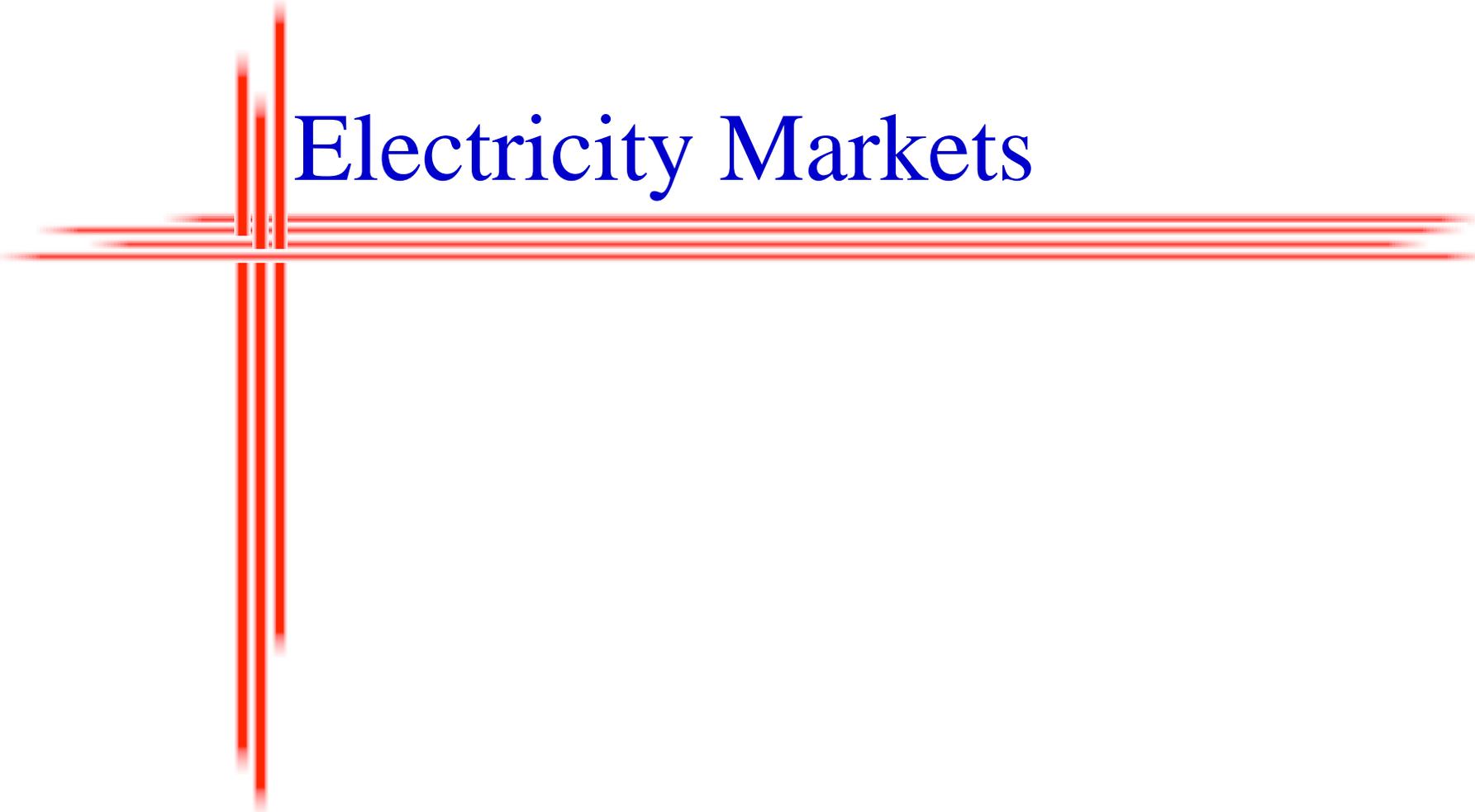
Source: Derived from Bloomberg data

Updated: March 12, 2013

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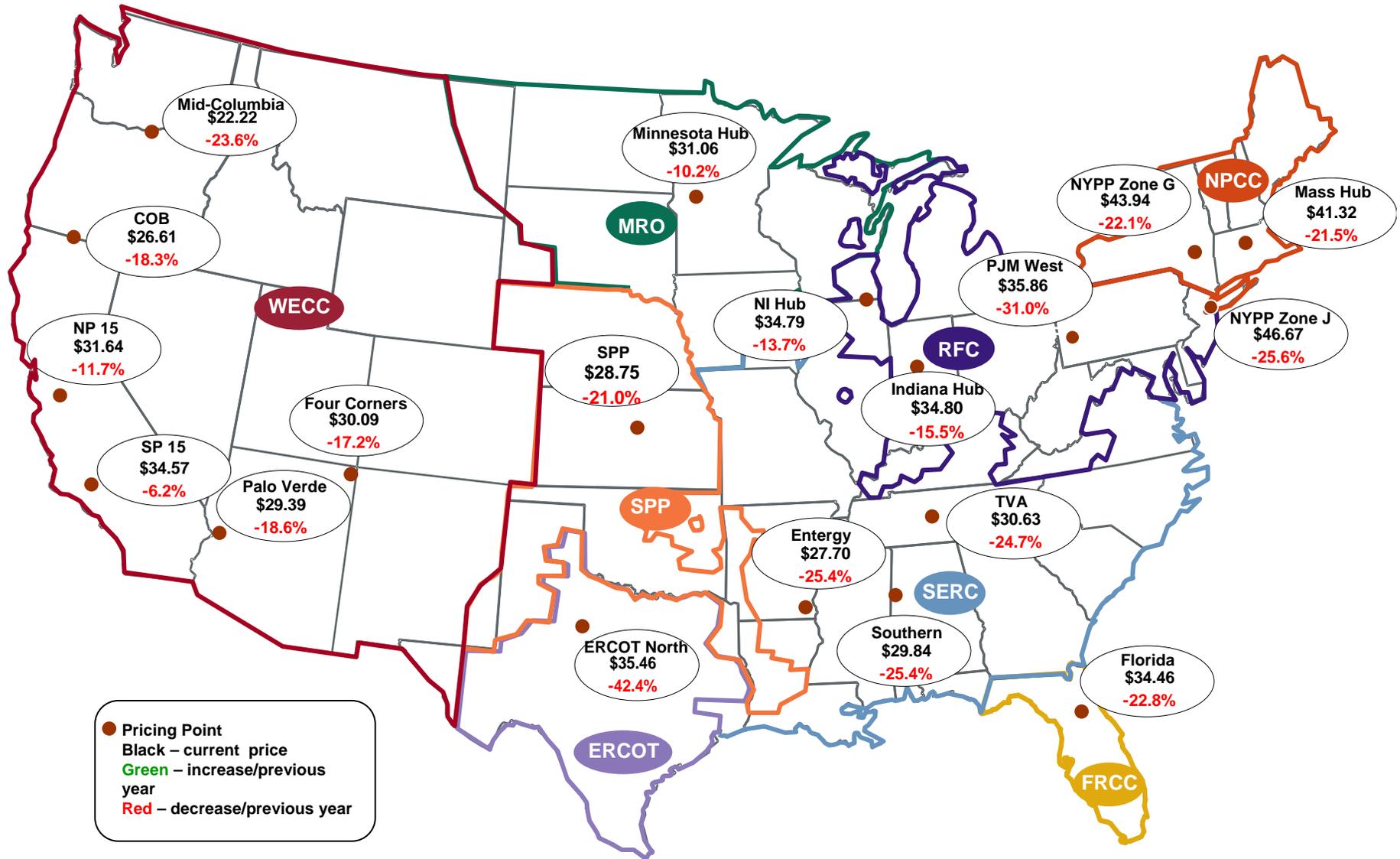
U.S. Coal Stockpiles at Electric Power Generating Facilities





Electricity Markets

Average On-Peak Spot Electric Prices 2012 (\$/MWh)



Source: Derived from *Platts* data.
March 2013 Western Snapshot Report

Updated: January 6, 2013

Regional Spot Prices: 2010-2012

	On-peak Spot Prices (\$/MWh)					Off-peak Spot Prices (\$/MWh)				
	2010	2011	2012	% Change 10-11	% Change 11-12	2010	2011	2012	% Change 10-11	% Change 11-12
Northeast										
Mass Hub	56.18	52.64	41.32	-6.3%	-21.5%	38.84	37.95	28.36	-2.3%	-25.3%
Ny Zone G	59.48	56.41	43.94	-5.2%	-22.1%	39.47	38.26	28.23	-3.1%	-26.2%
NY Zone J	65.76	62.71	46.67	-4.6%	-25.6%	40.37	39.19	28.63	-2.9%	-27.0%
NY Zone A	43.89	41.52	35.86	-5.4%	-13.6%	34.05	32.65	24.93	-4.1%	-23.6%
PJM West	53.68	51.99	35.86	-3.2%	-31.0%	35.81	33.94	26.29	-5.2%	-22.5%
Southeast										
VACAR	43.24	44.44	32.65	2.8%	-26.5%	29.18	30.23	22.86	3.6%	-24.4%
Southern	42.61	39.97	29.83	-6.2%	-25.4%	29.51	27.98	21.51	-5.2%	-23.1%
TVA	41.79	40.68	30.63	-2.7%	-24.7%	27.43	27.55	21.25	0.4%	-22.9%
Florida	50.81	44.62	34.46	-12.2%	-22.8%	31.59	31.27	23.49	-1.0%	-24.9%
Entergy	40.07	37.14	27.70	-7.3%	-25.4%	24.87	24.52	19.16	-1.4%	-21.9%
Midwest										
Indiana*	41.51	41.17	34.80	-0.8%	-15.5%	24.34	25.86	22.14	6.2%	-14.4%
Michigan Hub	43.68	42.73	36.27	-2.2%	-15.1%	26.84	27.52	24.10	2.5%	-12.4%
Minnesota Hub	36.86	34.57	31.06	-6.2%	-10.2%	17.61	16.39	17.49	-6.9%	6.7%
NI Hub	40.85	40.31	34.79	-1.3%	-13.7%	21.70	22.78	21.04	5.0%	-7.7%
Illinois Hub	38.22	38.12	32.12	-0.2%	-15.8%	20.44	22.20	20.00	8.6%	-9.9%
MA PP South	37.60	35.48	29.42	-5.6%	-17.1%	21.76	19.90	18.93	-8.5%	-4.9%
South Central										
SPP North	38.71	36.41	28.75	-5.9%	-21.0%	21.51	20.42	18.73	-5.1%	-8.3%
ERCOT North	41.15	61.55	35.46	49.6%	-42.4%	26.97	25.74	18.63	-4.6%	-27.6%
Southwest										
Four Corners	39.68	36.34	30.09	-8.4%	-17.2%	27.02	20.45	20.64	-24.3%	0.9%
Palo Verde	38.76	36.10	29.39	-6.9%	-18.6%	27.72	21.57	20.78	-22.2%	-3.7%
Mead	40.11	36.92	30.75	-8.0%	-16.7%	29.37	22.34	21.97	-23.9%	-1.7%
Northwest										
Mid-C	35.90	29.10	22.22	-19.0%	-23.6%	29.19	19.98	18.33	-31.6%	-8.2%
COB	38.84	32.55	26.61	-16.2%	-18.3%	29.86	19.92	17.92	-33.3%	-10.0%
California										
NP15	40.08	35.81	31.64	-10.6%	-11.7%	29.89	21.26	22.53	-28.9%	6.0%
SP15	40.21	36.87	34.57	-8.3%	-6.2%	29.14	21.78	23.28	-25.3%	6.9%

Note: Effective January 1, 2012, Platts replaced the Cinergy Hub with the Indiana Hub.

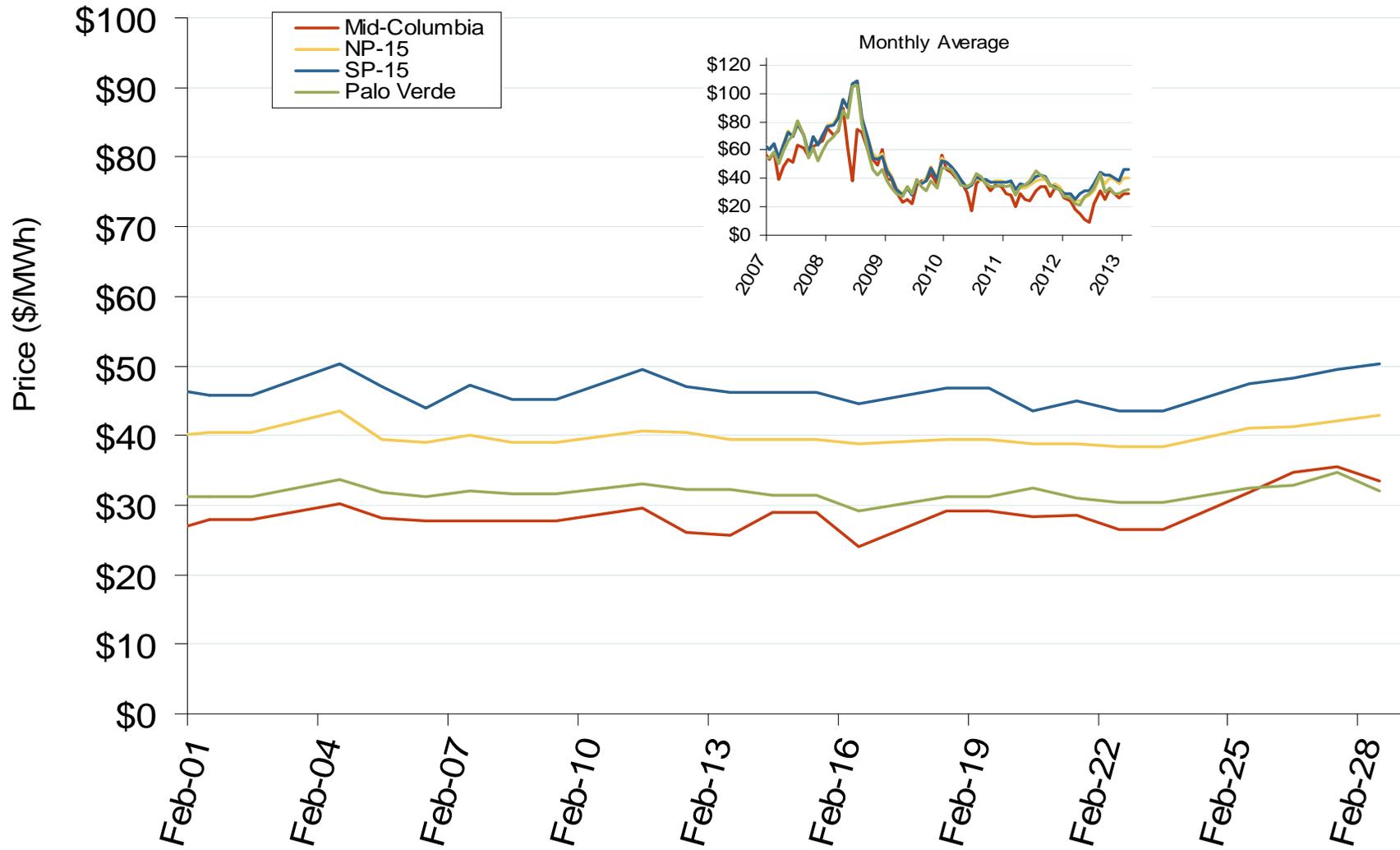
March 2013 Western Snapshot Report

California Annual Average Bilateral Prices

Annual Average Day Ahead On Peak Prices (\$/MWh)						
	2008	2009	2010	2011	2012	5-Year Avg
NP15	\$80.14	\$39.29	\$40.08	\$35.81	\$32.02	\$45.49
SP15	\$79.36	\$38.31	\$40.21	\$36.87	\$34.91	\$45.96

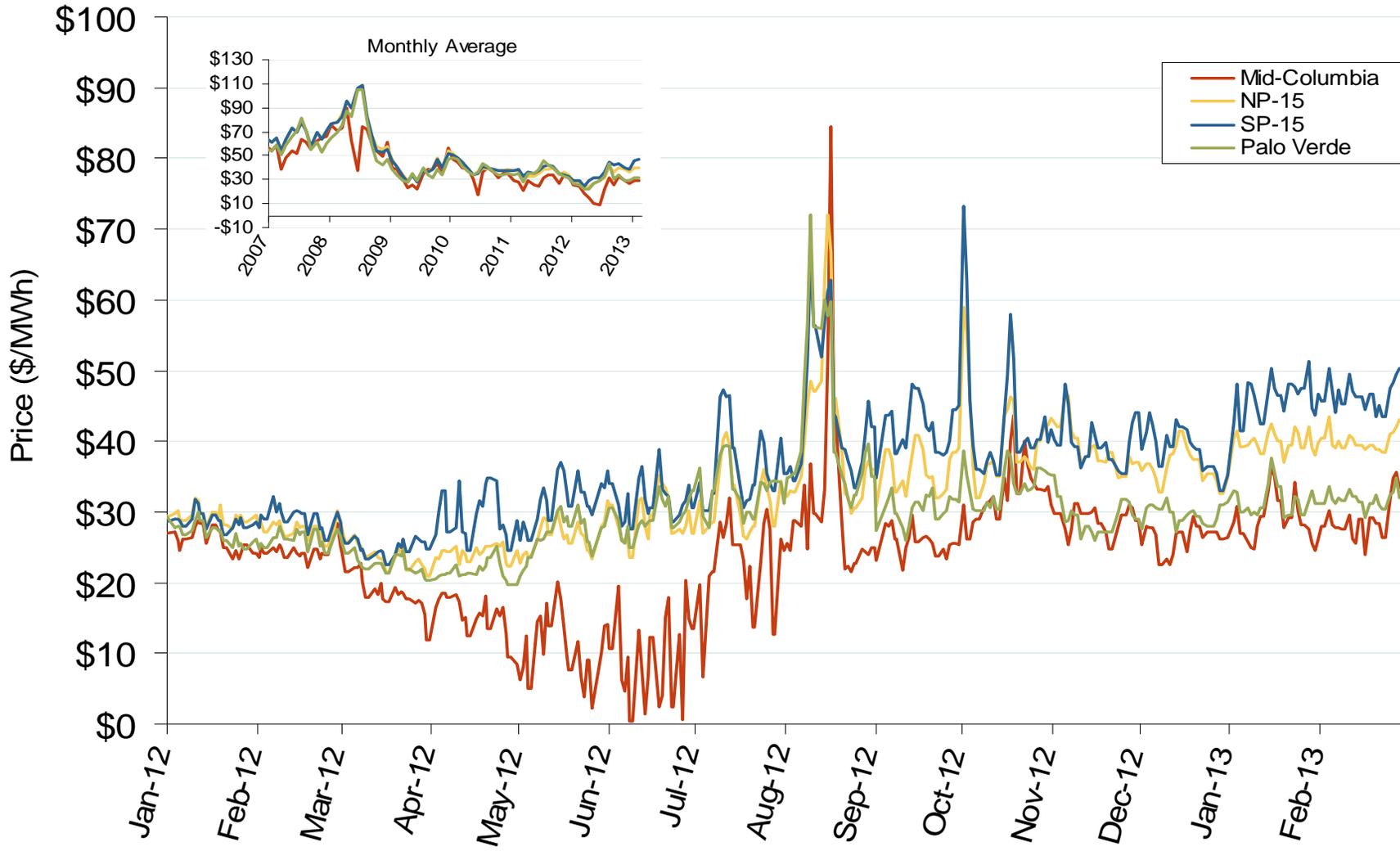
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Western Daily Index Day-Ahead On-Peak Prices



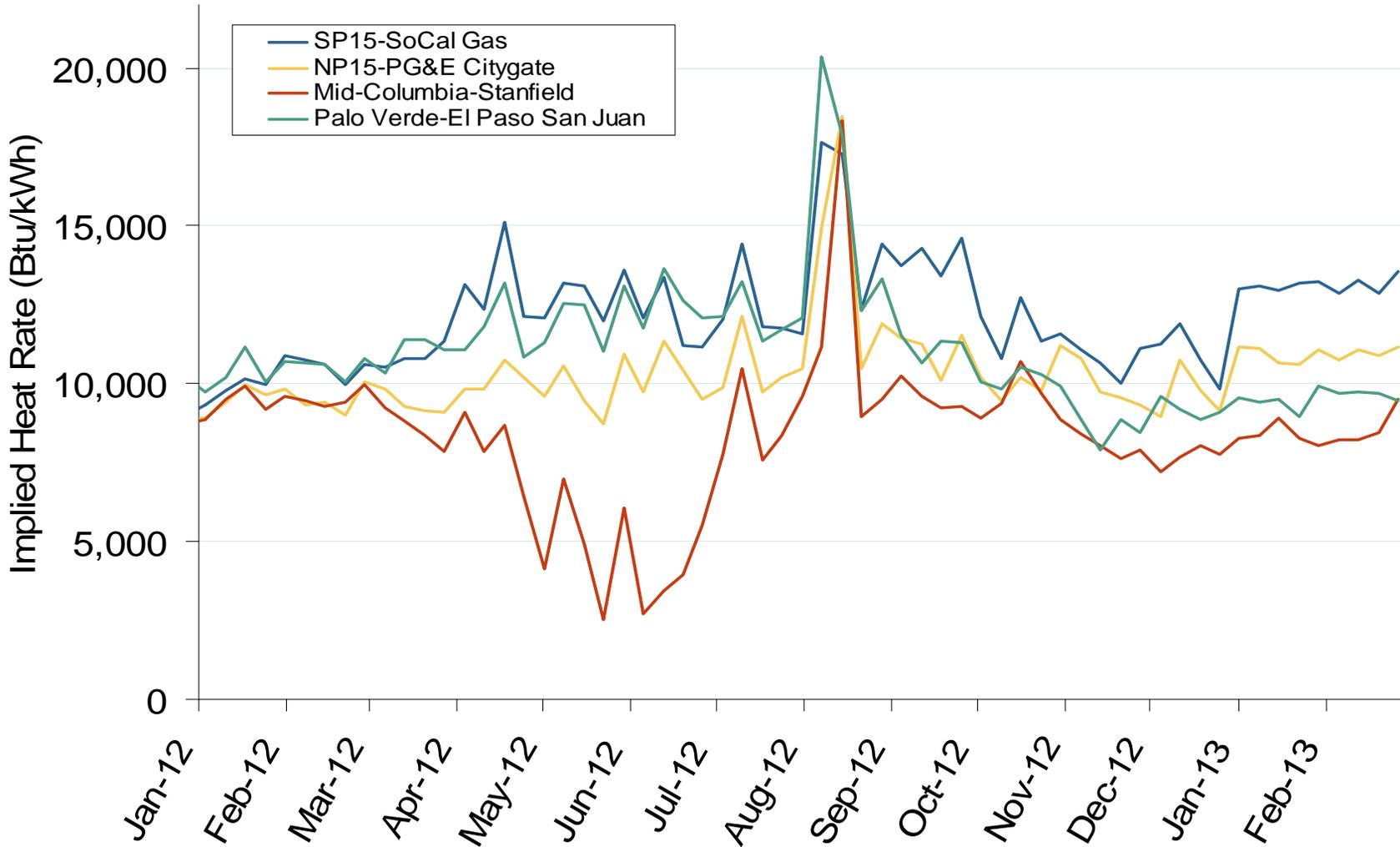
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Western Daily Index Day-Ahead On-Peak Prices



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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
March 2013 Western Snapshot Report

Pacific/Northwest Hydro and Snowpack Levels

Snow Water Equivalent			
	One Year Ago (3/1/2012) (% of historical median)	One Month Ago (2/1/2013) (% of historical median)	Current (3/1/2013) (% of historical median)
California	36%	102%	75%
Idaho	101%	93%	87%
Montana	108%	98%	95%
Oregon	79%	101%	97%
Washington	116%	119%	119%
Columbia River Basin	101%	104%	100%

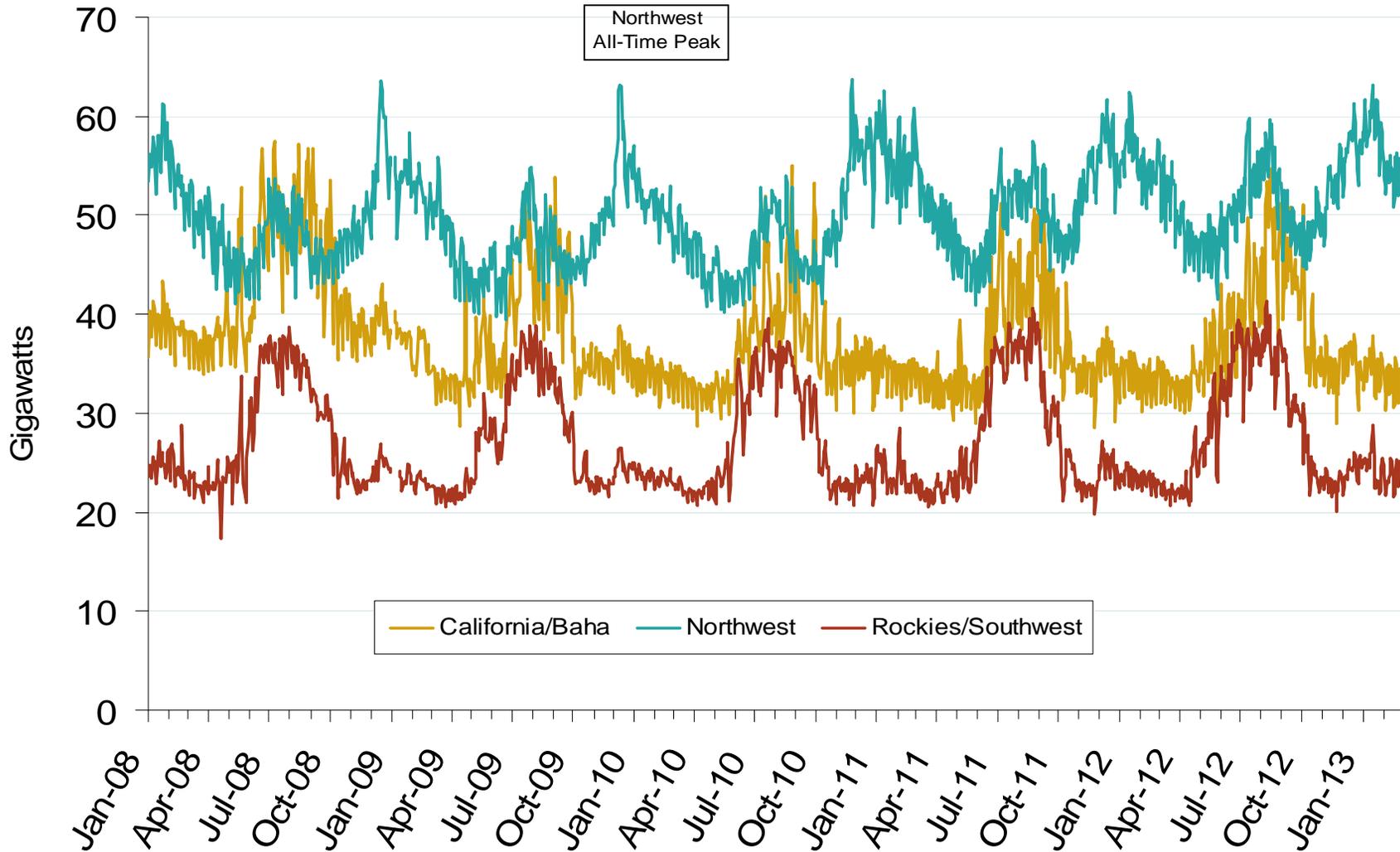
Notes:

Snow Water Equivalent represents the depth of water in the snowpack, if the snowpack were melted, expressed in inches. The percentage of median is the ratio of current snow water equivalents compared to the median for the same day 1981-2010.

Source: U.S. Department of Agriculture Natural Resources Conservation Service

Updated: March 13, 2013

Western Daily Actual Peak Demand

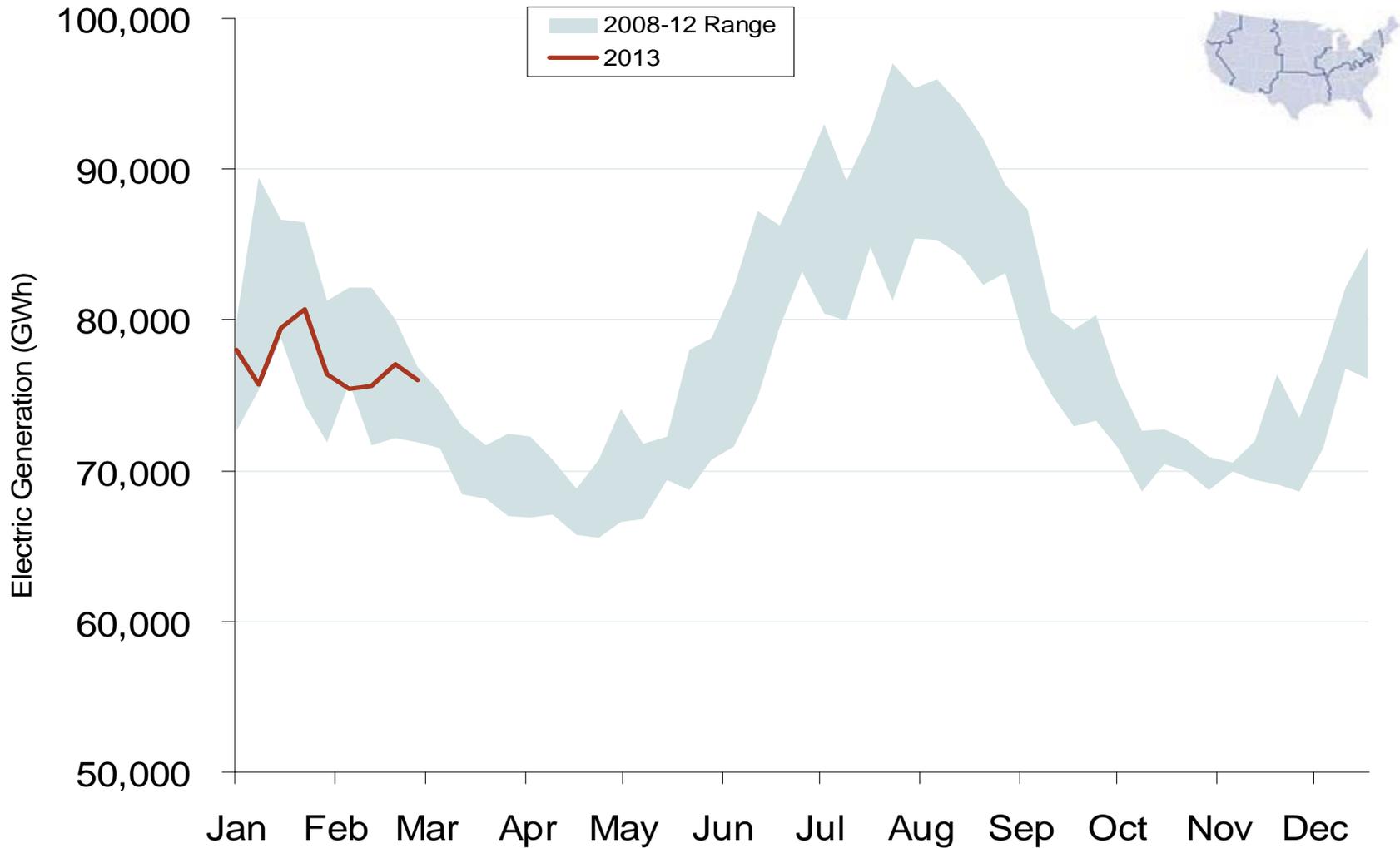


Notes: Data prior to 9/14/2010 does not include weekends and holidays. Some data for 12/31/2008 – 1/9/2009 are not available from WECC

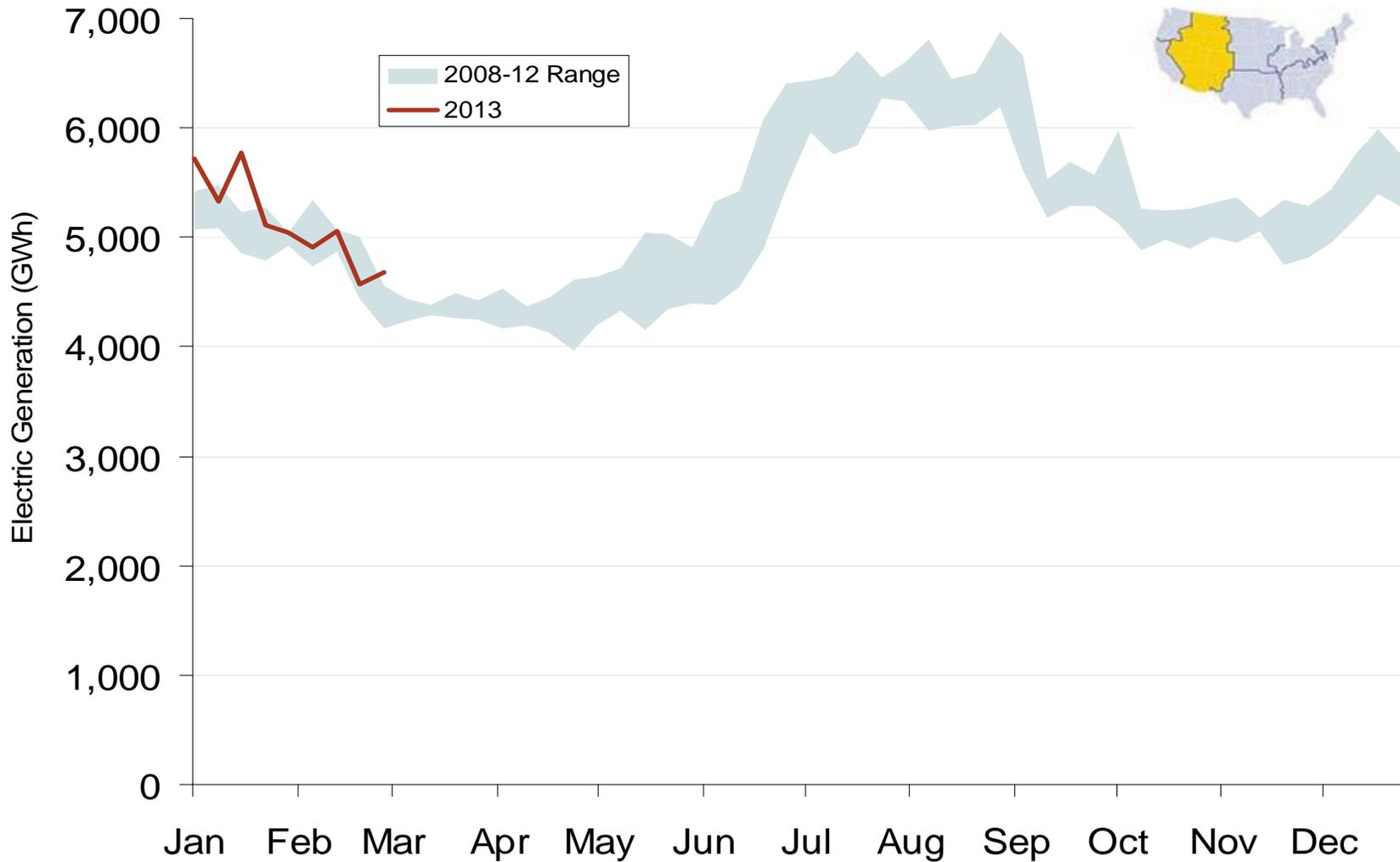
Source: Derived from WECC Daily Report data available at <http://wecc.biz>

Updated: March 12, 2013

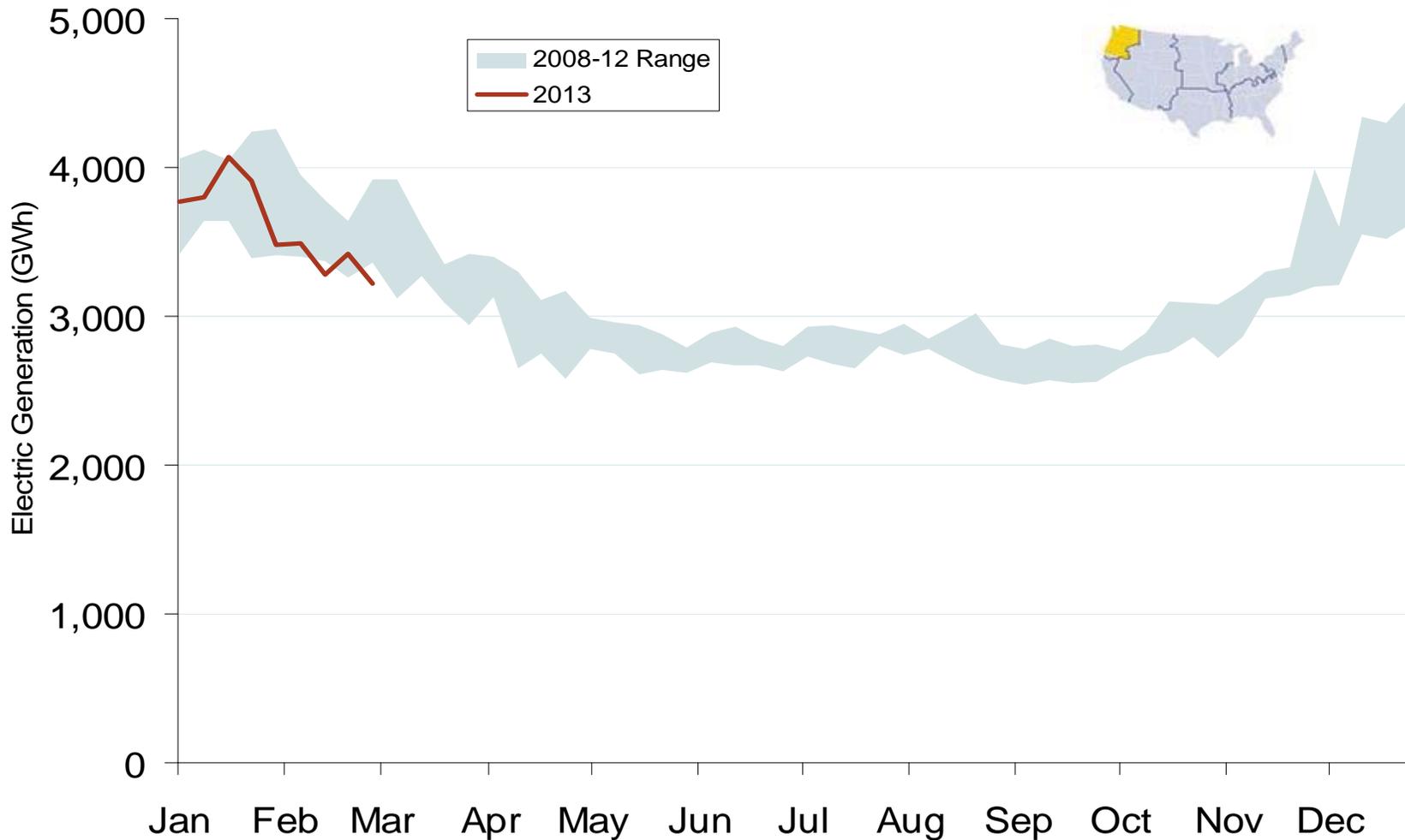
Weekly U.S. Electric Generation Output



Weekly Generation Output - Rocky Mountains



Weekly Generation Output - Pacific Northwest



Weekly Generation Output - California

