

OE ENERGY MARKET SNAPSHOT

Midwest States Version – May 2013 Data

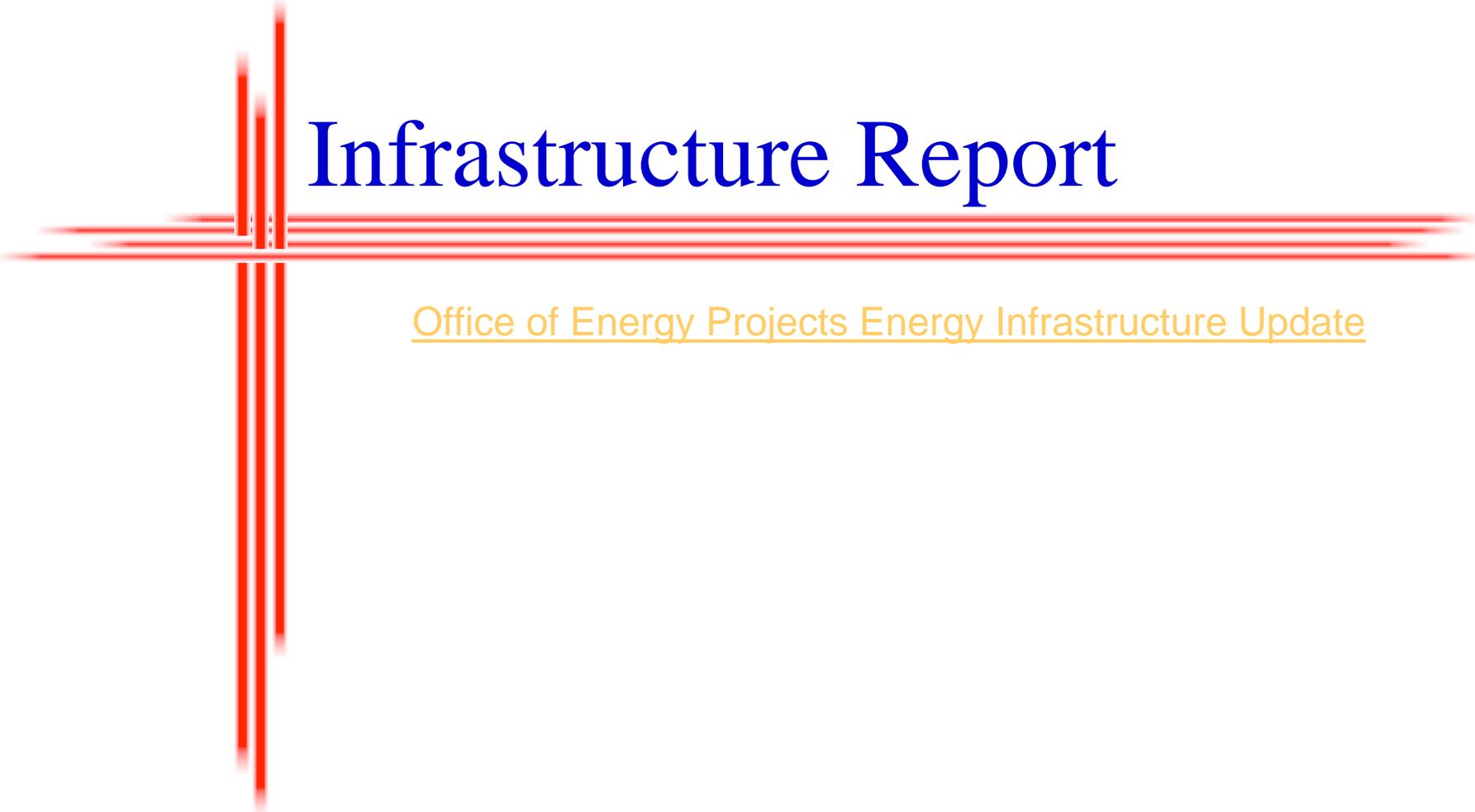
Office of Enforcement
Federal Energy Regulatory Commission
June 2013

2012 State of the Markets Report

<http://www.ferc.gov/market-oversight/reports-analyses/st-mkt-ovr/som-rpt-2012.pdf>

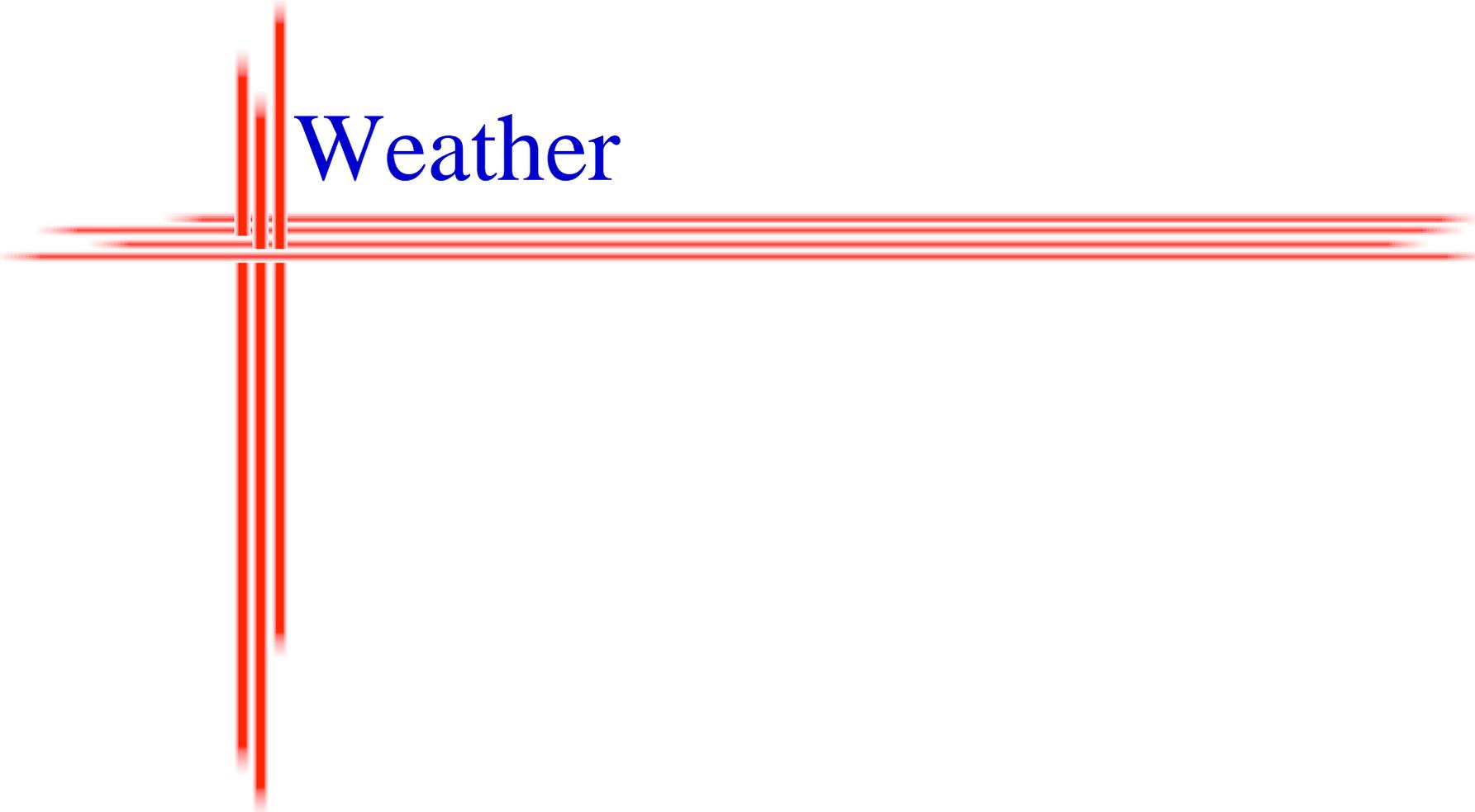
Summer 2013 Energy Market and Reliability Assessment

<http://www.ferc.gov/market-oversight/reports-analyses/mkt-views/2013/05-16-13.pdf>



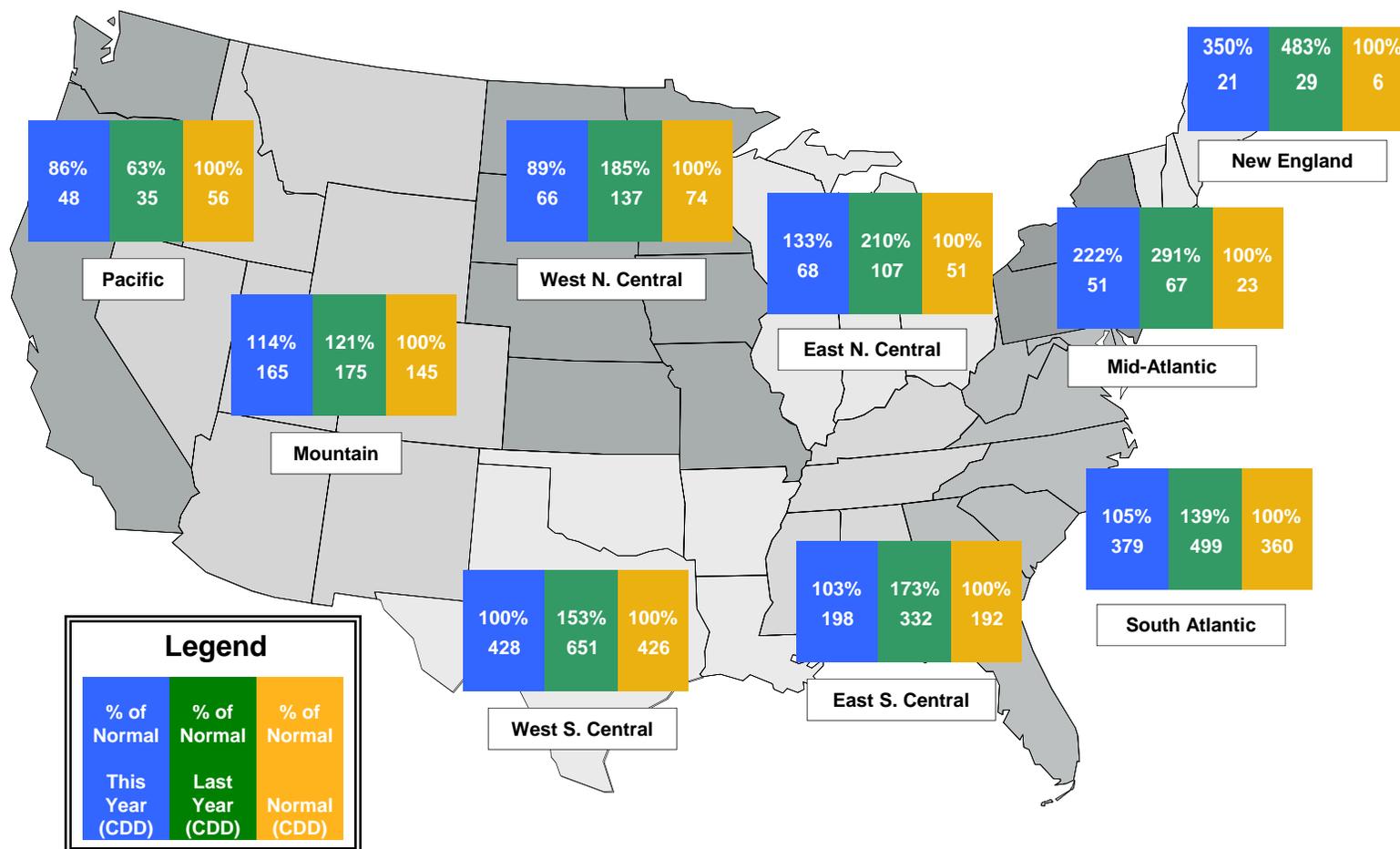
Infrastructure Report

Office of Energy Projects Energy Infrastructure Update



Weather

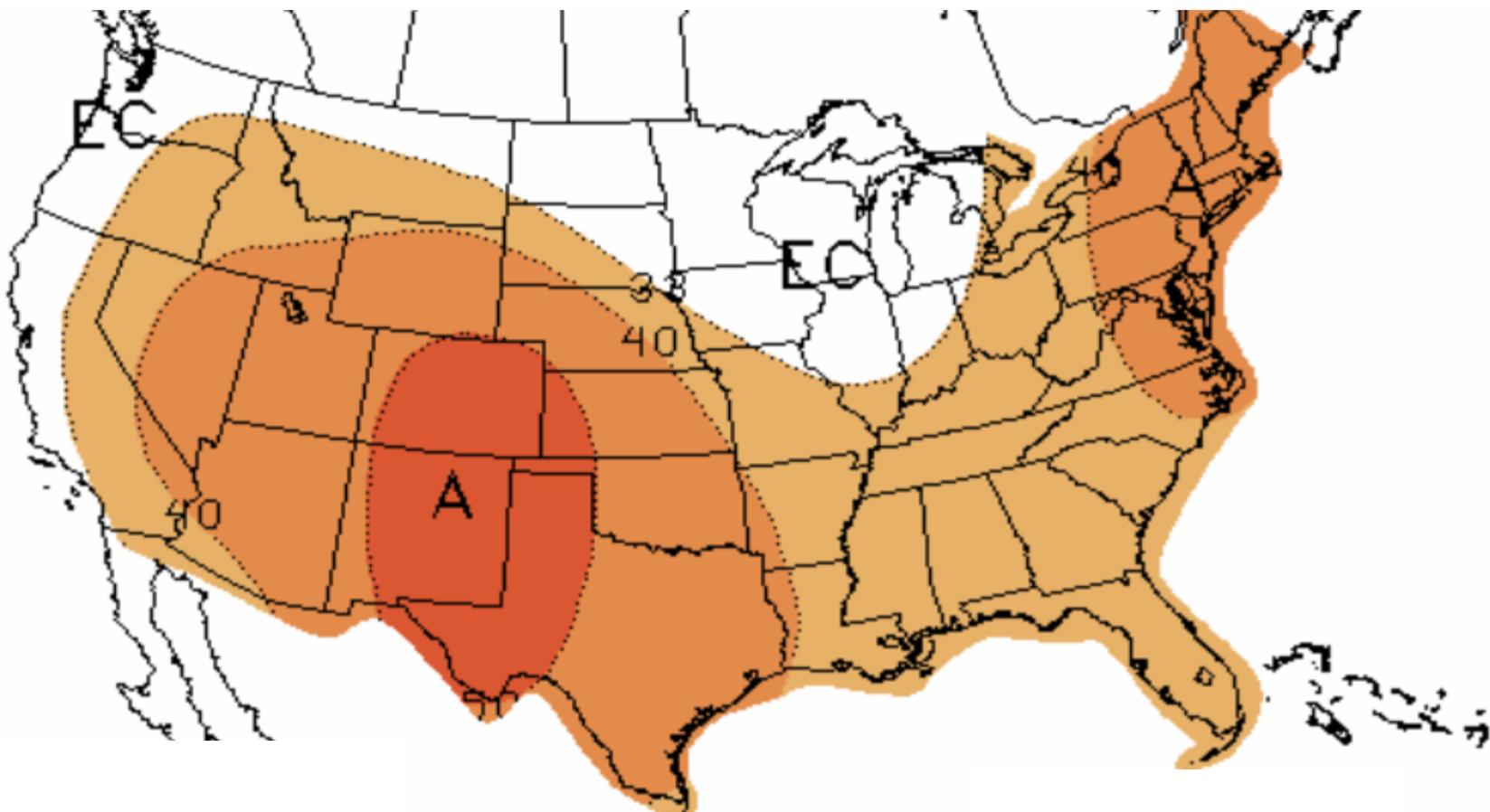
Regional Cooling Degree Days – January to June 2013



Source: Derived from NOAA data. Normal is based on a 30-year average of cooling degree day data.
June 2013 Midwest Snapshot Report

Updated: June 7, 2013

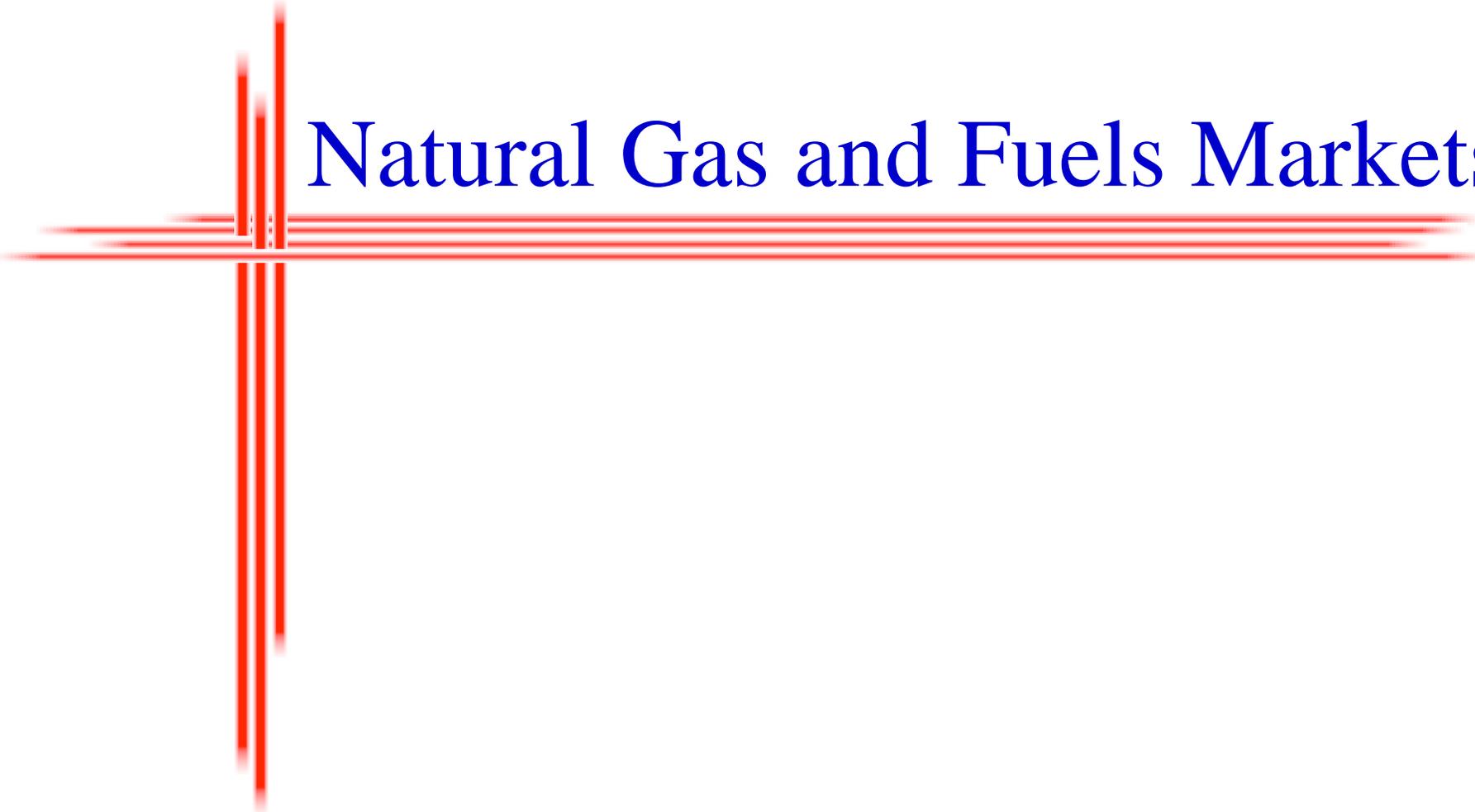
NOAA's 3 Month Temperature Forecast Made February 21, 2013, Valid for July 2013 – August 2013



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.

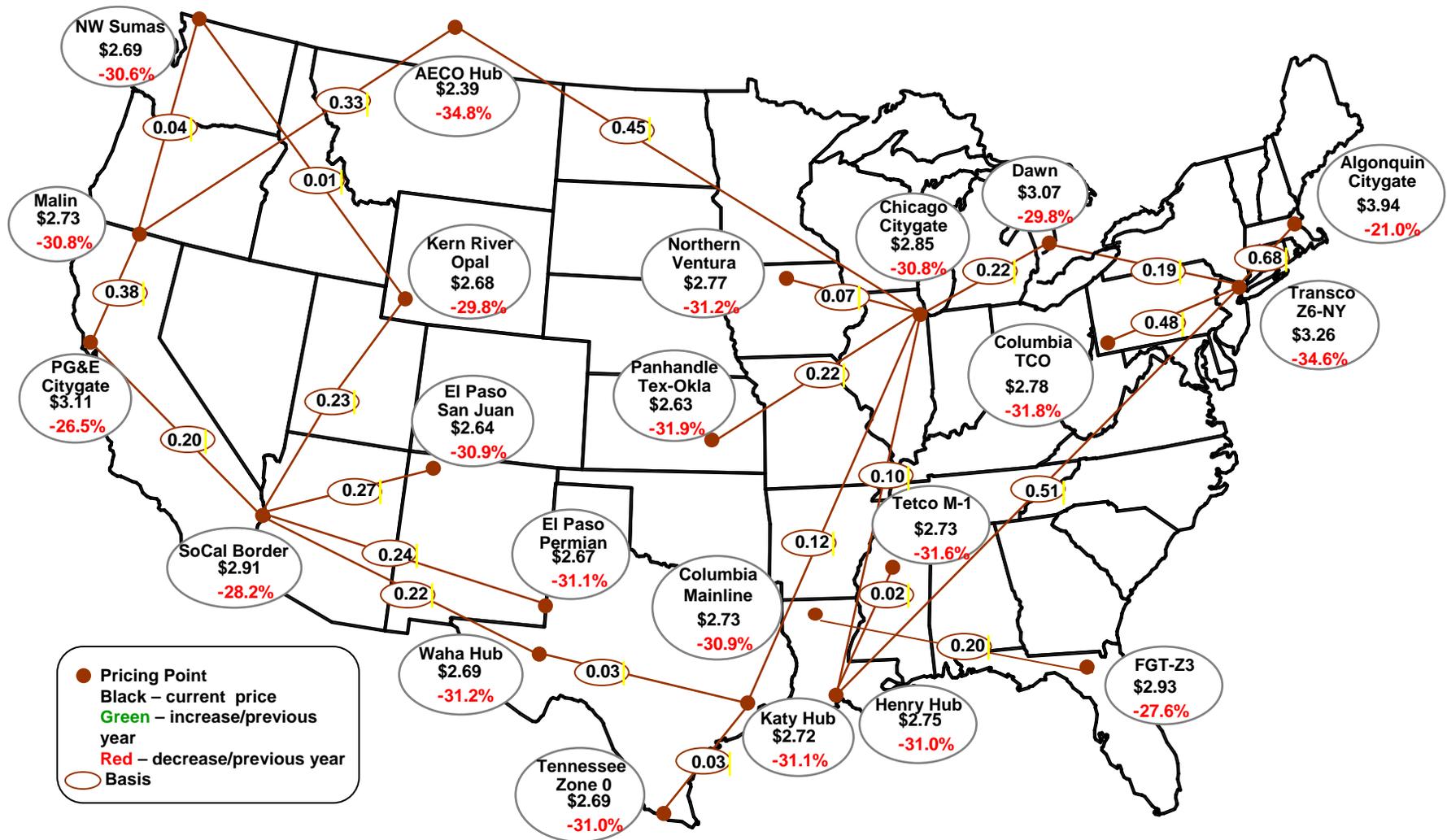
Source: Derived from NOAA data.

Updated: June 7, 2013



Natural Gas and Fuels Markets

Average Spot Gas Prices, 2012 (\$MMBtu)

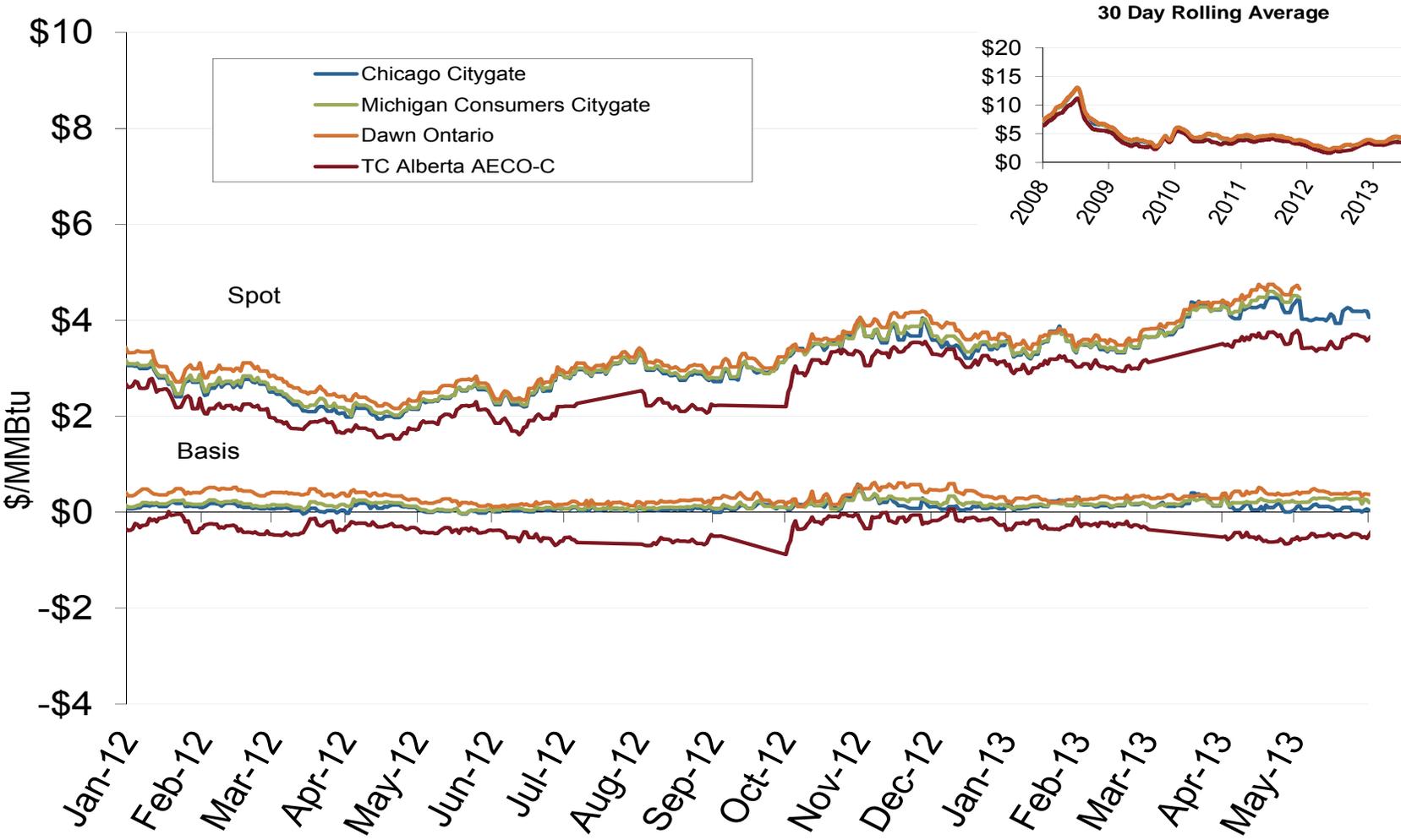


Source: Derived from *Platts* data.
June 2013 Midwest Snapshot Report

Midwest Annual Average Spot Hub Prices

Annual Average Day Ahead Prices (\$/MMBtu)						
	2008	2009	2010	2011	2012	5-Year Avg
Chicago Citygate	\$8.79	\$3.92	\$4.46	\$4.11	\$2.85	\$4.82
Dawn	\$9.12	\$4.24	\$4.74	\$4.37	\$3.07	\$5.11
MichCon Citygate	\$9.02	\$4.09	\$4.54	\$4.20	\$2.90	\$4.95
AECO	\$7.76	\$3.48	\$3.88	\$3.67	\$2.39	\$4.24
Northern Ventura	\$8.28	\$3.86	\$4.38	\$4.03	\$2.77	\$4.66

Midwestern Day-Ahead Hub Spot Prices and Basis



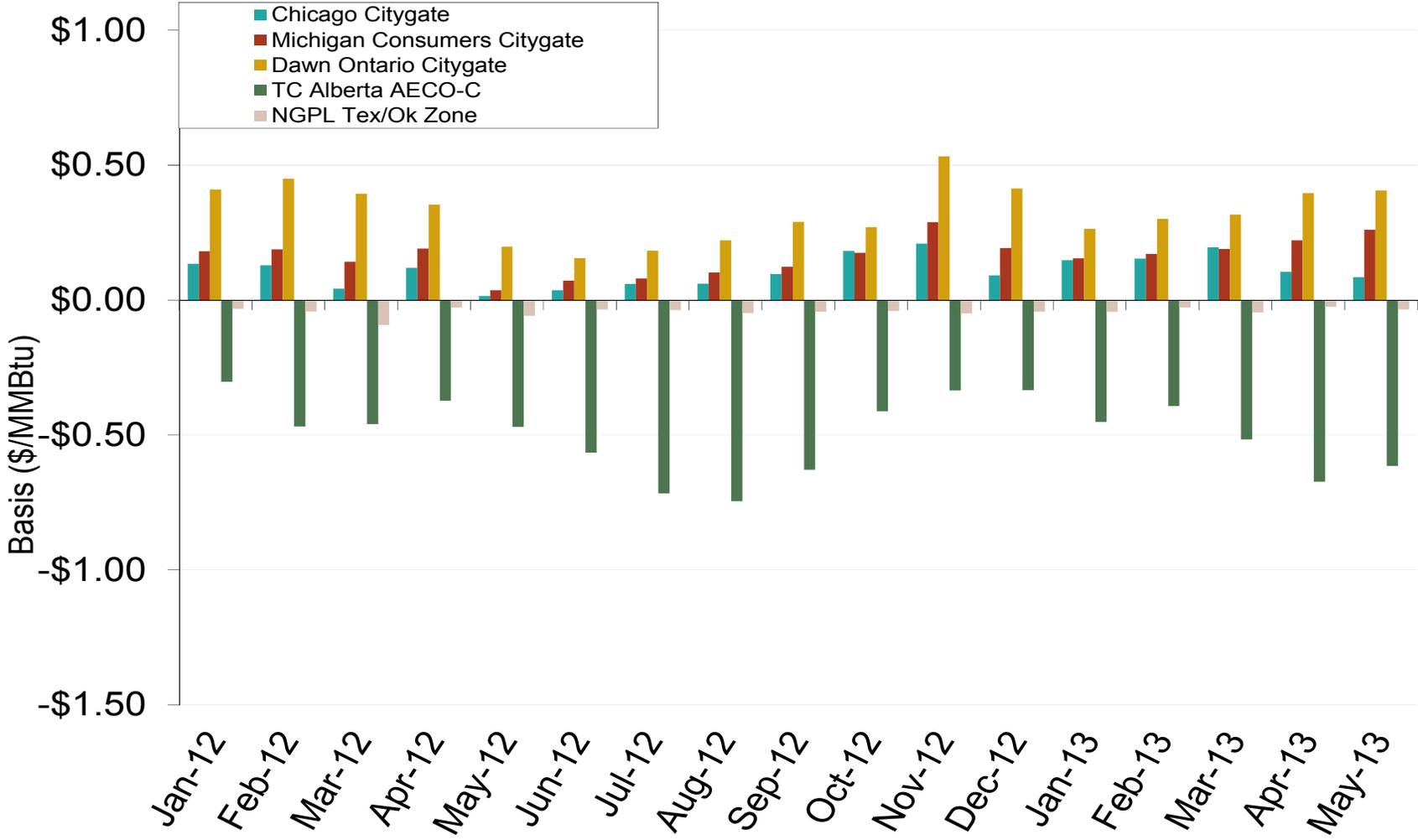
Source: Derived from Platts data
June 2013 Midwest Snapshot Report

Updated: June 06, 2013

Midwest Natural Gas Market: Average Basis to Henry Hub

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

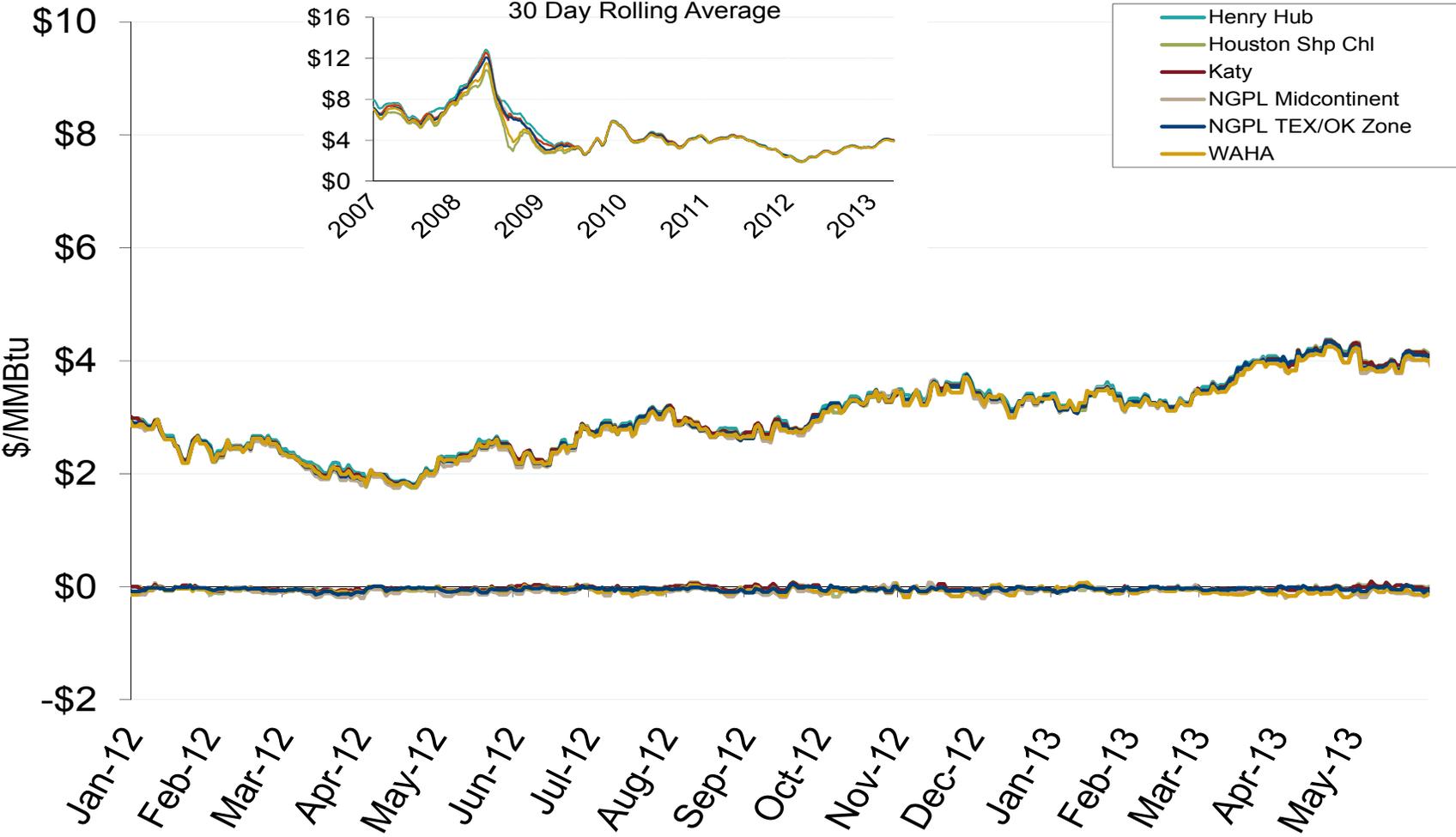
Midwestern Monthly Average Basis Value to Henry Hub



Source: Derived from Platts data
June 2013 Midwest Snapshot Report

Updated: June 06, 2013

Gulf Day-Ahead Hub Spot Prices and Basis

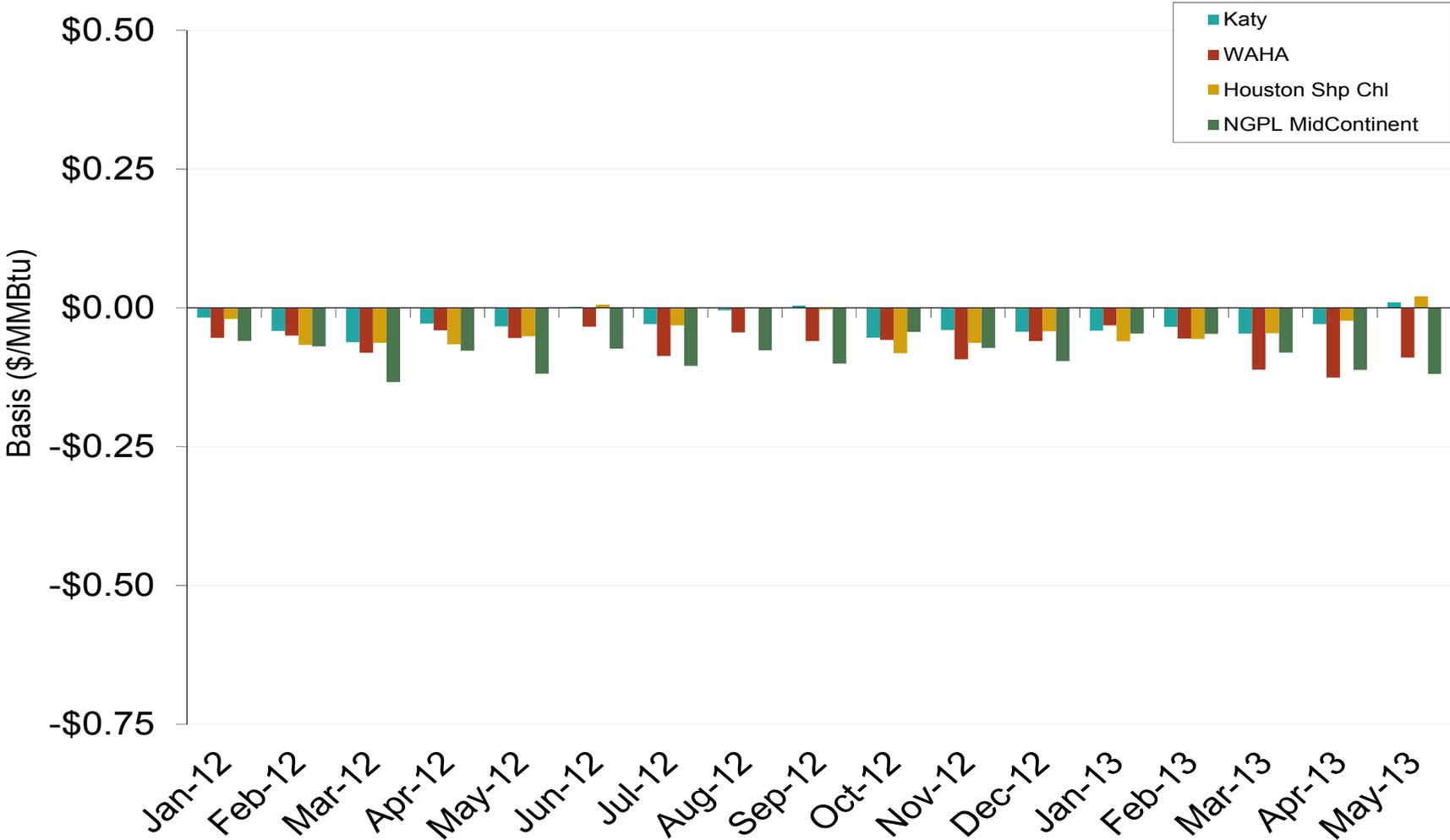


Source: Derived from Platts data
June 2013 Midwest Snapshot Report

Updated: June 06, 2013

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

Gulf Monthly Average Basis Value to Henry Hub



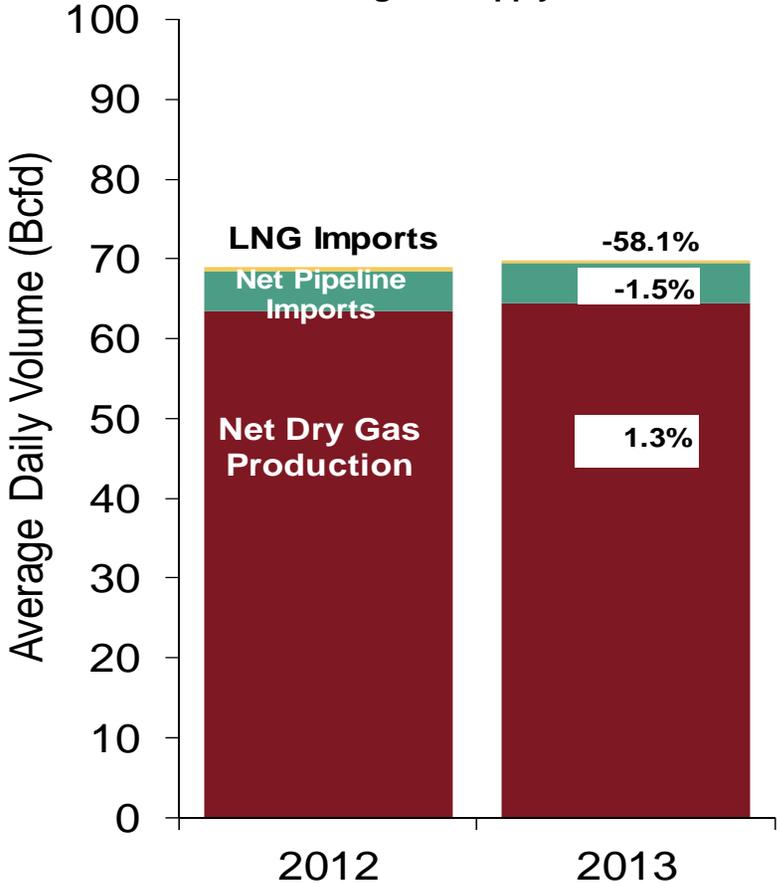
Source: Derived from Platts data
June 2013 Midwest Snapshot Report

Updated: June 06, 2013

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

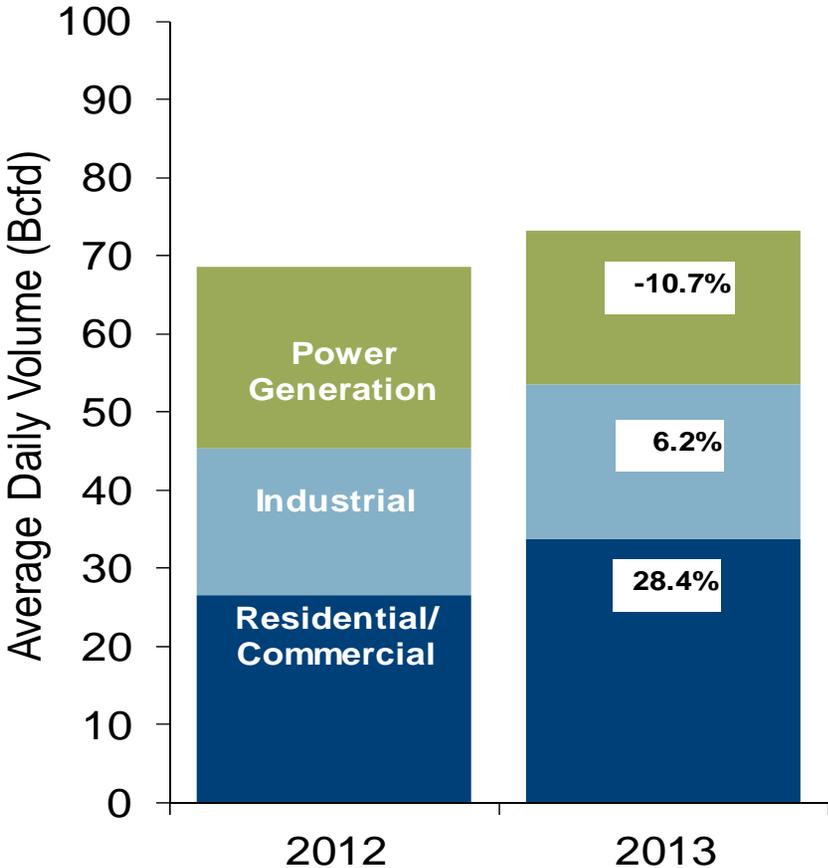
US Natural Gas Supply

Total Change in Supply 0.0%



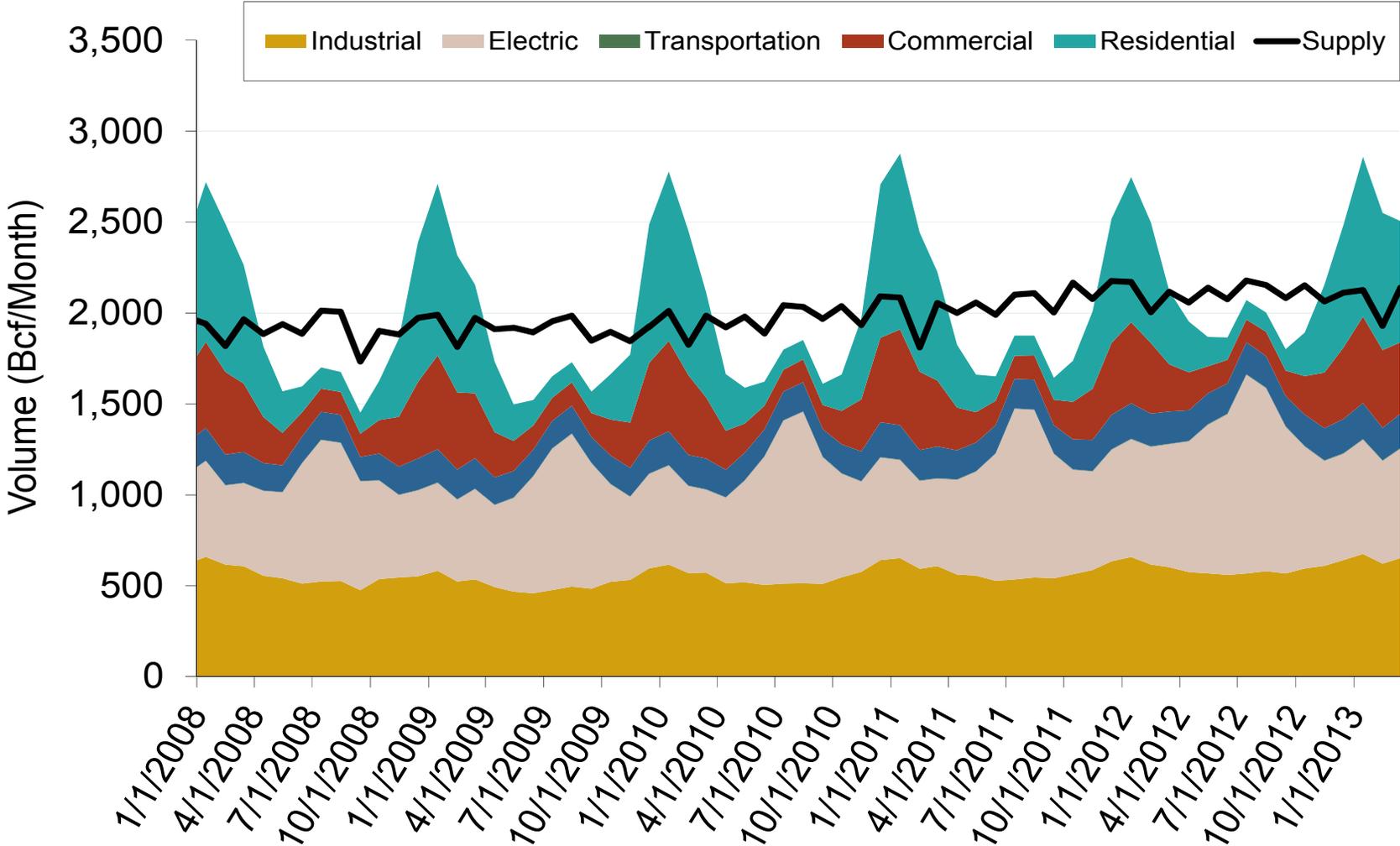
US Natural Gas Demand

Total Change in Demand 10.4%



Note: Balance includes all amounts not attributable to other categories.
Source: Derived from *Bentek Energy* data
June 2013 Midwest Snapshot Report

Annual U.S. Natural Gas Consumption by Sector

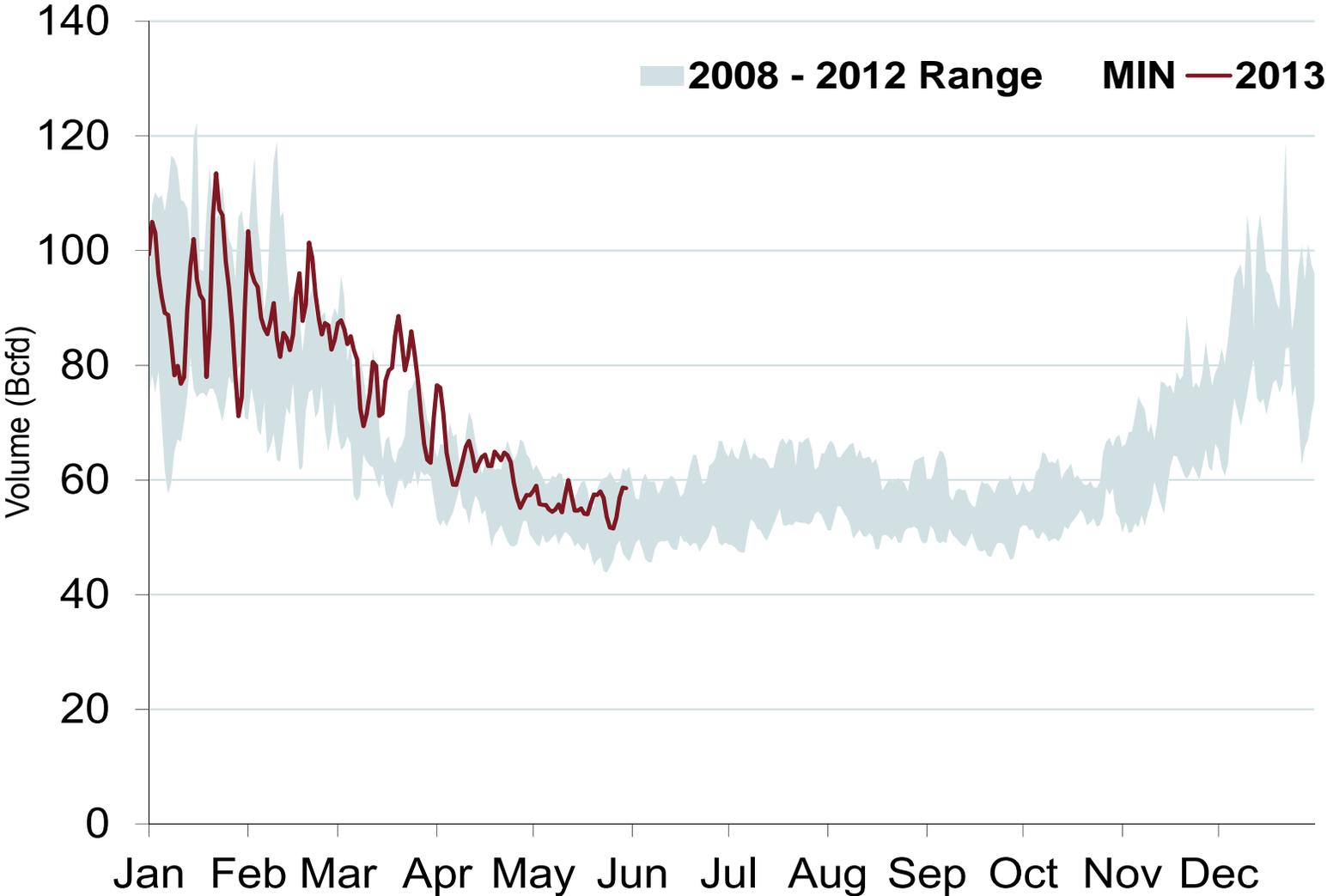


Notes: Supply includes lower 48 state production, net pipeline imports, and LNG imports

Source: Derived from EIA data

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

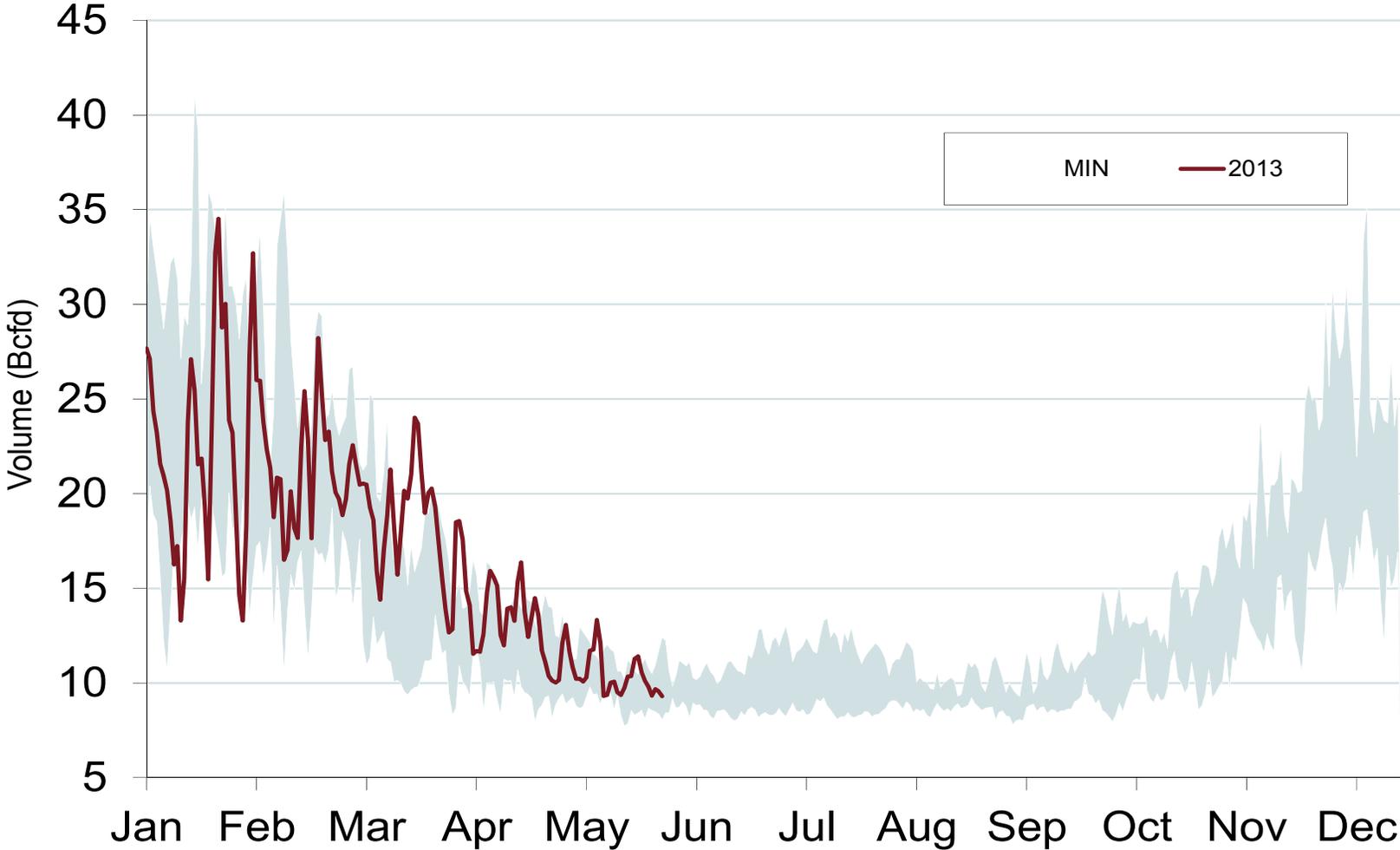
Total U.S. Natural Gas Demand All Sectors



Source: Derived from *Bentek Energy* data
June 2013 Midwest Snapshot Report

Updated: June 05, 2013

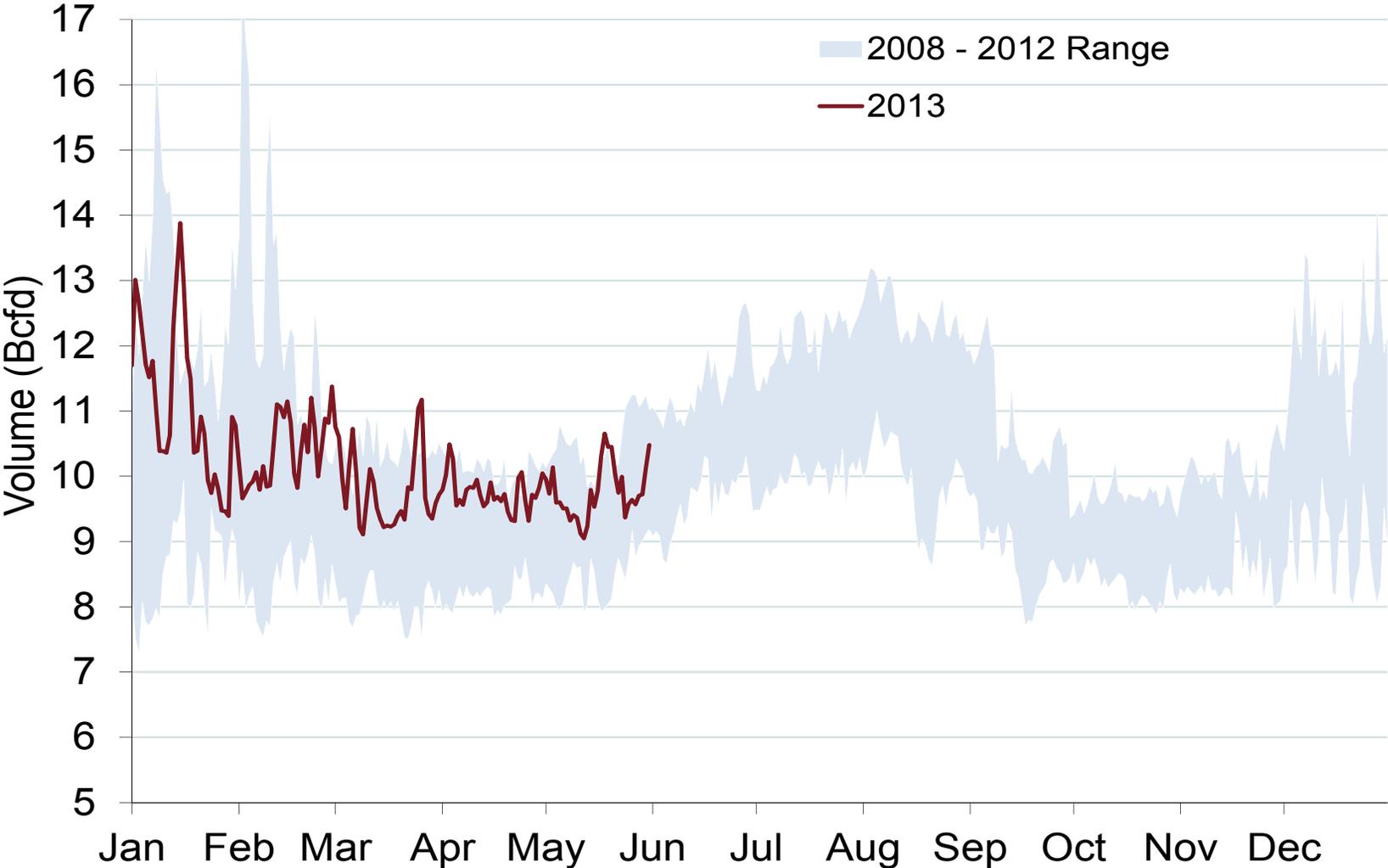
Daily Midwest Natural Gas Demand All Sectors



Source: Derived from *Bentek Energy* data
June 2013 Midwest Snapshot Report

Updated: June 05, 2013

Daily Gulf Natural Gas Demand All Sectors

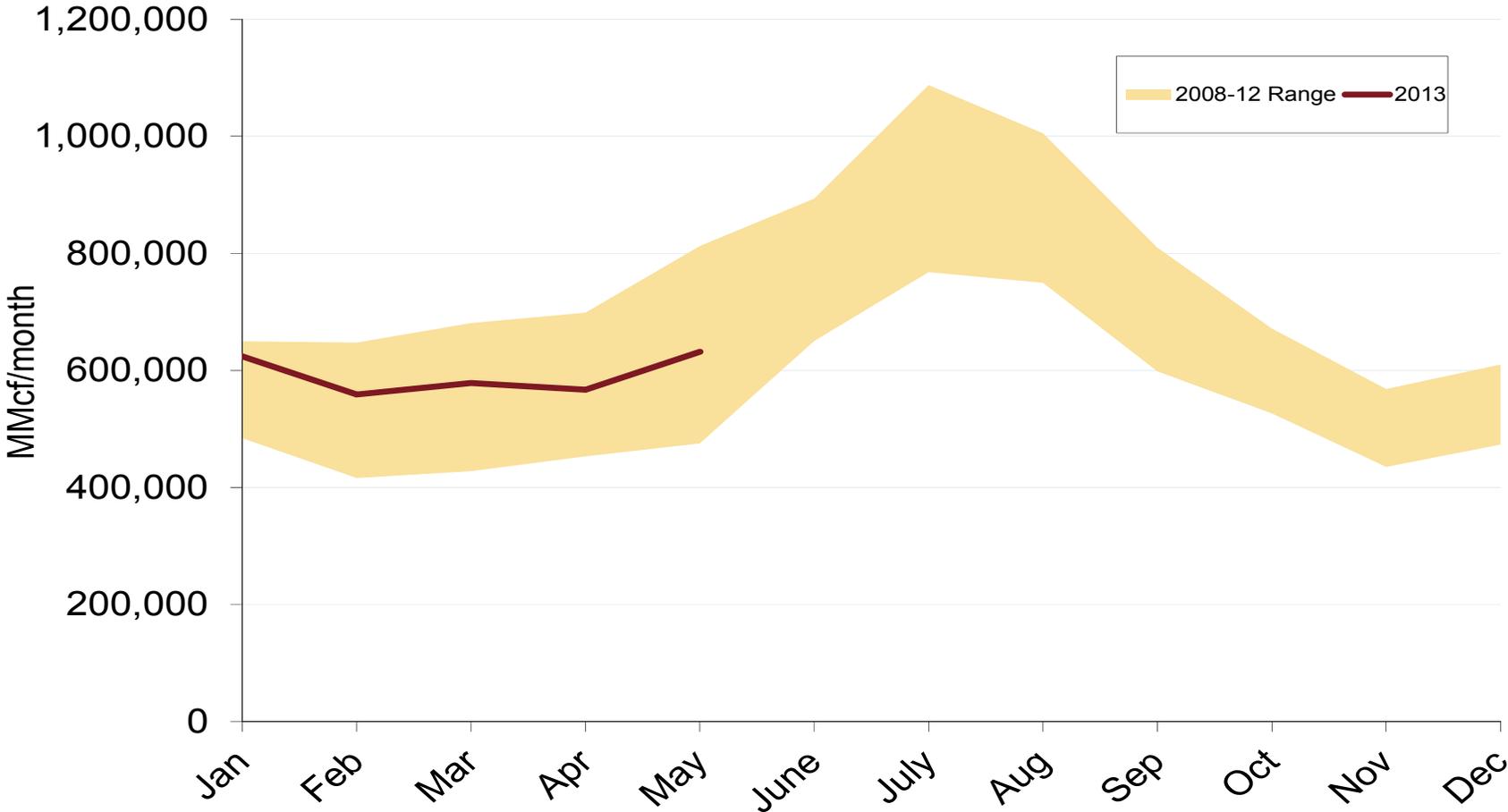


Source: Derived from *Bentek Energy* data
June 2013 Midwest Snapshot Report

Updated: June 05, 2013

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

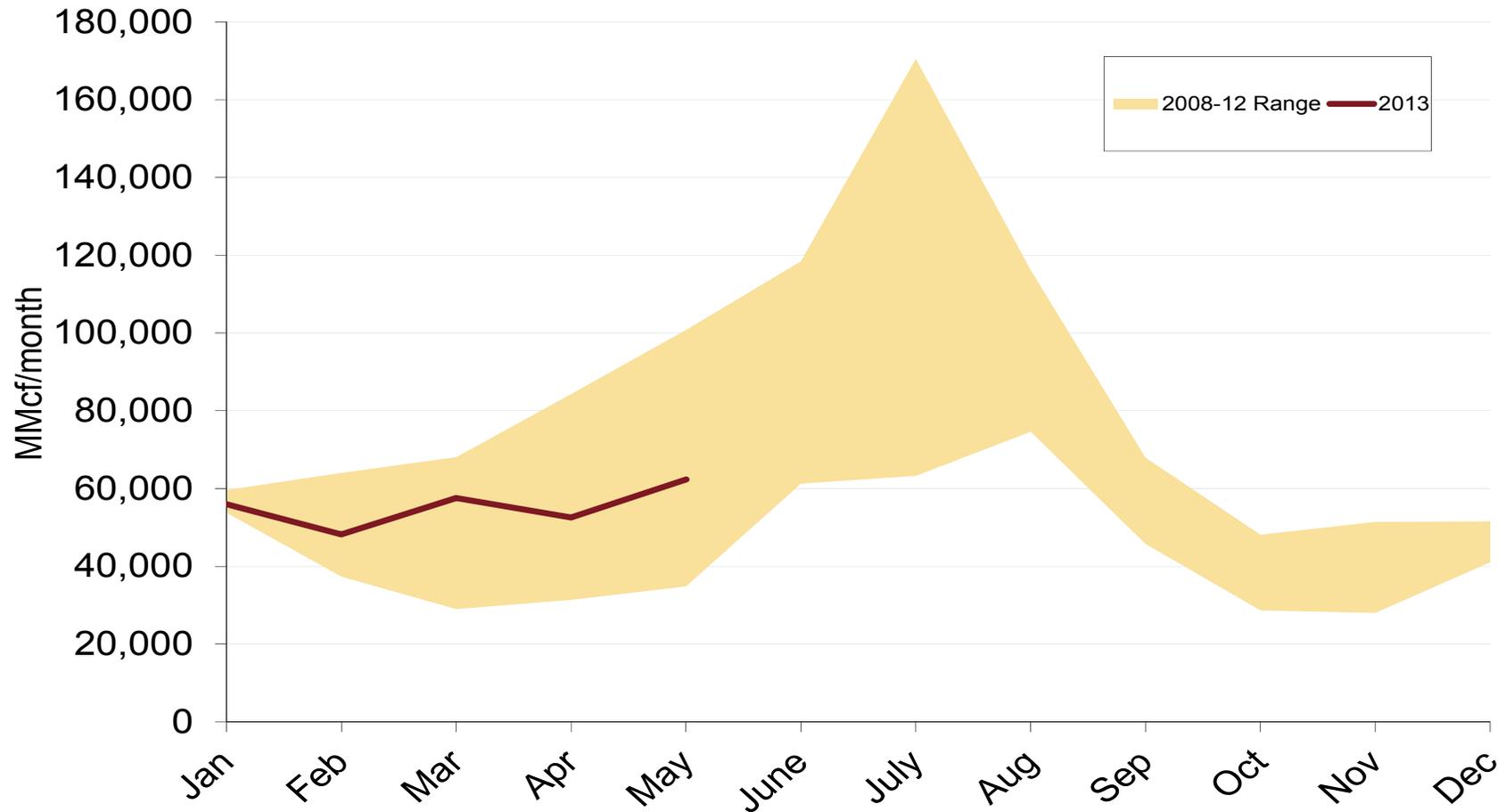
U.S. Natural Gas Consumption for Power Generation



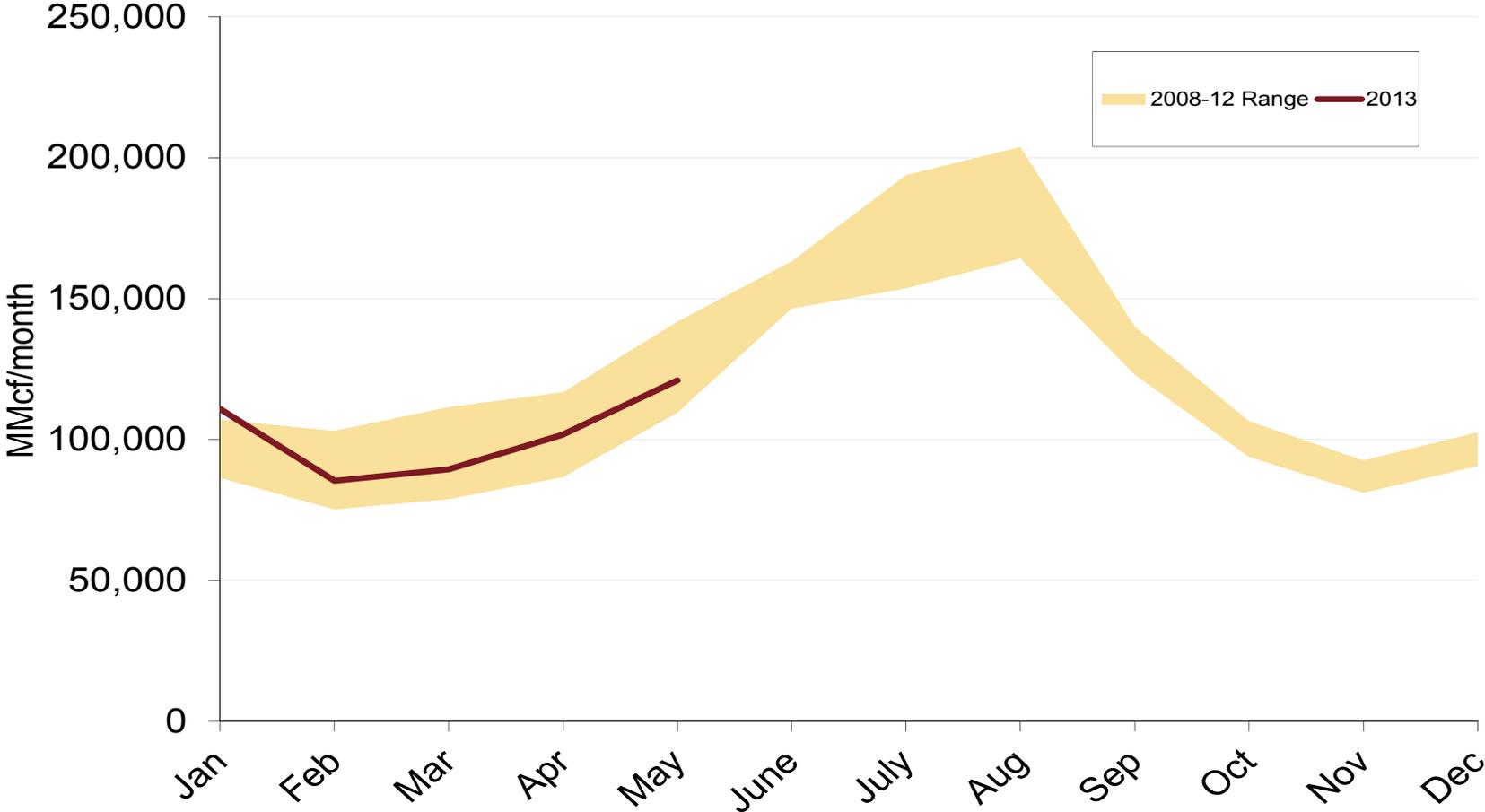
Source: Derived from *Bentek Energy* data
June 2013 Midwest Snapshot Report

Updated: June 05, 2013

Midwest Natural Gas Consumption for Power Generation



Gulf Natural Gas Consumption for Power Generation

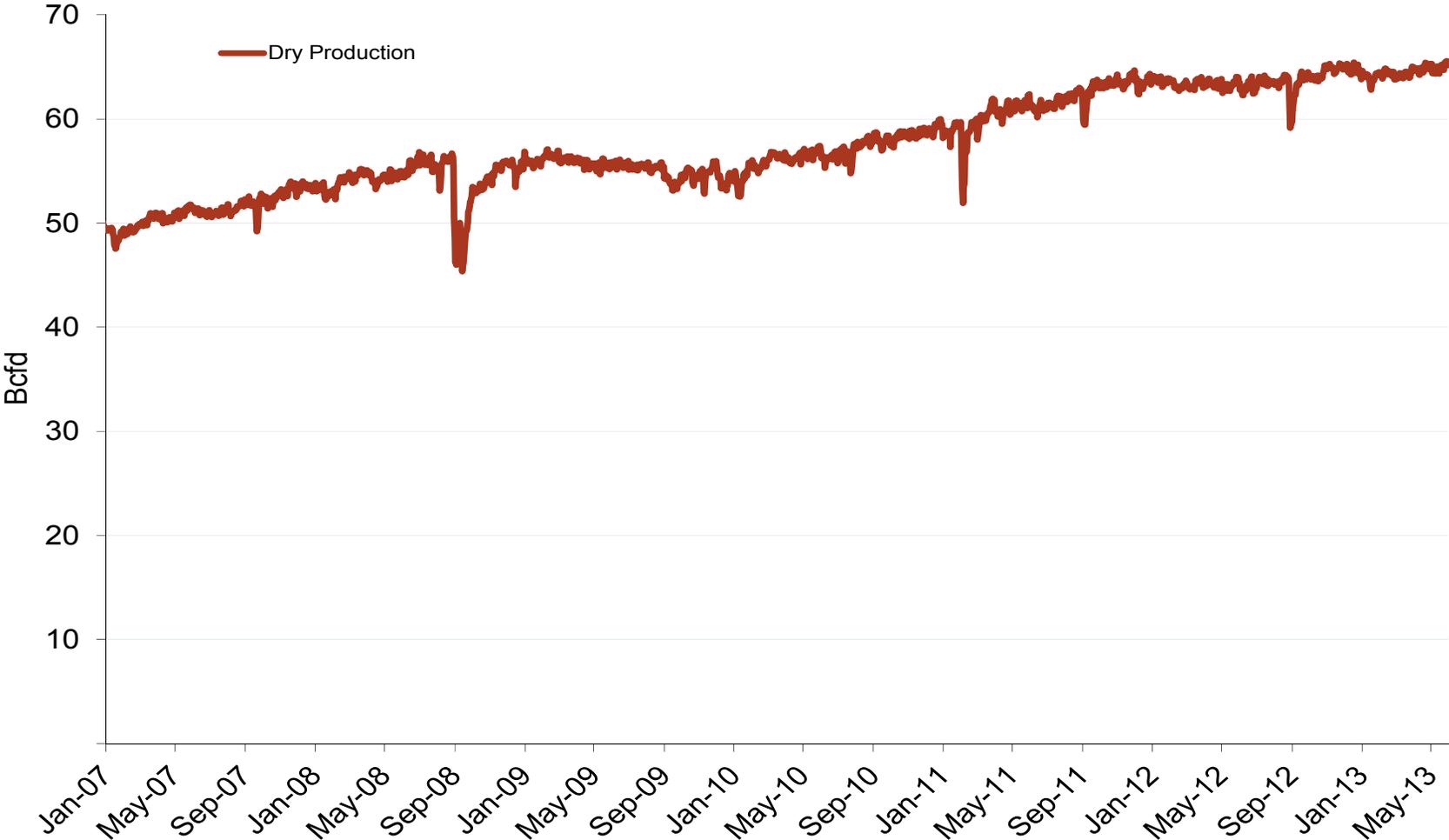


Source: Derived from *Bentek Energy* data
June 2013 Midwest Snapshot Report

Updated: June 05, 2013

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

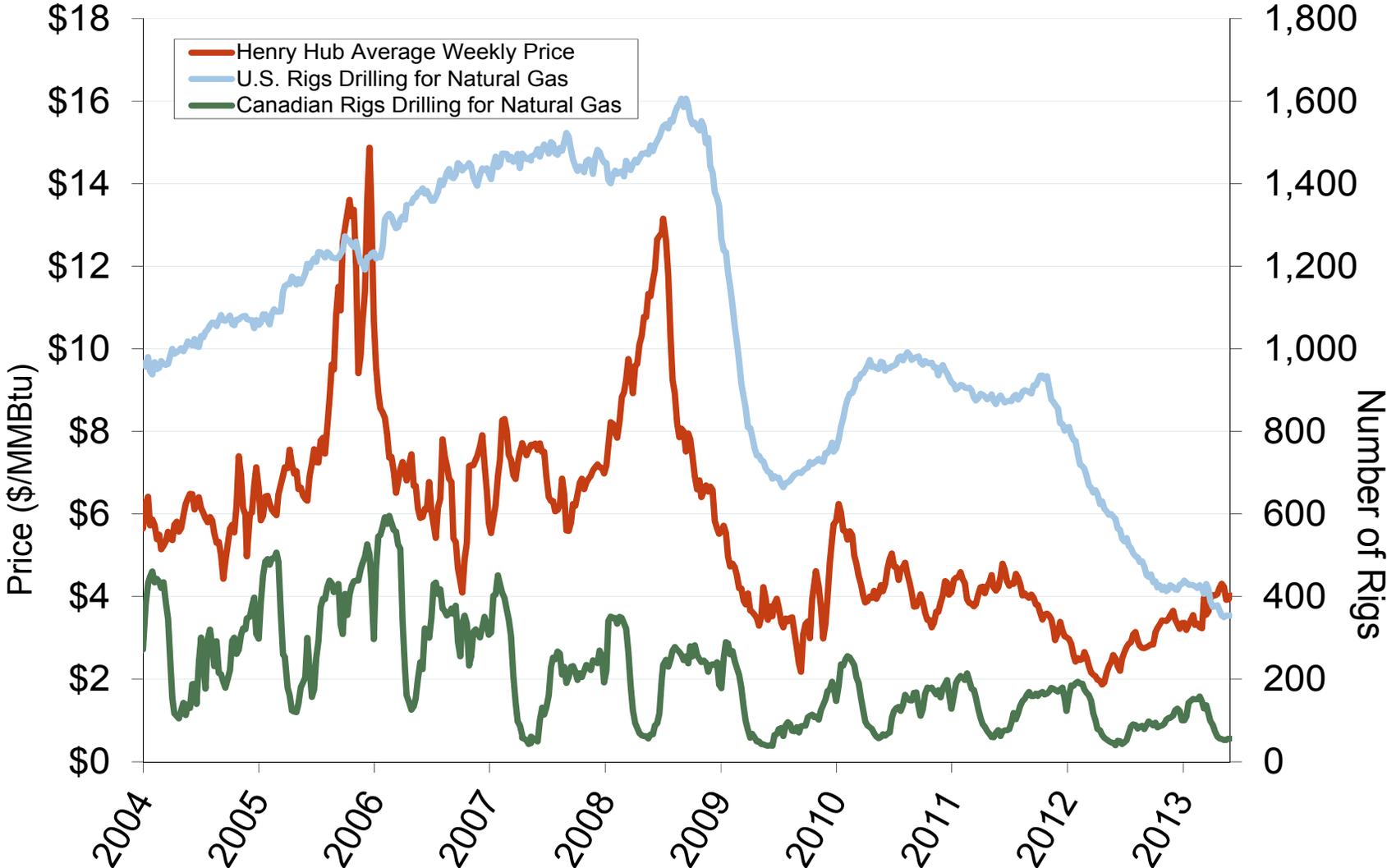
Monthly U.S. Dry Gas Production – Lower 48 States



Note: Prior to July 2010, chart was derived from a combination of EIA and Bentek Energy data
Source: Derived from Bentek Energy data
June 2013 Midwest Snapshot Report

Updated: June 05, 2013

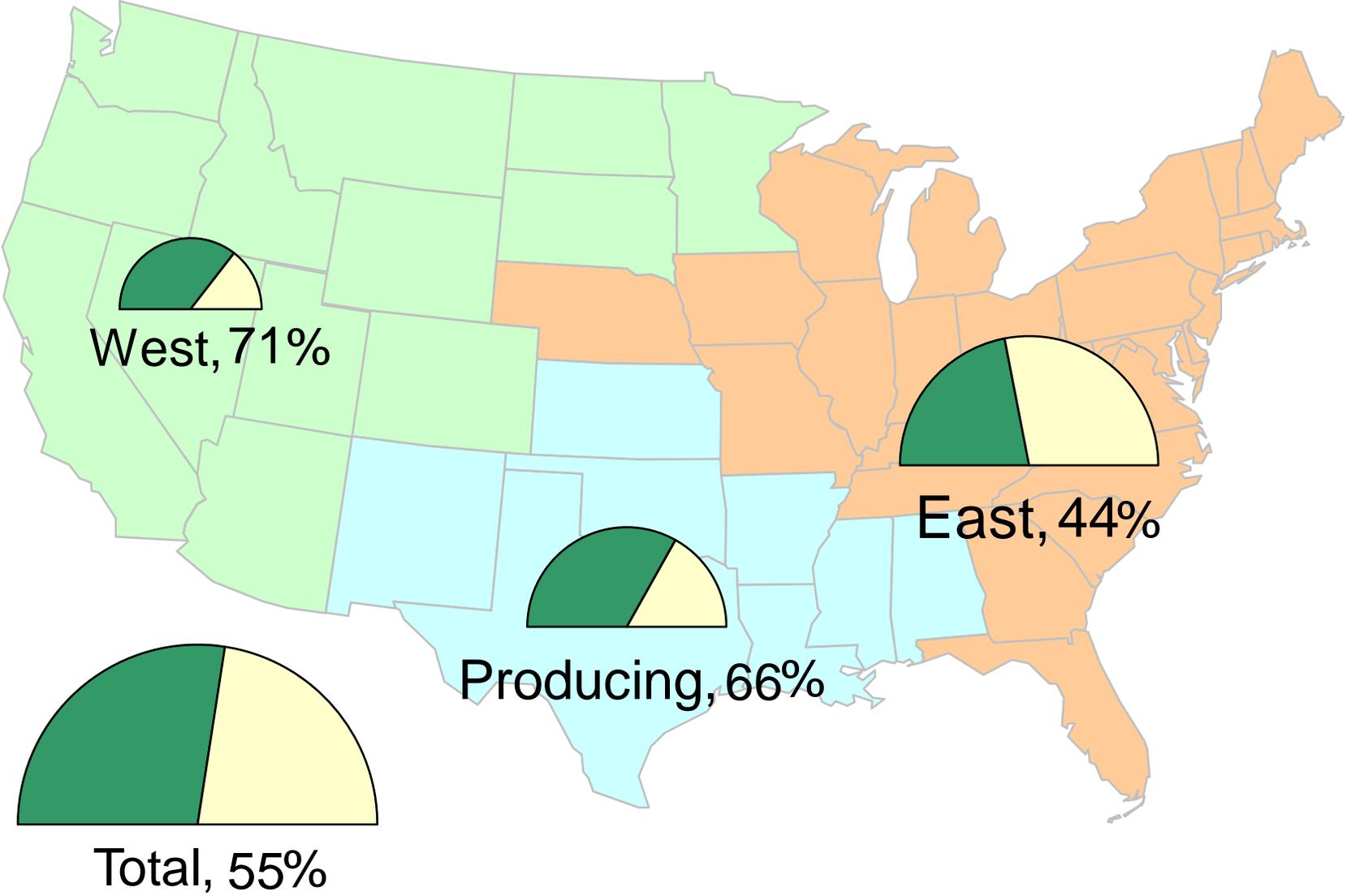
U.S. and Canadian NG Drilling Rig Count and Daily Spot Prices



Source: Derived from *Platts* and *Baker Hughes* data
June 2013 Midwest Snapshot Report

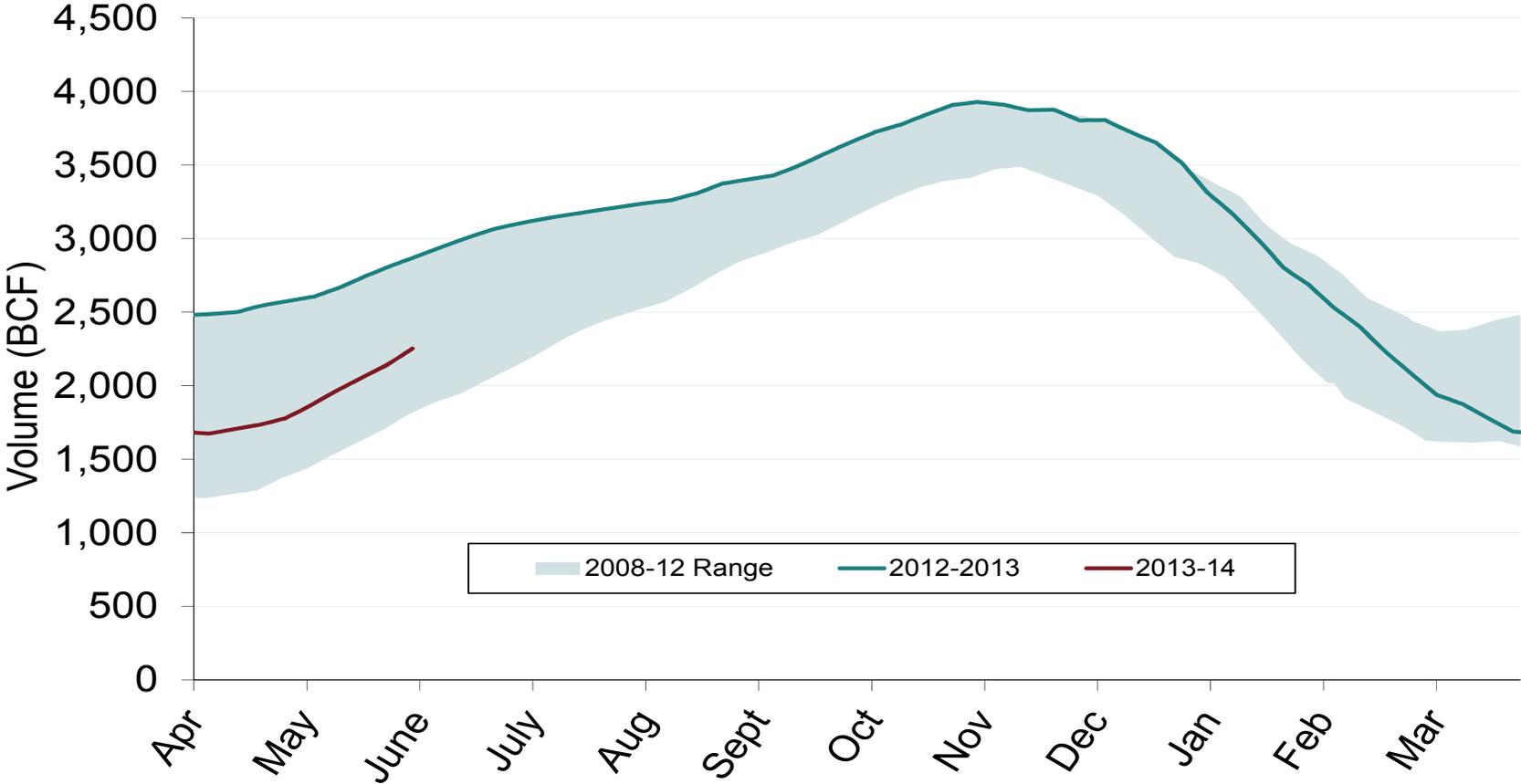
Updated: June 07, 2013

Natural Gas Storage Inventories – May 31, 2013



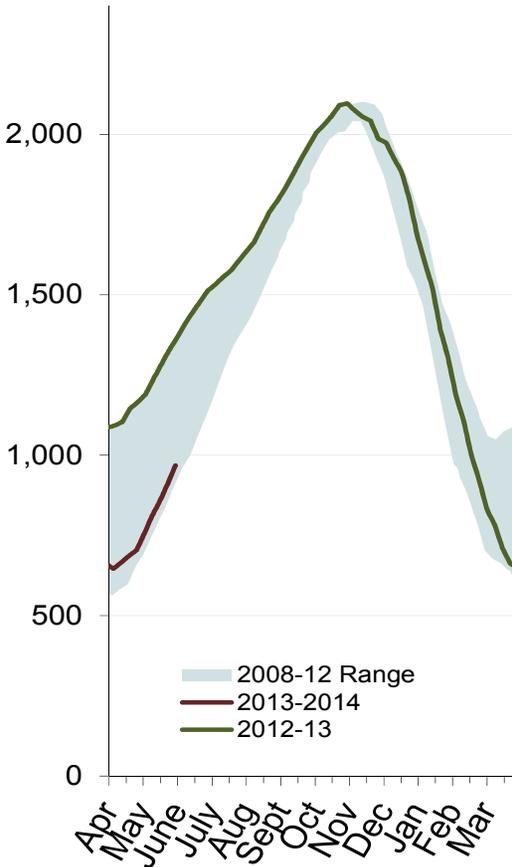
Source: Derived from EIA Storage and Estimated Working Gas Capacity data
June 2013 Midwest Snapshot Report

Total U.S. Working Gas in Storage

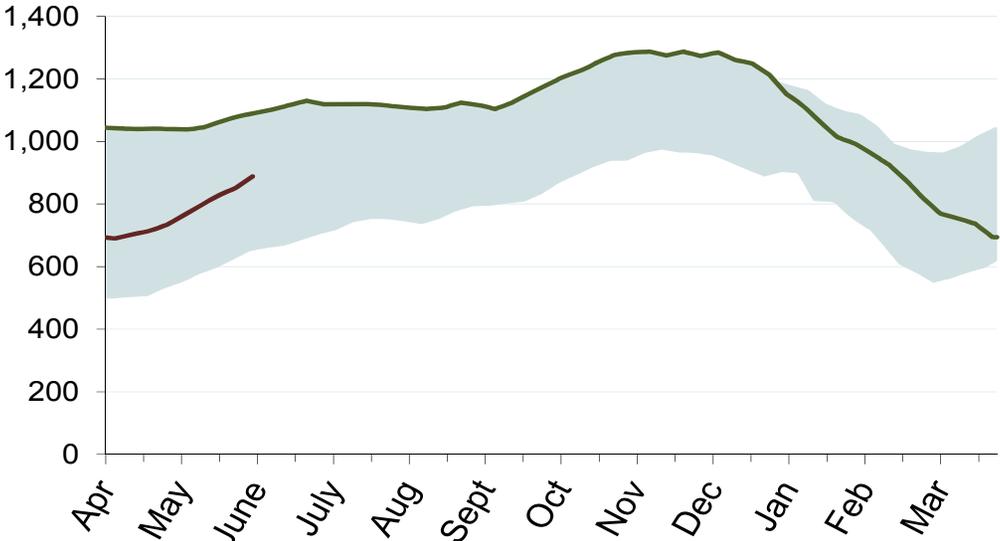


Regional Totals of Working Gas in Storage

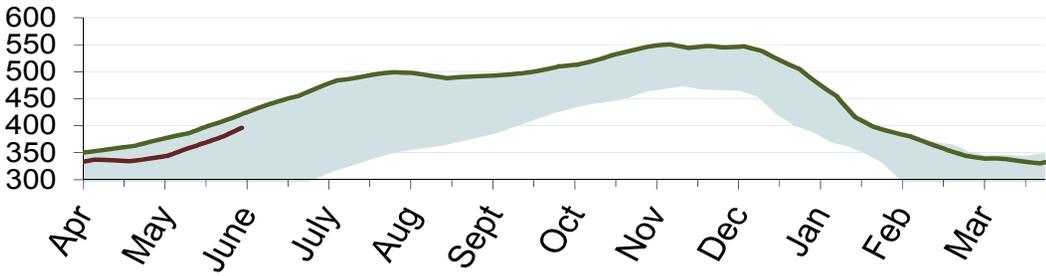
Eastern Consuming Region



Producing Region



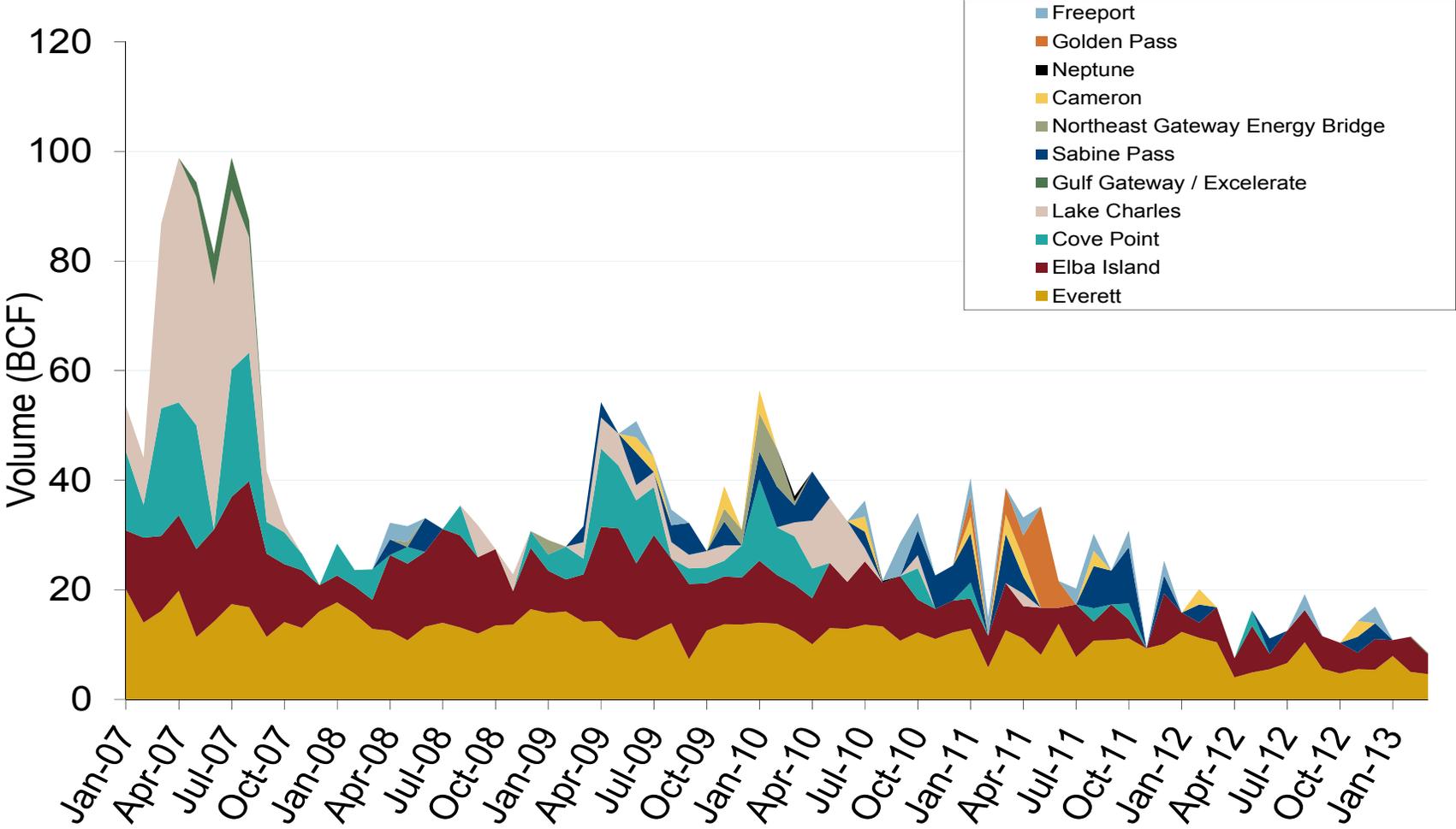
Western Consuming Region



World LNG Estimated July 2013 Landed Prices



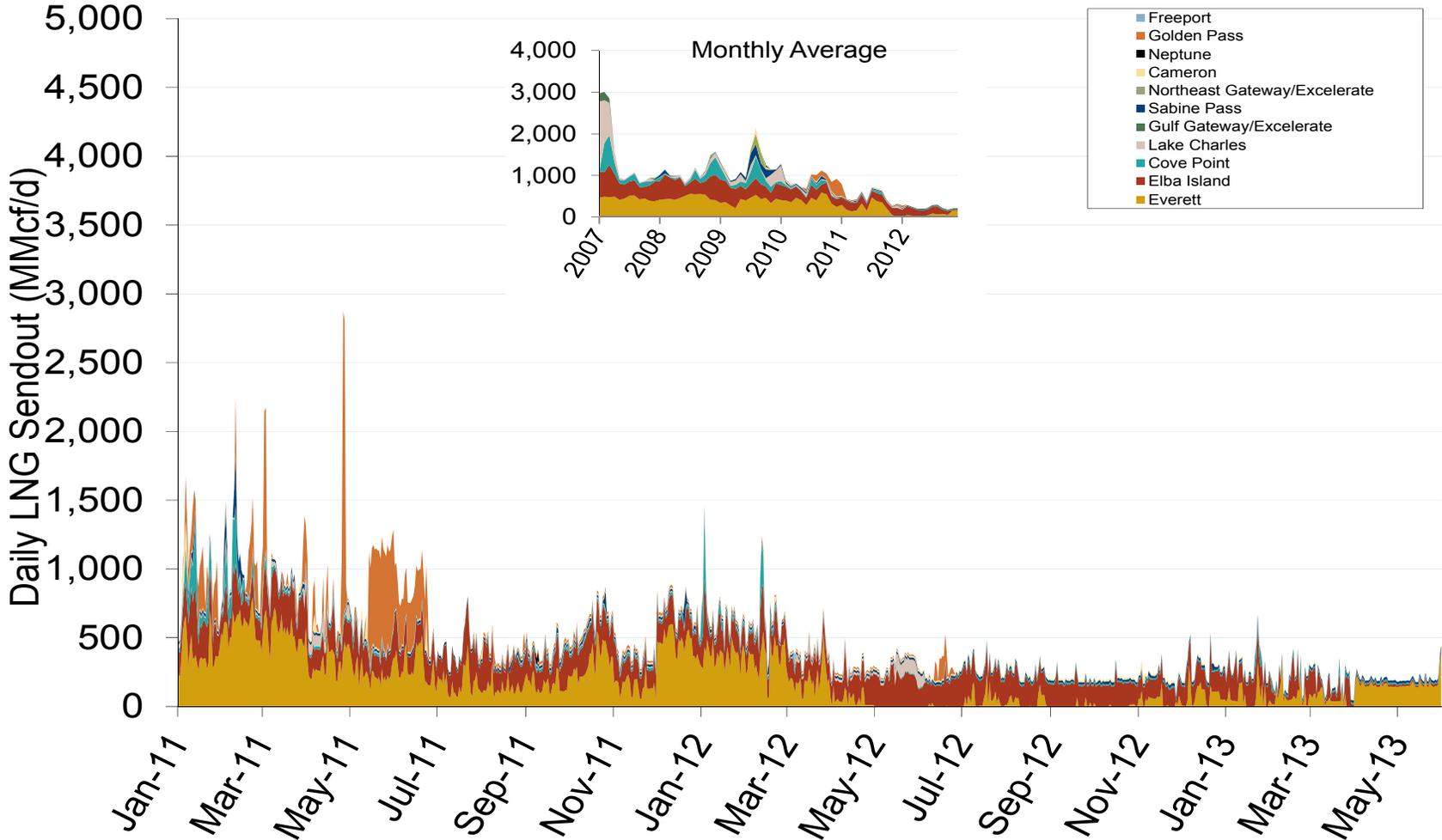
Monthly Gas Imports at Existing U.S. LNG Facilities



Source: Derived from DOE Office of Fossil Energy data
June 2013 Midwest Snapshot Report

Updated: June 11, 2013

Daily Gas Sendout from Existing U.S. LNG Facilities



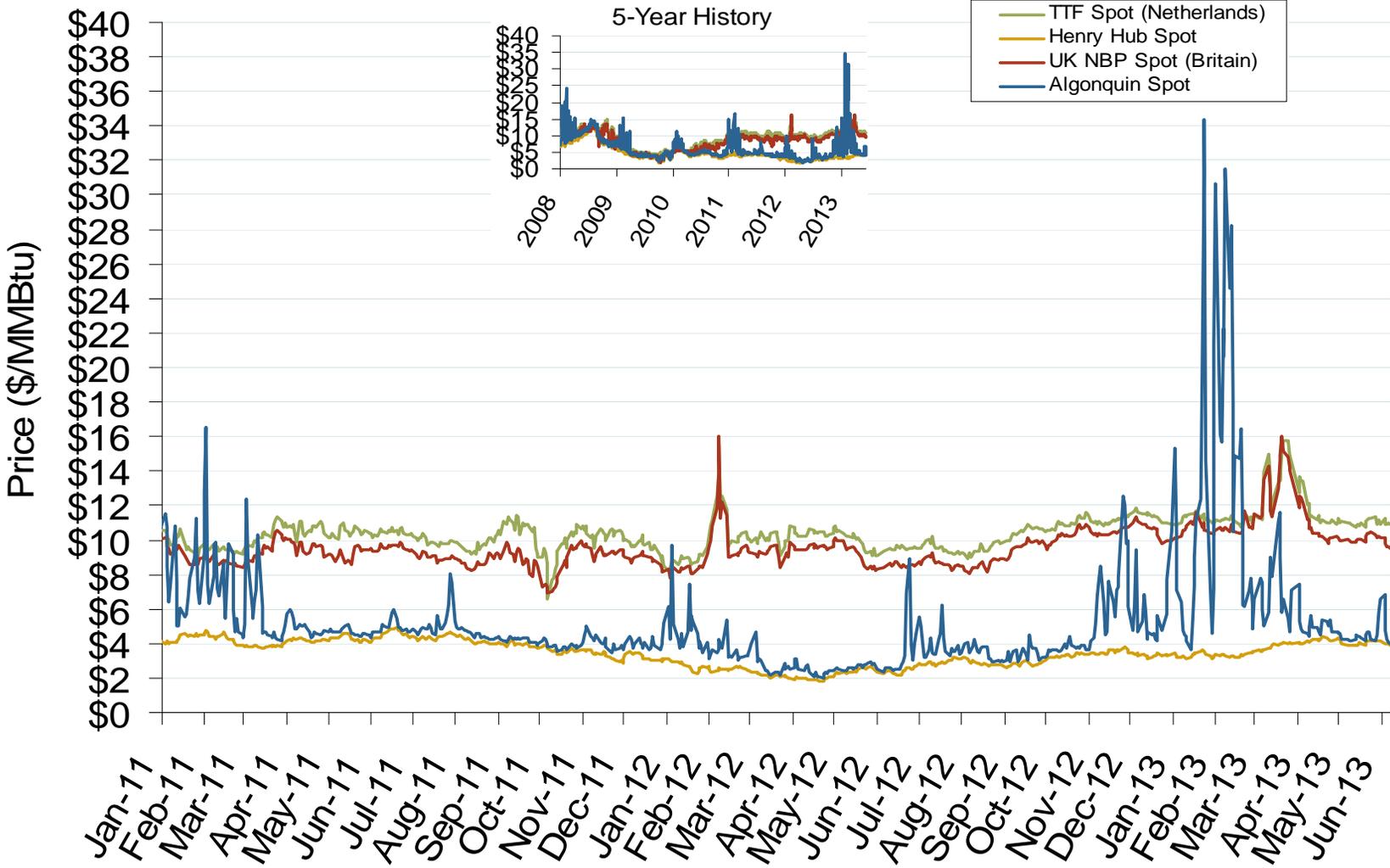
Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes flows to the Freeport LNG which flows via intrastate pipelines and flows to the Mystic 8 and 9 power plants.

Source: Derived from Bentek Energy data

June 2013 Midwest Snapshot Report

Updated: June 05, 2013

Atlantic Basin European and US Spot Natural Gas Prices

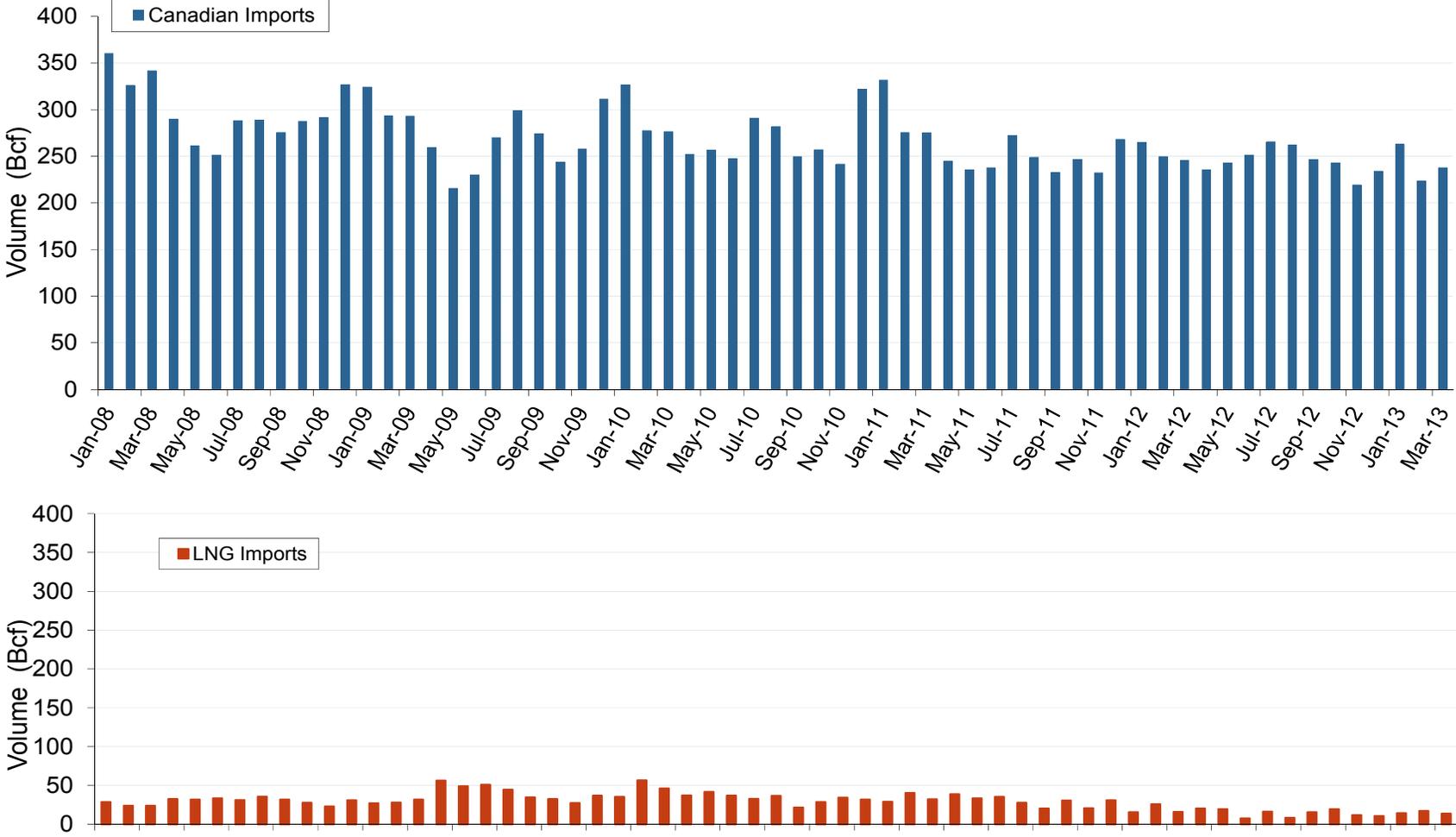


Source: Derived from *Bloomberg* and *ICE* data
June 2013 Midwest Snapshot Report

Updated: June 7, 2013

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

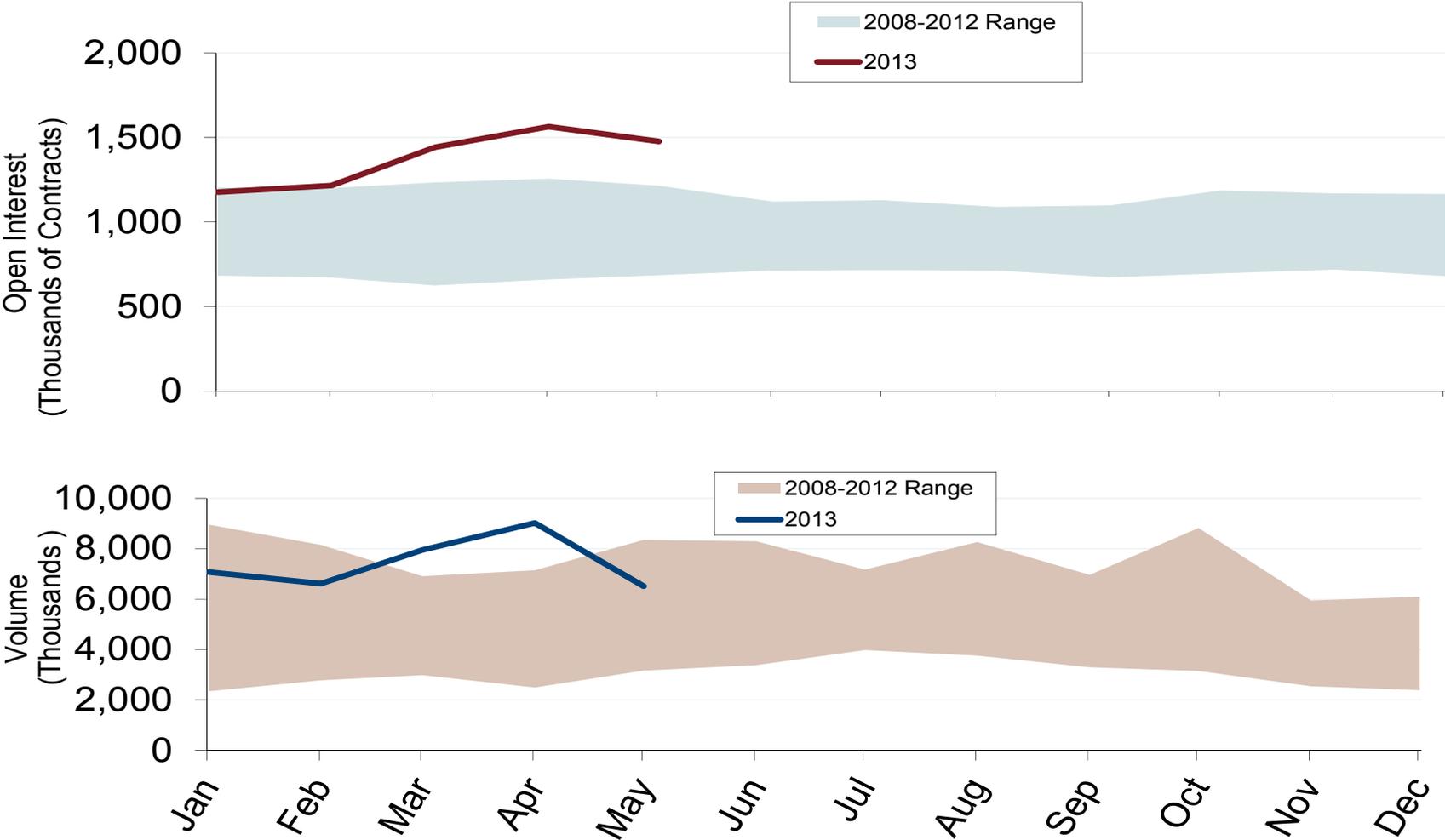
Canadian and LNG Natural Gas Imports Into the U.S.



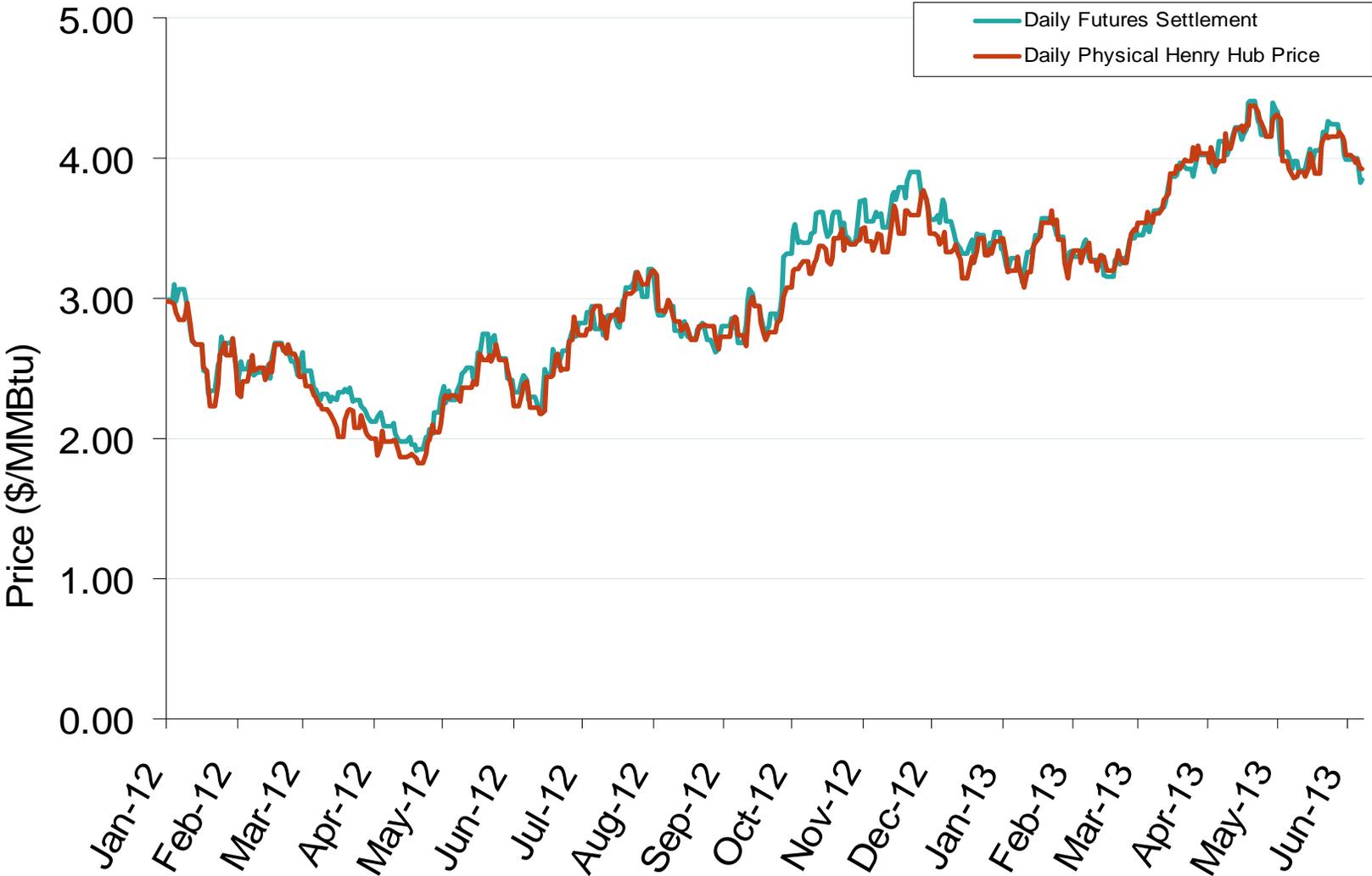
Source: EIA Natural Gas Monthly
June 2013 Midwest Snapshot Report

Updated: June 07, 2013

Nymex NG Futures Month-End Open Interest and Monthly Volume



Daily Physical Index Price & Daily Futures Settlement Price



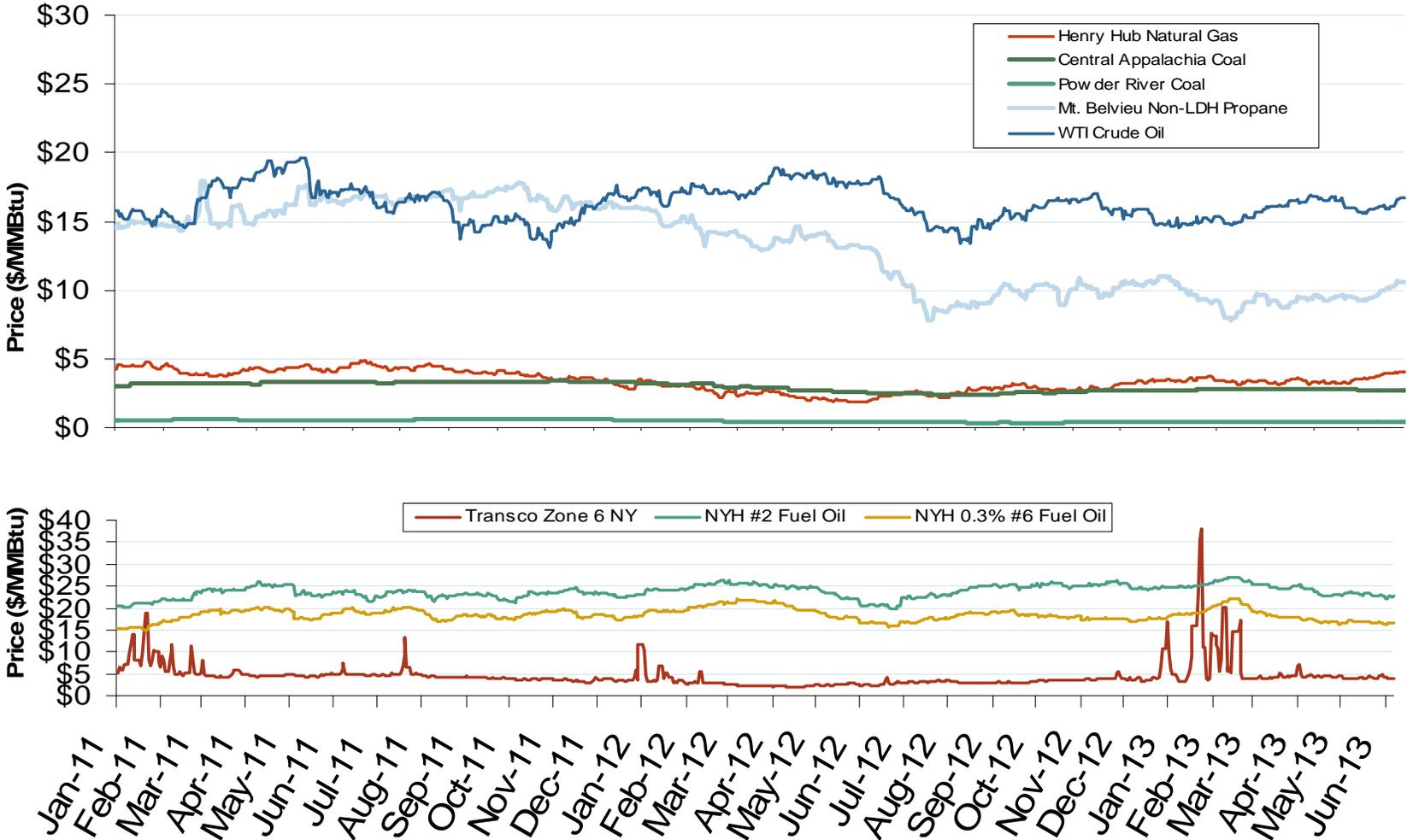
Source: Derived from *Bloomberg* data
June 2013 Midwest Snapshot Report

Updated: June 7, 2013

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

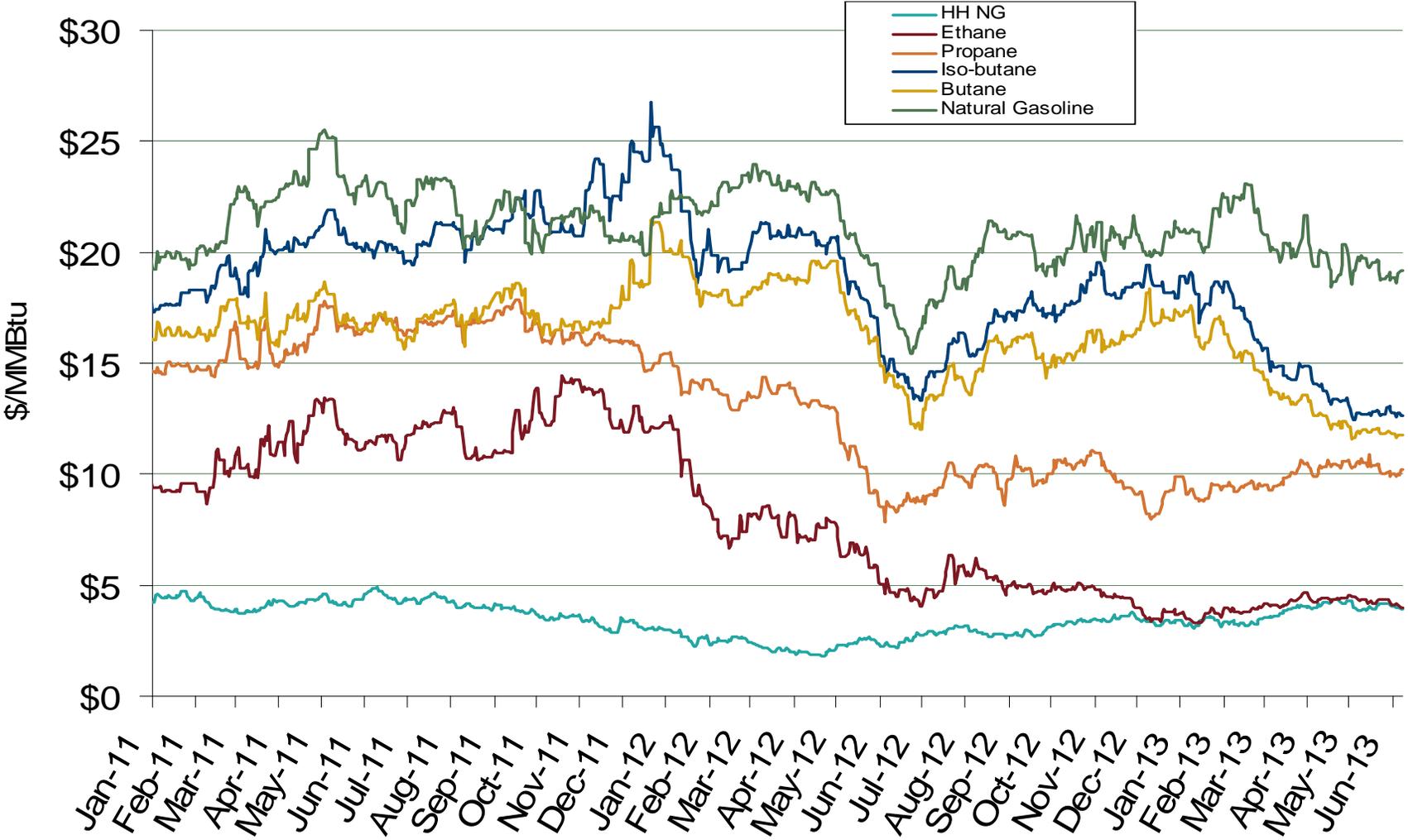


Notes: Coal prices are quoted in \$/ton. Conversion factors to \$/MMBtu are based on contract specifications of 12,000 btus/pound for Central Appalachian coal and 8800 btus/pound for Powder River Basin coal

Source: Derived from ICE and Bloomberg data
June 2013 Midwest Snapshot Report

Updated: June 7, 2013

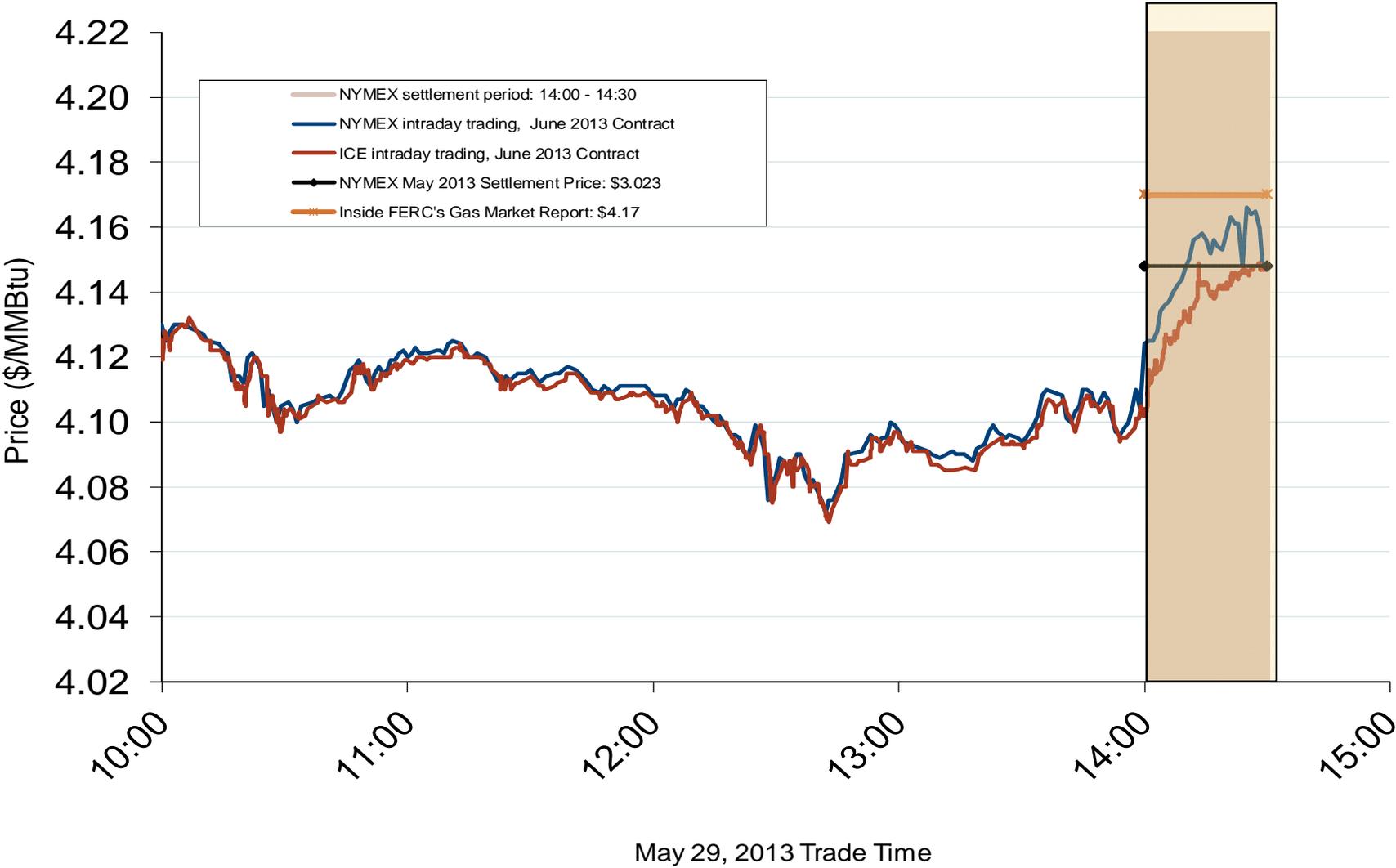
U.S. Natural Gas vs. Natural Gas Liquids (NGL) Prices



Source: Derived from Bloomberg Data
June 2013 Midwest Snapshot Report

Updated: June 7, 2013

Nymex and ICE Contract Final Settlement - June 2013



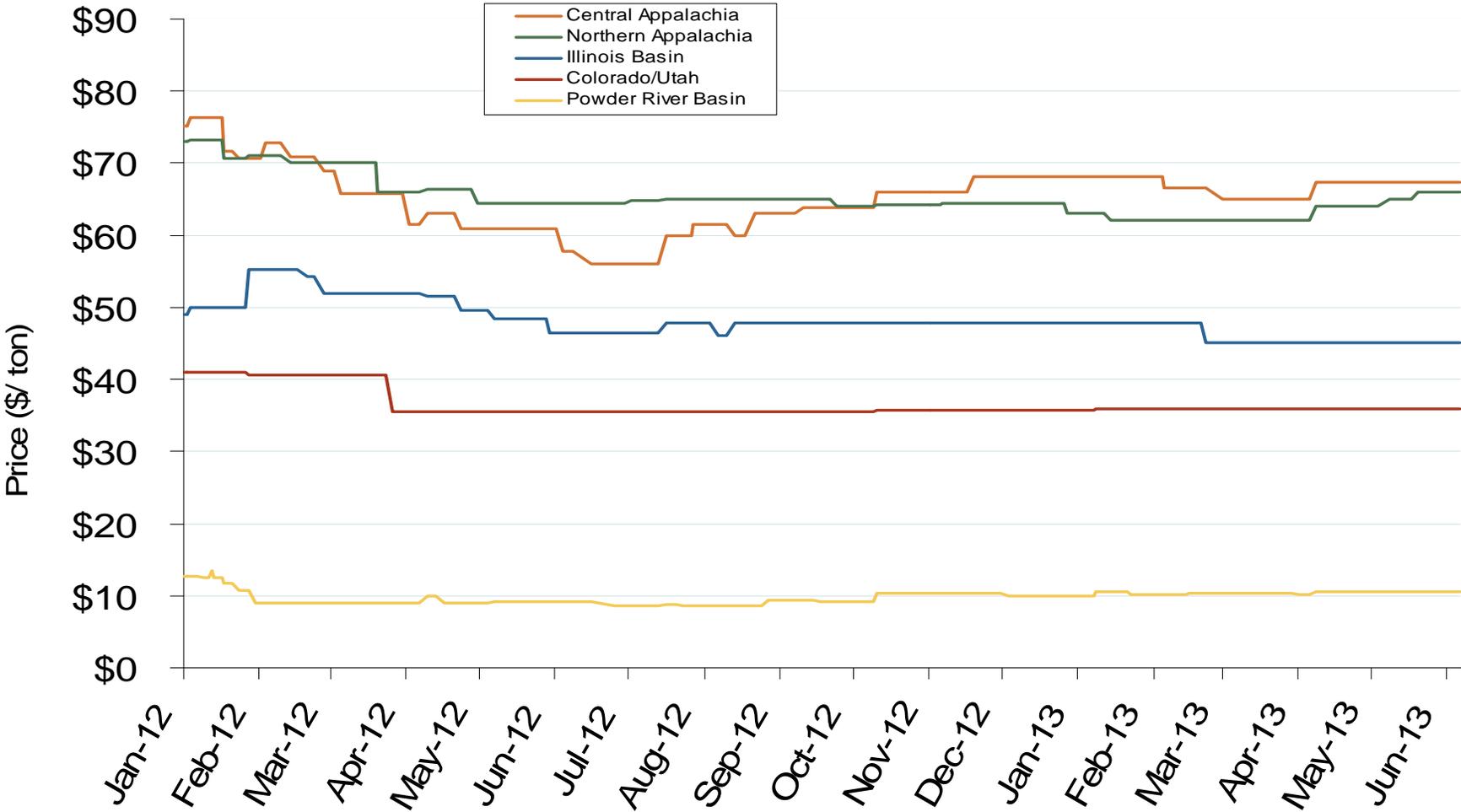
Notes: The final settlement day for this Nymex contract is three business days before the start of the contract term (which is the 1st day of the month)

Source: Derived from Nymex and ICE data

June 2013 Midwest Snapshot Report

Updated: June 8, 2013

Central Appalachian and Powder River Basin Coal Prices

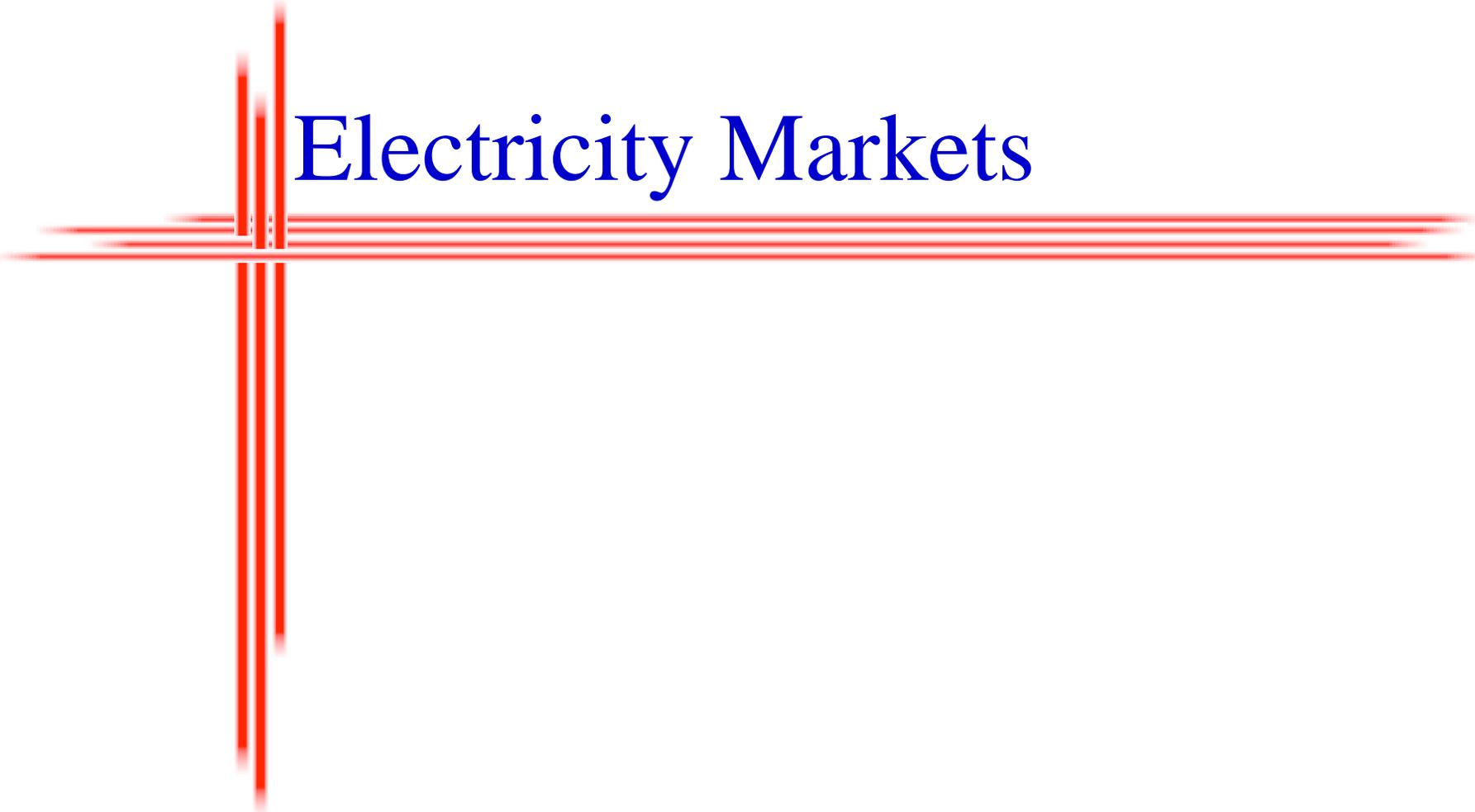


Notes: The Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances

Source: Derived from Bloomberg data

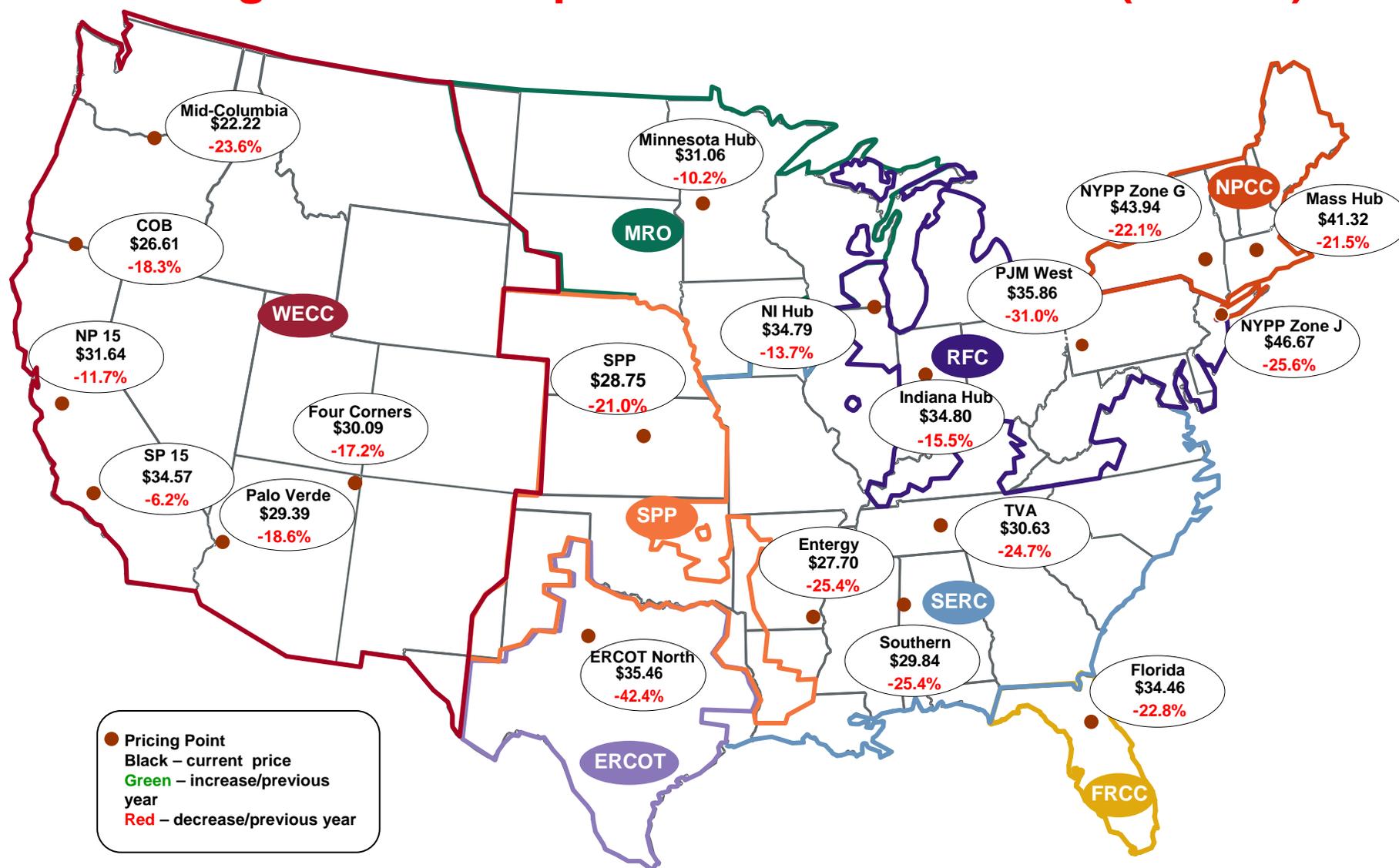
June 2013 Midwest Snapshot Report

Updated: June 7, 2013



Electricity Markets

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



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%

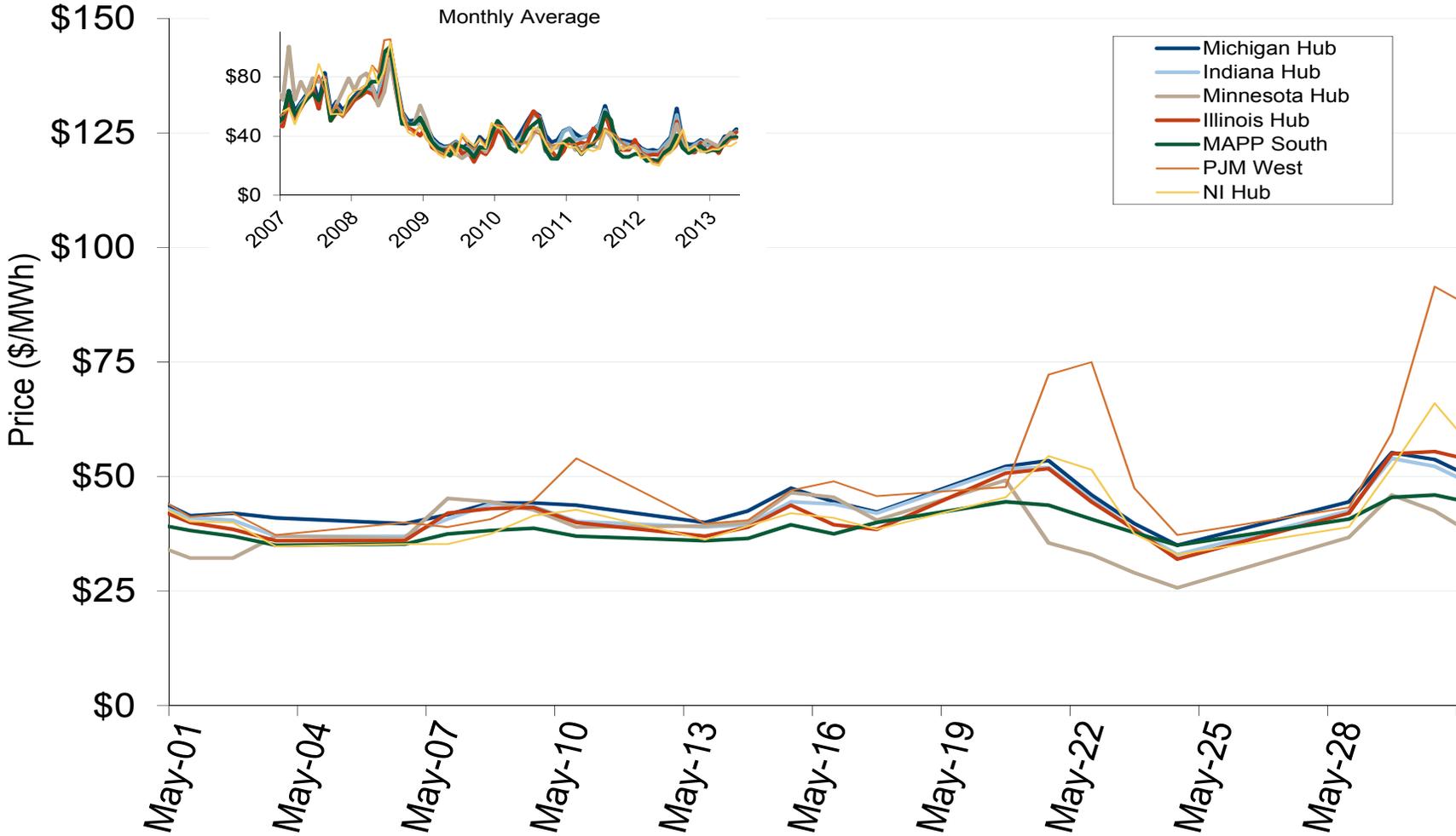
Note: Effective January 1, 2012, Platts replaced the Cinergy Hub with the Indiana Hub.

June 2013 Midwest Snapshot Report

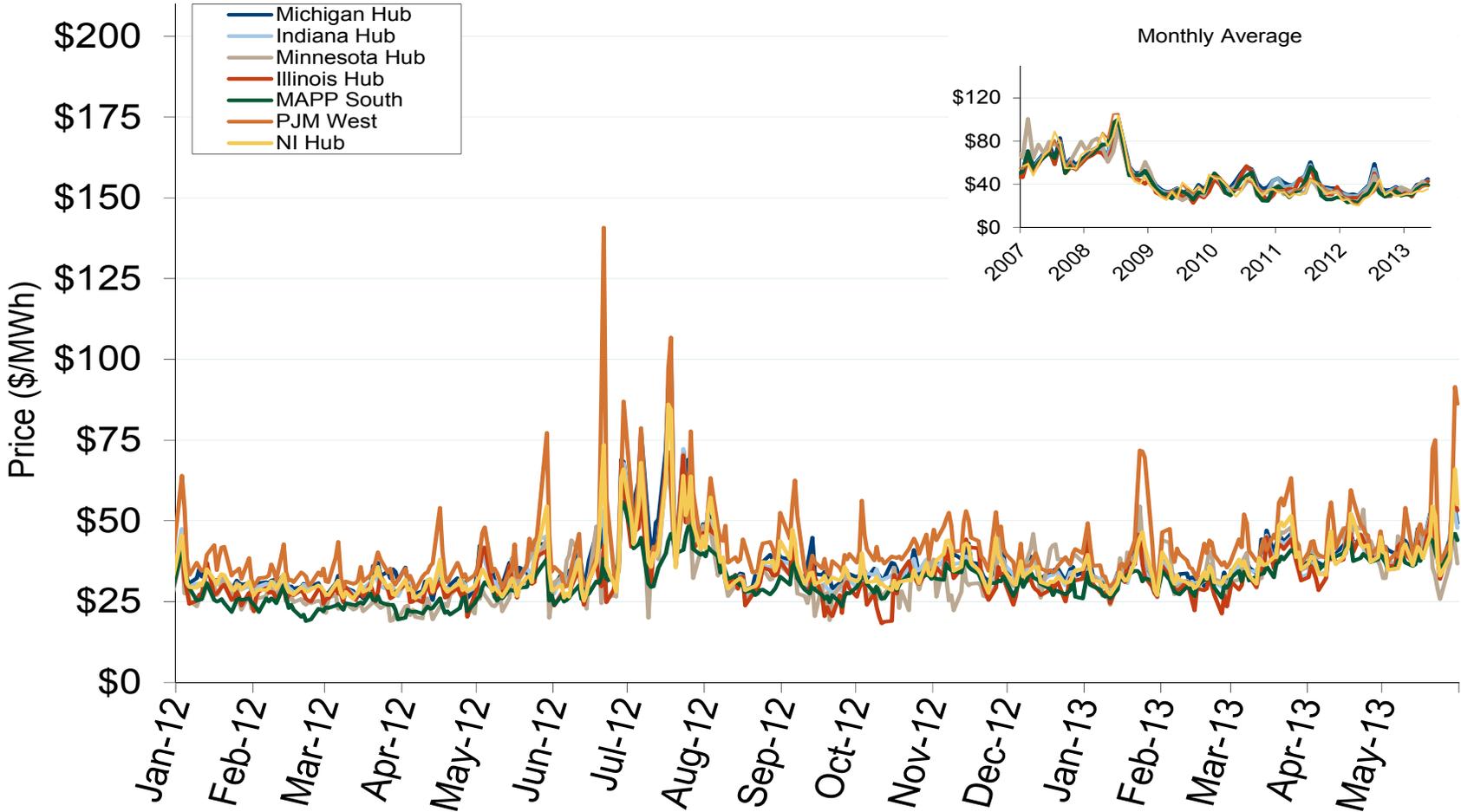
Midwest Electric Market: Last Month's MISO/PJM Index Prices

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

MISO/PJM Index Day-Ahead On-Peak Prices



MISO/PJM Index Day-Ahead On-Peak Prices



Source: Derived from *Platts* data
June 2013 Midwest Snapshot Report

Updated: June 05, 2013

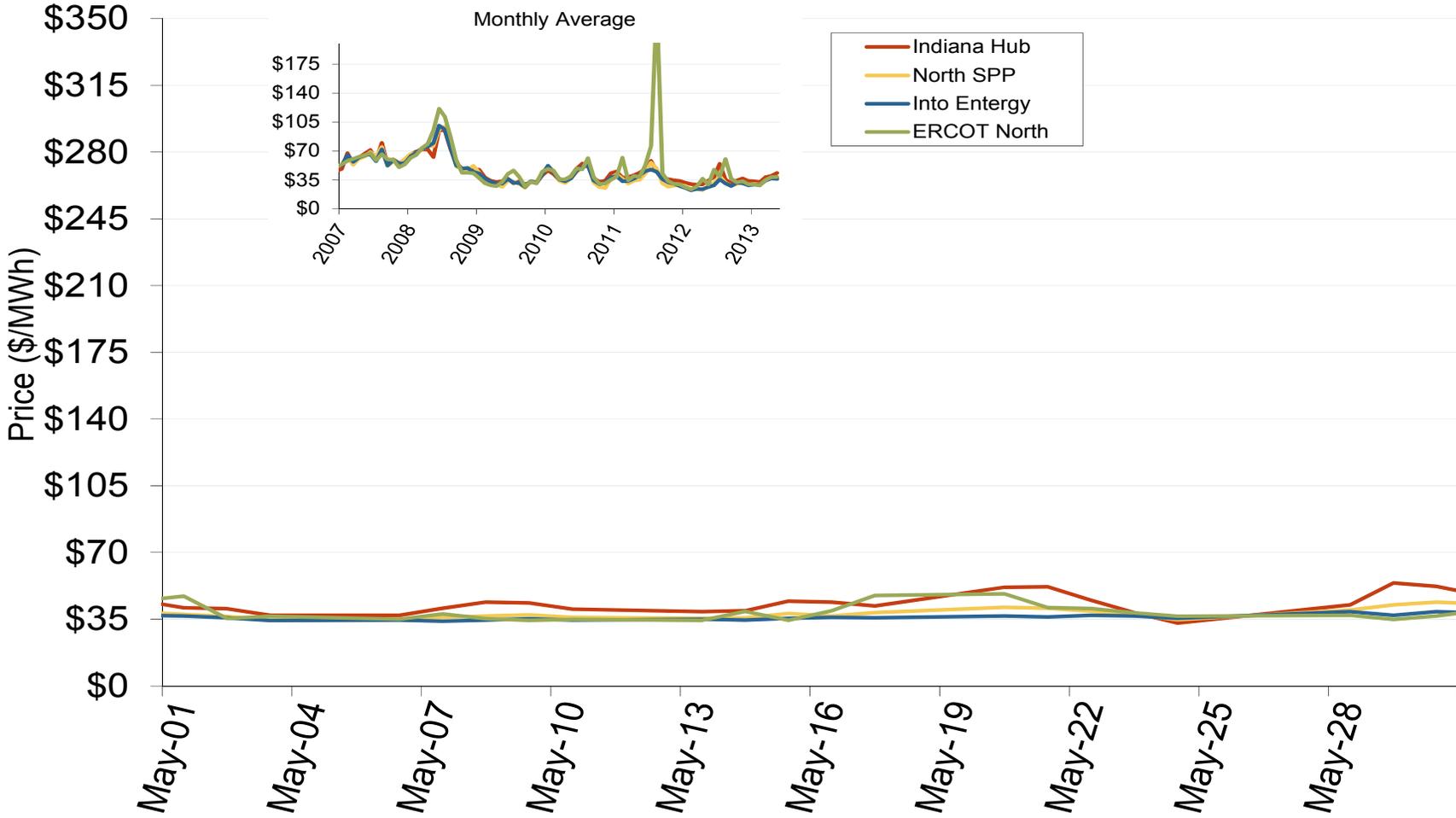
South Central Annual Average Bilateral Prices

Annual Average Day Ahead On Peak Prices (\$/MWh)						
	2008	2009	2010	2011	2012	5-Year Avg
SPP North	\$68.77	\$32.94	\$38.71	\$36.41	\$28.76	\$41.15
ERCOT North	\$73.42	\$34.89	\$41.15	\$61.55	\$34.99	\$49.20

Midwest Electric Market: Last Month's Midwestern Index Prices

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

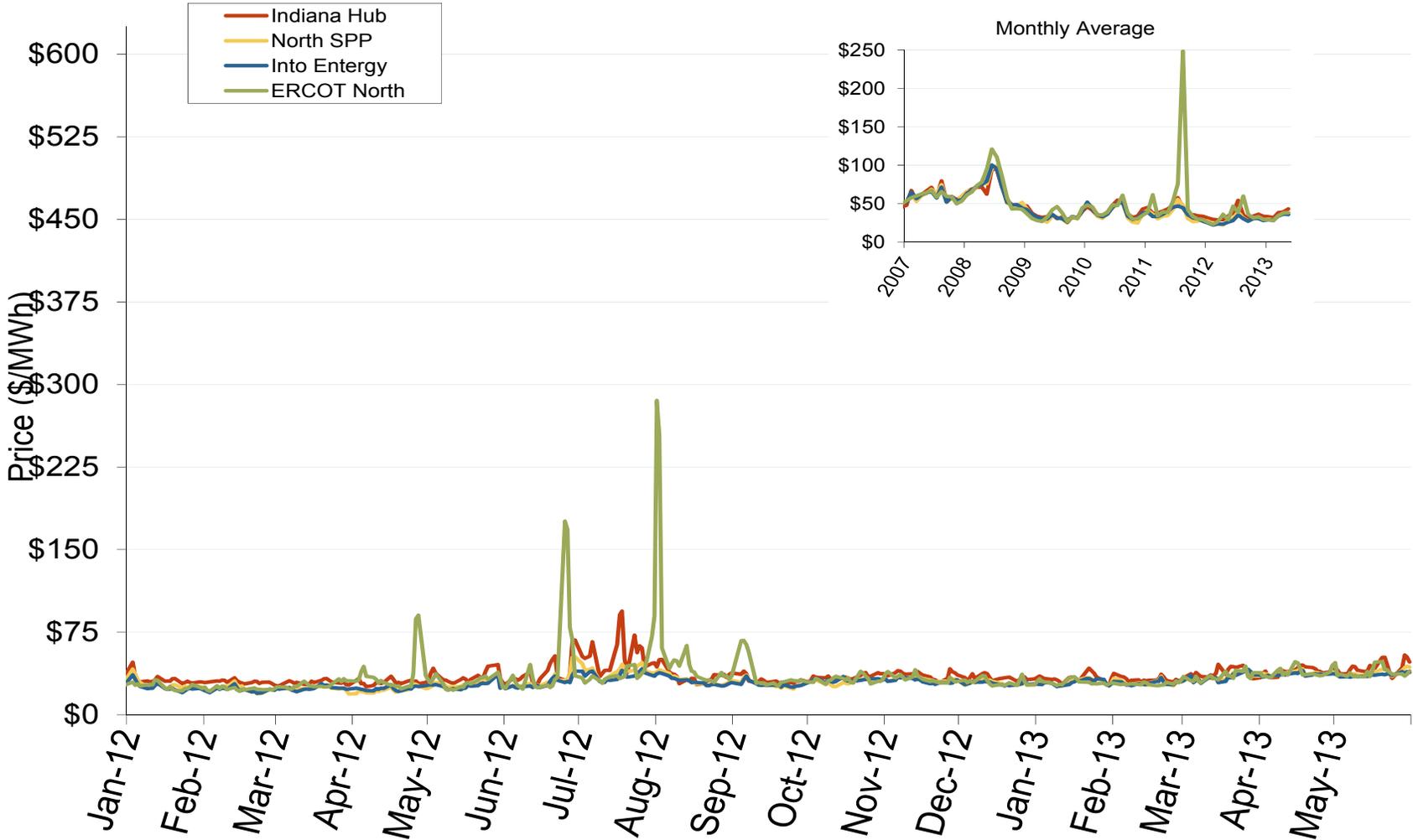
Midwestern Daily Index Day-Ahead On-Peak Prices



Southeast Electric Market: Midwestern Index Prices

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

Midwestern Daily Index Day-Ahead On-Peak Prices

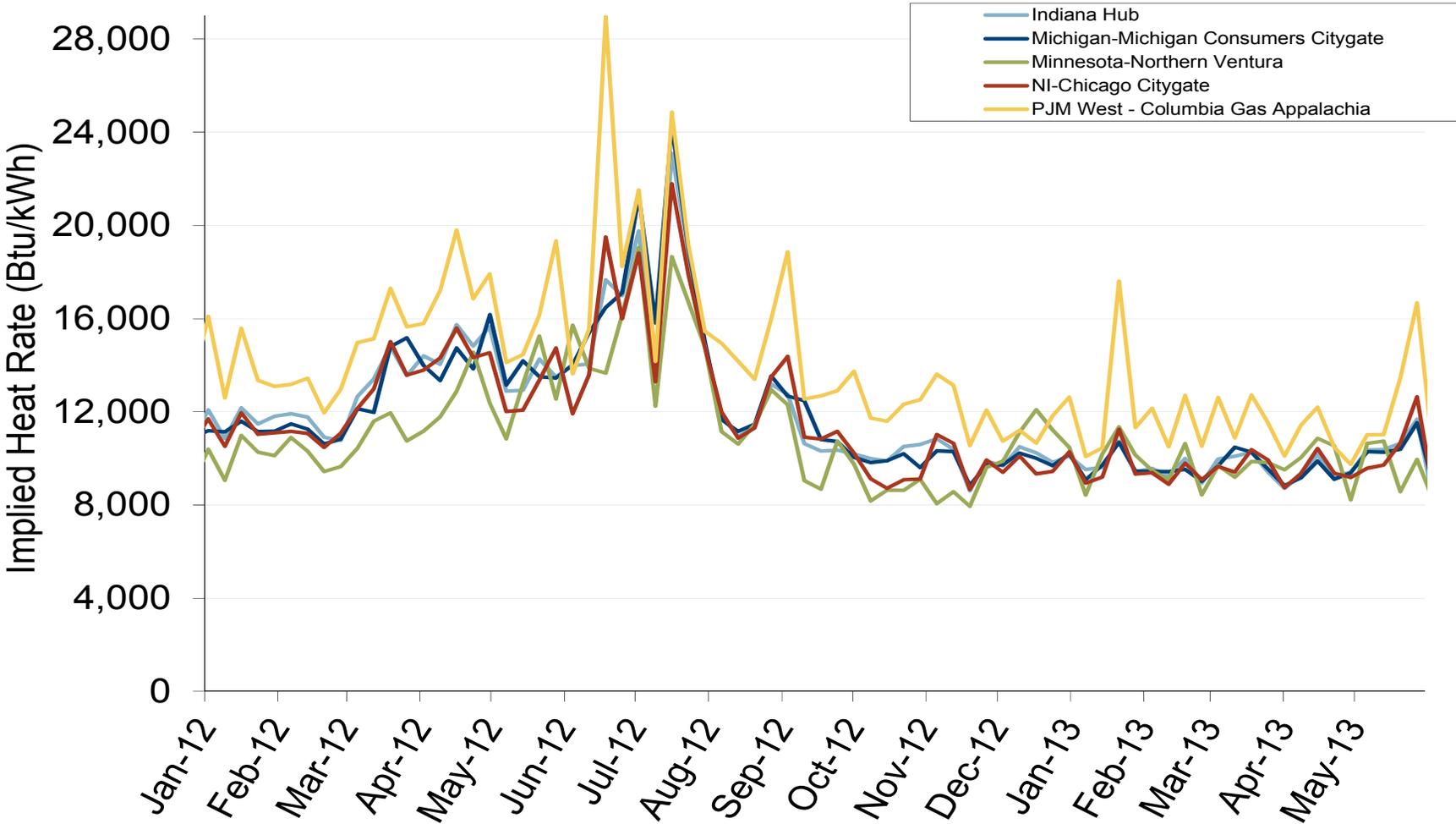


Source: Derived from Platts data
June 2013 Midwest Snapshot Report

Updated: June 05, 2013

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

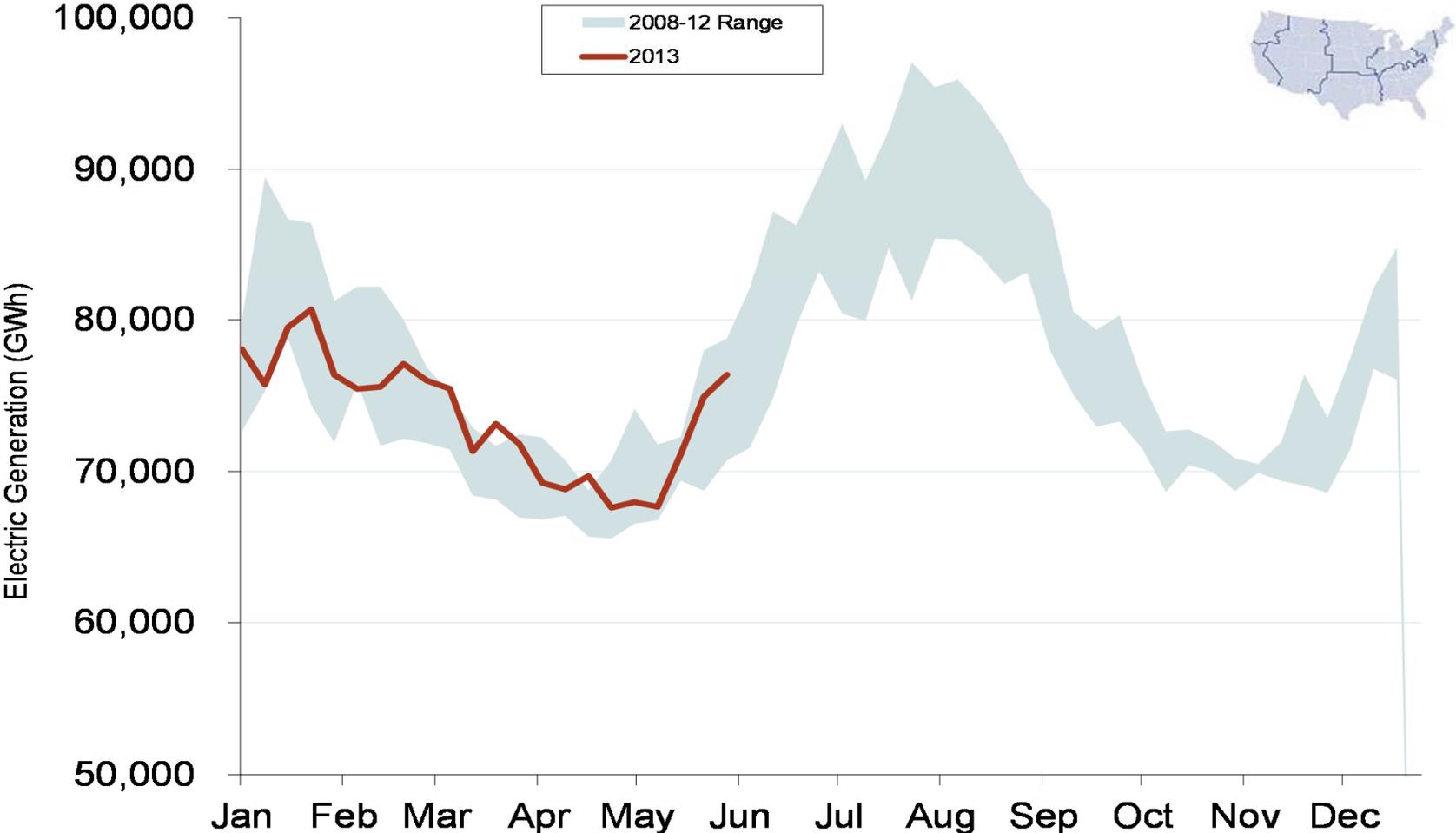
Implied Heat Rates at MISO and PJM Hubs - Weekly Averages



Source: Derived from *Platts* on-peak electric and natural gas price data
June 2013 Midwest Snapshot Report

Updated: June 06, 2013

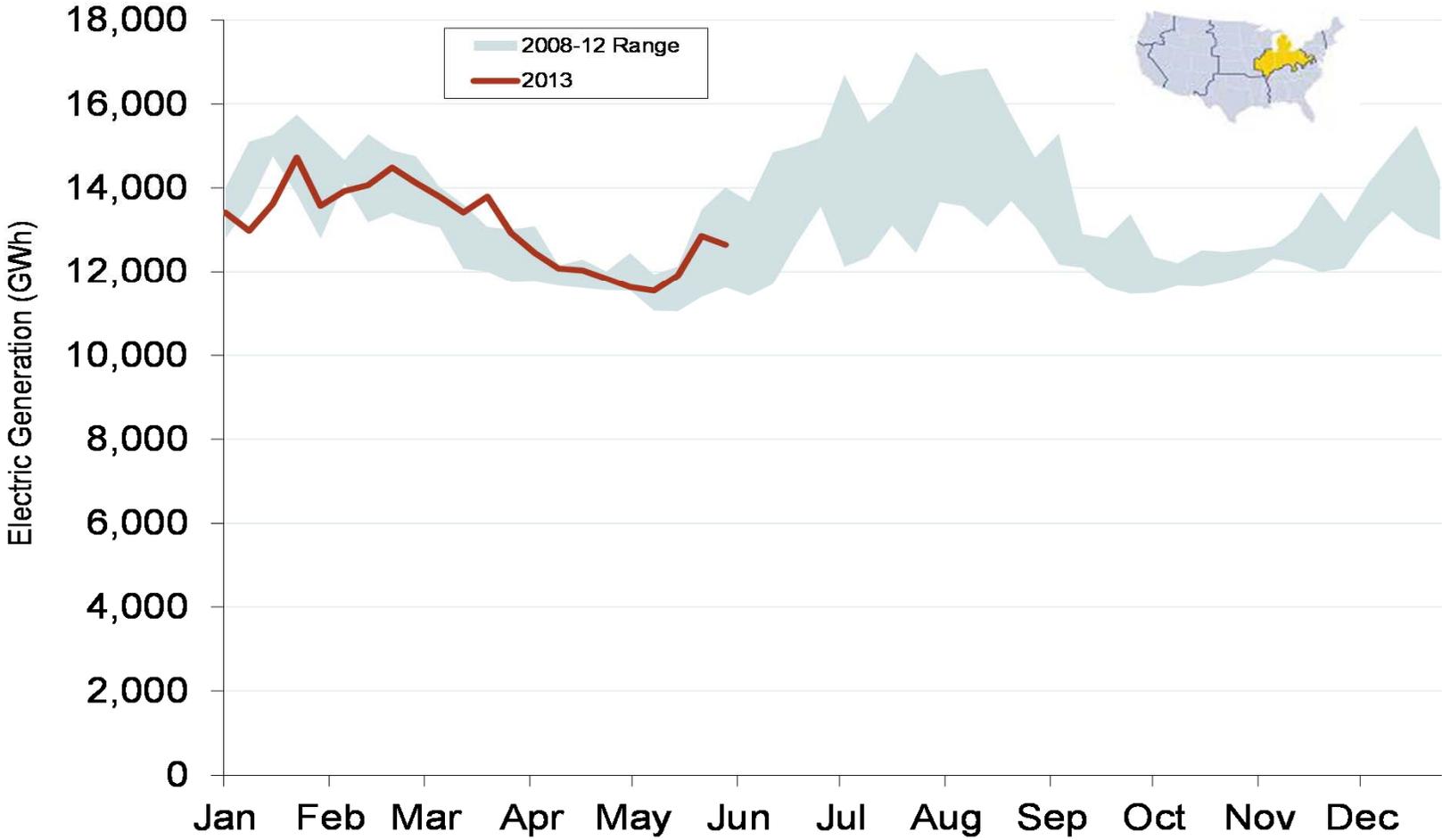
Weekly U.S. Electric Generation Output



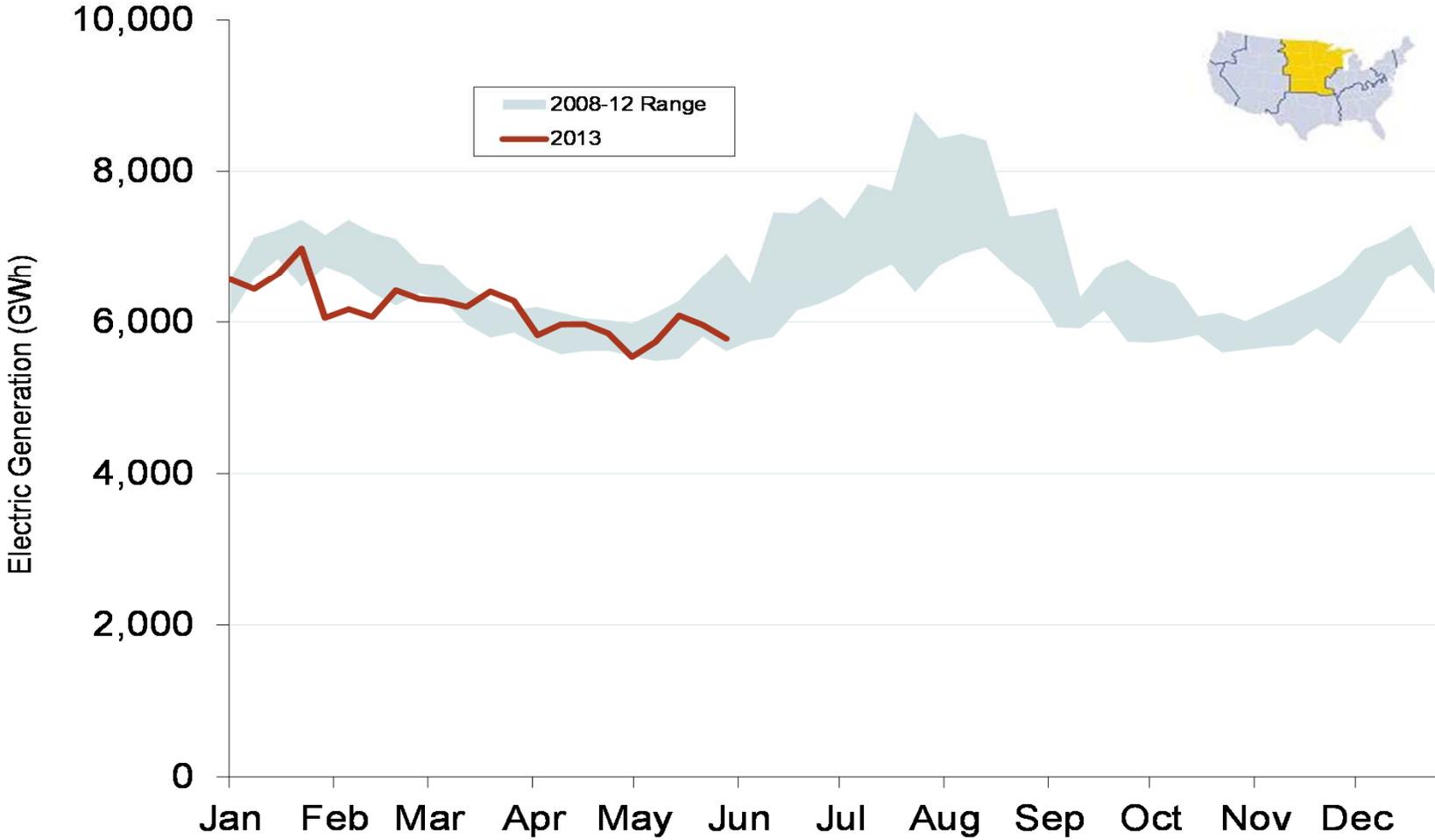
Source: Derived from *EEI* data
June 2013 Midwest Snapshot Report

Updated: June 06, 2013

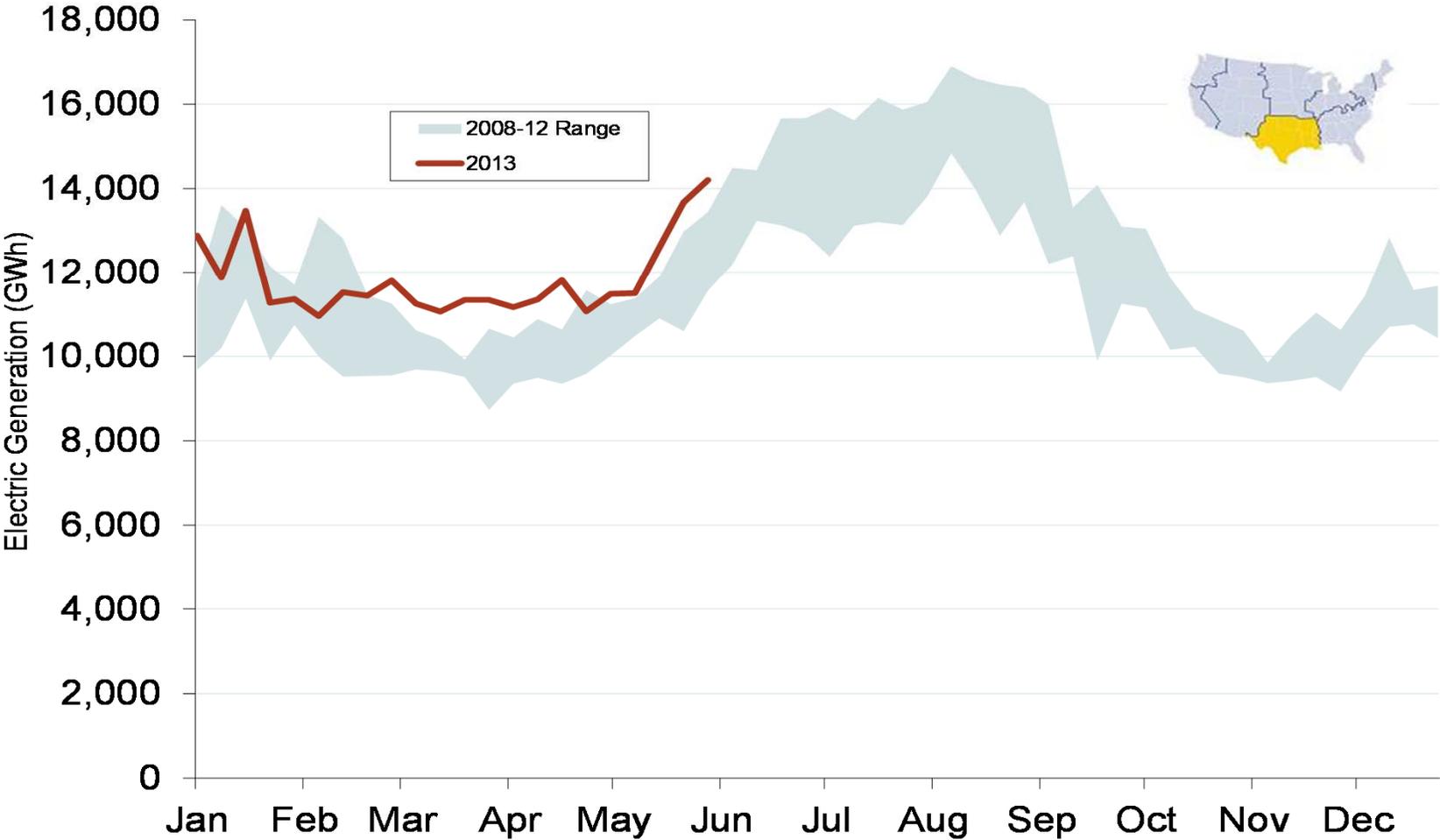
Weekly Generation Output - Central Industrial Region



Weekly Generation Output - West Central



Weekly Generation Output - South Central



Source: Derived from *EEI* data
June 2013 Midwest Snapshot Report

Updated: June 06, 2013