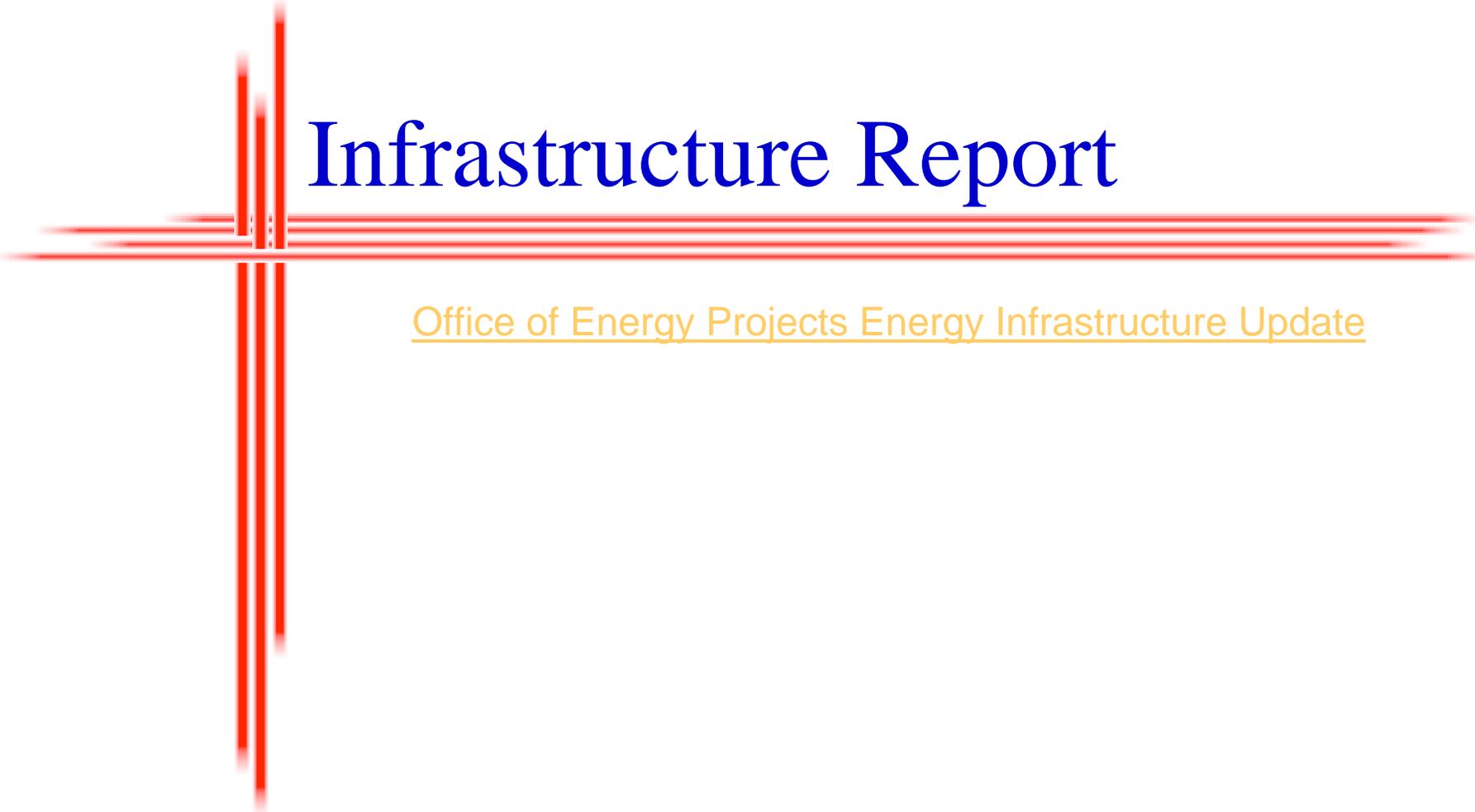


OE ENERGY MARKET SNAPSHOT

Midwest States Version – September 2013 Data

Office of Enforcement
Federal Energy Regulatory Commission
October 2013



Infrastructure Report

Office of Energy Projects Energy Infrastructure Update



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

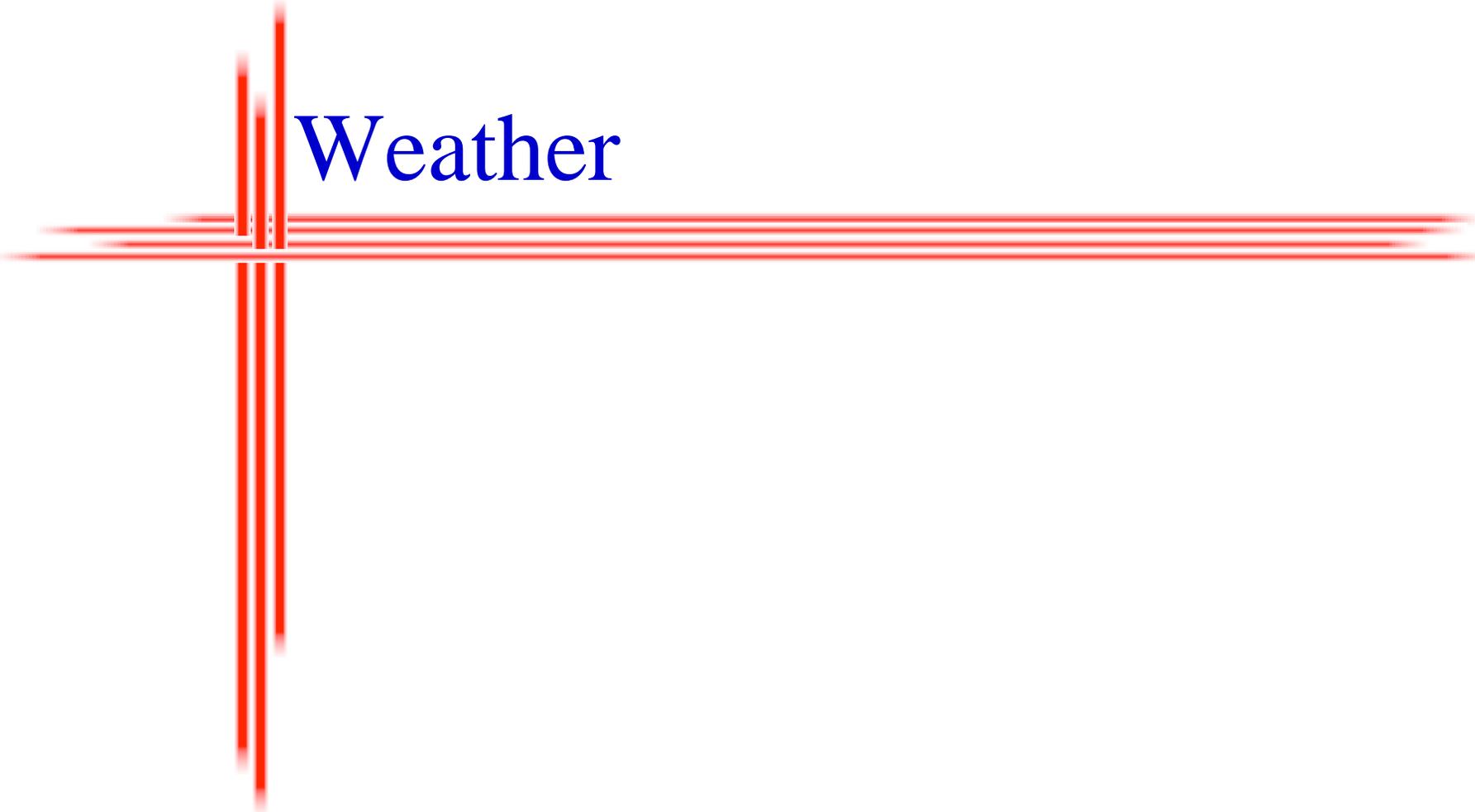


**Winter 2013-14
Energy Market Assessment
Report to the Commission**

Docket No. AD06-3-000
October 2013

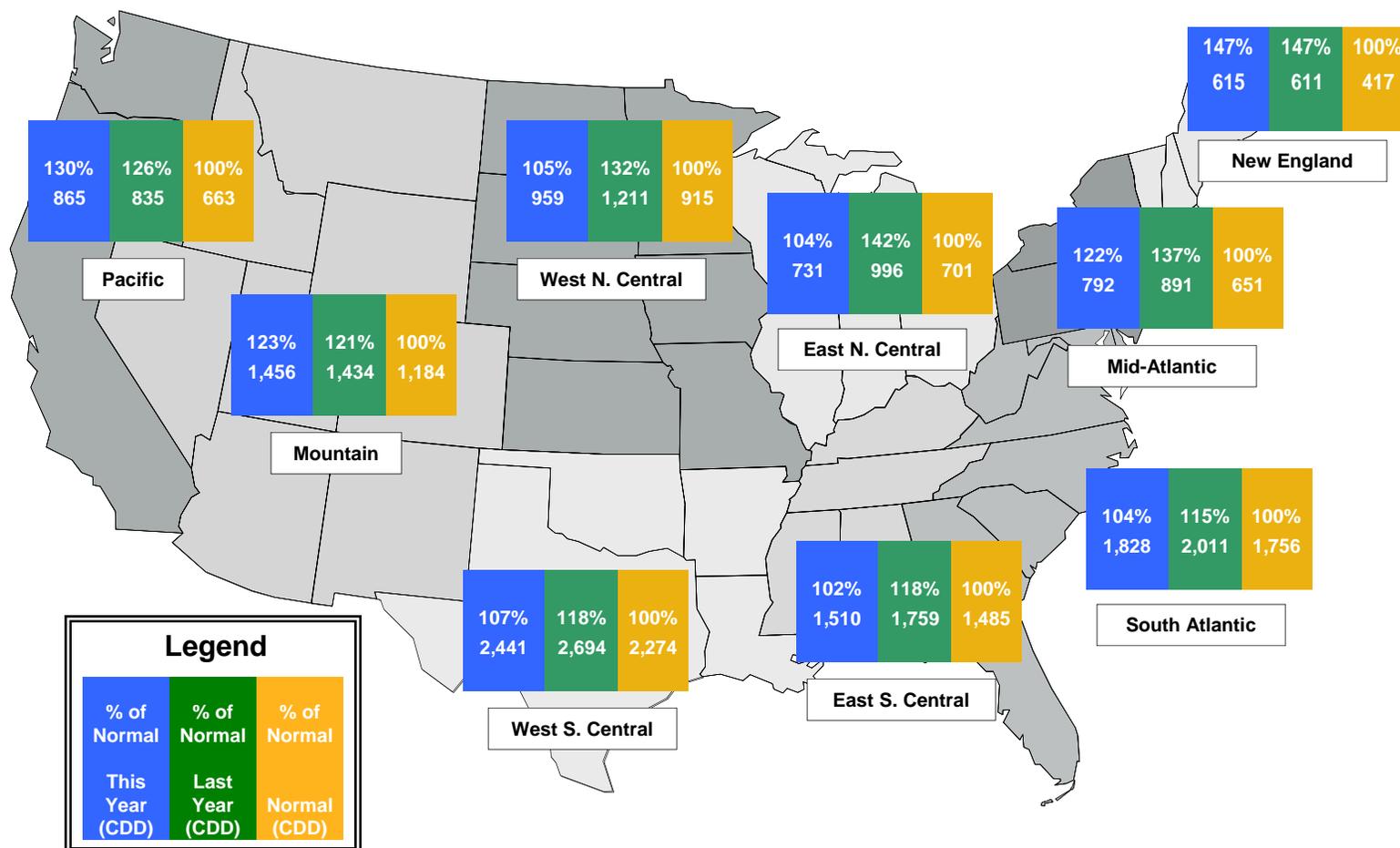
Disclaimer: The matters presented in this staff report do not necessarily represent the views of the Federal Energy Regulatory Commission, its Chairman, or individual Commissioners, and are not binding on the Commission.

<http://www.ferc.gov/CalendarFiles/20131017101835-2013-14-WinterReport.pdf>



Weather

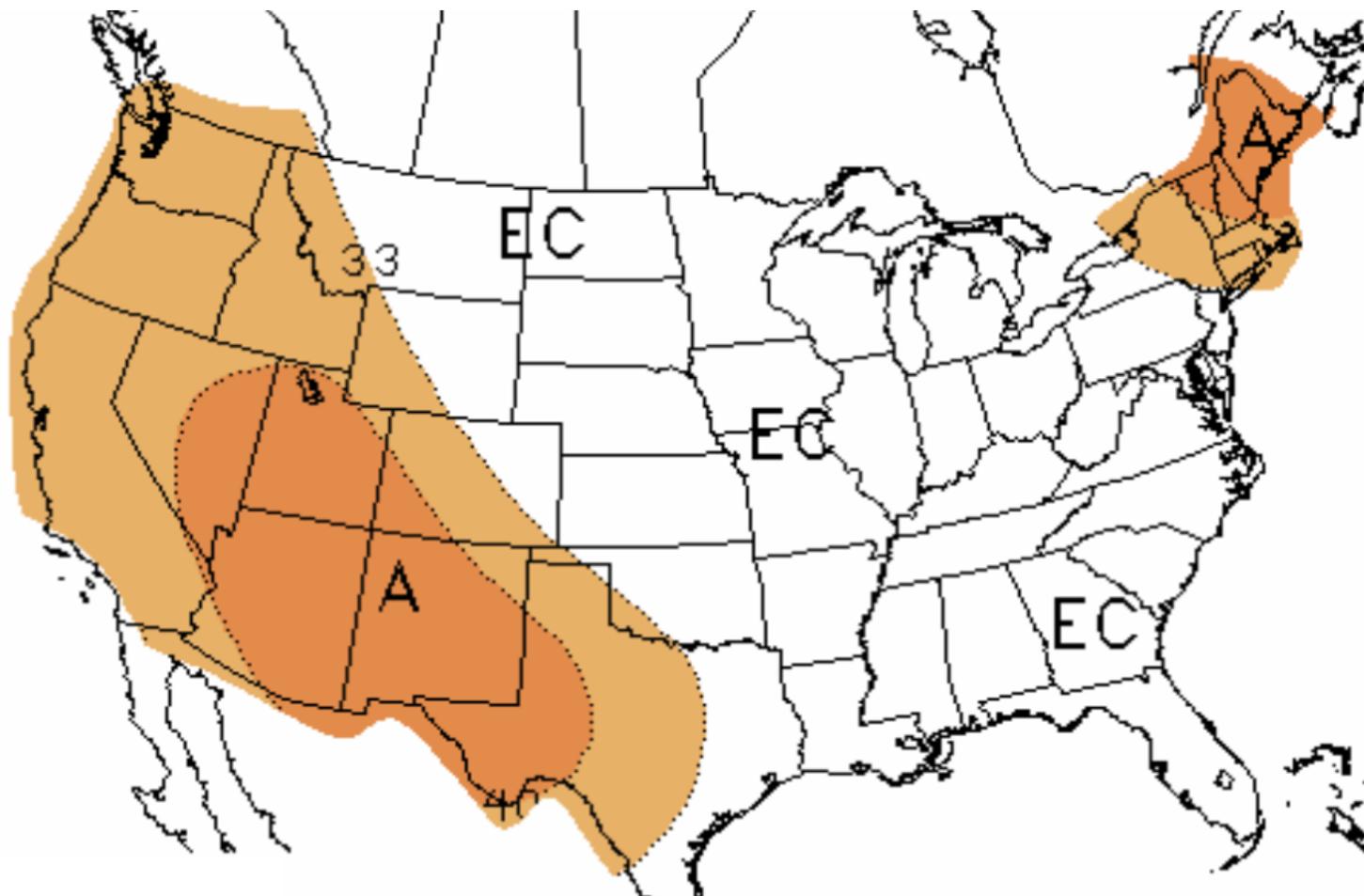
Regional Cooling Degree Days – January to September 2013



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

Updated: October 16, 2013

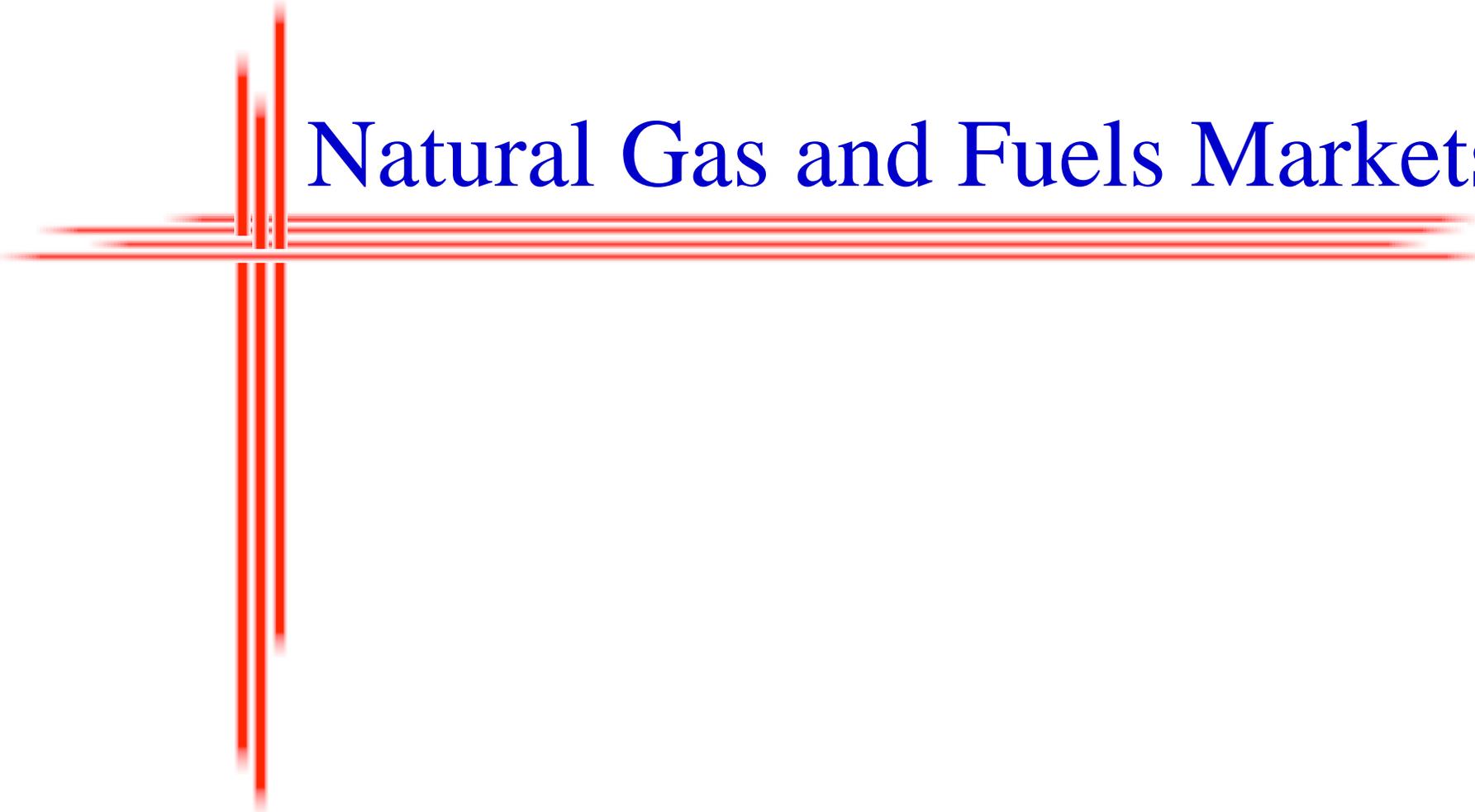
NOAA's 3 Month Temperature Forecast Made July 18, 2013, Valid for October 2013 – December 2013



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.

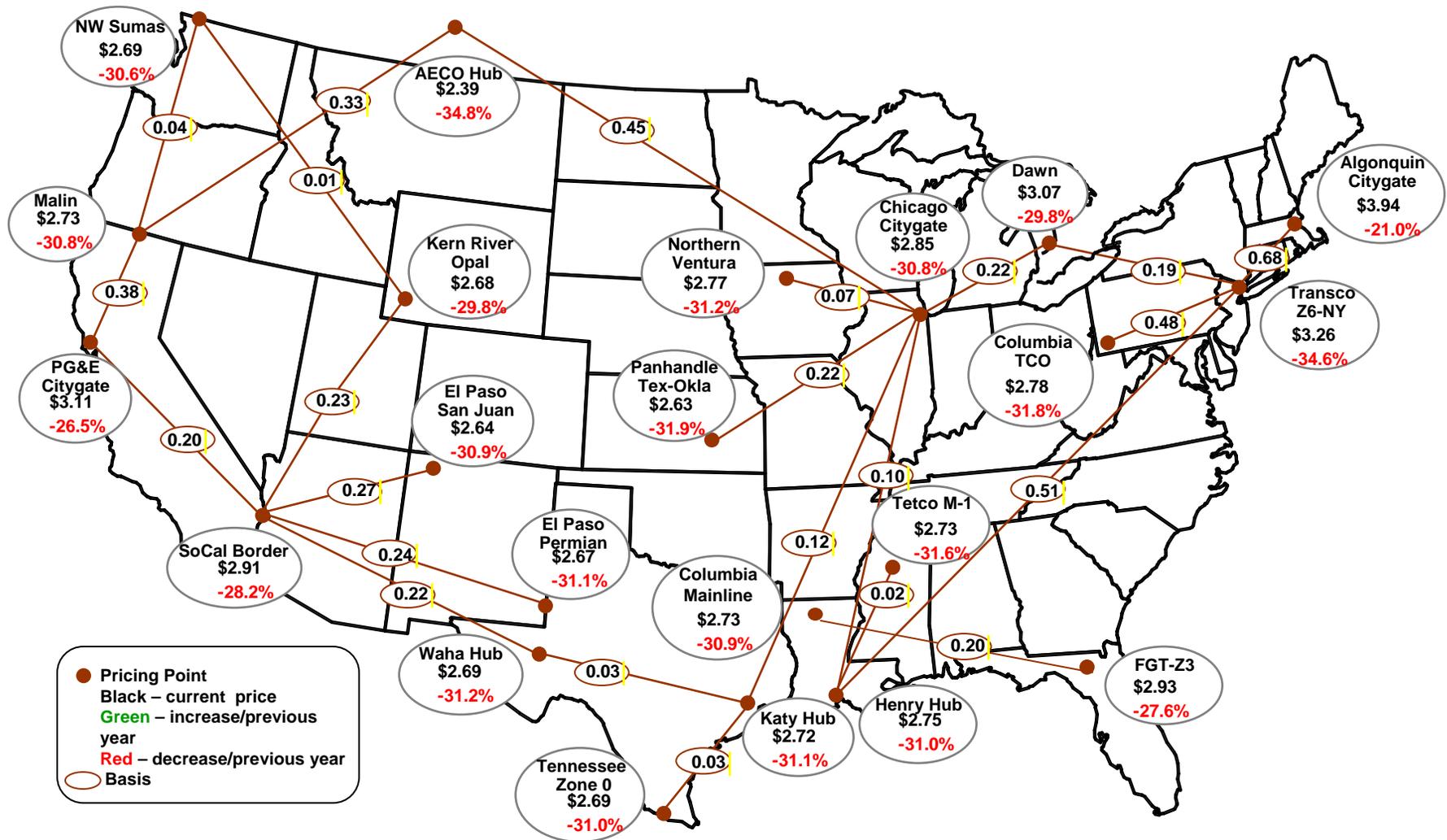
Source: Derived from NOAA data.

Updated: October 16, 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.

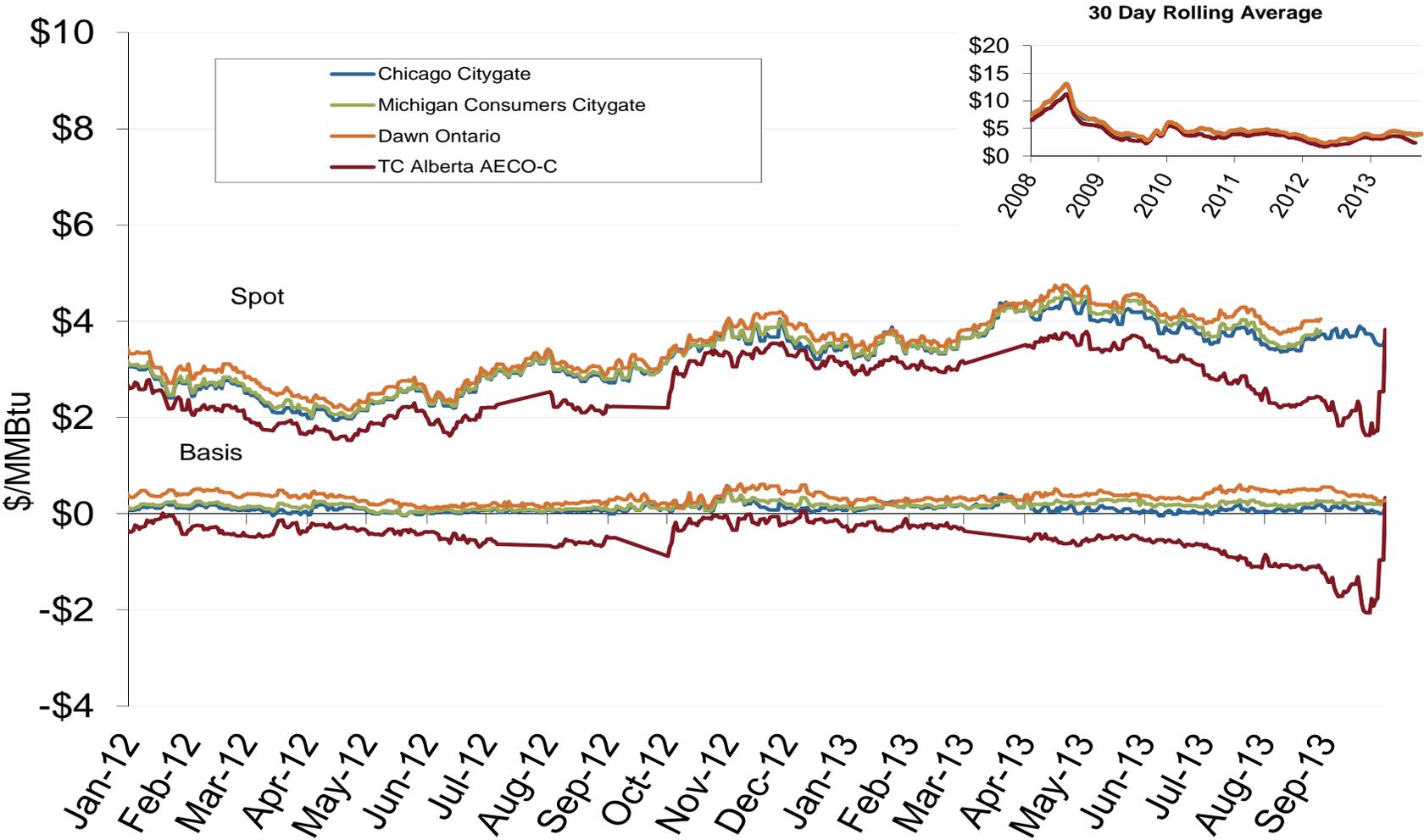
Natural Gas and Fuels Markets

Average Spot Gas Prices, 2012 (\$MMBtu)



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

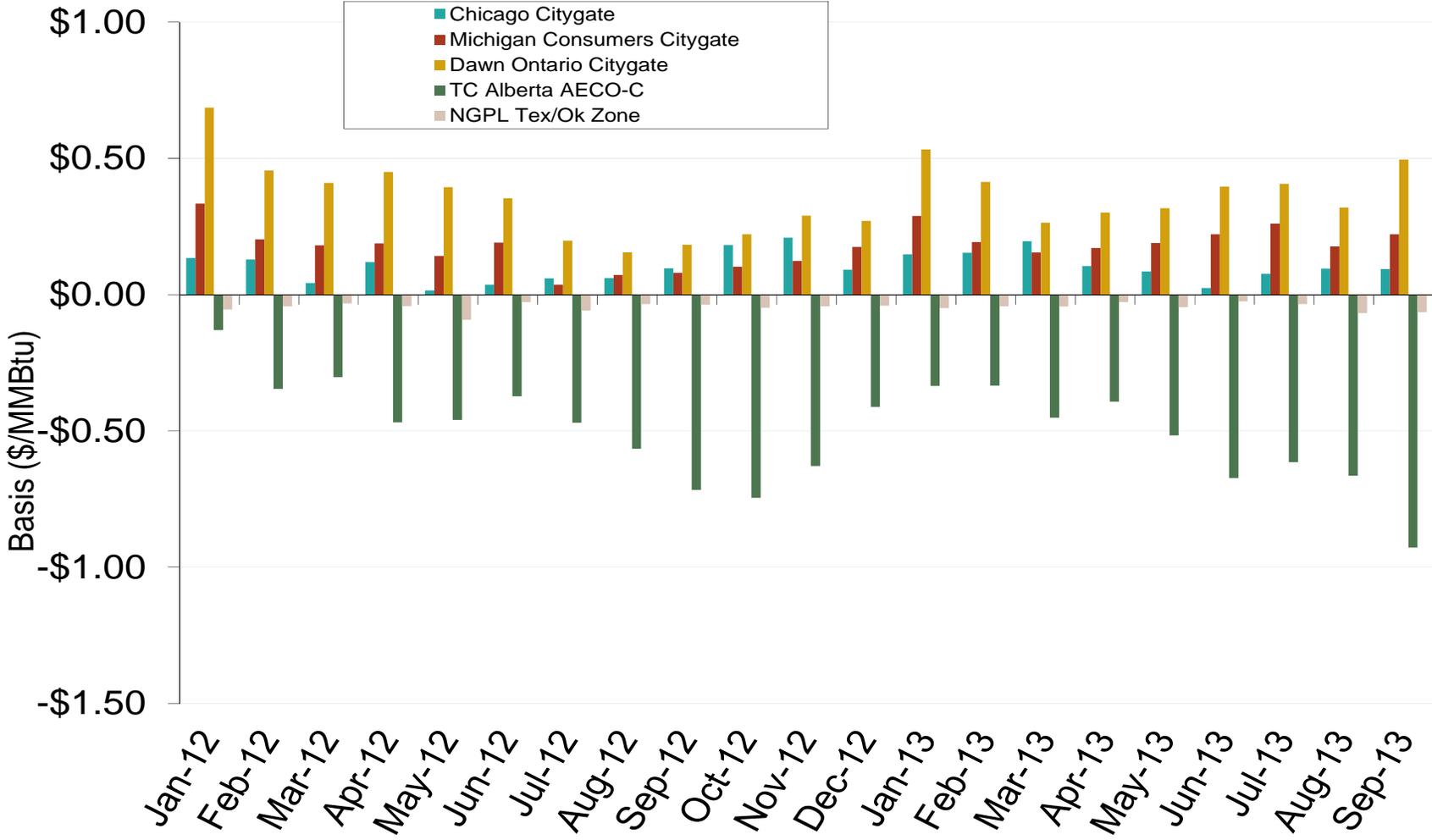
Midwestern Day-Ahead Hub Spot Prices and Basis



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

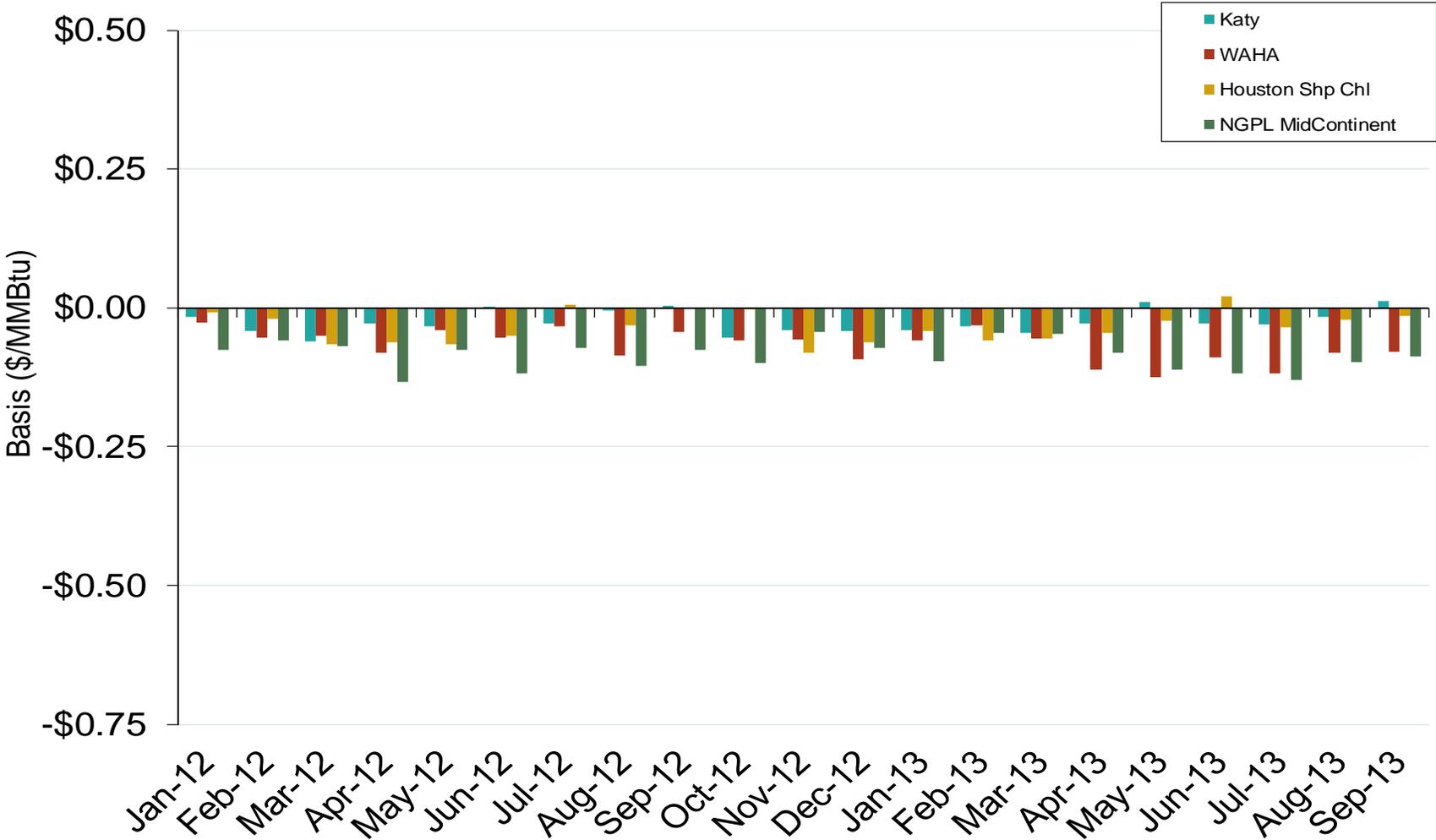


Source: Derived from Platts data
October 2013 Midwest Snapshot Report

Updated: October 03, 2013

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Gulf Monthly Average Basis Value to Henry Hub



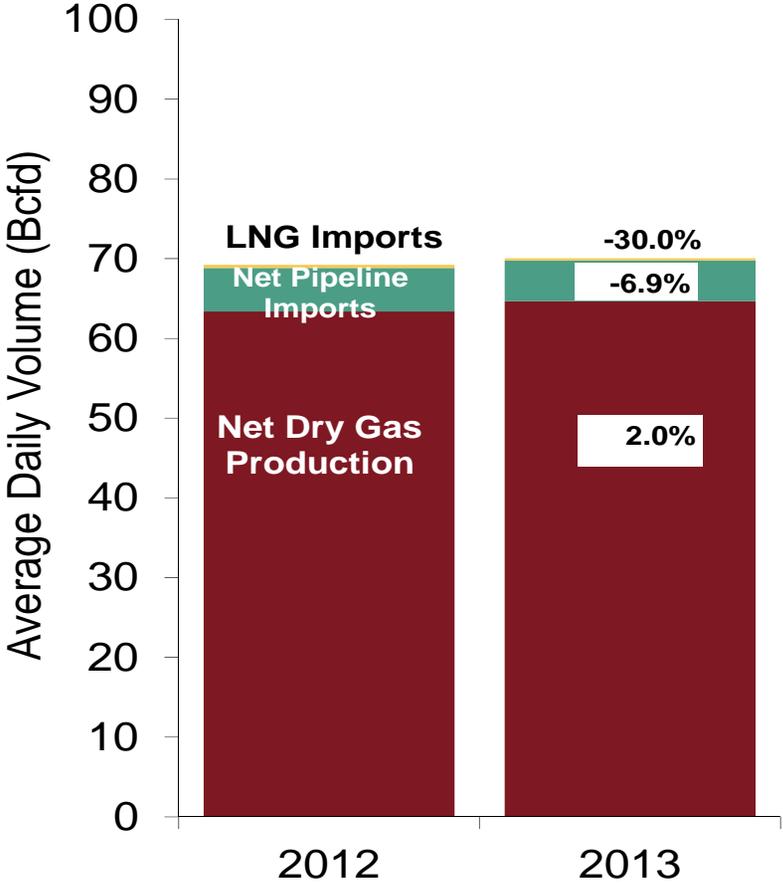
Source: Derived from Platts data
October 2013 Midwest Snapshot Report

Updated: October 11, 2013

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

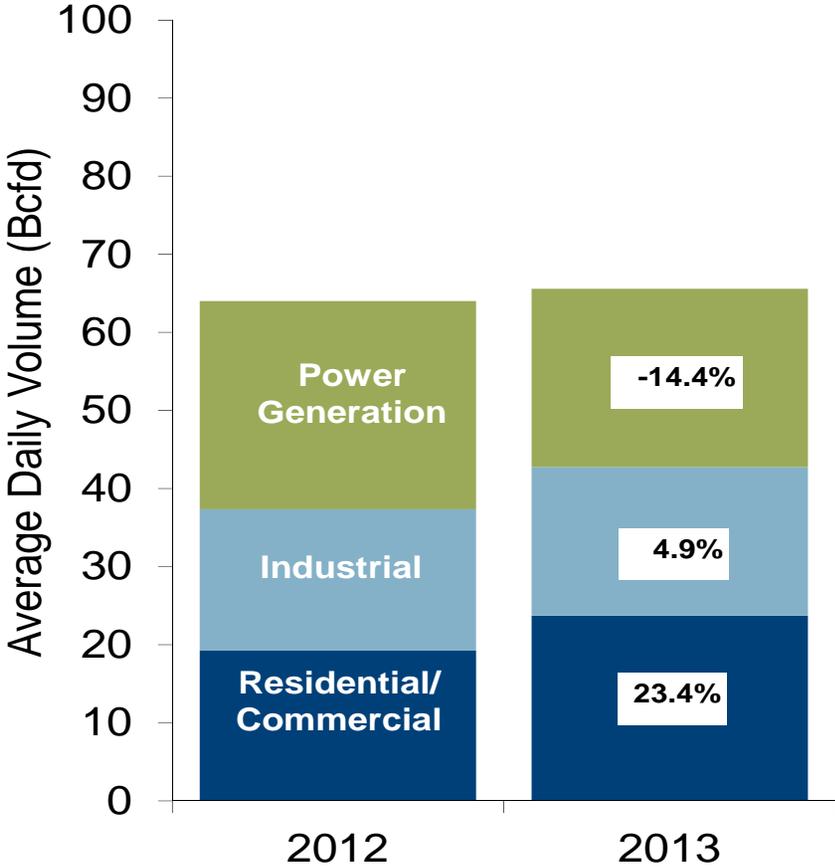
US Natural Gas Supply

Total Change in Supply 0.8%



US Natural Gas Demand

Total Change in Demand 1.4%

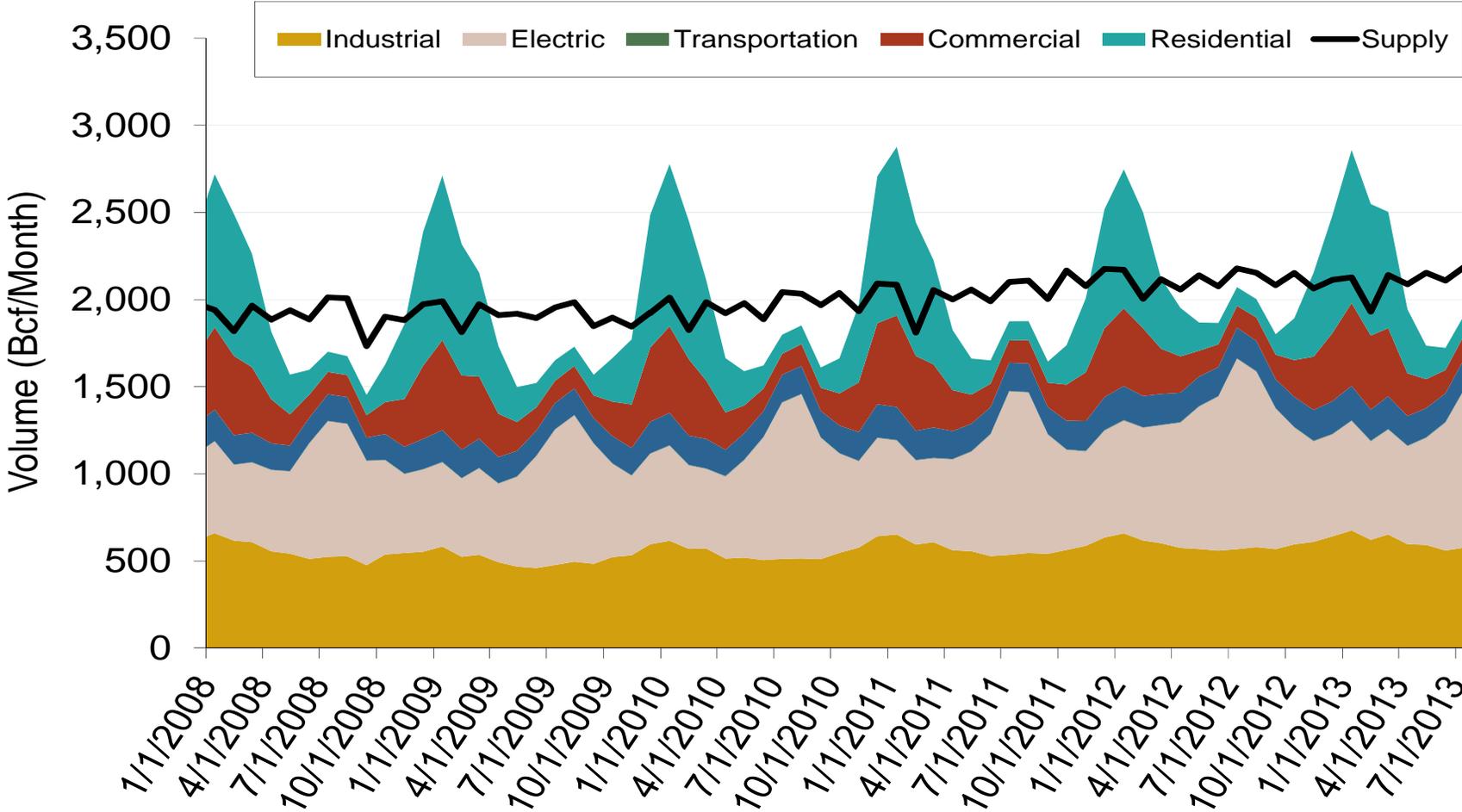


Note: Balance includes all amounts not attributable to other categories.

Source: Derived from *Bentek Energy* data

October 2013 Midwest Snapshot Report

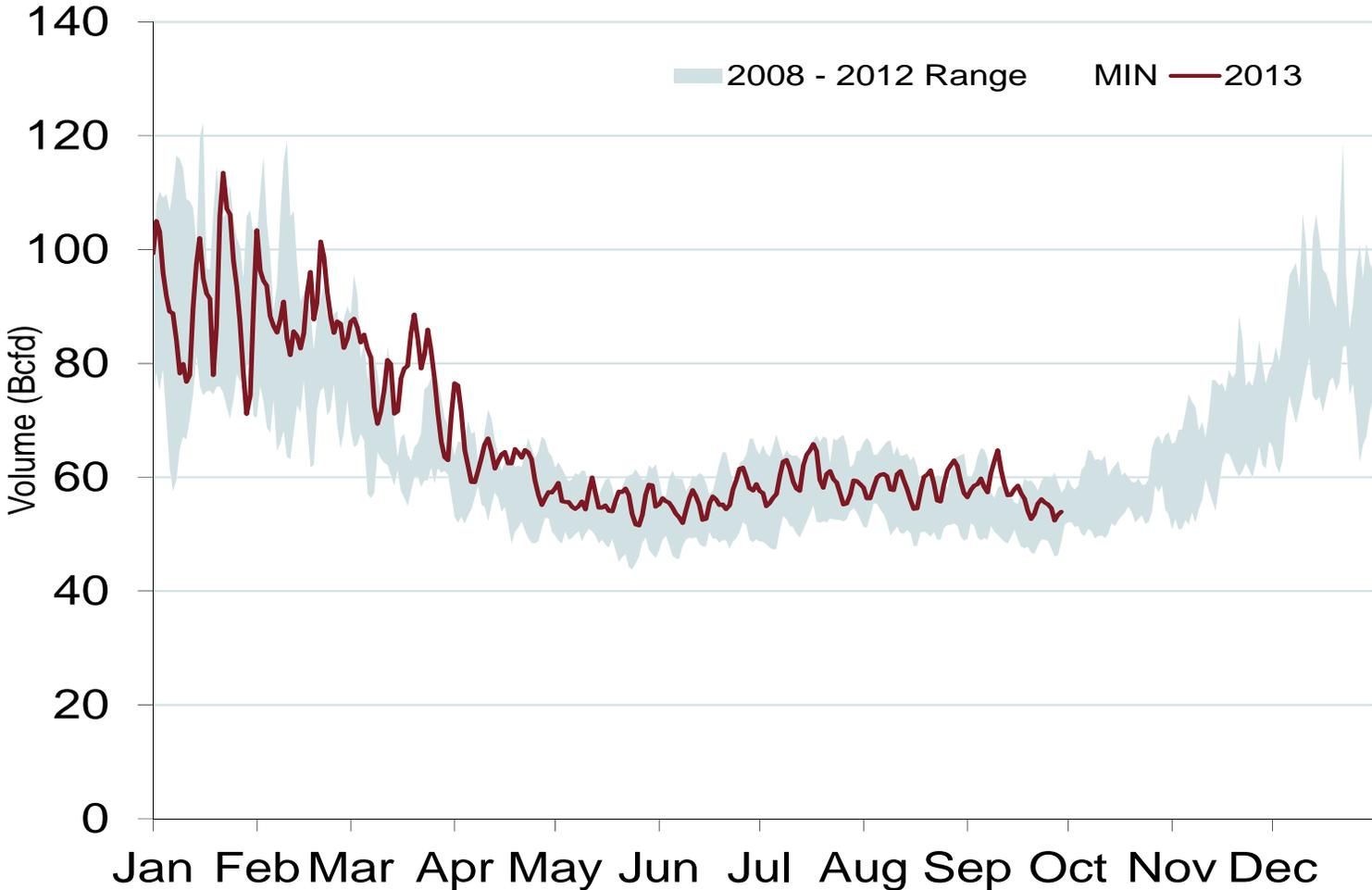
Annual U.S. Natural Gas Consumption by Sector



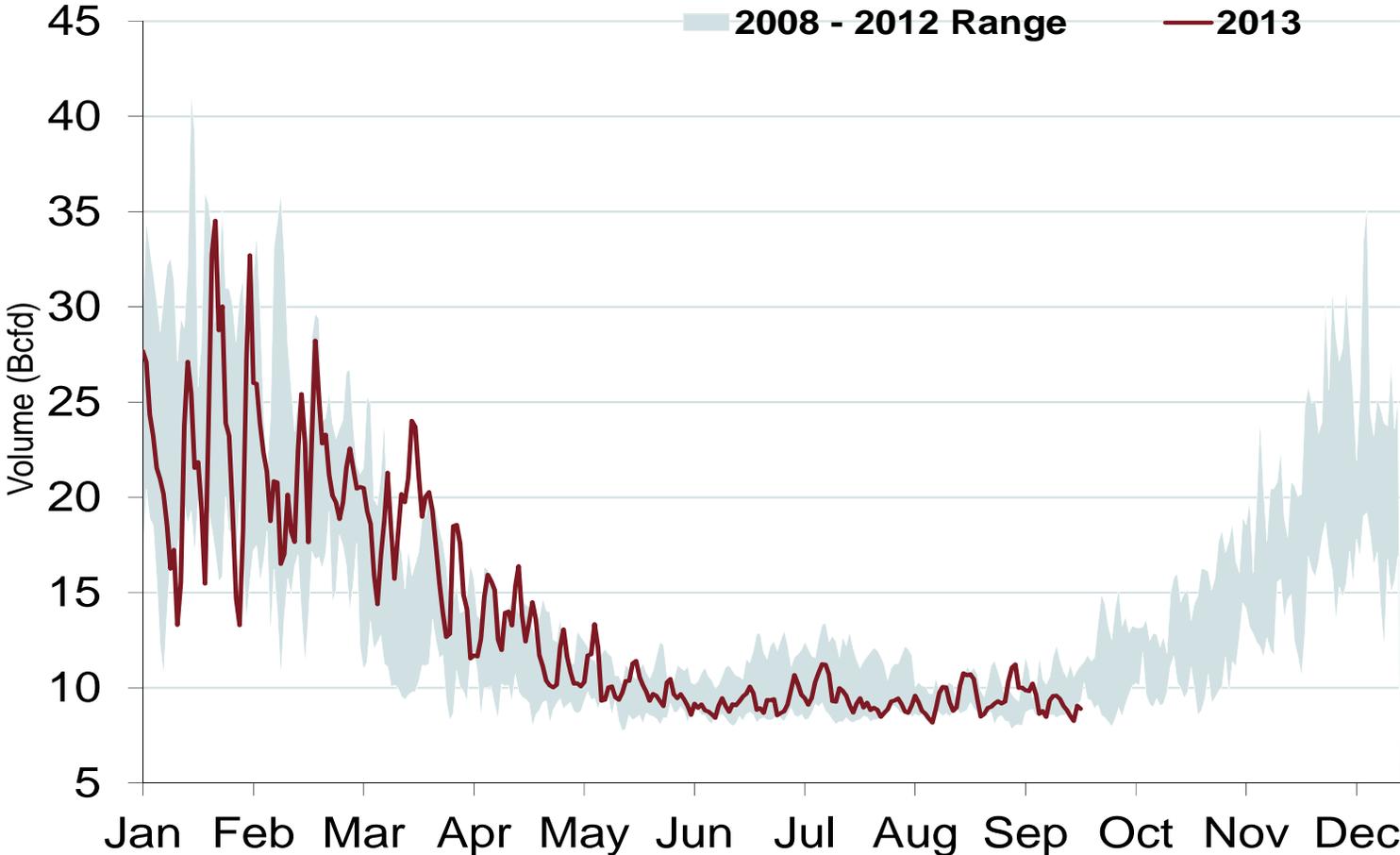
Notes: Supply includes lower 48 state production, net pipeline imports, and LNG imports

Source: Derived from EIA data

Total U.S. Natural Gas Demand All Sectors



Daily Midwest Natural Gas Demand All Sectors

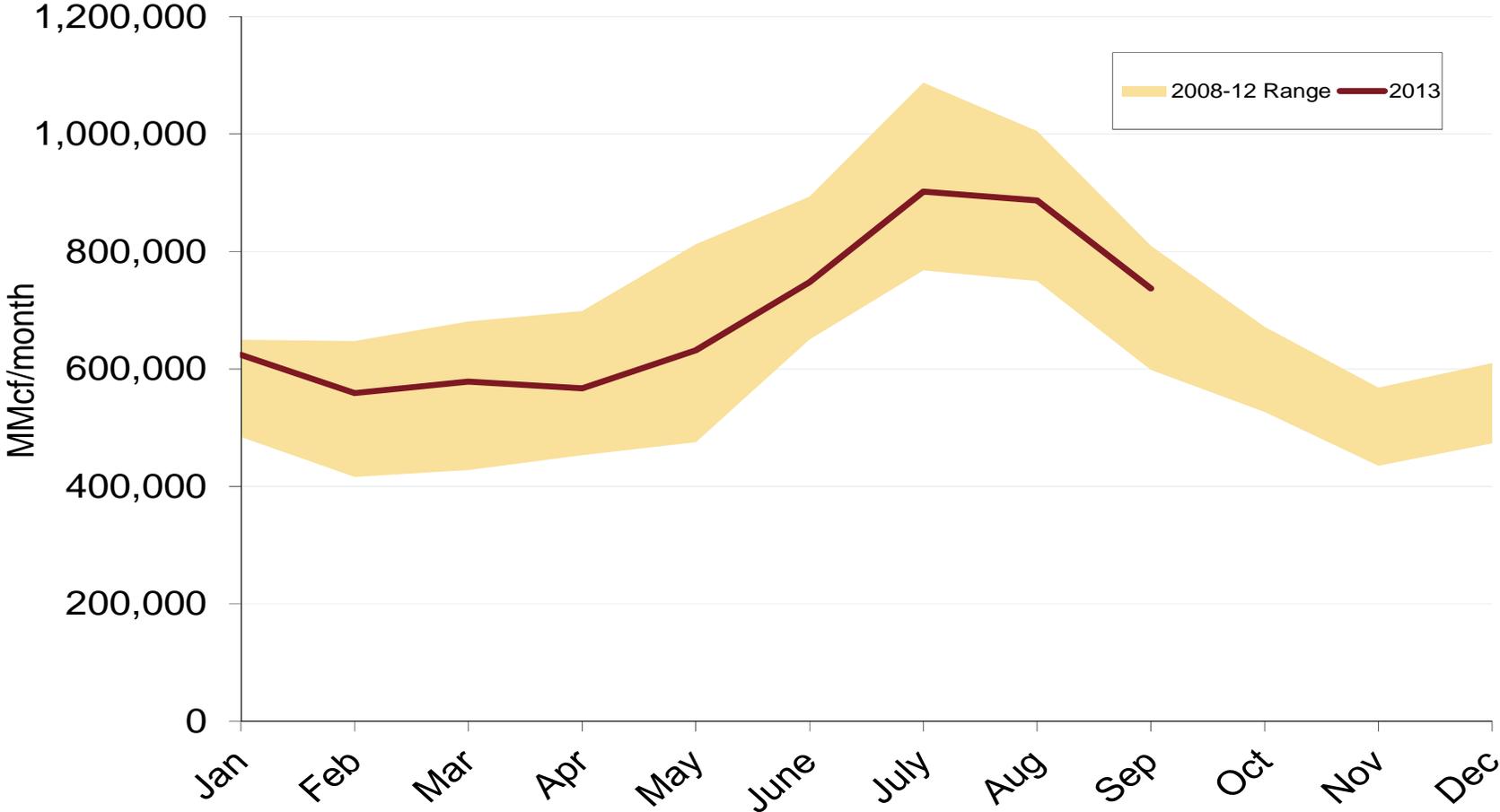


Source: Derived from *Bentek Energy* data
October 2013 Midwest Snapshot Report

Updated: October 07, 2013

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U.S. Natural Gas Consumption for Power Generation

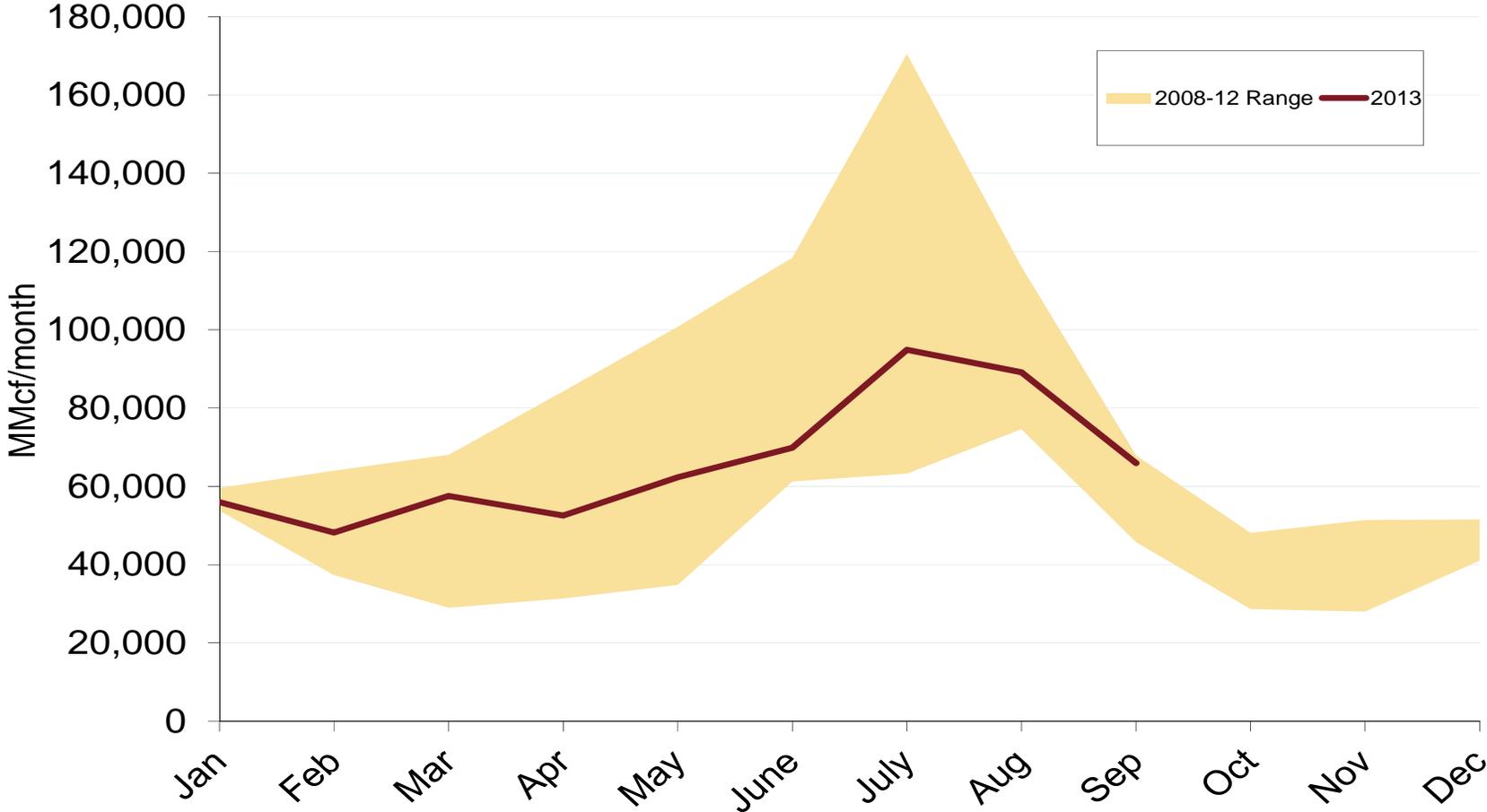


Source: Derived from *Bentek Energy* data
October 2013 Midwest Snapshot Report

Updated: October 07, 2013

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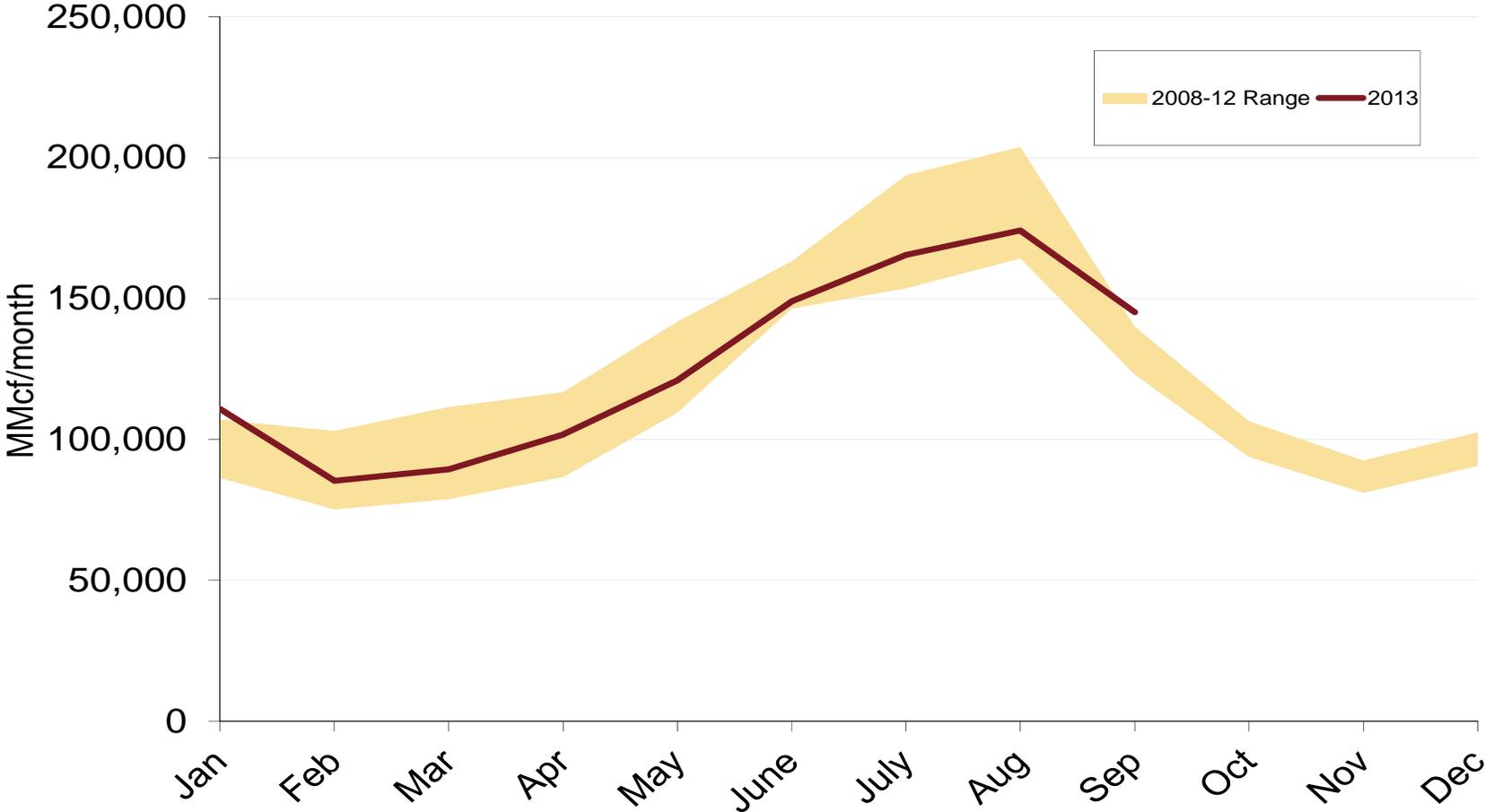
Midwest Natural Gas Consumption for Power Generation



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

Updated: October 07, 2013

Gulf Natural Gas Consumption for Power Generation

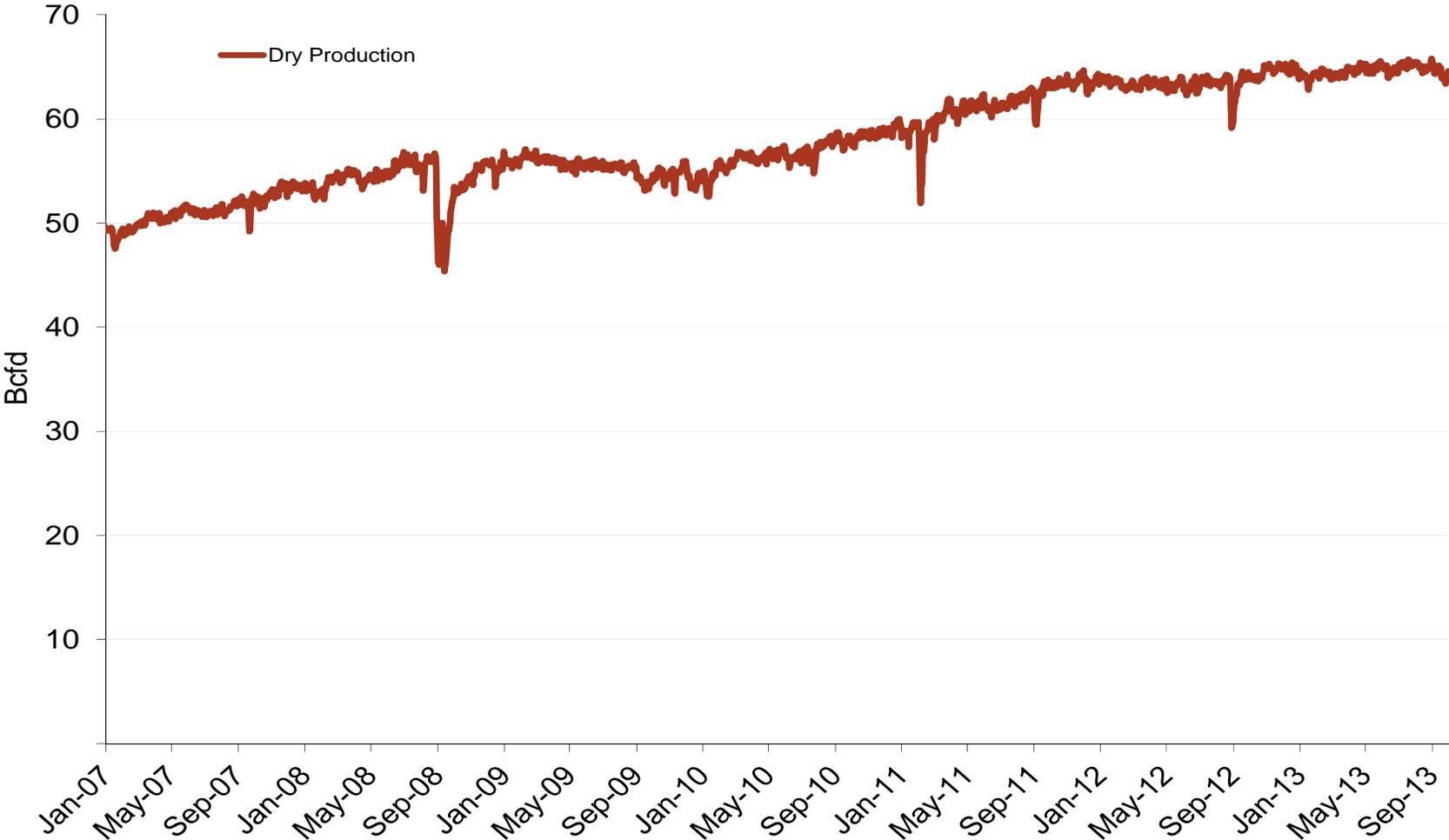


Source: Derived from *Bentek Energy* data
October 2013 Midwest Snapshot Report

Updated: October 07, 2013

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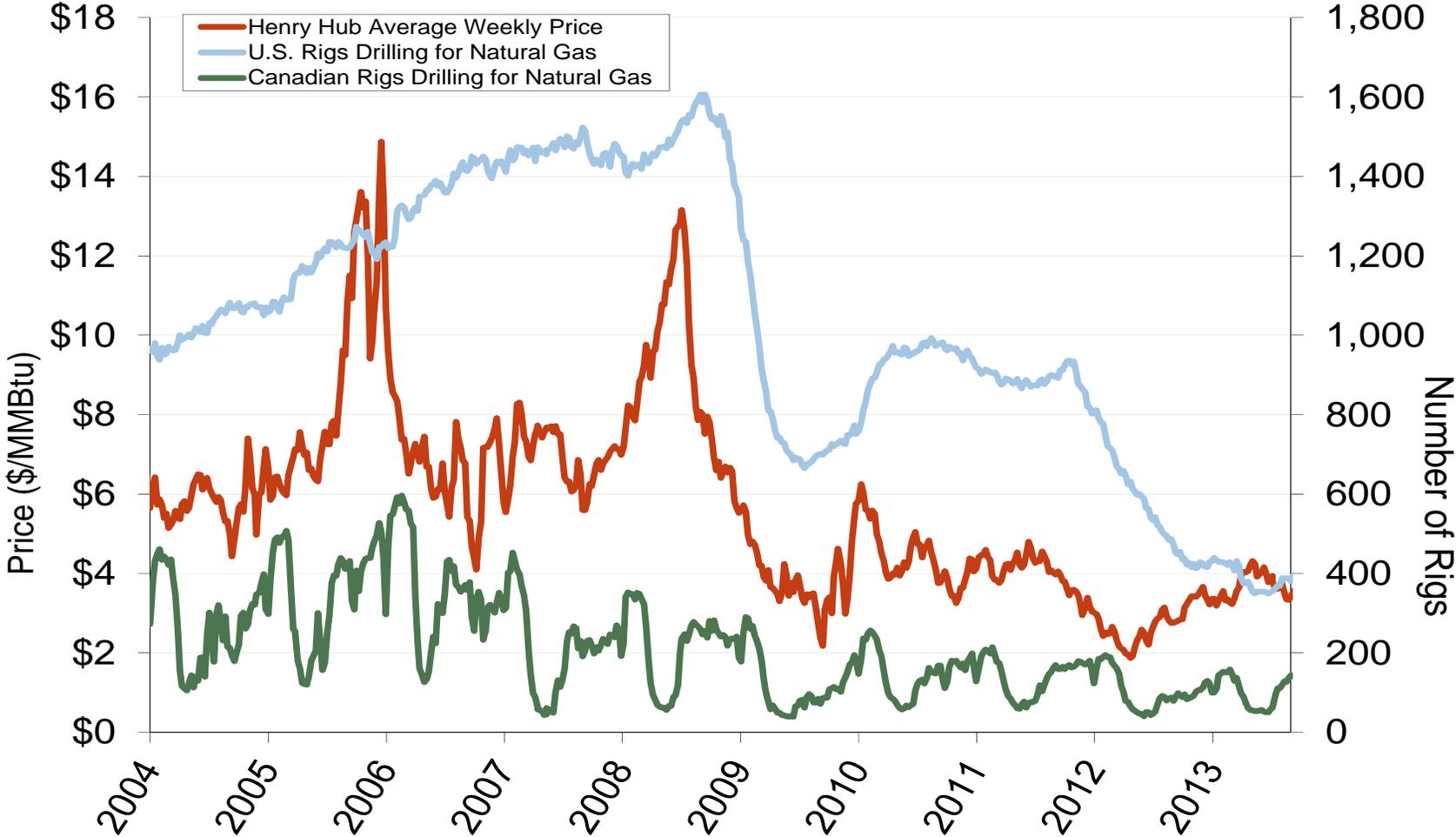
Monthly U.S. Dry Gas Production – Lower 48 States



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

Source: Derived from Bentek Energy data

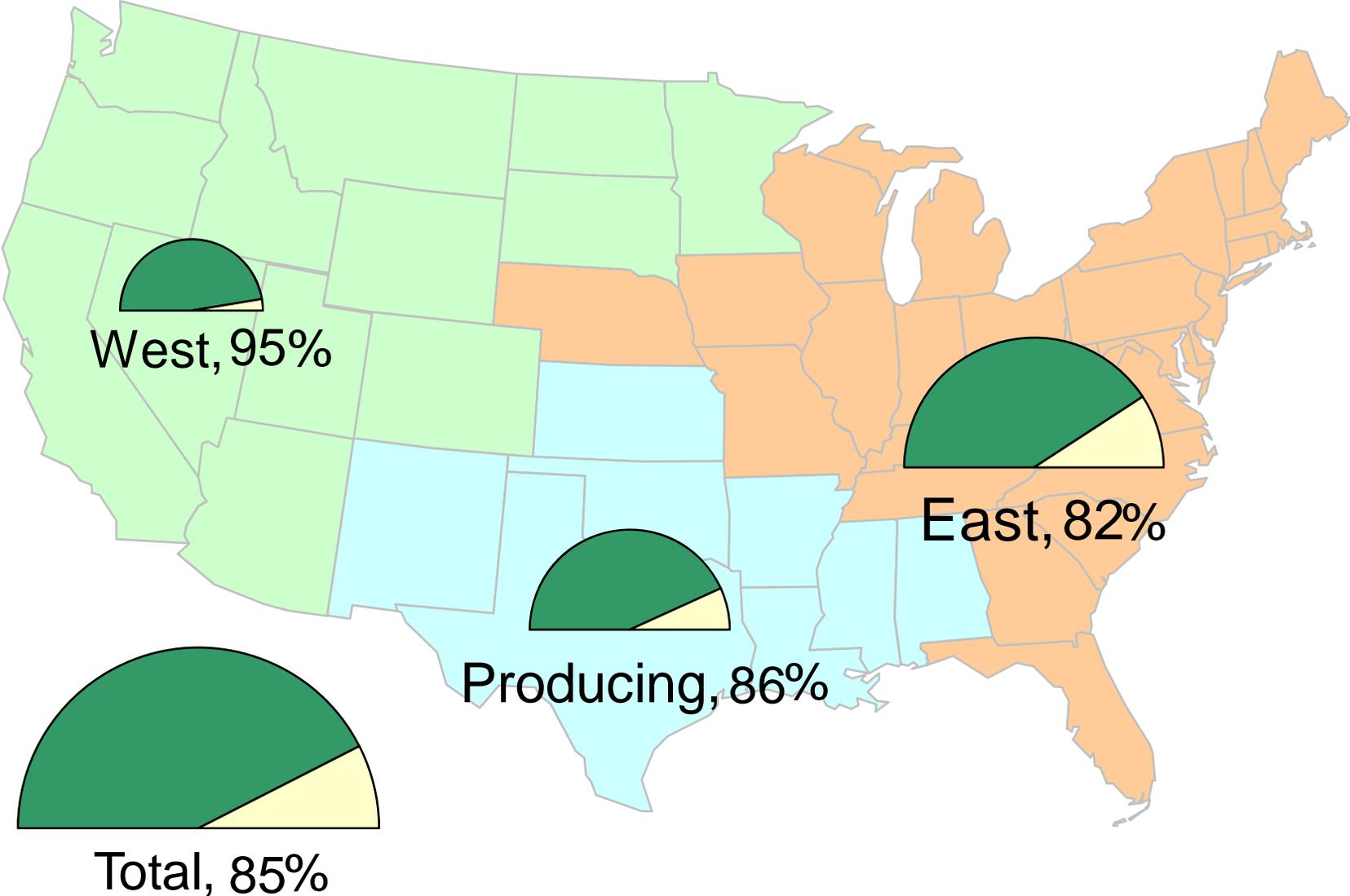
U.S. and Canadian NG Drilling Rig Count and Daily Spot Prices



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

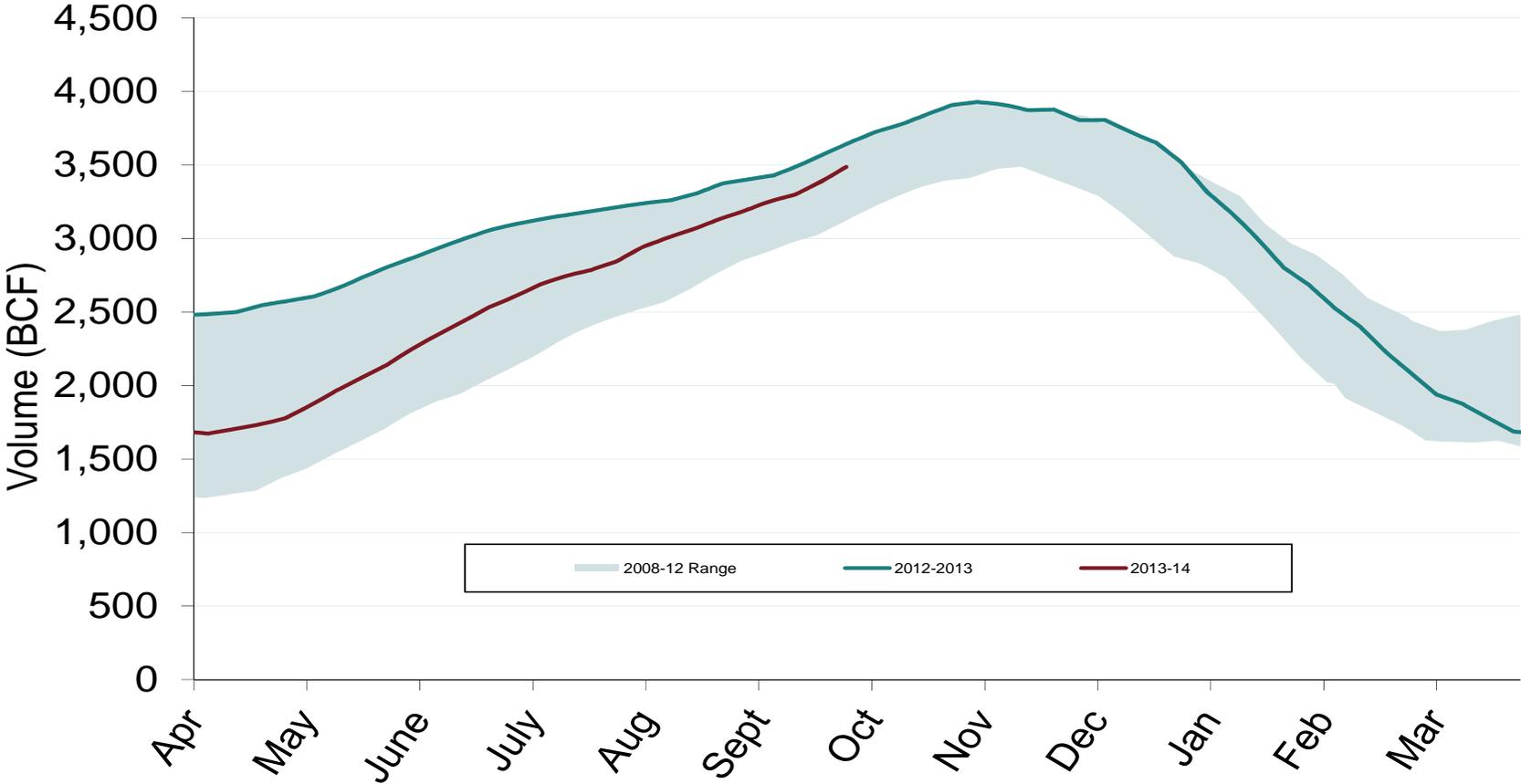
Updated: October 07, 2013

Natural Gas Storage Inventories – September 30, 2013



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

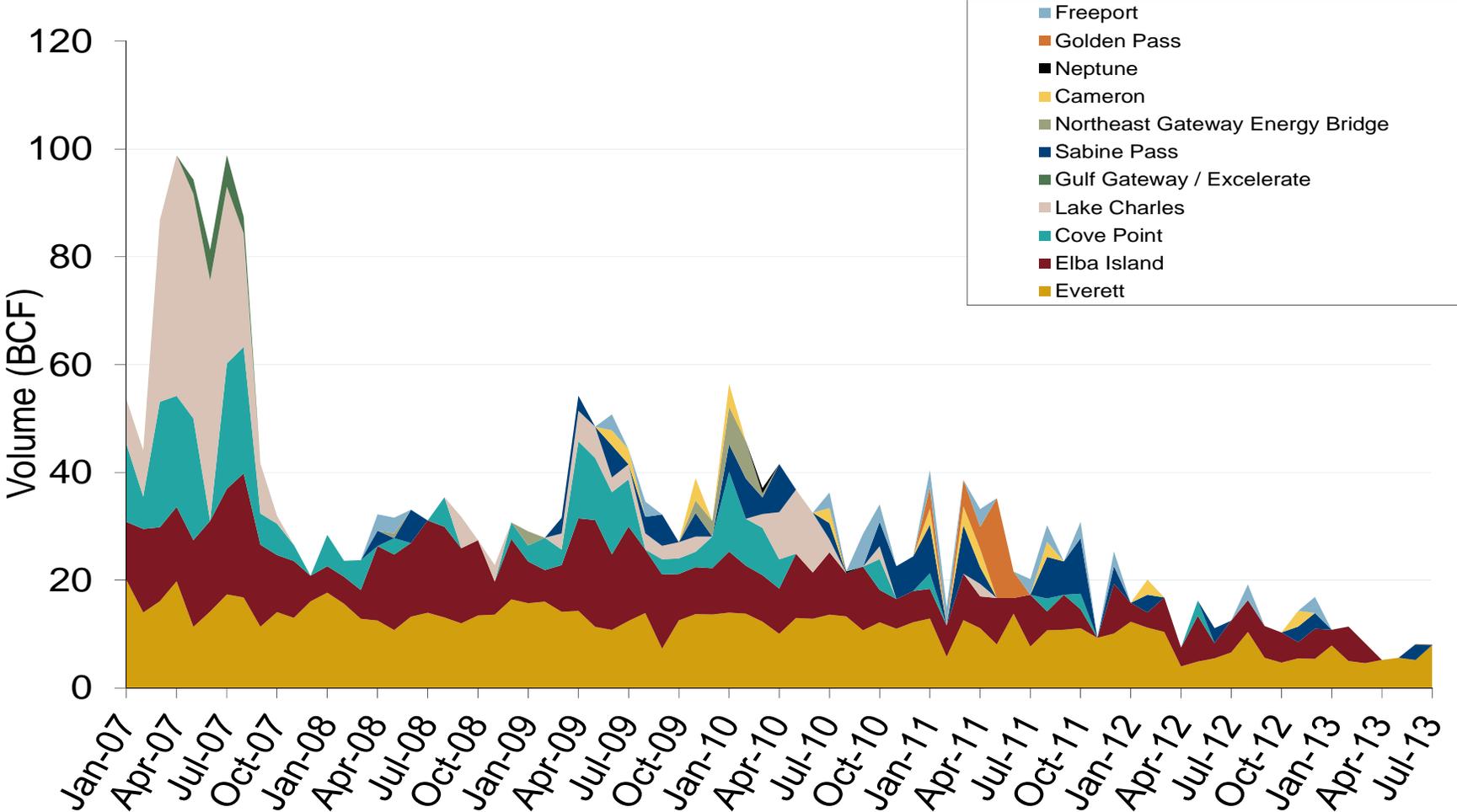
Total U.S. Working Gas in Storage



World LNG Estimated November 2013 Landed Prices



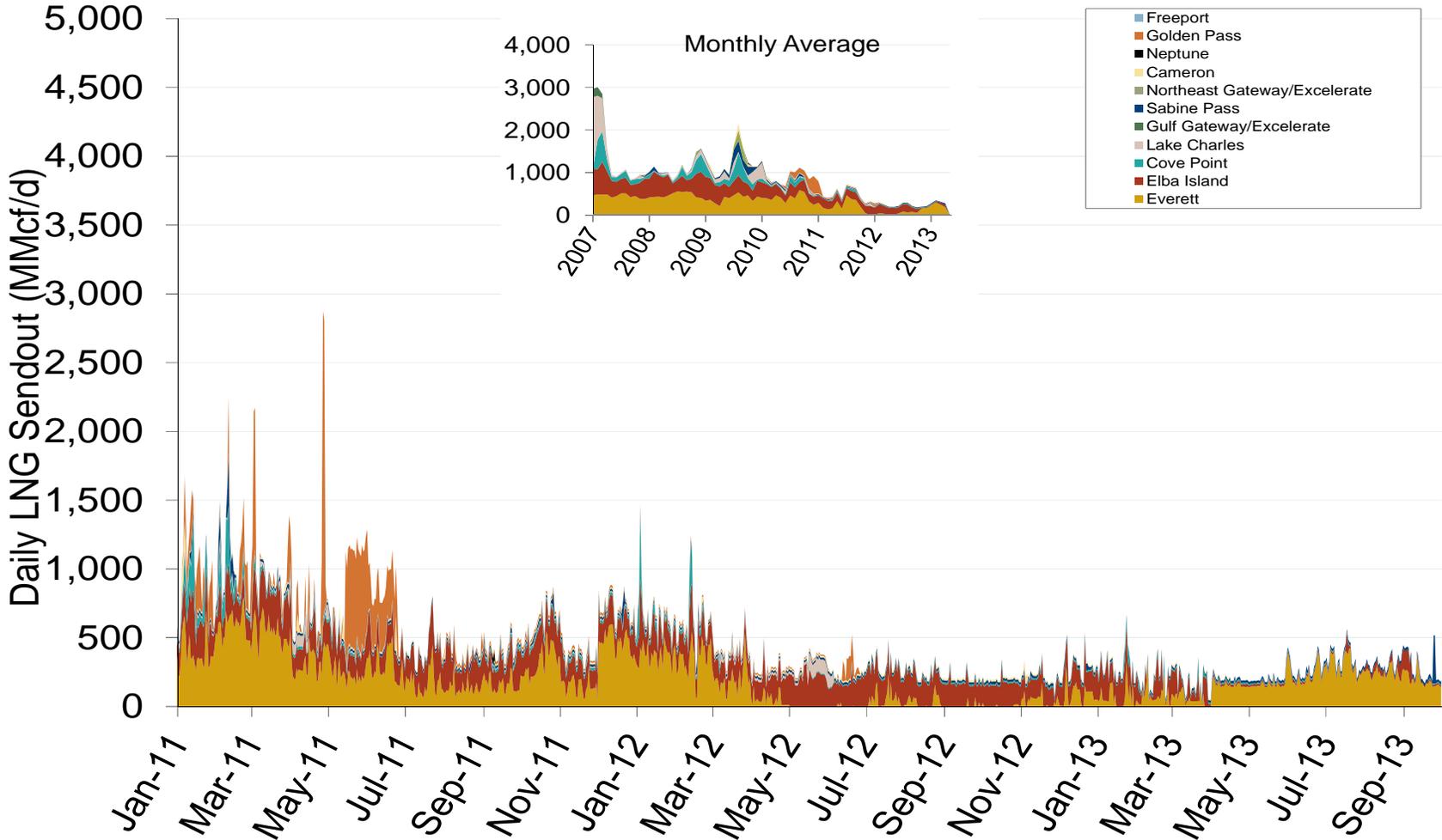
Monthly Gas Imports at Existing U.S. LNG Facilities



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

Updated: October 07, 2013

Daily Gas Sendout from Existing U.S. LNG Facilities

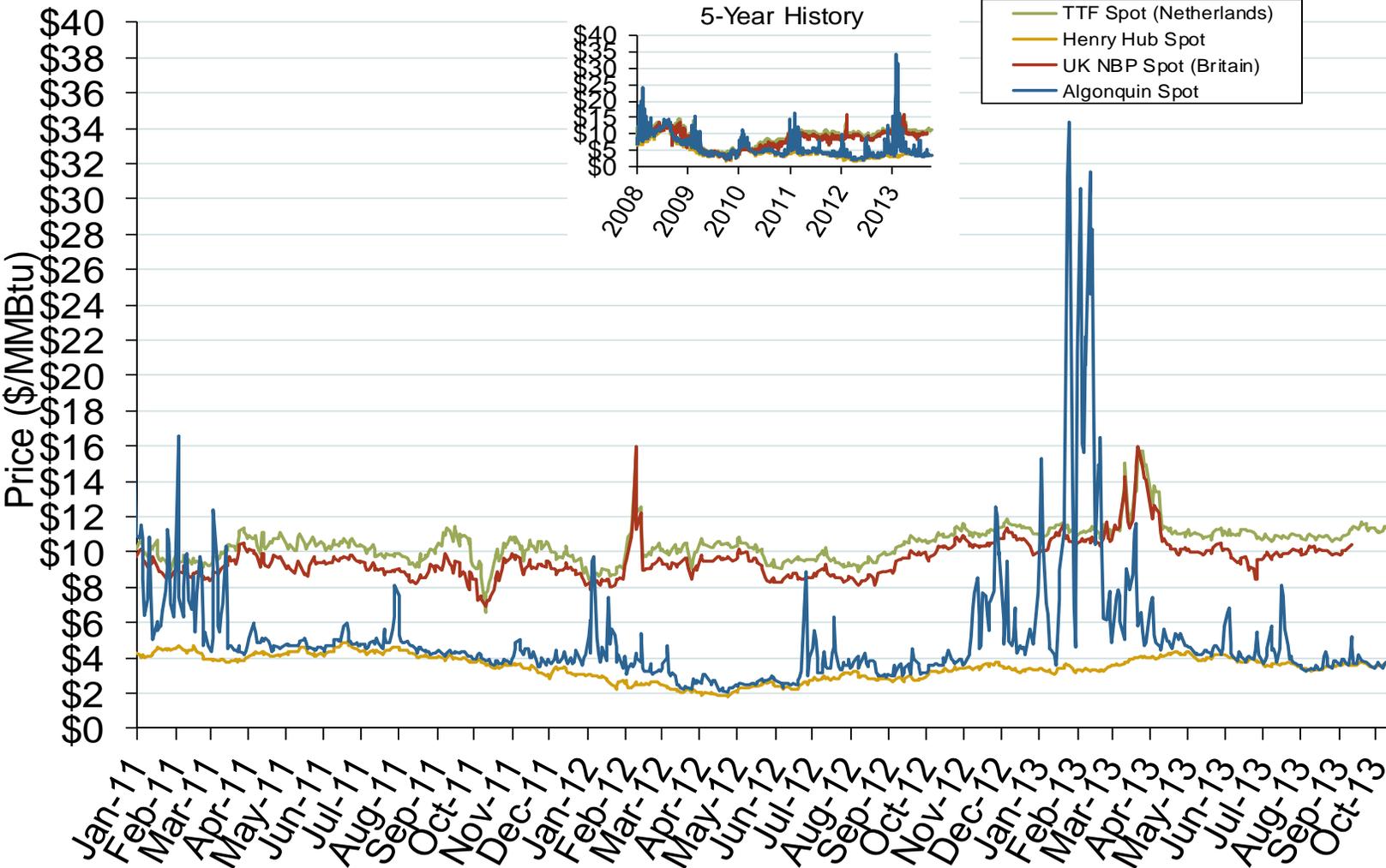


Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes flows to the Freeport LNG which flows via intrastate pipelines and flows to the Mystic 8 and 9 power plants.

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

Updated: October 07, 2013

Atlantic Basin European and US Spot Natural Gas Prices



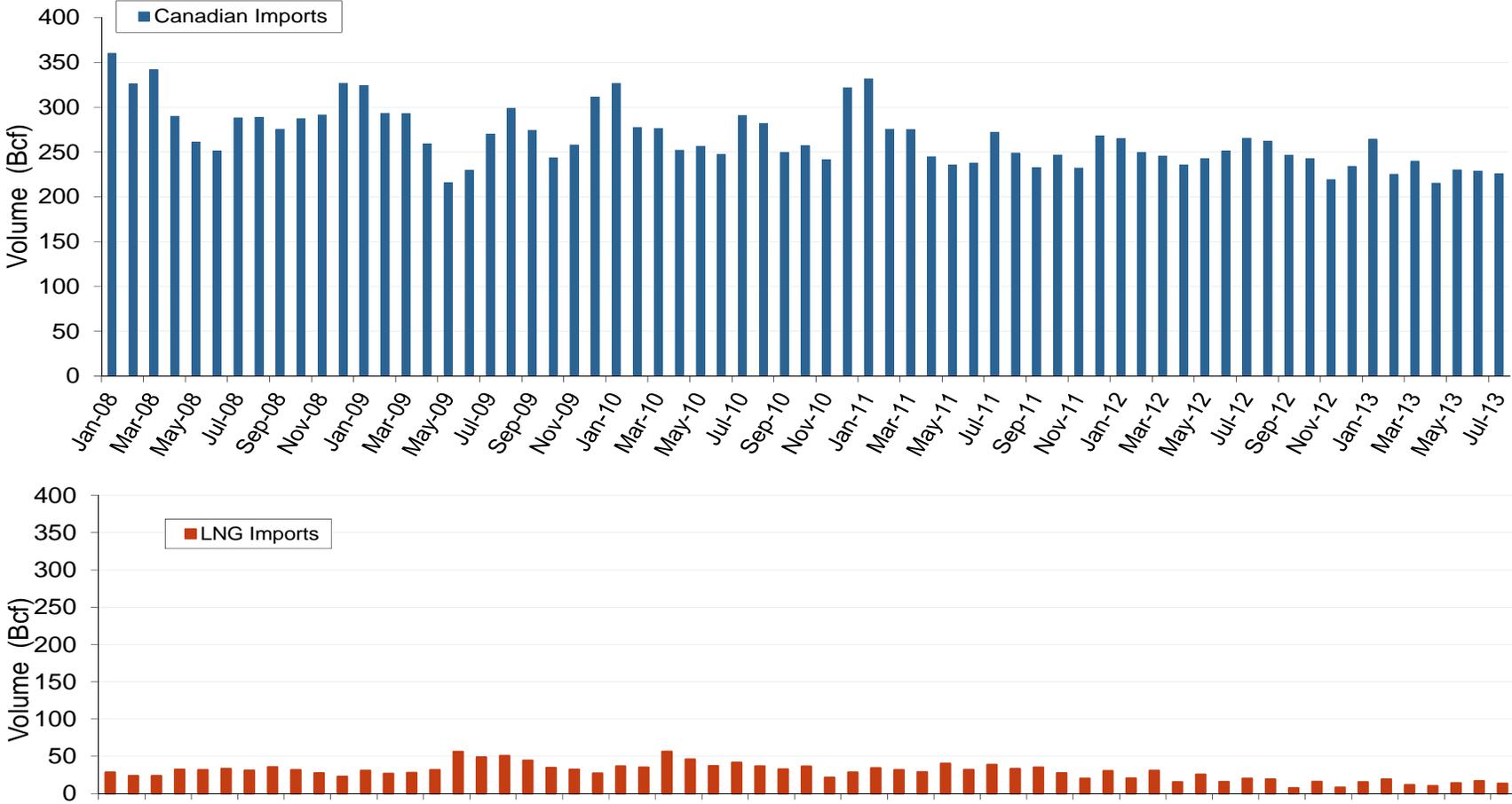
Source: Derived from *Bloomberg* and *ICE* data
October 2013 Midwest Snapshot Report

Updated October 10, 2013

Natural Gas Overview: Natural Gas Imports

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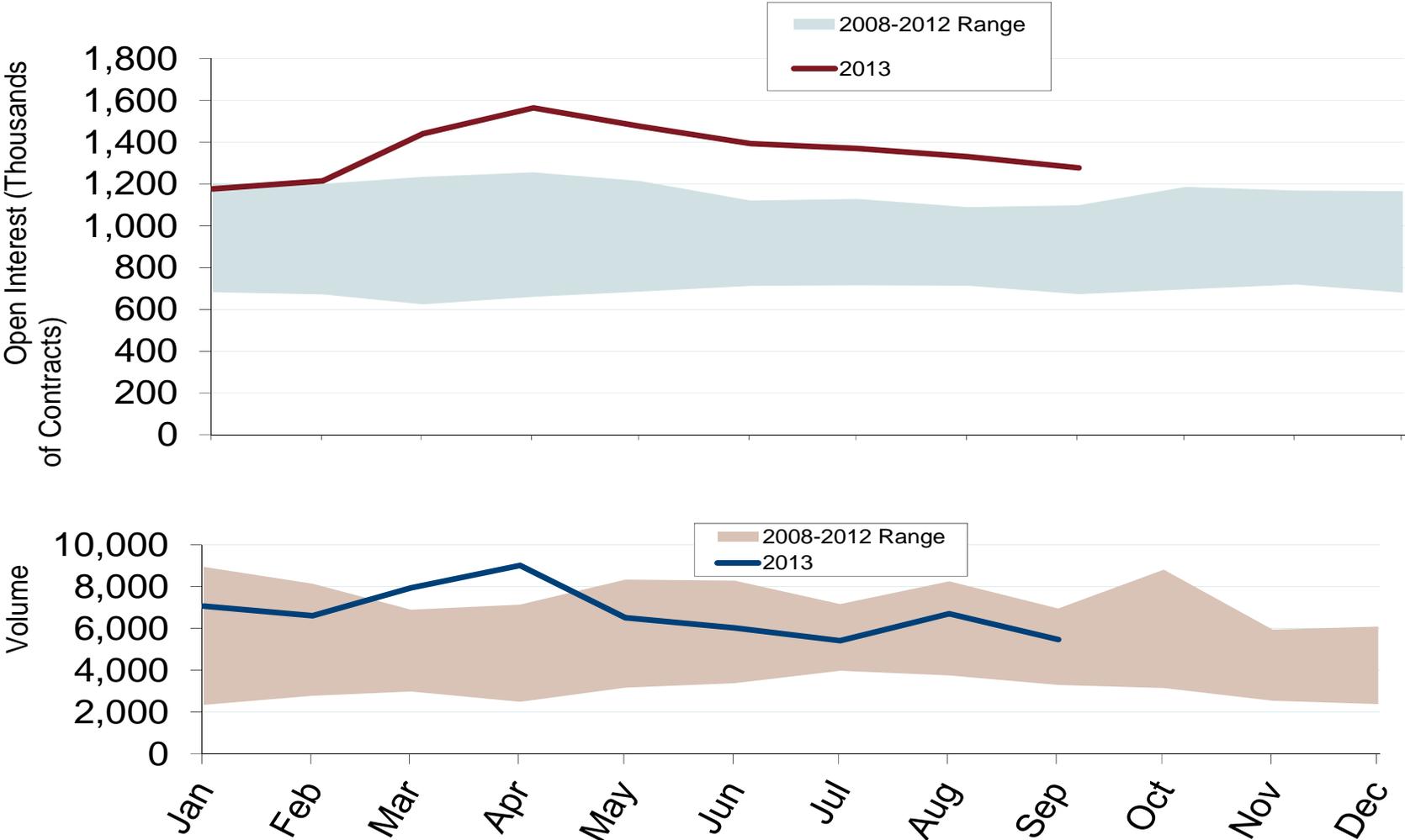
Canadian and LNG Natural Gas Imports Into the U.S.



Source: EIA Natural Gas Monthly
October 2013 Midwest Snapshot Report

Updated: October 07, 2013

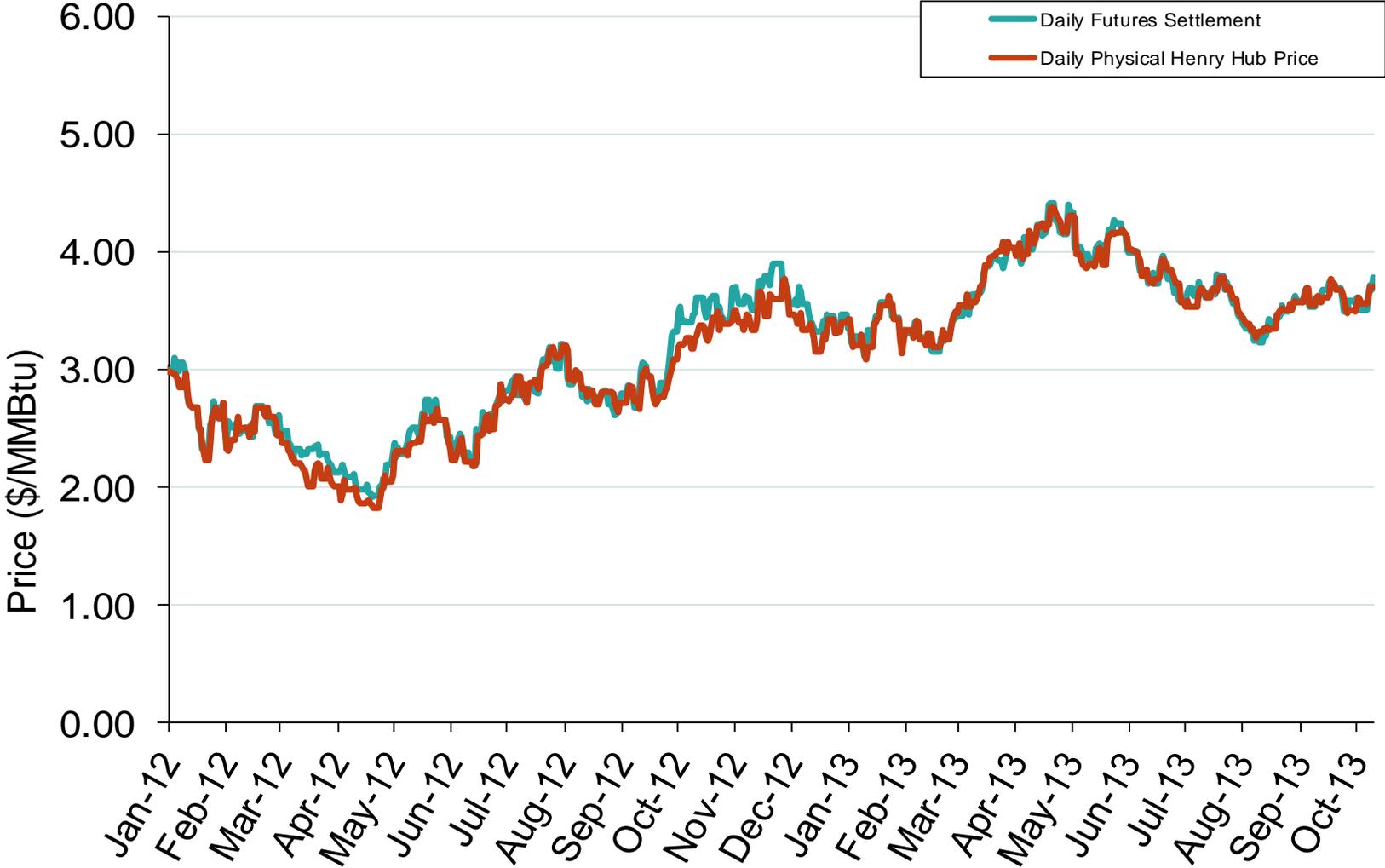
Nymex NG Futures Month-End Open Interest and Monthly Volume



Source: Derived from Nymex data
October 2013 Midwest Snapshot Report

Updated: October 07, 2013

Daily Physical Index Price & Daily Futures Settlement Price



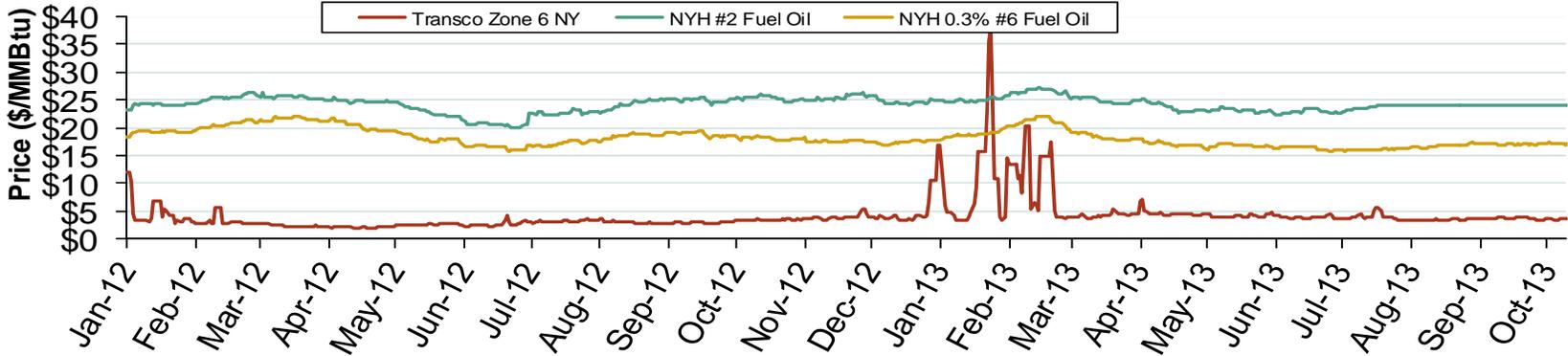
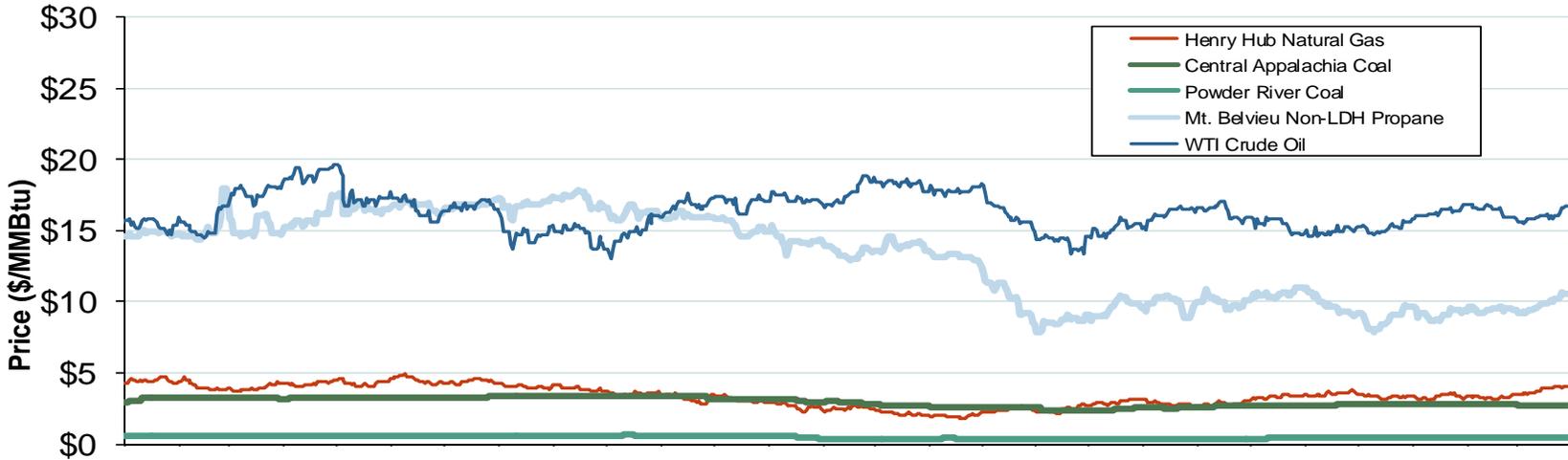
Source: Derived from *Bloomberg* data
October 2013 Midwest Snapshot Report

Updated October 10, 2013

Other Fuels Market: Fossil Fuel Prices

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Oil, Coal, Natural Gas and Propane Daily Spot Prices

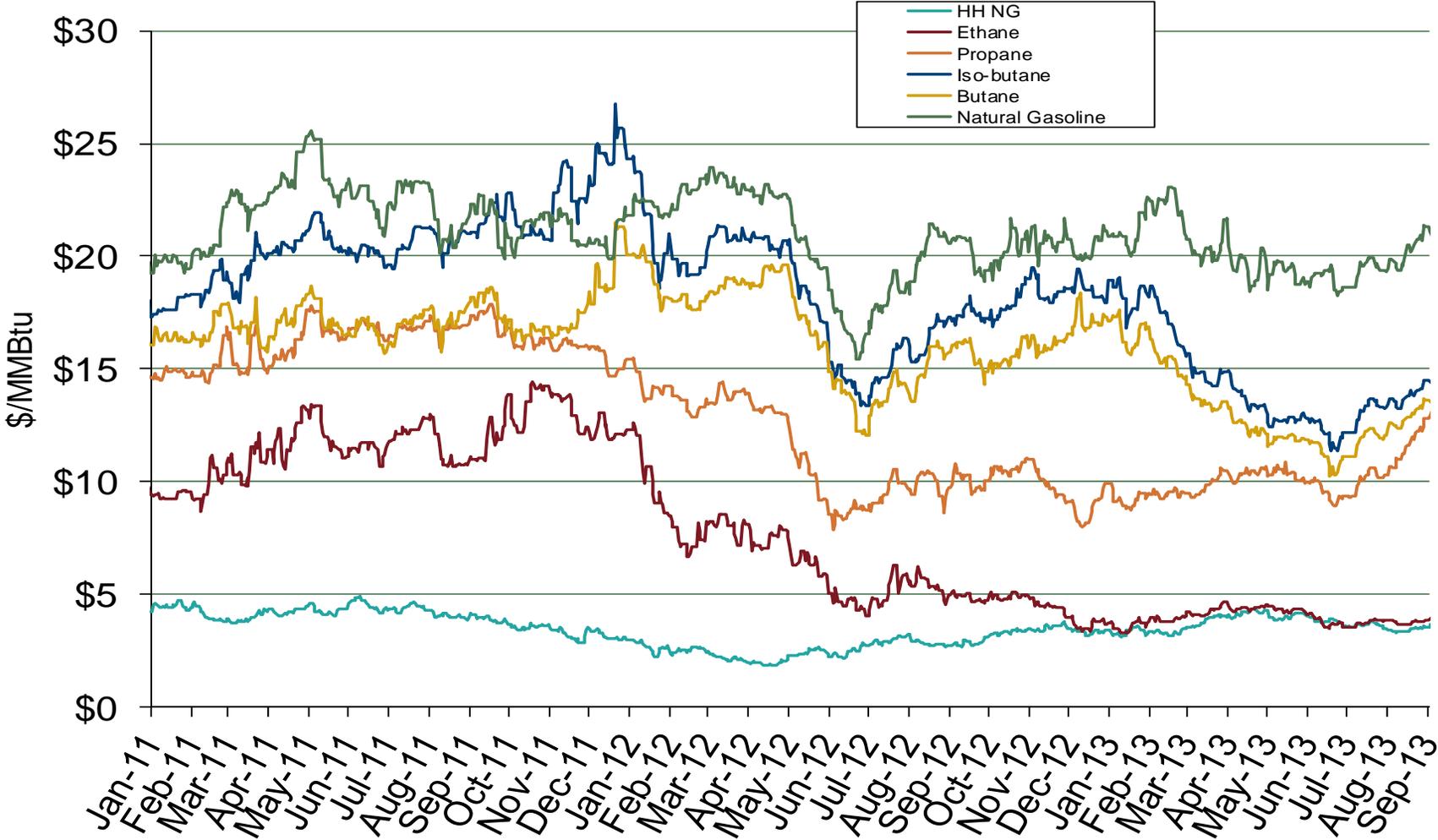


Notes: Coal prices are quoted in \$/ton. Conversion factors to \$/MMBtu are based on contract specifications of 12,000 btus/pound for Central Appalachian coal and 8800 btus/pound for Powder River Basin coal

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

Updated October 10, 2013

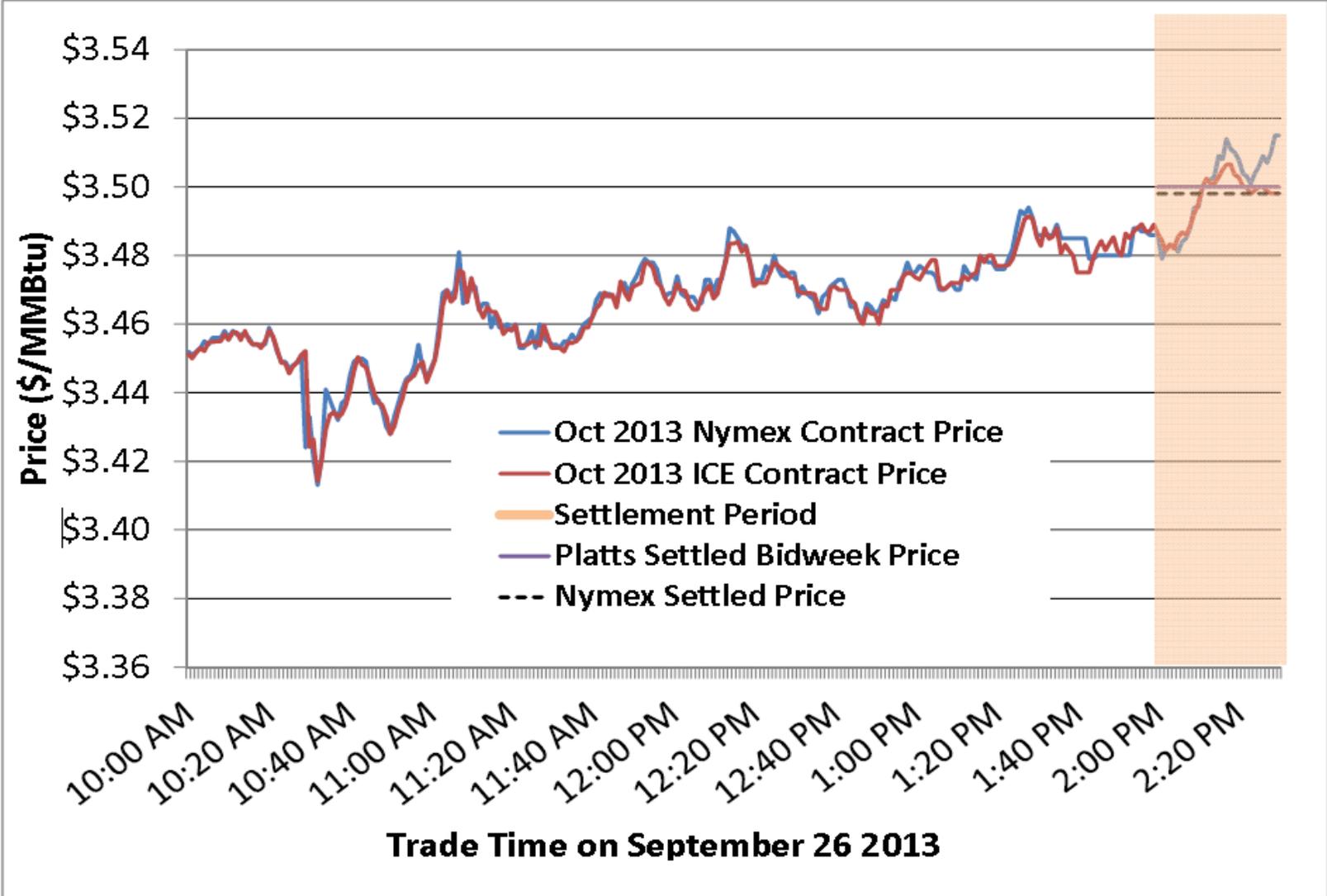
U.S. Natural Gas vs. Natural Gas Liquids (NGL) Prices



Source: Derived from Bloomberg Data
October 2013 Midwest Snapshot Report

Updated October 10, 2013

Nymex and ICE Contract Final Settlement - October 2013

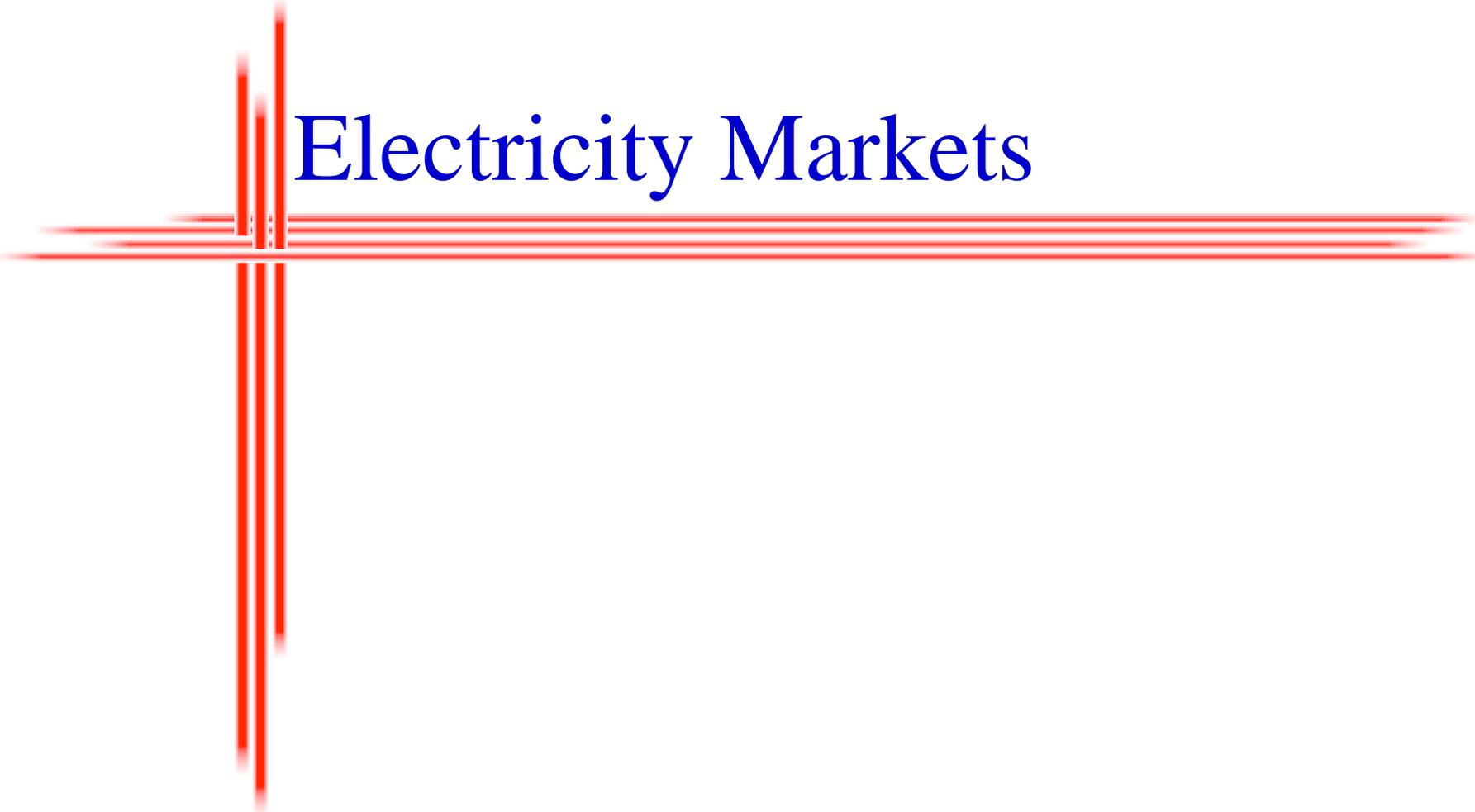


Notes: The final settlement day for this Nymex contract is three business days before the start of the contract term (which is the 1st day of the month)

Source: Derived from Nymex and ICE data

October 2013 Midwest Snapshot Report

Updated: October 10, 2013



Electricity Markets

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% |

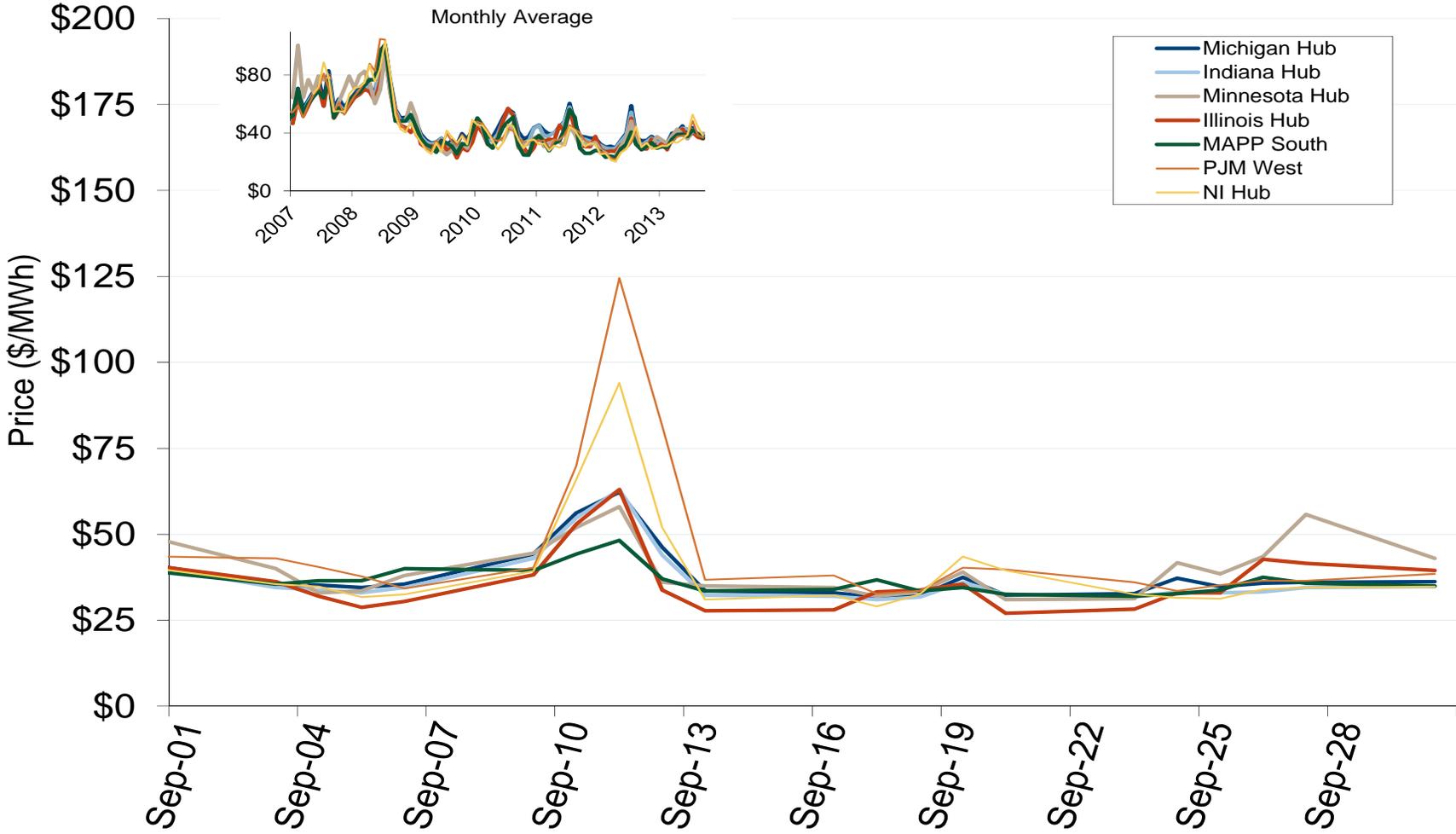
Note: Effective January 1, 2012, Platts replaced the Cinergy Hub with the Indiana Hub.

October 2013 Midwest Snapshot Report

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

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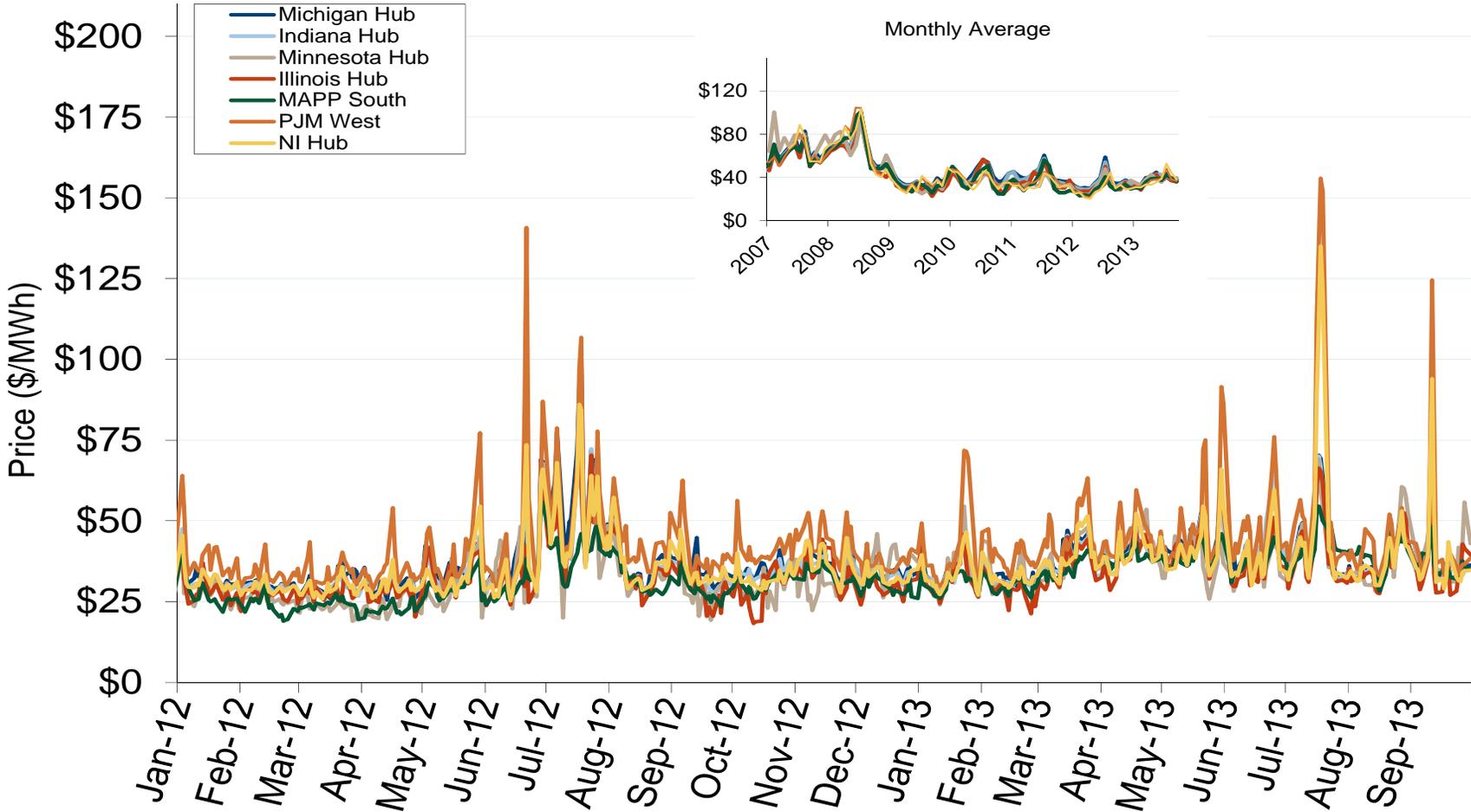
MISO/PJM Index Day-Ahead On-Peak Prices



Source: Derived from Platts data
October 2013 Midwest Snapshot Report

Updated: October 01, 2013

MISO/PJM Index Day-Ahead On-Peak Prices



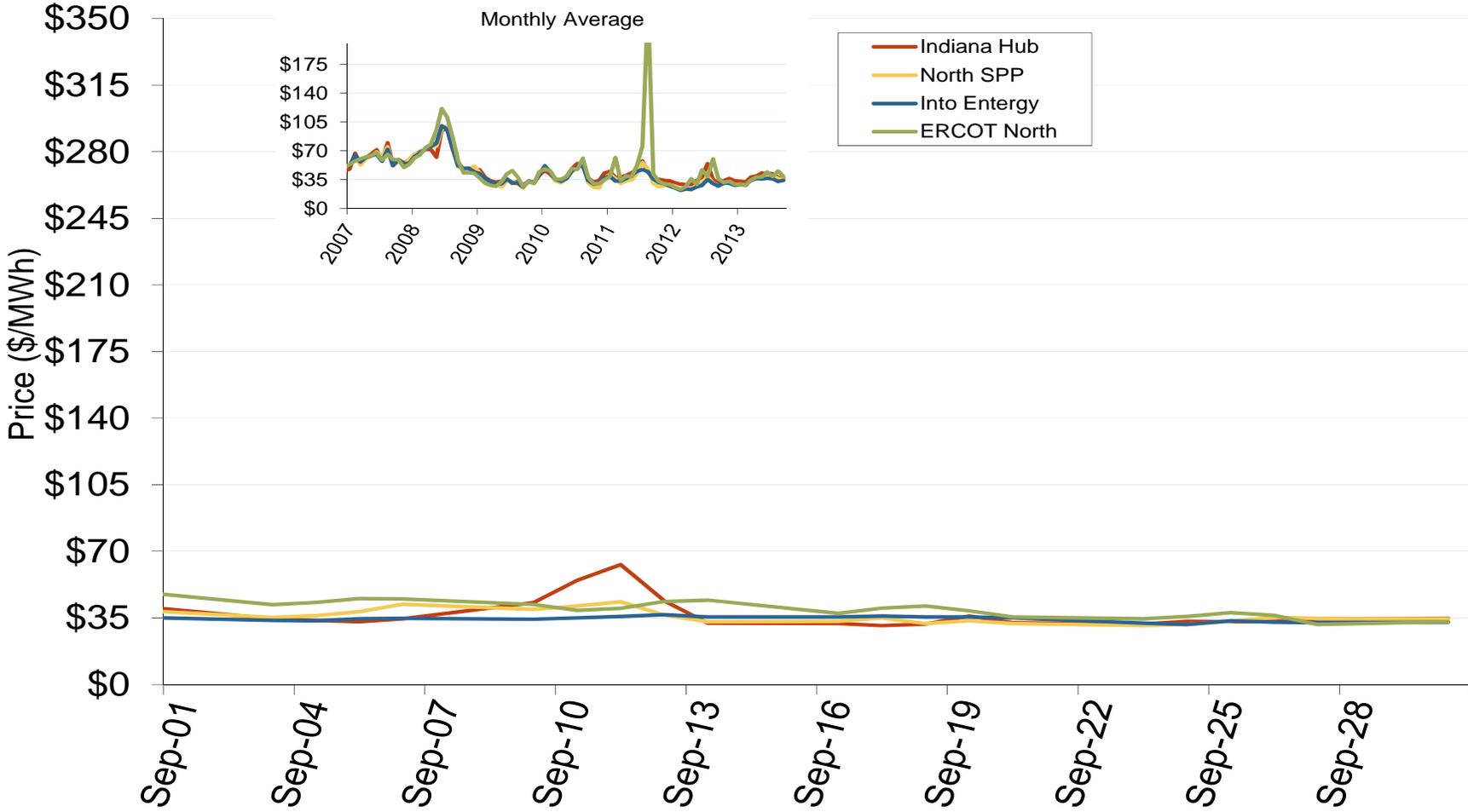
South Central Annual Average Bilateral Prices

| 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

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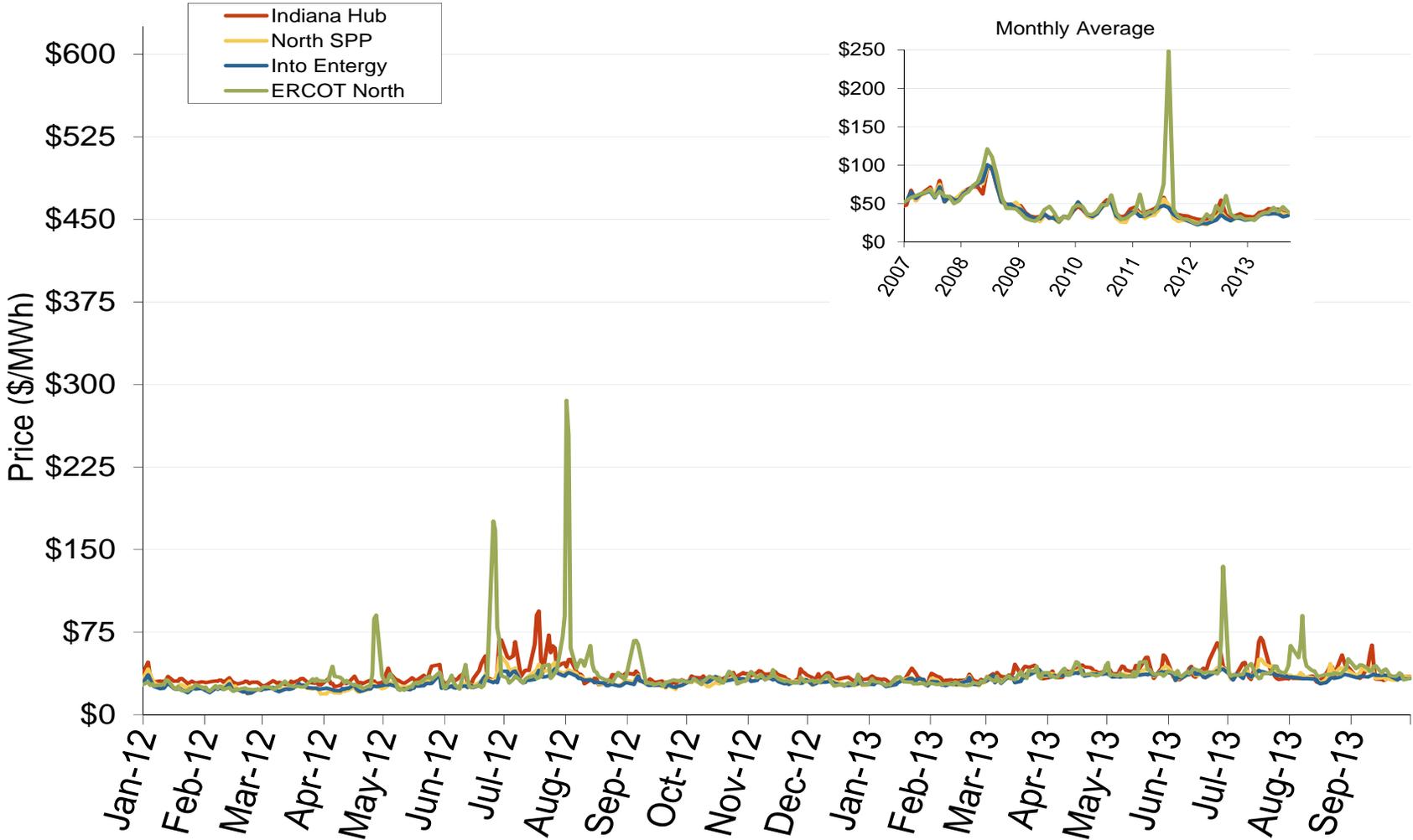
Midwestern Daily Index Day-Ahead On-Peak Prices



Southeast Electric Market: Midwestern Index Prices

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

Midwestern Daily Index Day-Ahead On-Peak Prices

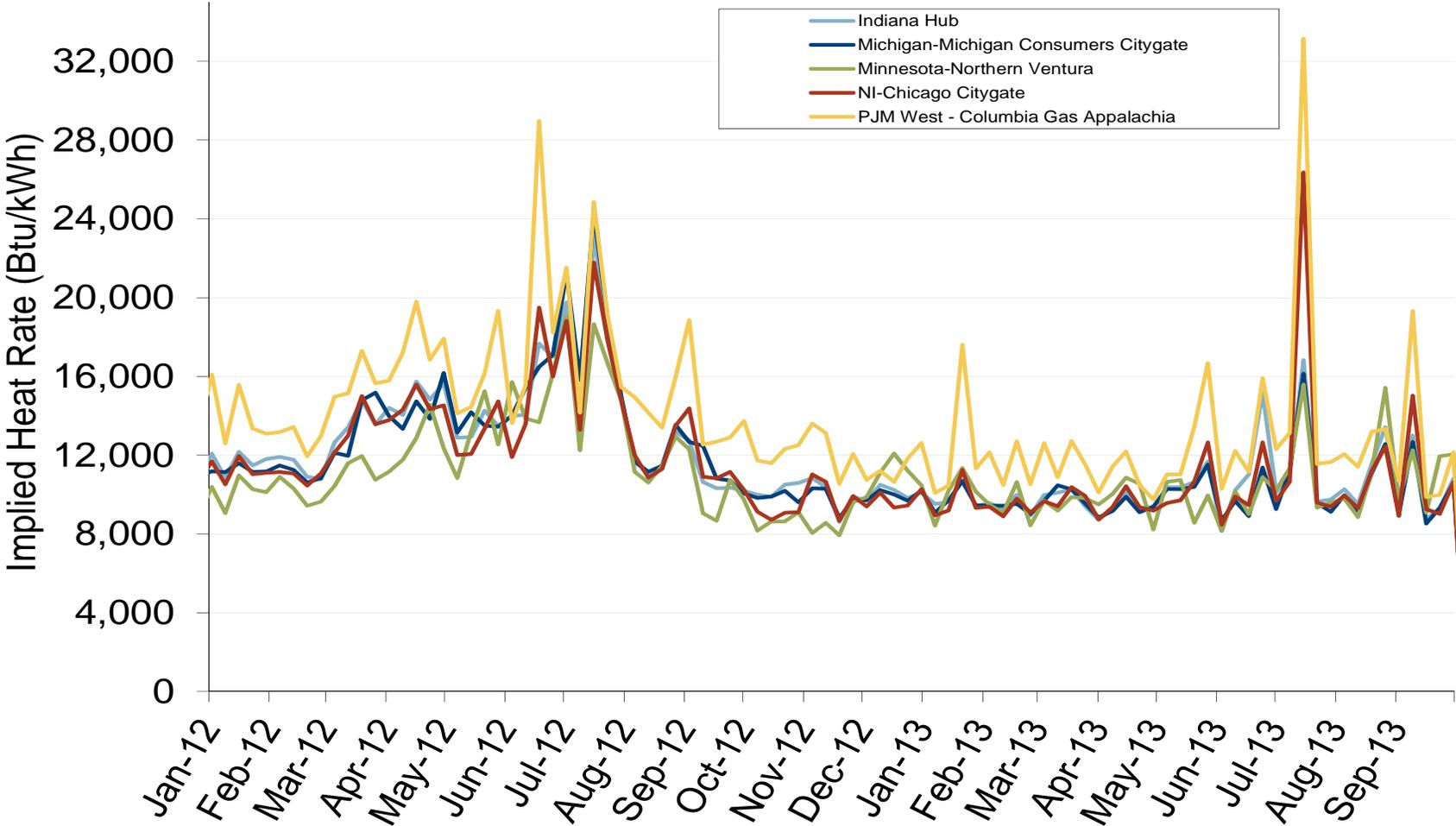


Source: Derived from Platts data
October 2013 Midwest Snapshot Report

Updated: October 01, 2013

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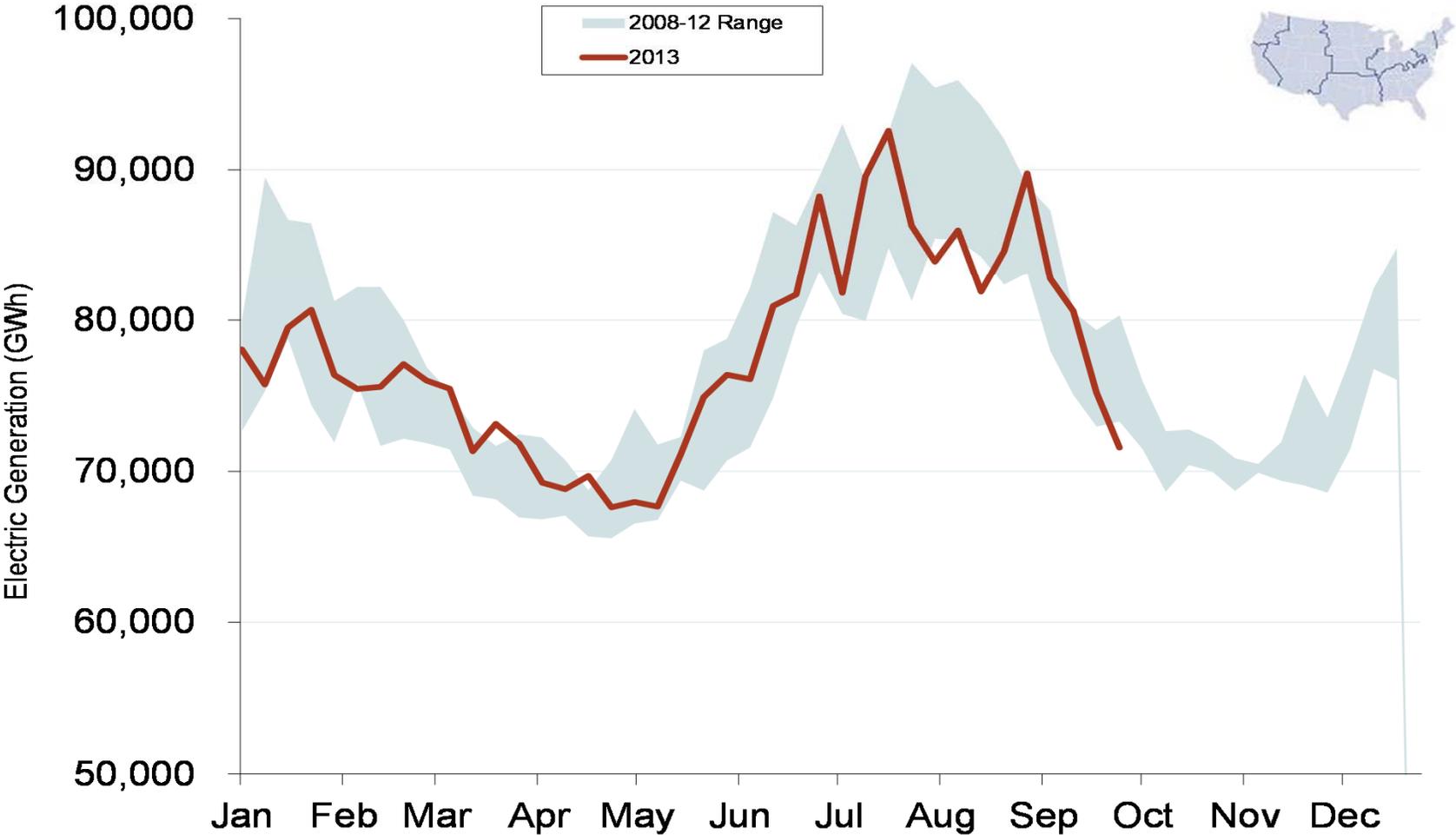
Implied Heat Rates at MISO and PJM Hubs - Weekly Averages



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

Updated: October 03, 2013

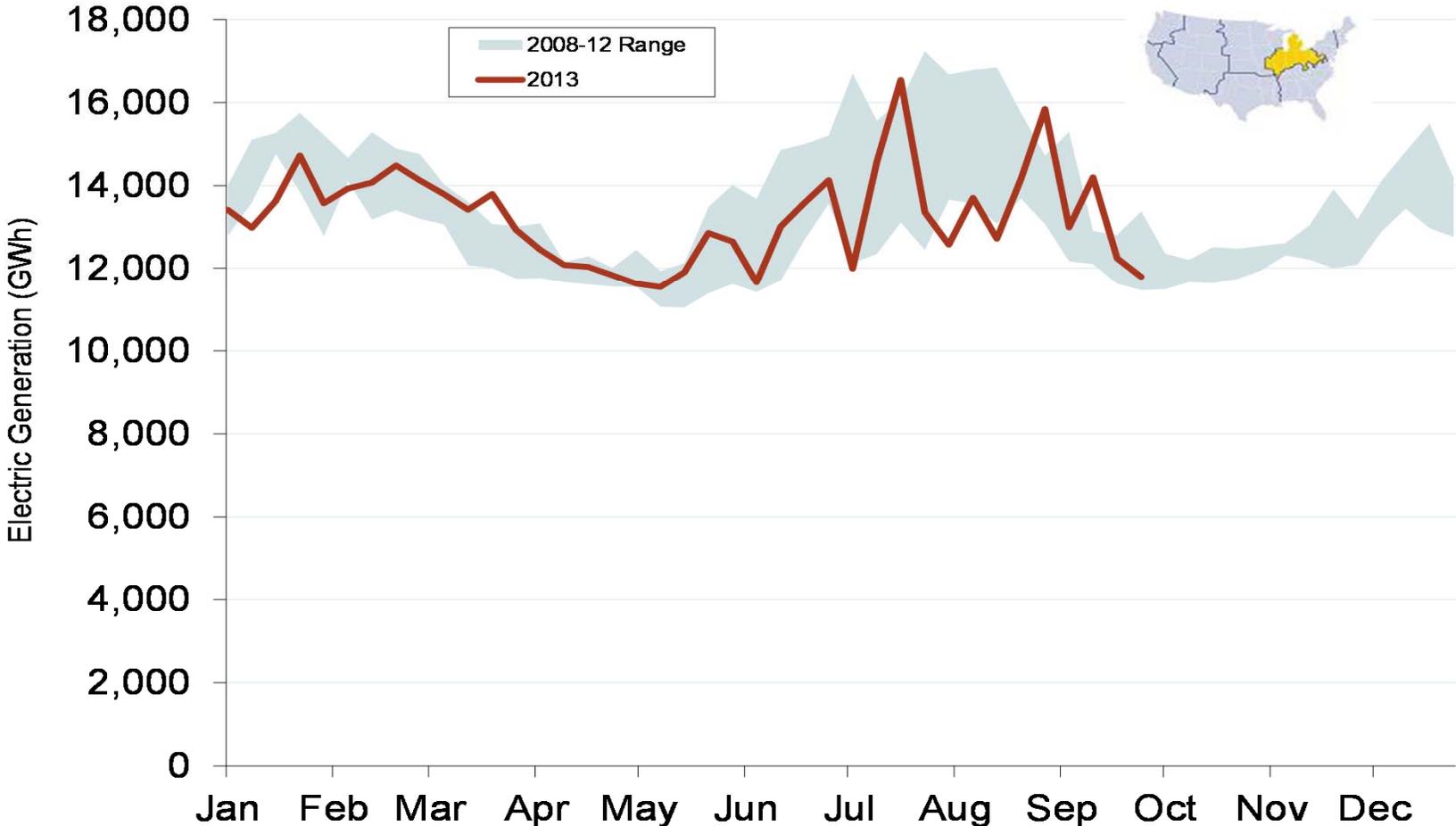
Weekly U.S. Electric Generation Output



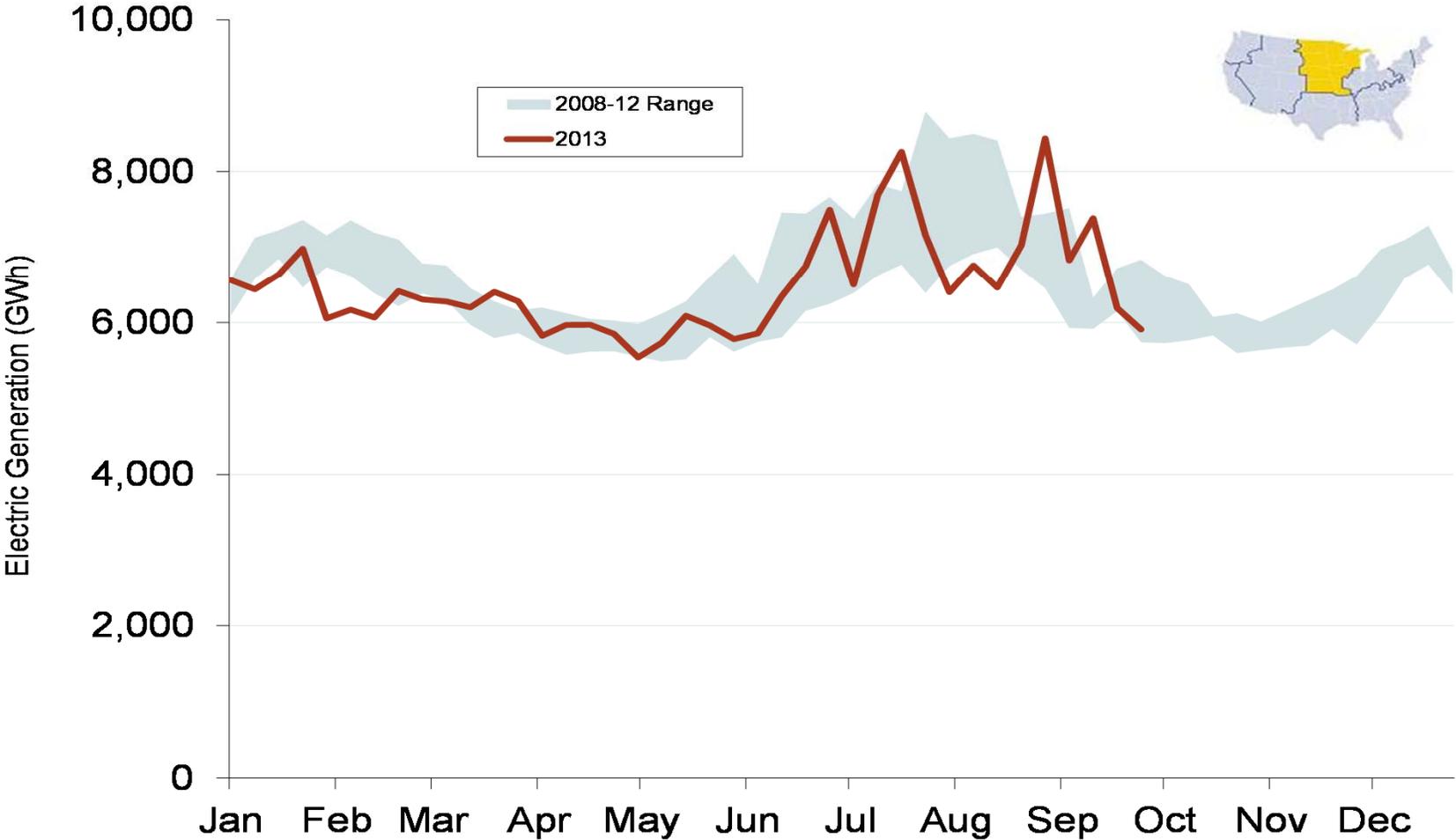
Source: Derived from *EEI* data
October 2013 Midwest Snapshot Report

Updated: October 07, 2013

Weekly Generation Output - Central Industrial Region



Weekly Generation Output - West Central



Weekly Generation Output - South Central

