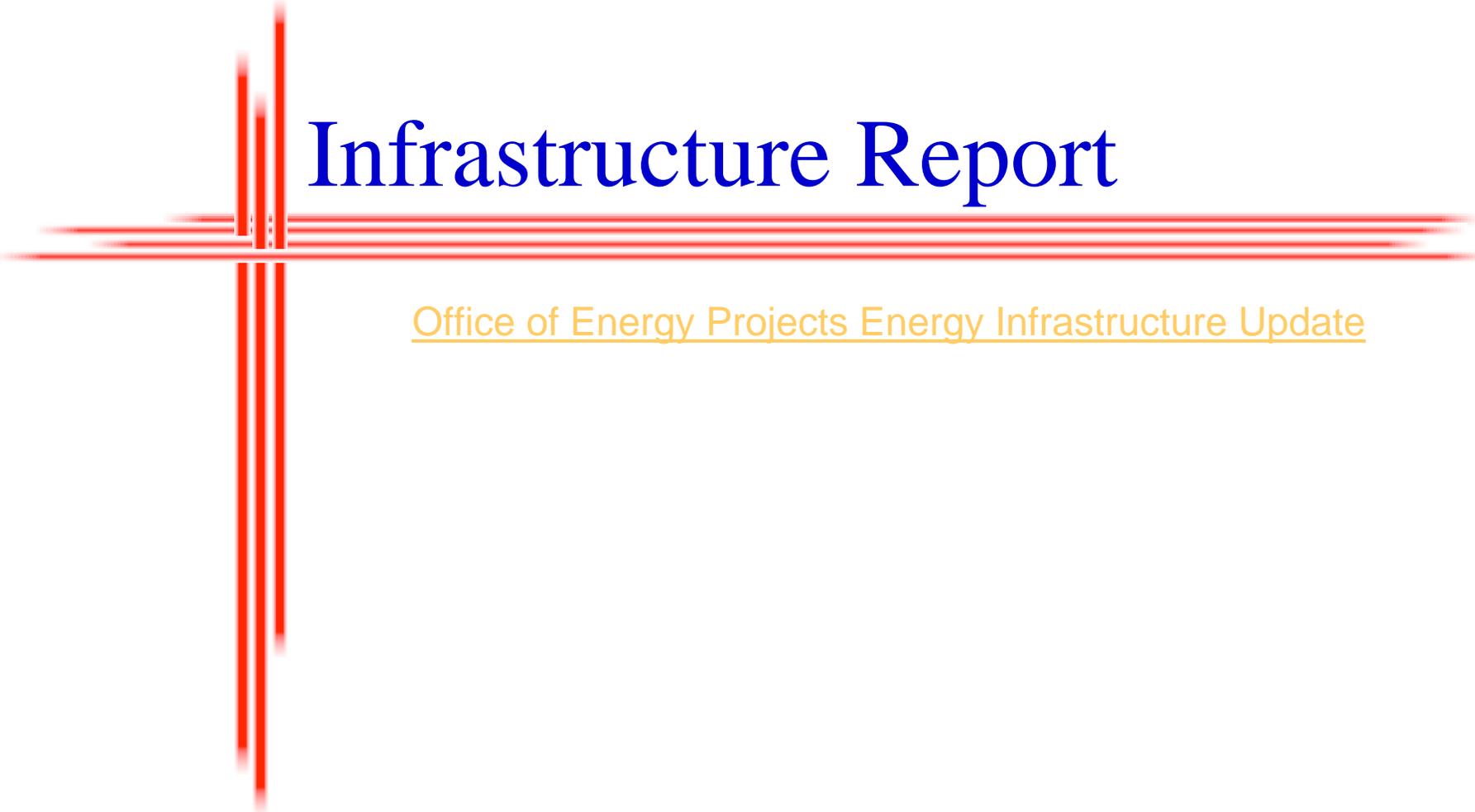


OE ENERGY MARKET SNAPSHOT

Southeast States Version – July 2013 Data

Office of Enforcement
Federal Energy Regulatory Commission
August 2013

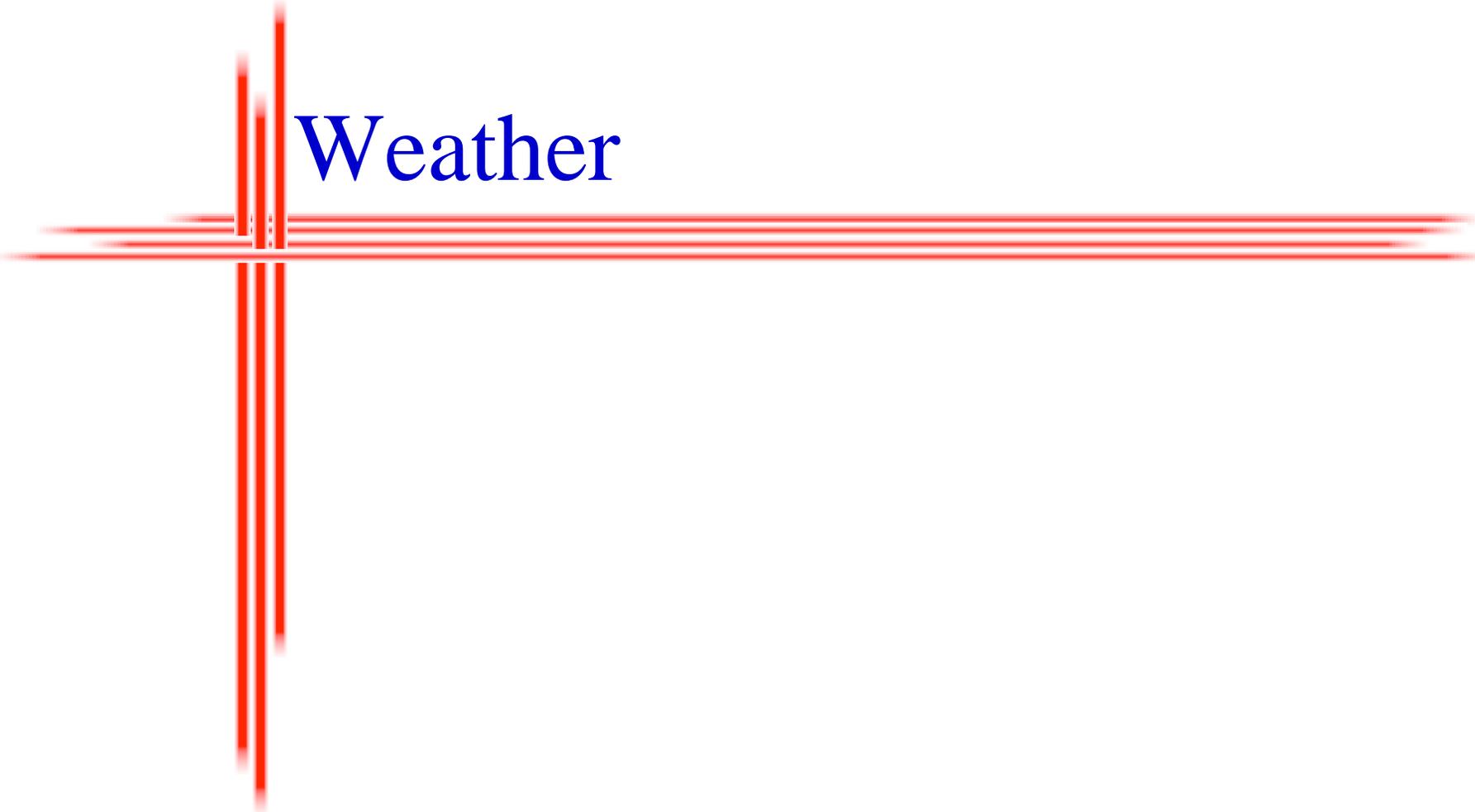


Infrastructure Report

Office of Energy Projects Energy Infrastructure Update

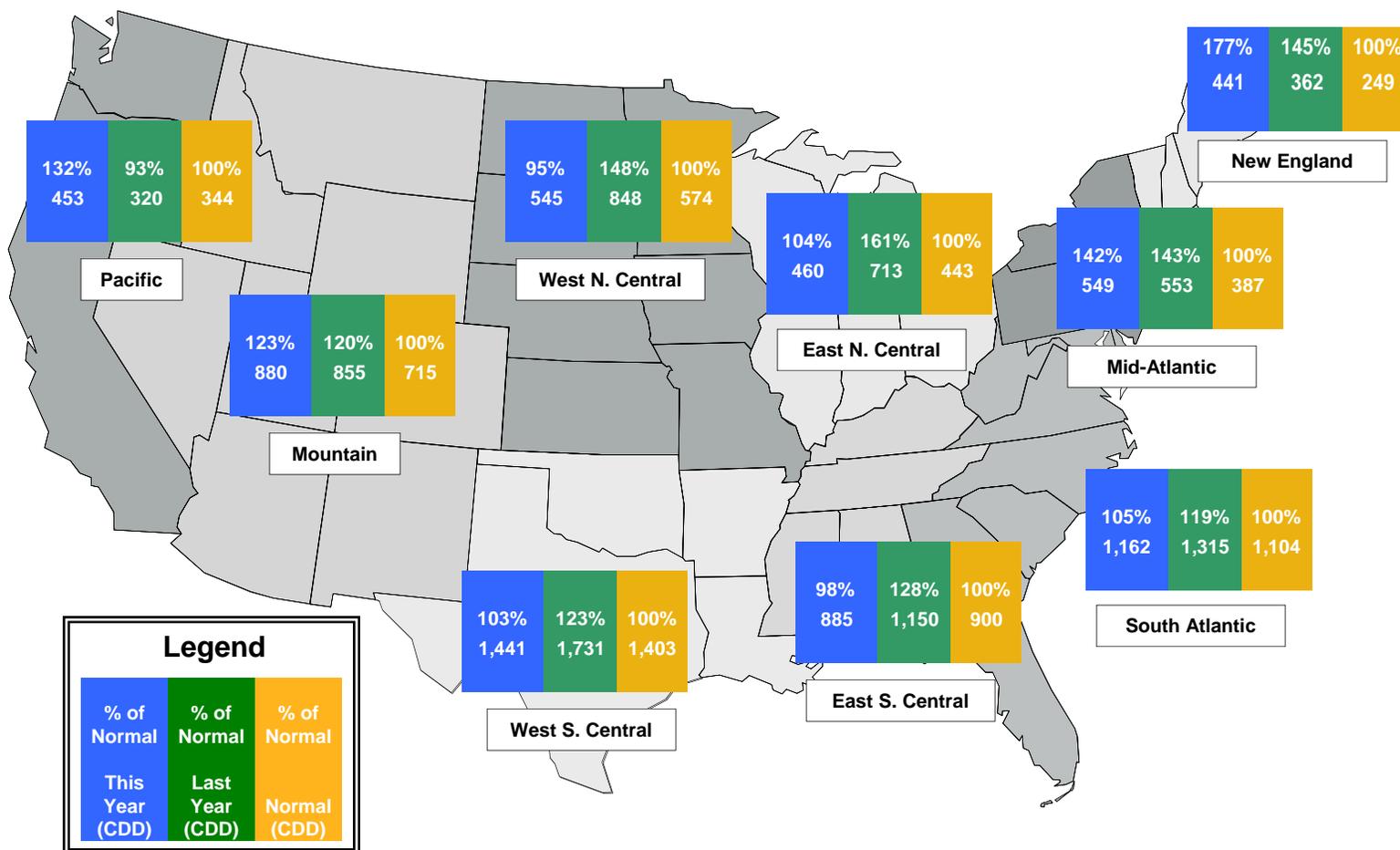


<http://www.ferc.gov/market-oversight/reports-analyses/st-mkt-ovr/2012-som-final.pdf>



Weather

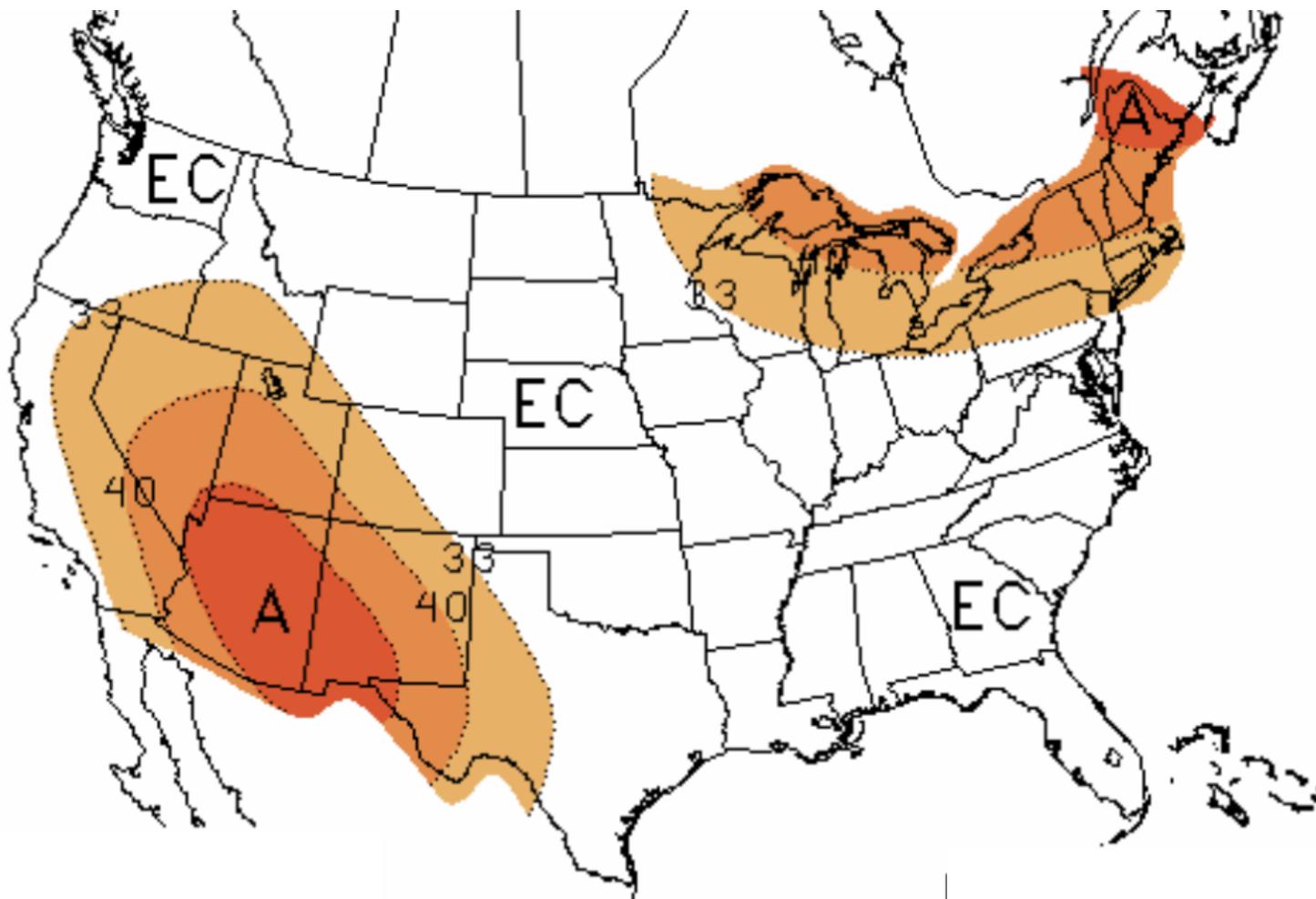
Regional Cooling Degree Days – January to August 2013



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

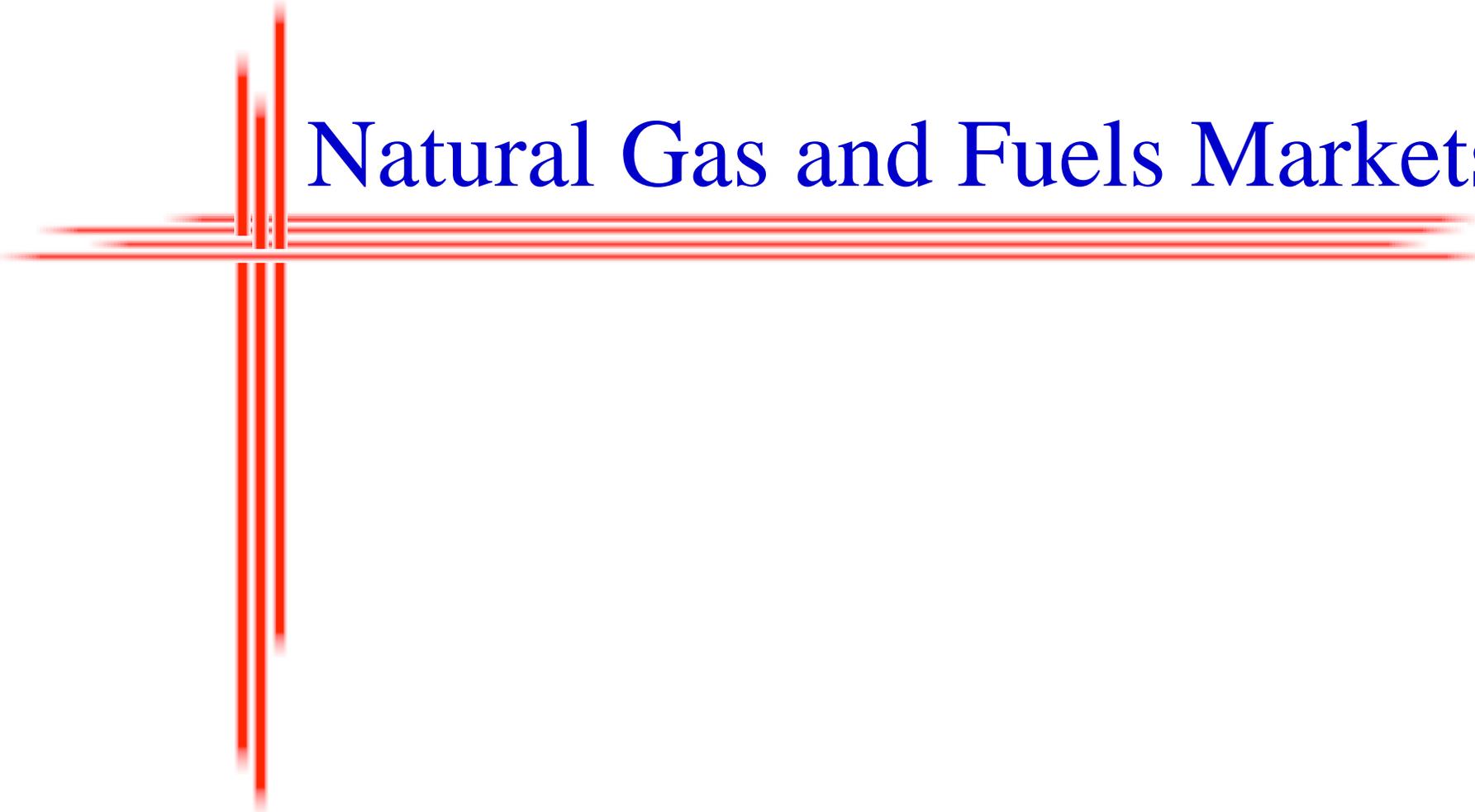
Updated: August 21, 2013

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



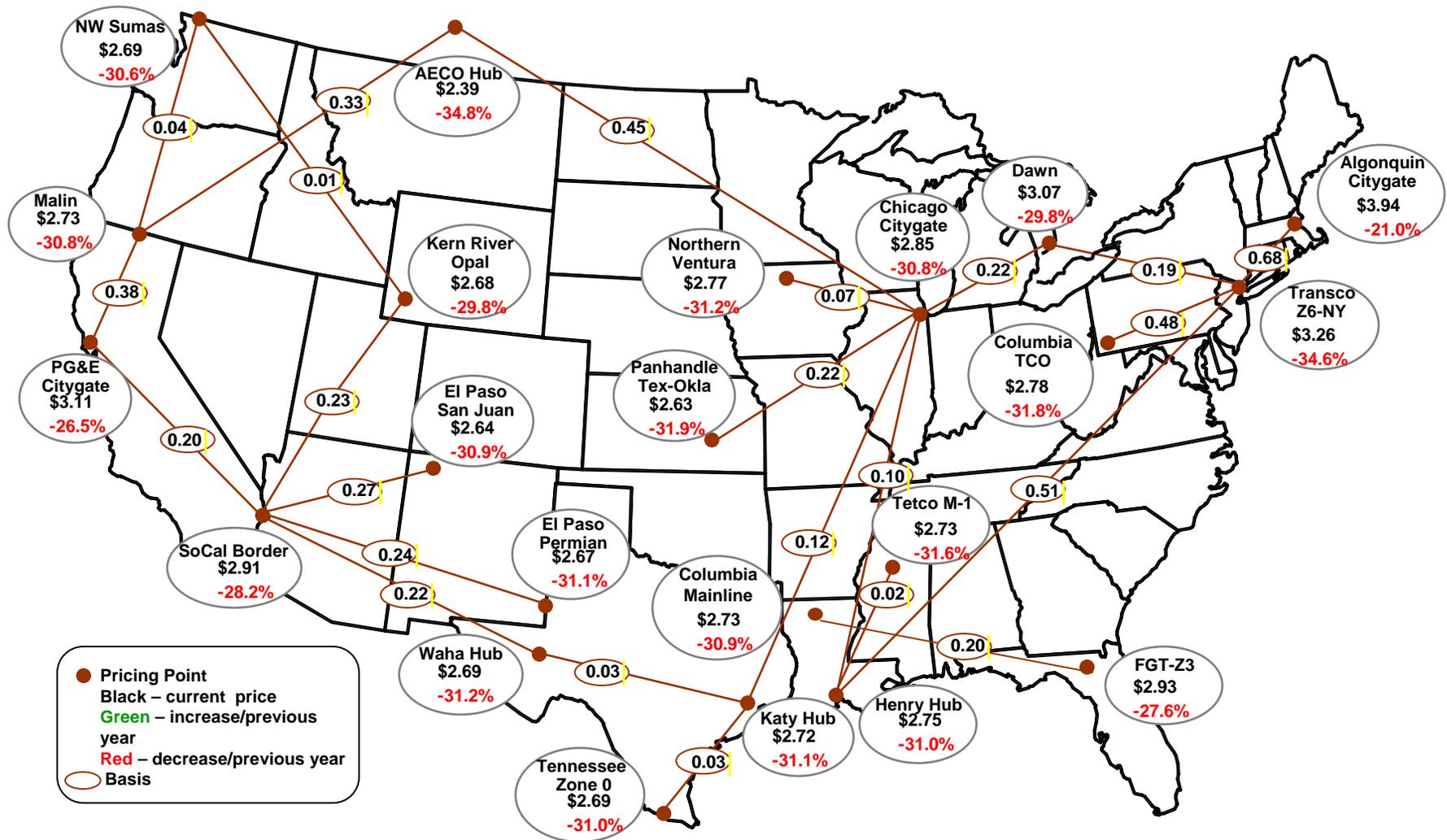
Note: "A" areas are above normal, "B" areas are below normal and "EC" means equal chance. Normal is based on the last 30 years of data.
Source: Derived from NOAA data.

Updated: August 21, 2013



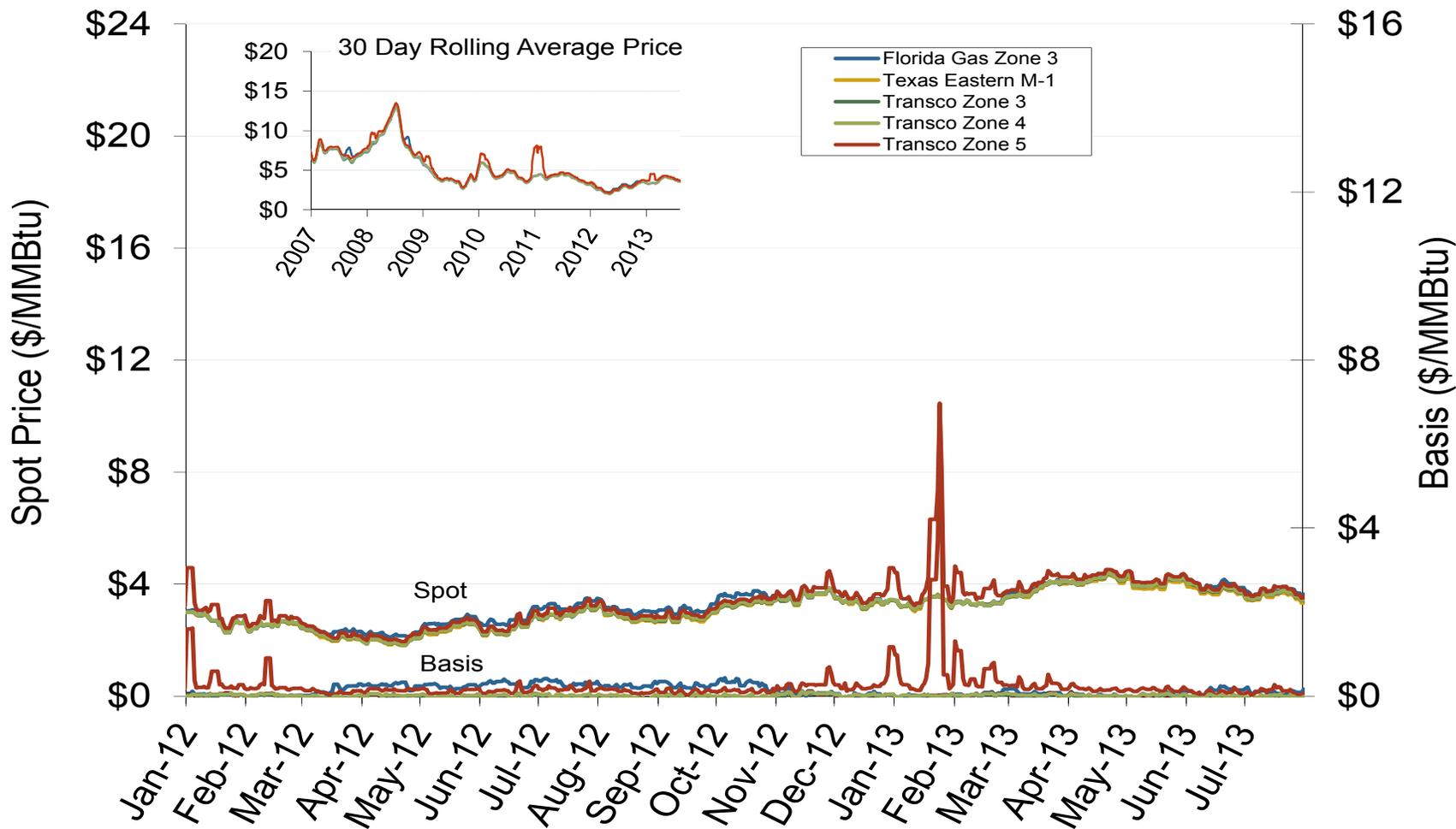
Natural Gas and Fuels Markets

Average Spot Gas Prices, 2012 (\$MMBtu)



Source: Derived from *Platts* data.
August 2013 Southeast Snapshot Report

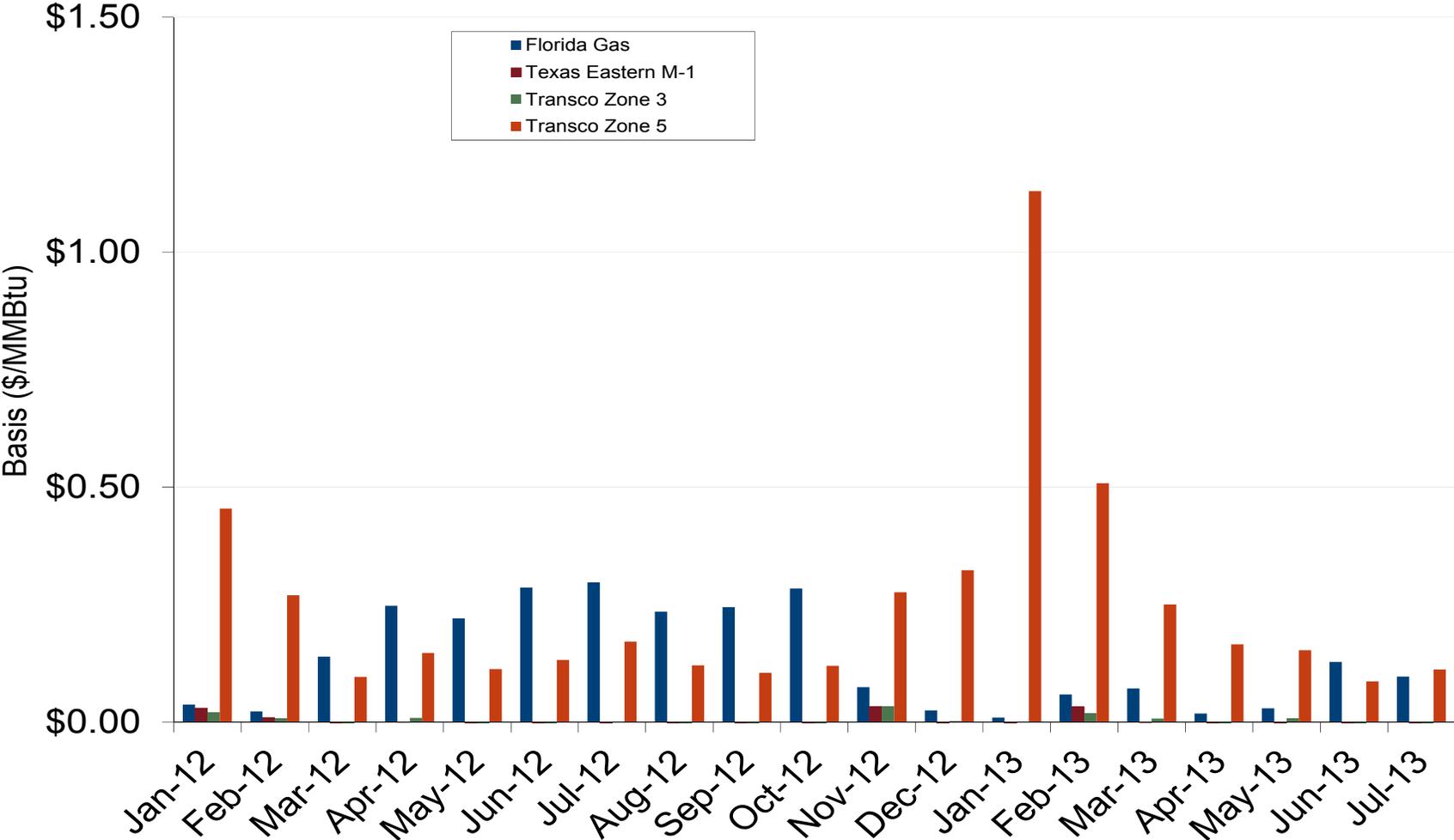
Southeastern Day-Ahead Hub Spot Prices and Basis



Southeast Natural Gas Market: Average Basis to Henry Hub

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

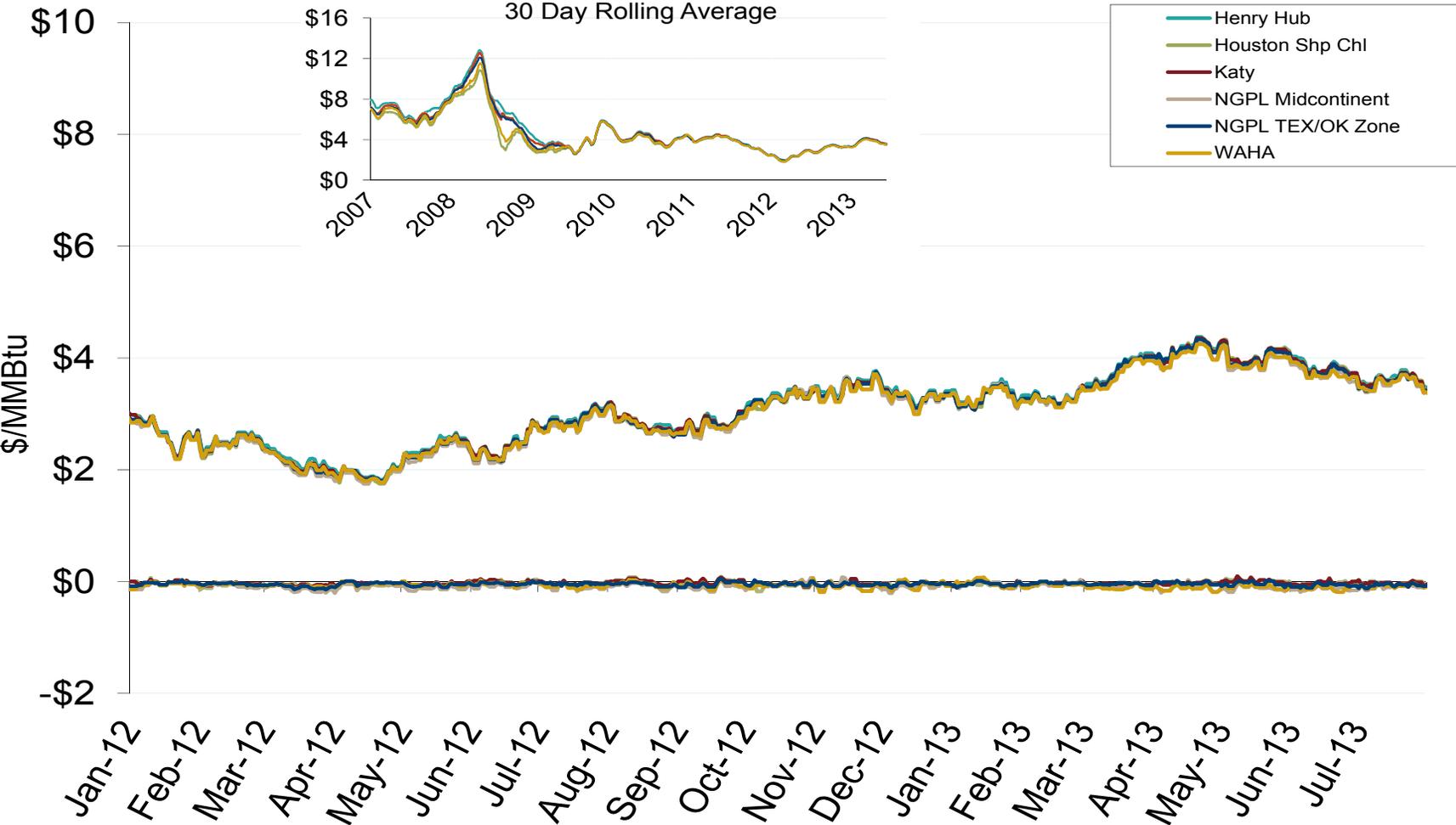
Southeastern Monthly Average Basis Value to Henry Hub



Source: Derived from Platts data
August 2013 Southeast Snapshot Report

Updated: August 06, 2013

Gulf Day-Ahead Hub Spot Prices and Basis

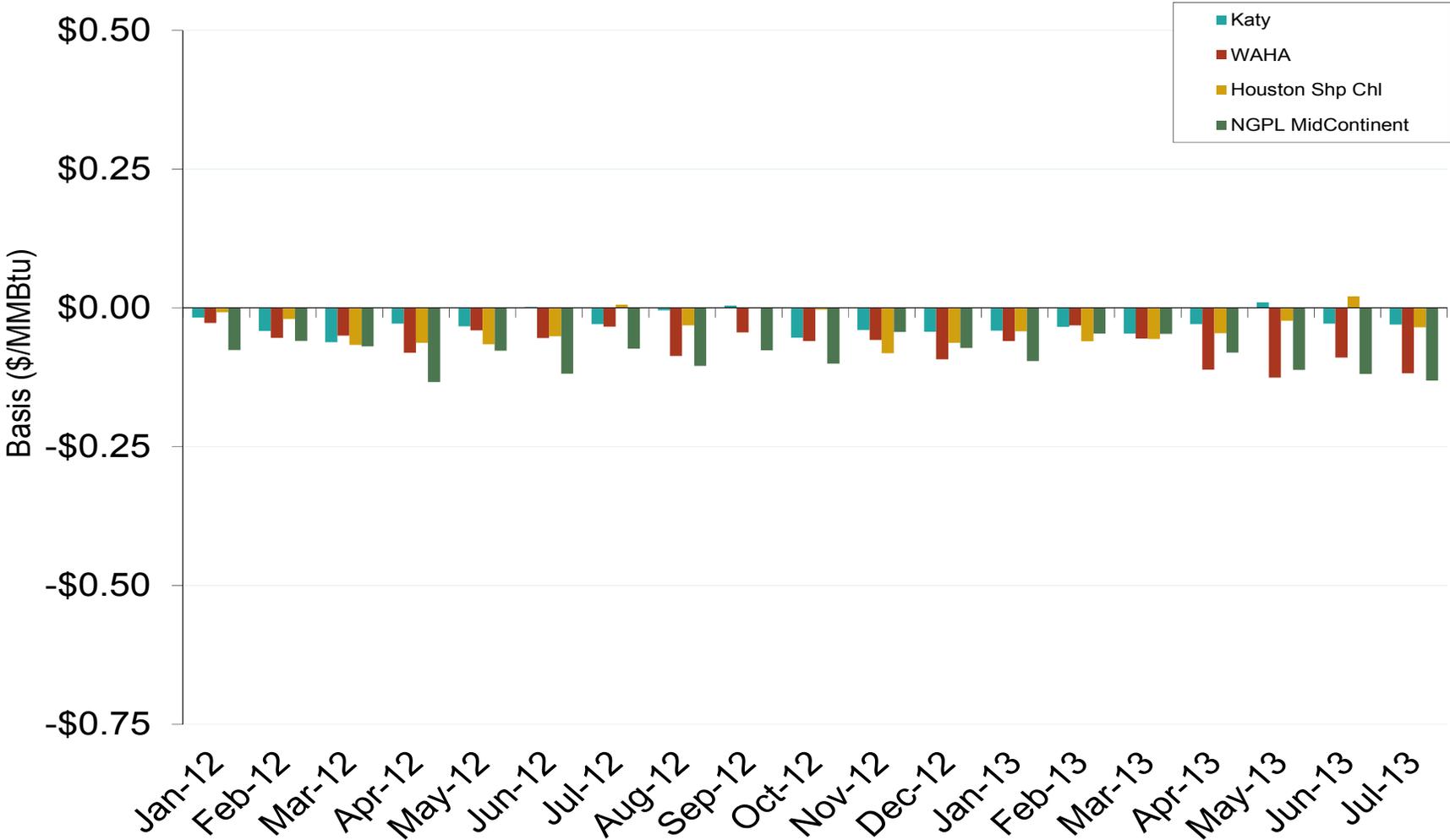


Source: Derived from *Platts* data
August 2013 Southeast Snapshot Report

Updated: August 06, 2013

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

Gulf Monthly Average Basis Value to Henry Hub



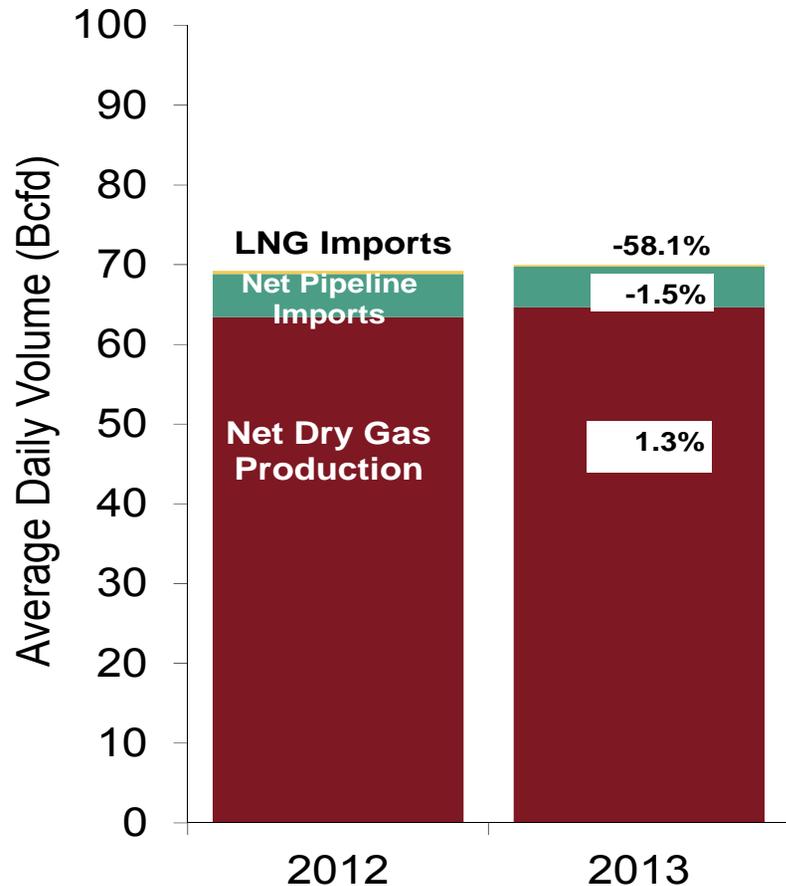
Source: Derived from Platts data
August 2013 Southeast Snapshot Report

Updated: August 06, 2013

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

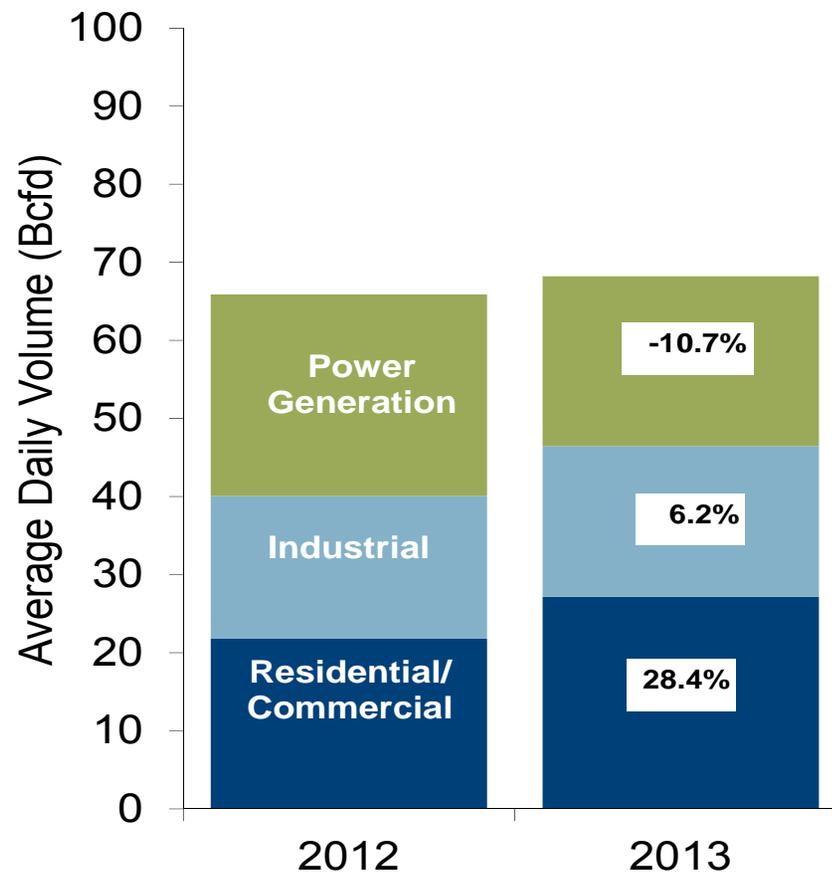
US Natural Gas Supply

Total Change in Supply 0.0%



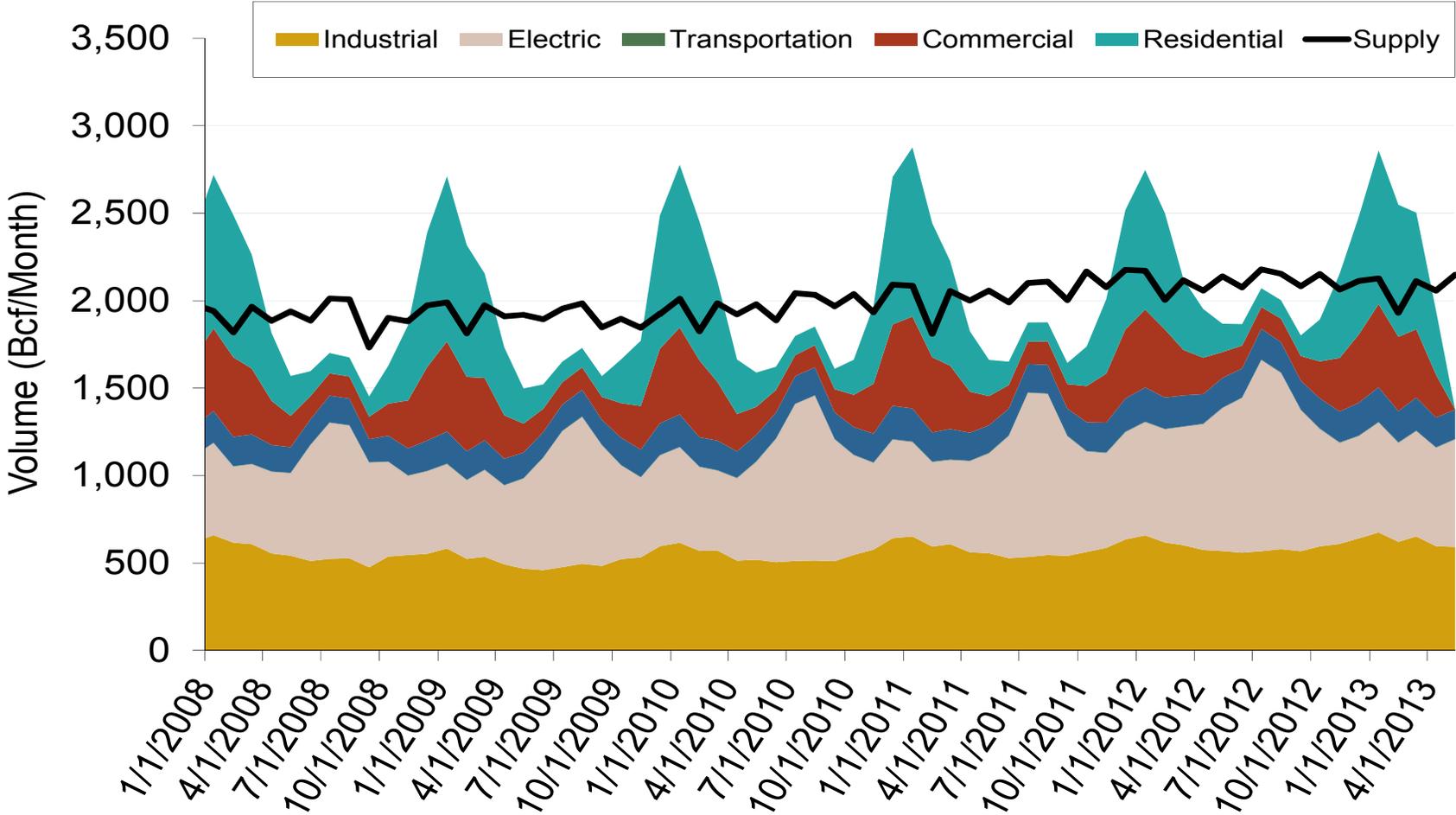
US Natural Gas Demand

Total Change in Demand 10.4%



Note: Balance includes all amounts not attributable to other categories.
Source: Derived from Baker Energy data

Annual U.S. Natural Gas Consumption by Sector



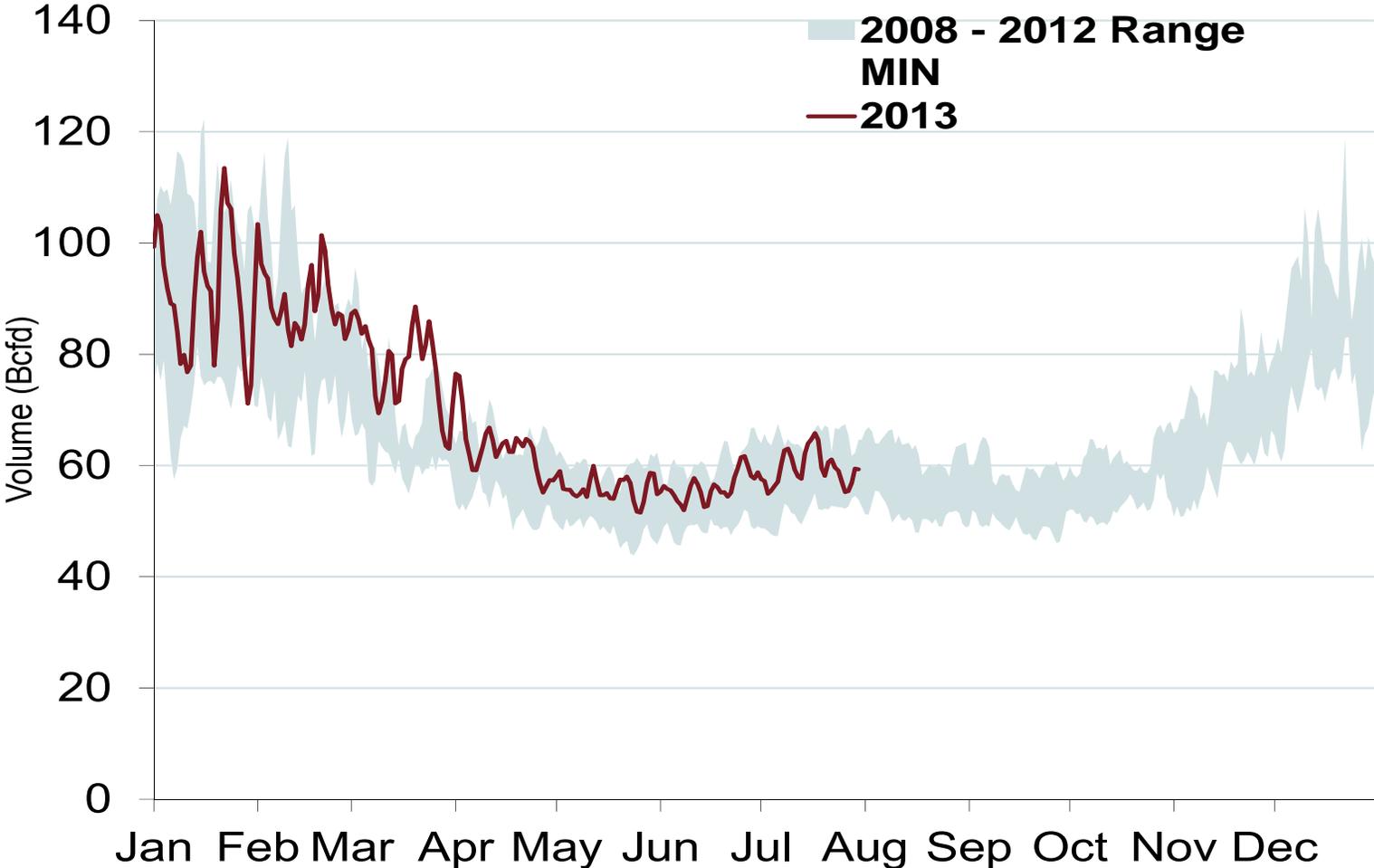
Notes: Supply includes lower 48 state production, net pipeline imports, and LNG imports

Source: Derived from EIA data

August 2013 Southeast Snapshot Report

Updated: August 09, 2013

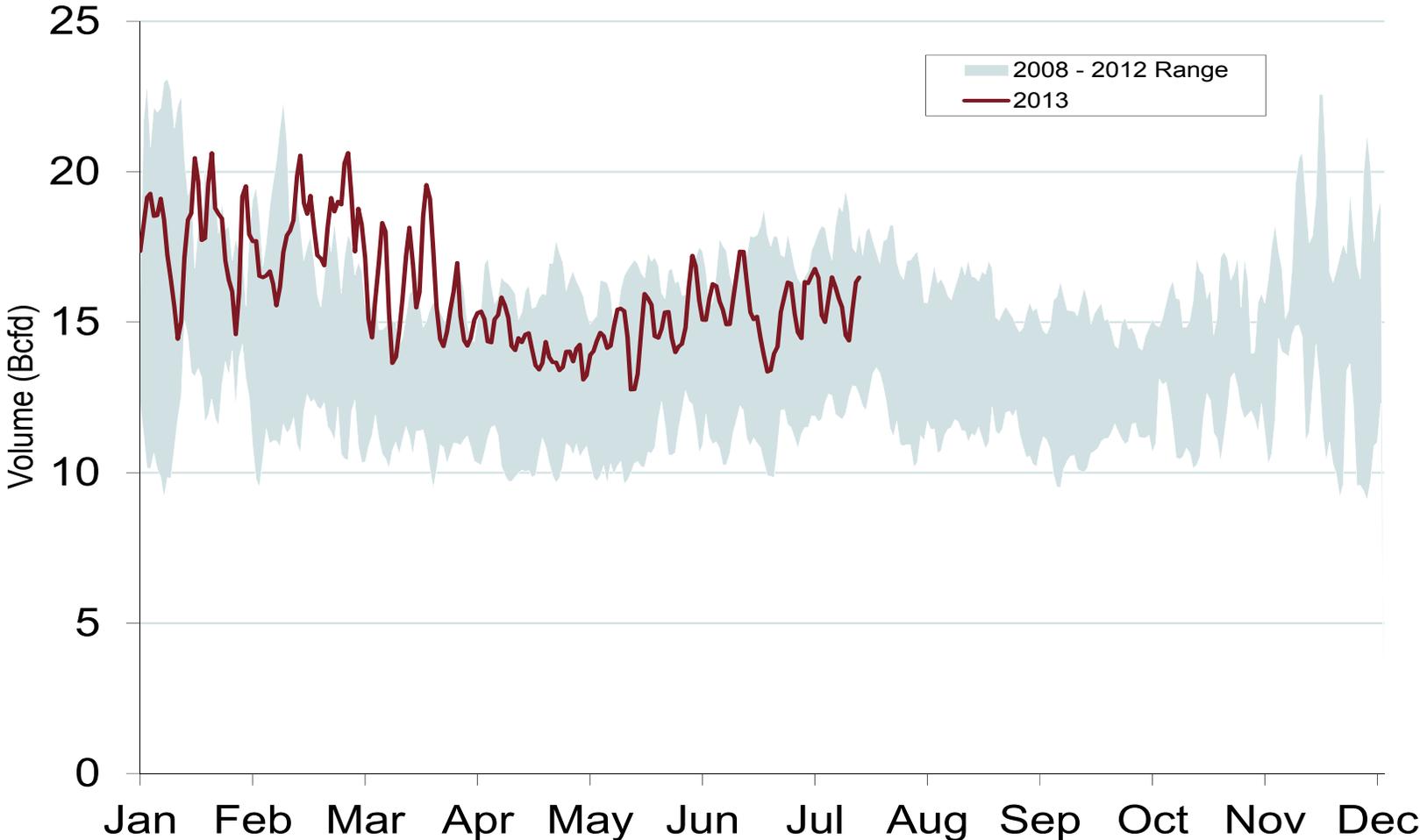
Total U.S. Natural Gas Demand All Sectors



Source: Derived from *Bentek Energy* data
August 2013 Southeast Snapshot Report

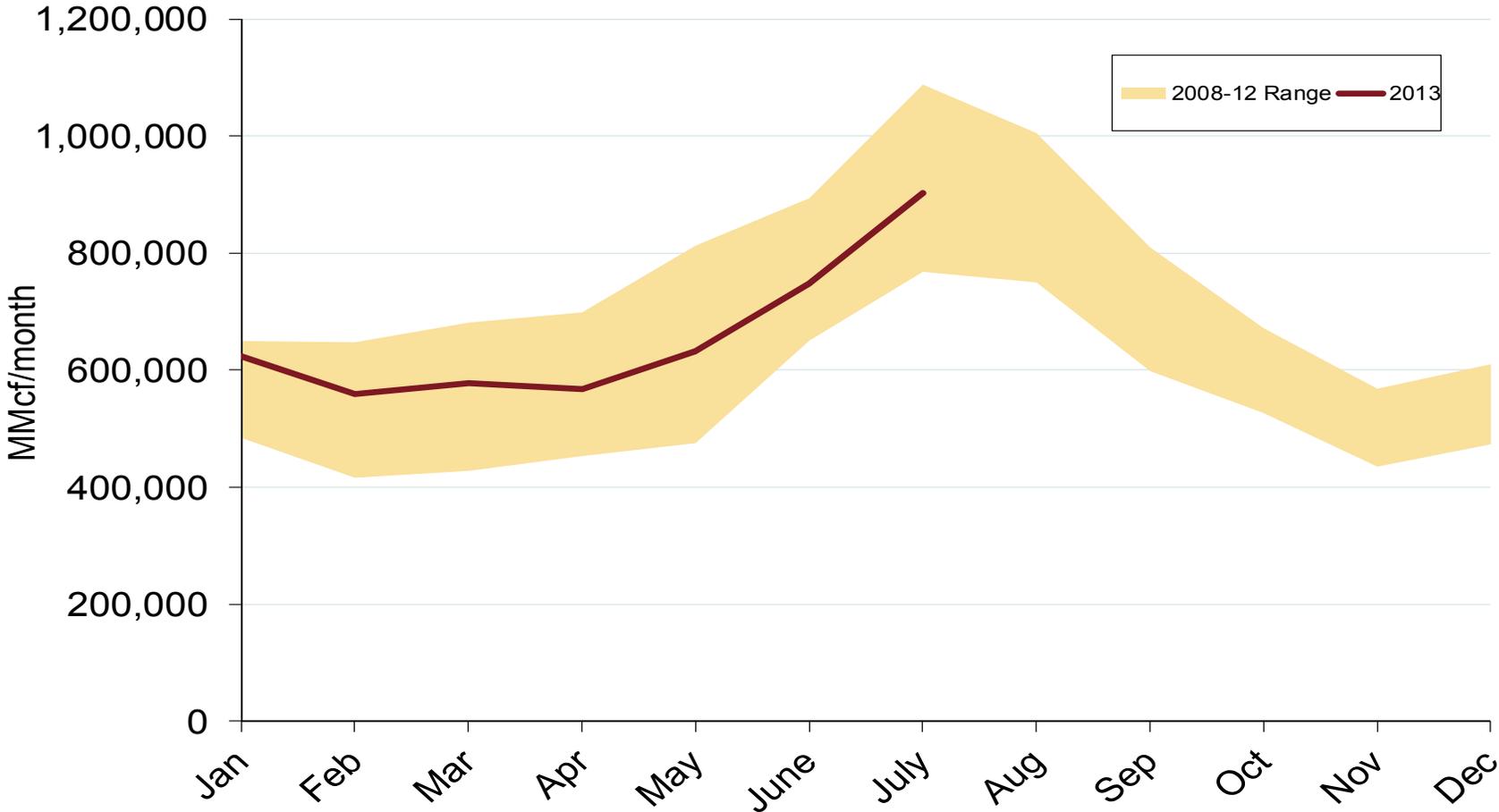
Updated: August 09, 2013

Daily Southeast Natural Gas Demand All Sectors



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U.S. Natural Gas Consumption for Power Generation

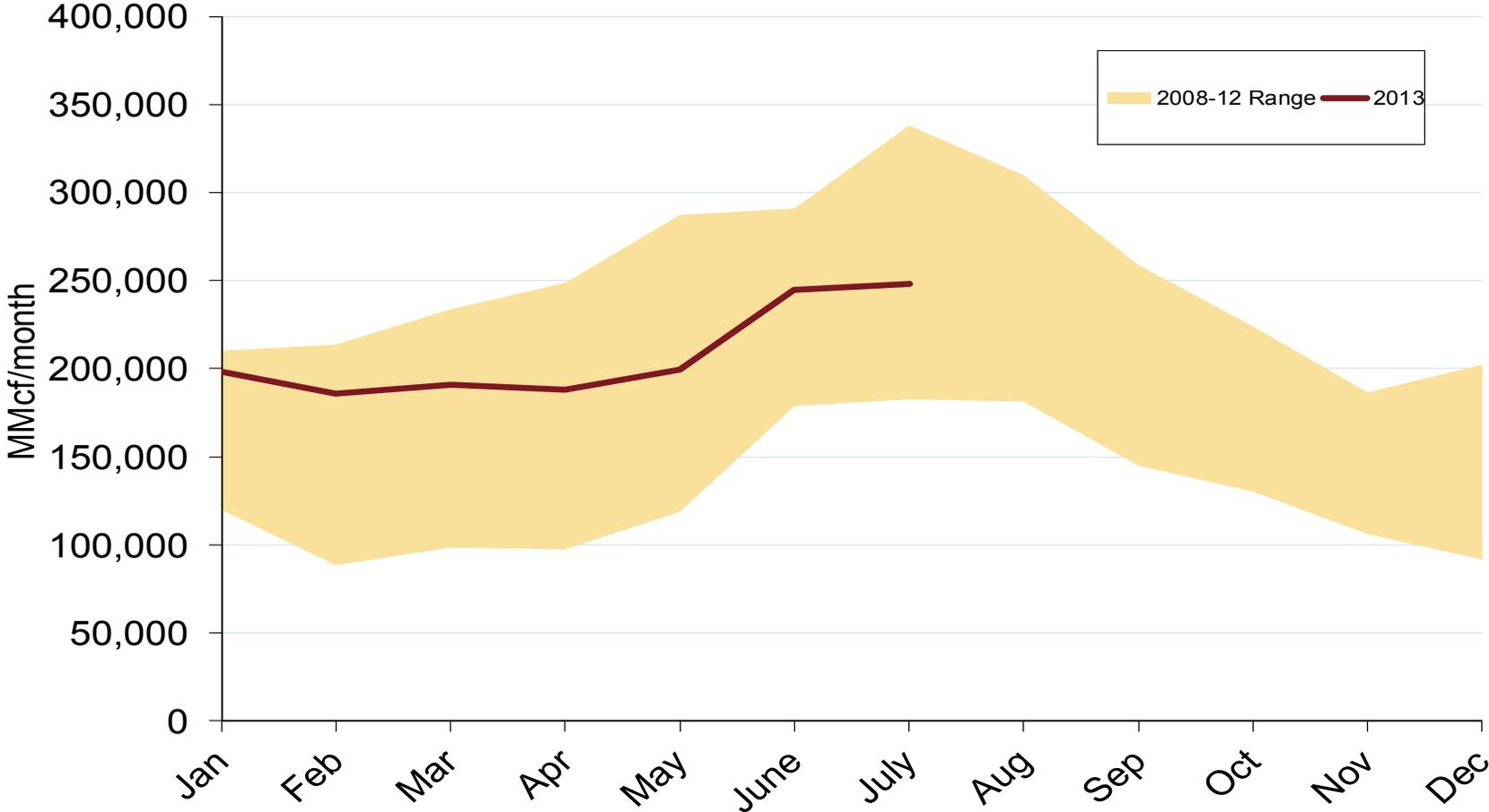


Source: Derived from *Bentek Energy* data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

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

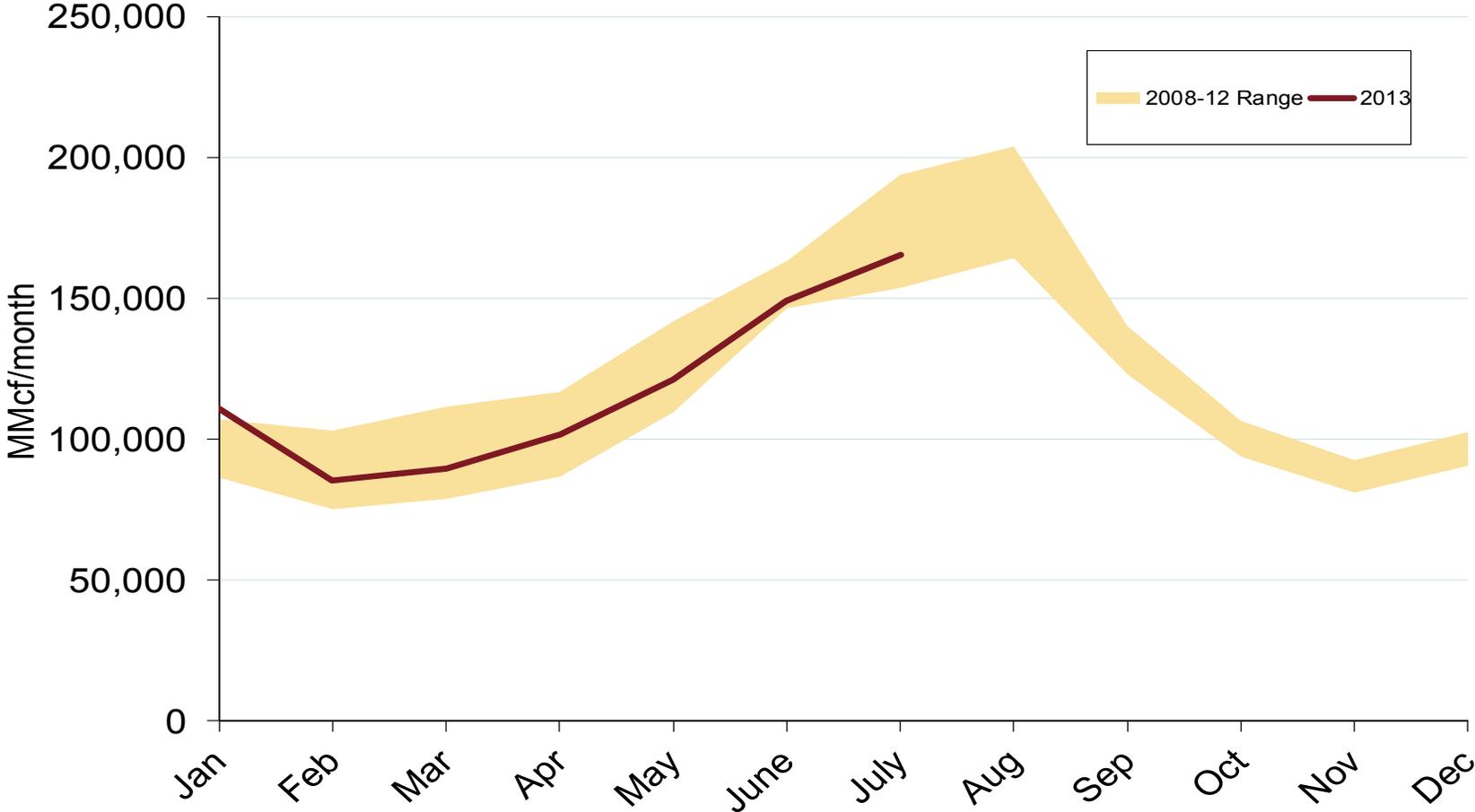
Southeast Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

Gulf Natural Gas Consumption for Power Generation



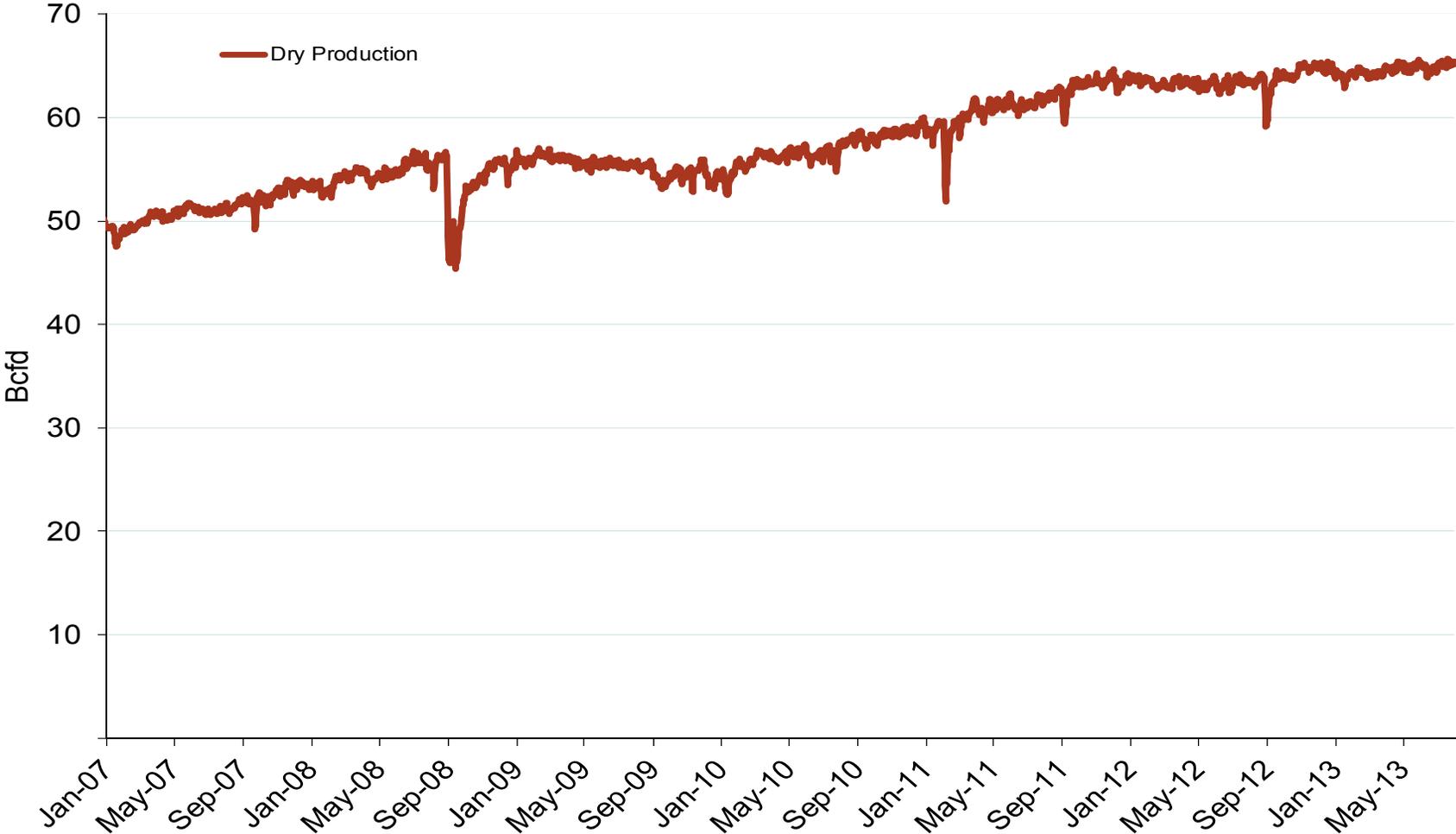
Source: Derived from *Bentek Energy* data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

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

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

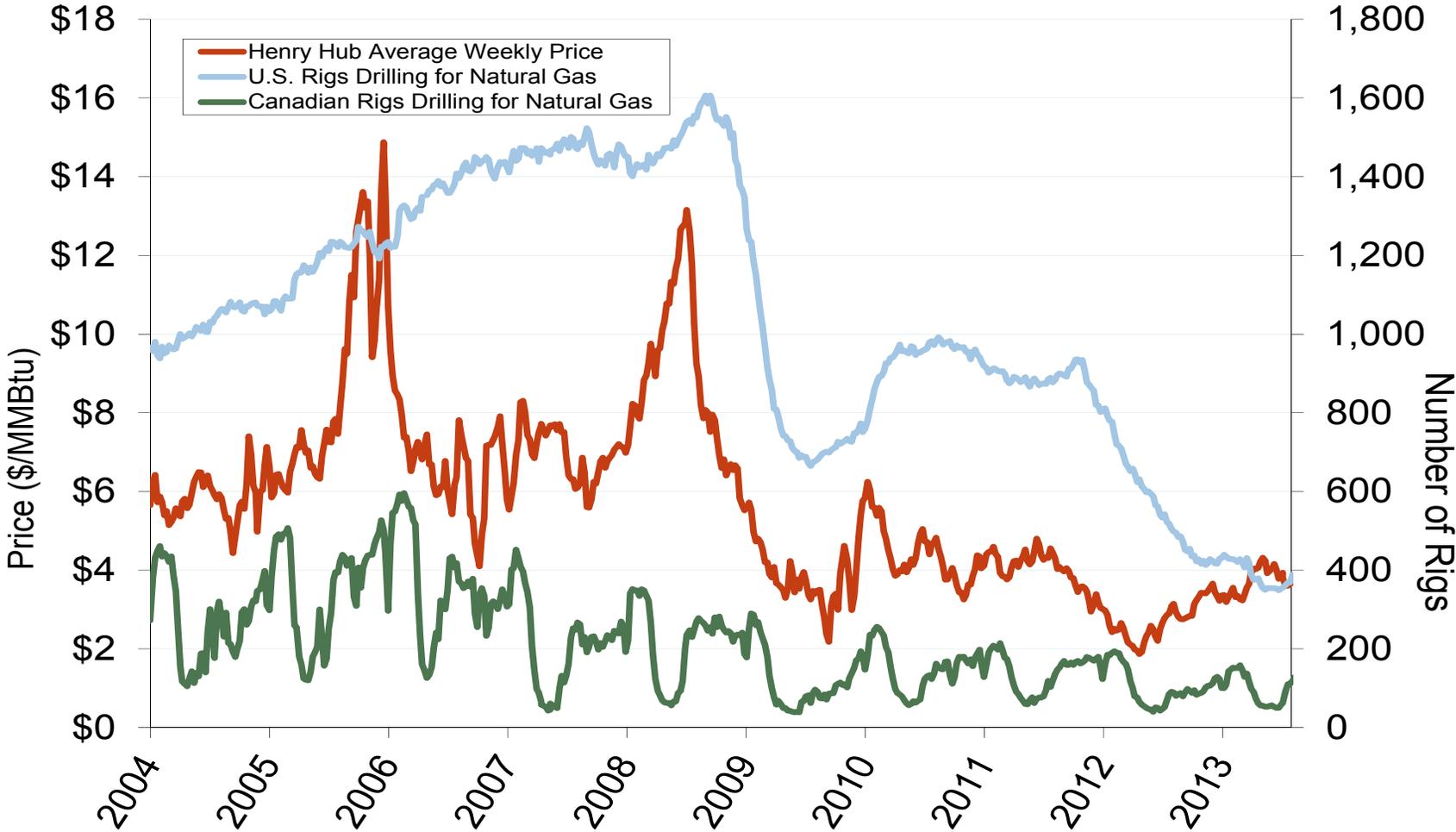
Monthly U.S. Dry Gas Production – Lower 48 States



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

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

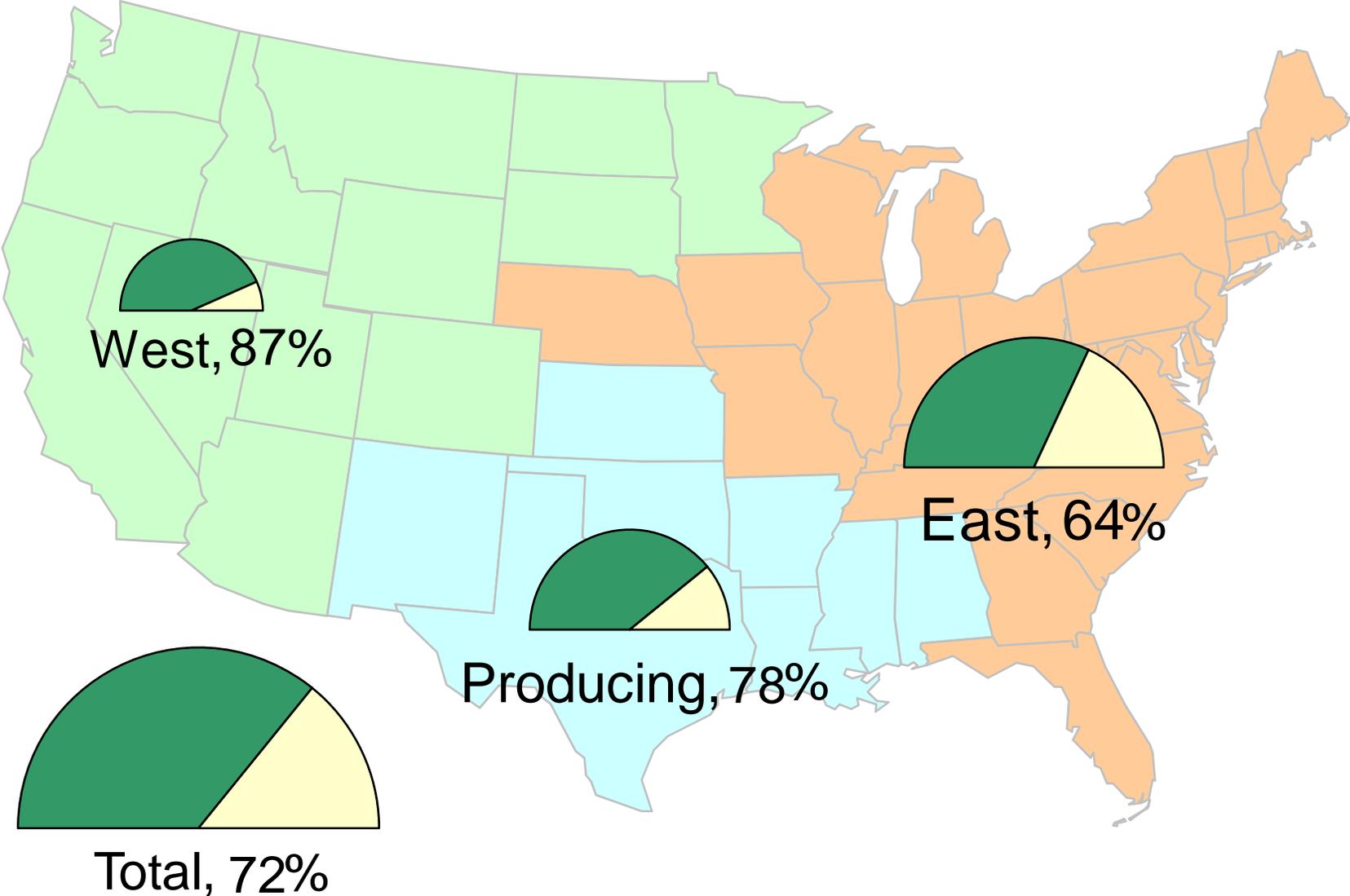
U.S. and Canadian NG Drilling Rig Count and Daily Spot Prices



Source: Derived from *Platts* and *Baker Hughes* data
August 2013 Southeast Snapshot Report

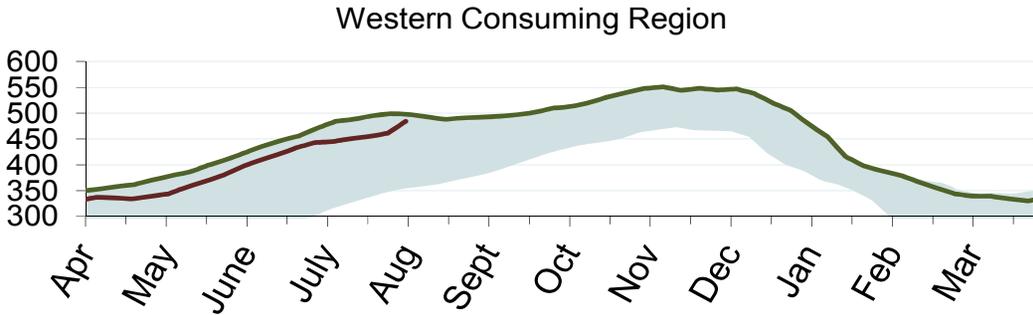
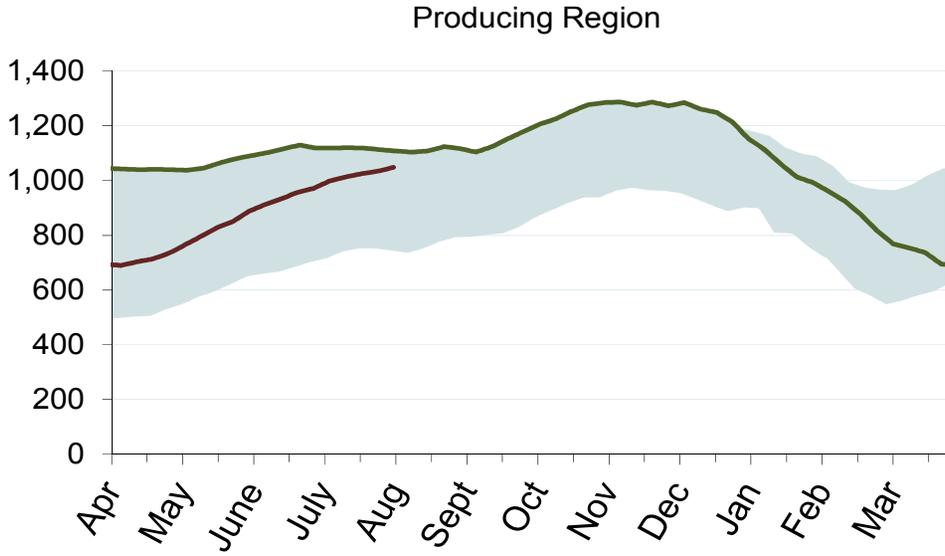
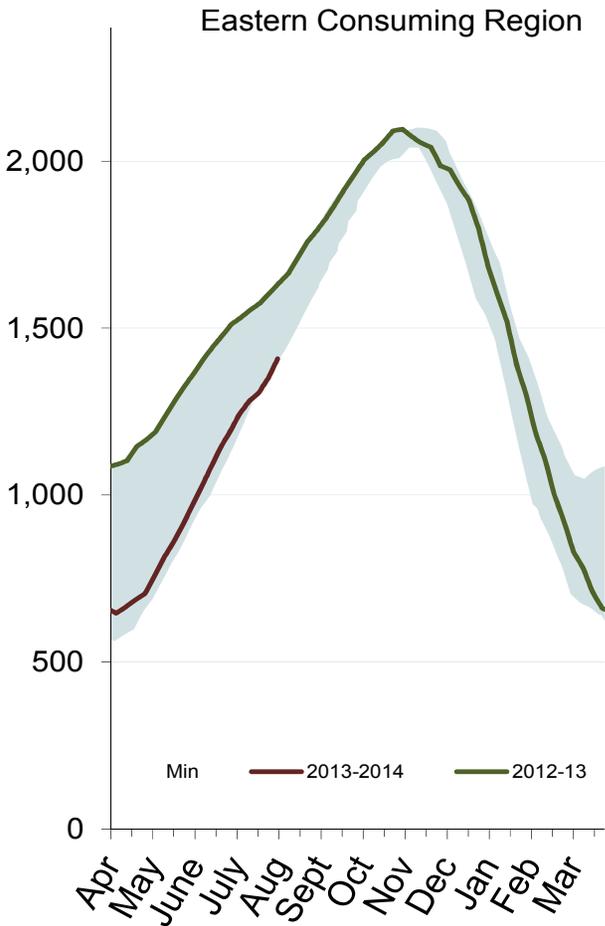
Updated: August 09, 2013

Natural Gas Storage Inventories – August 2, 2013



Source: Derived from EIA Storage and Estimated Working Gas Capacity data
August 2013 Southeast Snapshot Report

Regional Totals of Working Gas in Storage



Source: Derived from EIA data
August 2013 Southeast Snapshot Report

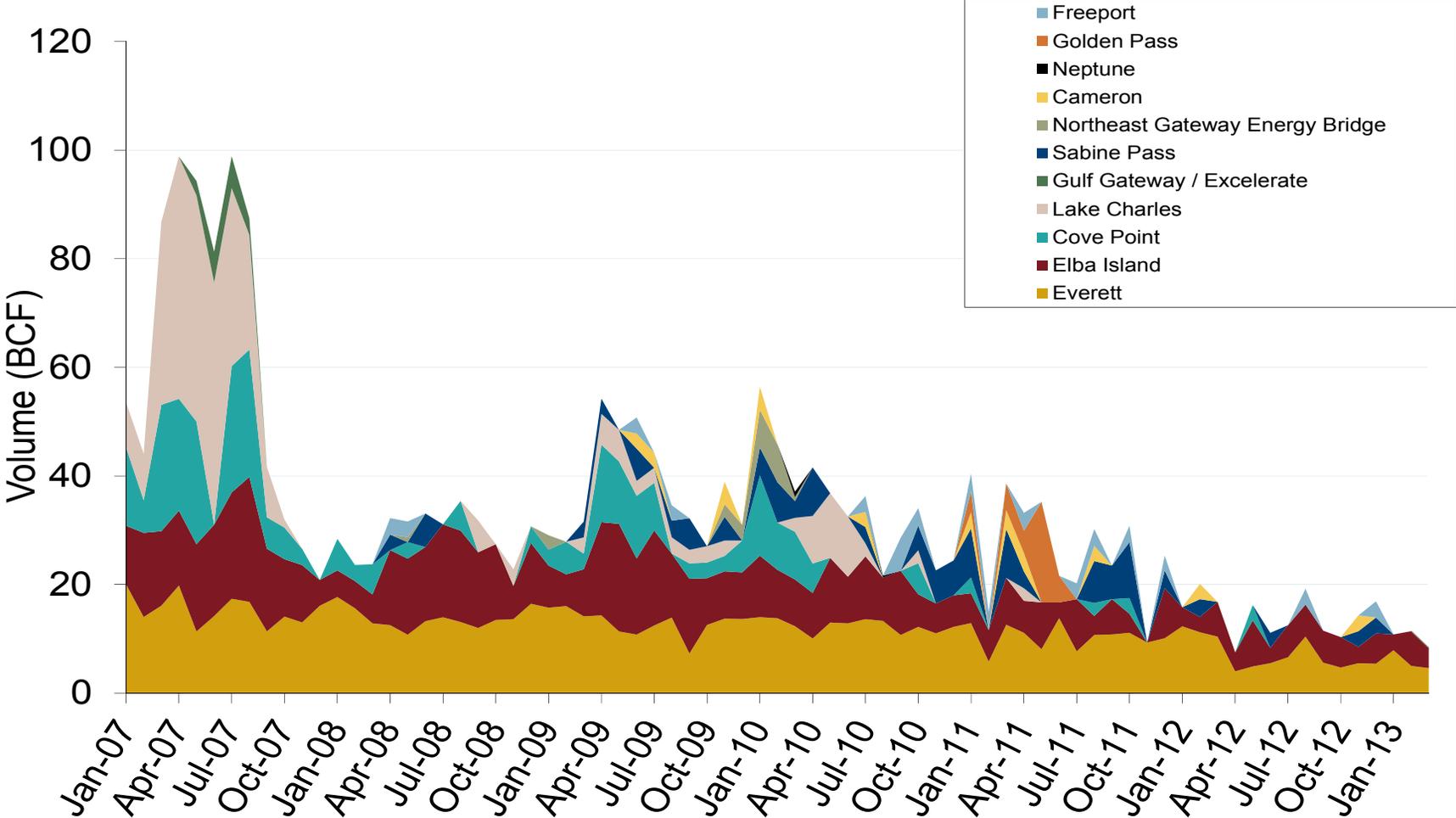
Updated: August 09, 2013

World LNG Estimated September 2013 Landed Prices



Source: Waterborne Energy, Inc. Data in \$US/MMBtu
August 2013 Southeast Snapshot Report

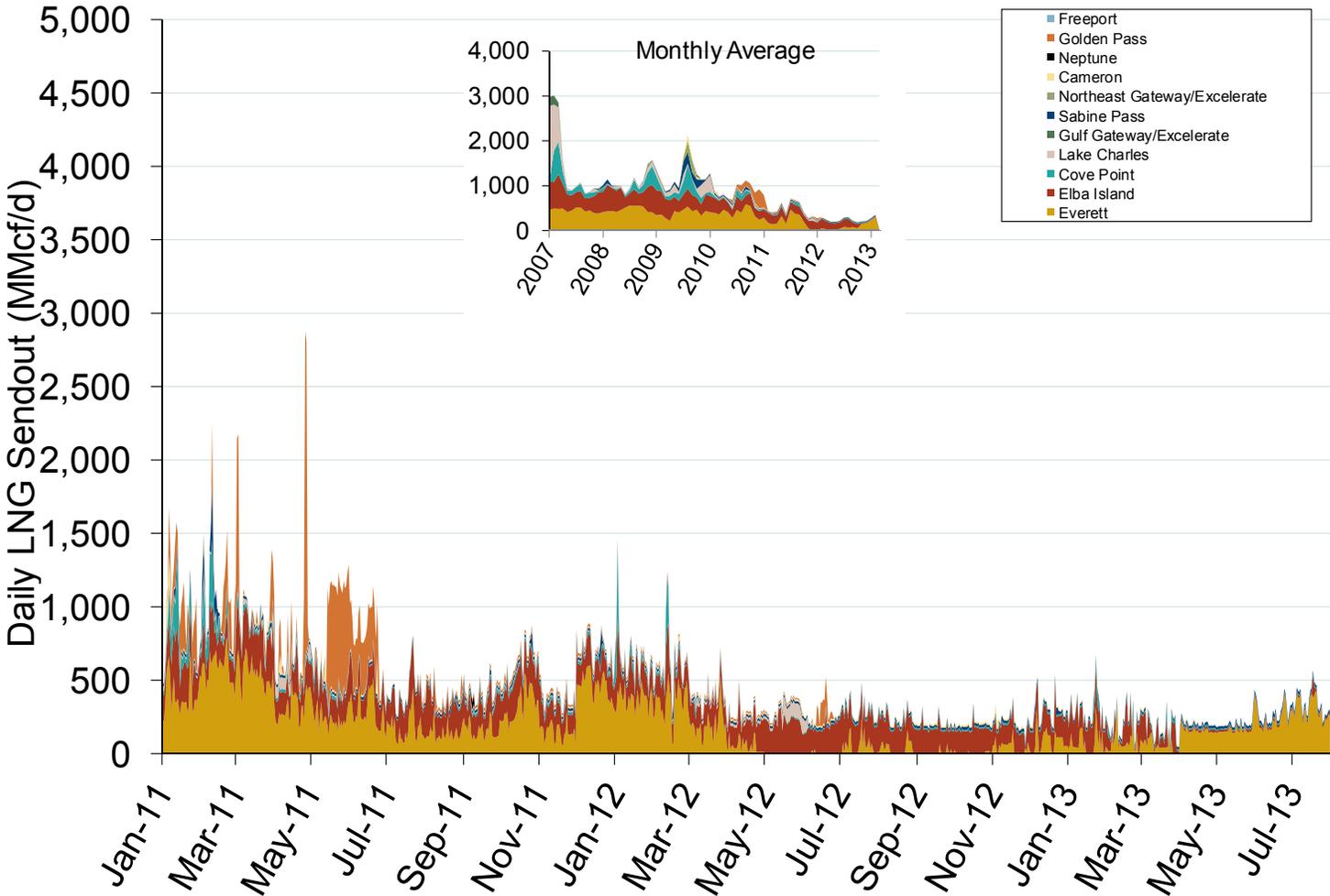
Monthly Gas Imports at Existing U.S. LNG Facilities



Source: Derived from DOE Office of Fossil Energy data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

Daily Gas Sendout from Existing U.S. LNG Facilities

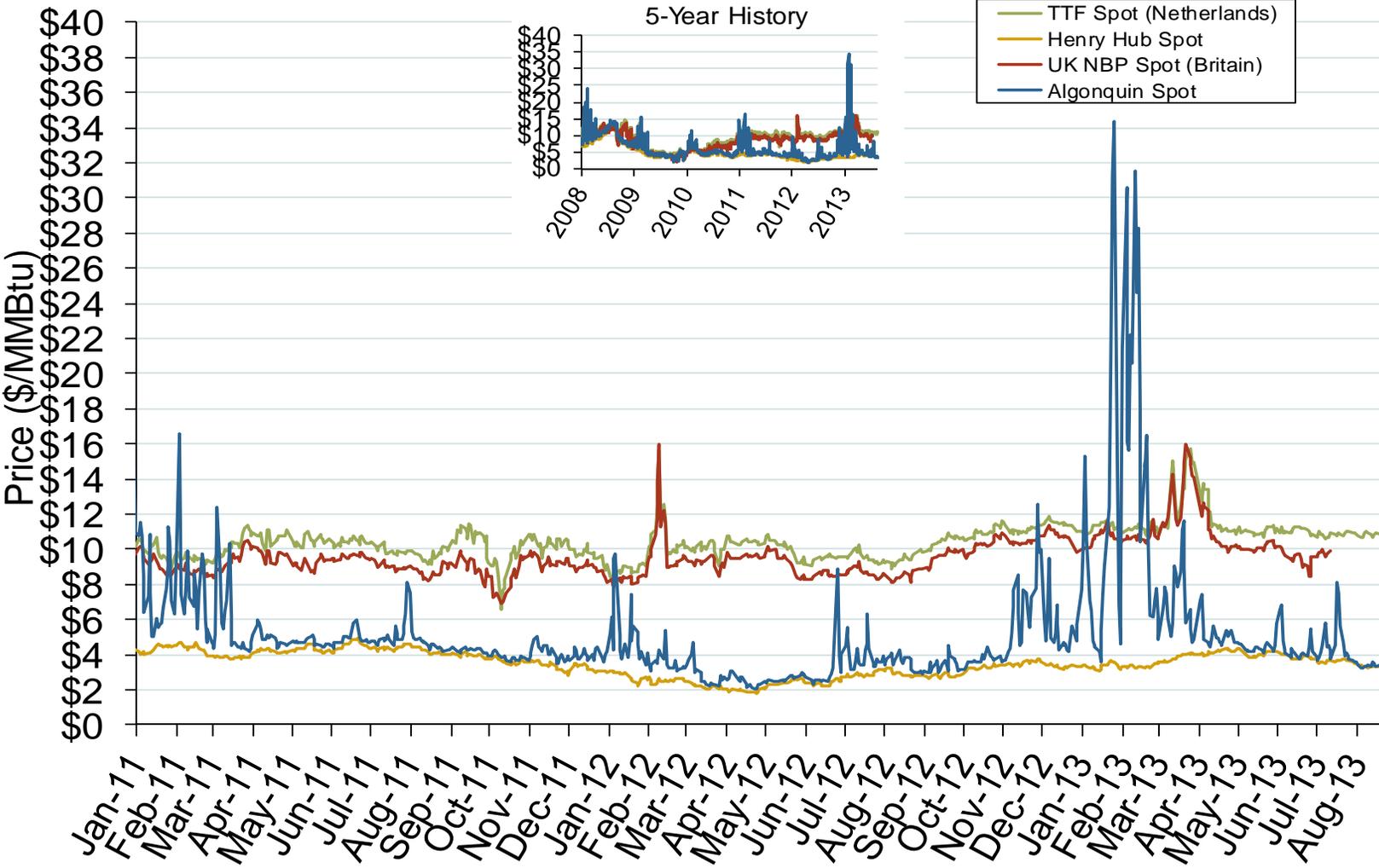


Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes flows to the Freeport LNG which flows via intrastate pipelines and flows to the Mystic 8 and 9 power plants.

Source: Derived from *Bentek Energy* data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

Atlantic Basin European and US Spot Natural Gas Prices



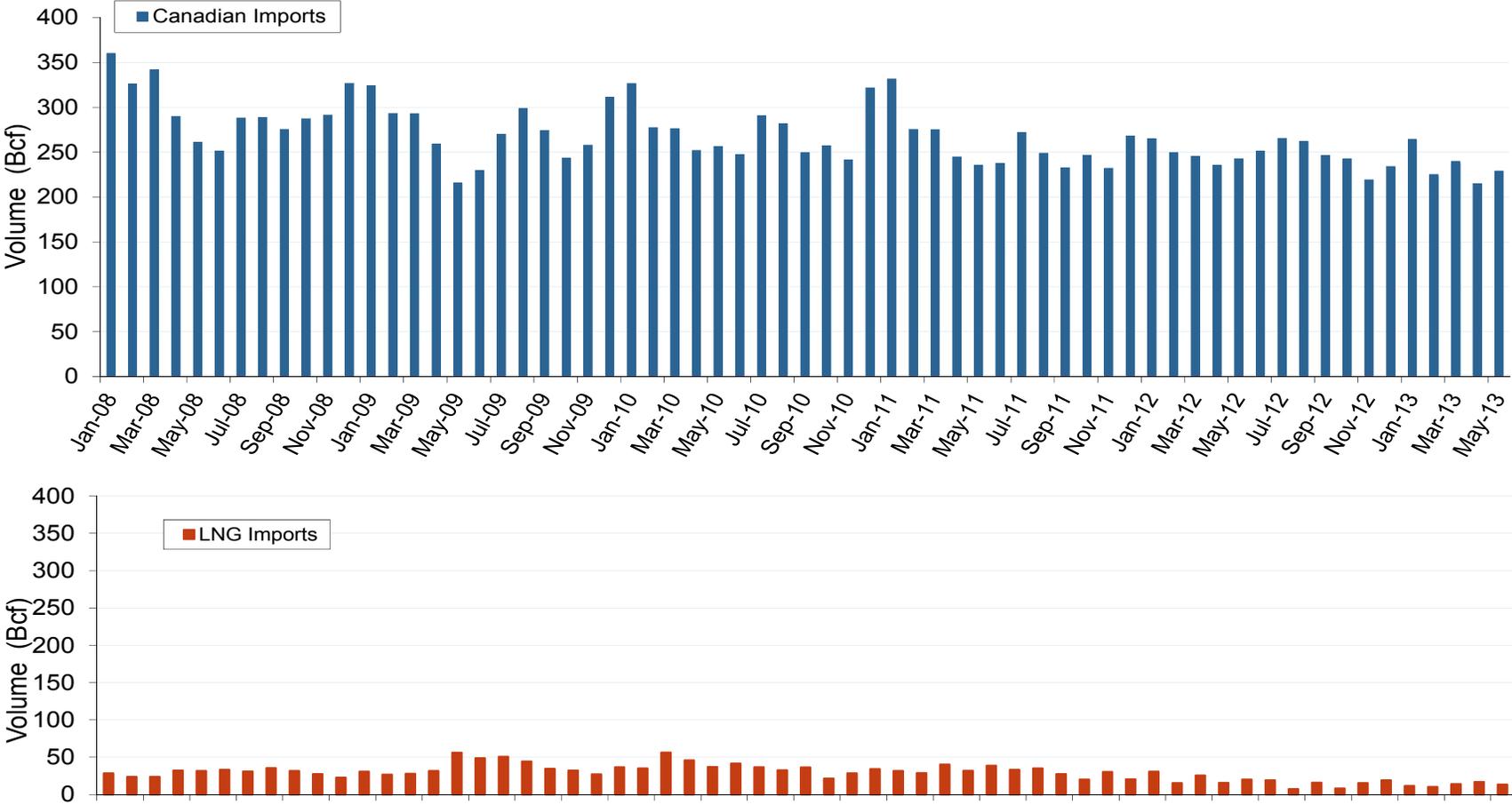
Source: Derived from *Bloomberg* and *ICE* data
August 2013 Southeast Snapshot Report

Updated: August 18, 2013

Natural Gas Overview: Natural Gas Imports

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

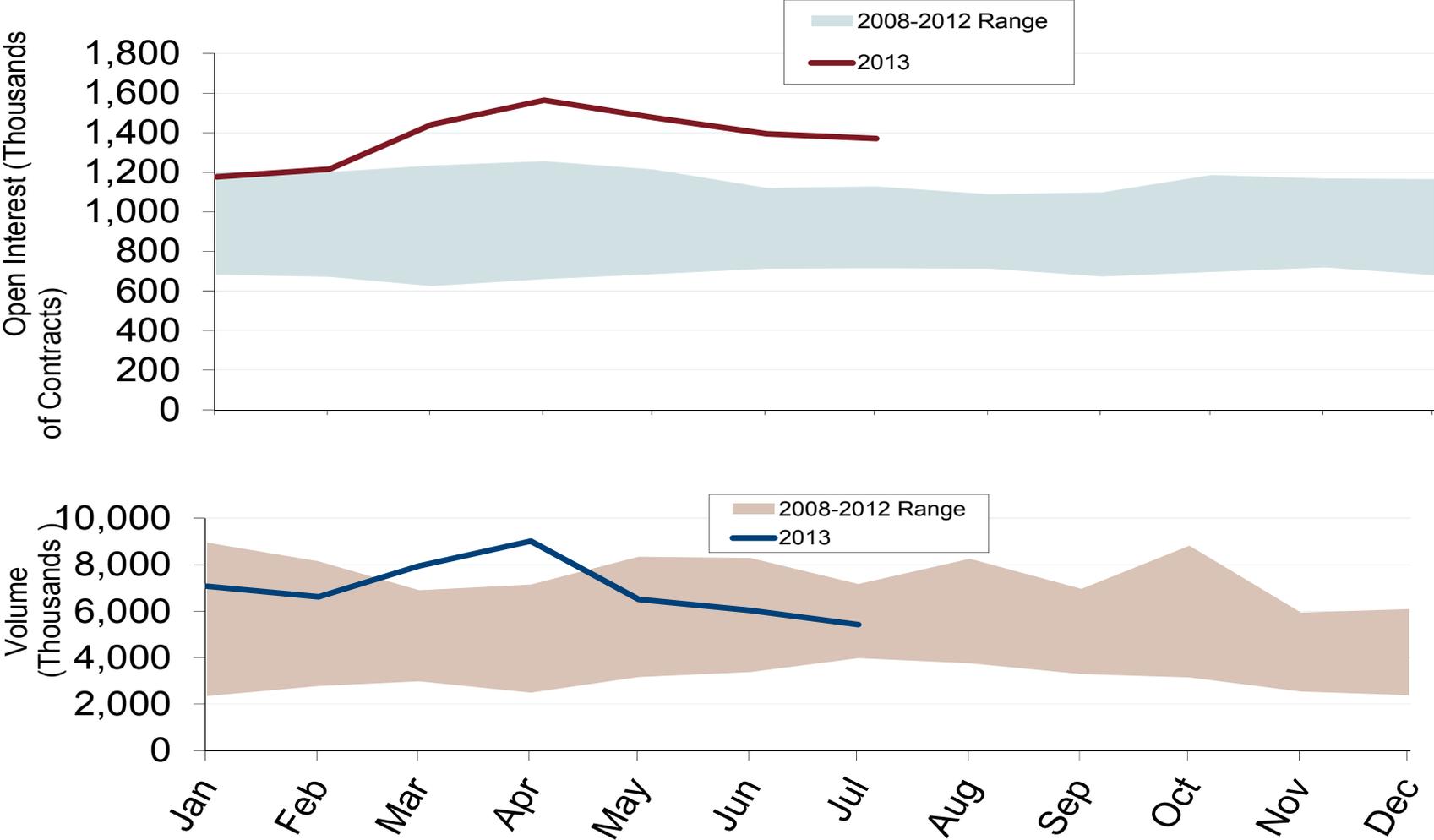
Canadian and LNG Natural Gas Imports Into the U.S.



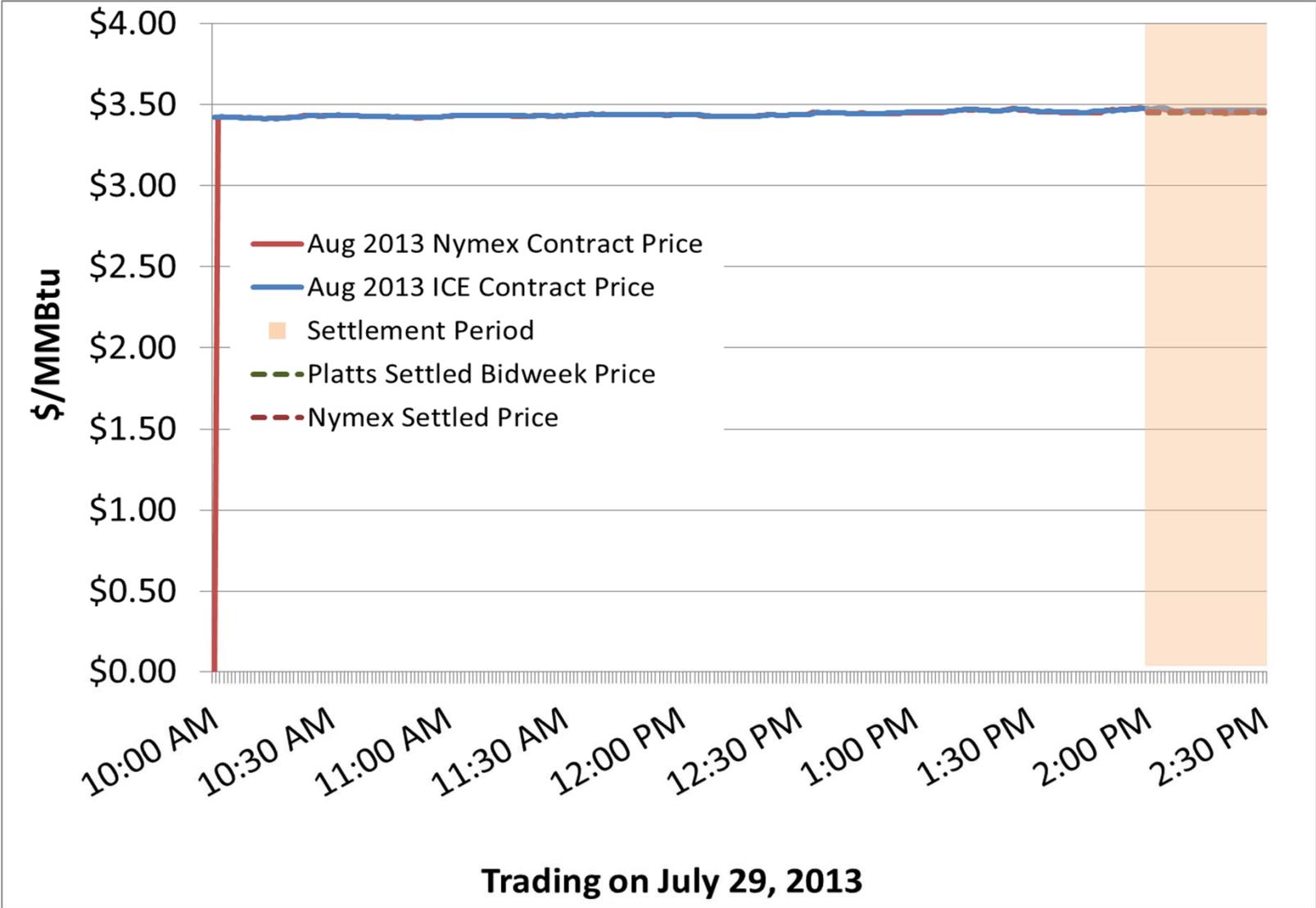
Source: EIA Natural Gas Monthly
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

Nymex NG Futures Month-End Open Interest and Monthly Volume



Nymex and ICE Contract Final Settlement - August 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)

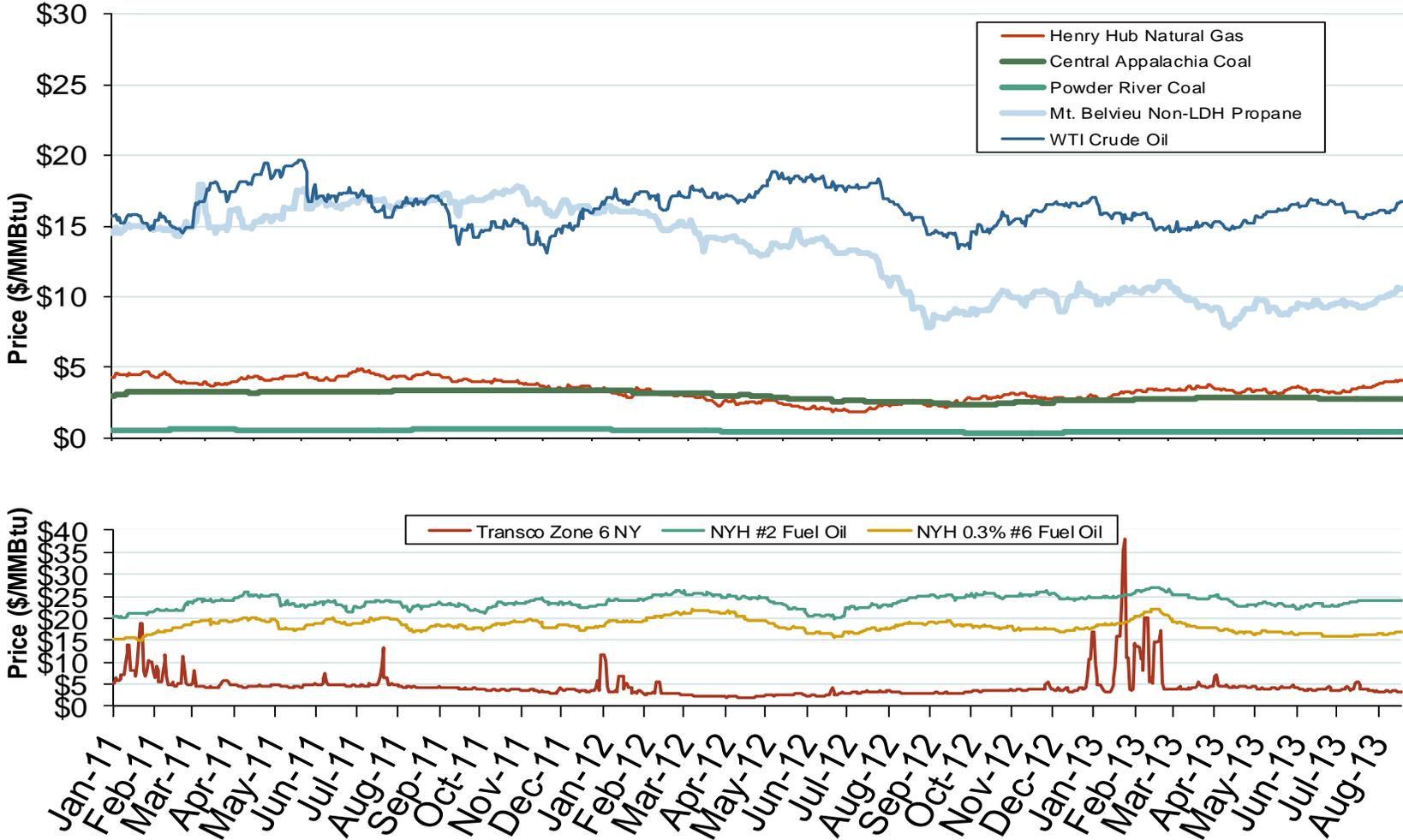
Source: Derived from Nymex and ICE data

Updated: August 15, 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

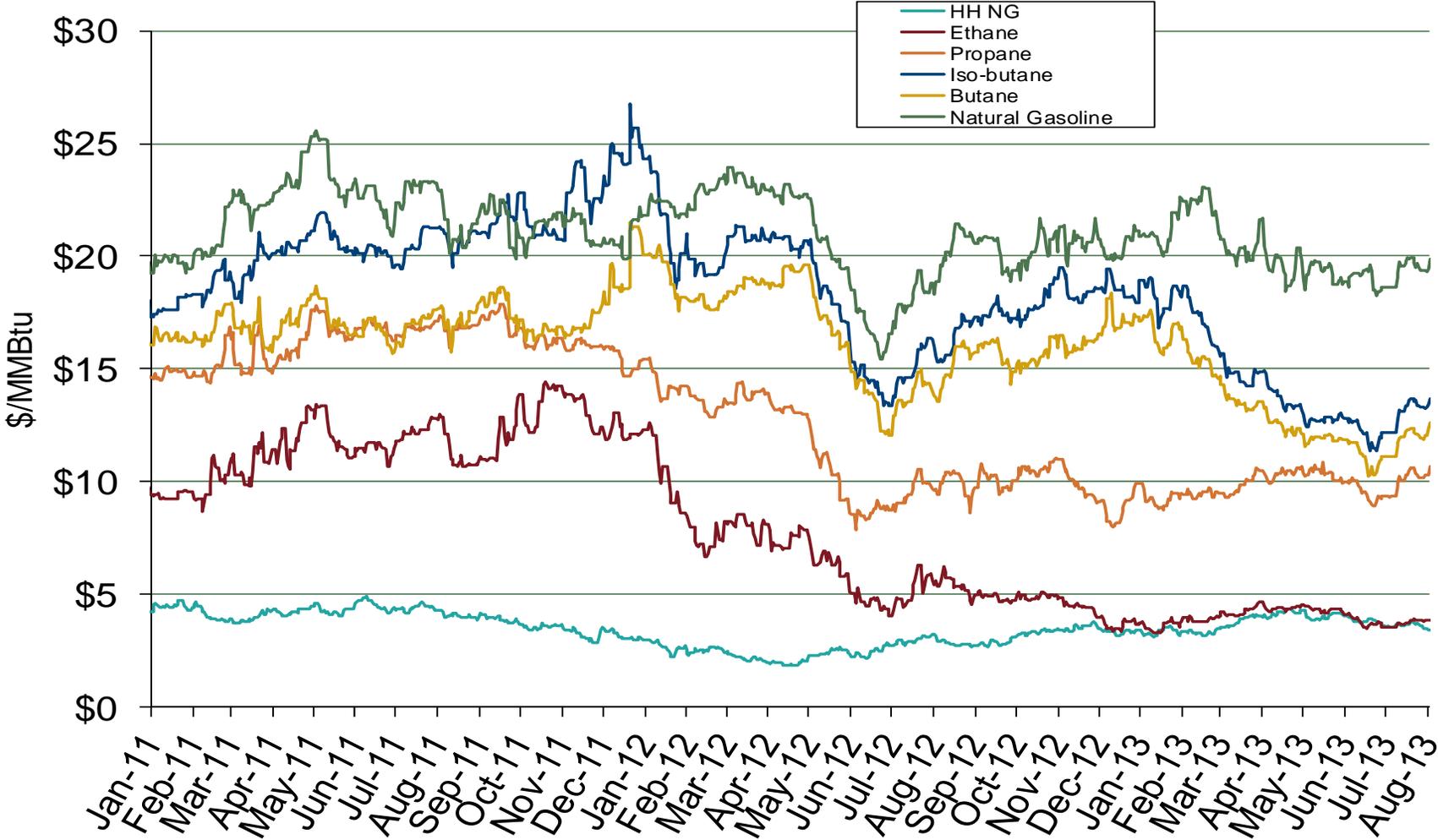
Source: Derived from ICE and Bloomberg data
August 2013 Southeast Snapshot Report

Updated: August 18, 2013

Natural Gas Market Overview: NGL Prices

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

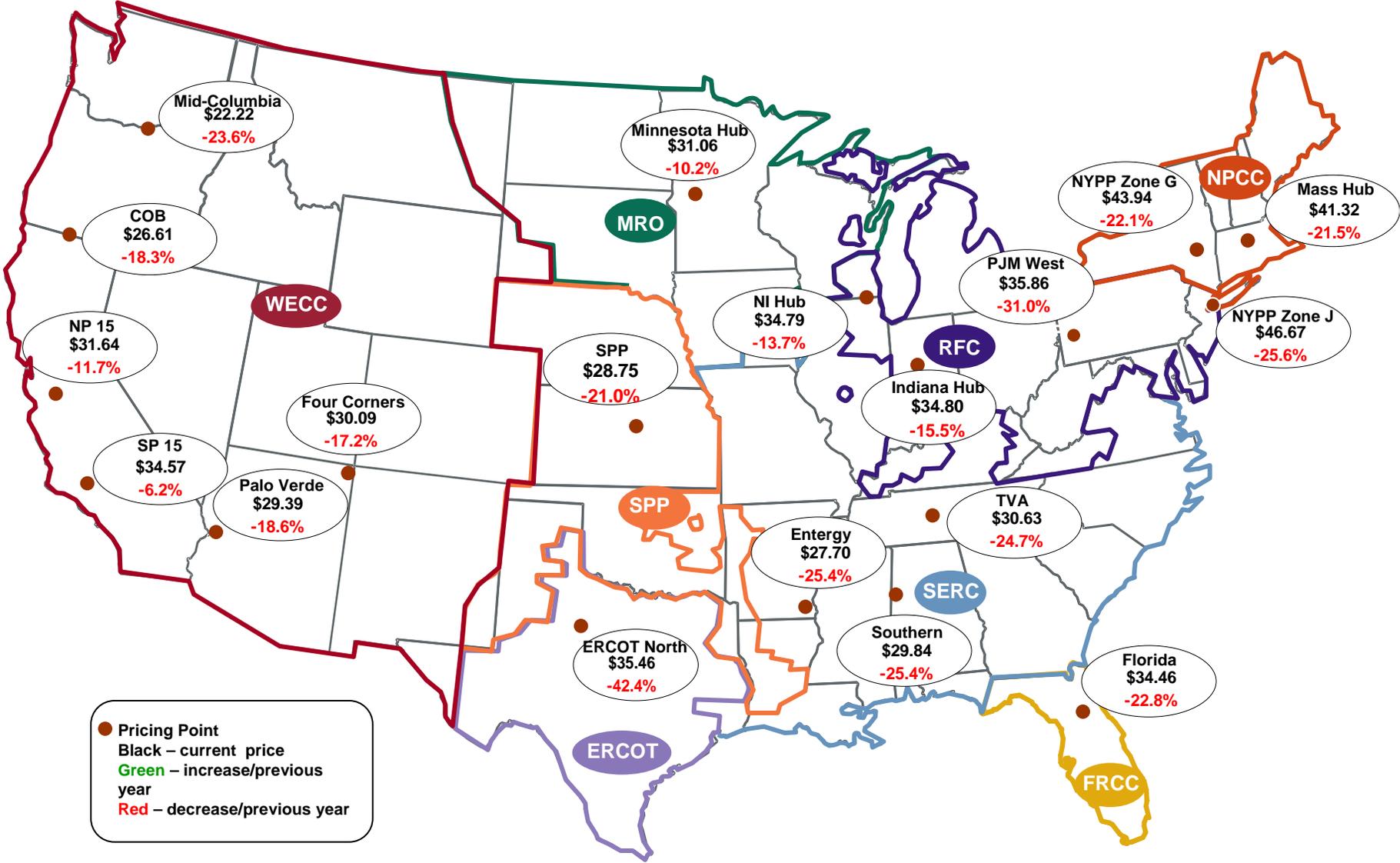
U.S. Natural Gas vs. Natural Gas Liquids (NGL) Prices



Source: Derived from Bloomberg Data
August 2013 Southeast Snapshot Report

Updated: August 18, 2013

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



Source: Derived from *Platts* data.
August 2013 Southeast 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.

August 2013 Southeast Snapshot Report

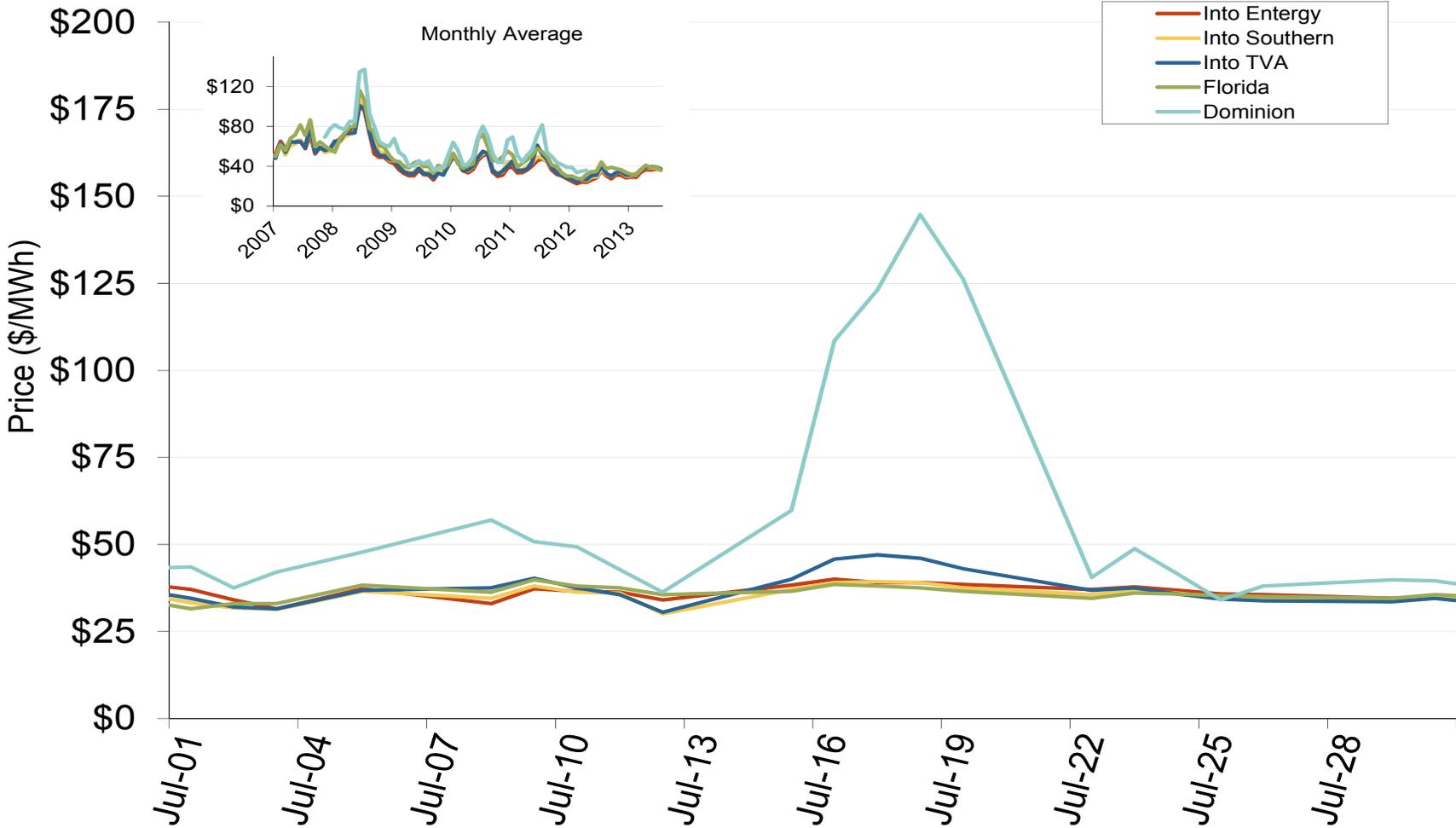
Southeast Annual Average Bilateral Prices

Annual Average Day Ahead On Peak Prices (\$/MWh)						
	2008	2009	2010	2011	2012	5-Year Avg
VACAR	\$70.86	\$36.42	\$43.24	\$44.44	\$32.65	\$45.55
Southern	\$70.13	\$36.58	\$42.61	\$39.97	\$29.83	\$43.86
TVA	\$69.01	\$34.91	\$41.79	\$40.68	\$30.63	\$43.44
Florida	\$74.66	\$40.75	\$50.81	\$44.62	\$34.39	\$49.08
Entergy	\$68.49	\$33.57	\$40.07	\$37.14	\$27.75	\$41.44

Southeast Electric Market: Last Month's Southeastern Index Prices

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

Southeastern Daily Index Day-Ahead On-Peak Prices



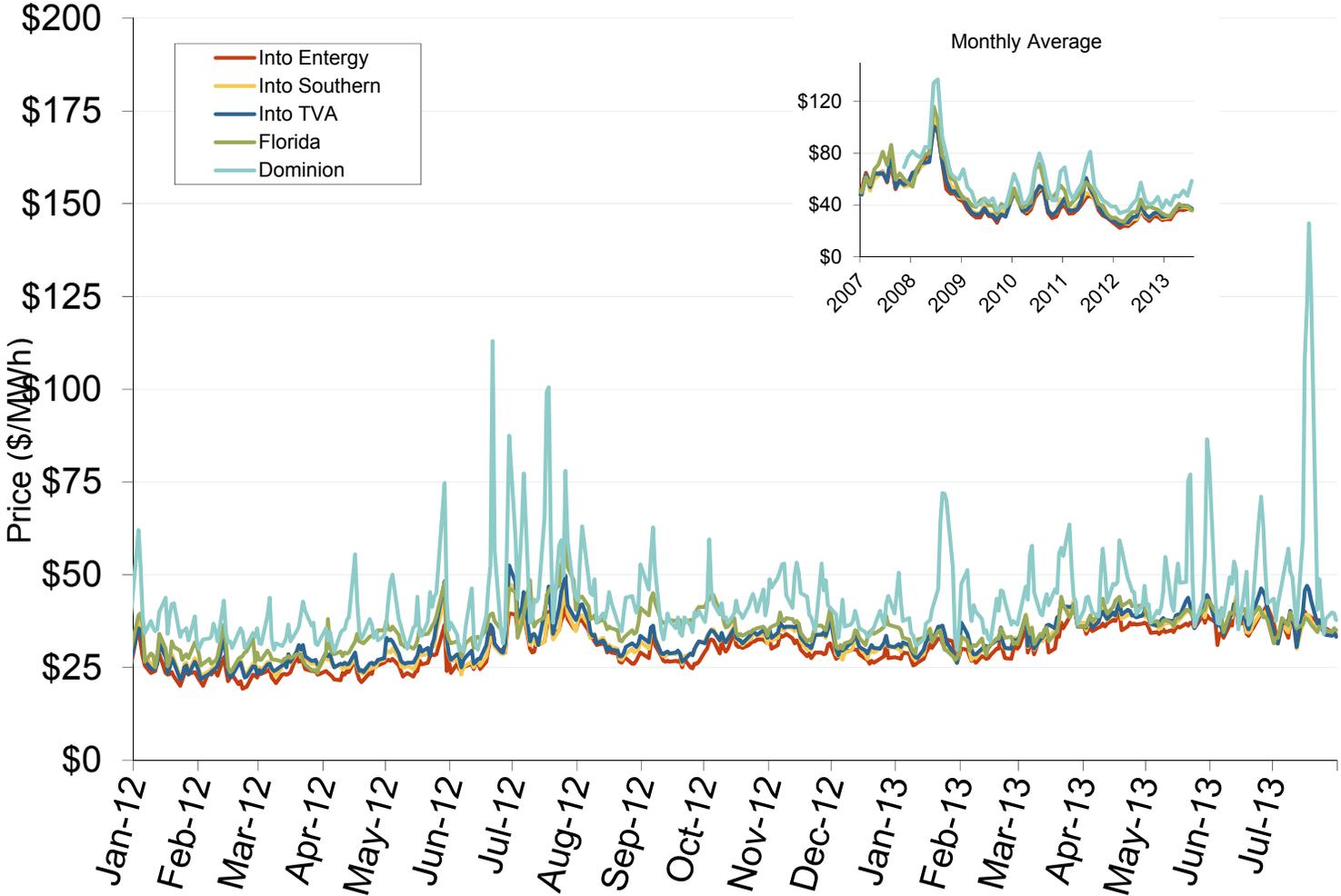
Source: Derived from Platts data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

Southeast Electric Market: Southeastern Index Prices

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

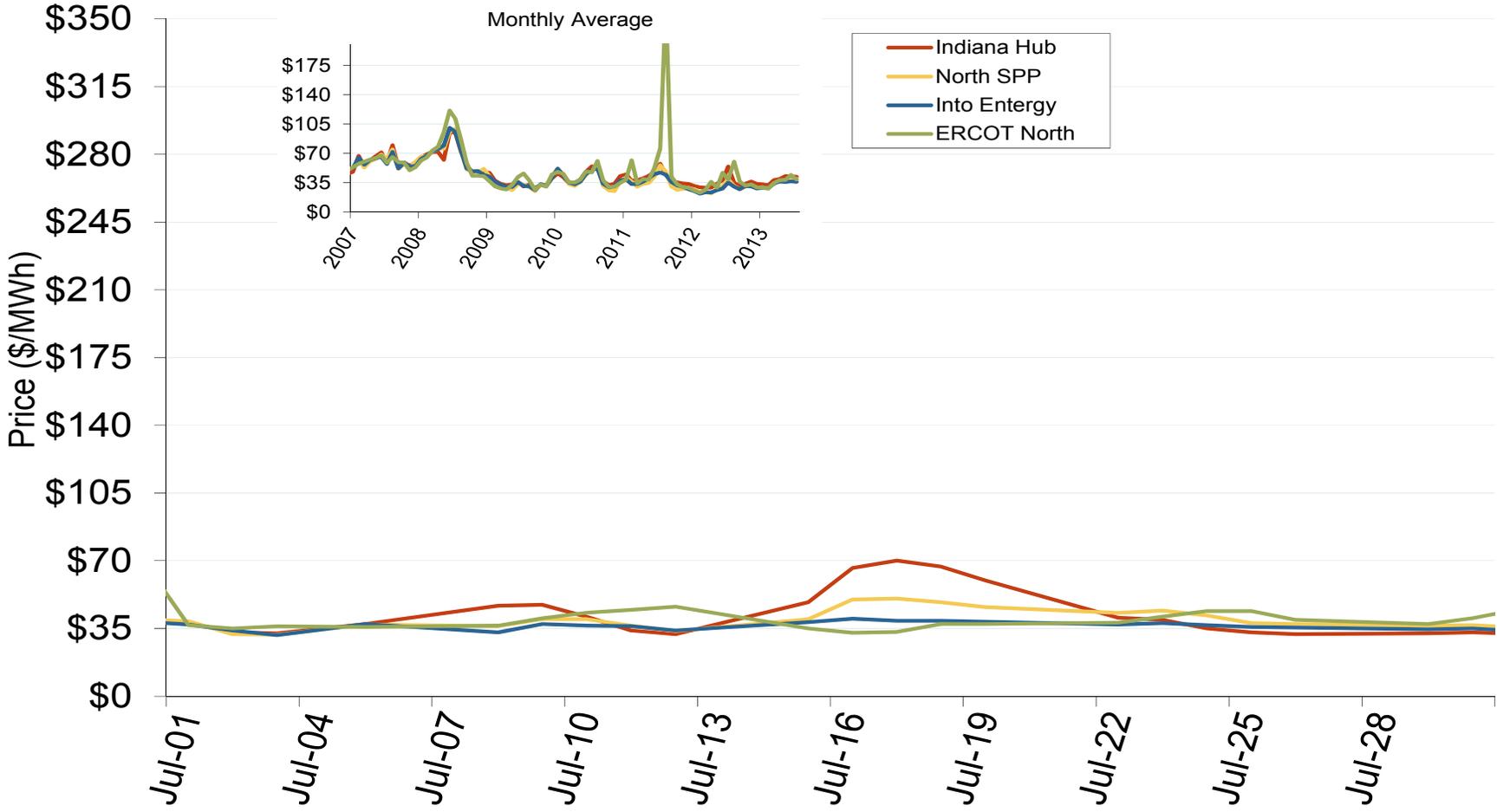
Southeastern Daily Index Day-Ahead On-Peak Prices



Southeast Electric Market: Last Month's Midwestern Index Prices

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Midwestern Daily Index Day-Ahead On-Peak Prices



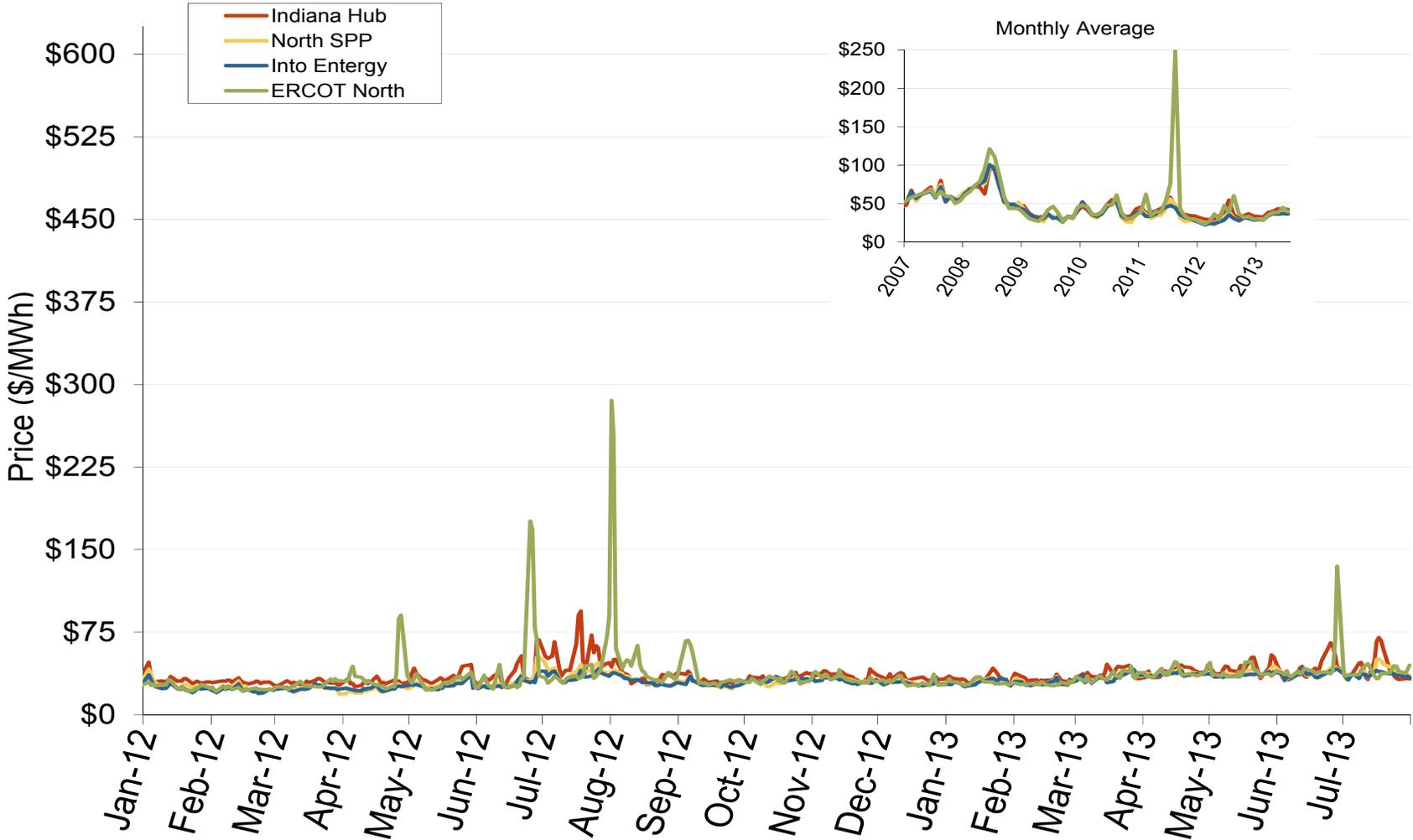
Source: Derived from Platts data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

Southeast Electric Market: Midwestern Index Prices

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

Midwestern Daily Index Day-Ahead On-Peak Prices



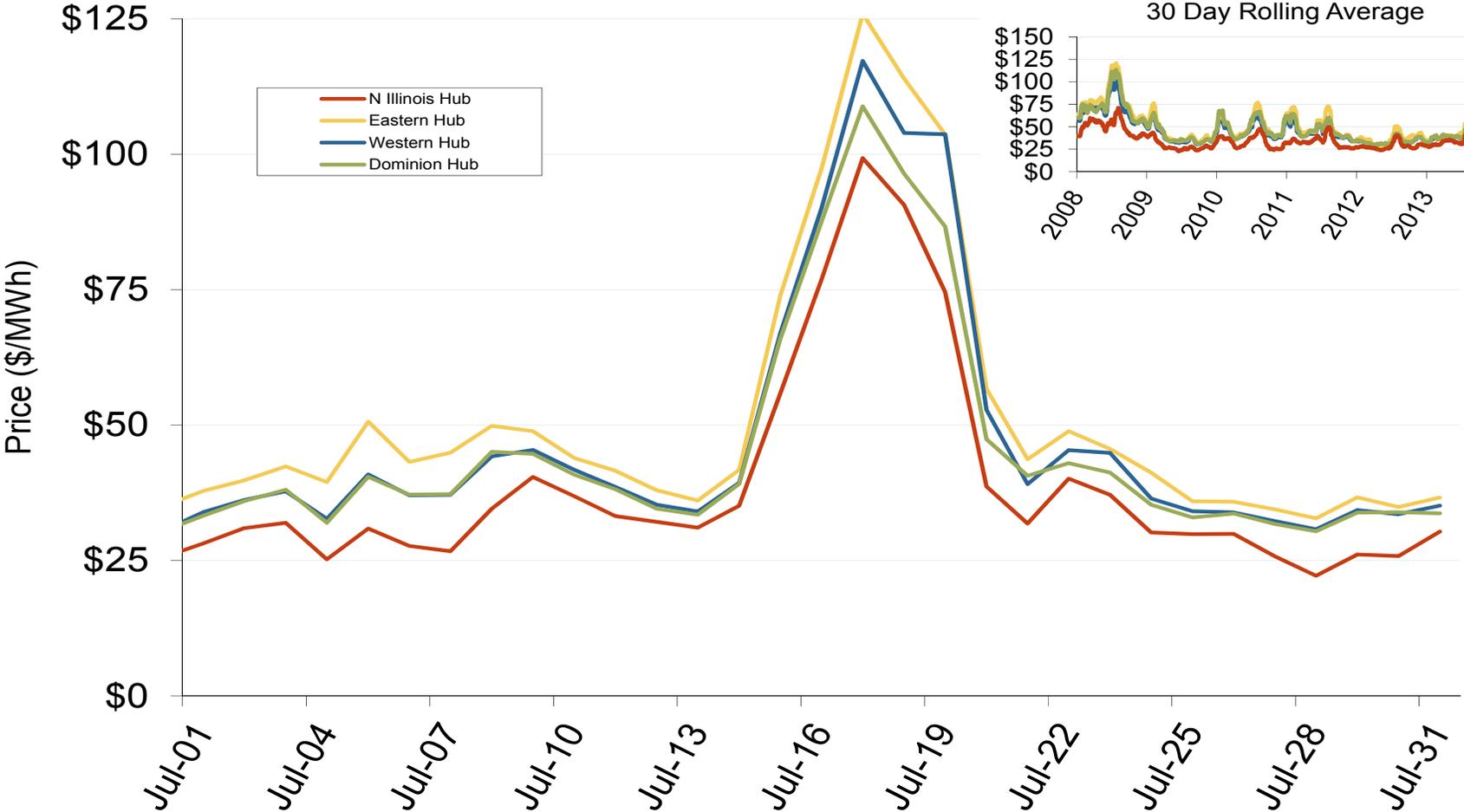
Source: Derived from Platts data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

PJM Annual Average Bilateral Prices

Annual Average Day Ahead On Peak Prices (\$/MWh)						
	2008	2009	2010	2011	2012	5-Year Avg
Mass Hub	\$91.55	\$46.24	\$56.18	\$52.64	\$42.06	\$57.75
Ny Zone G	\$100.99	\$49.80	\$59.48	\$56.41	\$44.35	\$62.22
NY Zone J	\$112.63	\$55.77	\$65.76	\$62.71	\$46.95	\$68.79
NY Zone A	\$68.34	\$35.54	\$43.89	\$41.52	\$35.82	\$45.03
PJM West	\$83.70	\$44.60	\$53.68	\$51.99	\$40.86	\$54.98

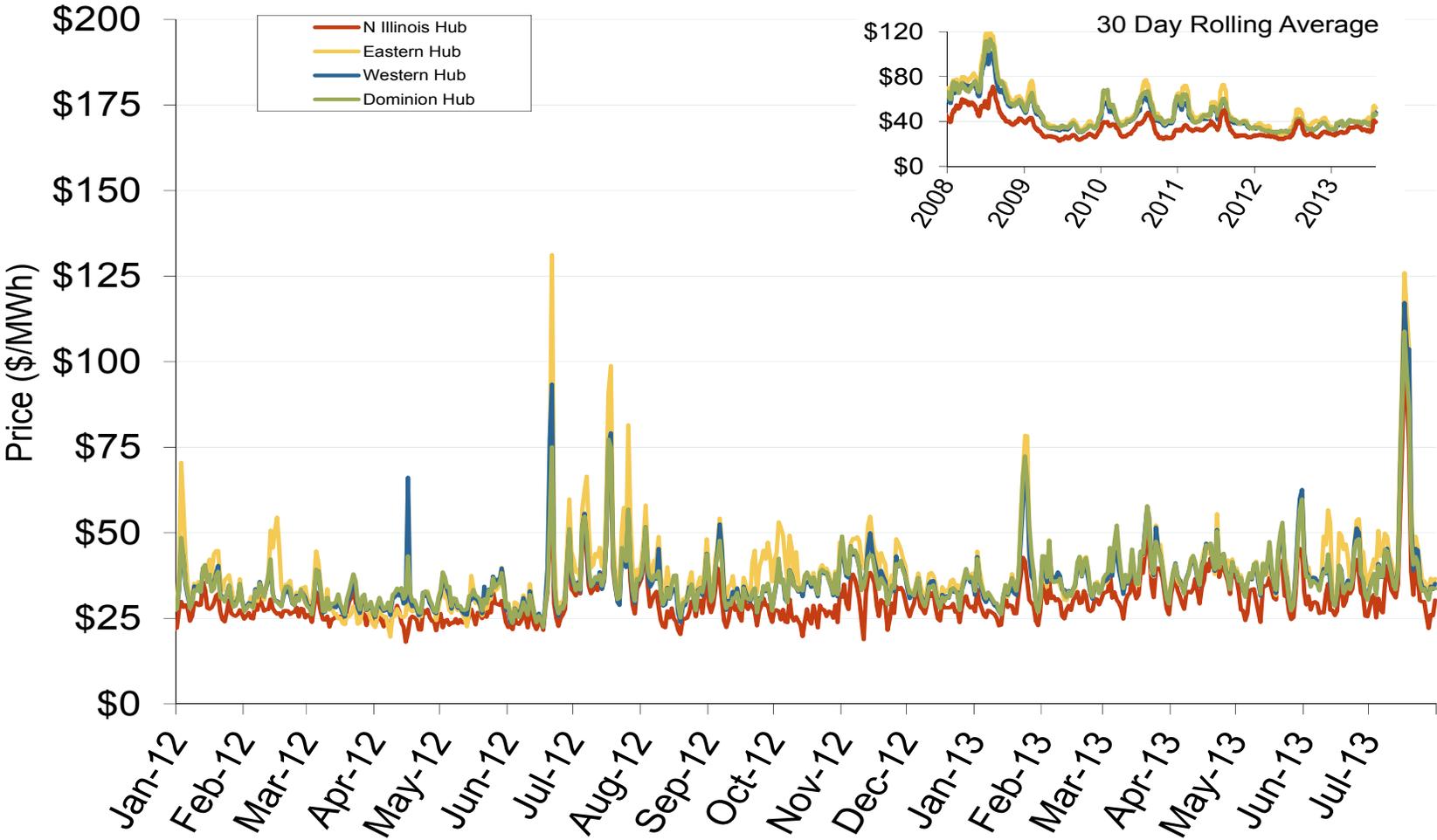
Daily Average of PJM Day-Ahead Prices - All Hours



Source: Derived from Bloomberg data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

Daily Average of PJM Day-Ahead Prices - All Hours



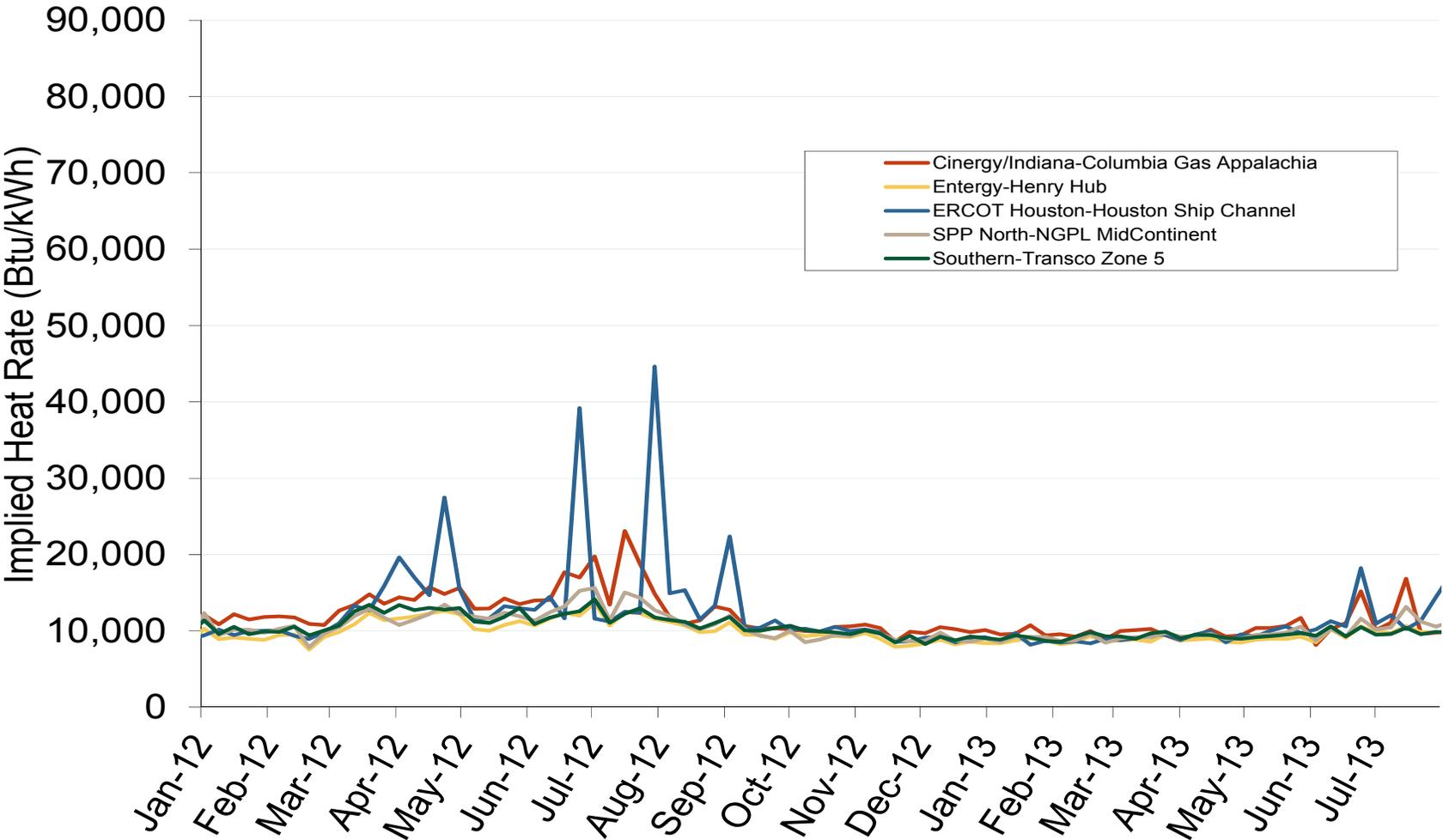
Source: Derived from *Bloomberg* data
August 2013 Southeast Snapshot Report

Updated: August 09, 2013

Southeast Electric Market: South Central Implied Heat Rates

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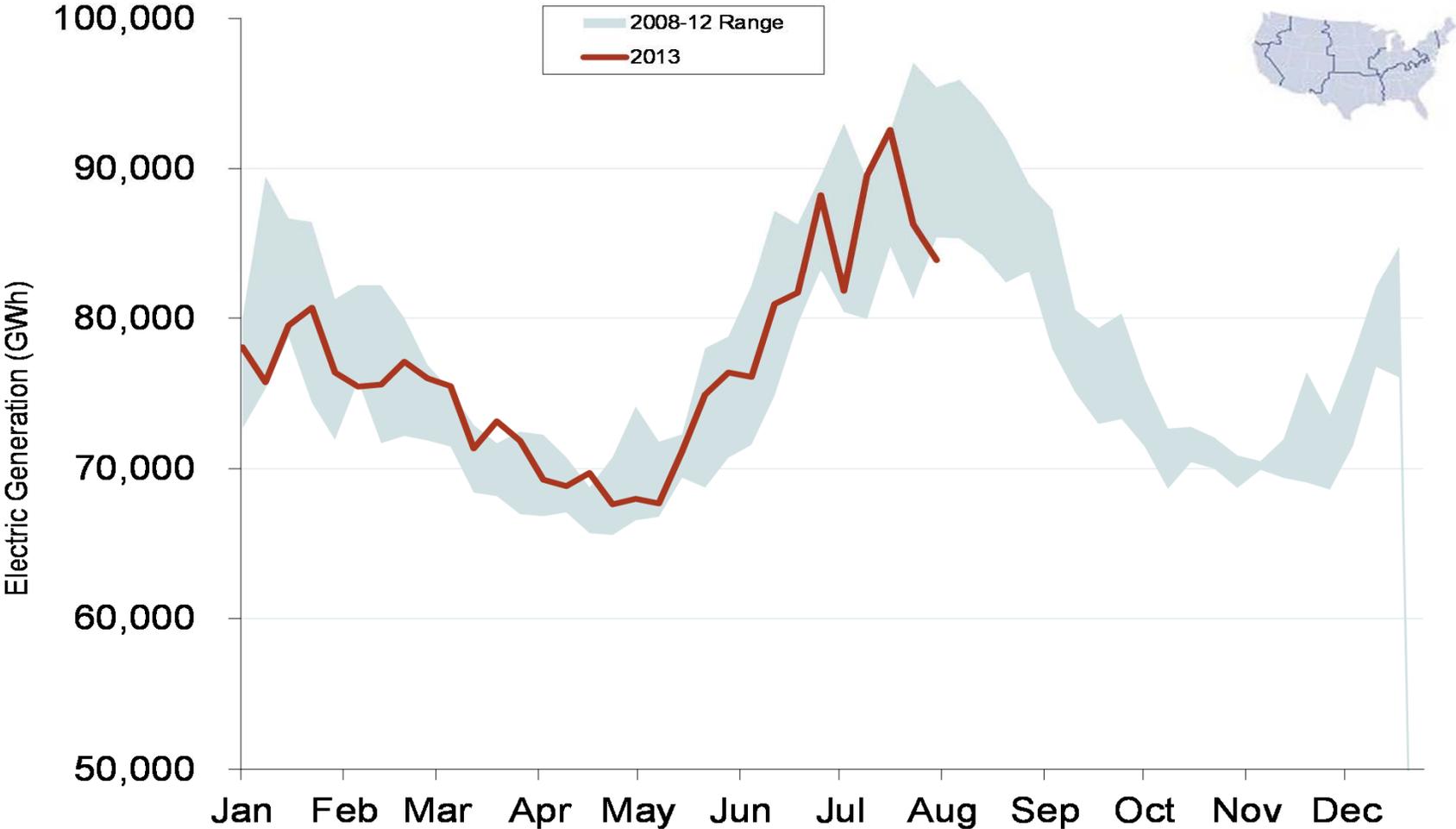
Implied Heat Rates at South Central Trading Points - Weekly Avgs.



Source: Derived from Platts on-peak electric and natural gas price data
August 2013 Southeast Snapshot Report

Updated: August 06, 2013

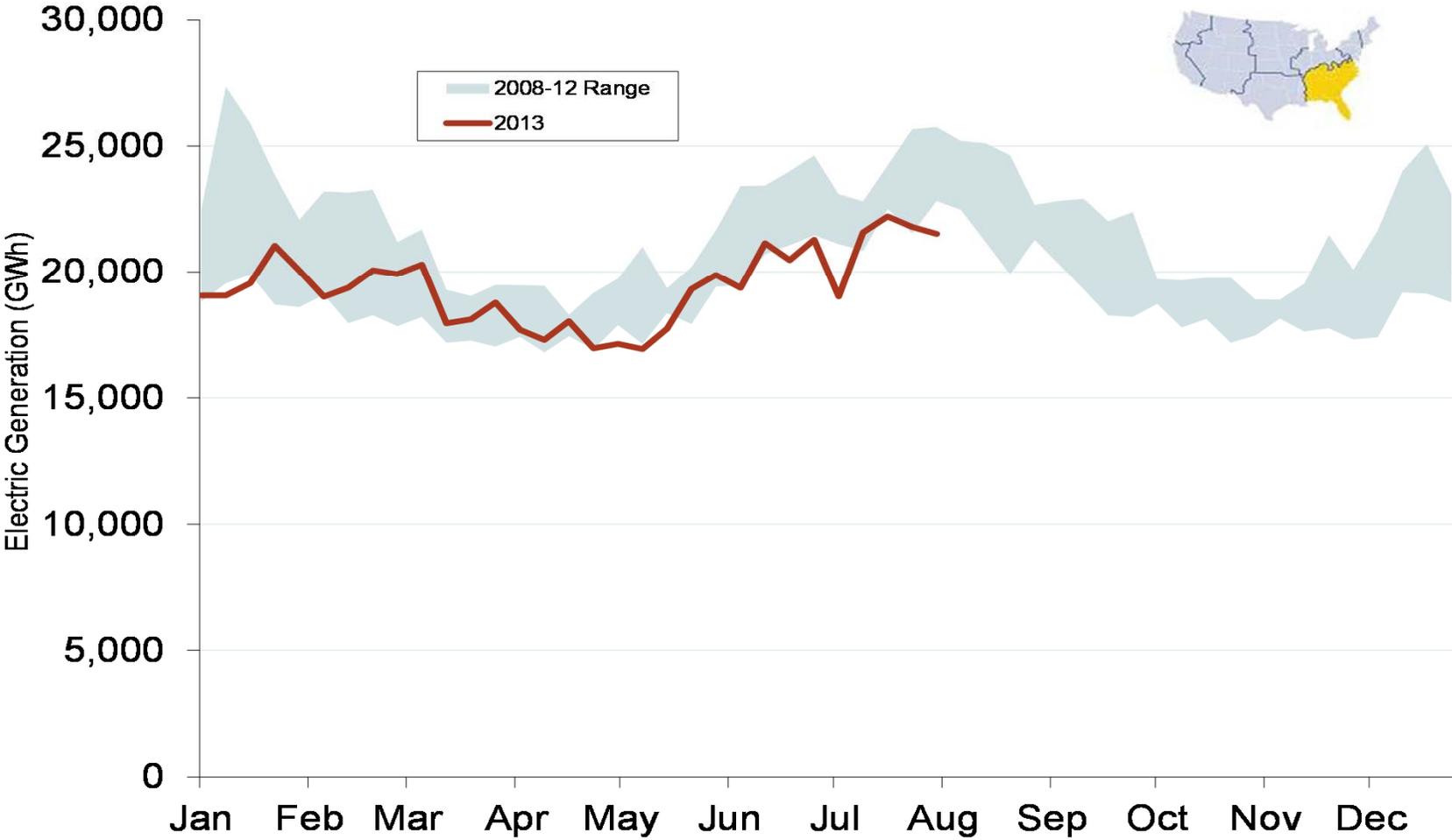
Weekly U.S. Electric Generation Output



Source: Derived from *EEI* data
August 2013 Southeast Snapshot Report

Updated: August 15, 2013

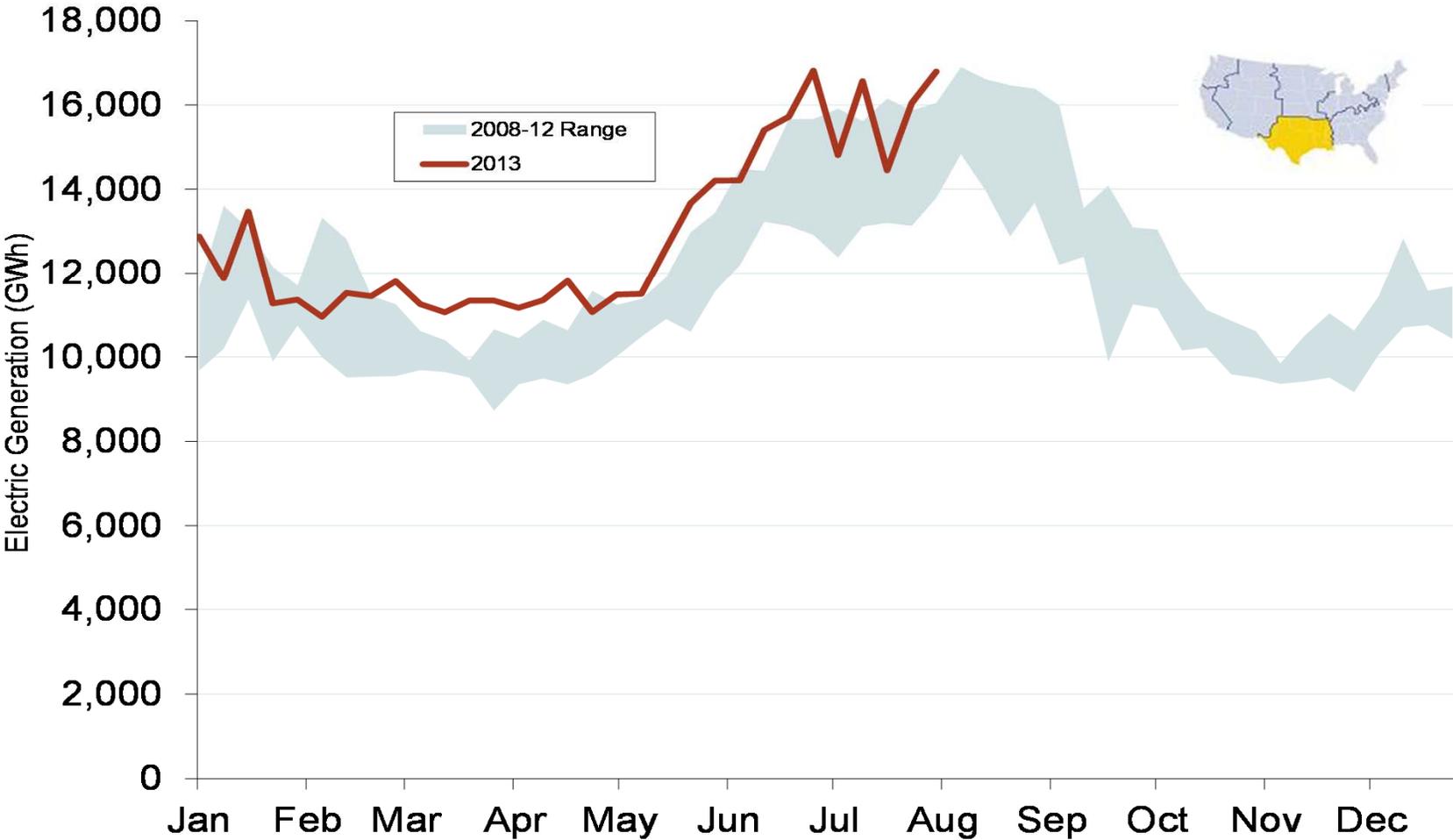
Weekly Generation Output - Southeast



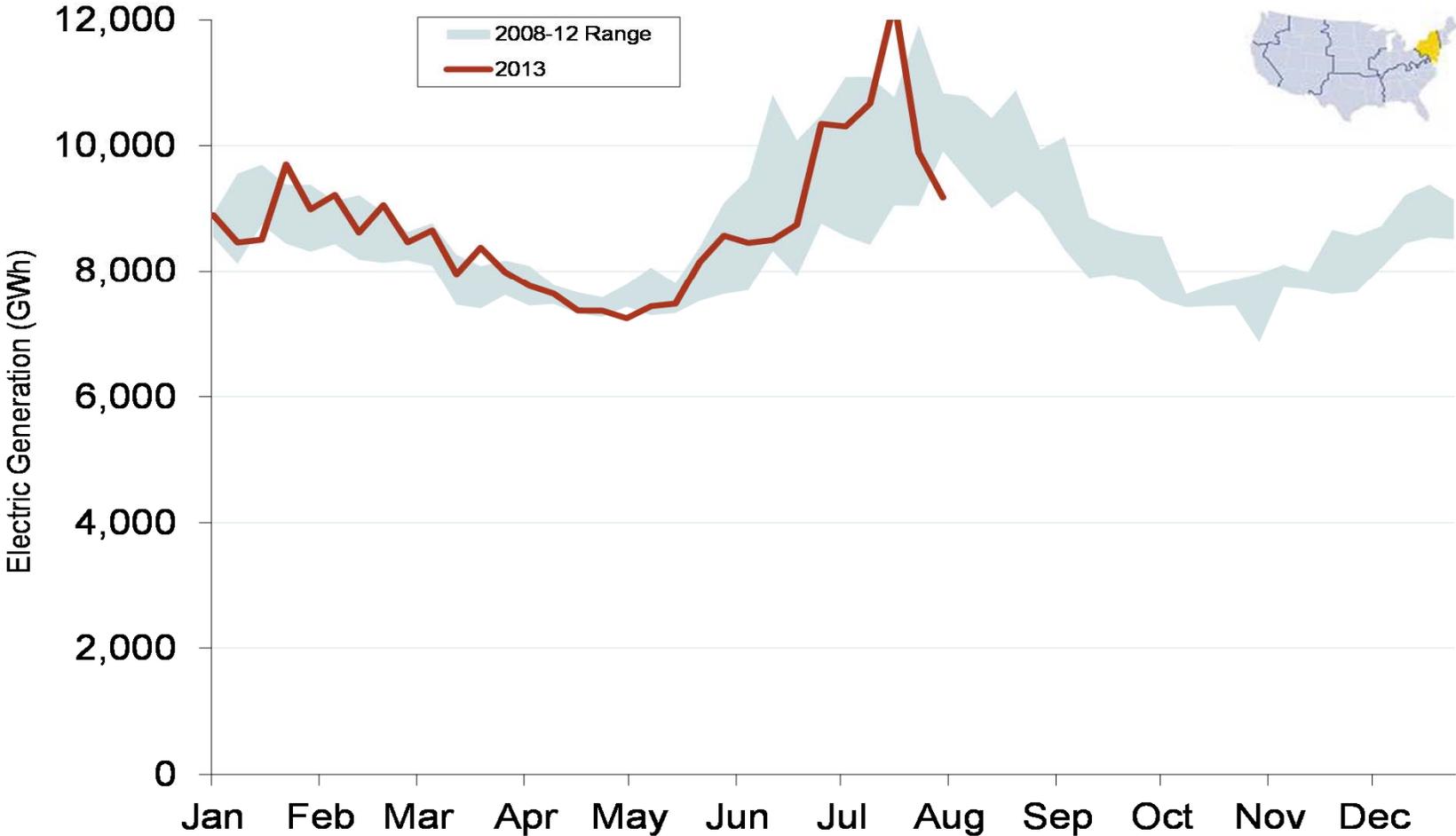
Source: Derived from *EEI* data
August 2013 Southeast Snapshot Report

Updated: August 15, 2013

Weekly Generation Output - South Central



Weekly Generation Output - Mid Atlantic



Monthly Southeastern Hydroelectric Generation

