OE ENERGY MARKET SNAPSHOT

West Version – May 2014 Data

Office of Enforcement
Federal Energy Regulatory Commission

June 2014

2014 Summer Assessment

2014 Summer Assessment
http://www.ferc.gov/market-oversight/reports-analyses/mkt-views/2014/05-15-14.pdf

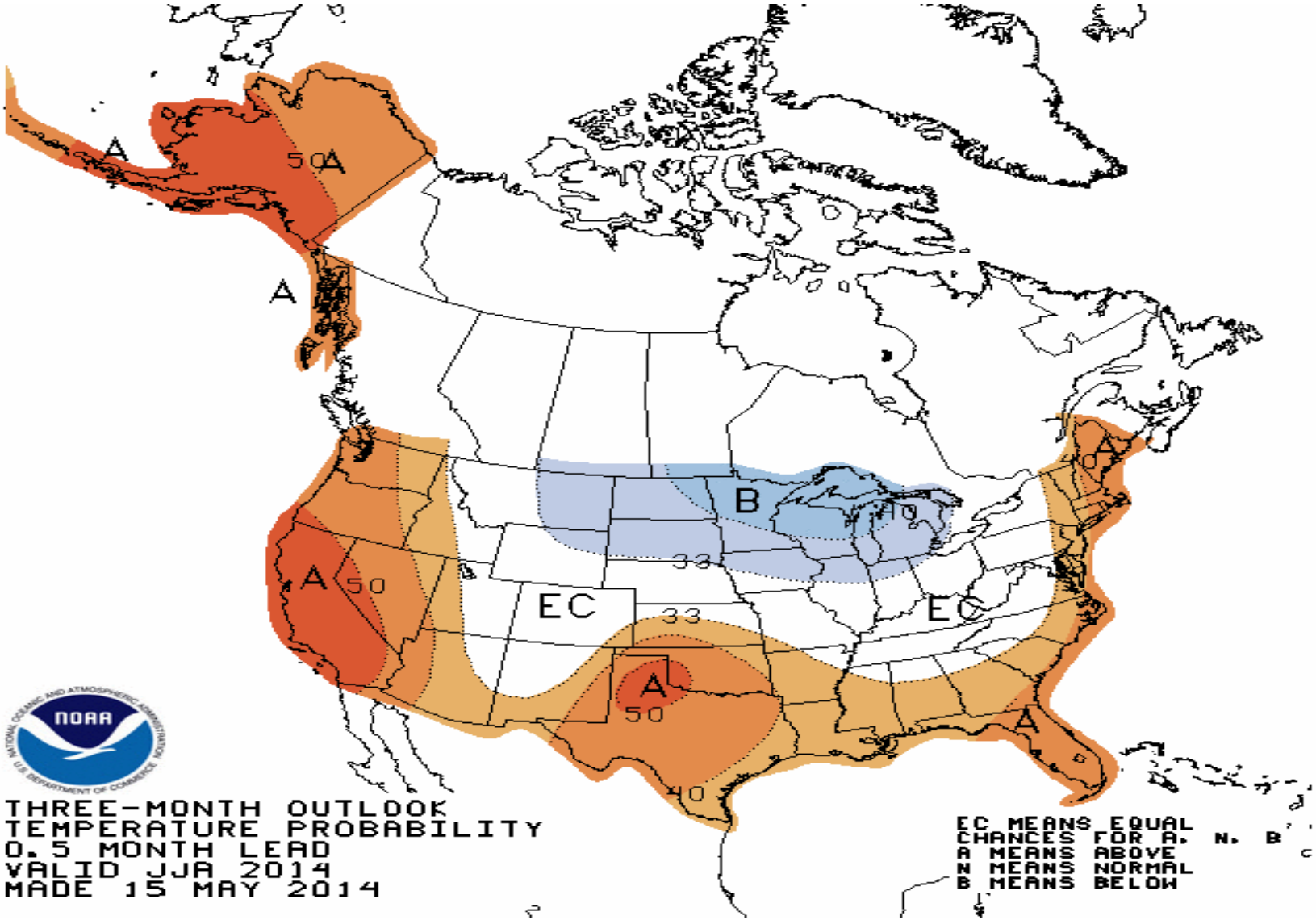
Infrastructure Report

Office of Energy Projects Energy Infrastructure Update
http://www.ferc.gov/legal/staff-reports.asp

(see “Energy Infrastructure” tab)

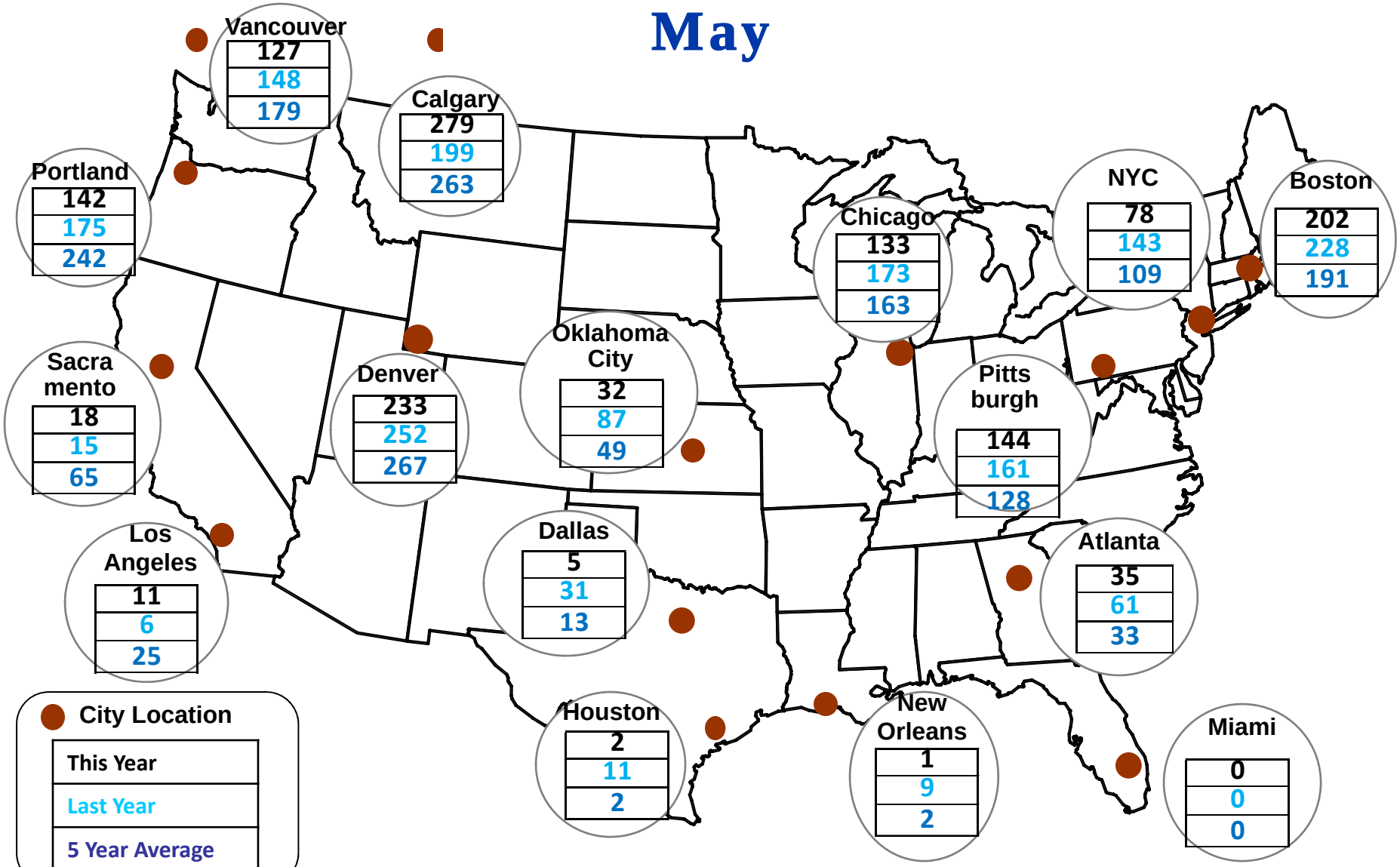
National Slides

NOAA 3 Month Outlook



Cumulative HDDs by City

May

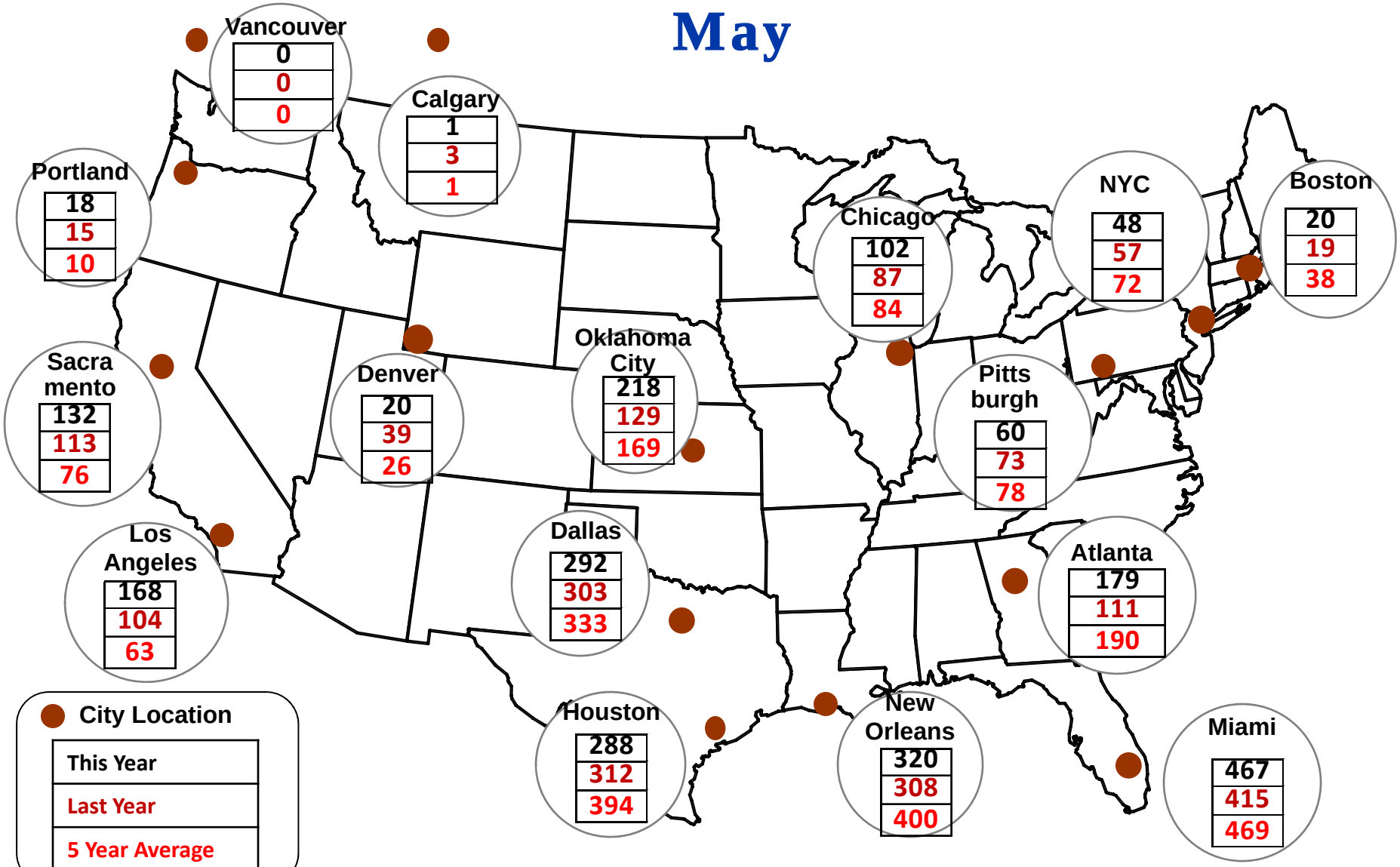


Source: Bloomberg Weather

Updated 6/19/2014

Cumulative CDDs by City

May



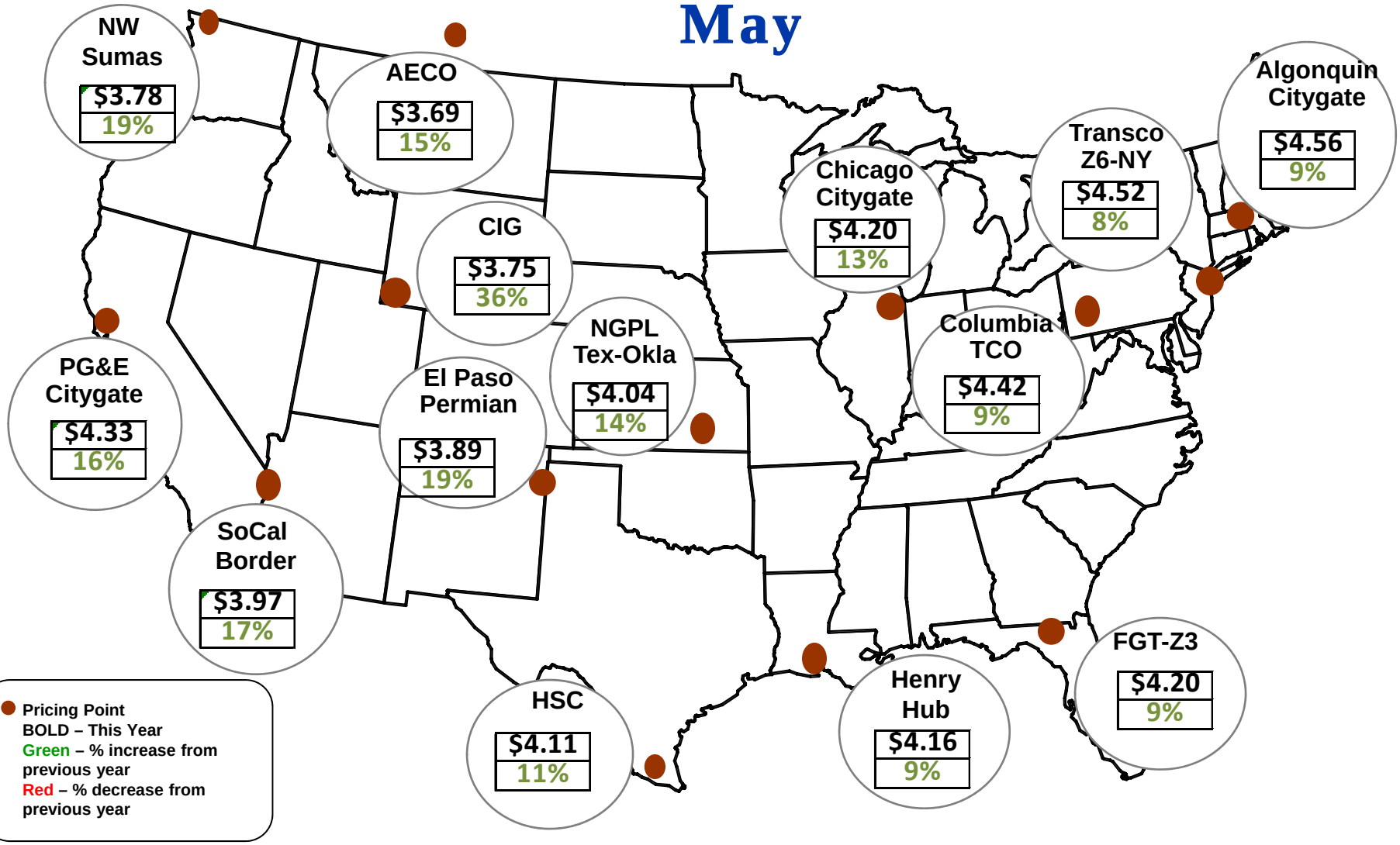
Source: Bloomberg Weather

Updated 6/19/2014

2181

Spot Natural Gas Prices Average ($/MMBtu)

May

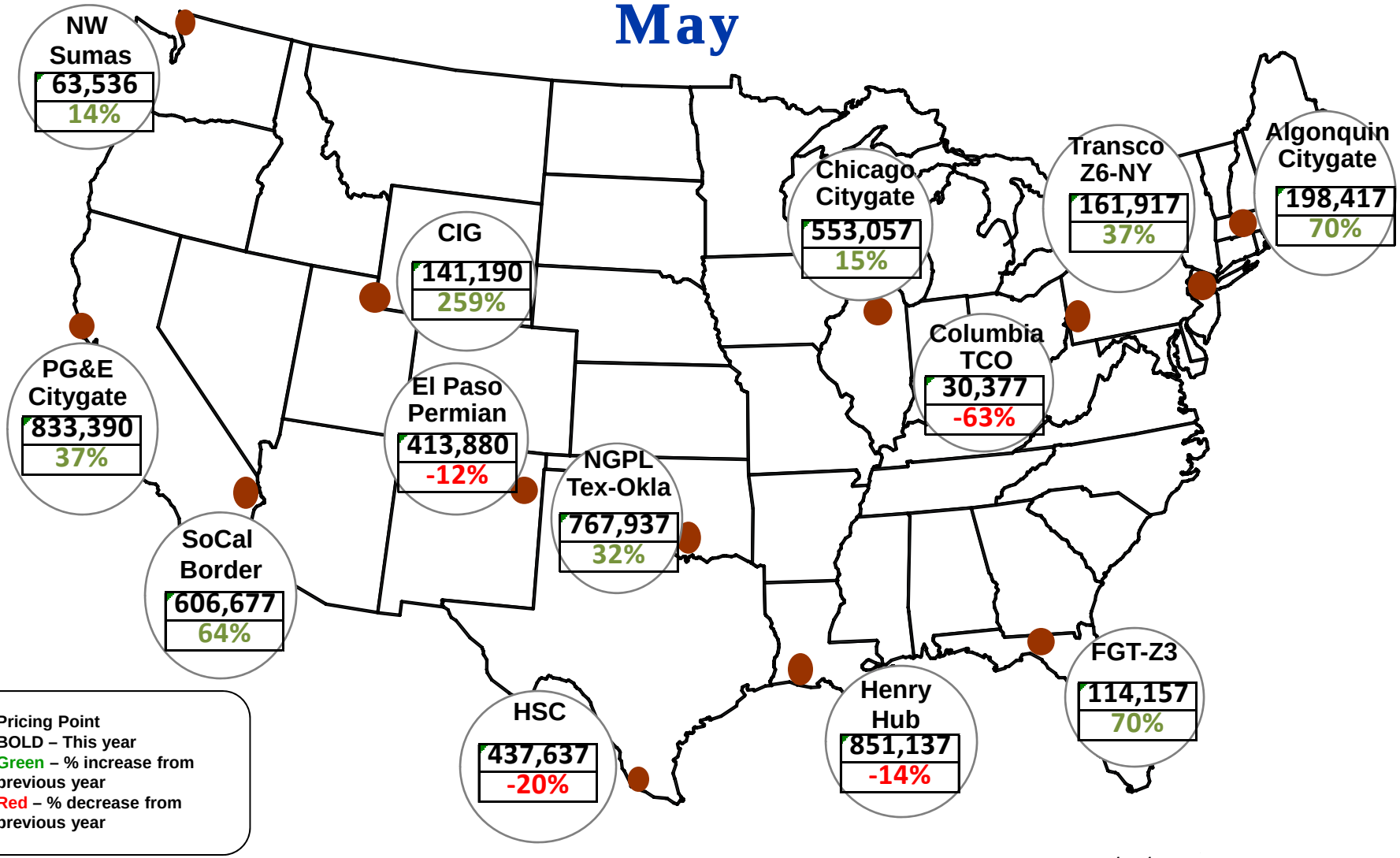


Source: ICE

Updated 6/19/2014

Spot Natural Gas Trading Volumes Average (MMBtus)

May

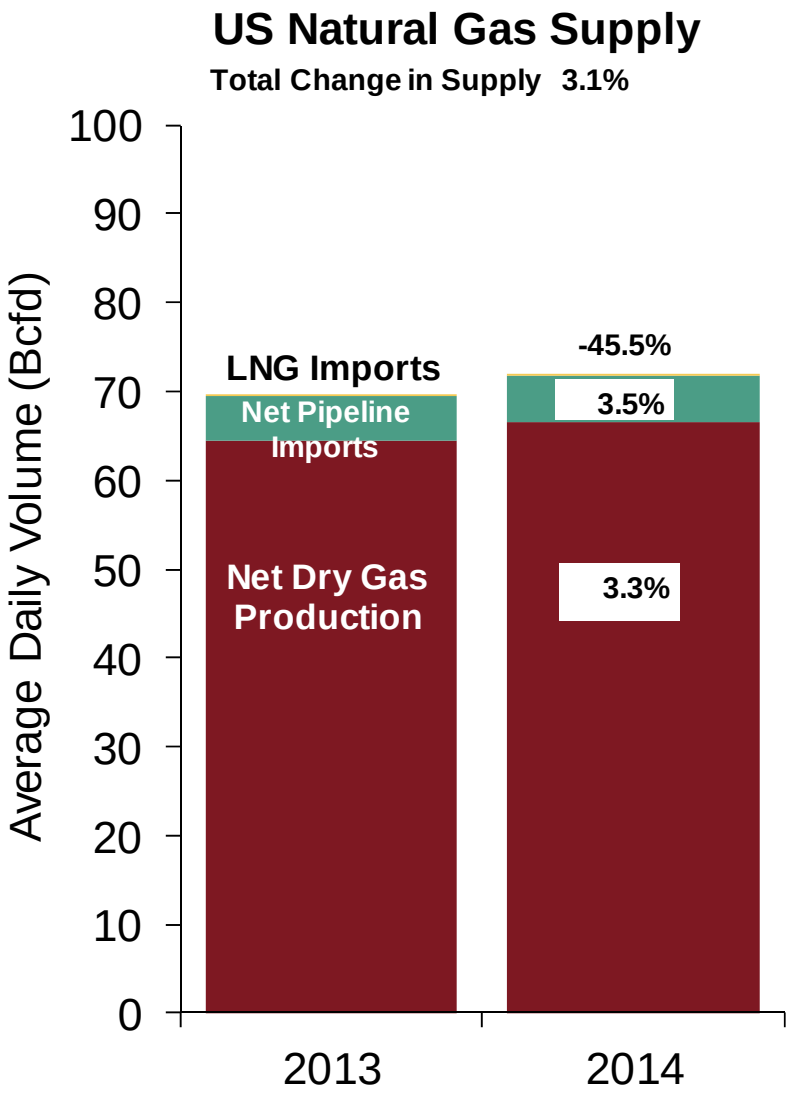


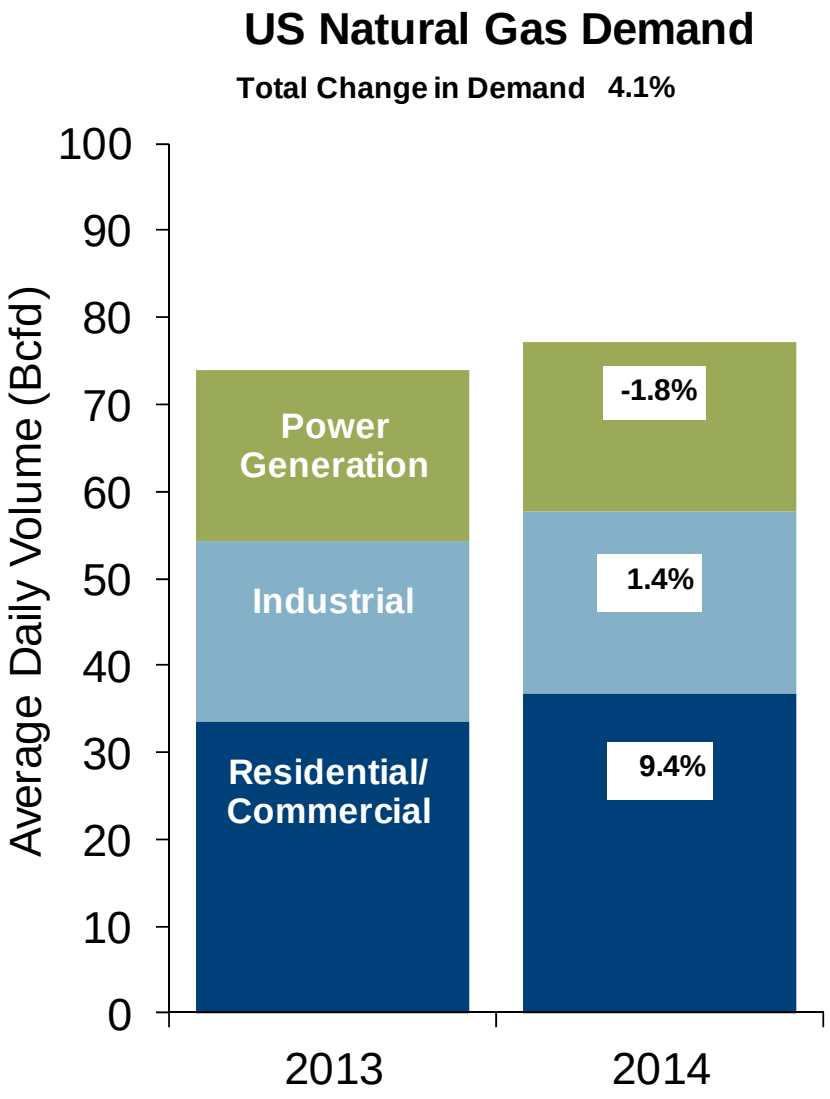
Pricing Point
BOLD – This year
Green – % increase from previous year
Red – % decrease from previous year

Source: ICE

Updated 6/19/2014

U.S. NG Supply and Demand May 2013 vs. May 2014

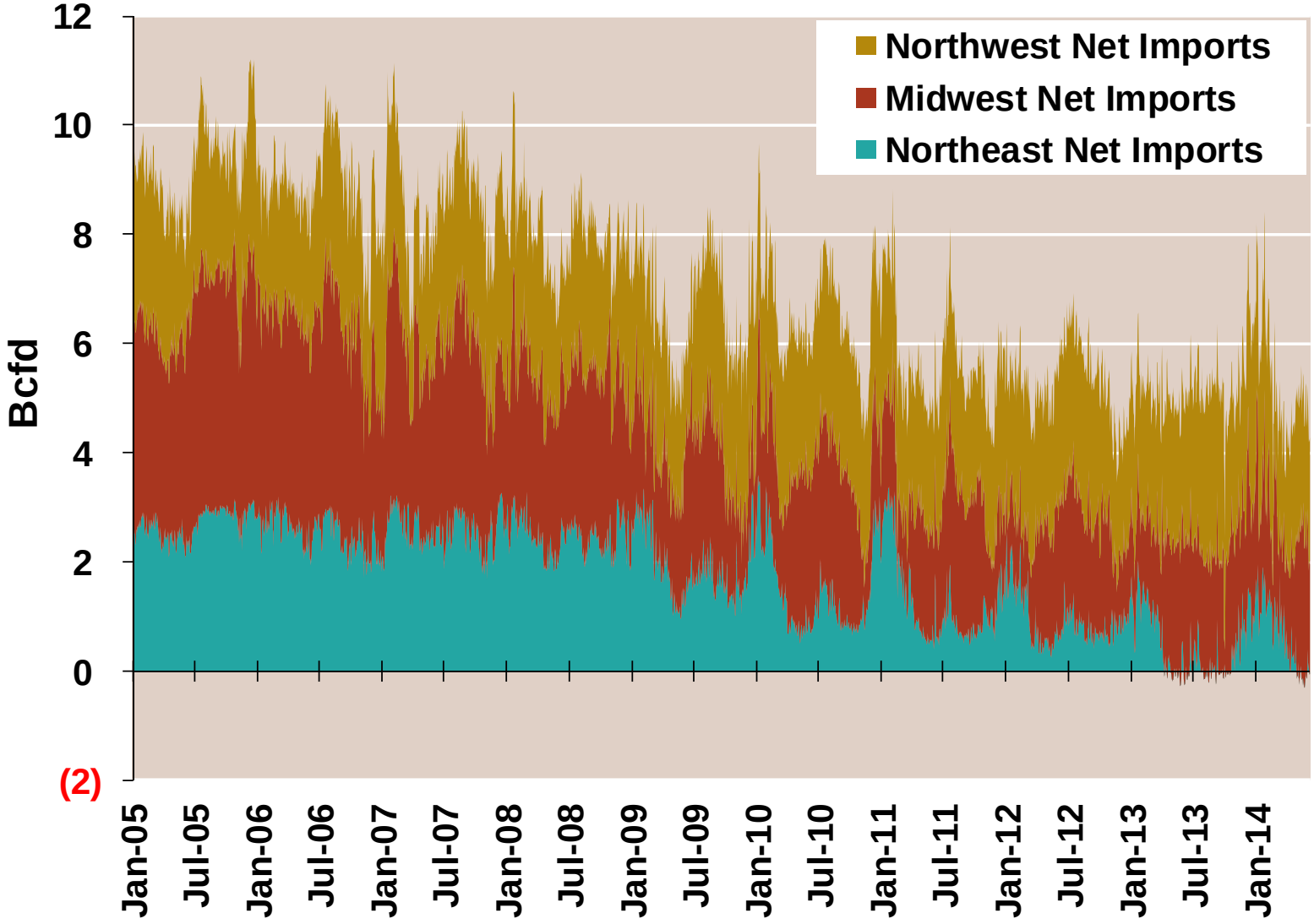




Note: Balance includes all amounts not attributable to other categories.
Source: Derived from *Bentek Energy* data

Updated: June 2014

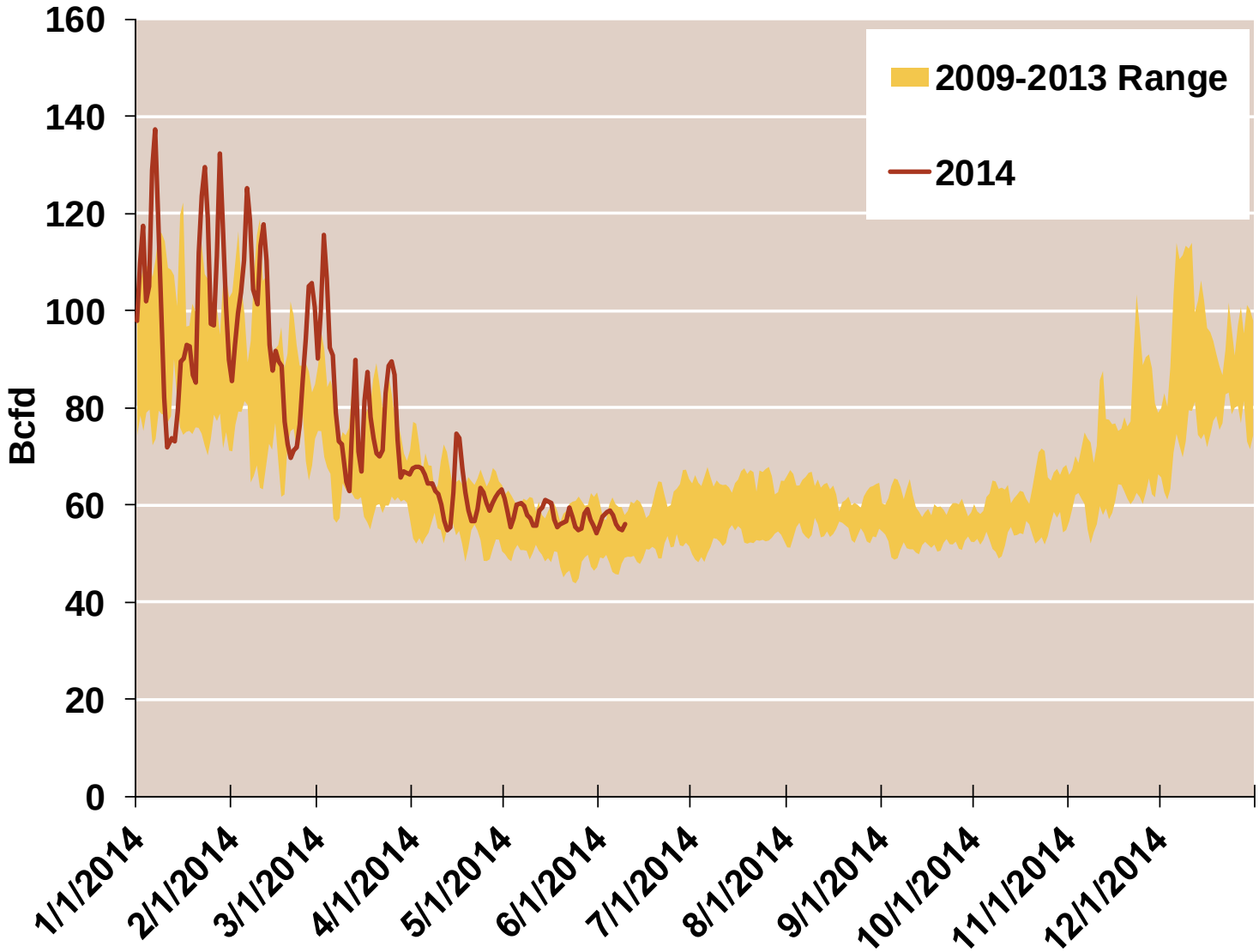
Regional Imports from Canada



Source: Derived from *Bentek Energy* data

Updated: June 2014

Total U.S. Natural Gas Demand All Sectors



Source: Derived from *Bentek Energy* data, derived from interstate pipeline flow and modeled data.

Updated: June 2014

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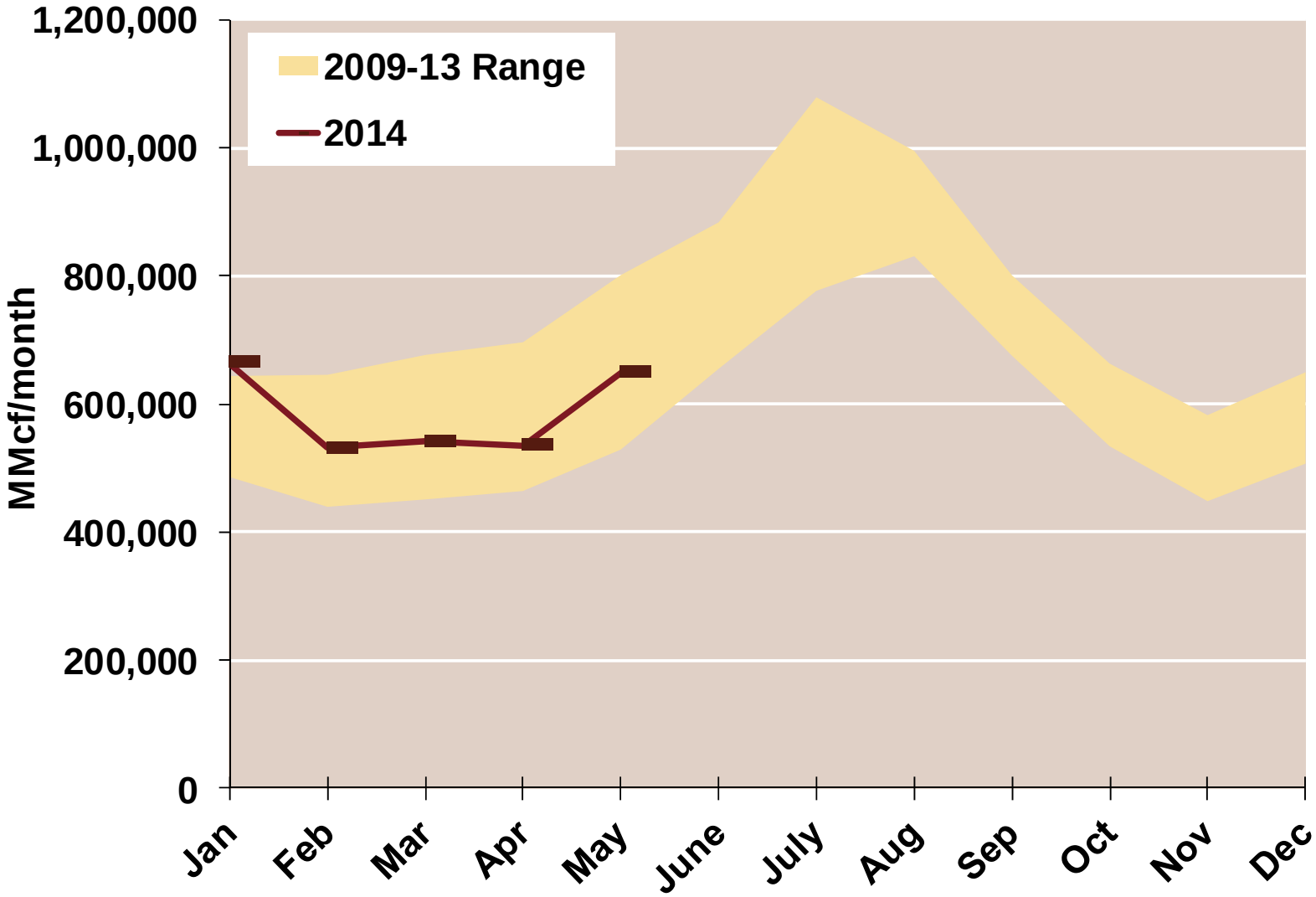
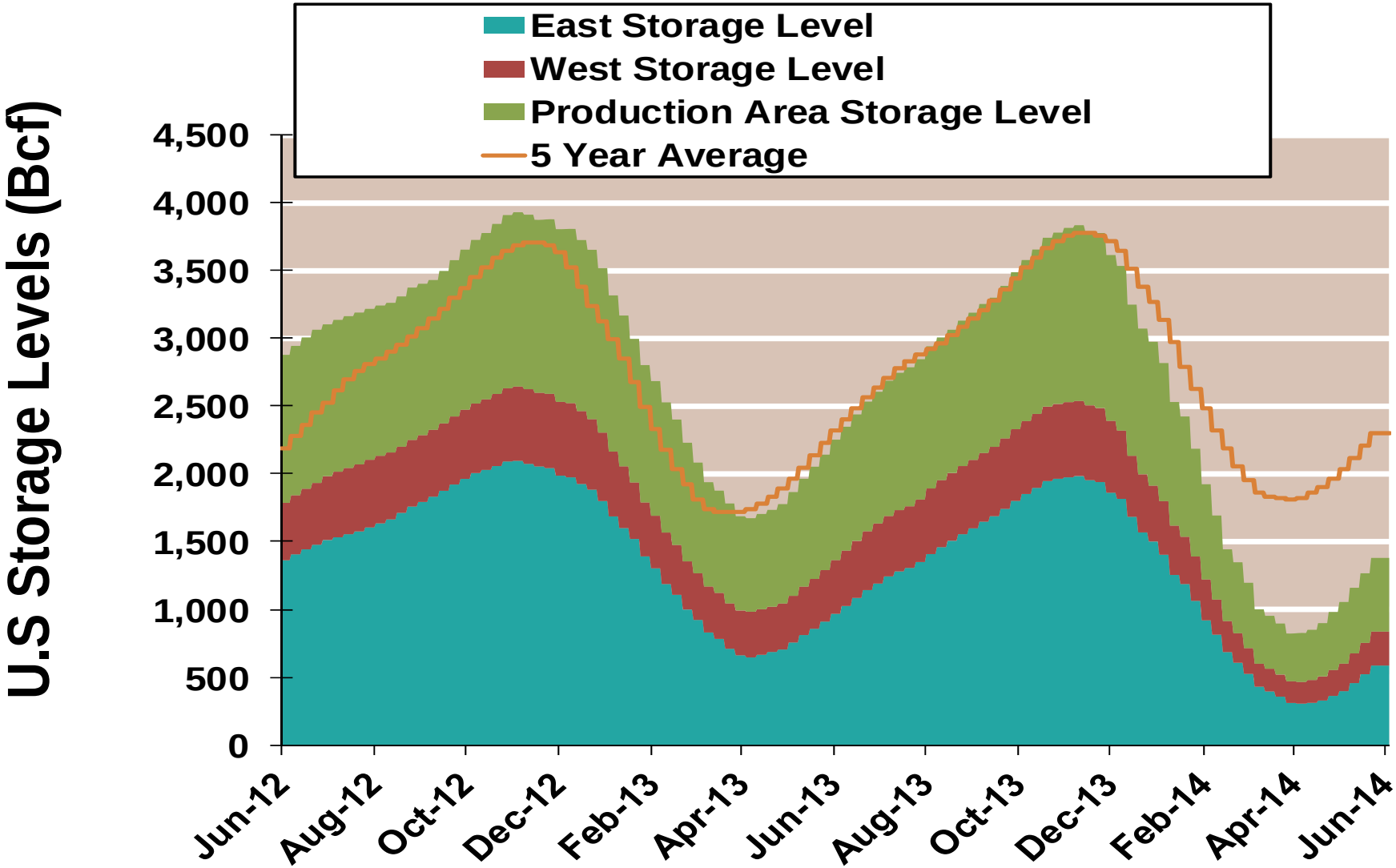
U.S. Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data

Updated: June 2014

EIA National Storage Inventories by Region

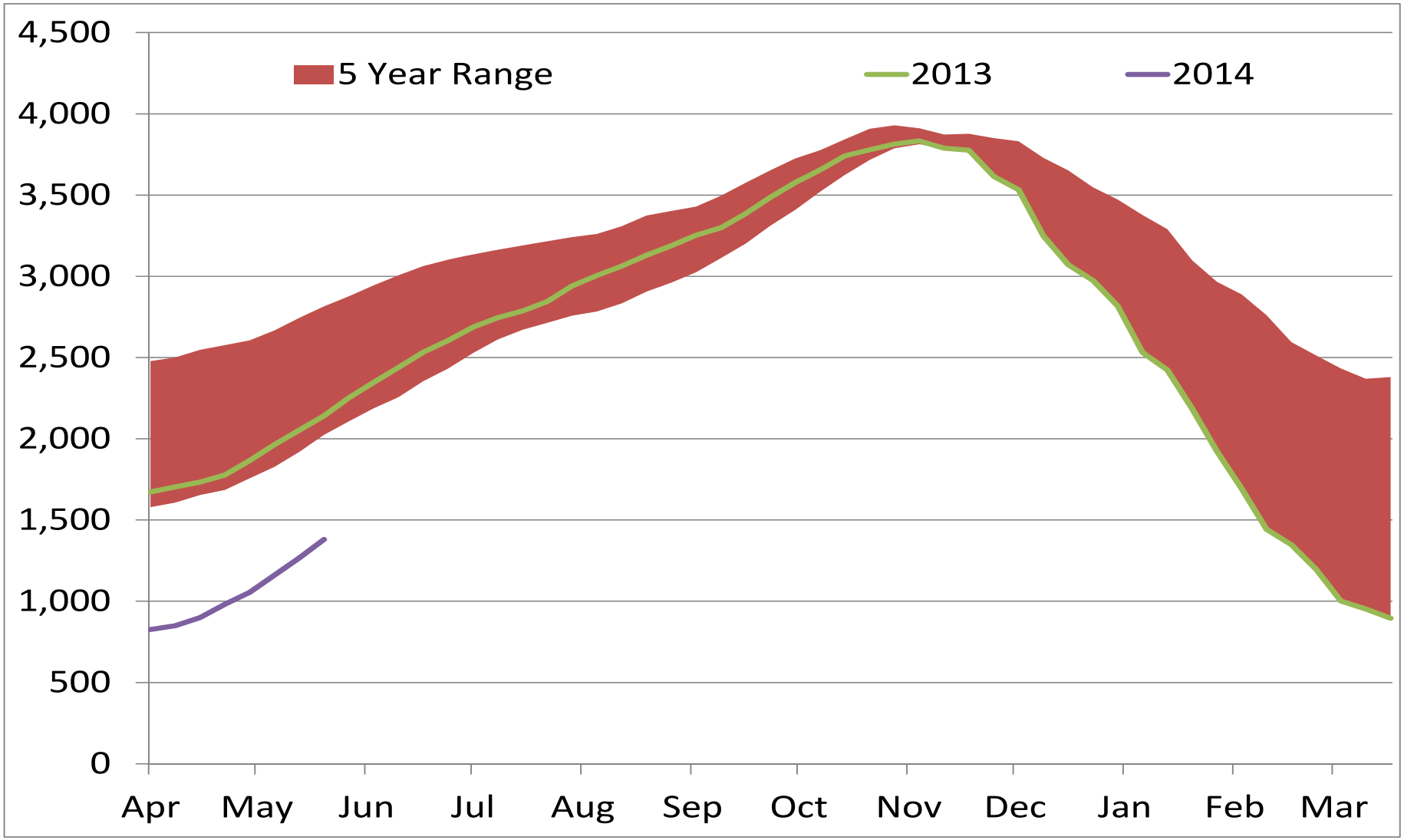


Notes:

Source: Derived from Bloomberg Data

Updated 6/4/2014

EIA National Storage Inventories

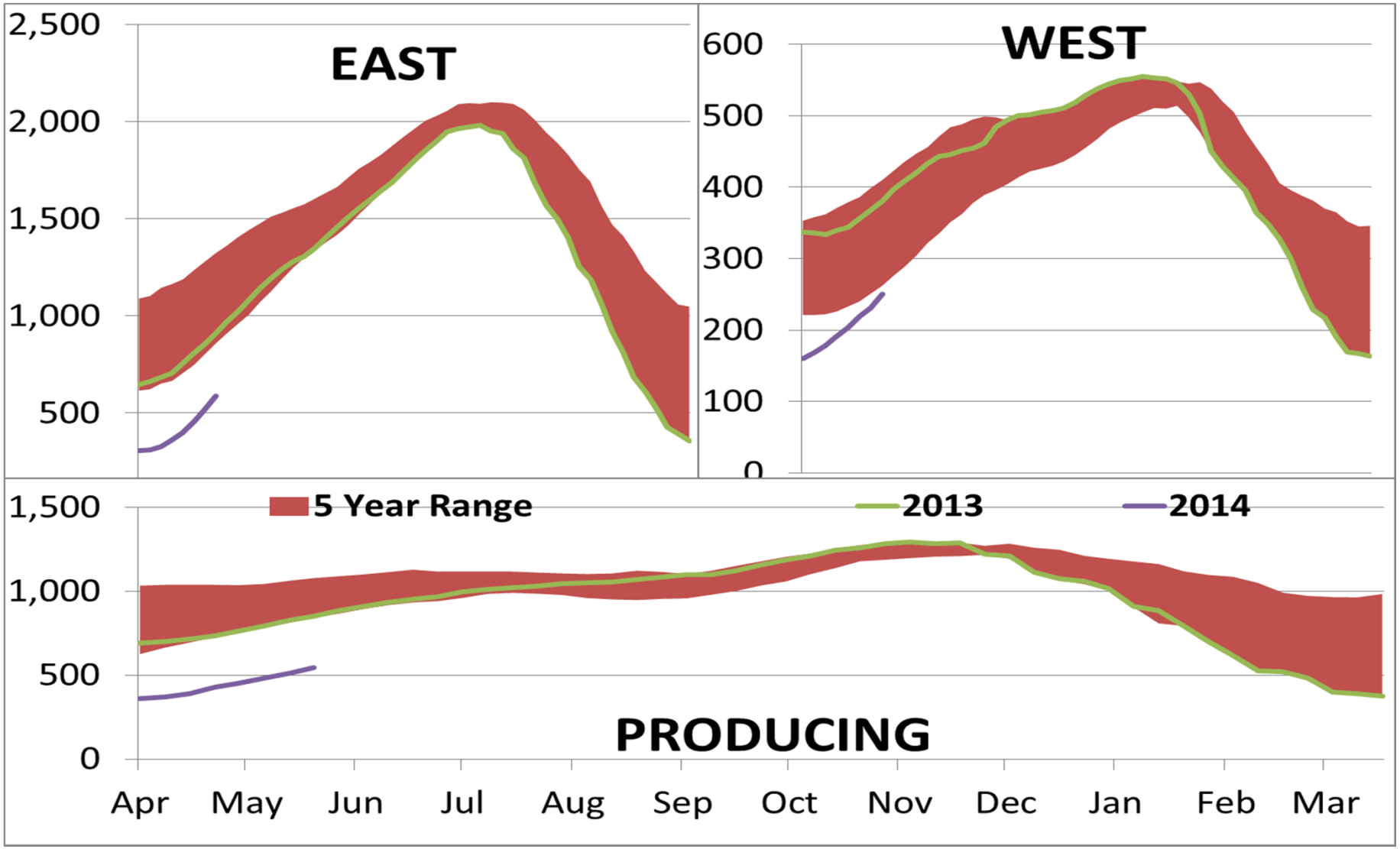


Notes:

Source: Derived from Bloomberg Data

Updatec 6/4/2014

EIA Regional Storage Inventories

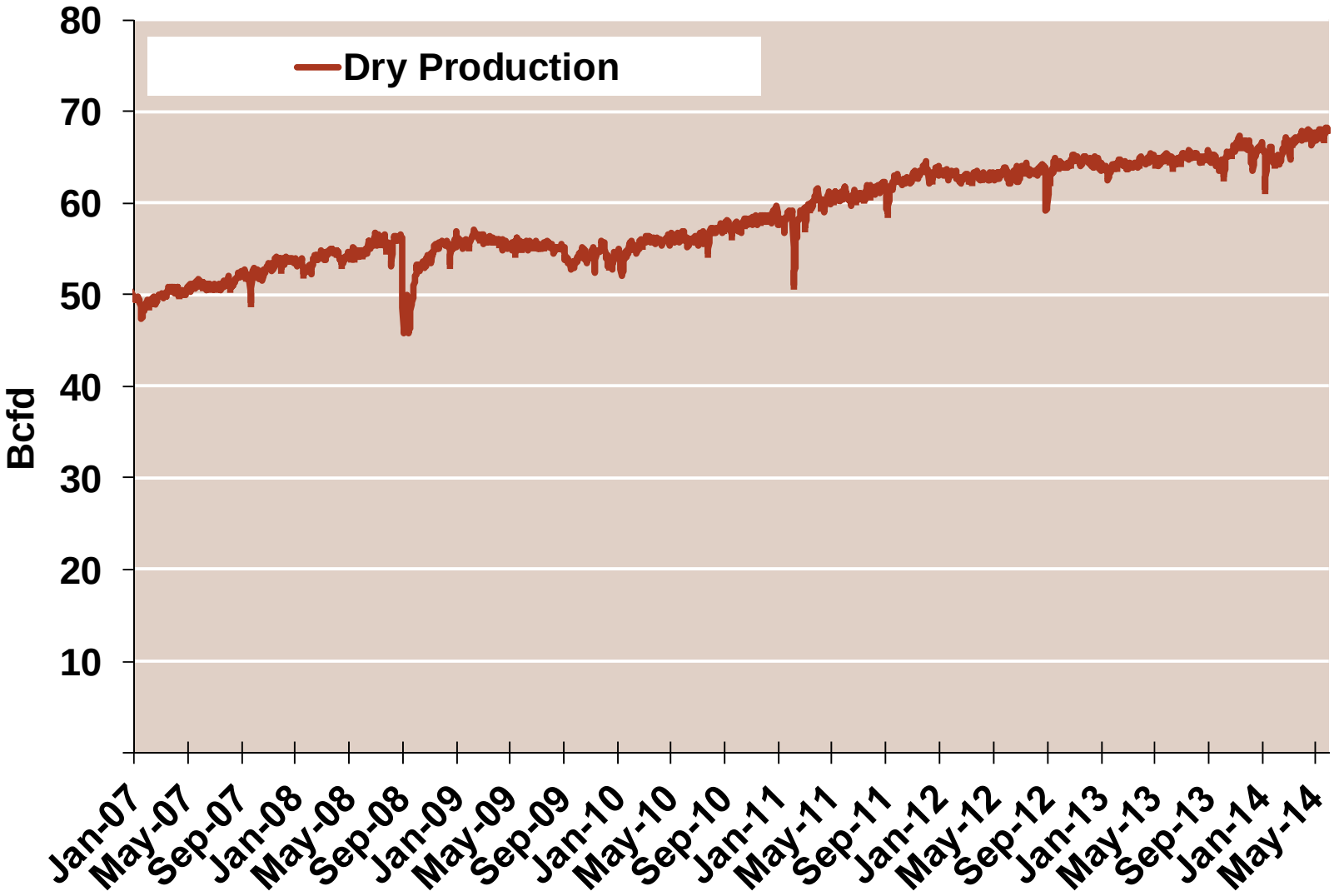


Notes:

Source: Derived from Bloomberg Data

Updatec 6/4/2014

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

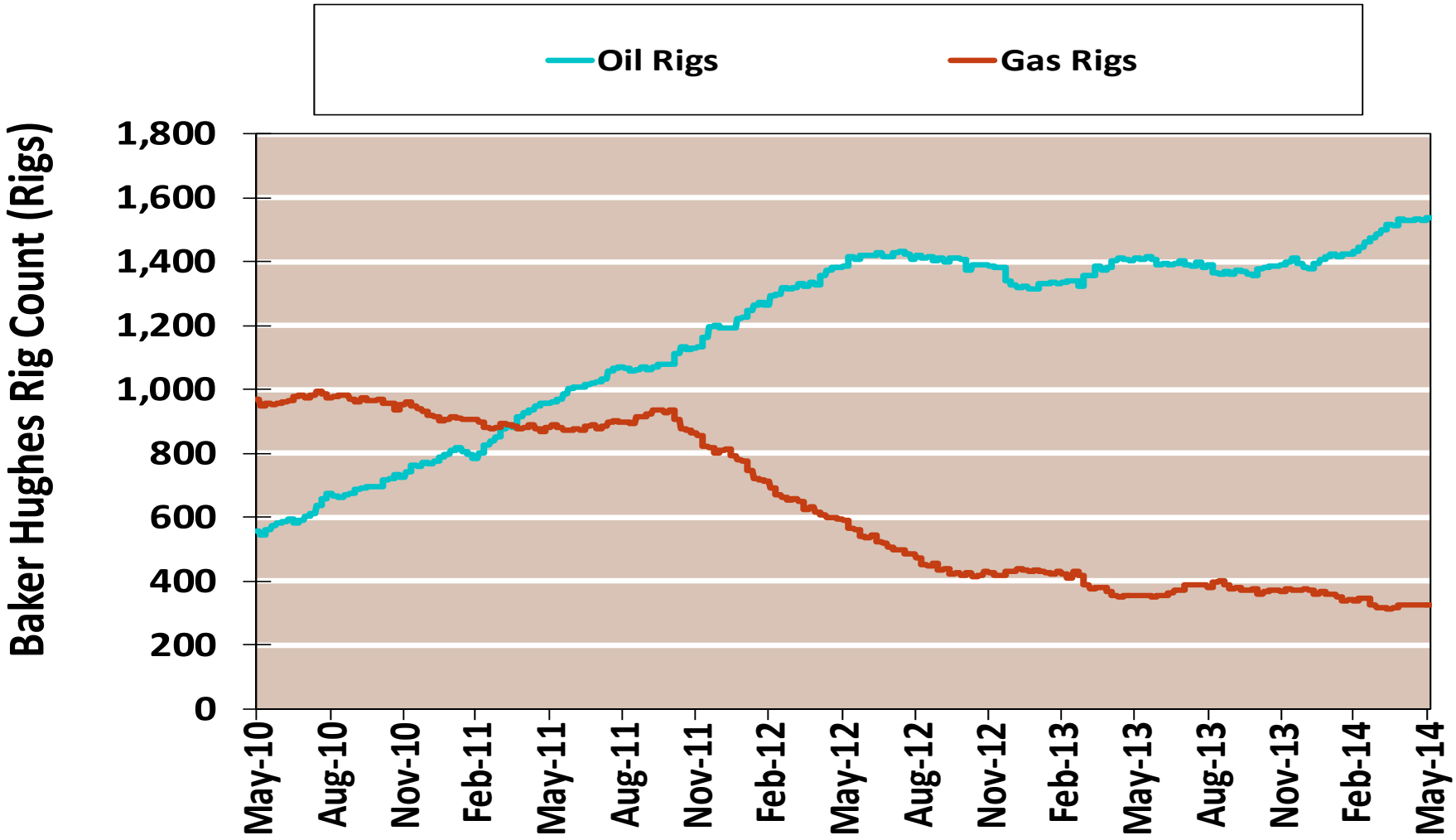


Note: Prior to July 2010, chart was derived from a combination of *EIA* and *Bentek Energy* data

Source: Derived from *Bentek Energy* data

Updated: June 2014

NG Rigs by Type

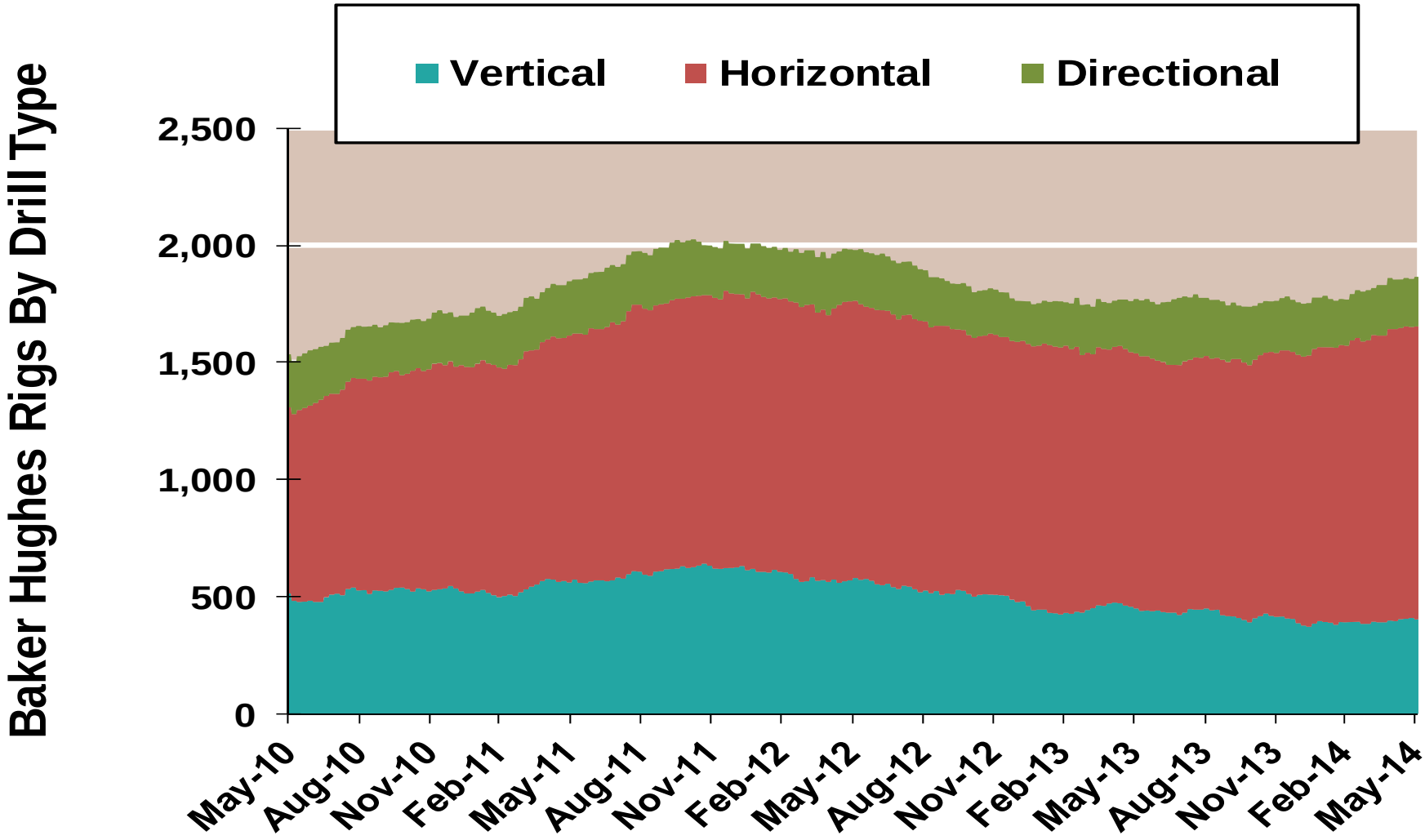


Notes:

Source: Derived from Bloomberg data

Updated 6/4/2014

NG Rig by Direction

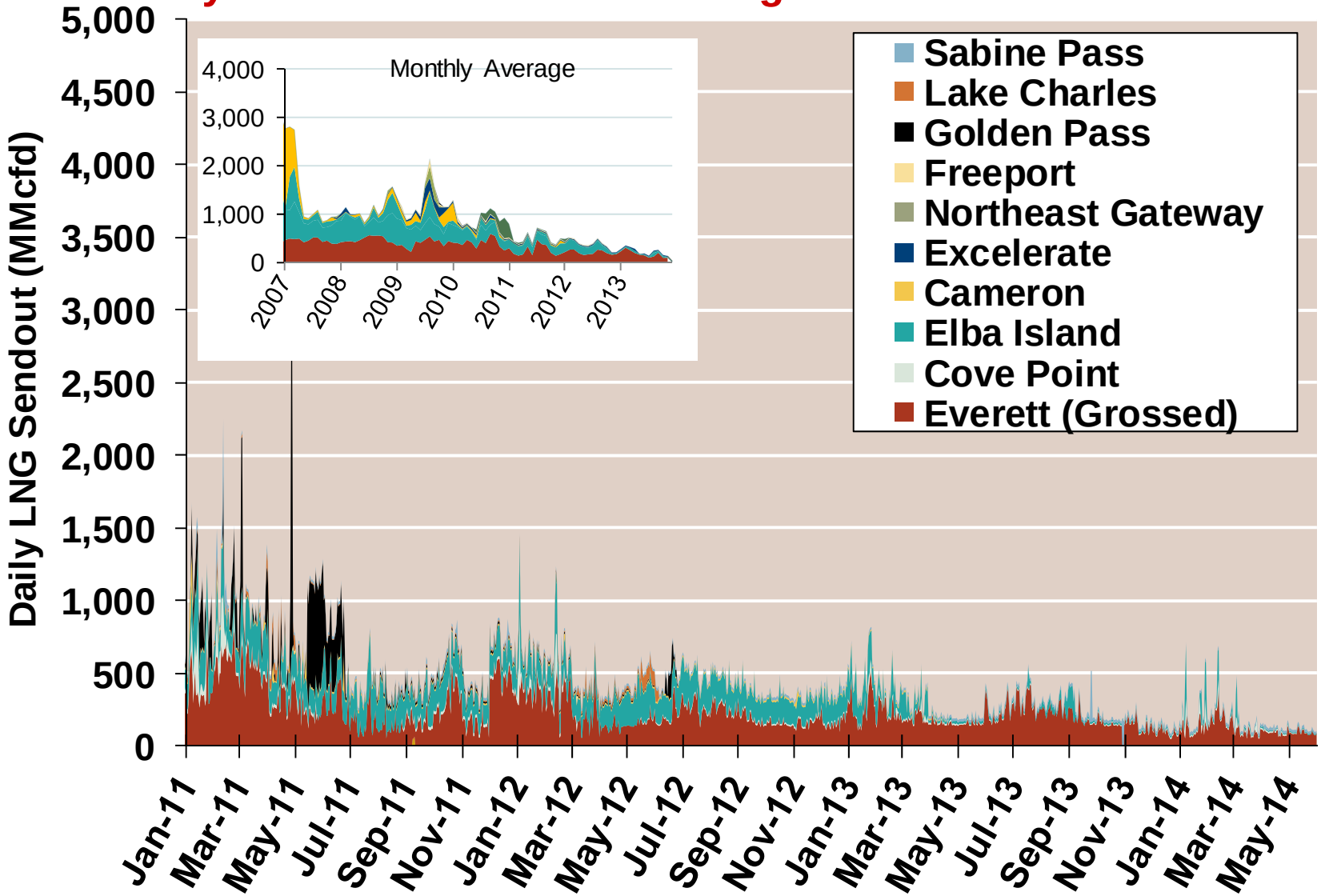


Notes:

Source: Derived from Bloomberg data

Updated 6/4/2014

Daily Gas Sendout from Existing U.S. LNG Facilities

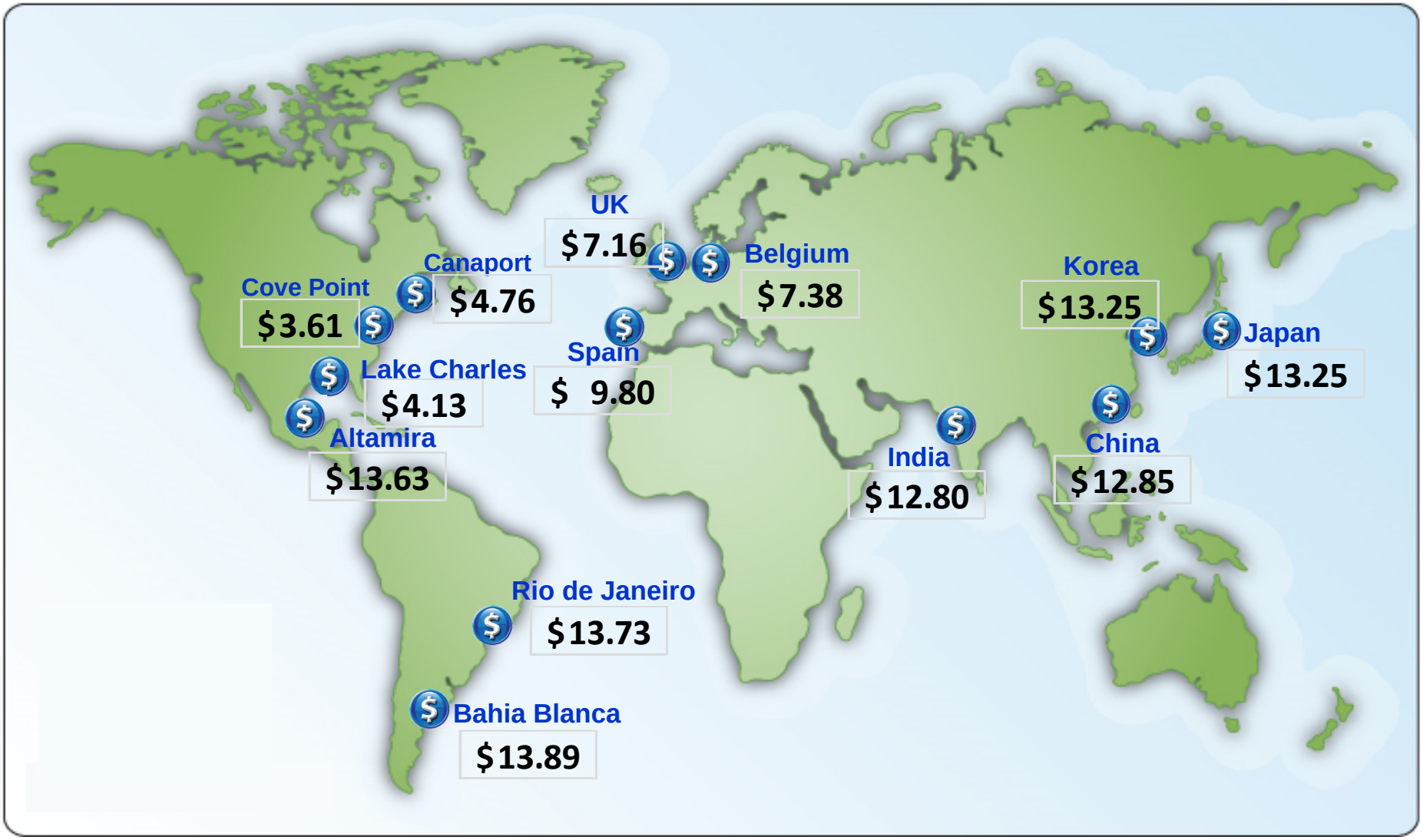


Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes flows to the Freeport LNG which flows via intrastate pipelines and flows to the Mystic 8 and 9 power plants.

Source: Derived from *Bentek Energy* data

Updated: June 2014

World LNG Estimated July 2014 Landed Prices



Source: *Waterborne Energy, Inc*. Data in $US/MMBtu

Updated June 2014

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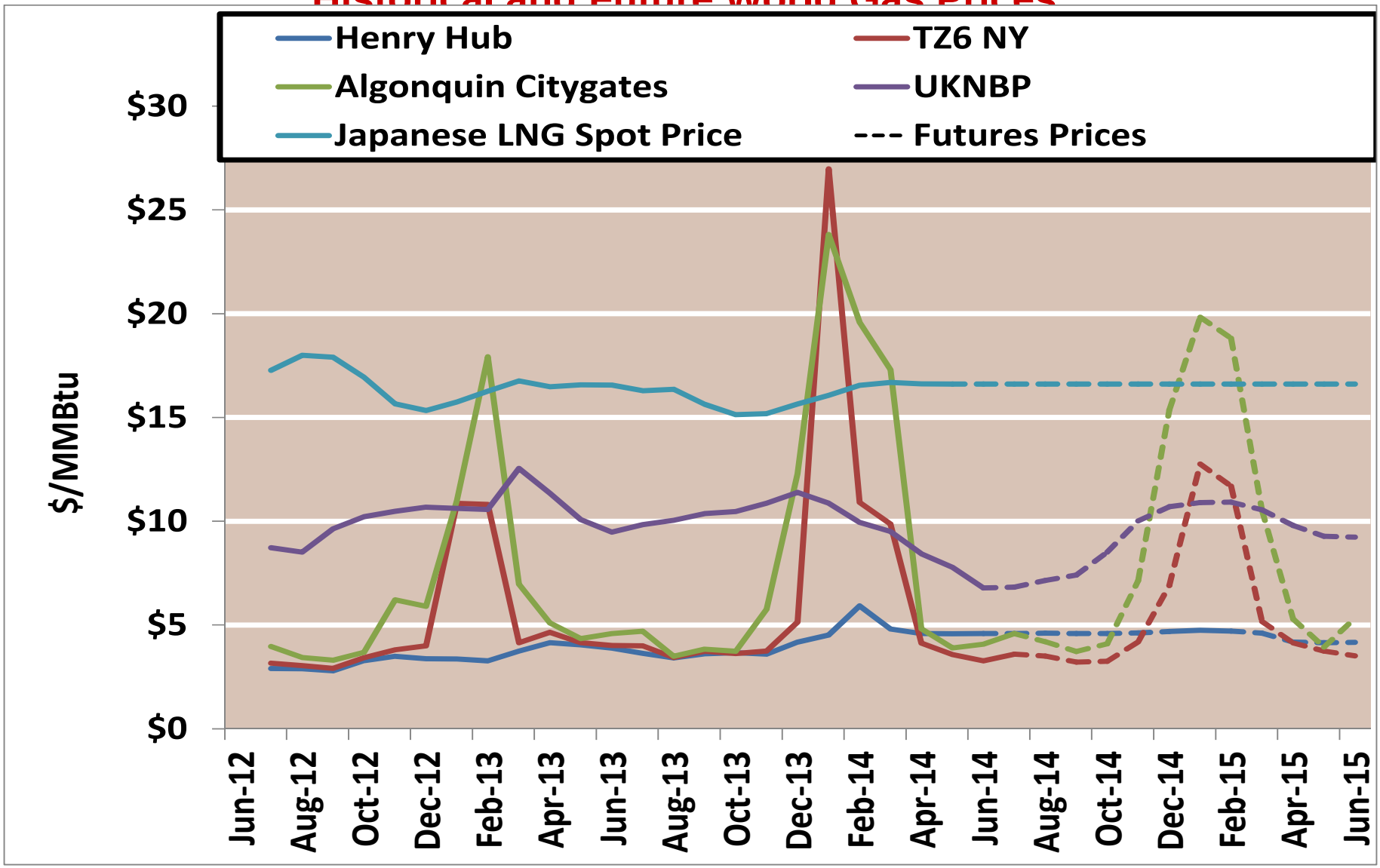
Historical and Future World Gas Prices

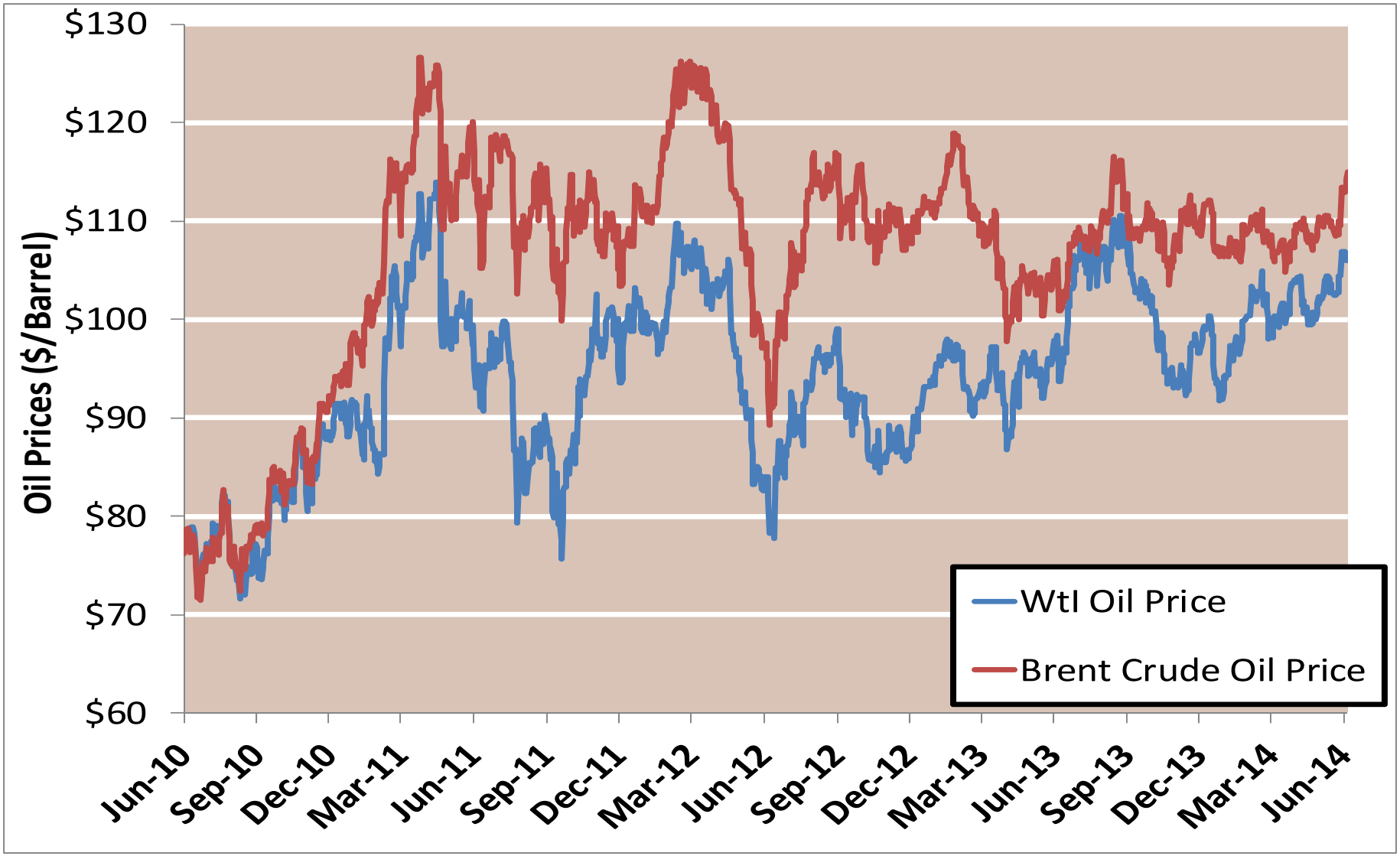


Notes:

Source: Derived from Bloomberg data

Updated 6/4/2014

WTI vs Brent Crude Oil Price



Source: Derived from Bloomberg data

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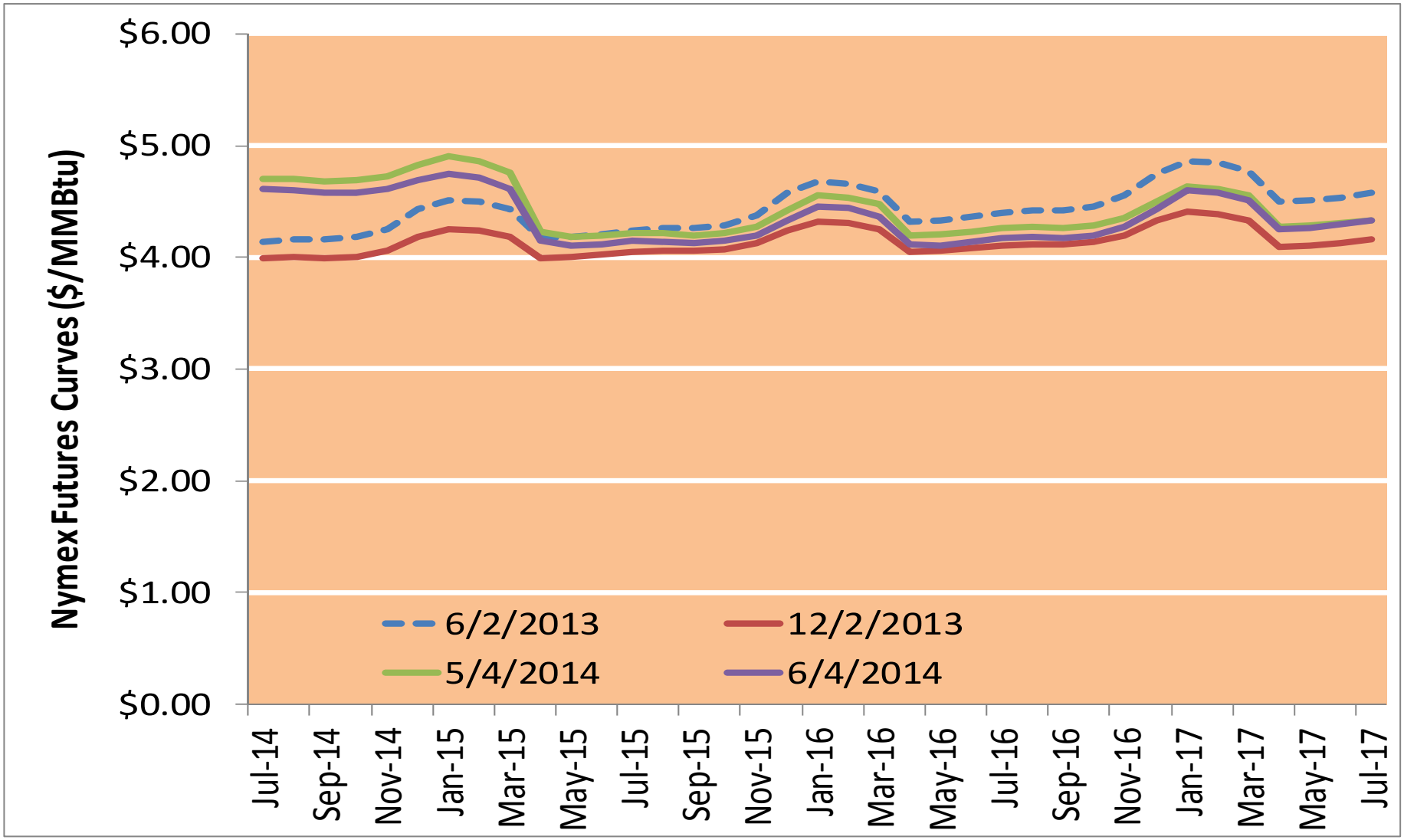
Nymex Futures Curves



Source: Derived from Bloomberg data

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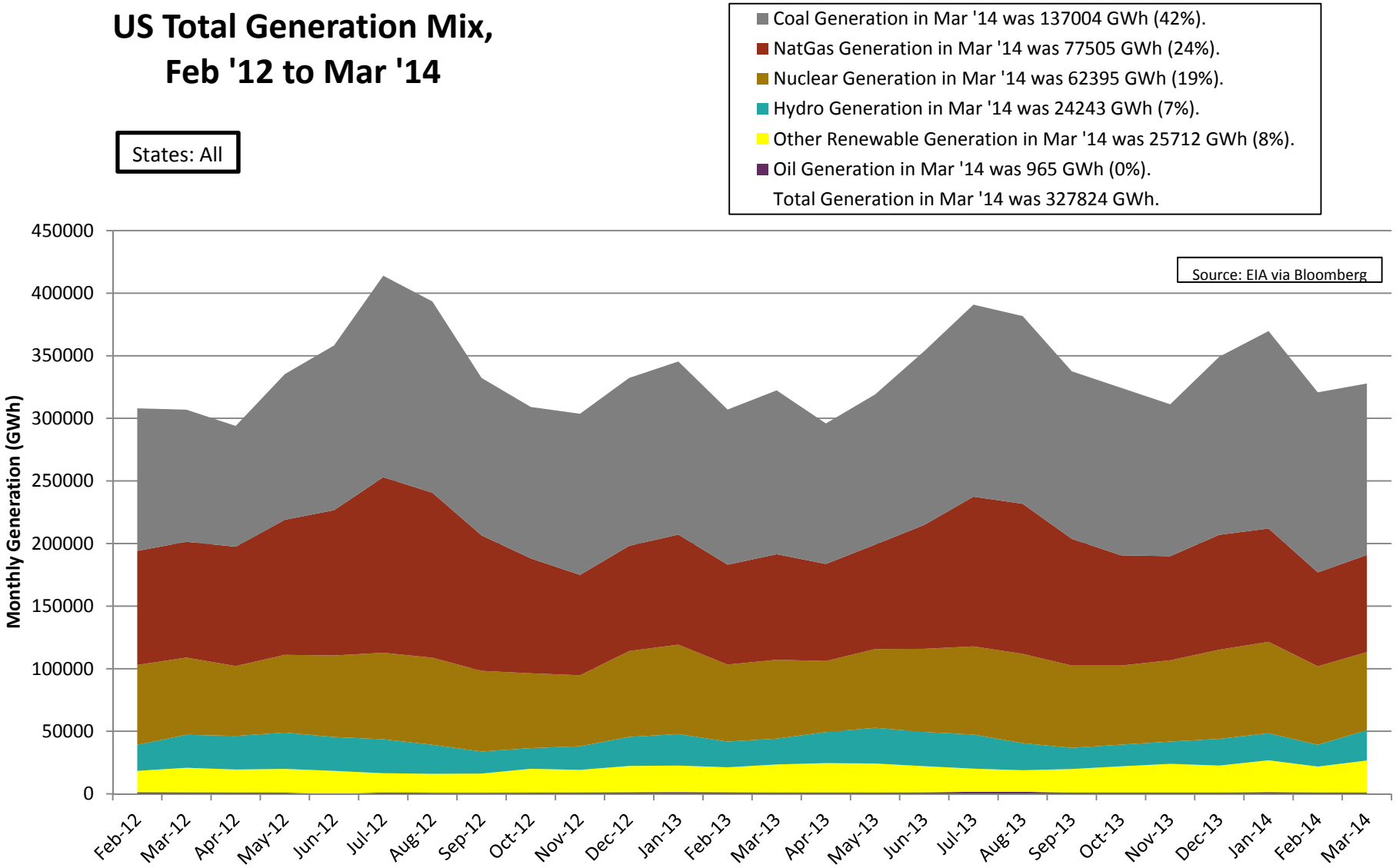
US Total Generation Mix



Updated: June 16, 2014

Natural Gas and Fuels Markets

West

West Annual Average Day Ahead Natural Gas Prices

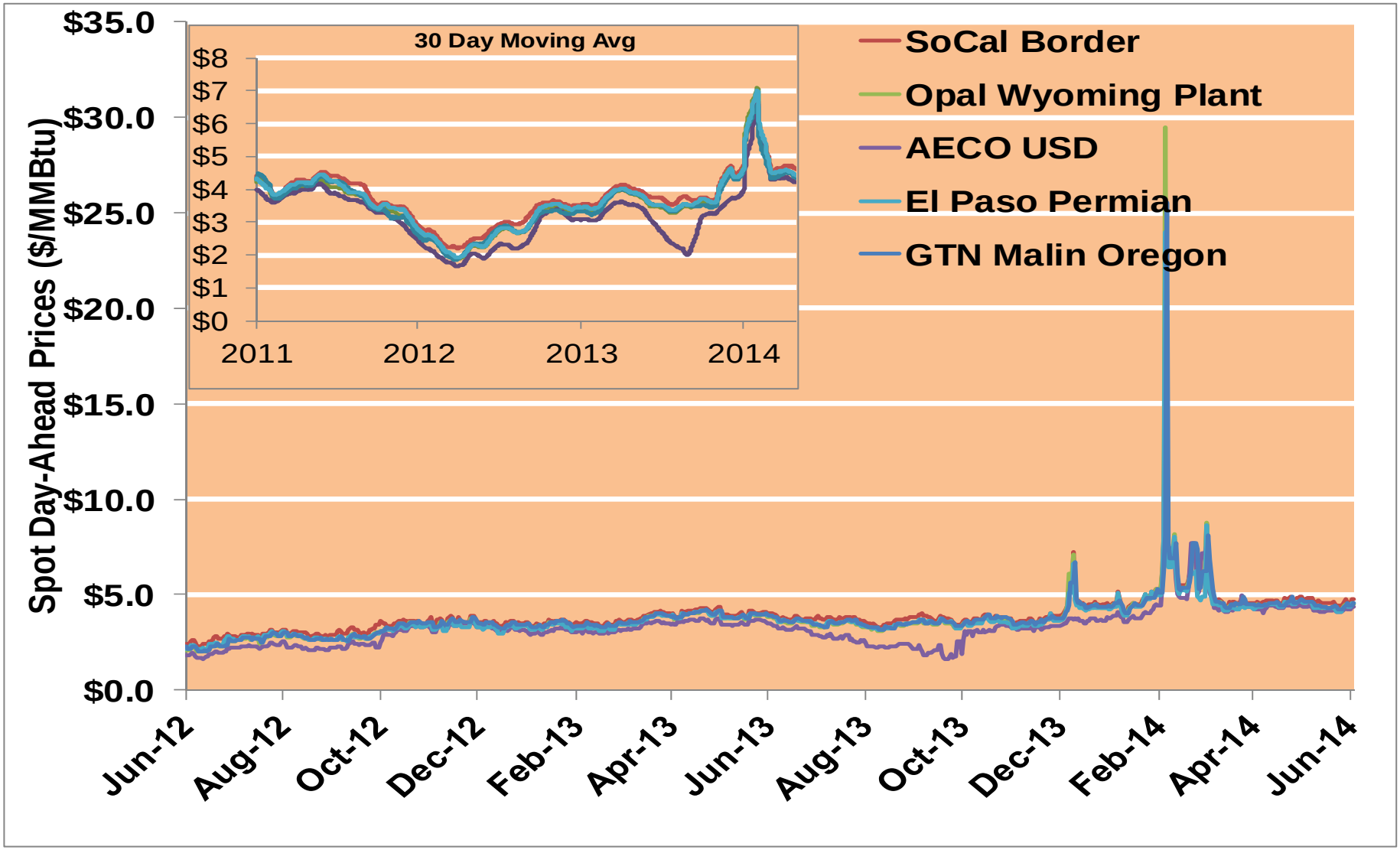
	Average Day Ahead Prices ($/MMBtu)	SoCal Border	Opal Wyoming Plant	AECO USD	El Paso Permian	GTN Malin Oregon	Henry Hub
2011	Annual	4.05	3.81	3.66	3.87	3.94	**3.98**
	Summer	4.18	3.89	3.78	3.99	4.03	**4.14**
	Winter 2011/2012	2.98	2.75	2.49	2.69	2.86	**2.74**
2012	Annual	2.91	2.68	2.39	2.67	2.73	**2.75**
	Summer	2.83	2.58	2.24	2.61	2.61	**2.69**
	Winter 2012/2013	3.62	3.46	3.22	3.38	3.52	**3.47**
2013	Annual	3.83	3.65	3.09	3.63	3.71	**3.70**
	Summer	3.82	3.61	2.94	3.63	3.67	**3.75**
	Winter 2013/2014	4.89	4.88	4.36	4.68	4.88	**4.61**
2014 YTD	Annual	5.07	5.02	4.68	4.86	5.03	**4.88**
	Summer	4.65	4.44	4.28	4.42	4.50	**4.52**
	Winter 2014/2015						

Notes:

Source: ICE

Updated 6/3/2014

West Daily Day-Ahead Prices

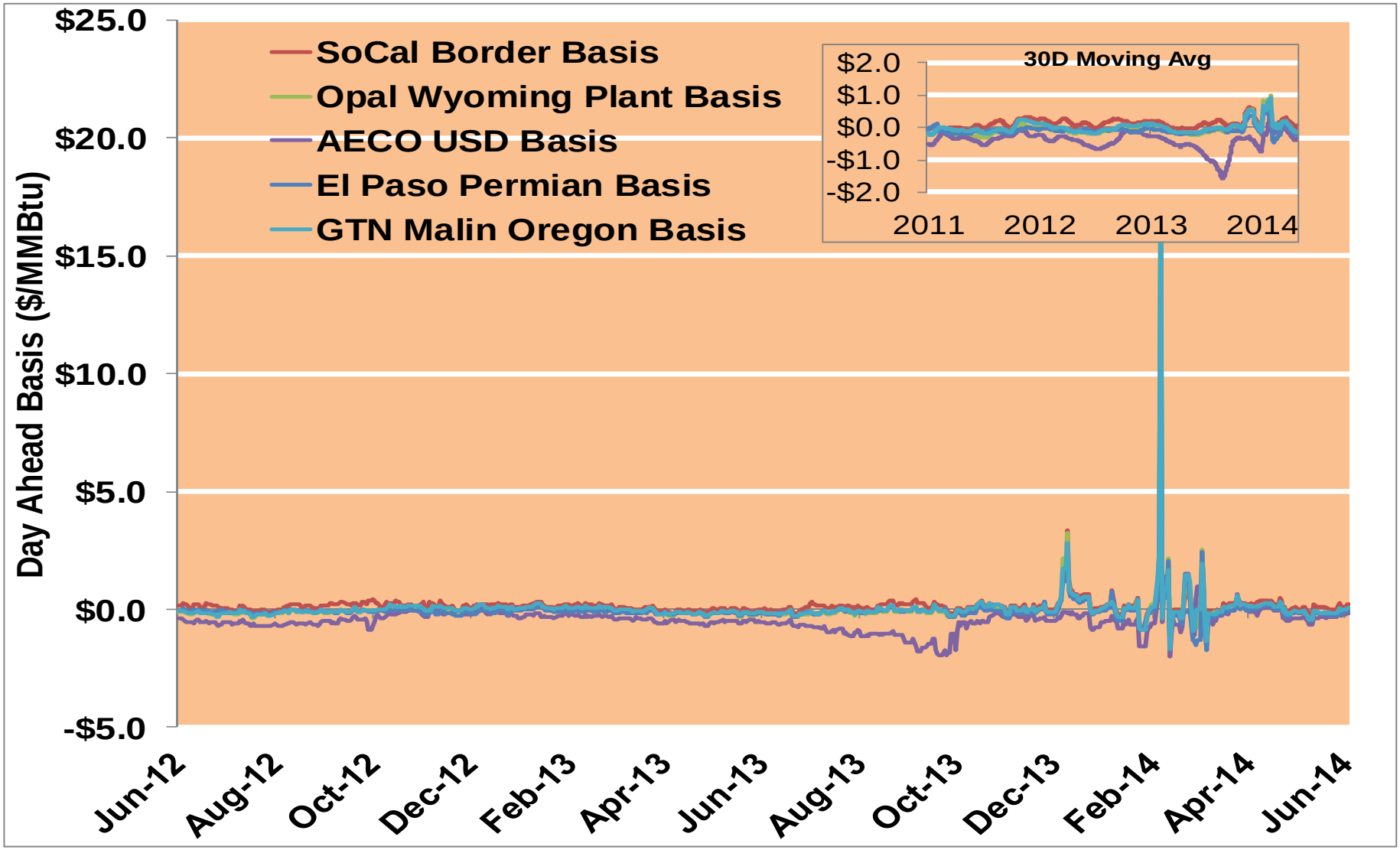


Notes:

Source: ICE

Updated 6/3/2014.

West Daily Day-Ahead Basis

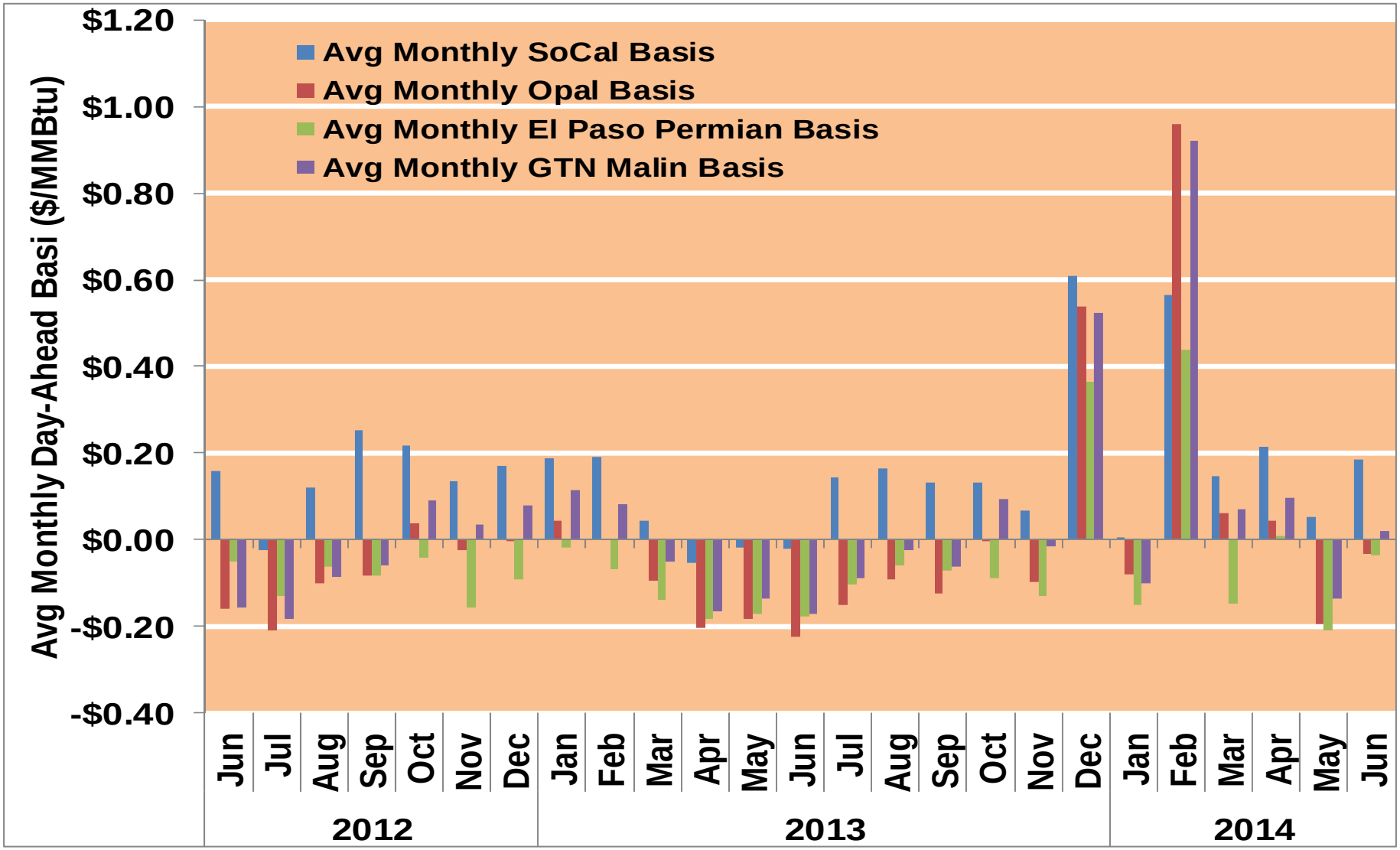


Notes:

Source: ICE

Updated 6/3/2014

West Average Monthly Basis

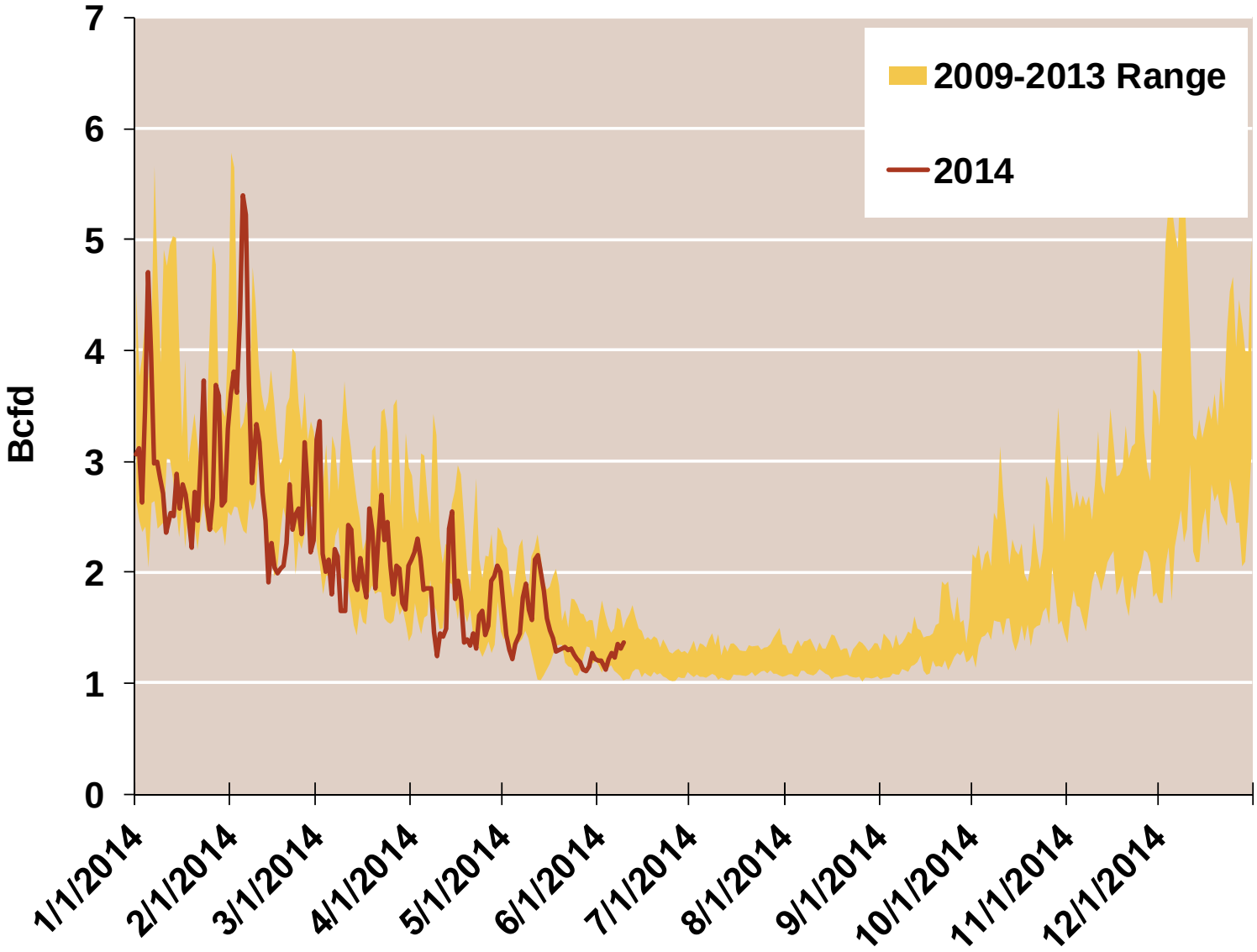


Notes:

Source: ICE

Updated 6/3/2014.

Daily Rockies Natural Gas Demand All Sectors

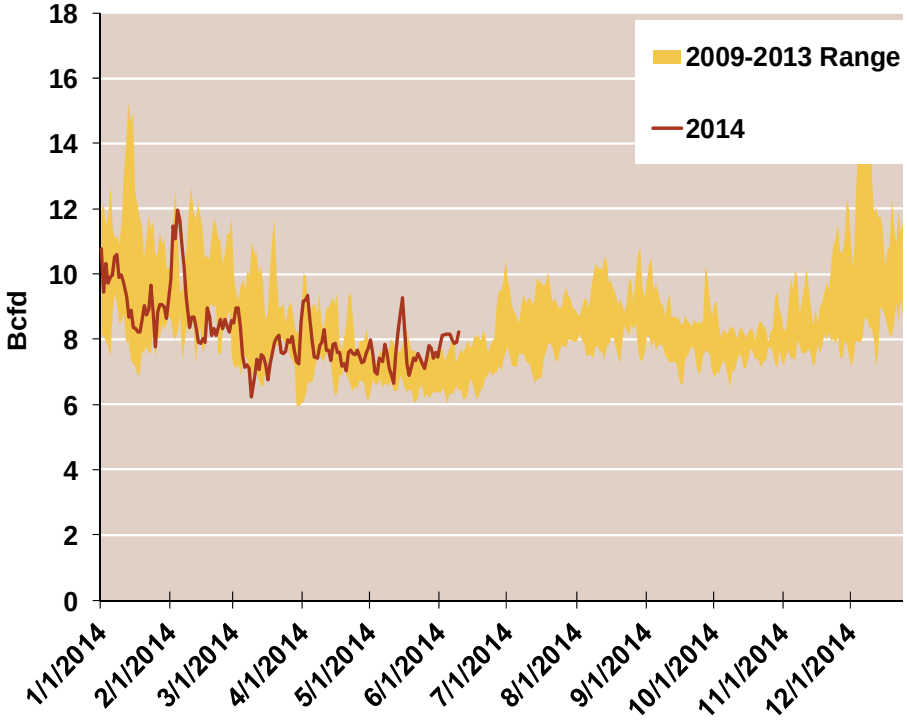


Source: Derived from *Bentek Energy* data

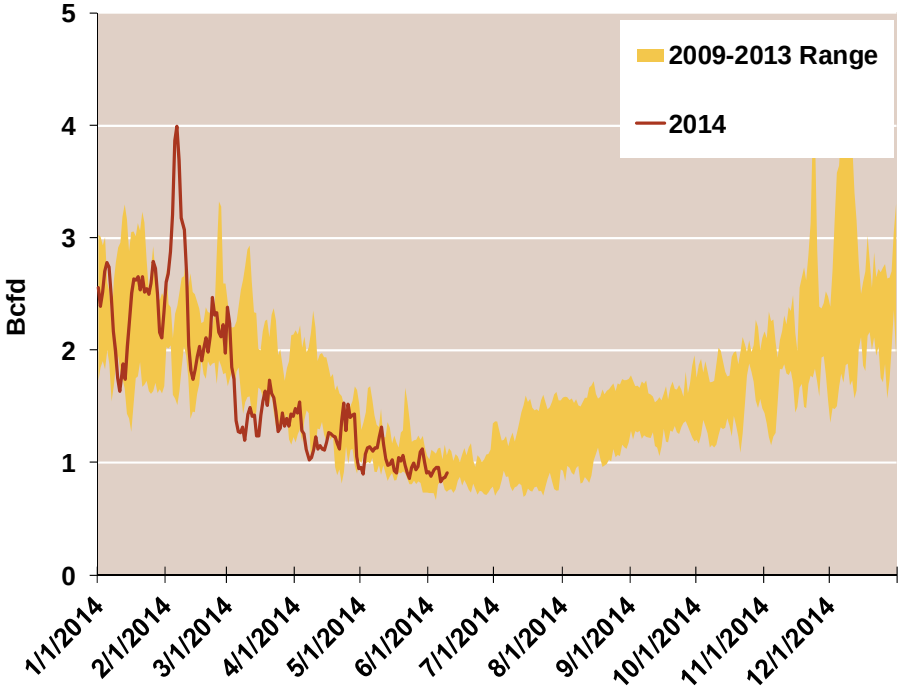
Updated: May 2014

Daily Southwest and Northwest Natural Gas Demand All Sectors

Southwest



Northwest

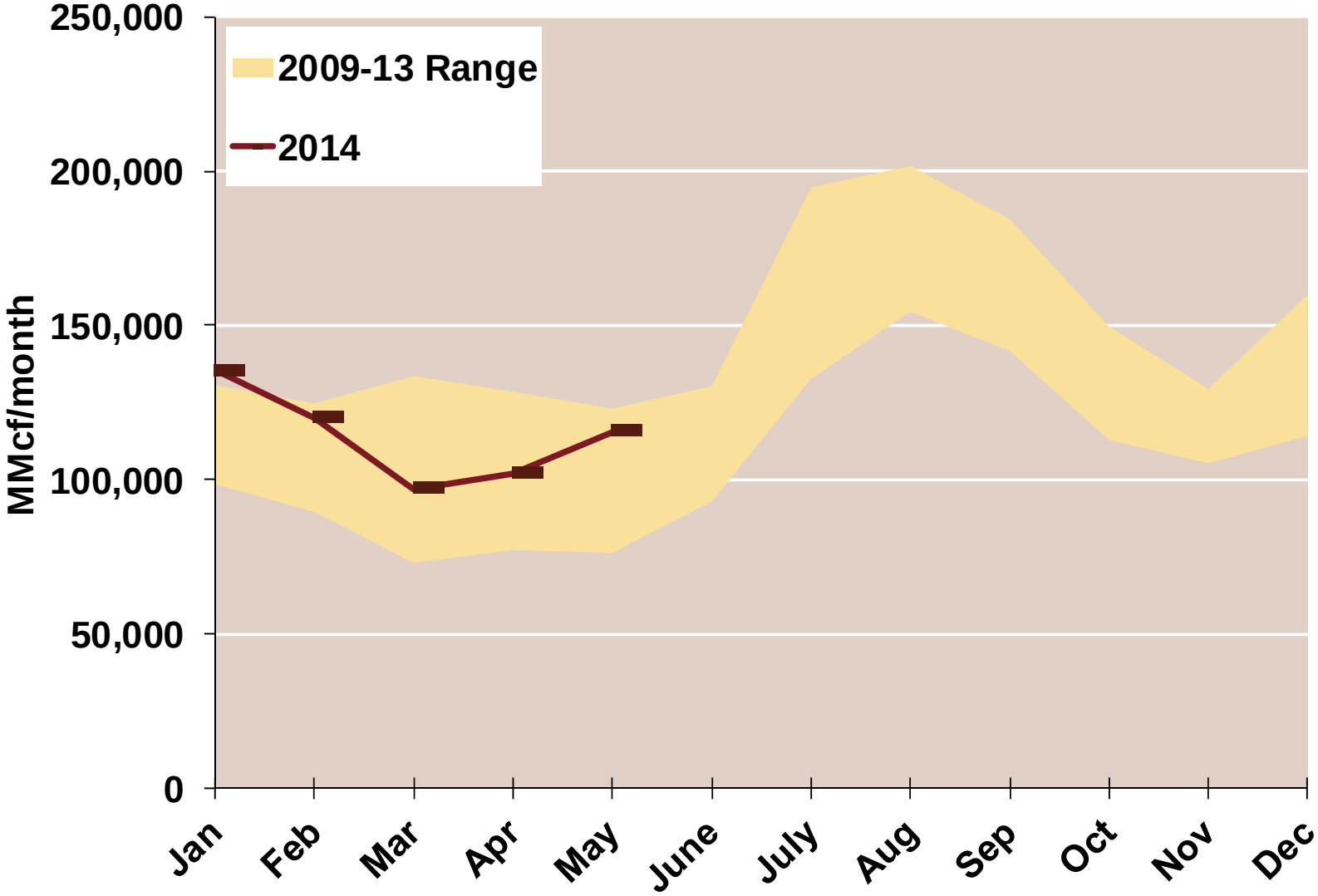


Source: Derived from *Bentek Energy* data

Note: Data derived from interstate natural gas pipeline flows.

Updated: May 2014

West Natural Gas Consumption for Power Generation



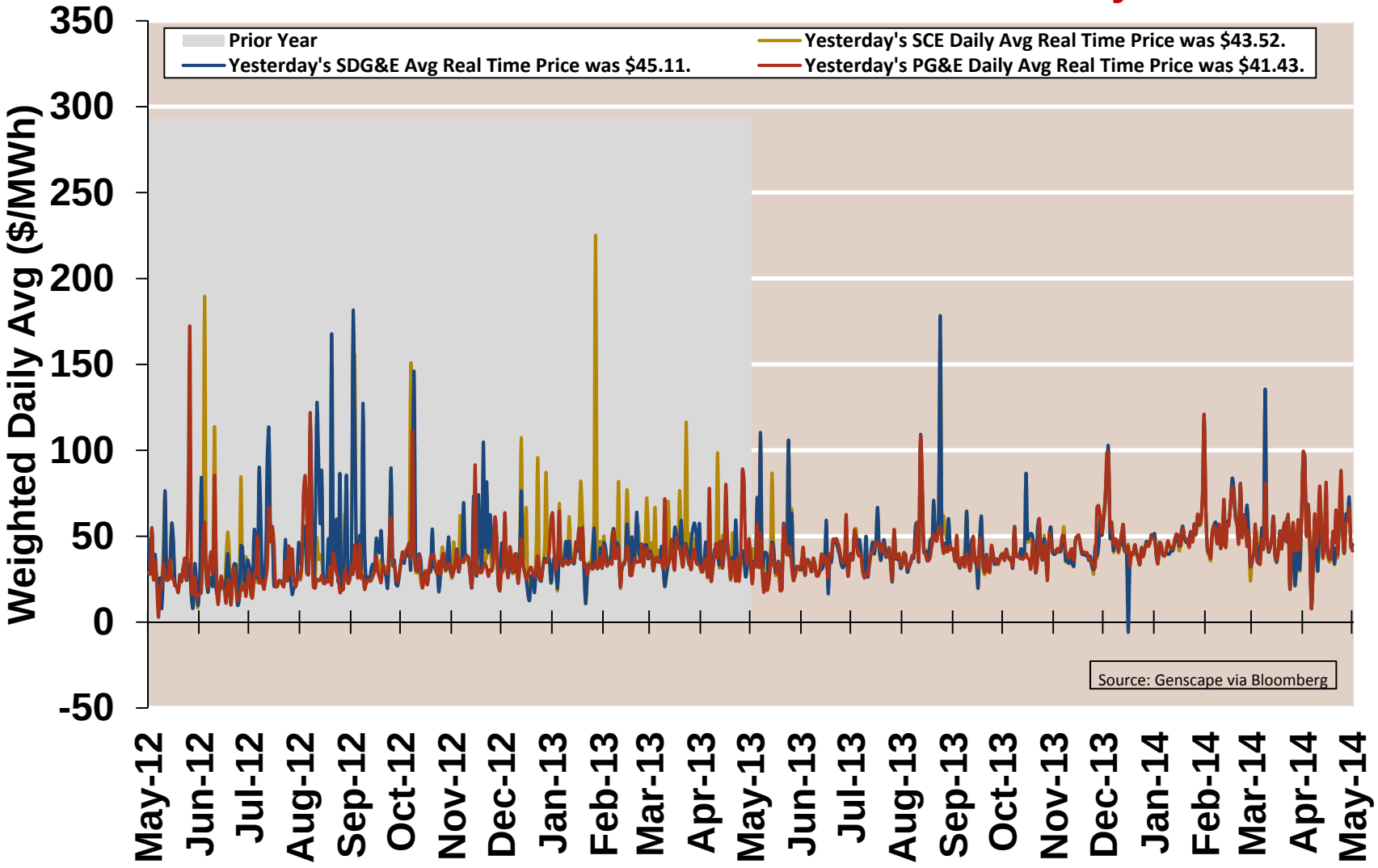
Source: Derived from *Bentek Energy* data

Updated: May 2014

Electricity Markets

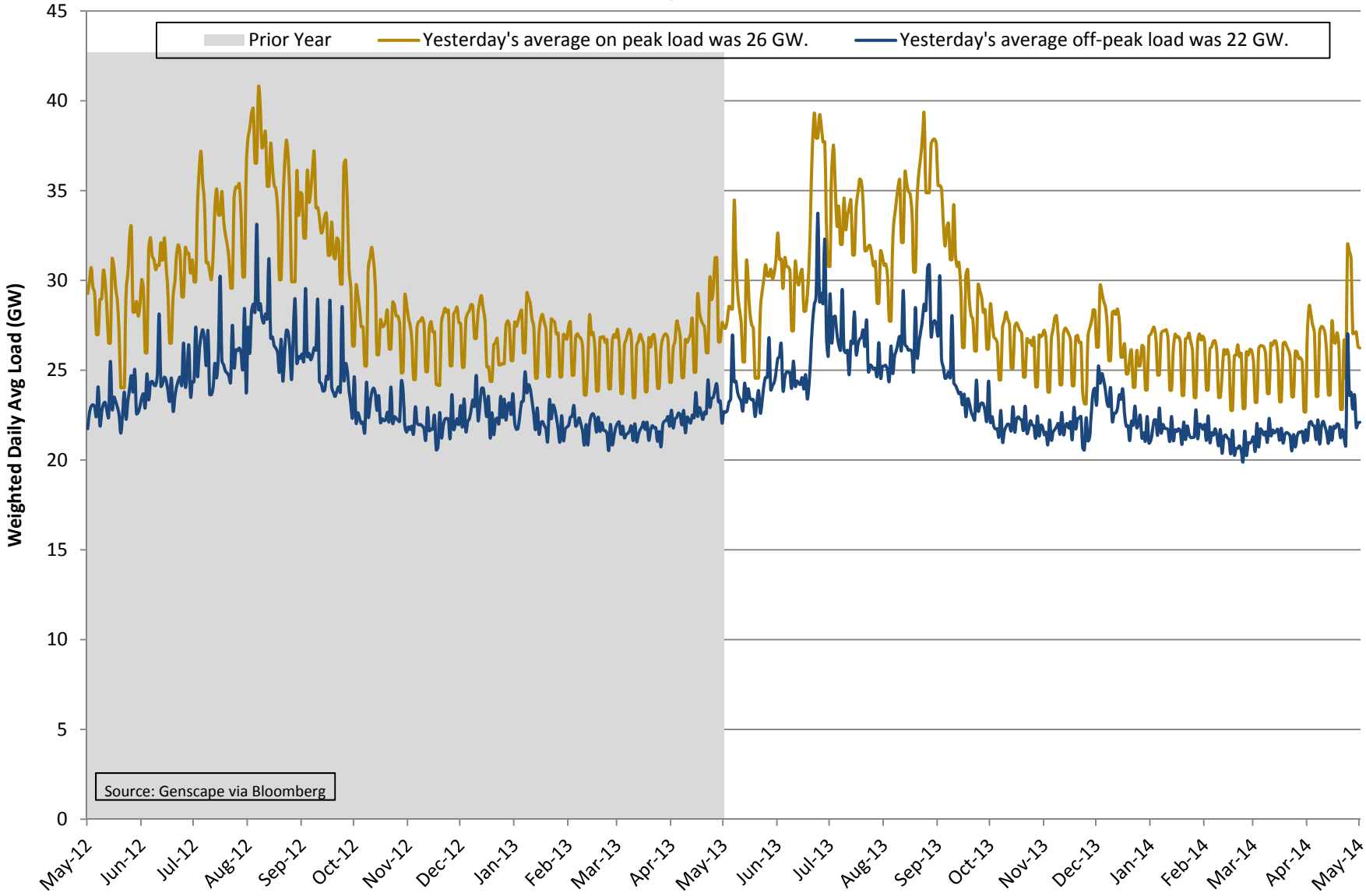
West

CAISO Real Time Prices—Two Year History



Updated: June 16, 2014

CAISO System Daily Average Load —Two Year History



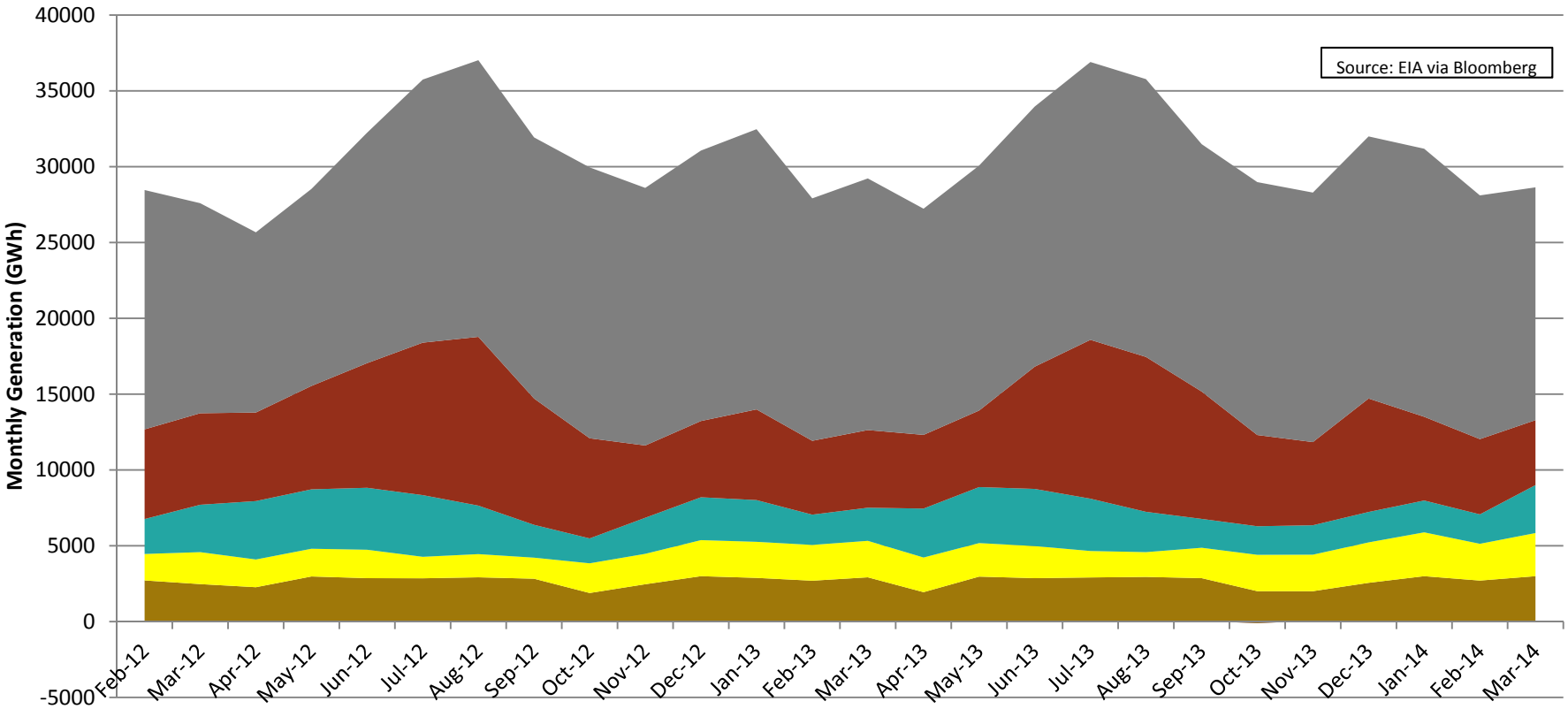
Updated: June 16, 2014

Mountain Regional Generation Mix, Feb '12 to Mar '14

States: AZ, CO, ID, MT, NM, NV, UT, WY

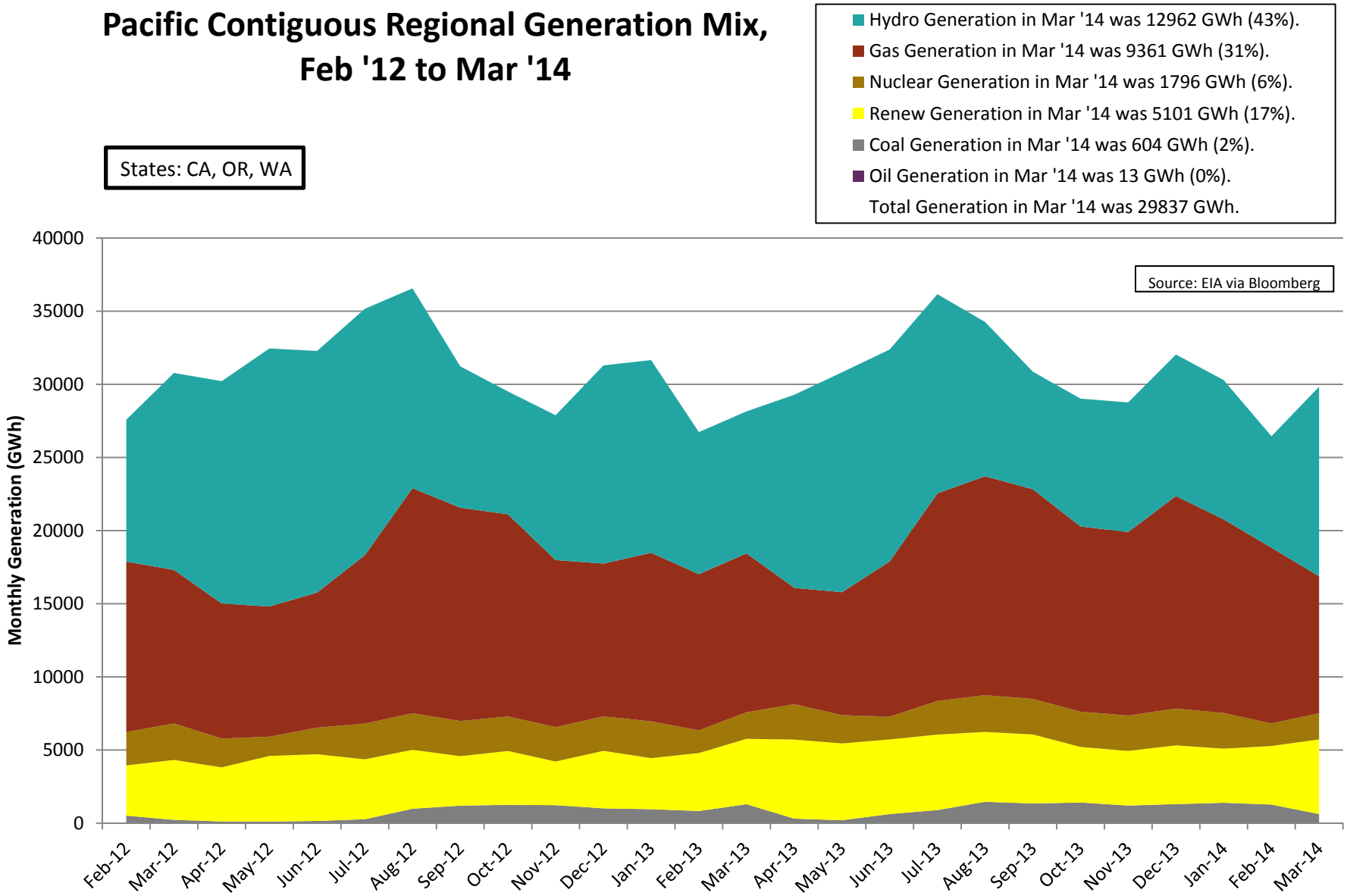
- Coal Generation in Mar '14 was 15353 GWh (54%).
- Gas Generation in Mar '14 was 4285 GWh (15%).
- Hydro Generation in Mar '14 was 3157 GWh (11%).
- Othr Renew Generation in Mar '14 was 2842 GWh (10%).
- Nuclear Generation in Mar '14 was 2967 GWh (10%).
- Oil Generation in Mar '14 was 30 GWh (0%).

Total Generation in Mar '14 was 28634 GWh.



Updated: June 16, 2014

Pacific Contiguous Regional Generation Mix, Feb '12 to Mar '14



Updated: June 16, 2014

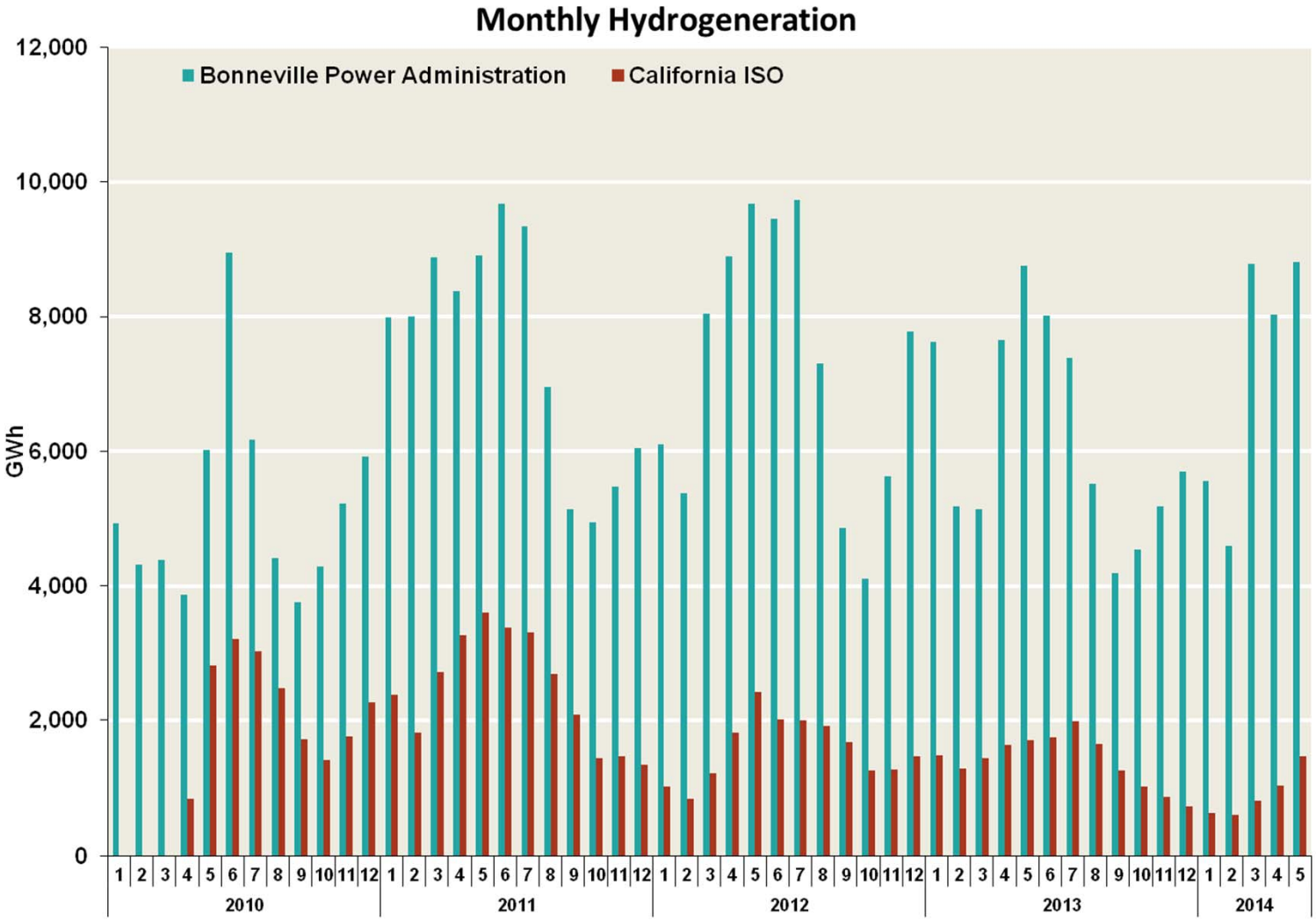
Northwest Snowpack

Northwest Snowpack Improves			
State/Region	Snow Water Equivalent (% of Historic Median)		
	One Year Ago	One Month Ago	Current
	2/2/2014	3/2/2014	4/2/2014
California	46%	27%	33%
Idaho	87%	78%	114%
Montana	96%	111%	142%
Oregon	94%	38%	61%
Washington	115%	53%	99%
Columbia River Basin	98%	64%	102%

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

Updated: June 20, 2014

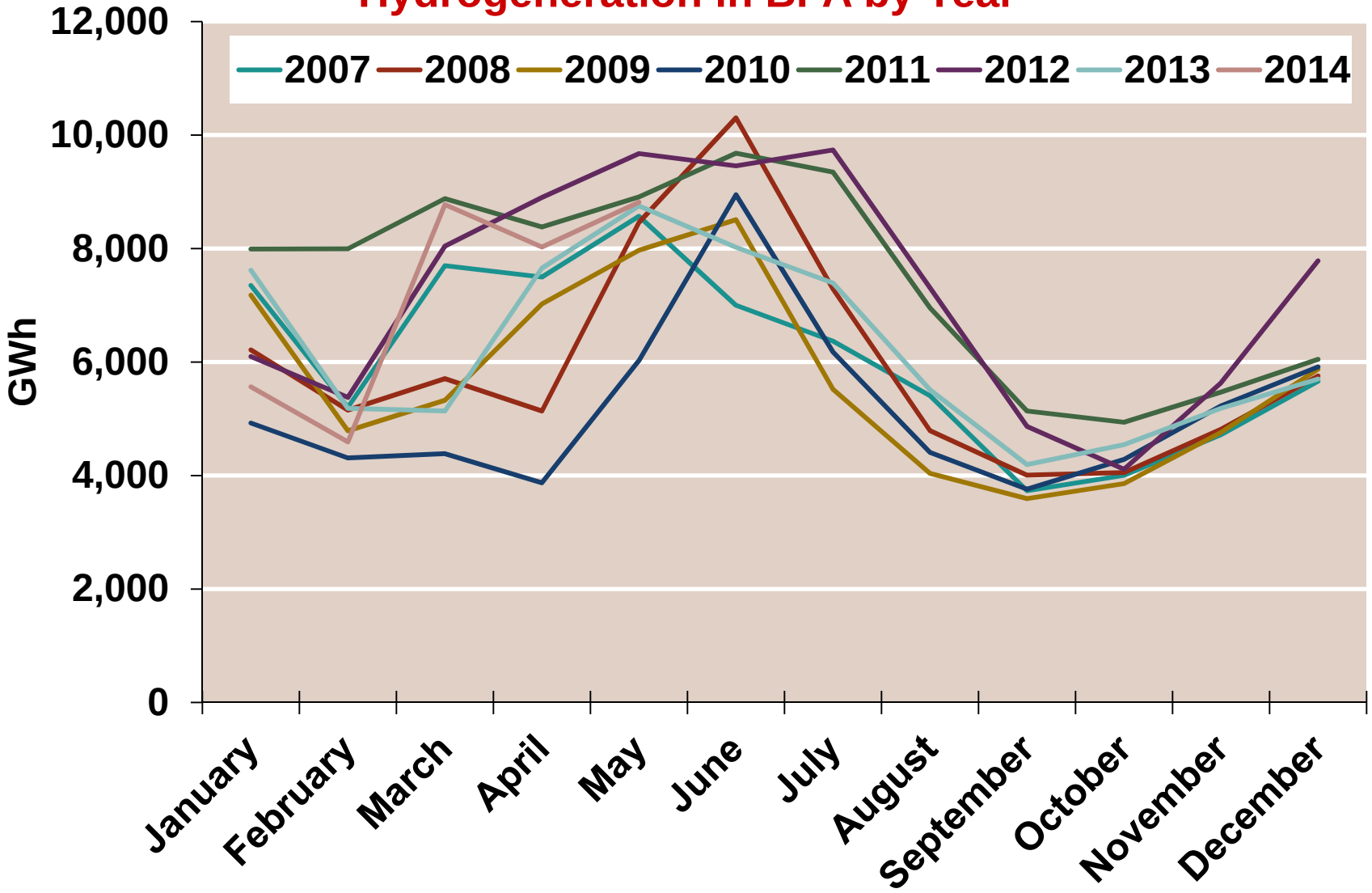
Monthly Hydrogeneration by Footprint



Source: Derived from Energy Velocity and BPA data.

Updated: June 20, 2014

Hydrogeneration in BPA by Year



Source: BPA

Updated: June 20, 2014