OE ENERGY MARKET SNAPSHOT

National Version – January 2014 Data

Office of Enforcement
Federal Energy Regulatory Commission
February 2014

Infrastructure Report

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

(see “Energy Infrastructure” tab)

Natural Gas and Fuels Markets

Extreme Weather Causes Record Gas and Power Prices in Jan

Cumulative HDDs	Boston	NYC	Pittsburgh	Atlanta	Chicago	Richmond	Philadelphia
30 yr avg	1,086	975	1,111	681	1,212	860	974
5 yr avg	1,100	1,007	1,170	671	1,261	859	987
Last Jan	1,038	928	1,038	511	1,160	785	885
Jan 2014	**1,164**	**1,129**	**1,329**	**907**	**1,485**	**1,019**	**1,139**
% Chg from Last Jan	12%	22%	28%	77%	28%	30%	29%
% Chg from 5 yr avg	6%	12%	14%	35%	18%	19%	15%
% Chg from 30 yr avg	7%	16%	20%	33%	22%	18%	17%
Coldest Jan since	**2009**	**2009**	**2009**		**1994**	**2003**	**2004**

Area	Natural Gas Prices ($/MMBtu)		RTO On-Peak Power Prices ($/MWh)	
	January 2014 Average	January 2014 High Price	January 2014 Average	January 2014 High Price
Boston	$24.54	$78.64	$205	$854
Chicago	$7.94	$41.31	$110	$839
New Jersey	$21.87	$79.85	$239	$1,021
New York City	$28.85	$120.70	$226	$605
Philadelphia	$25.88	$123.50	$215	$1,006
Richmond	$25.73	$120.21	$176	$1,026
Gulf/Southeast	$4.60	$5.69		

Notes:

Source: ICE and Bloomberg Weather

Western and Midwest NG Hubs Set Records in Early Feb

Region	Hub	2-6-14 Delivered Price	All Time High	Date "All Time High" Was Set
Rockies	Cheyenne	$32.25	$32.25	2/5/2014
Midwest	Chicago Citygates	$26.73	$41.31	1/27/2014
Rockies	CIG Mainline	$26.43	$26.43	2/5/2014
Midwest	Consumers	$27.52	$34.46	1/27/2014
Midcon	Demarc	$36.32	$36.32	2/5/2014
Southwest	EP Permian	$24.03	$24.03	2/5/2014
Southwest	EP San Juan	$24.04	$24.04	2/5/2014
Gulf	Henry	$7.91	$18.41	2/25/2003
Gulf	Houston Ship Channel	$10.49	$13.49	12/13/2005
West	Malin	$25.51	$25.51	2/5/2014
Midwest	MichCon	$22.92	$31.63	1/27/2014
Midcon	NBPL-Ventura	$36.03	$52.82	1/27/2014
Midcon	NGPL Midcont	$23.66	$23.66	2/5/2014
Midcon	NGPL TXOK	$8.27	$19.88	2/25/2003
Midcon	NNG-Ventura	$44.46	$54.44	1/27/2014
Rockies	NWP-Rocky Mtn	$21.69	$21.69	2/5/2014
Rockies	Opal	$29.50	$29.50	2/5/2014
Midcon	Panhandle	$36.26	$36.26	2/5/2014
West	PG&E Citygate	$21.79	$21.79	2/5/2014
West	SoCal Border	$20.17	$20.17	2/5/2014
Midcon	Ventura	$41.22	$53.91	1/27/2014
Southwest/Gulf	Waha	$21.22	$24.08	2/25/2003

Notes: Highlighted prices denote records

Source: ICE

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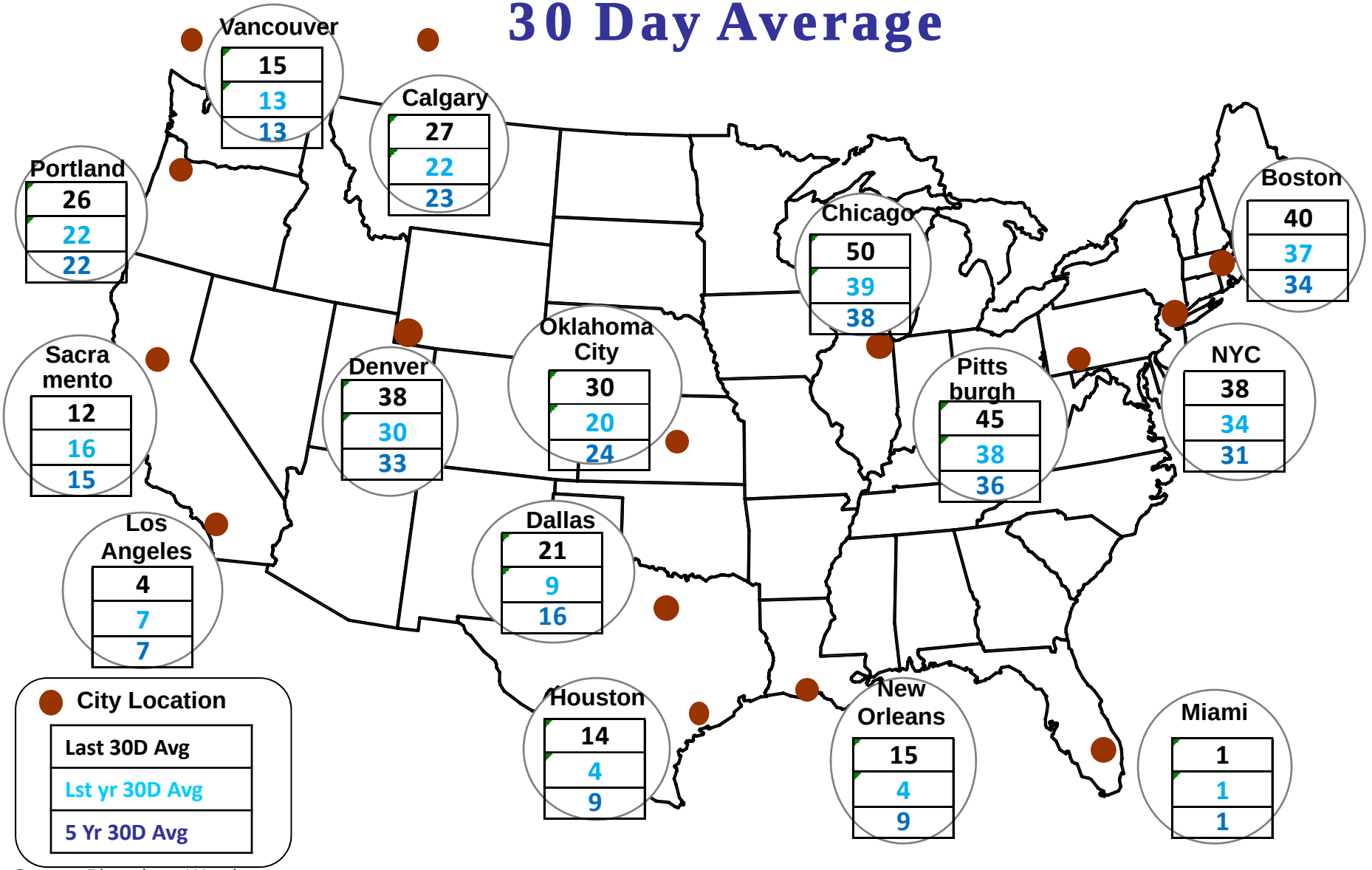
HDDs by City
30 Day Average



Source: Bloomberg Weather

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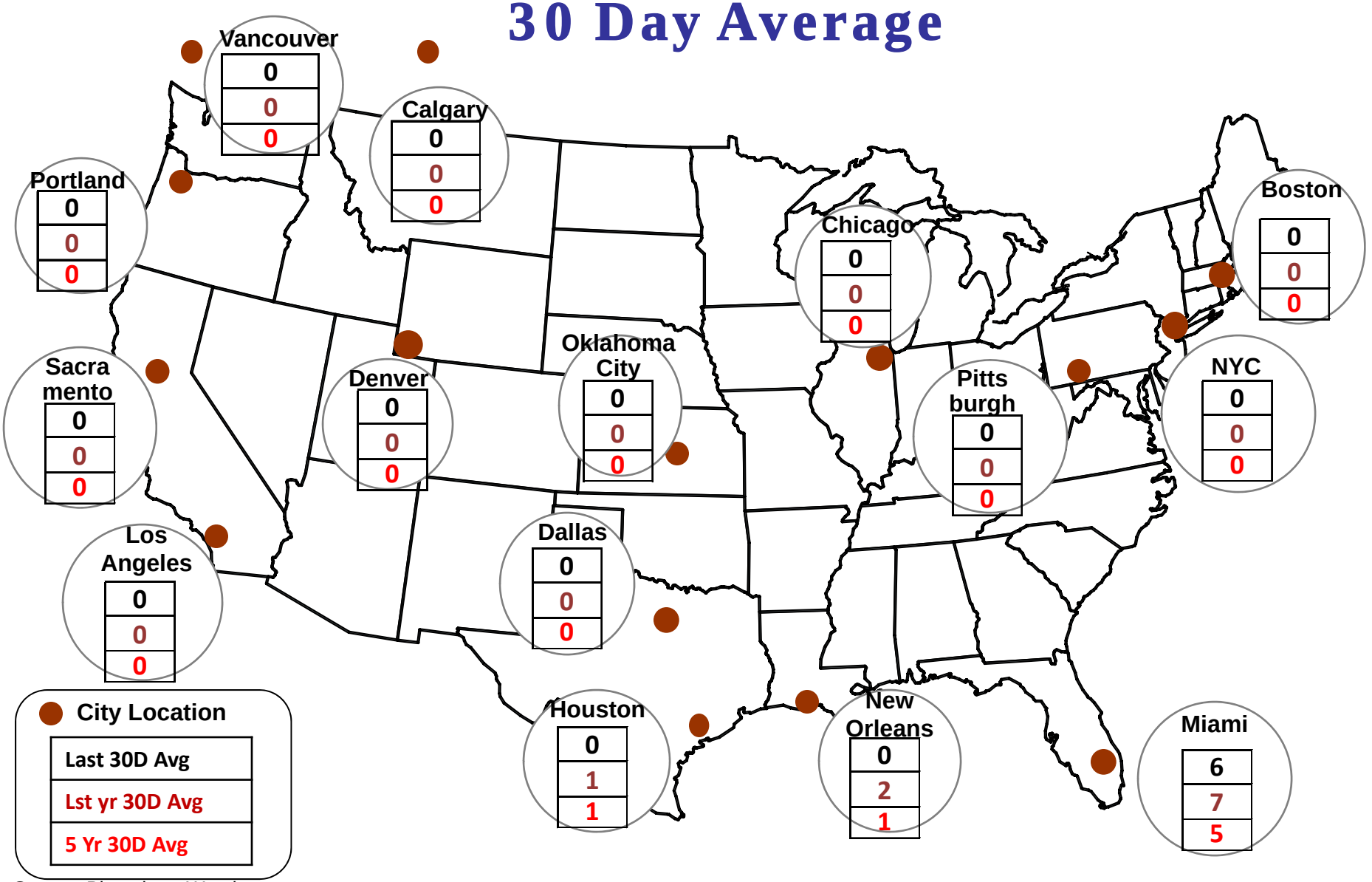
CDDs by City
30 Day Average



Source: Bloomberg Weather

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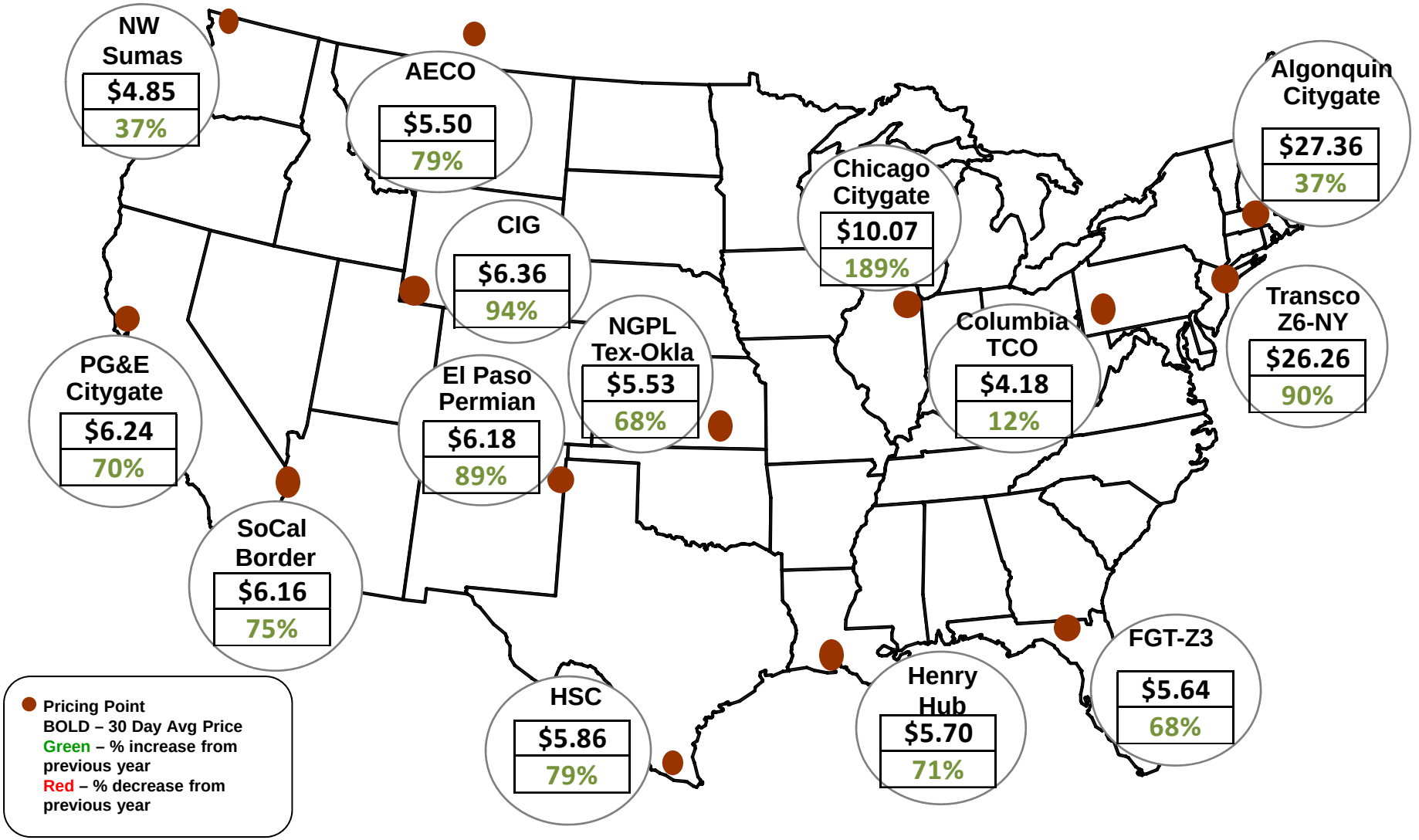
Average Spot Natural Gas Prices
30 Day Average ($/MMBtu)



Source: ICE

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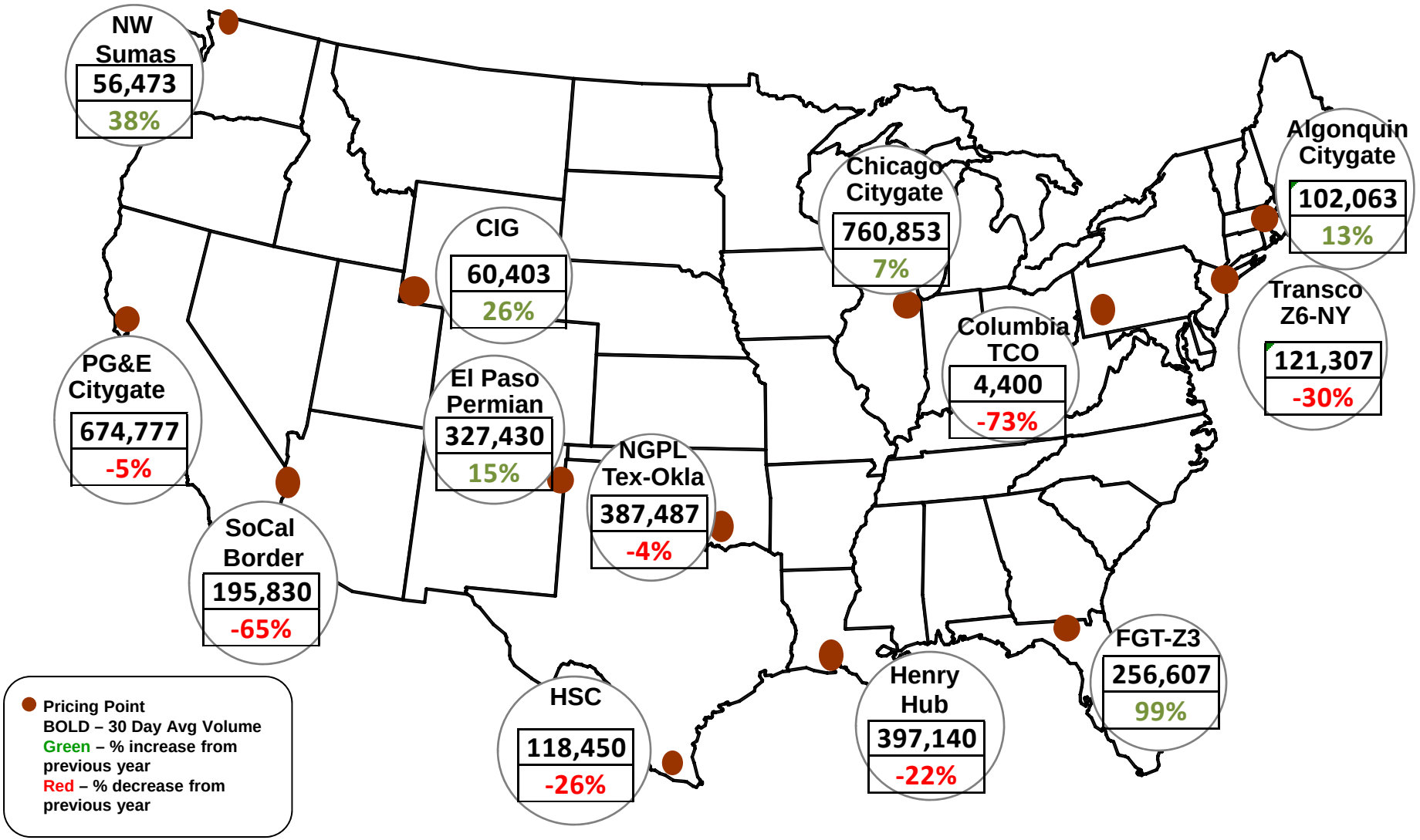
Average Spot Natural Gas Trading Volume
30 Day Average (MMBtus)



Source: ICE

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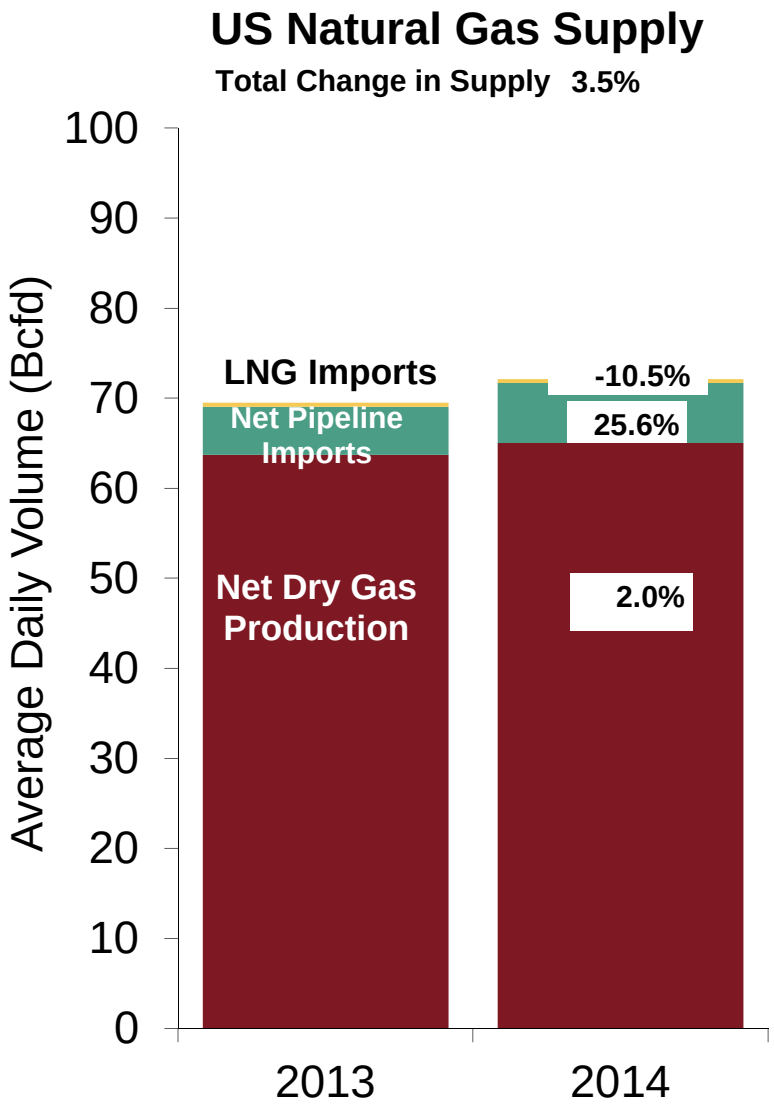
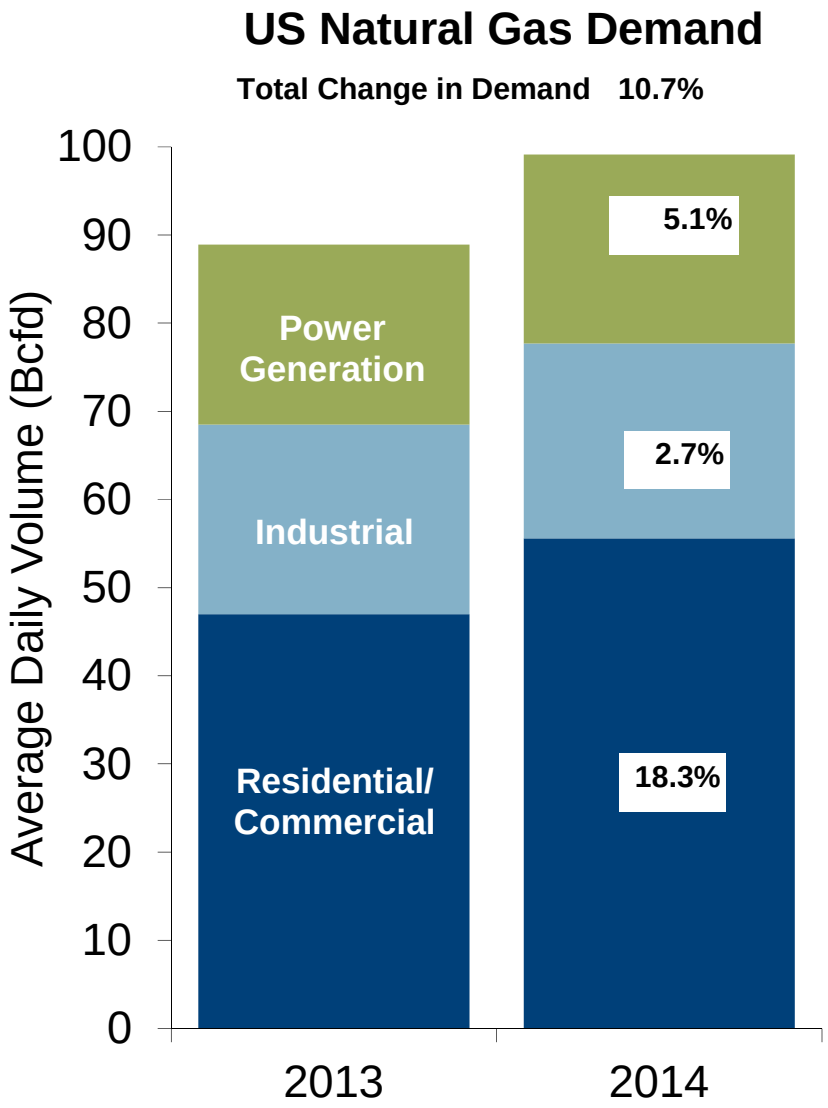
U.S. NG Supply and Demand January 2013 vs. January 2014





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

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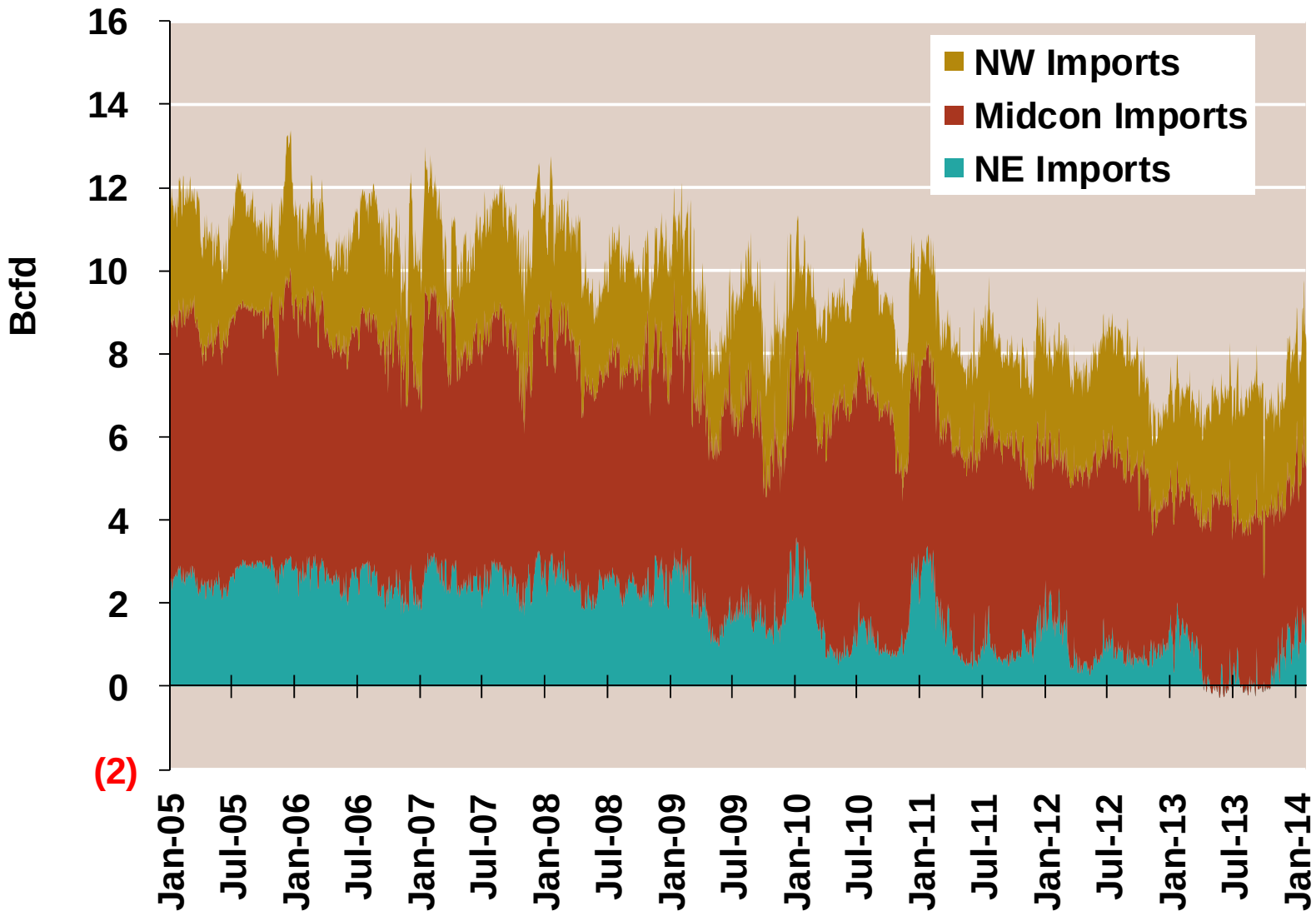
Regional Canadian Imports



Source: Derived from *Bentek Energy* data

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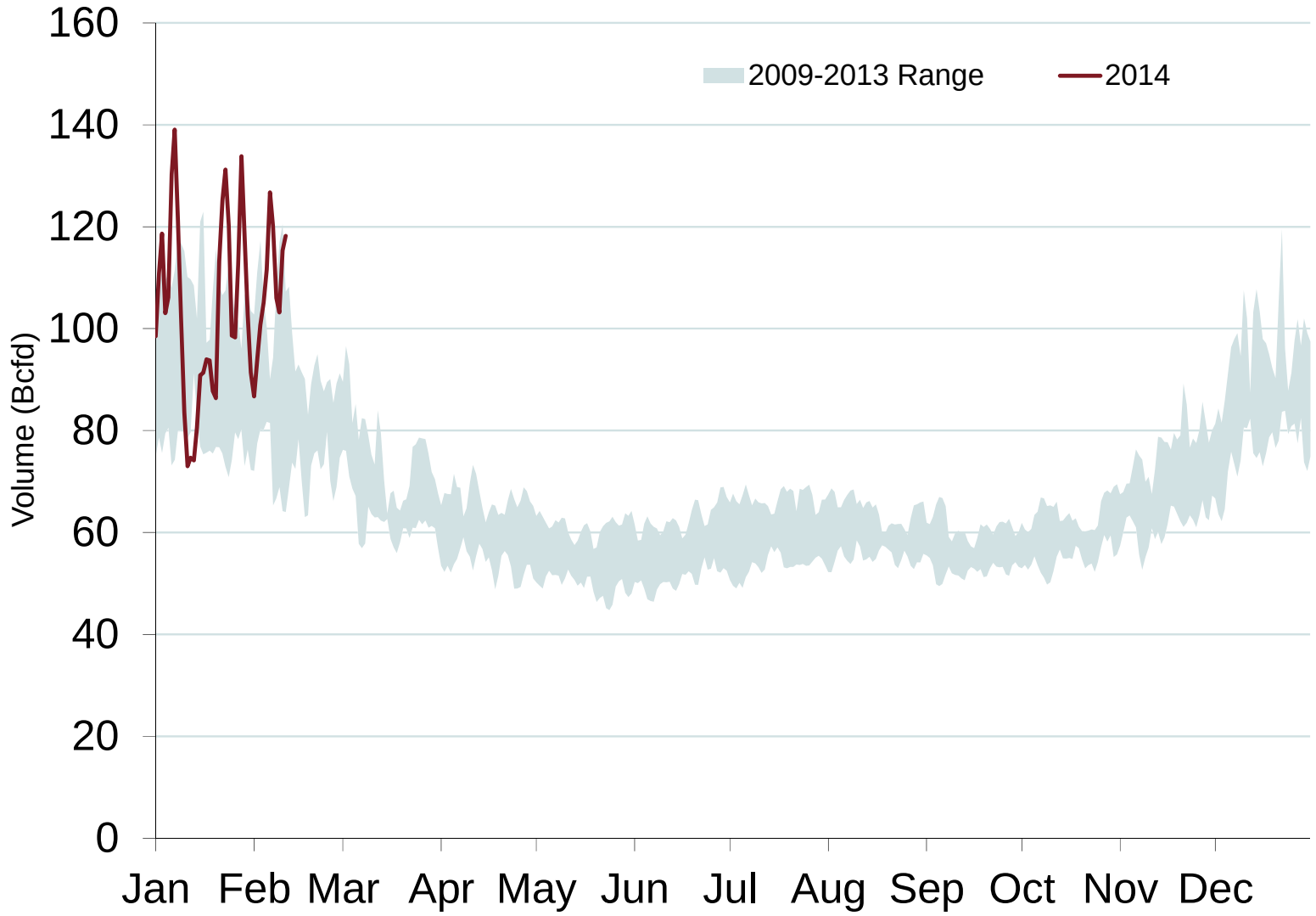
Total U.S. Natural Gas Demand All Sectors



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

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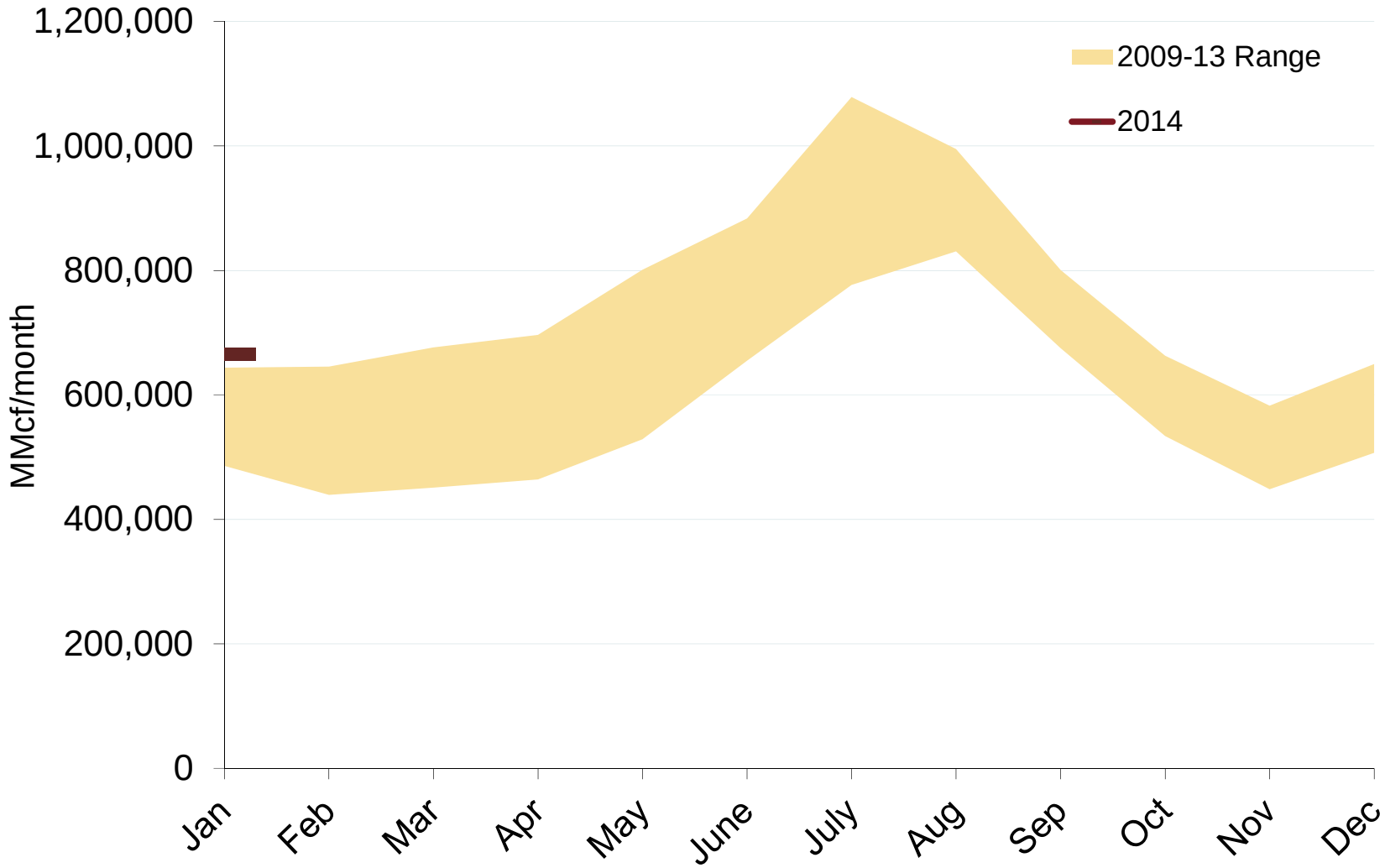
U.S. Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data

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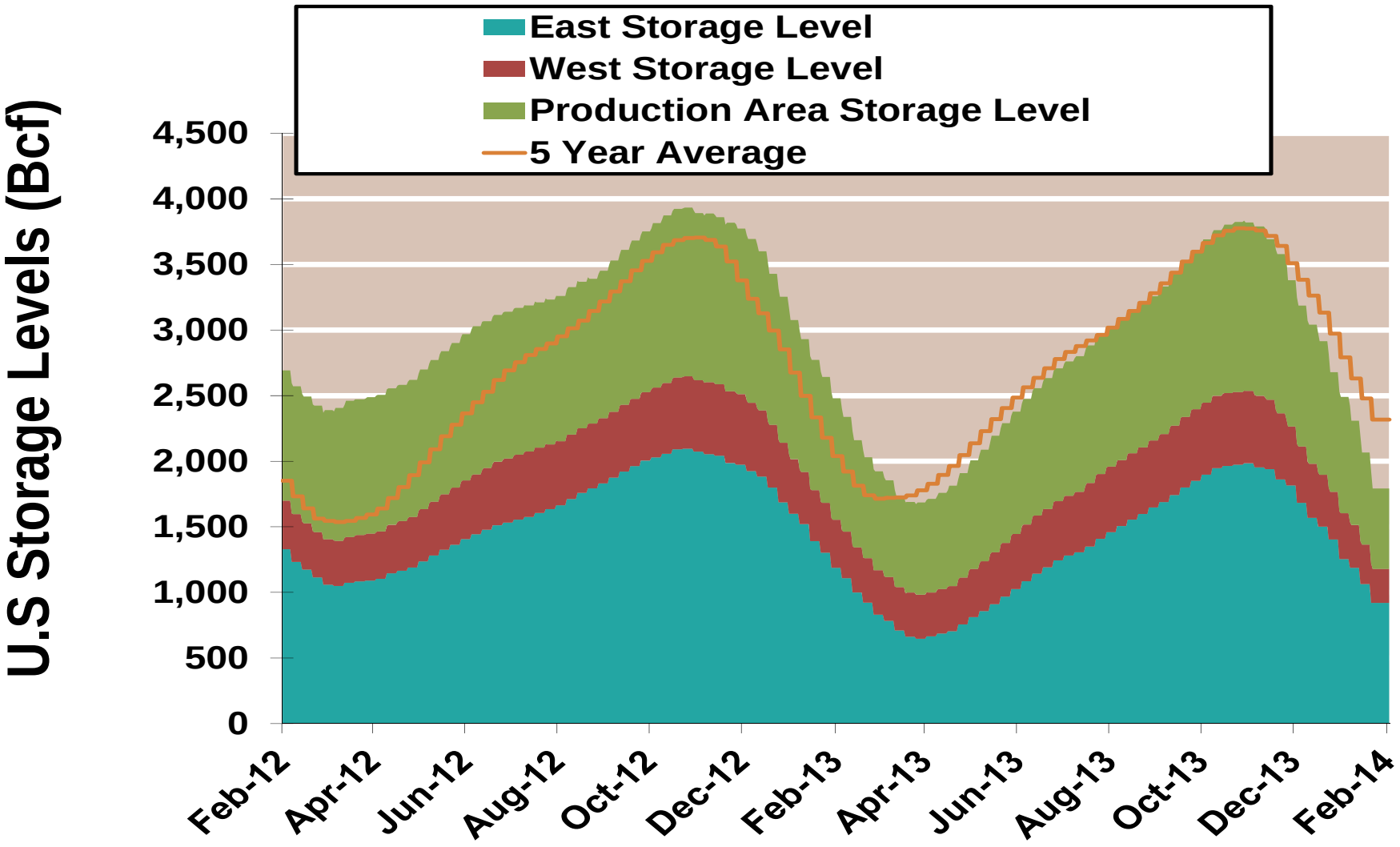
EIA Storage Inventories



Notes:

Source: Derived from Bloomberg Data

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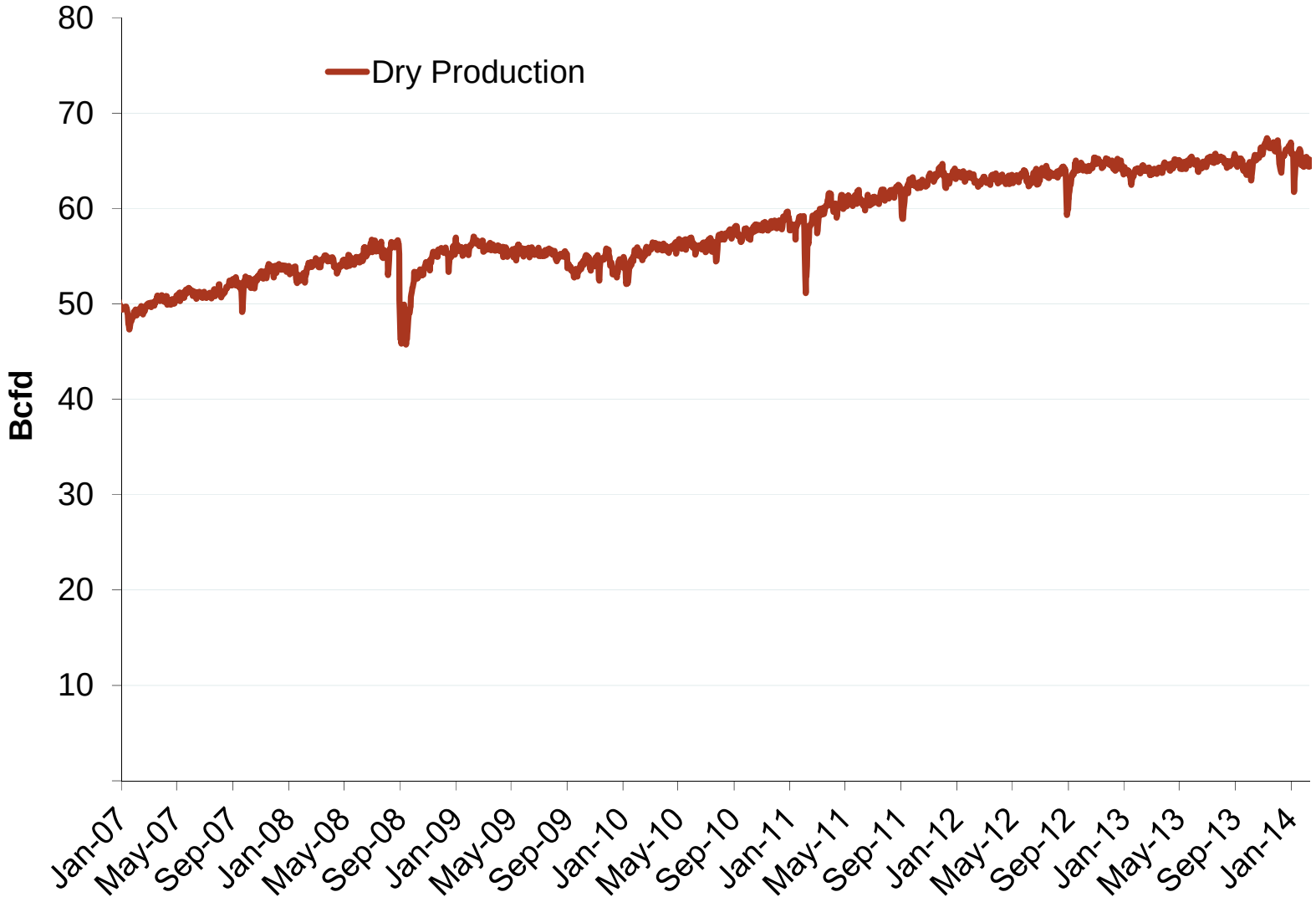
Monthly U.S. Dry Gas Production – Lower 48 States



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

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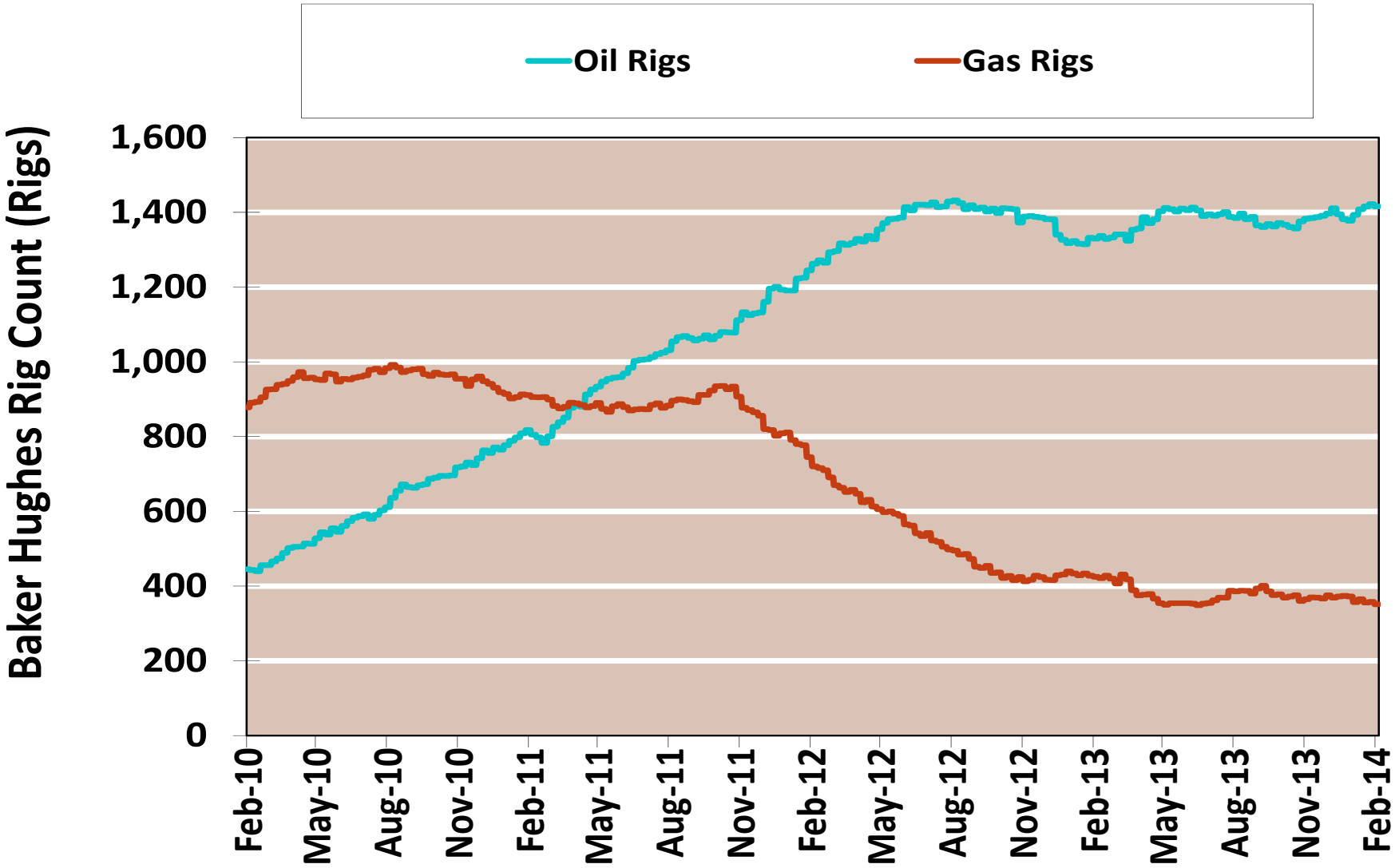
NG Rigs by Type



Notes:

Source: Derived from Bloomberg data

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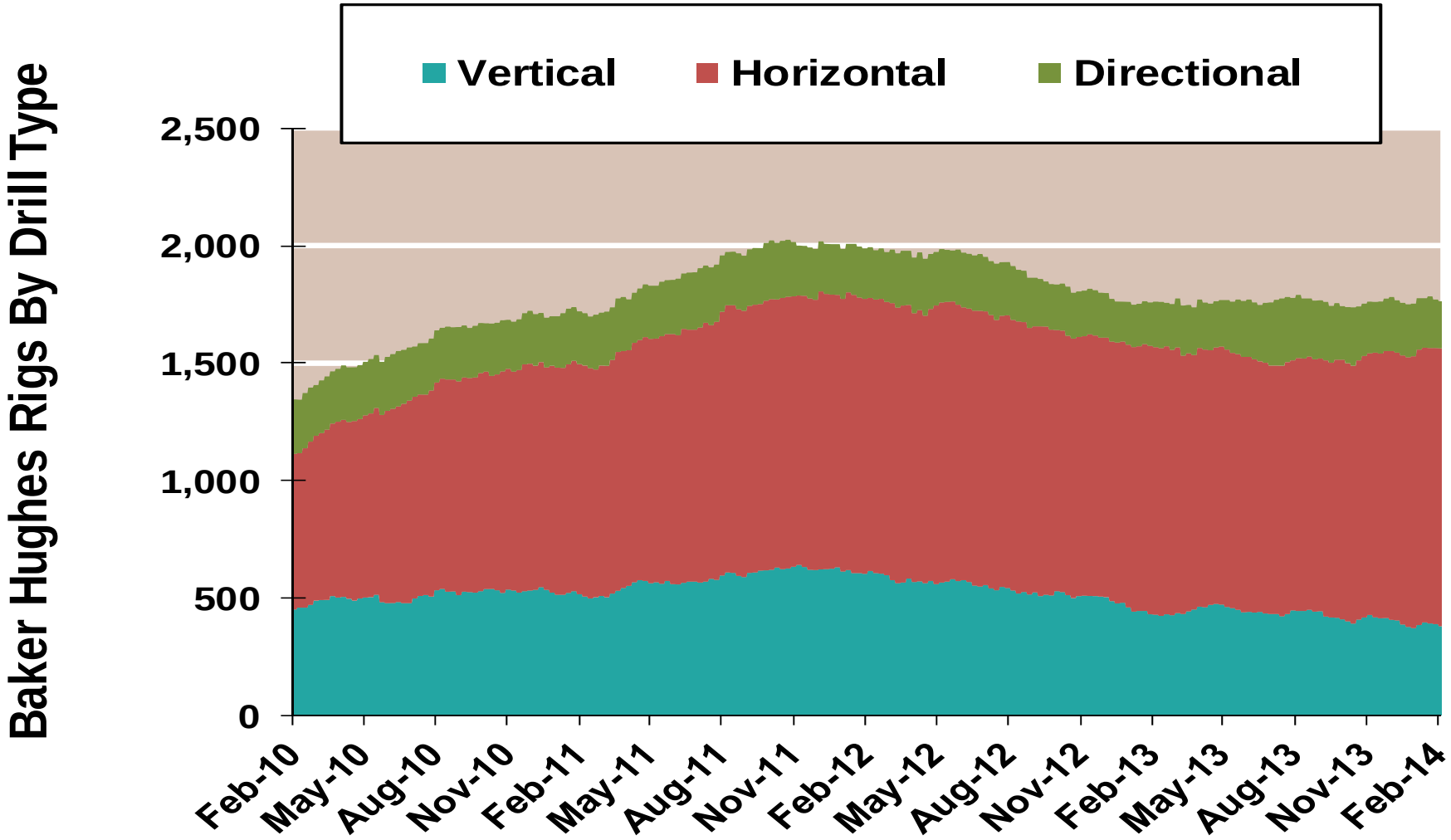
NG Rig by Direction



Notes:

Source: Derived from Bloomberg data

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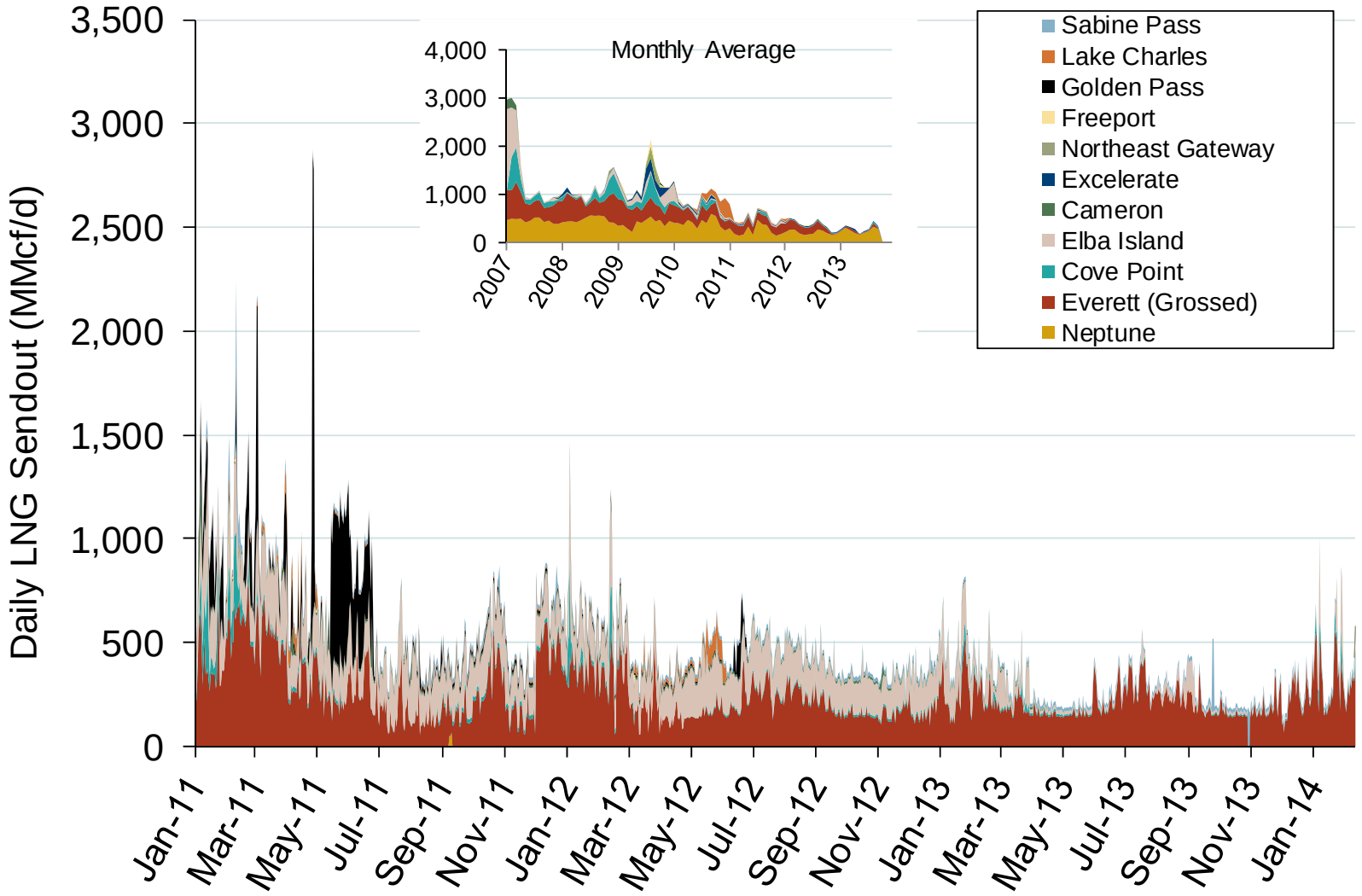
Daily Gas Sendout from Existing U.S. LNG Facilities



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

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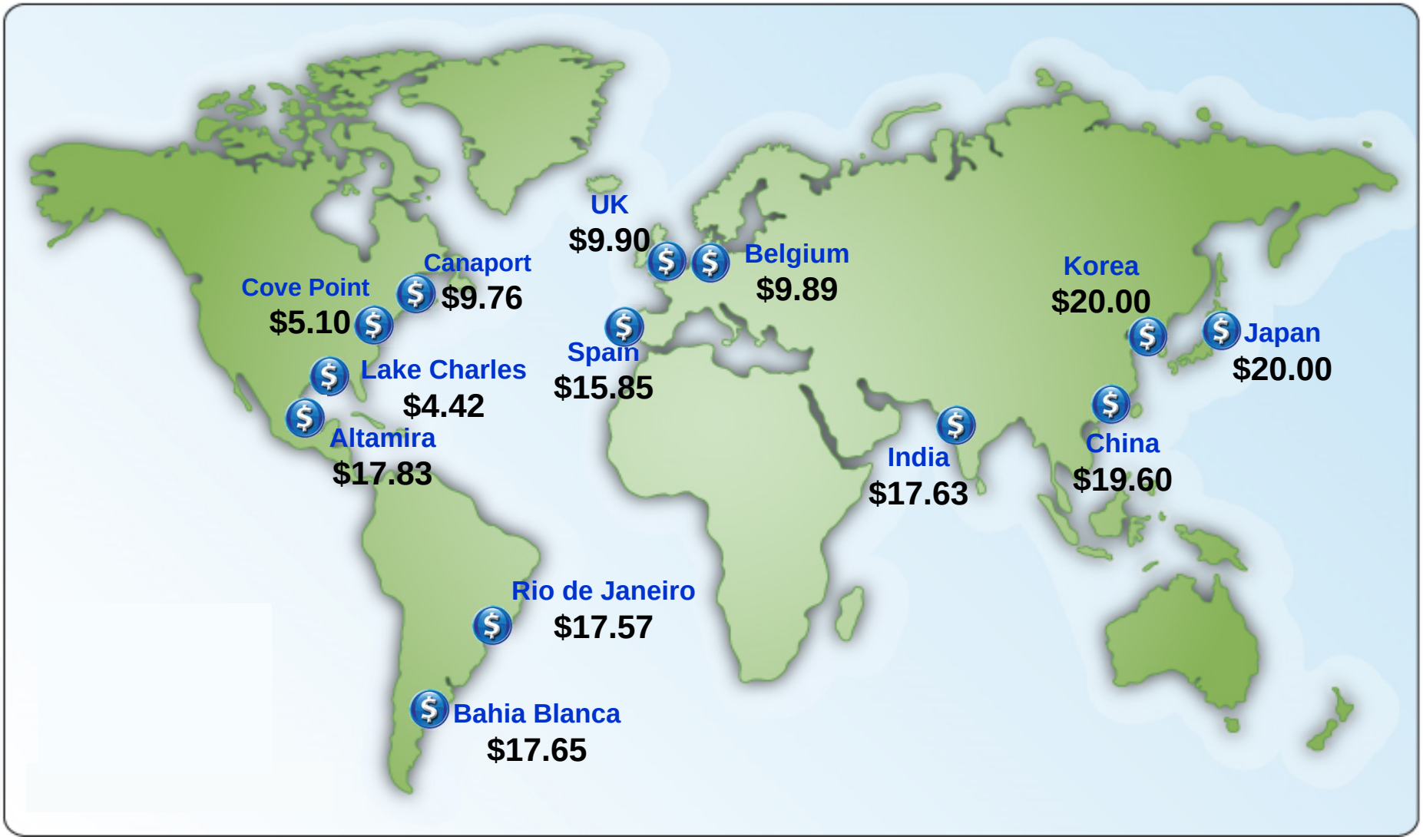
World LNG Estimated March 2014 Landed Prices



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

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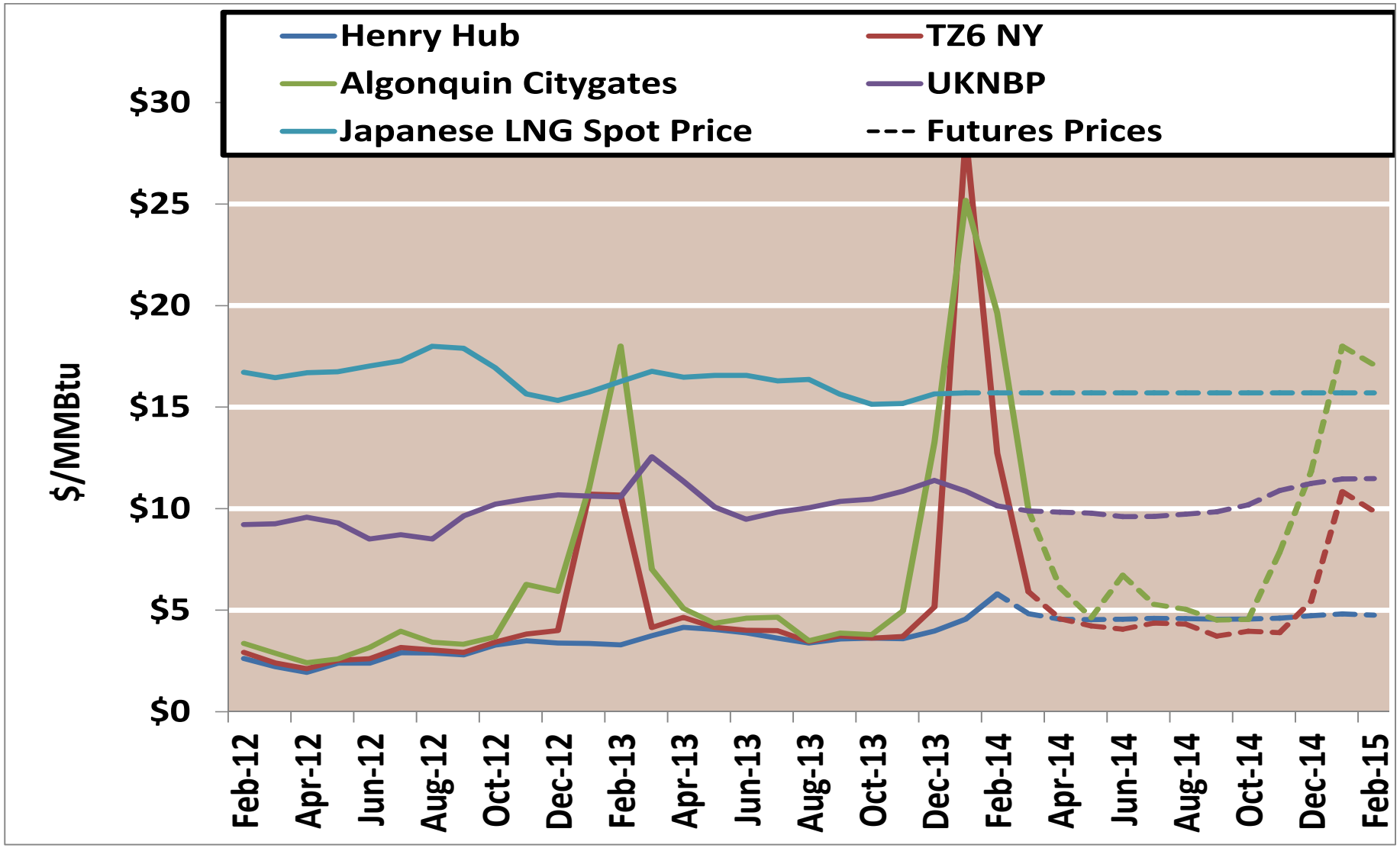
LNG Competitive Price Hubs



Notes:

Source: Derived from Bloomberg data

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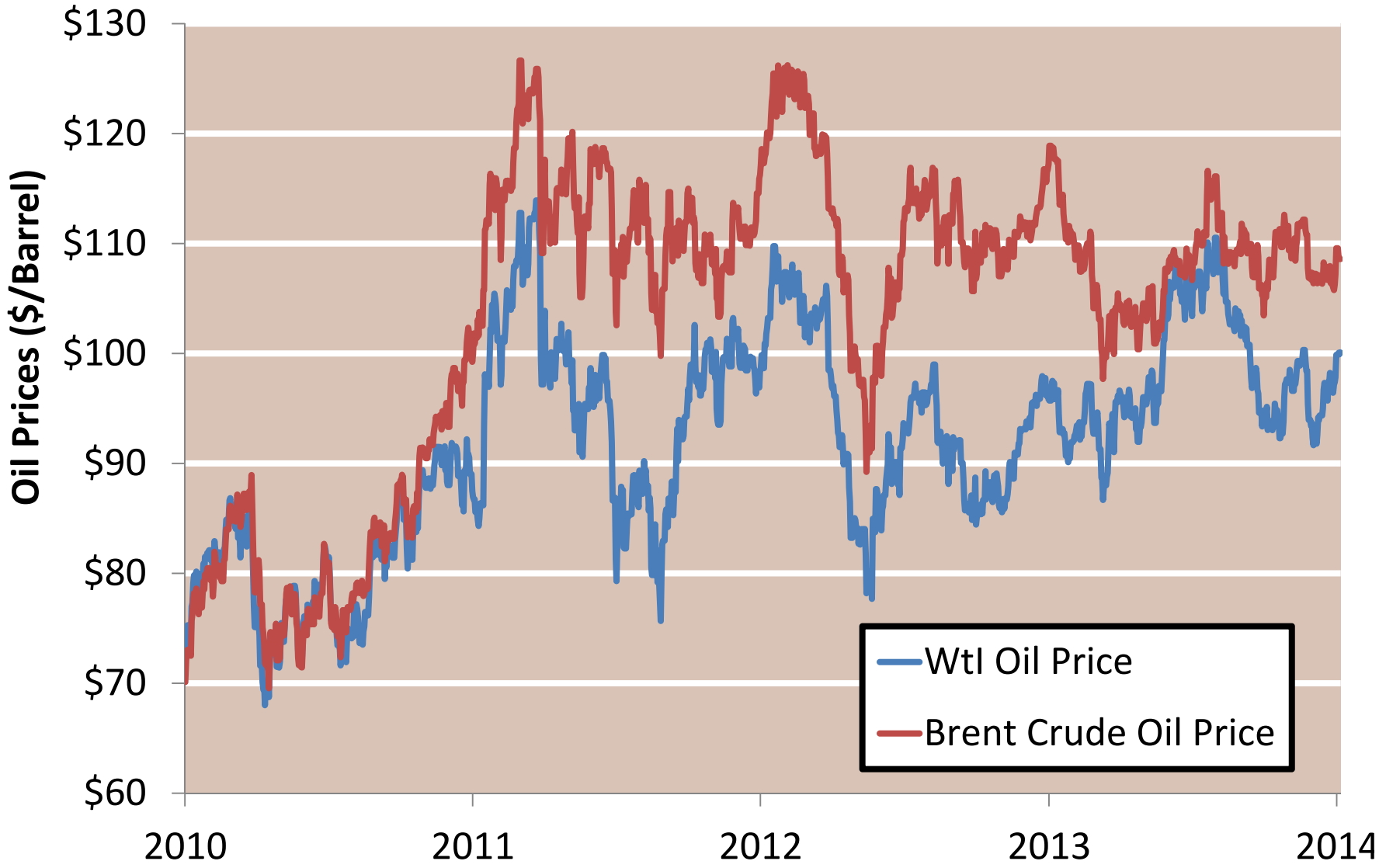

Source: Derived from Bloomberg data

Electricity Markets

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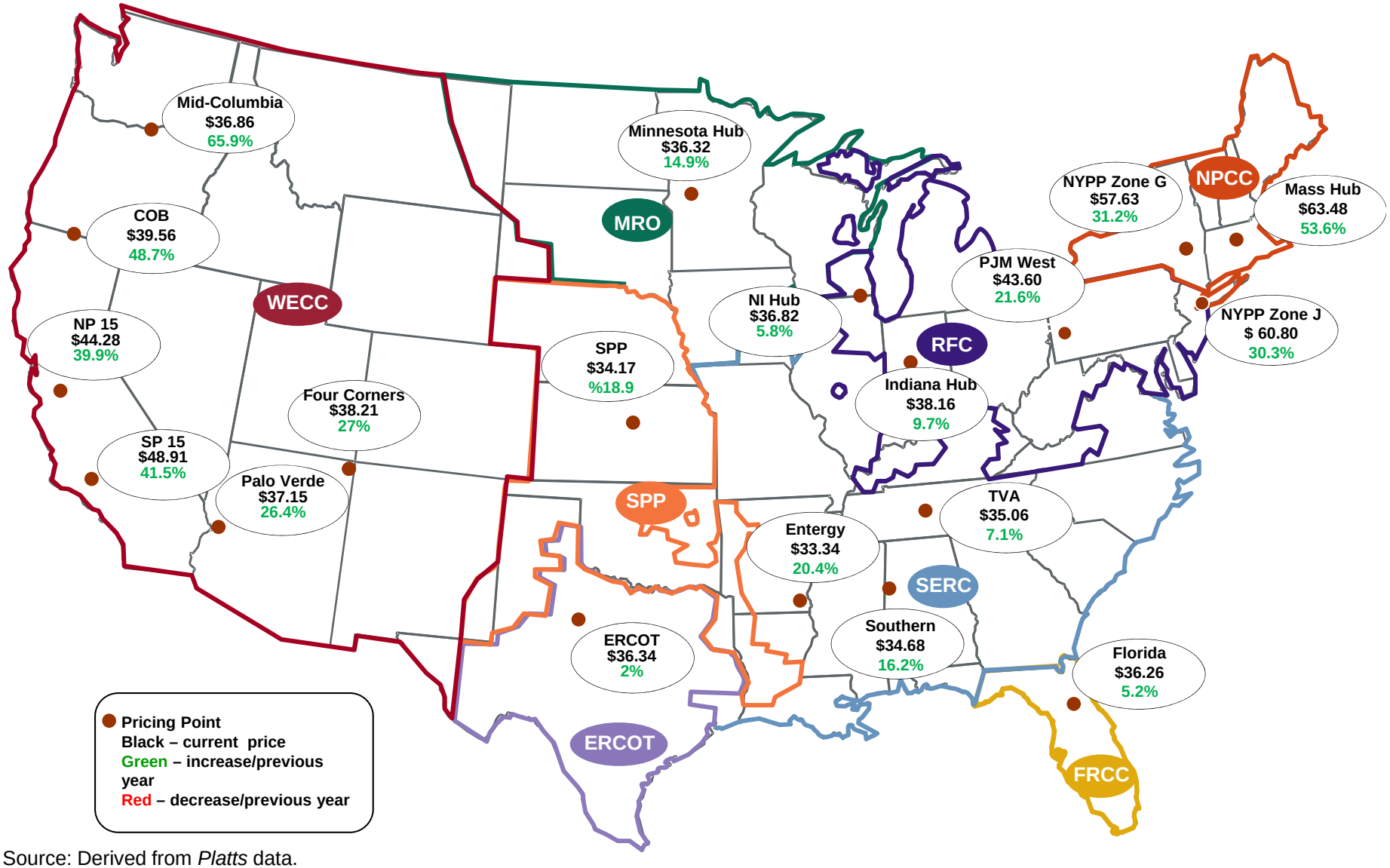
Average On-Peak Spot Electric Prices 2013 ($/MWh)



Source: Derived from *Platts* data.

Note: prices through Dec 31, 2013

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Electricity Prices in Eastern and Midwest RTOs

Real Time Prices Show Steep Increases During Cold Wave					
		Monday		Tuesday	
		January 6, 2013		January 7, 2013	
RTO	Hub Location	RT Avg Price (On Peak)	Heat Rate (On Peak)	RT Avg Price (On Peak)	Heat Rate (On Peak)
ISO-NE	Mass Hub	$ 169.10	10.63	$ 298.37	8.73
NYISO	N.Y.C. Zone J	$ 129.64	9.53	$ 509.52	9.18
PJM	Western Hub	$ 214.17	20.10	$ 764.90	17.30
MISO	Indiana Hub	$ 162.70	12.34	$ 290.02	39.24
SPP	SPP Wide	$ 47.73	9.88	$ 39.81	7.05

Source: Derived from ICE, Genscape, and SPP Data

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