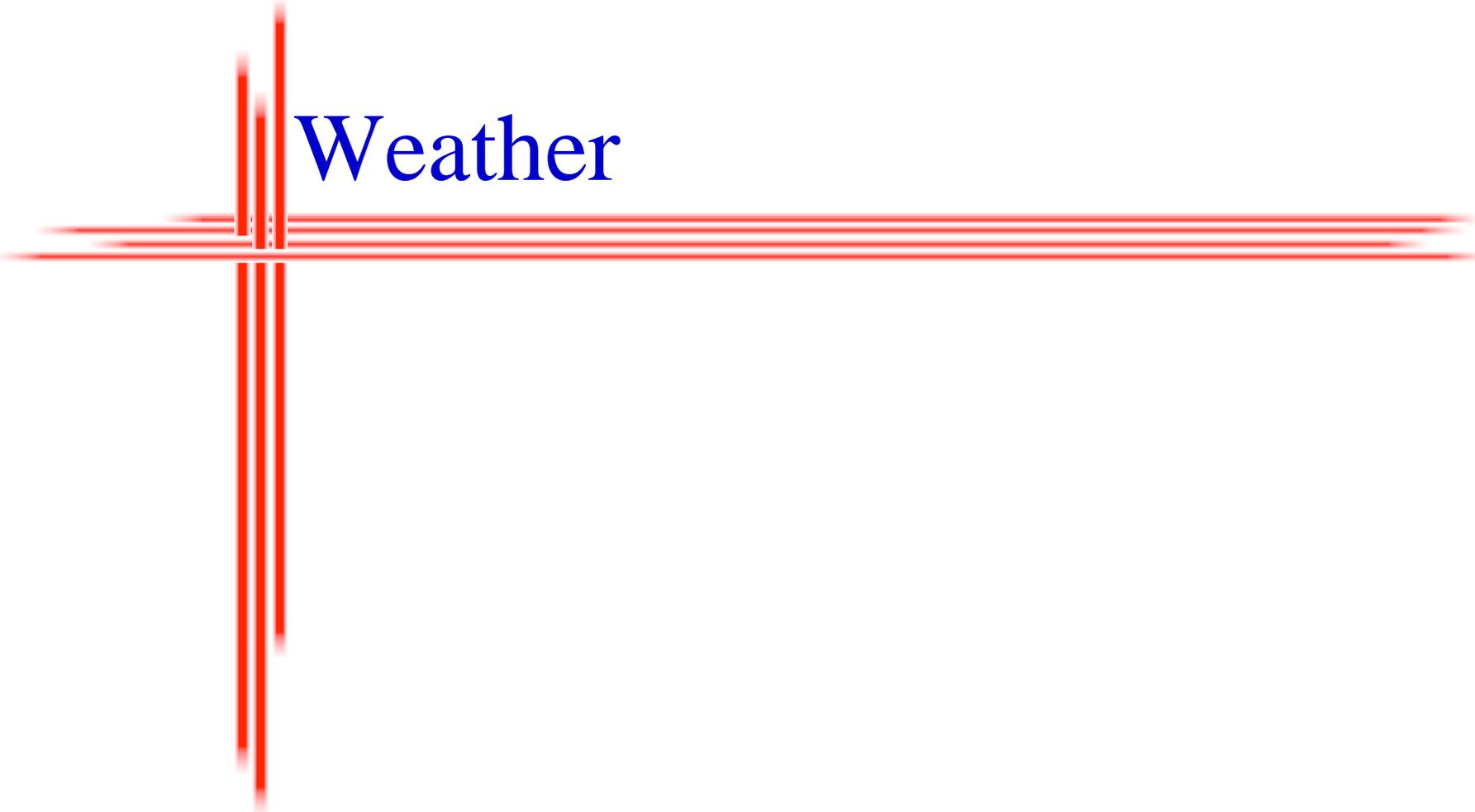


OE ENERGY MARKET SNAPSHOT

Western States Version – February 2011 Data

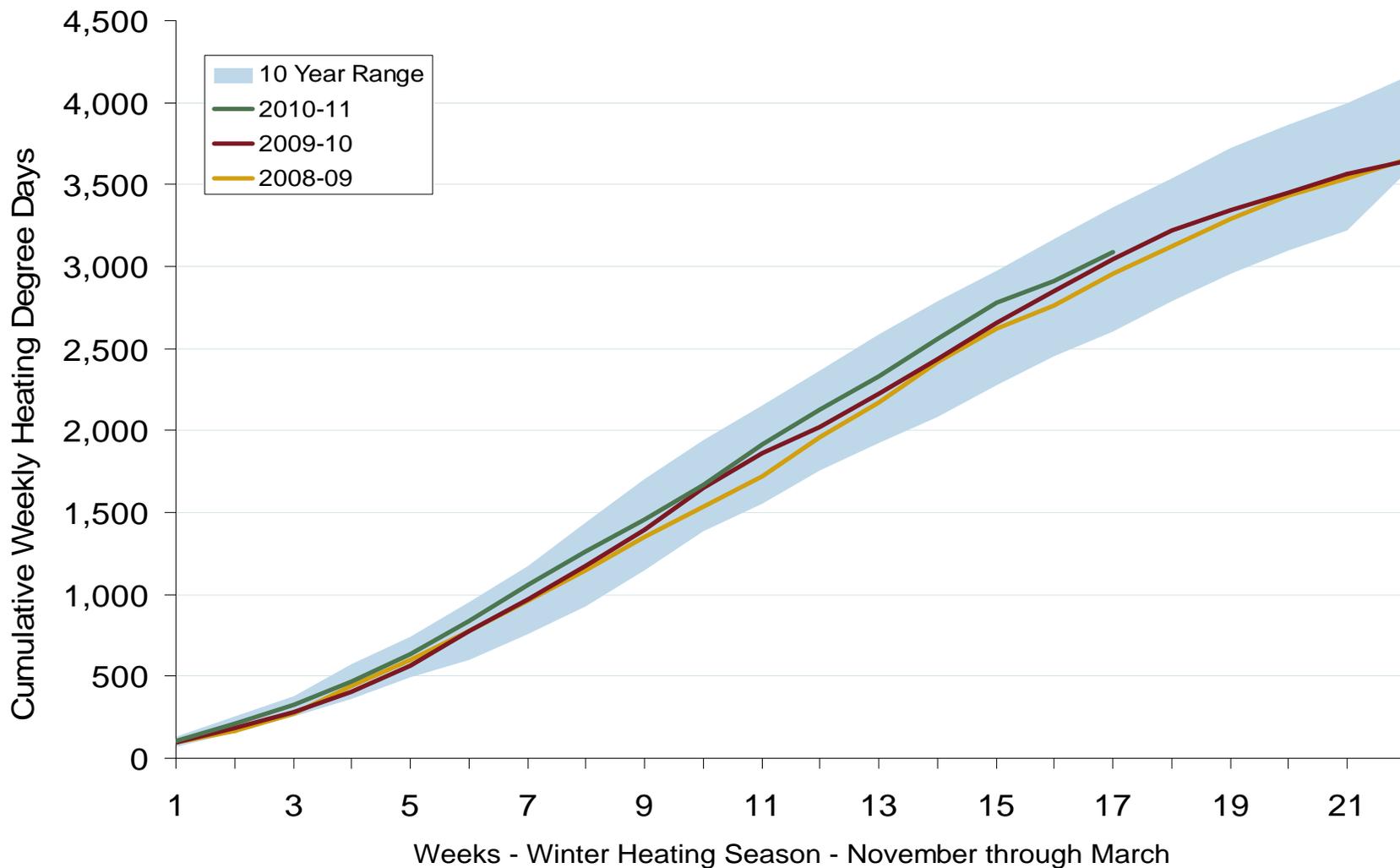
- **Weather**
- **Natural Gas and Fuel Markets**
- **Electricity Markets**

Office of Enforcement
Federal Energy Regulatory Commission
March 2011



Weather

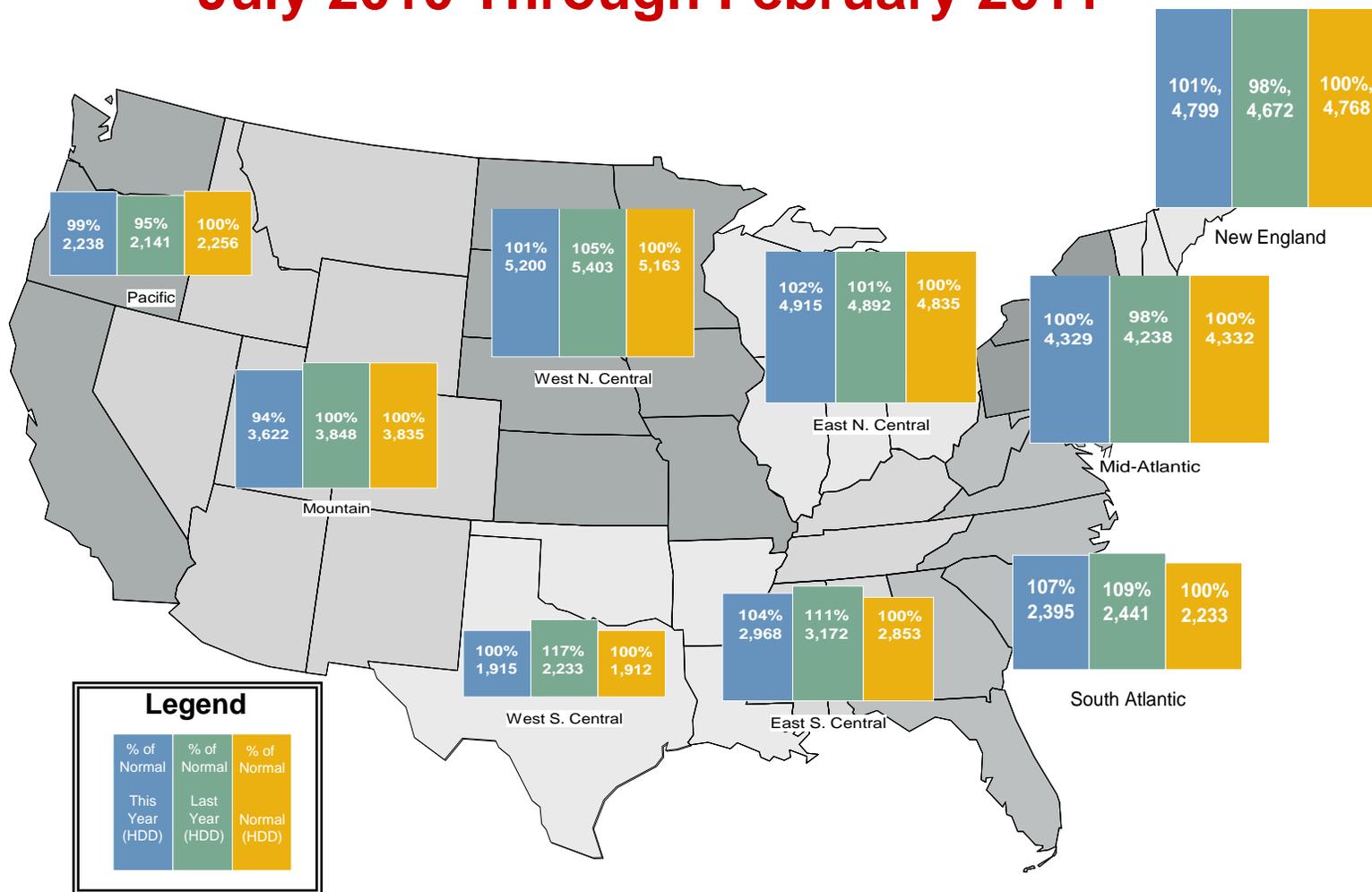
U. S. Winter Cumulative Heating Degree Days



Source: Derived from NOAA data.
March 2011 Western Snapshot Report

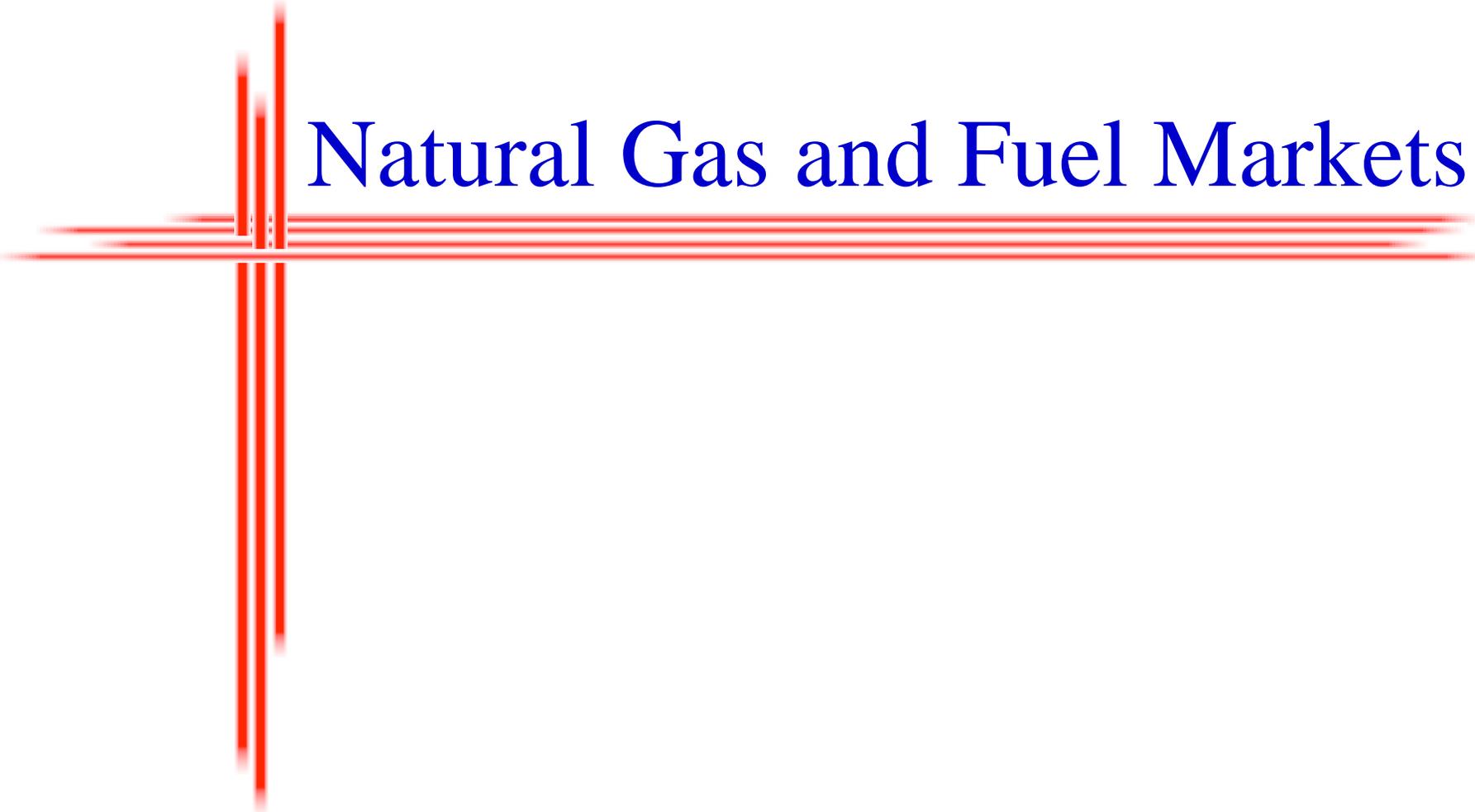
Updated: March 08, 2011

Regional Heating Degree Days July 2010 Through February 2011



Source: Derived from NOAA data. Normal is based on a 30-year average of heating degree day data.
March 2011 Western Snapshot Report

Updated: March 08, 2011

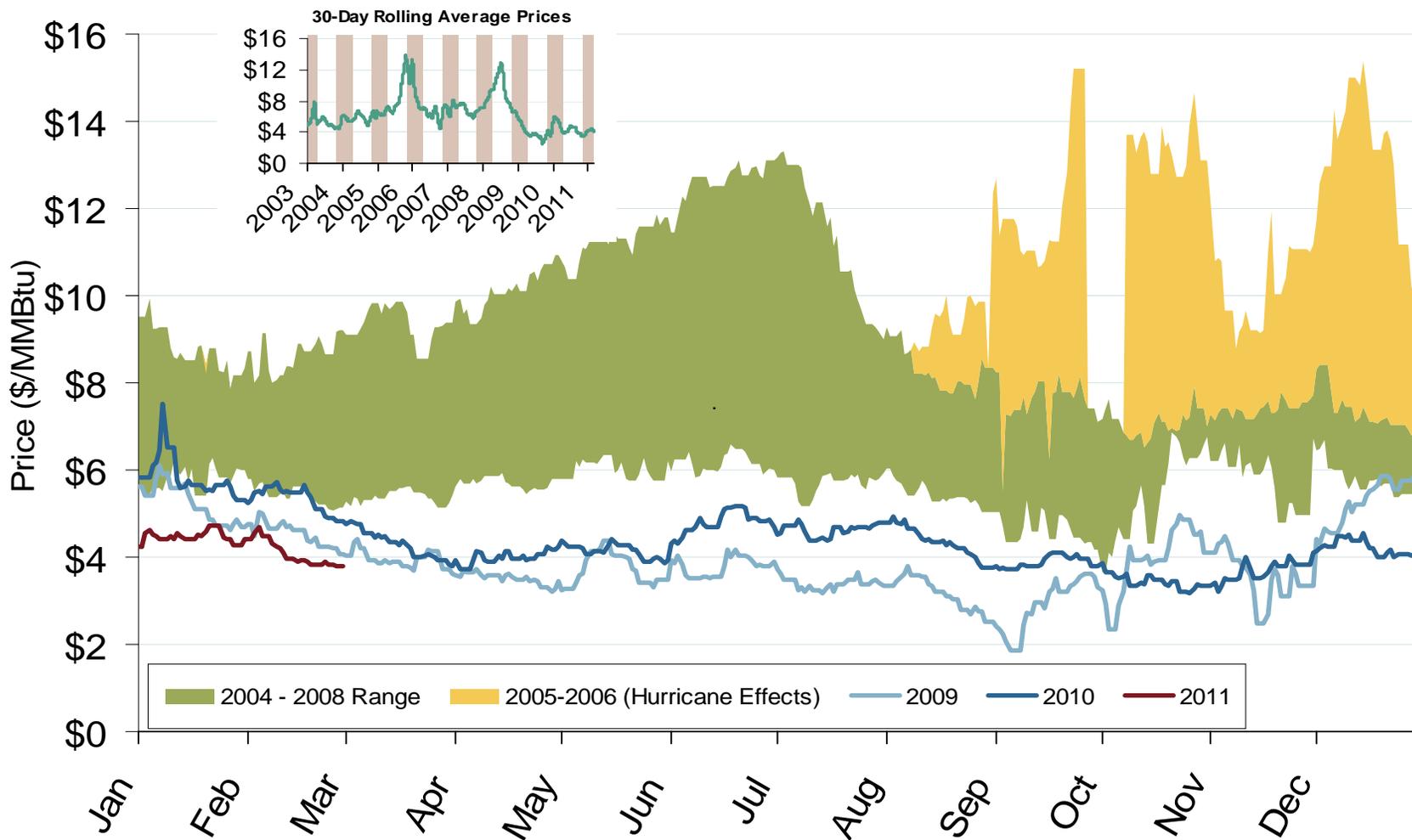
A decorative graphic consisting of several thick, parallel red lines. One vertical line runs down the left side of the page, and several horizontal lines cross it, creating a grid-like structure. The lines are slightly blurred and have a glowing effect.

Natural Gas and Fuel Markets

Natural Gas Market Overview: 5 Year Range of Henry Hub Spot Prices

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

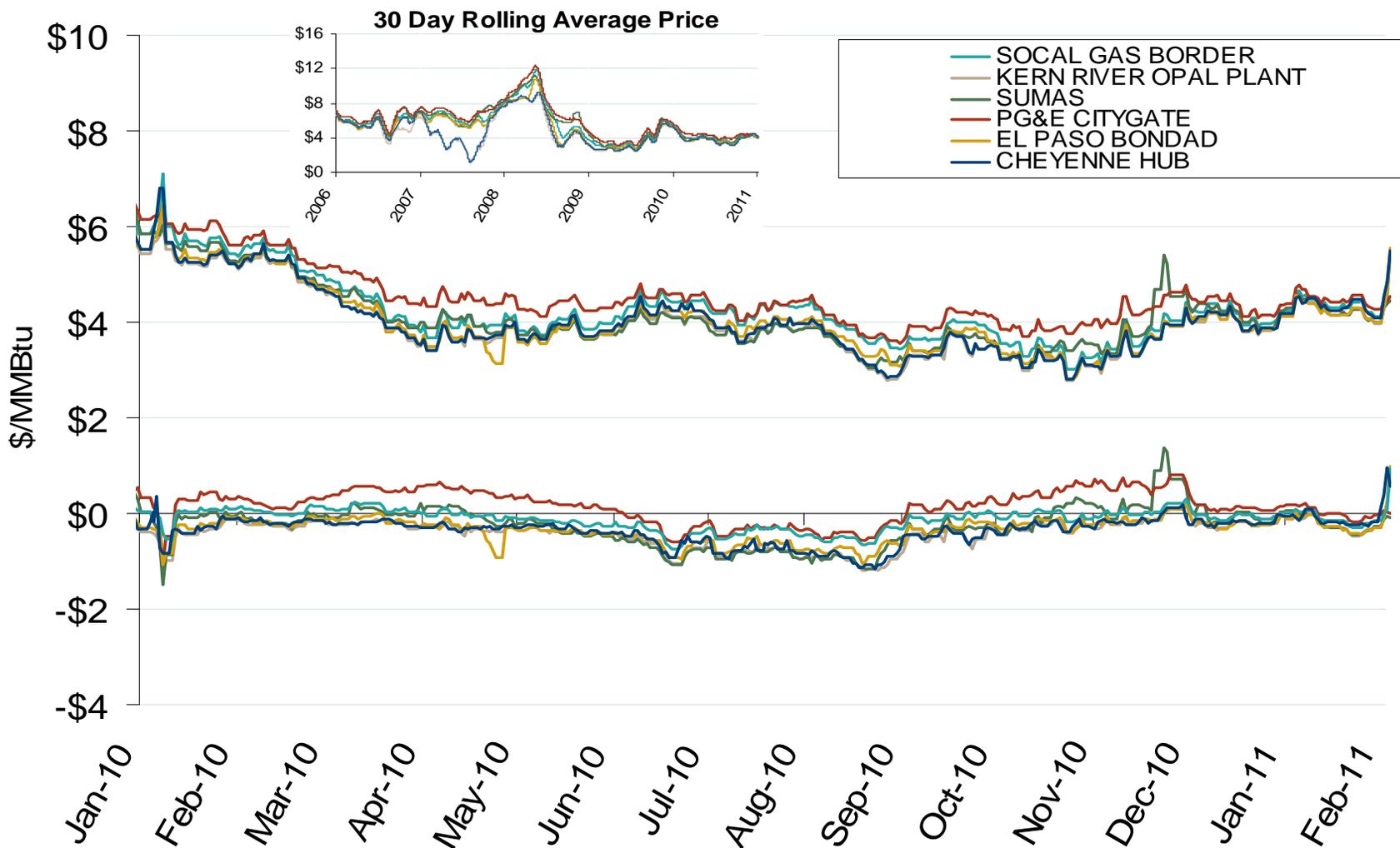
Henry Hub Natural Gas Daily Spot Prices



Source: Derived from *Platts* data.

Updated: March 08, 2011

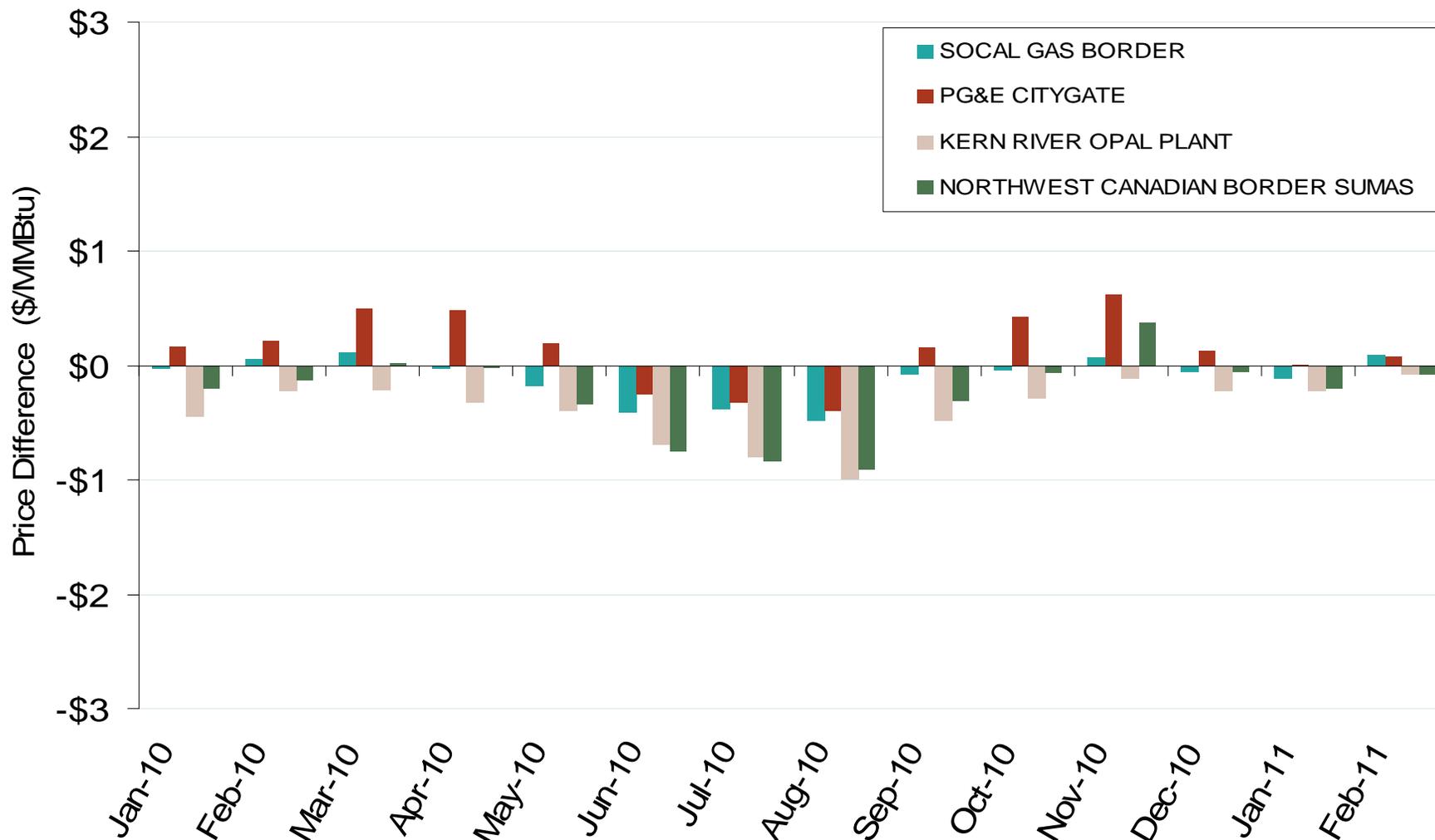
Western Day-Ahead Hub Spot Prices and Basis



Source: Derived from *Platts* data.

Updated: March 08, 2011

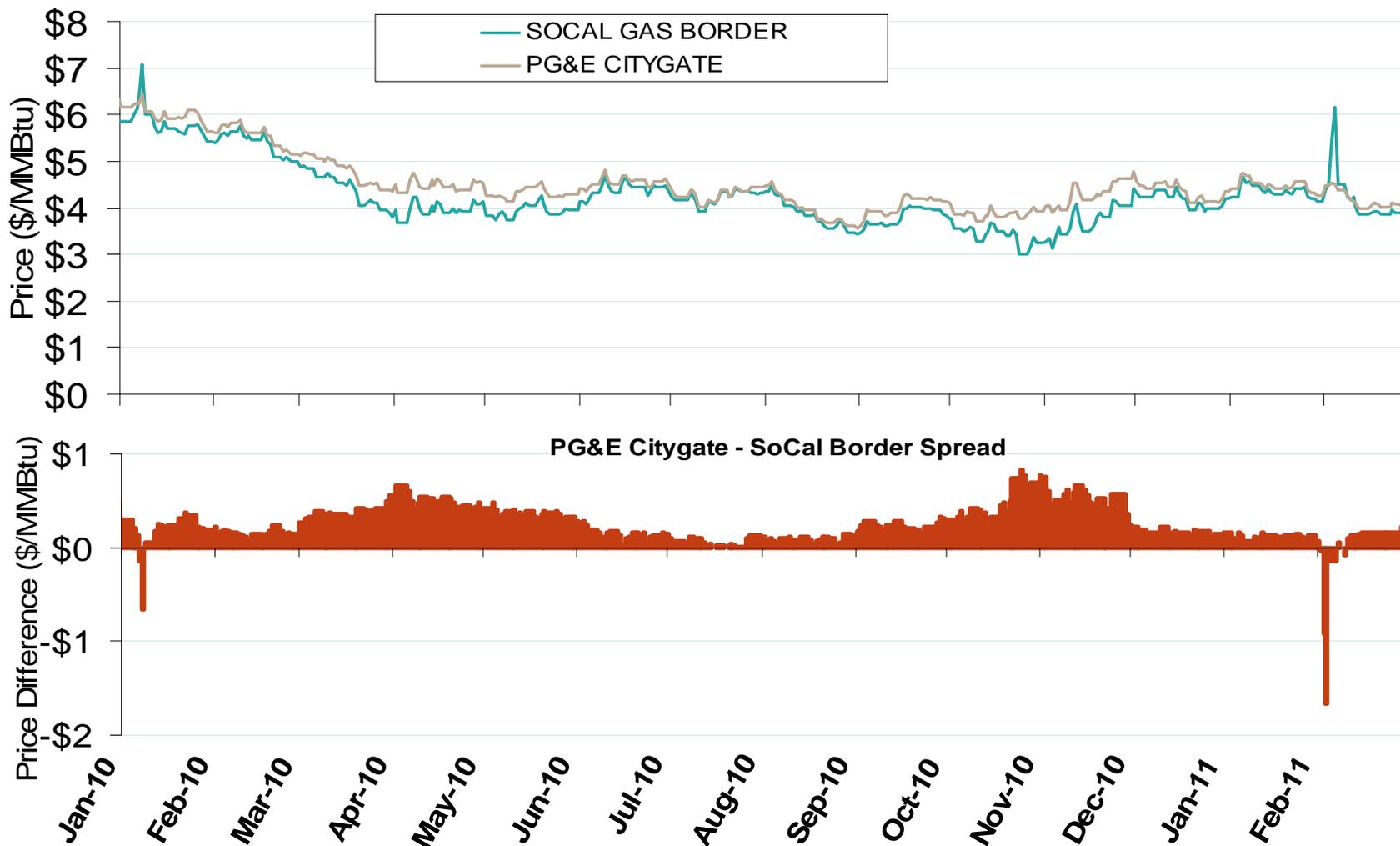
Western Monthly Average Basis Value to Henry Hub



Source: Derived from *Platts* data.
March 2011 Western Snapshot Report

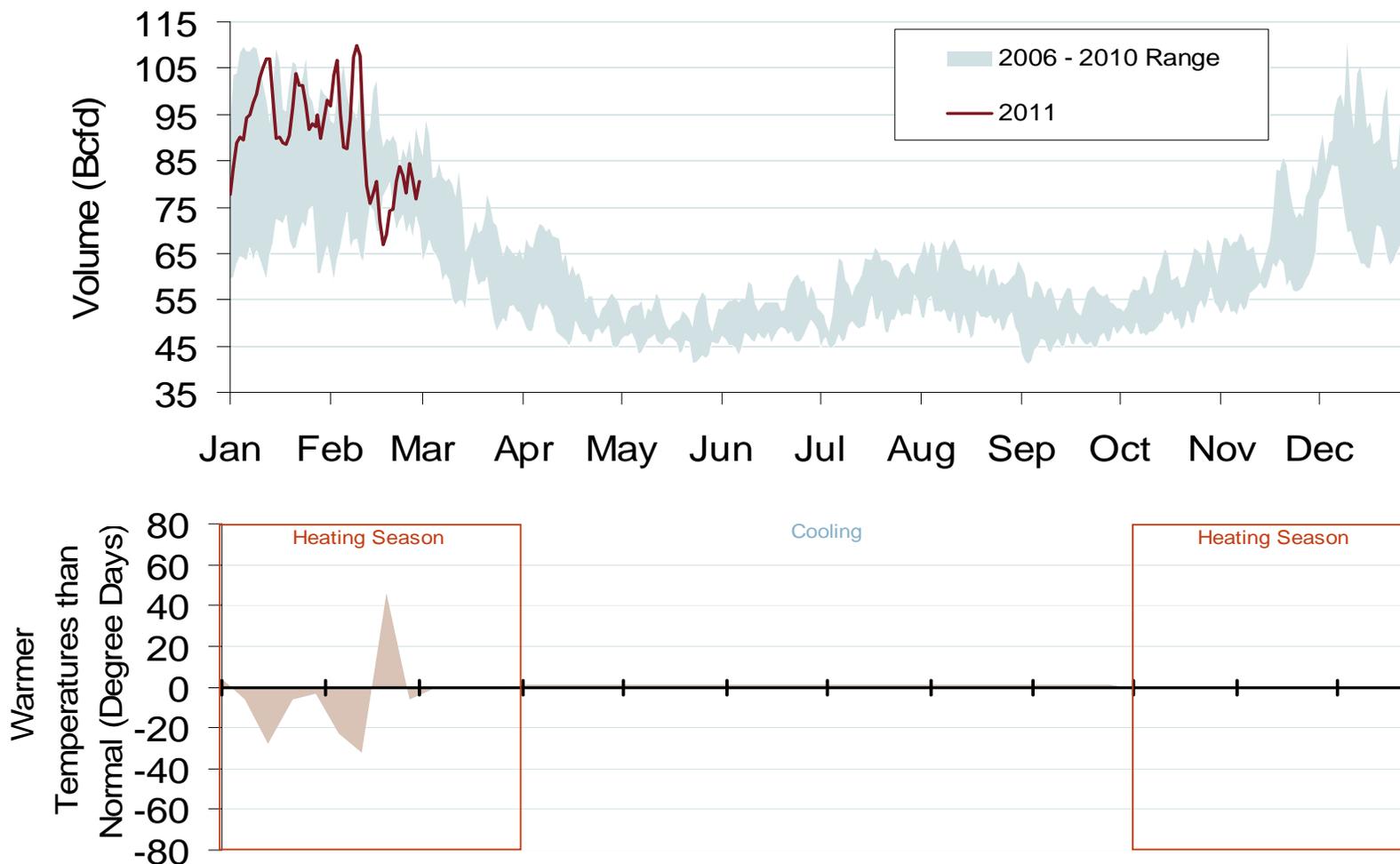
Updated: March 08, 2011

Difference in Northern and Southern California Daily Spot Prices



Source: Derived from *Platts* data.

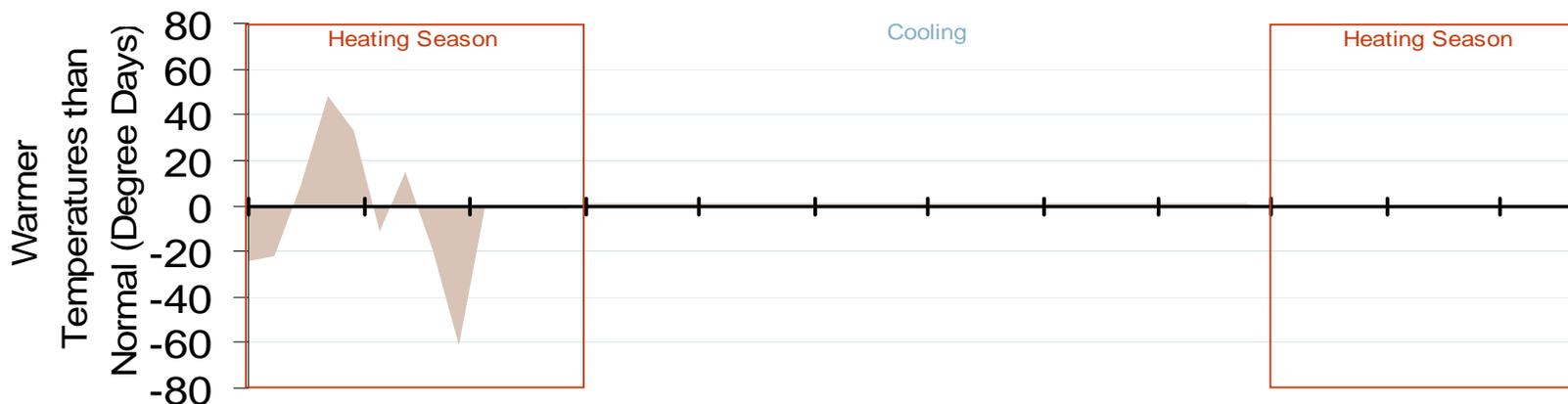
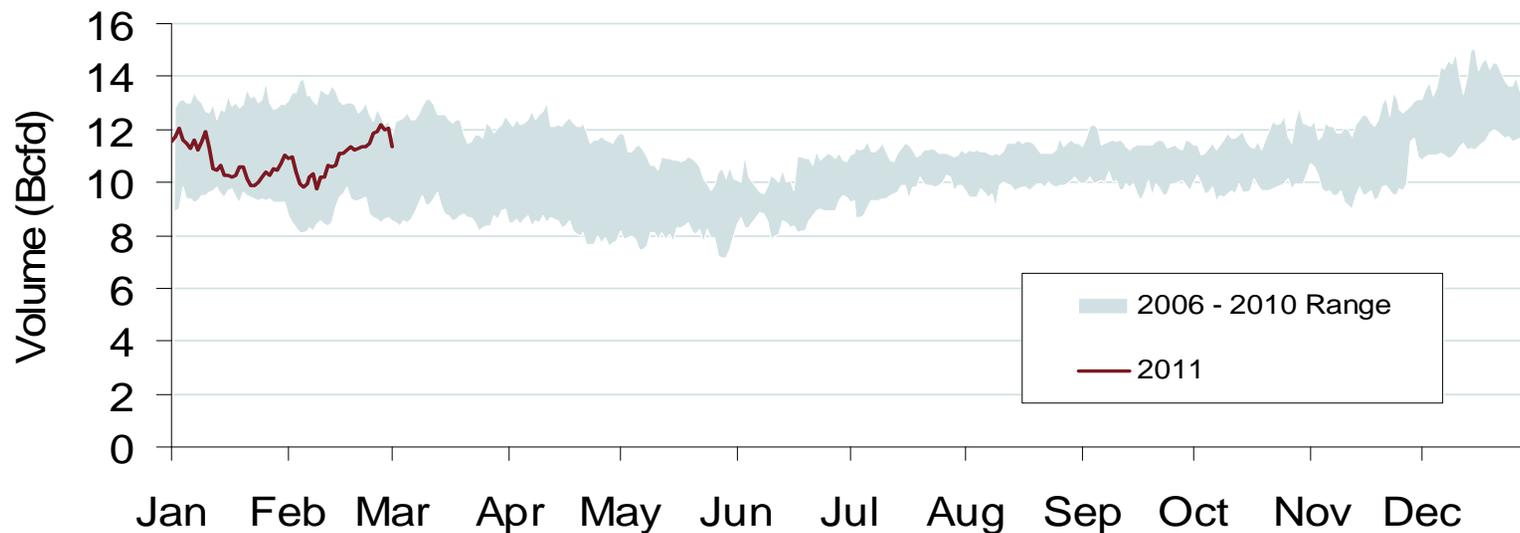
Total U.S. Natural Gas Demand (All Sectors) and Temperatures



Source: Derived from *Bentek Energy* and *Weekly NOAA* data.

Updated: March 08, 2011

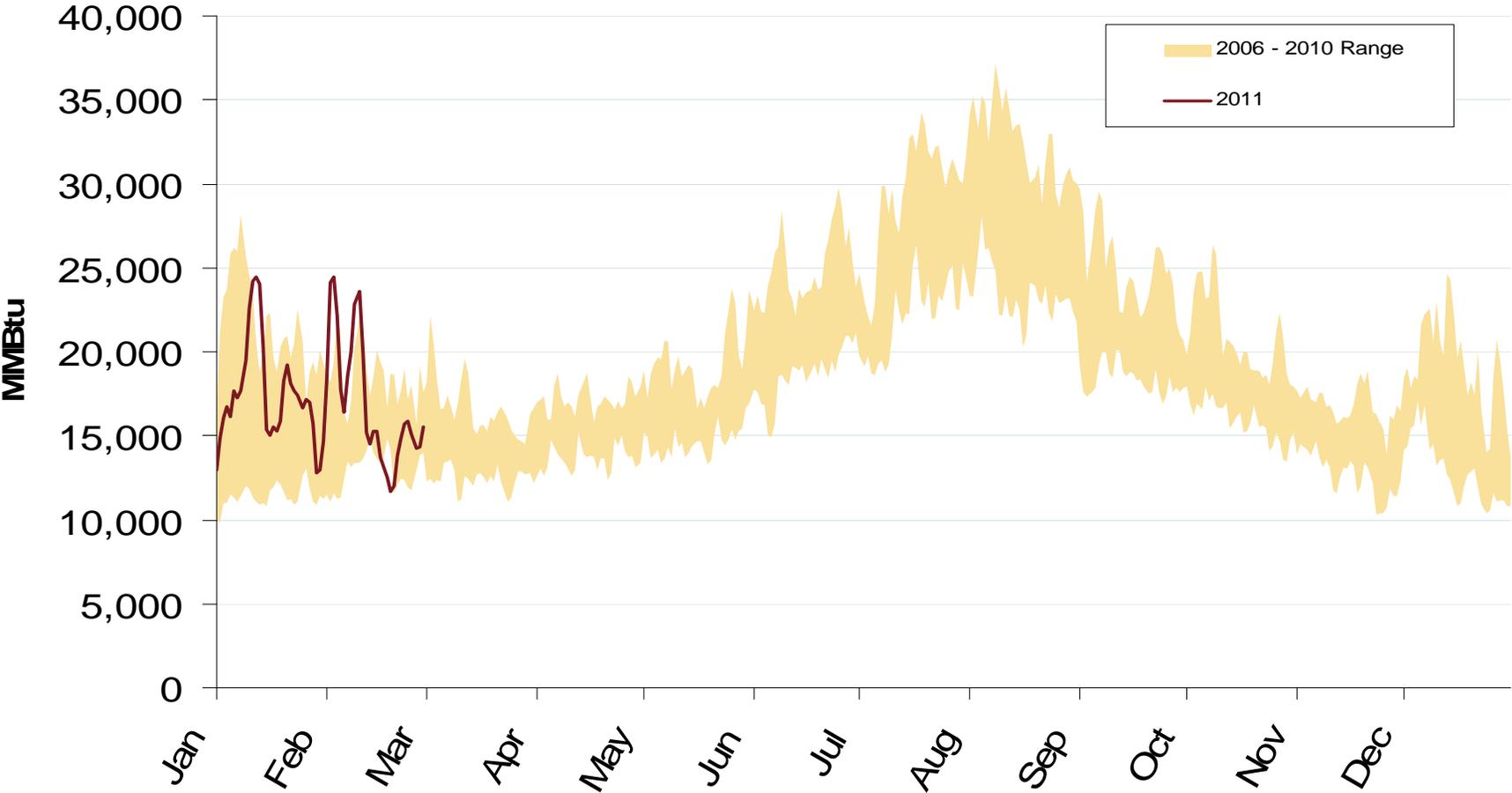
Daily Western Natural Gas Demand - All Sectors



Source: Derived from *Bentek Energy* and *Weekly NOAA* data.

Updated: March 08, 2011

U.S. Natural Gas Consumption for Power Generation

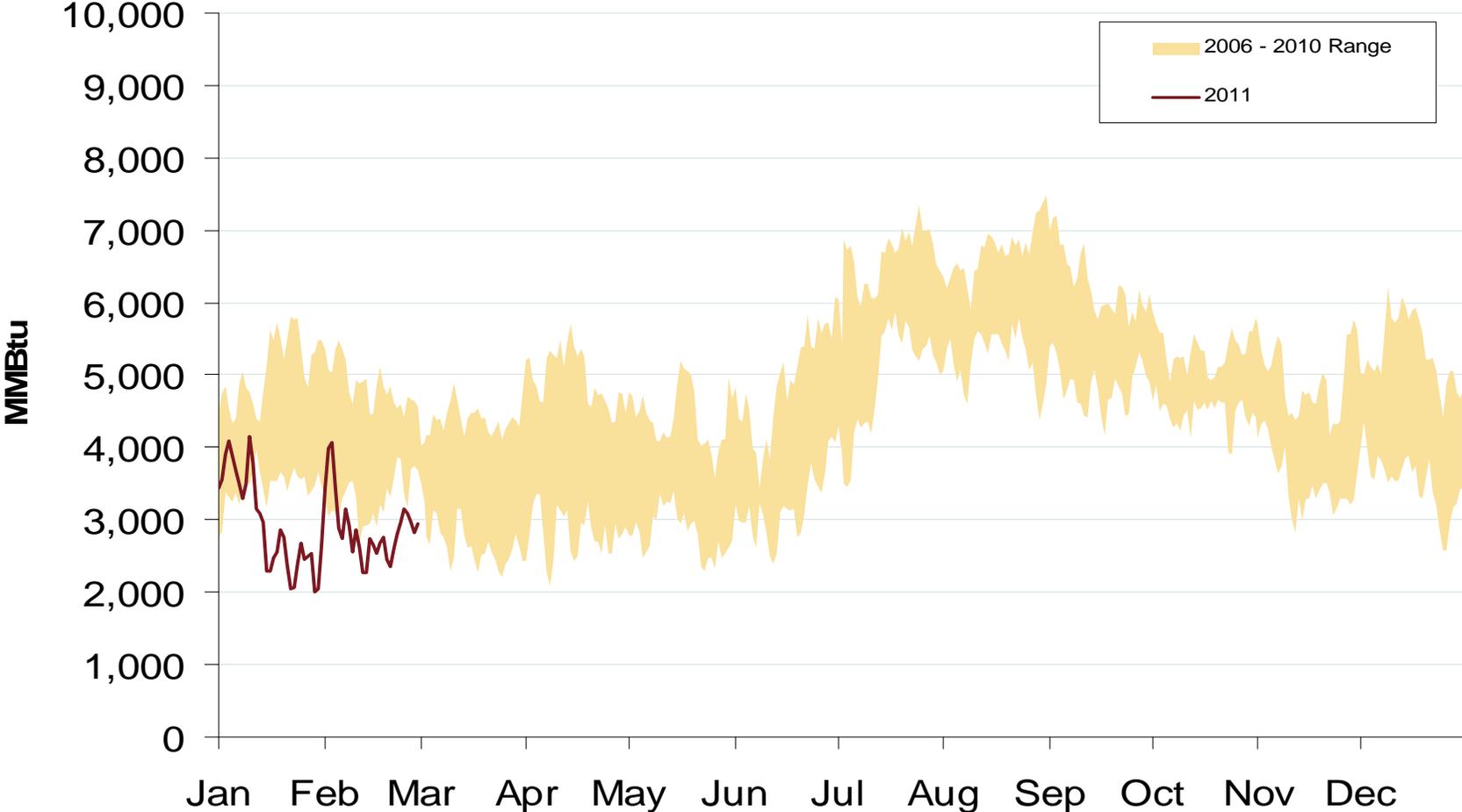


Source: Derived from *Bentek Energy* data.

Updated: March 08, 2011

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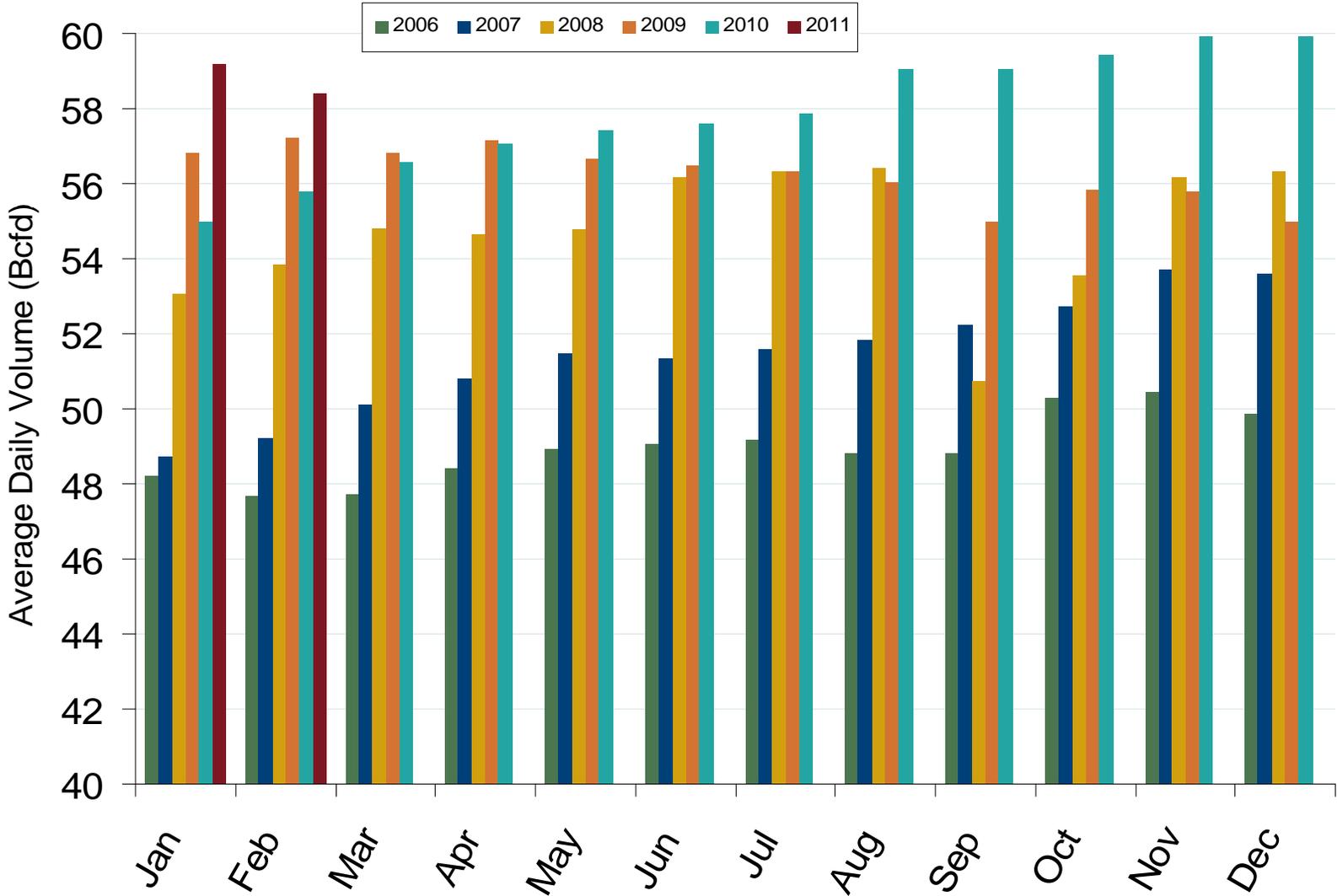
Western Natural Gas Consumption for Power Generation



Source: Derived from *Bentek Energy* data.

Updated: March 8, 2011

U.S. Dry Gas Production



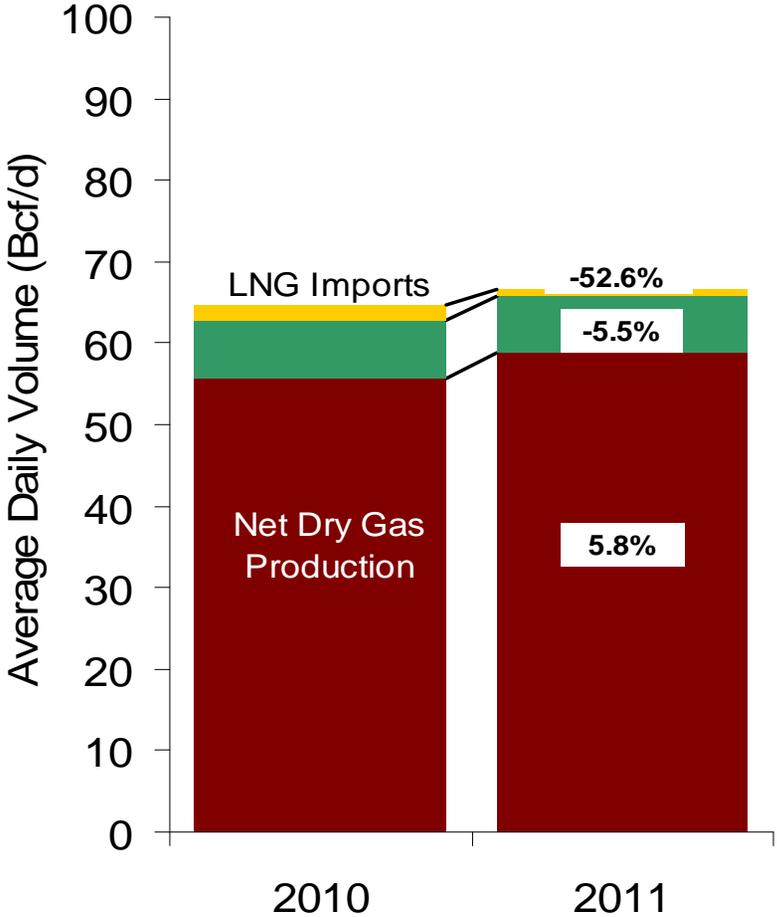
Source: Derived from EIA and Bentek data.
March 2011 Western Snapshot Report

Updated: March 08, 2011

U.S. Natural Gas Supply and Demand 2010 vs. 2011: February

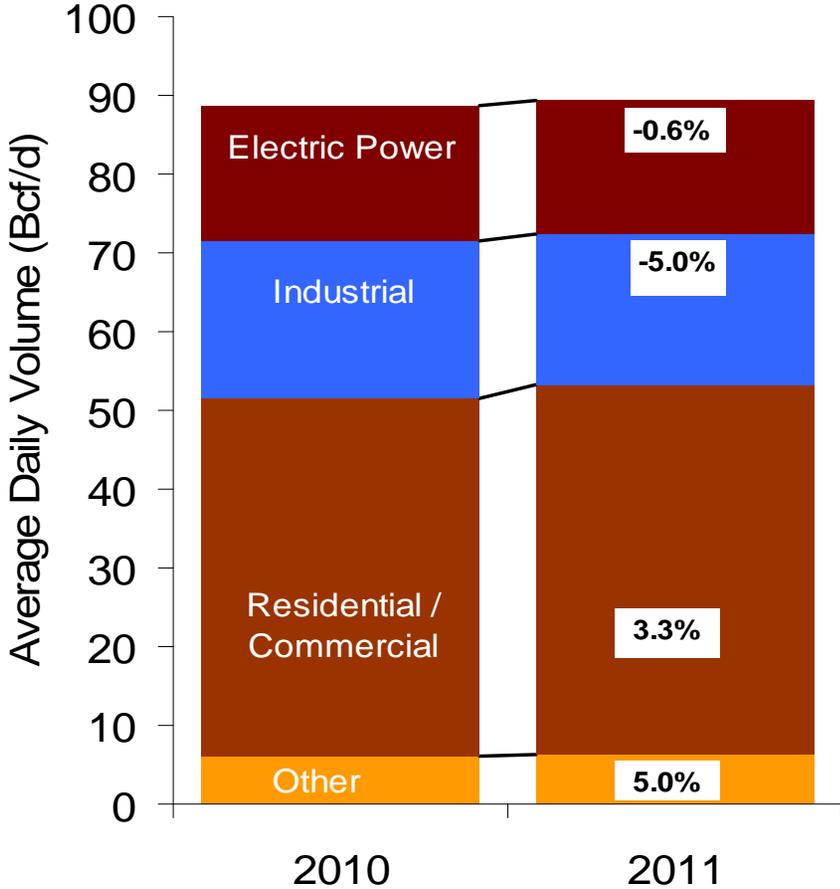
US Natural Gas Supply

Total Change in Supply 2.9%



US Natural Gas Demand

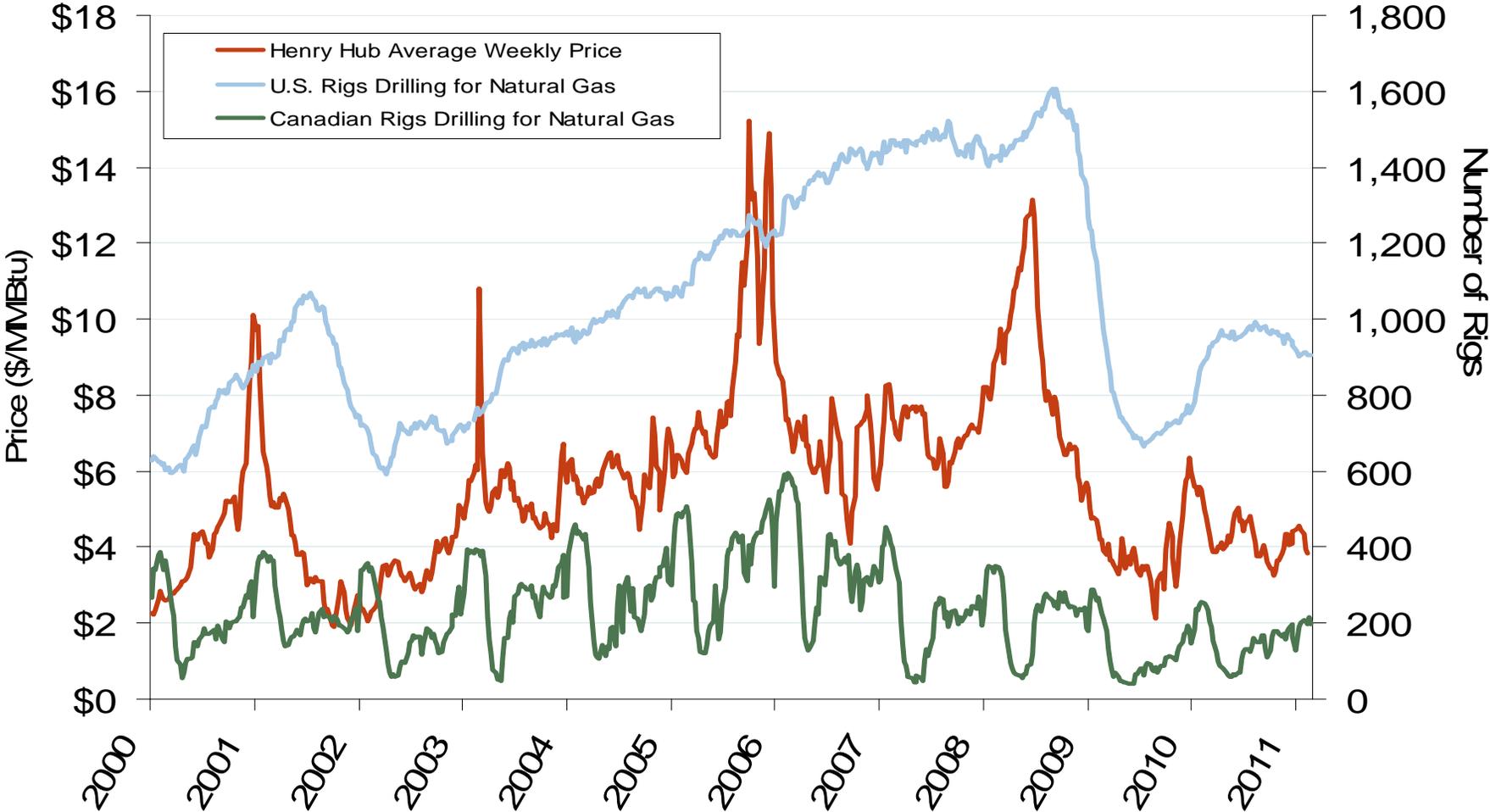
Total Change in Demand 4.5%



Source: Derived from Bentek data.
March 2011 Western Snapshot Report

Updated: March 08, 2011

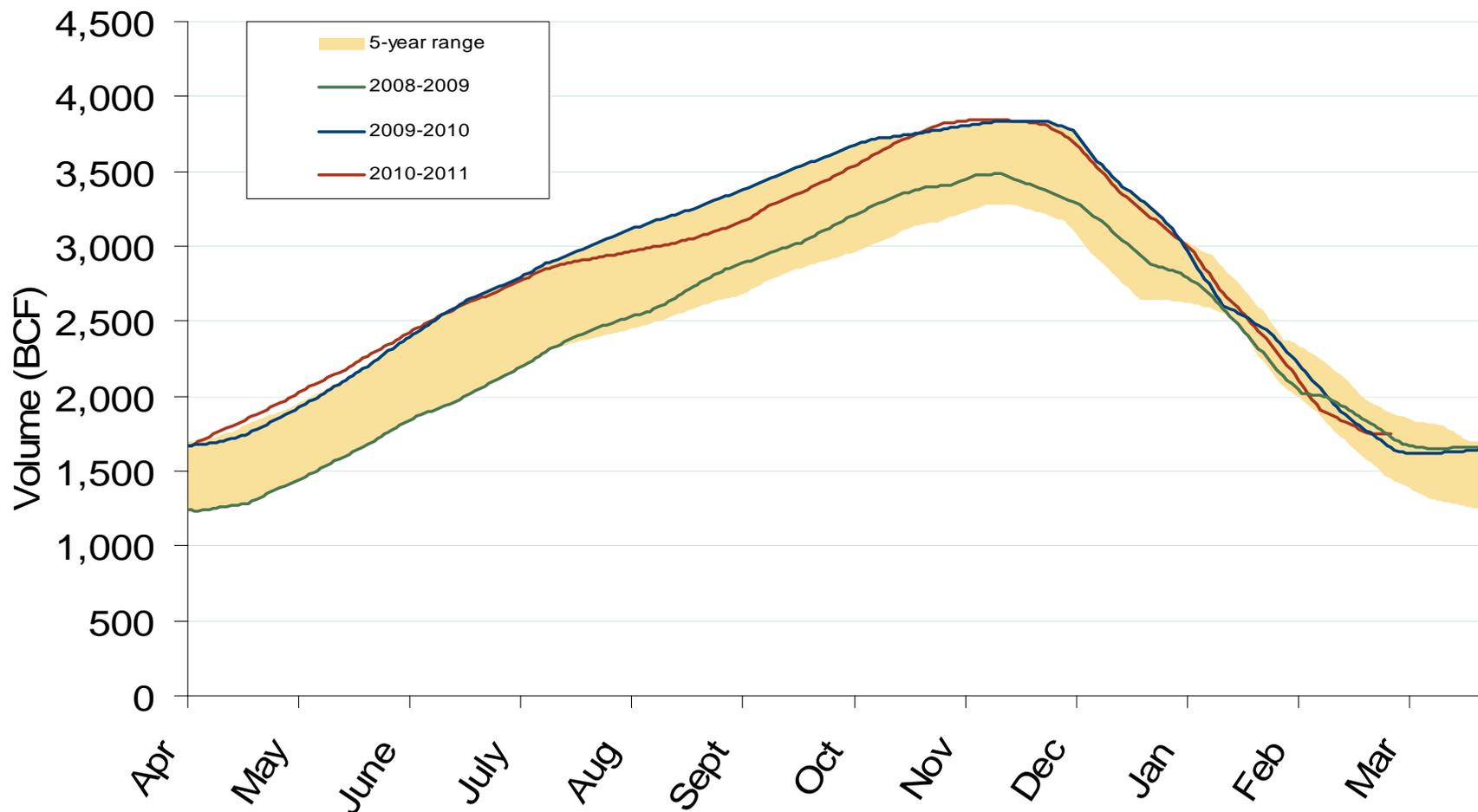
U.S. and Canadian Natural Gas Drilling Rig Count and Daily Spot Prices



Source: Derived from *Platts* and *Baker Hughes* data.

Updated: March 08, 2011

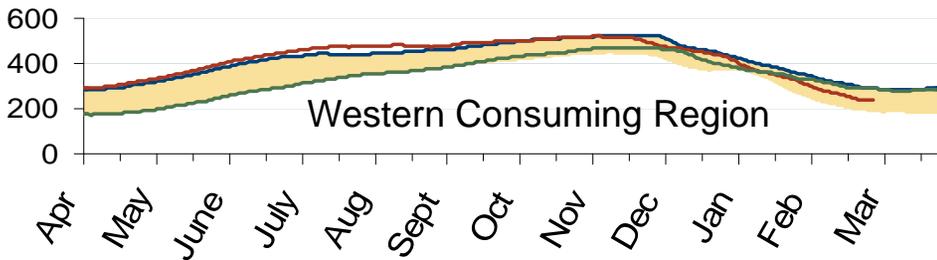
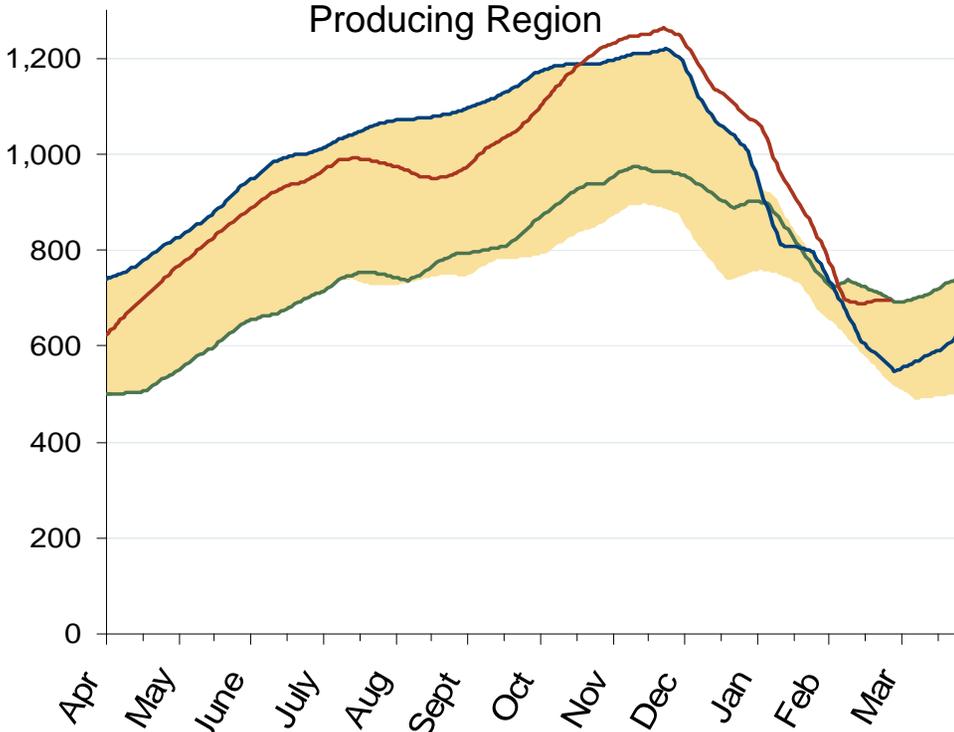
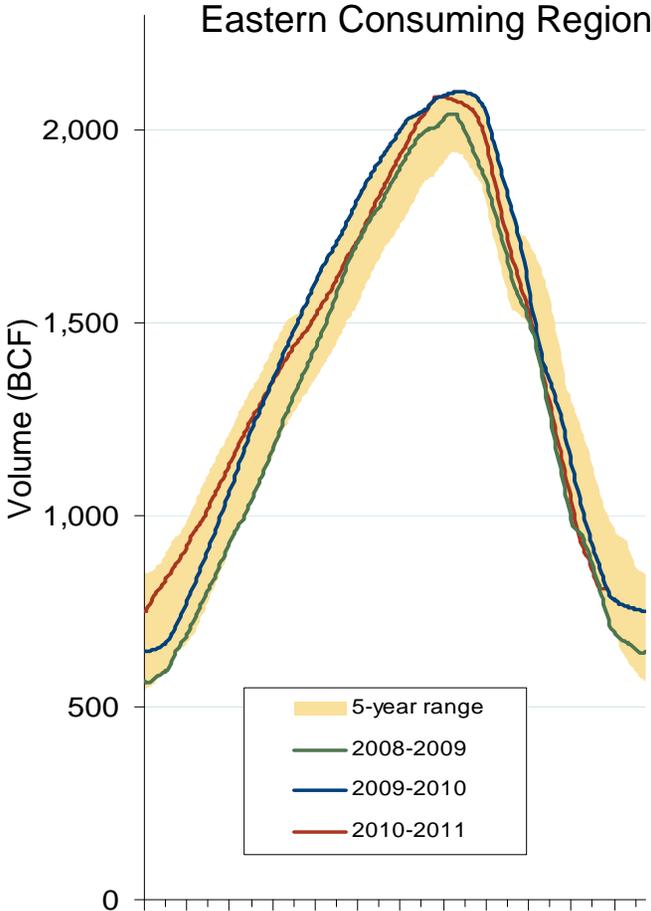
Total U.S. Working Gas in Storage



Source: Derived from EIA data.
March 2011 Western Snapshot Report

Updated: March 08, 2011

Regional Totals of Working Gas in Storage

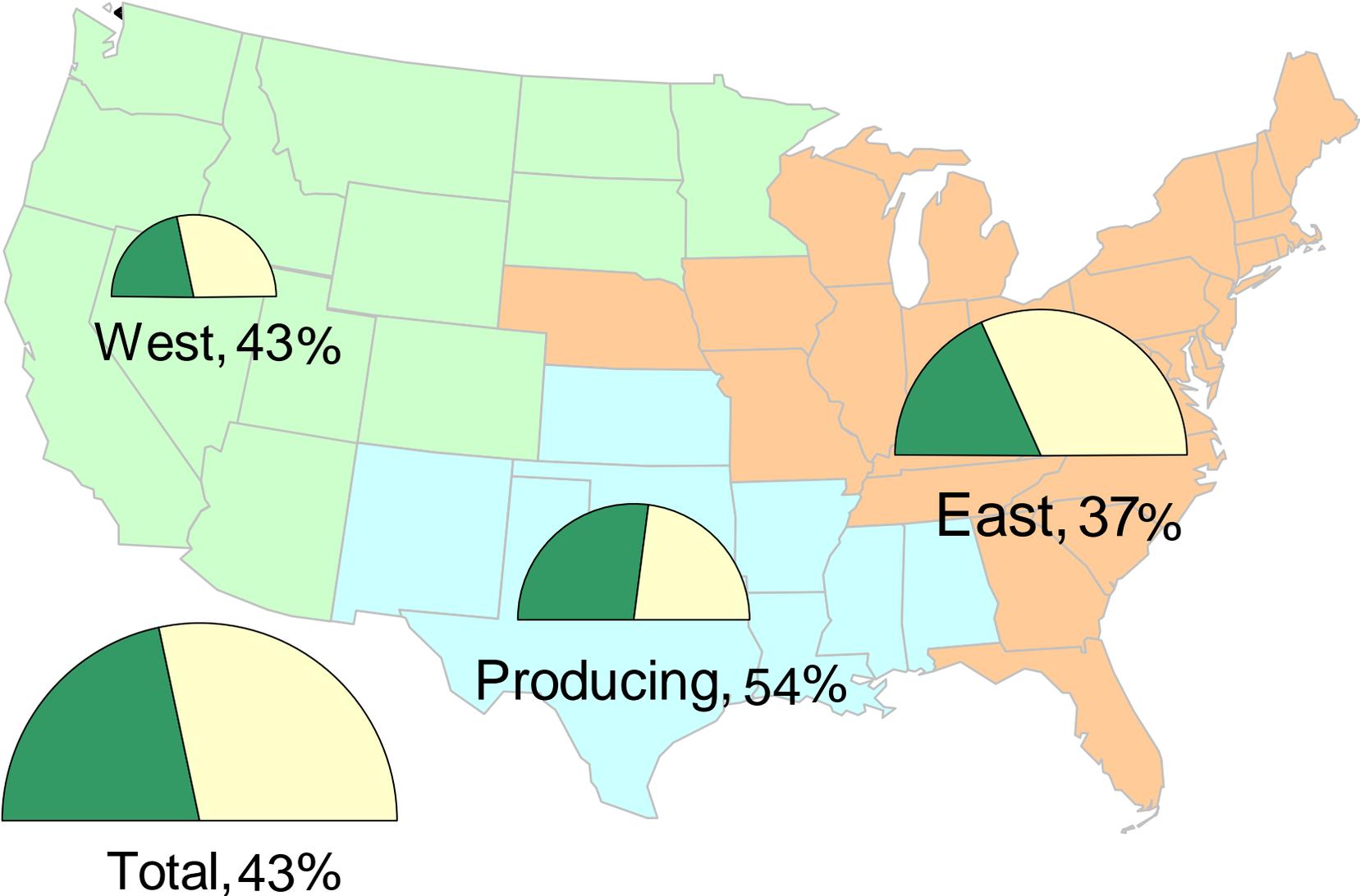


Source: Derived from EIA data.

March 2011 Western Snapshot Report

Updated: March 08, 2011

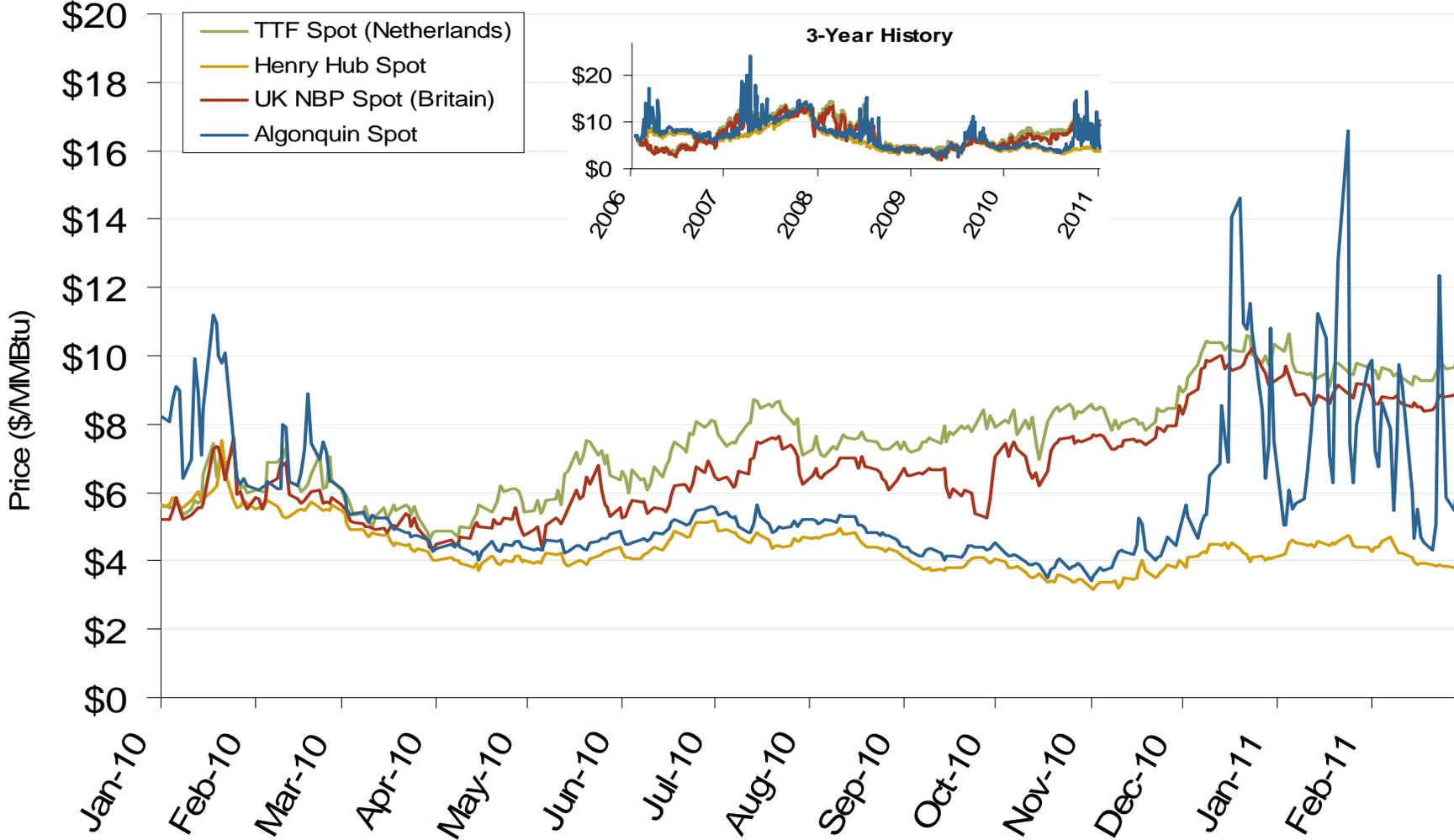
Natural Gas Storage Inventories – February 25, 2011



Source: Derived from *EIA Storage and Estimated Working Gas Capacity* data.
March 2011 Western Snapshot Report

Updated: March 08, 2011

Atlantic Basin European and US Spot Natural Gas Prices



Source: Derived from *Bloomberg and ICE data*.

Updated: March 08, 2011

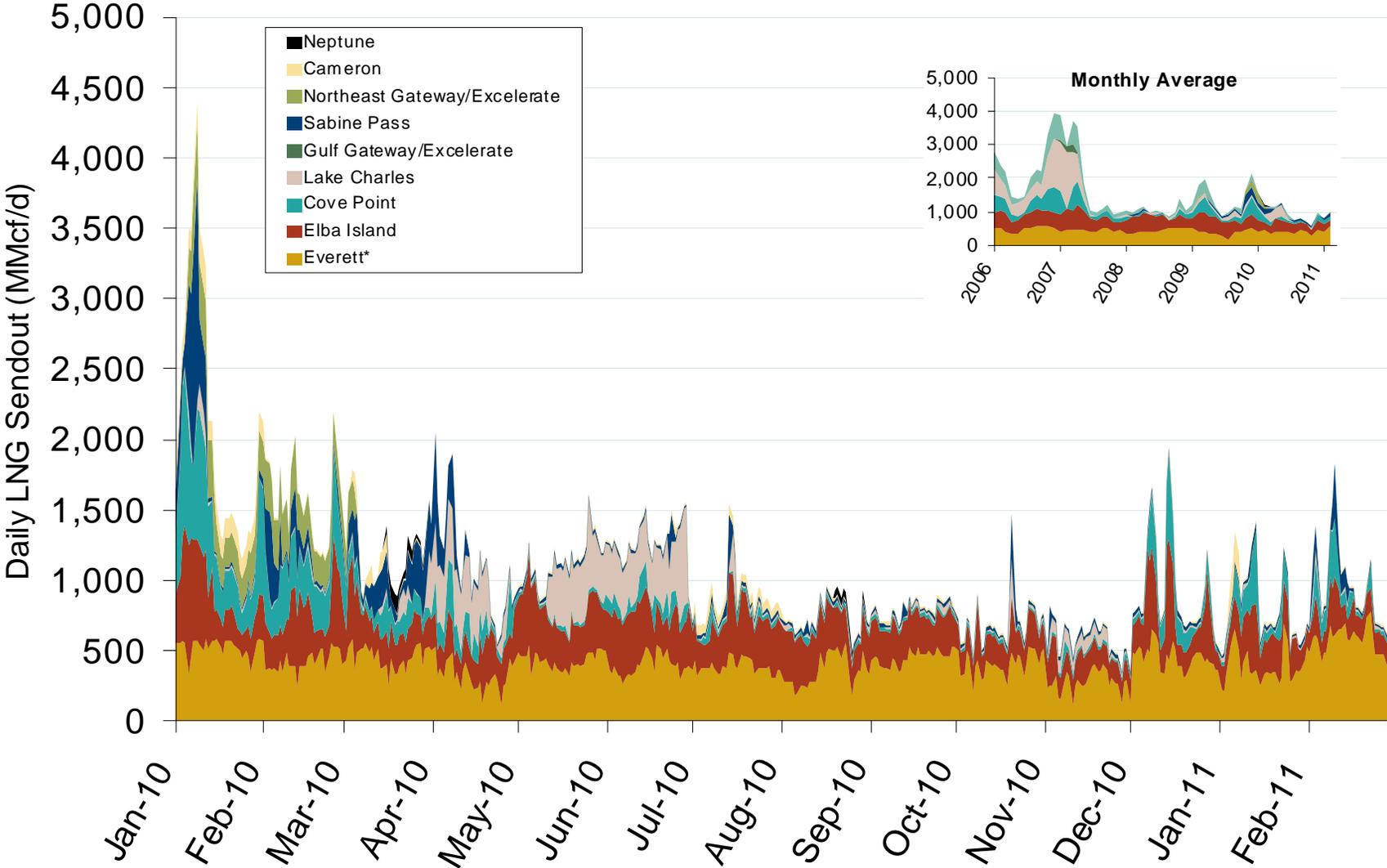
World LNG Estimated April 2011 Landed Prices



Source: *Waterborne Energy, Inc.* Data in \$US/MMBtu.
March 2011 Western Snapshot Report

Updated: March 08, 2011

Daily Gas Sendout from Existing U.S. LNG Facilities

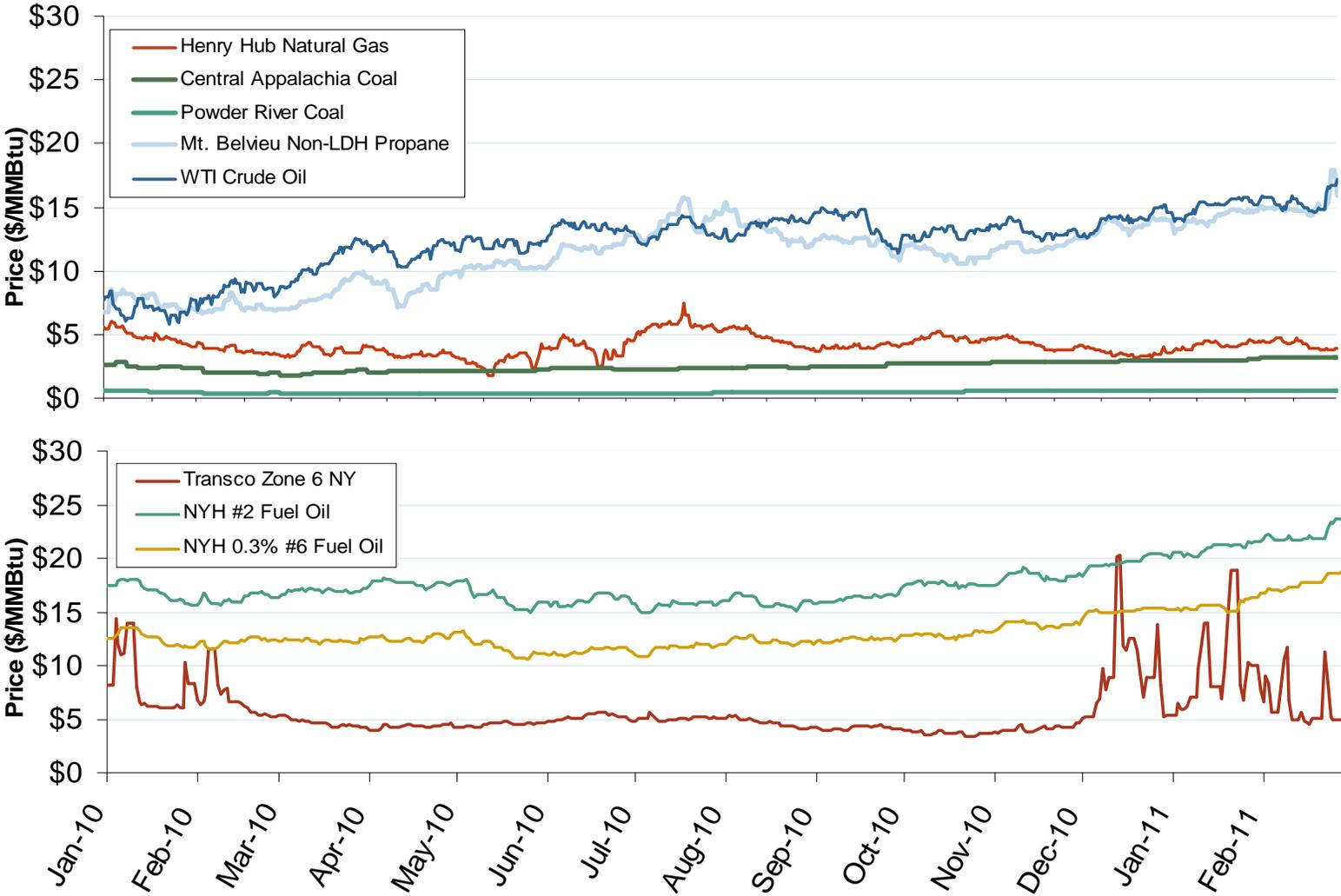


Source: Derived from Bentek data.

* 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 Freeport LNG which flows via intrastate pipelines.

Updated: March 08, 2011

Oil, Coal, Natural Gas and Propane Daily Spot Prices

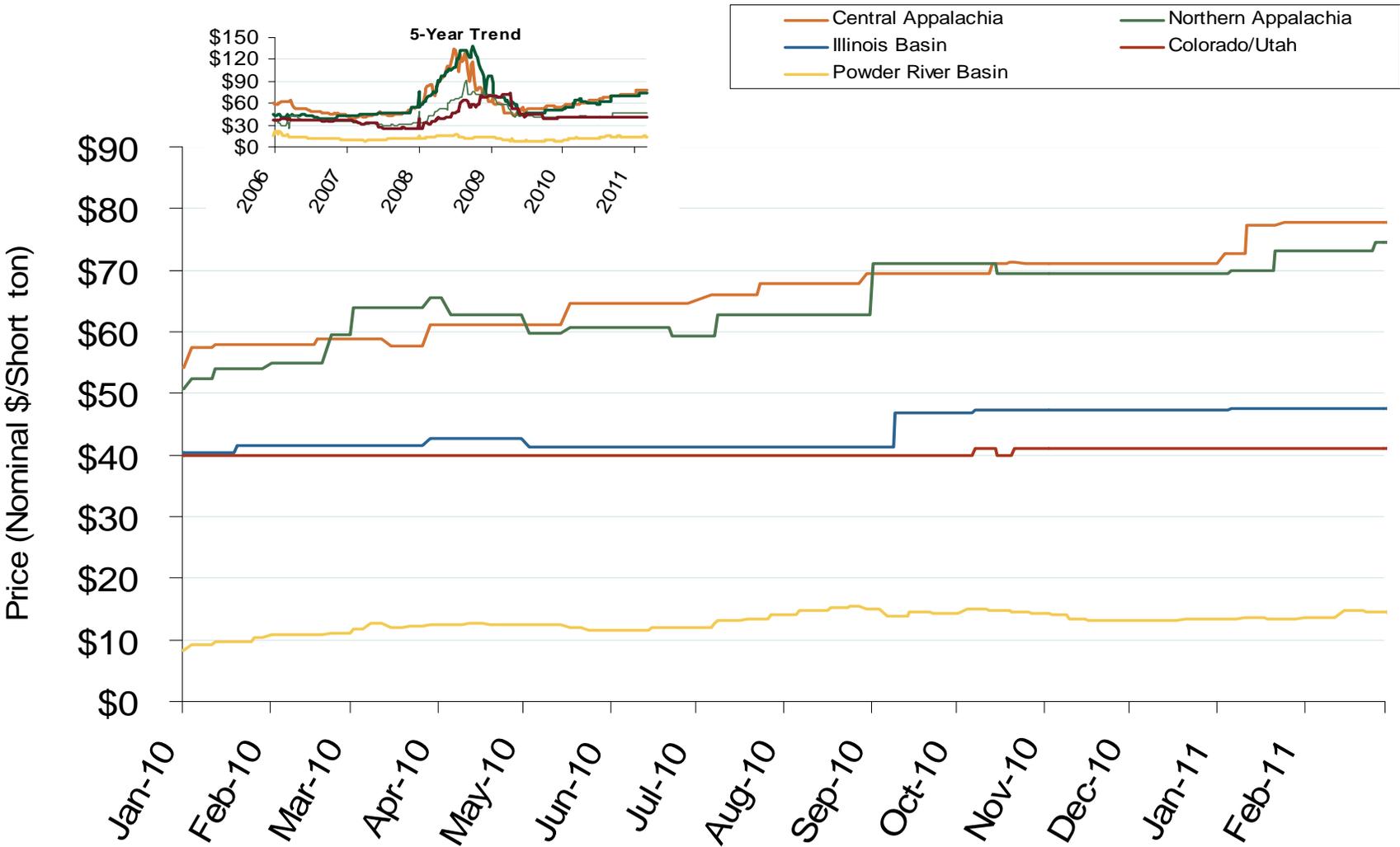


Source: Derived from ICE and Bloomberg data.

Note: 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.

Updated: March 08, 2011

Regional Coal Spot Prices

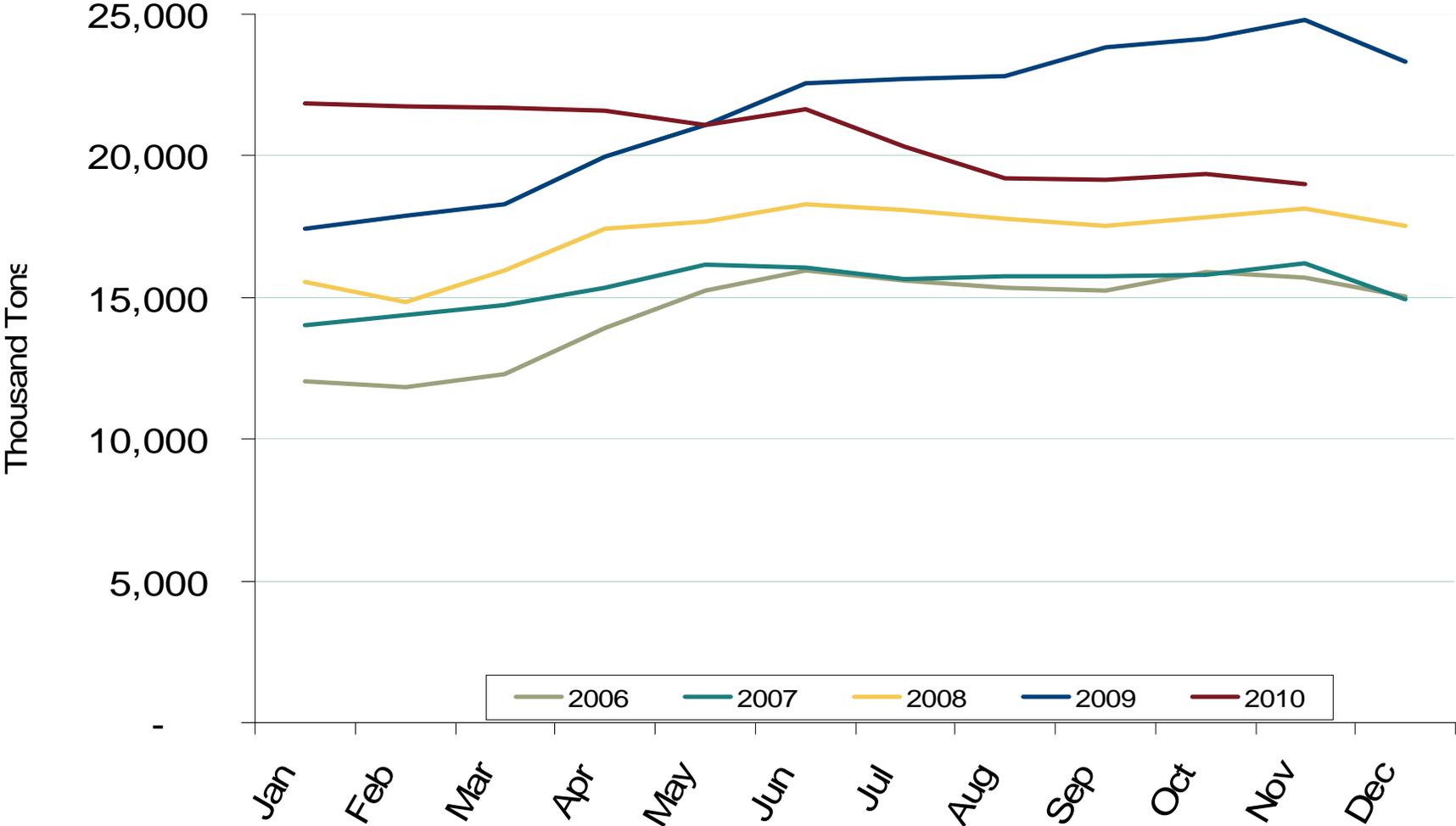


Note: the Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances.

Source: Derived from *Bloomberg* data.

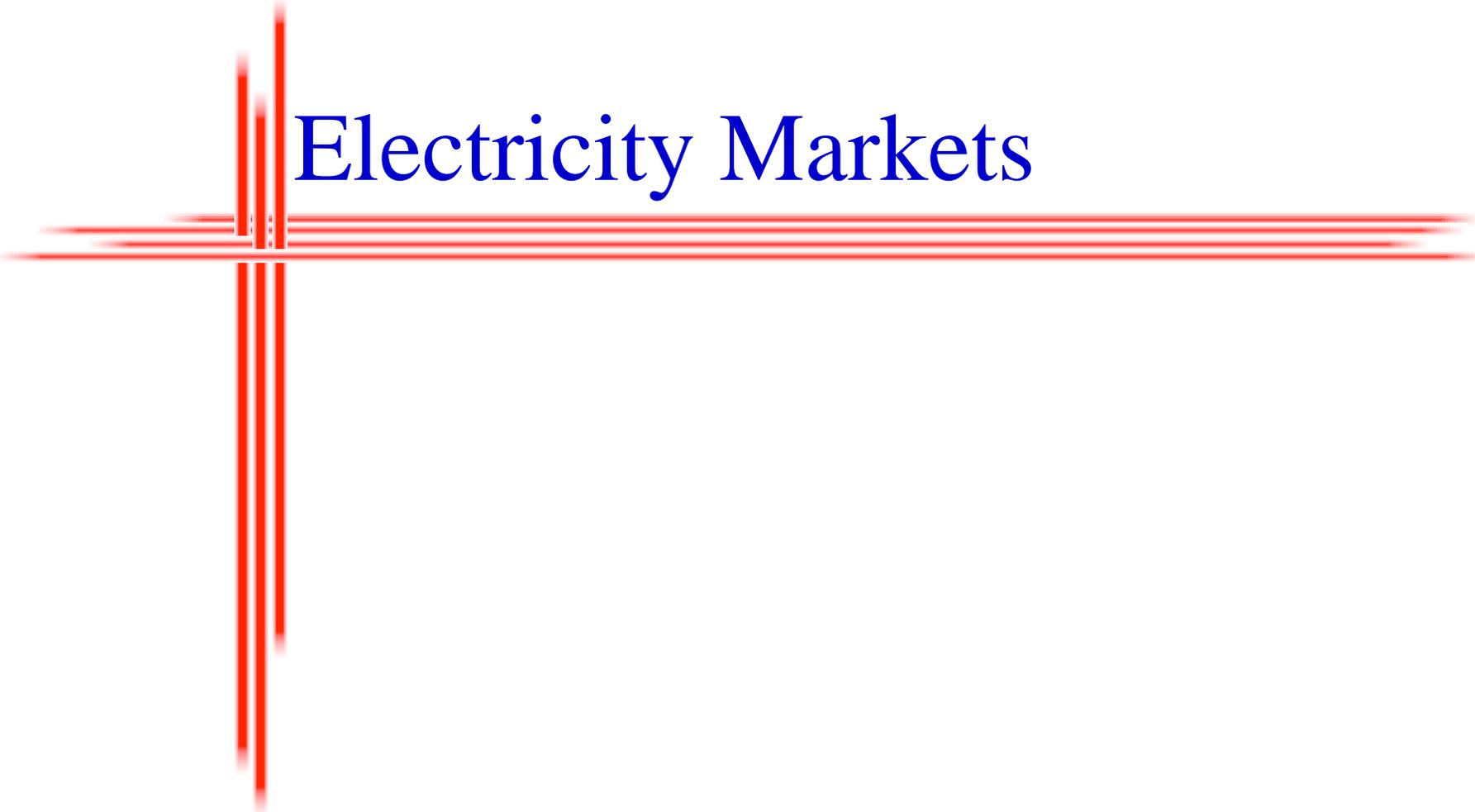
Updated: March 08, 2011

Western Coal Stockpiles at Electric Power Generating Facilities



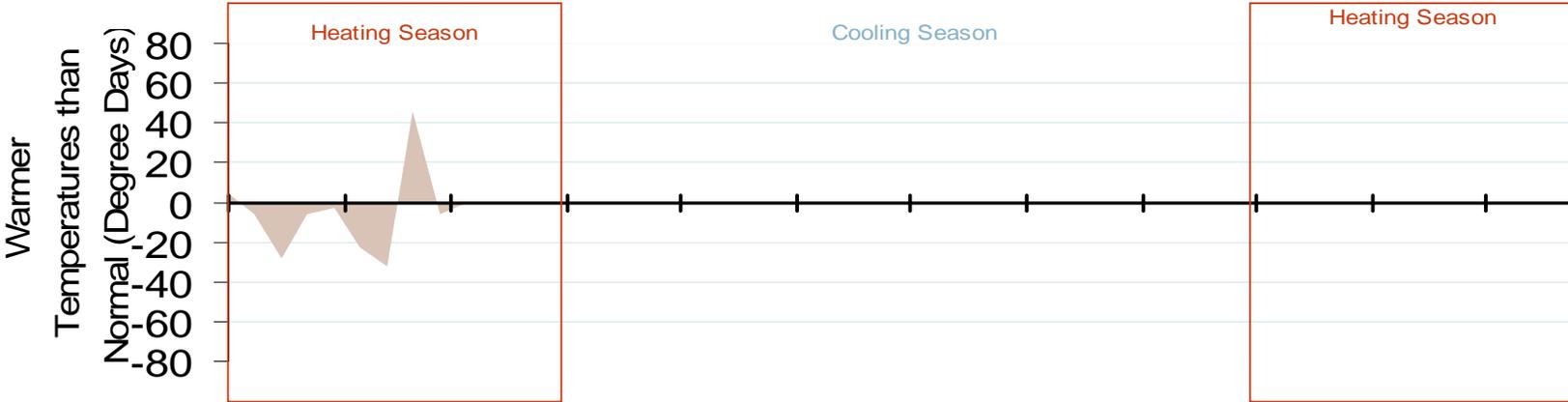
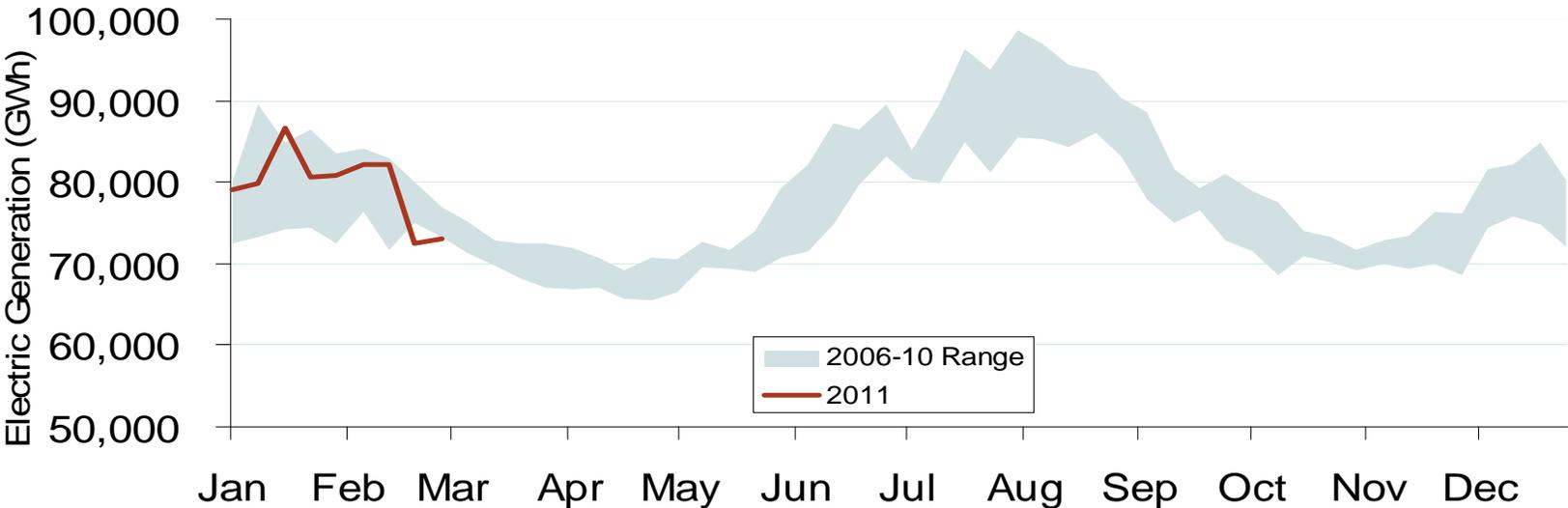
Source: Energy Information Administration. Excludes Industrial and Commercial Plants.
March 2011 Western Snapshot Report

Updated: March 08, 2011



Electricity Markets

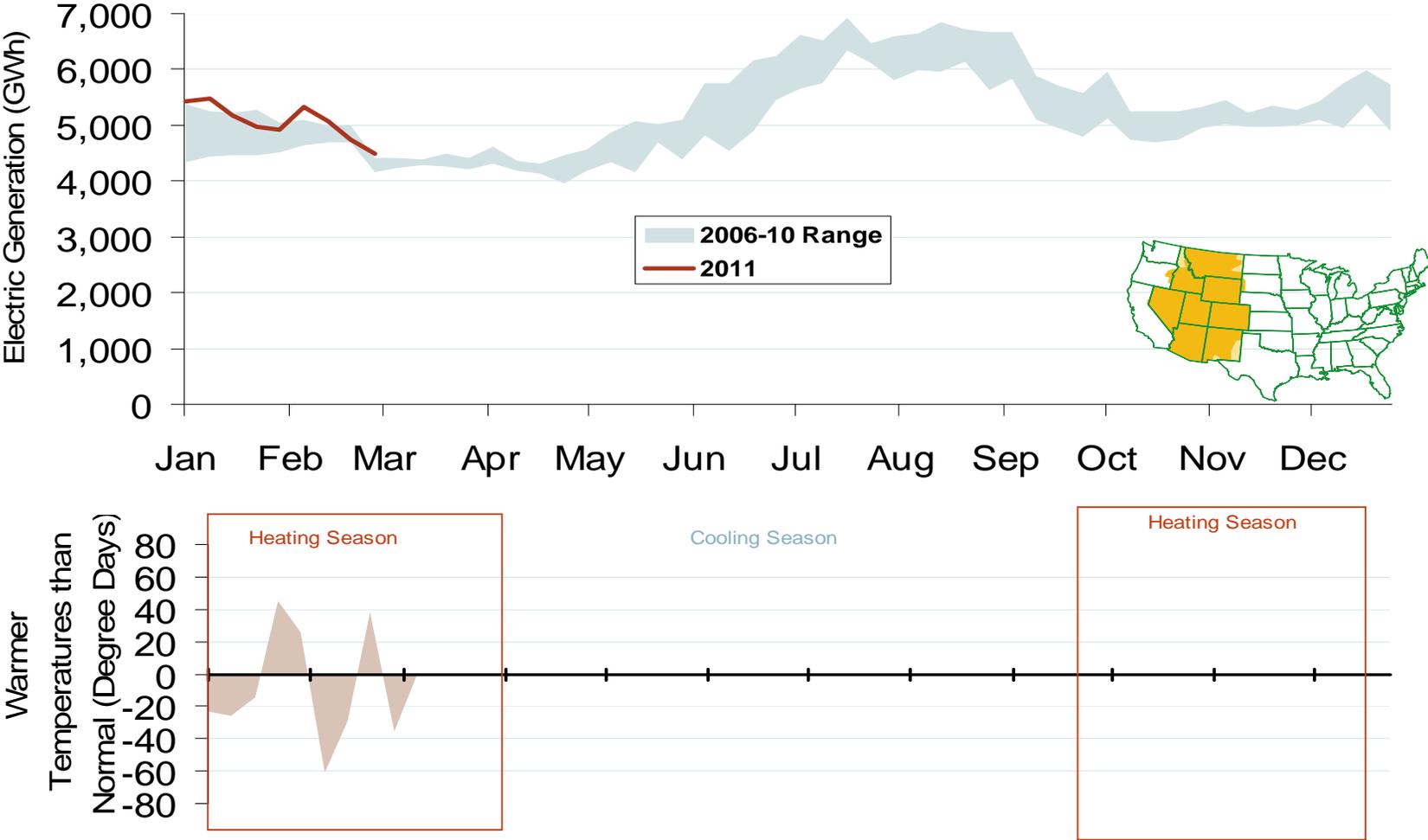
Weekly U.S. Electric Generation Output and Temperatures



Source: Derived from EEI and NOAA data.

Updated: March 08, 2011

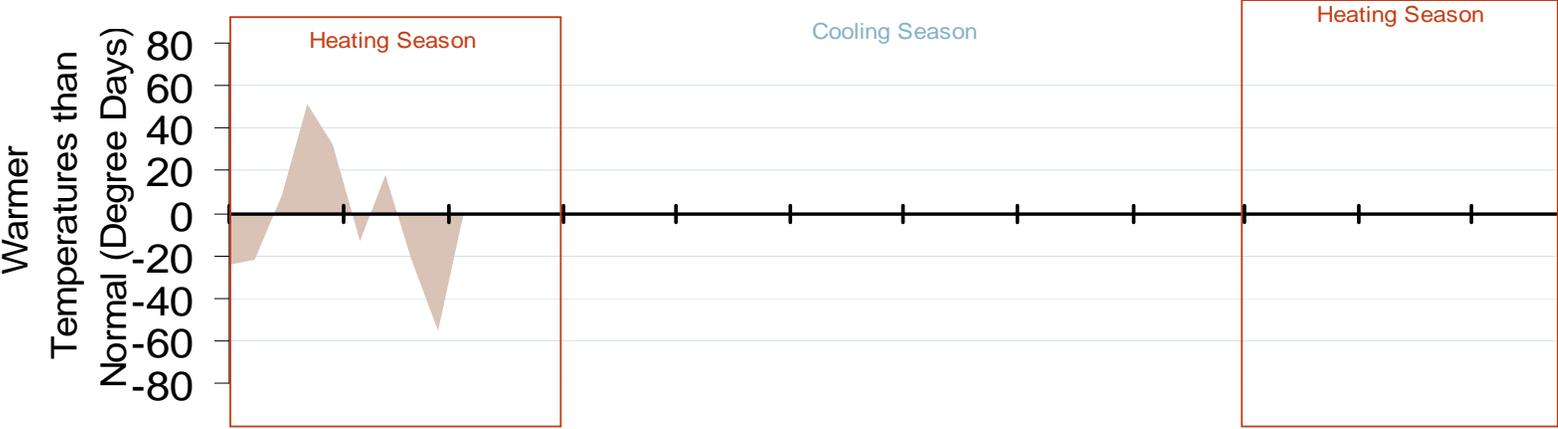
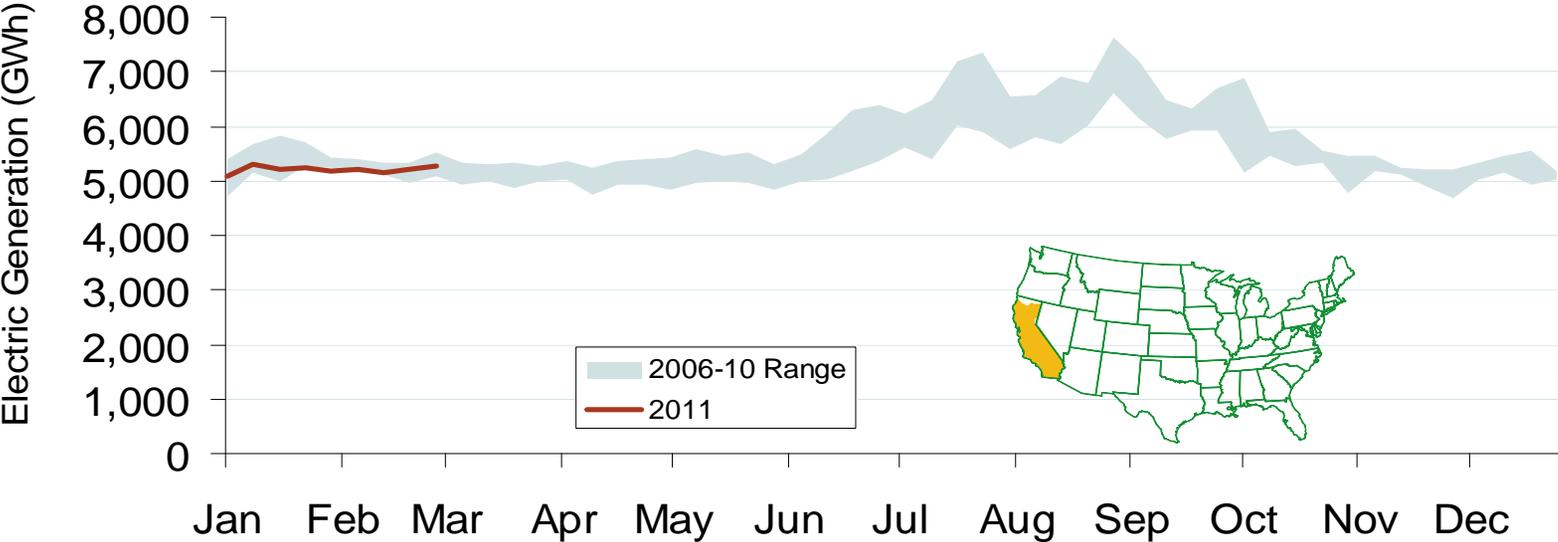
Weekly Electric Generation Output and Temperatures Rocky Mountain Region



Source: Derived from *EEl* and *NOAA* data.

Updated: March 08, 2011

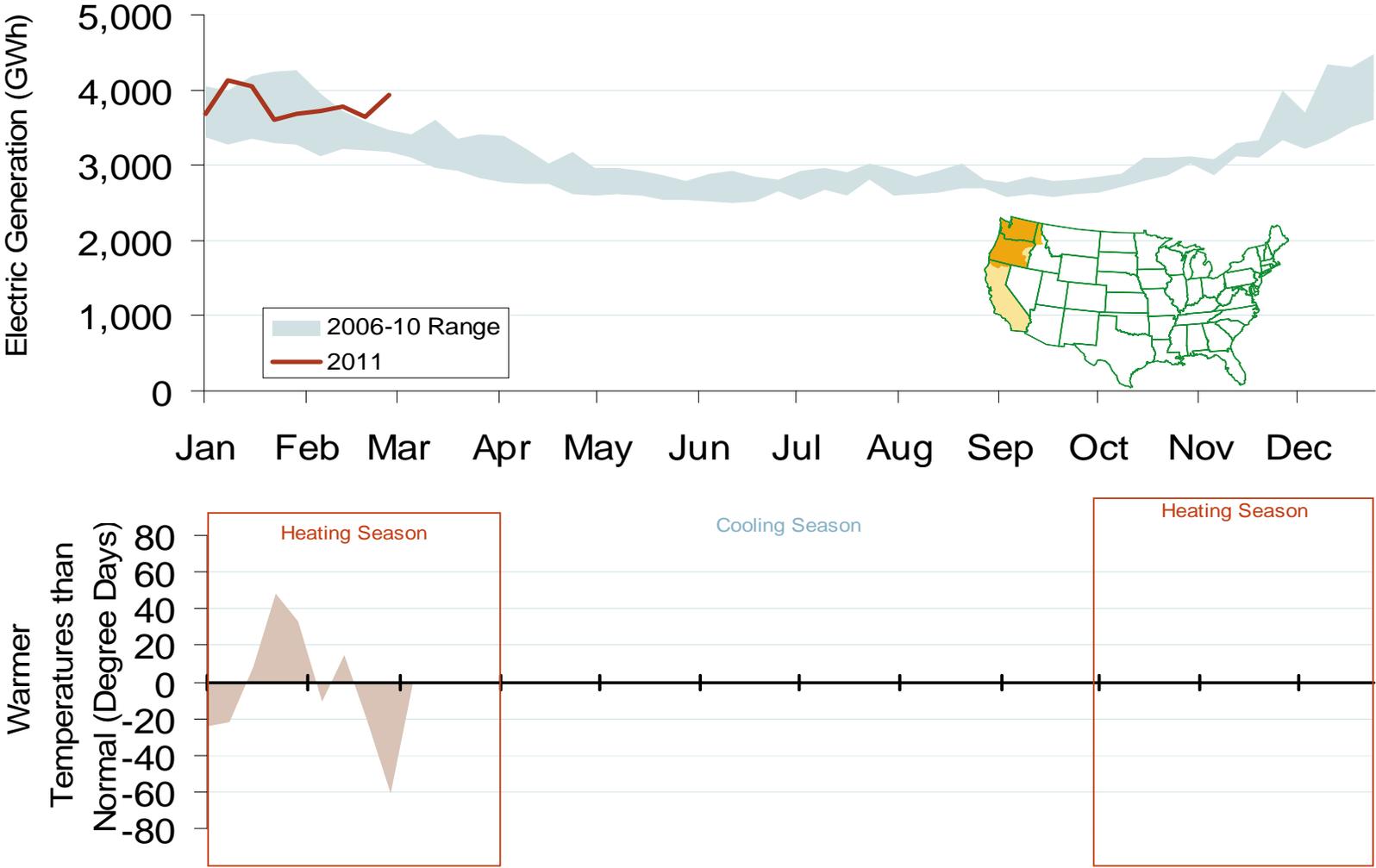
Weekly Electric Generation Output and Temperatures California



Source: Derived from *EEI* and *NOAA* data.
March 2011 Western Snapshot Report

Updated: March 08, 2011

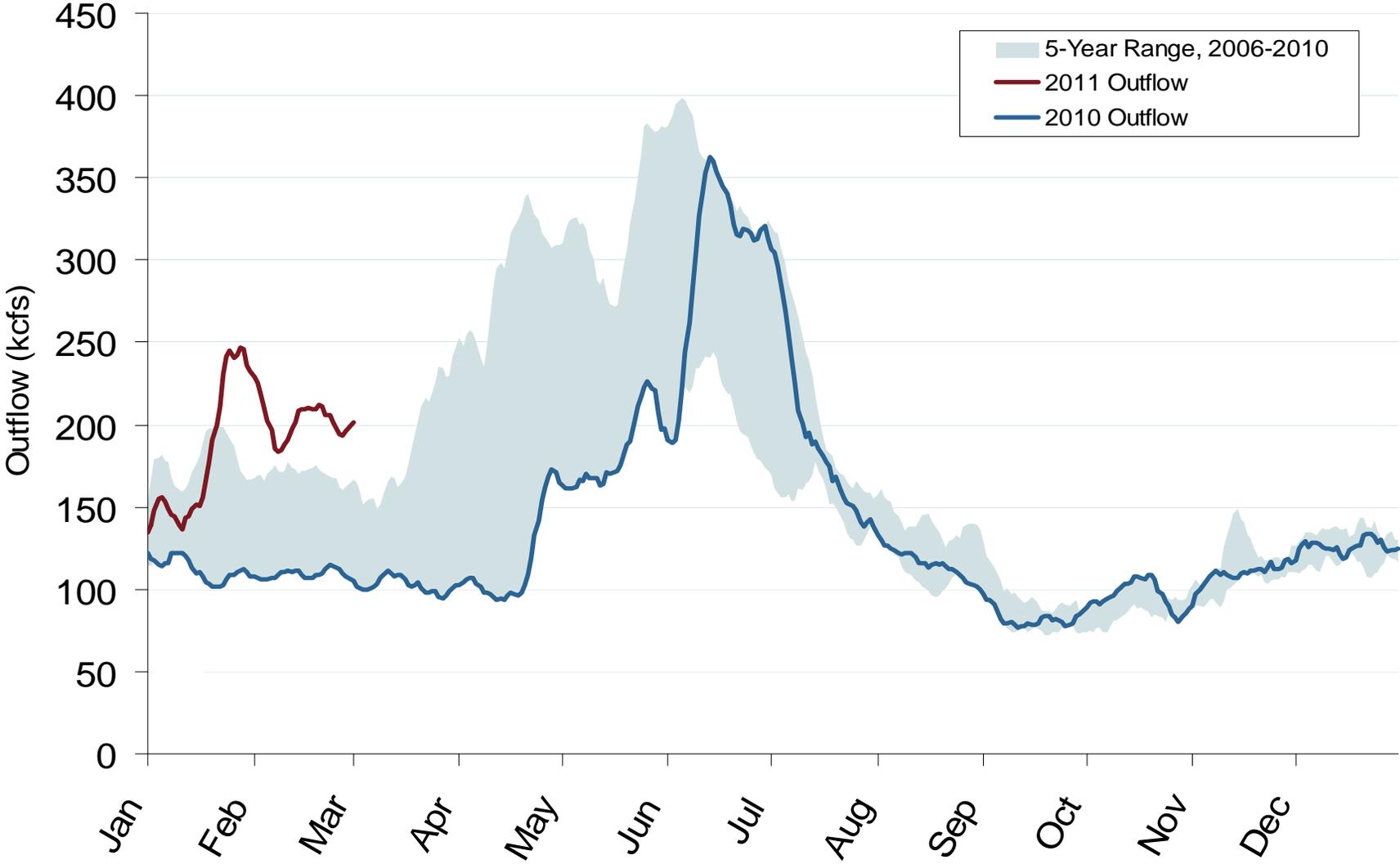
Weekly Electric Generation Output and Temperatures Pacific Northwest Region



Source: Derived from *EI* and *NOAA* data.
March 2011 Western Snapshot Report

Updated: March 08, 2011

Stream Flow at The Dalles Dam



Source: Derived from USACE data.

Trend lines are 7-day moving averages.

March 2011 Western Snapshot Report

Updated: March 08, 2011

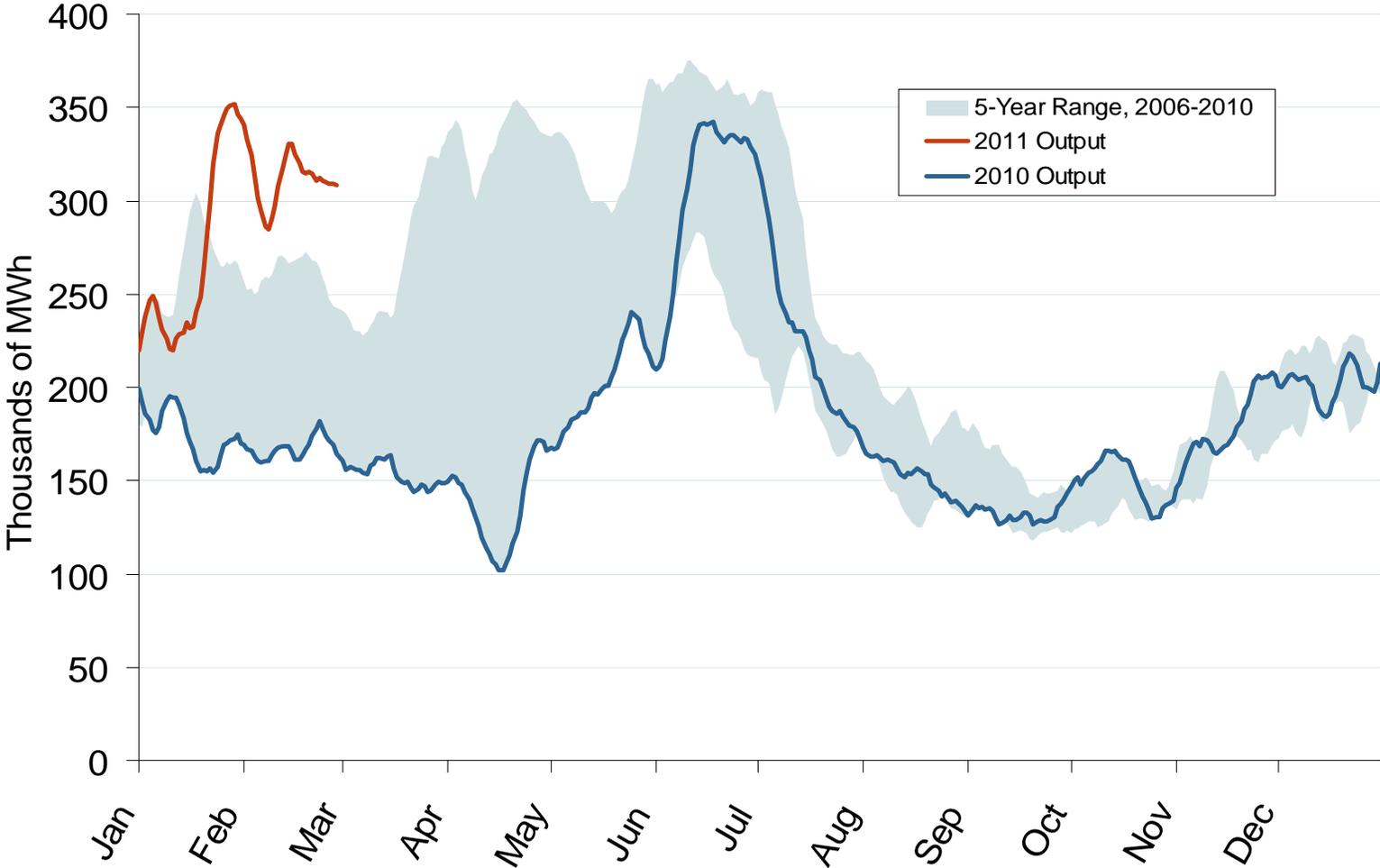
Pacific/Northwest Hydro and Snowpack Levels

	Hydro Generation		Snow Water Equivalent ³		
	In-State Capacity (MW) ¹	Additional Capacity Created Downstream (MW) ²	One Year Ago (3/1/10) (% of historical average)	Current (3/7/11) (% of historical average)	% Change from One Year Ago
Washington	21,500	0	67%	94%	+27%
Oregon	9,100	0	64%	94%	+30%
California	10,400	0	112%	136%	+24%
Idaho	2,700	19,700	64%	98%	+34%
Montana	2,700	16,200	62%	115%	+53%
British Columbia	10,000	16,200	69%	105%	+36%

- ¹ Net summer capacity in megawatts by state (EIA).
- ² Approximate electric capacity created by water flow through the downstream states (EIA and BPA). The capacity estimates reflect the water flow pattern of the series of hydro facilities on the Snake and Columbia Rivers.
- ³ Snow Water Equivalent, in percent of the historical average for the same date, is the ratio of current snow water daily data (collected by the Natural Resources Conservation Services' Snowtel Telemetry sites) compared to the average snow water for the same day between 1961-1990. Total Hydro Capacity figures by state do not tie precisely to Snow Water Equivalent data due to such factors as snow basin terrain and complex distribution of run-off to neighboring state hydroelectric dams or shared facilities (e.g., Columbia River hydroelectric dams on the border of Washington and Oregon) (Bloomberg, California Dept. of Water Resource and Government of British Columbia Ministry of Environment).

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Pacific Northwest Hydroelectric Production



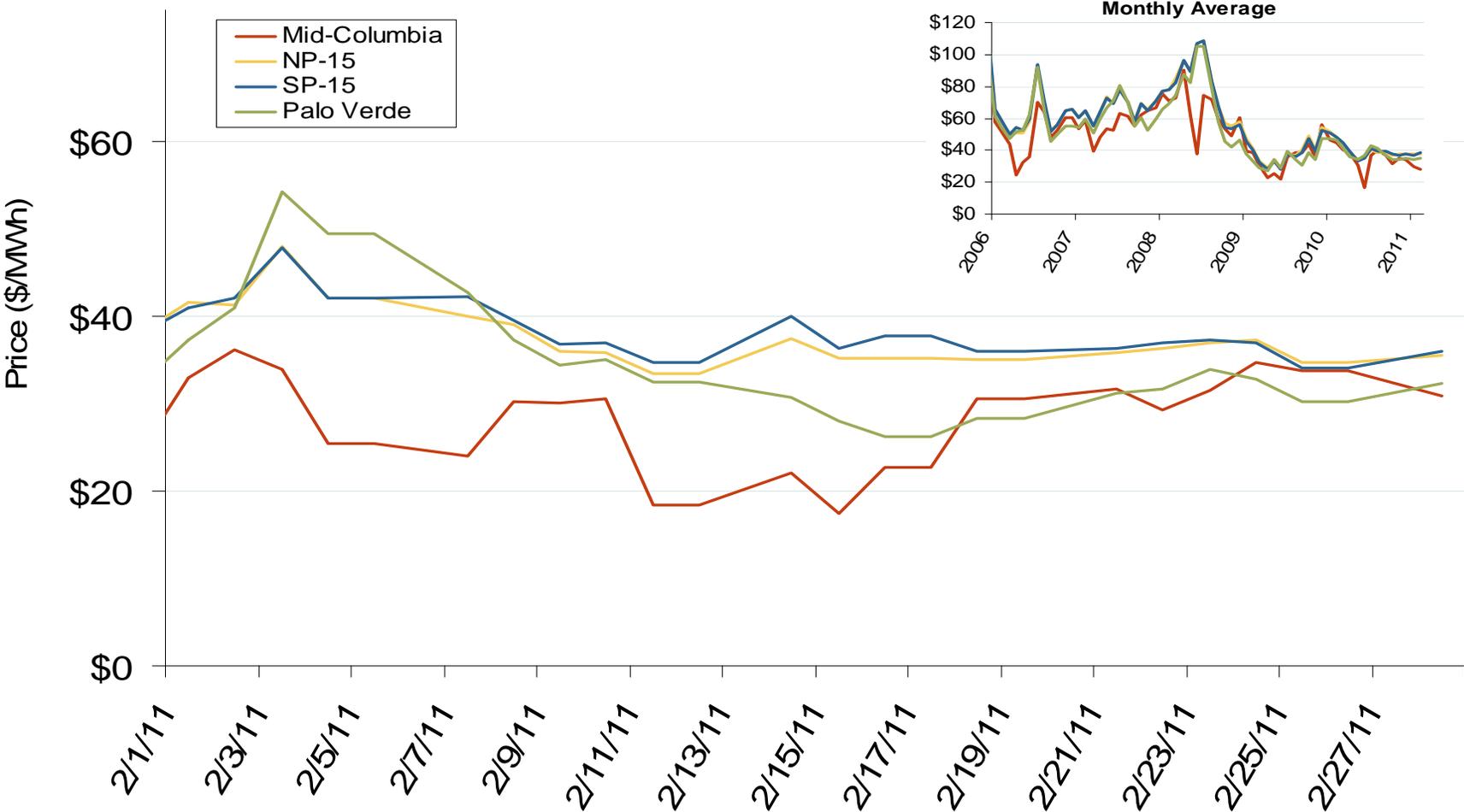
Source: Derived from USACE data reflecting the output of the 24 largest facilities.

Note: Trend lines are 7-day moving averages.

March 2011 Western Snapshot Report

Updated: March 08, 2011

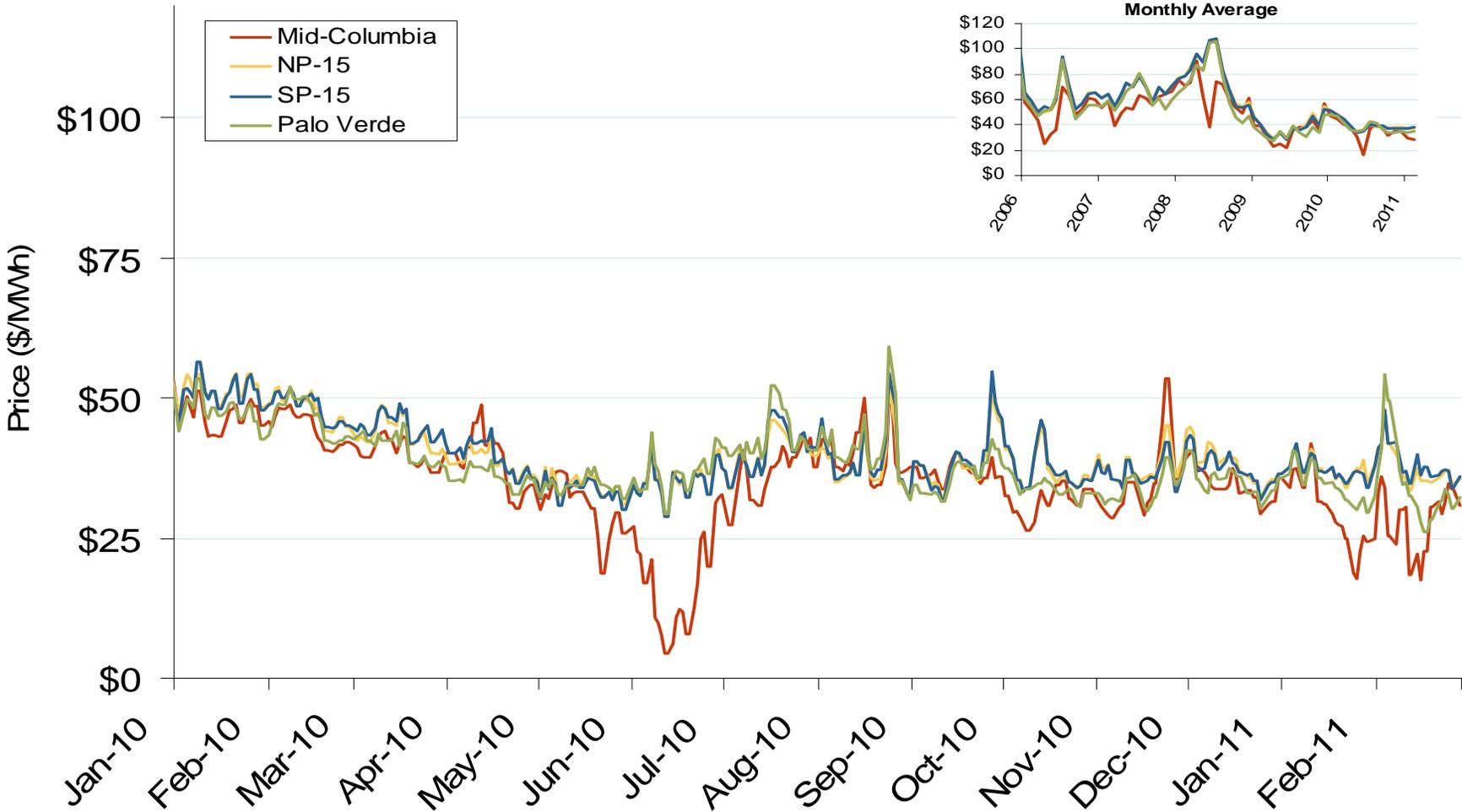
Western Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from *Platts* data.

Updated: March 08, 2011

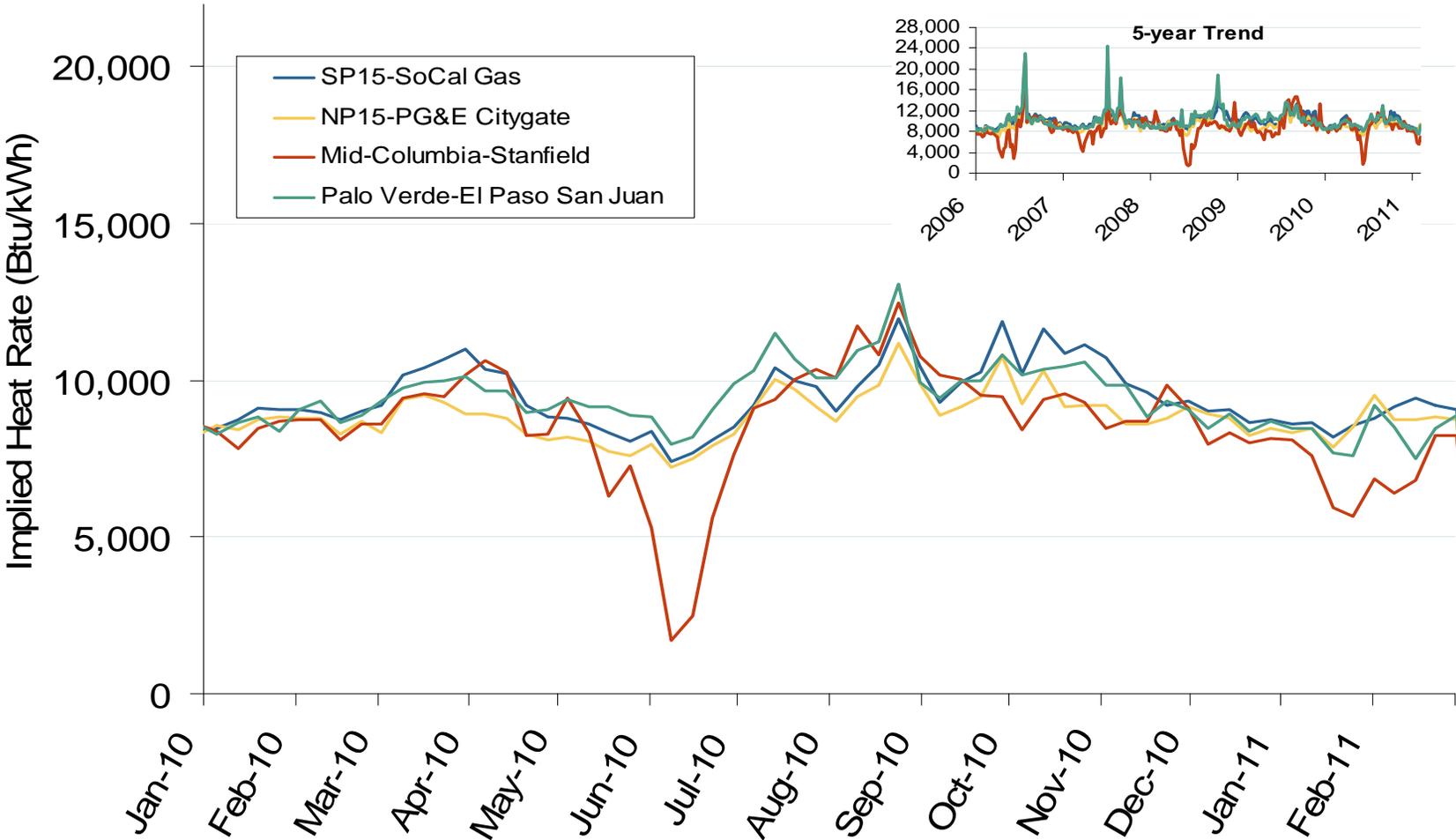
Western Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from *Platts* data.

Updated: March 08, 2011

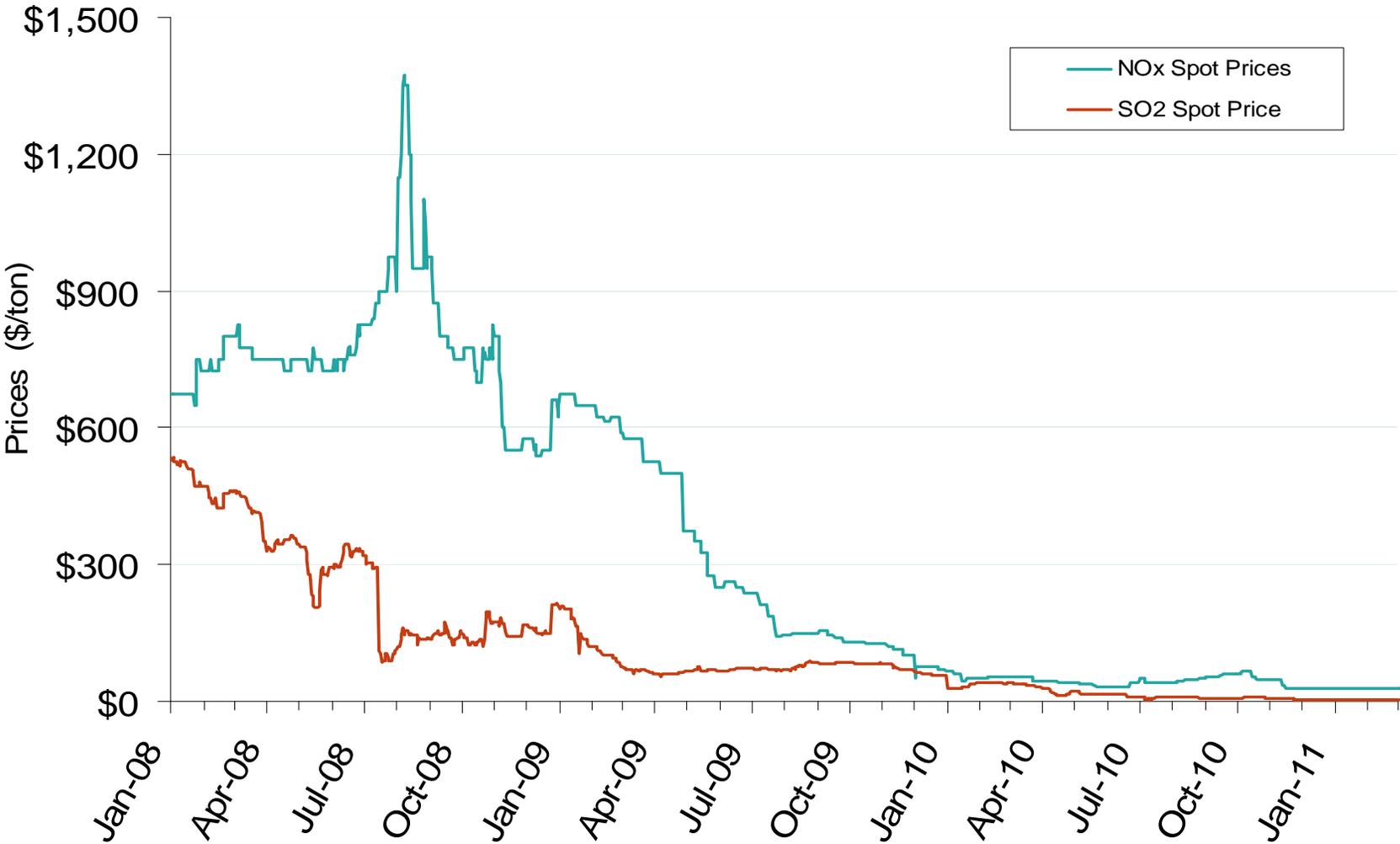
Implied Heat Rates at Western Trading Points Weekly Averages



Source: Derived from Platts on-peak electric and natural gas price data.

Updated: March 07, 2011

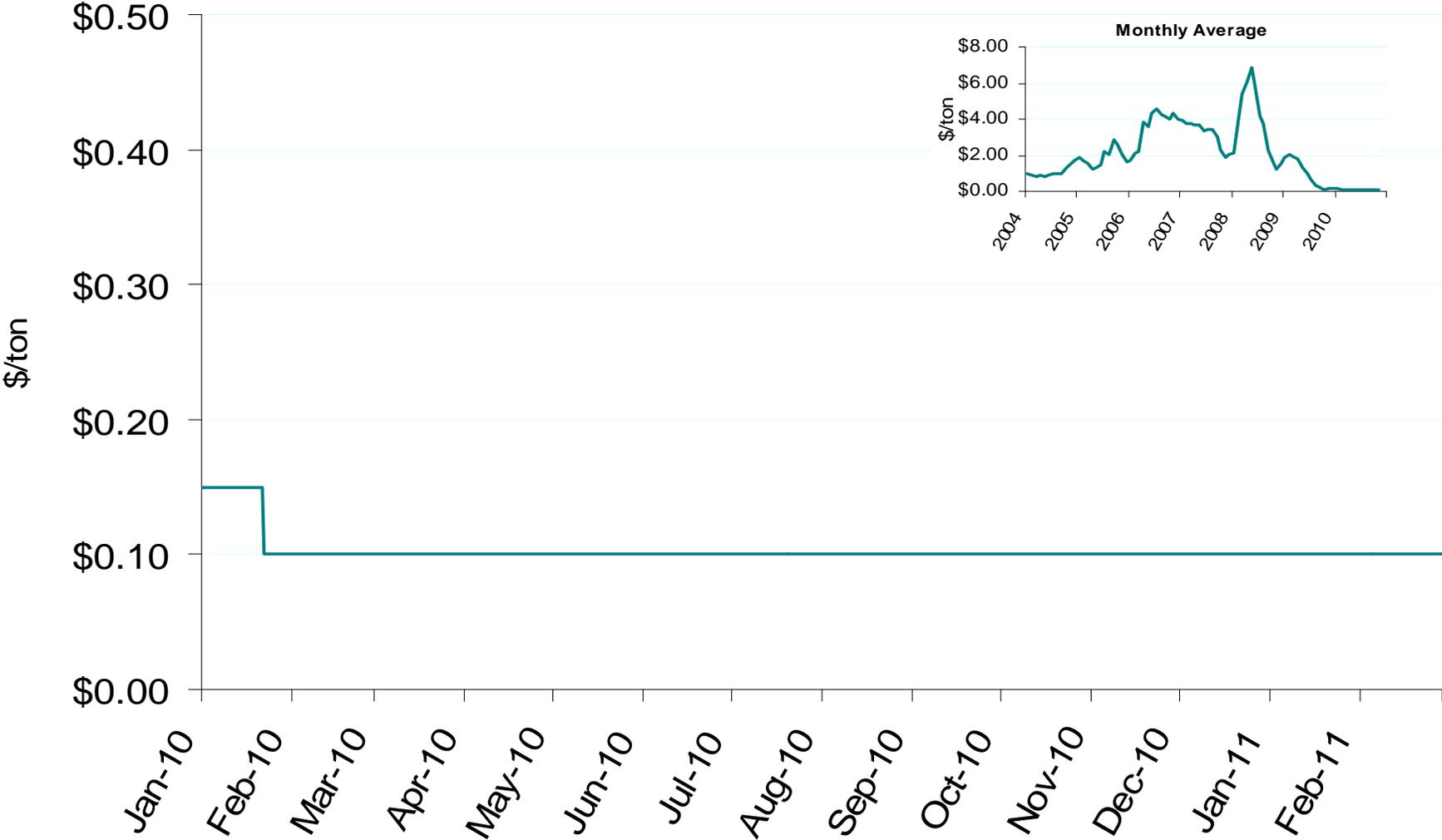
SO2 Allowance Spot Prices and NOx Seasonal Allowance Spot Prices



Source: Derived from *Bloomberg data*.

Updated: March 07, 2011

Chicago Climate Exchange CO2 Index



Source: Derived from *Bloomberg data*.
March 2011 Western Snapshot Report

Updated: March 07, 2011