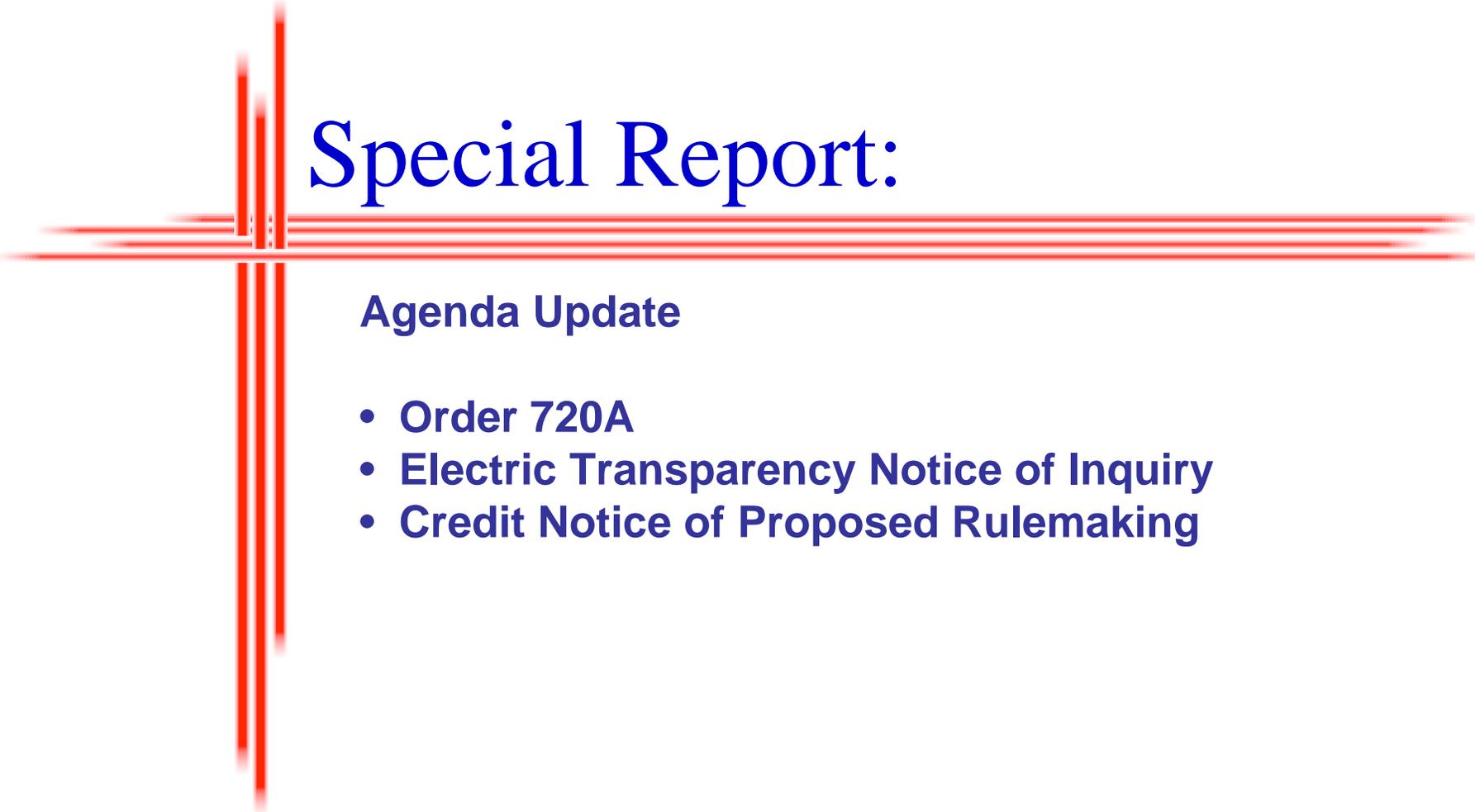


OE ENERGY MARKET SNAPSHOT

Midwest States Version – February 2010 Data

- **Special Report**
- **Natural Gas and Fuel Markets**
- **Electricity Markets**

Office of Enforcement
Federal Energy Regulatory Commission
March 2010



Special Report:

Agenda Update

- **Order 720A**
- **Electric Transparency Notice of Inquiry**
- **Credit Notice of Proposed Rulemaking**

Order 720A Promotes Greater Transparency in Gas Markets

- Commission voted to reaffirm and clarify Order No. 720 at January meeting
- Requires most “non-interstate pipelines” that deliver ≥ 50 million MMBtu (Bcf) annually to post daily scheduled flows at receipt and delivery points on a publicly accessible website
 - Postings to occur for receipt and delivery points with design capacity $\geq 15,000$ MMBtu/d
- Exemptions primarily for:
 - 1) Pipelines that deliver < 50 million MMBtu (Bcf) annually
 - 2) Pipelines that deliver more than 95% of natural gas directly to “retail end-users” (primarily LDCs)
 - 3) Pipelines that fall entirely upstream of a processing or treatment plant (primarily gatherers)
 - 4) Storage providers
 - 5) Pipeline owned or operated by end-users
- Requires interstate pipelines to post no-notice service

Link: <http://edocket.access.gpo.gov/2010/pdf/2010-1546.pdf>

Electricity Market Transparency NOI

The Commission is seeking comment on whether it should extend the EQR filing requirements to publicly owned utilities, municipal utilities, public utility districts, rural cooperatives, and federal entities in order to improve:

- Ability to monitor power sales for market power and manipulation
- Ex Ante analysis (granting MBR authority)
- Ex Post analysis

Additionally, the Commission is seeking comment on whether FERC should consider other refinements to the existing EQR filing requirements including:

- Reporting the trade date and type of rate;
- Reporting resale of financial transmission rights in secondary markets;
- Standardizing the unit for reporting energy and capacity transactions; and
- Omitting the time zone from the contract section of the EQR.

Comments are due March 30, 2010.

Link: <http://www.ferc.gov/whats-new/comm-meet/2010/012110/E-3.pdf>

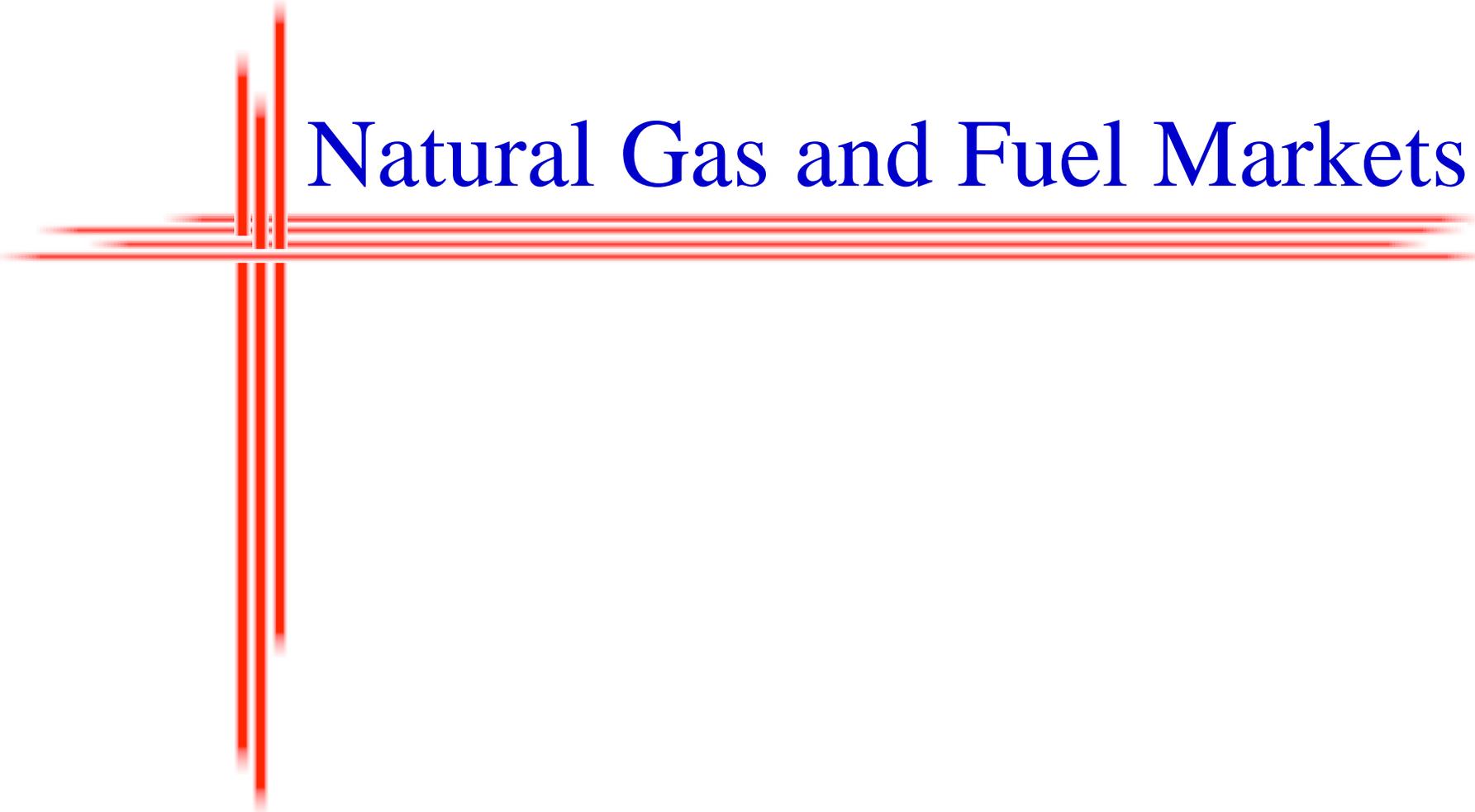
Credit Reforms in Organized Wholesale Electric Markets

The Commission is seeking comment on the following proposals:

- Shorten the settlement cycle to no more than seven calendar days with no more than an additional seven calendar days for final payment;
- Limit unsecured credit to no more than \$50 million per market participant in energy markets and eliminate unsecured credit in Financial Transmission Rights (FTR) markets; Clarify the ability of market administrators to offset amounts owed to market participants against amounts owed by market participants and to manage defaults;
- Establish minimum participation criteria for market participants;
- Specify circumstances in which a market administrator may invoke “material adverse change” to require a market participant to post additional collateral;
- Limit time period allowed for posting additional collateral when additional collateral is requested; and
- Whether the credit reforms should be applied differently to certain market participants depending on their characteristics.

Comments are due March 29, 2010.

Link: <http://elibrary.ferc.gov/idmws/common/opennat.asp?fileID=12249545>

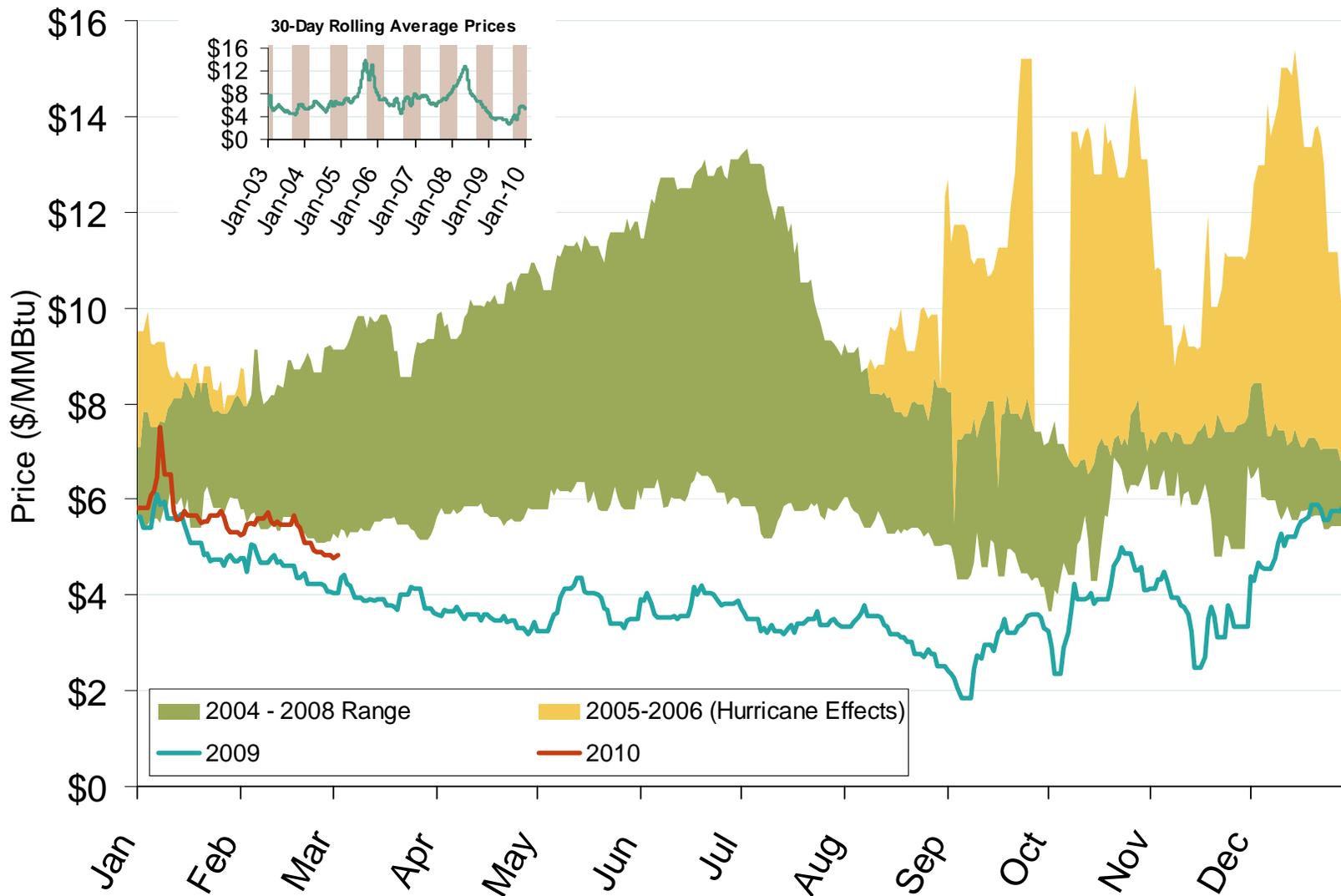


Natural Gas and Fuel Markets

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

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

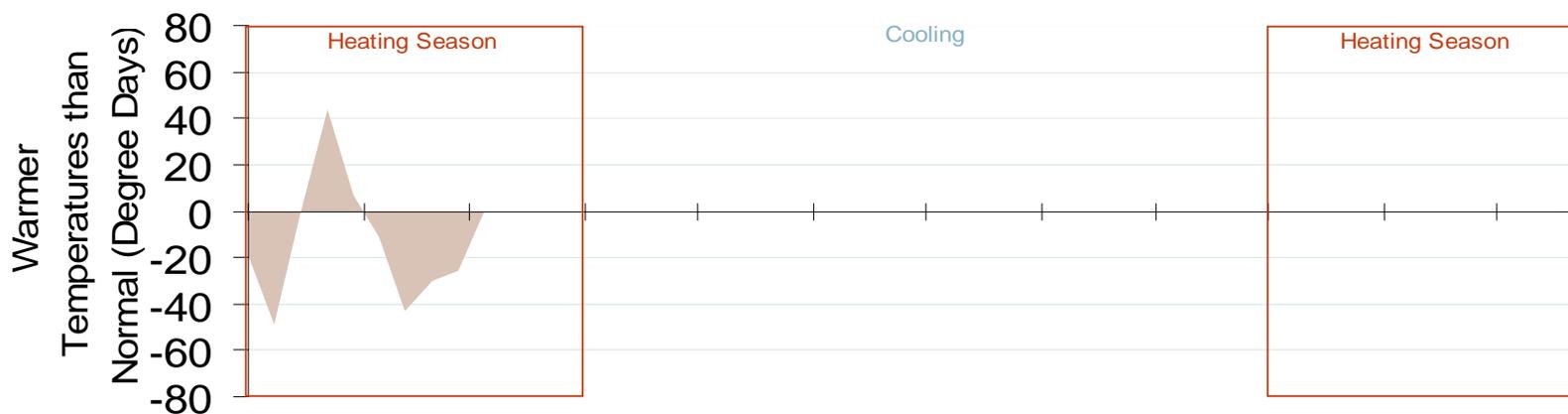
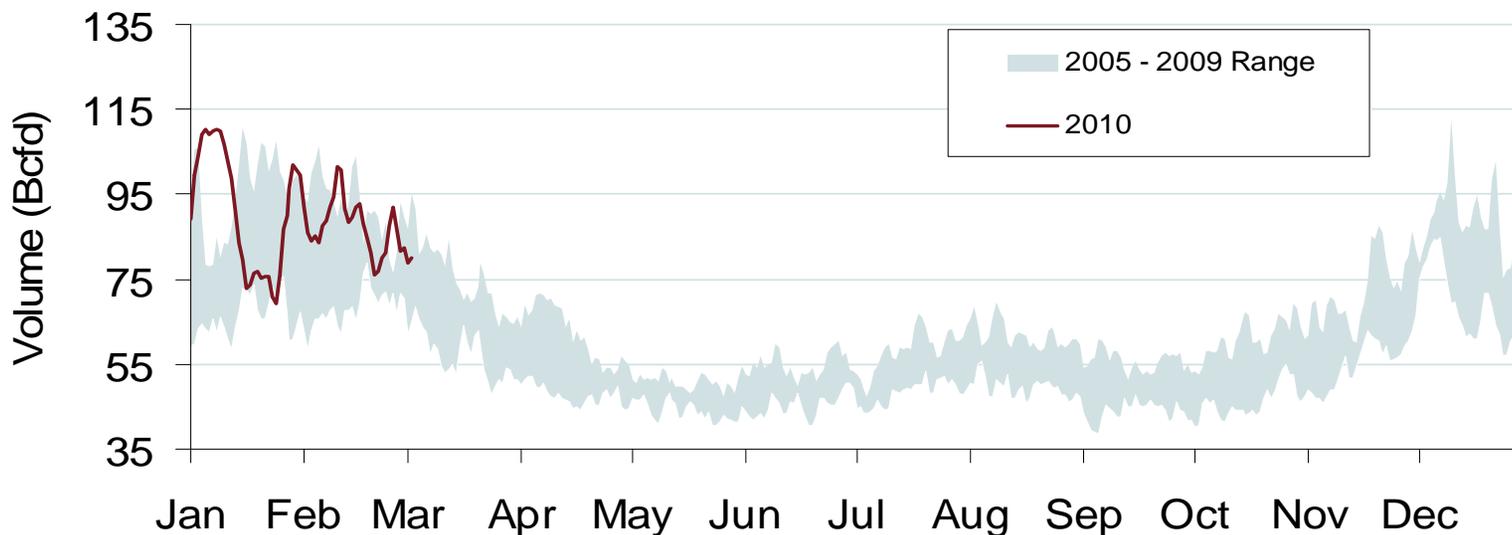
Henry Hub Natural Gas Daily Spot Prices



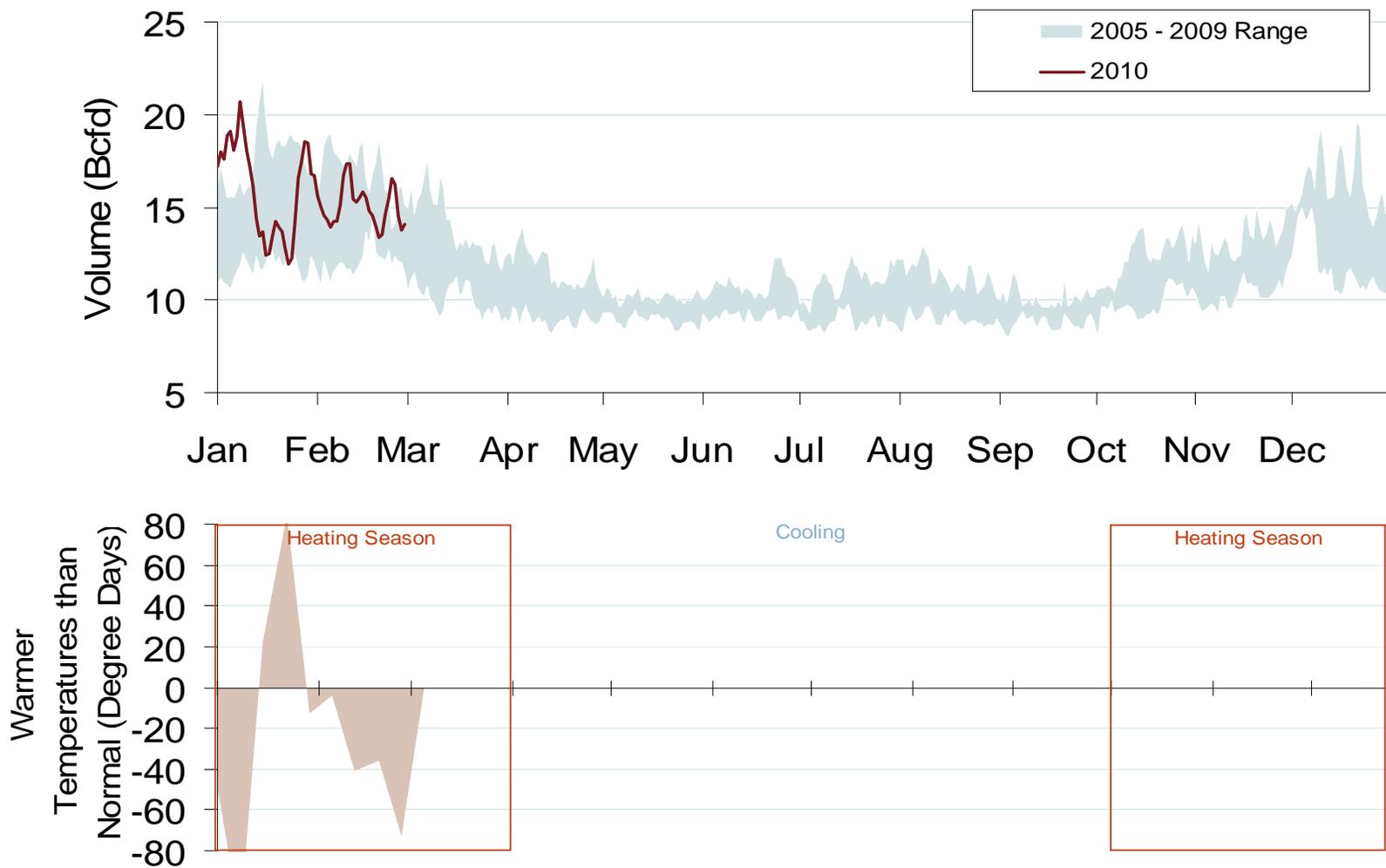
Source: Derived from Platts data.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

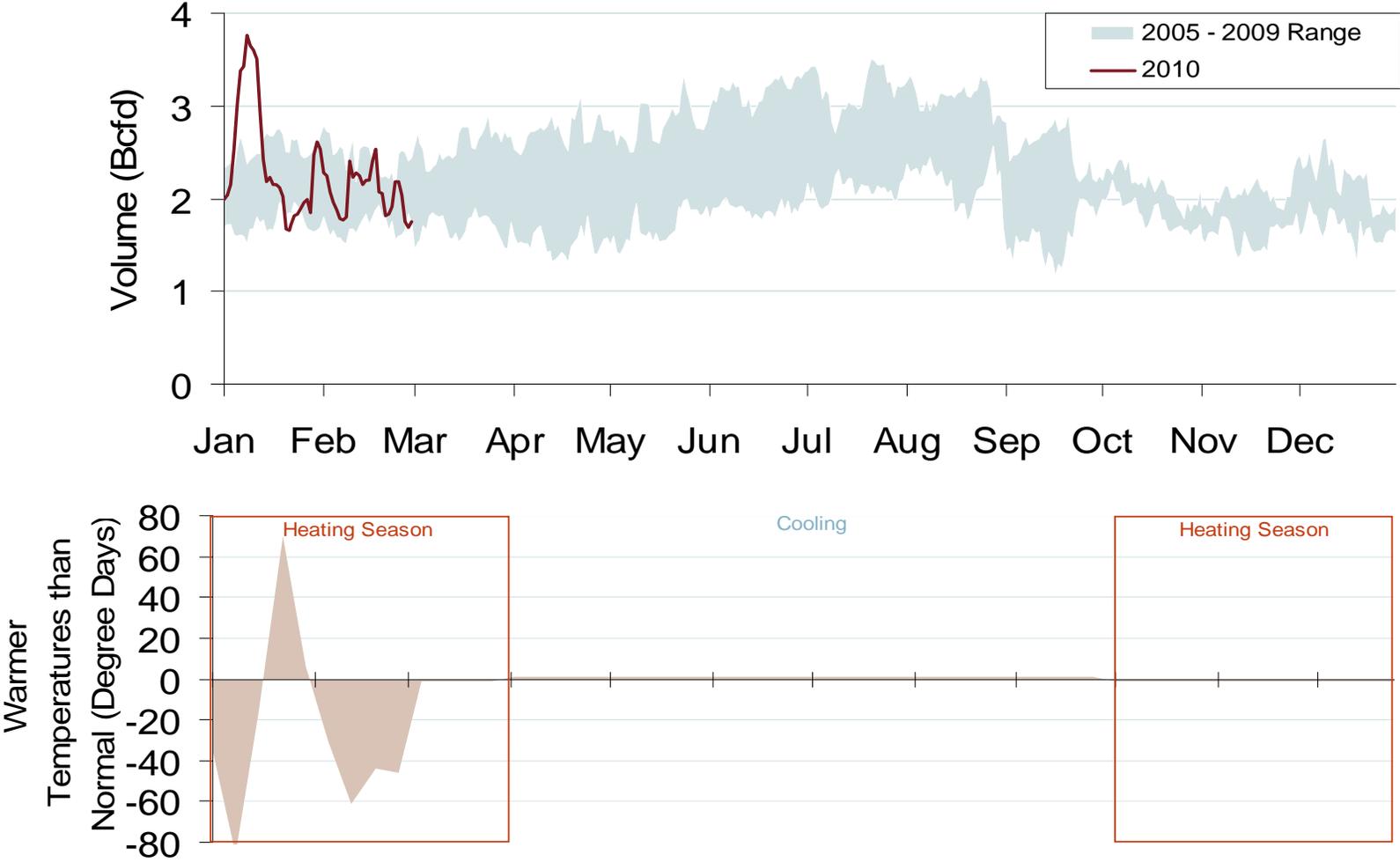
Total U.S. Natural Gas Demand (All Sectors) and Temperatures



Daily Midwest Natural Gas Demand All Sectors



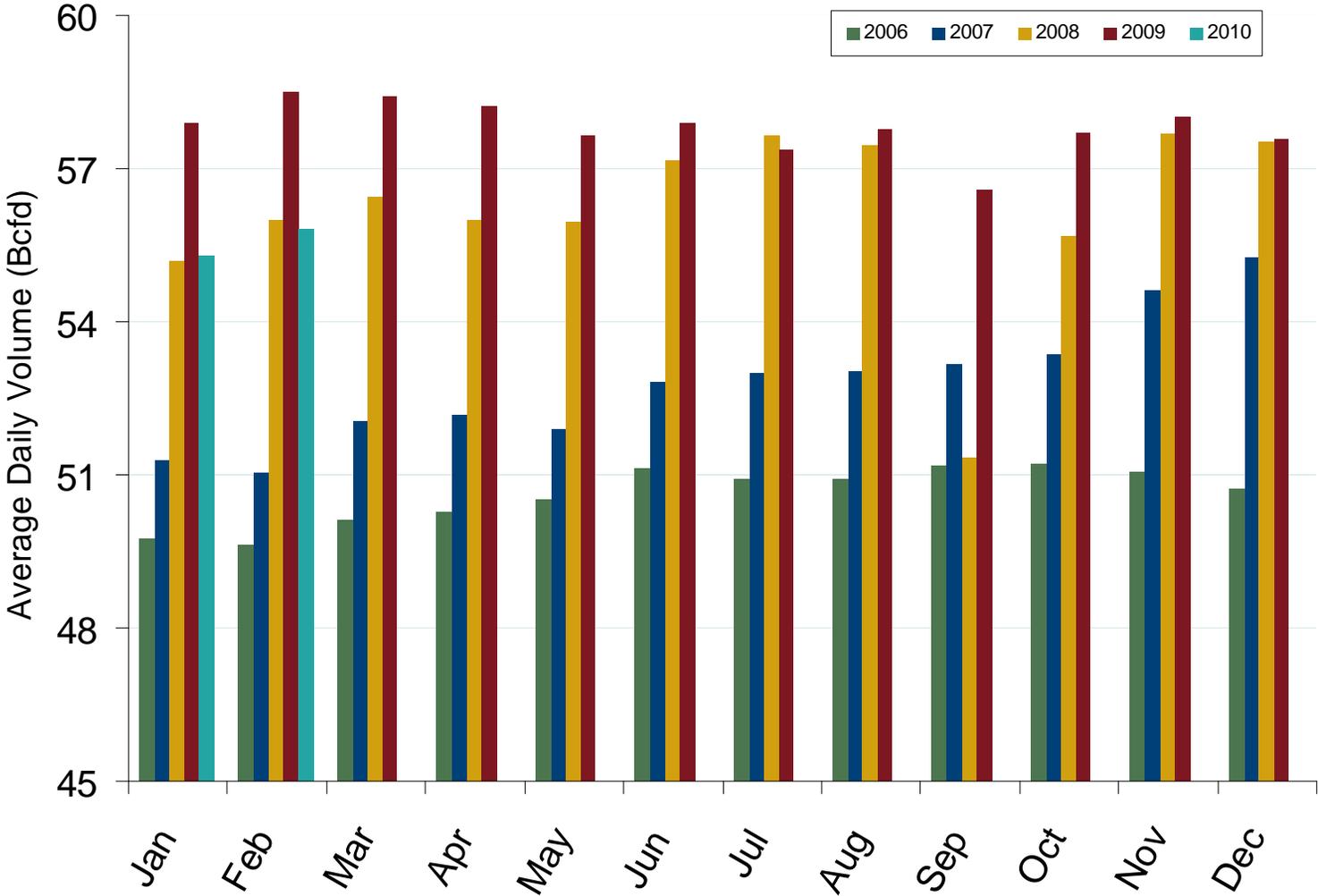
Daily Gulf Natural Gas Demand All Sectors



Source: Derived from Bentek Energy and NOAA data.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

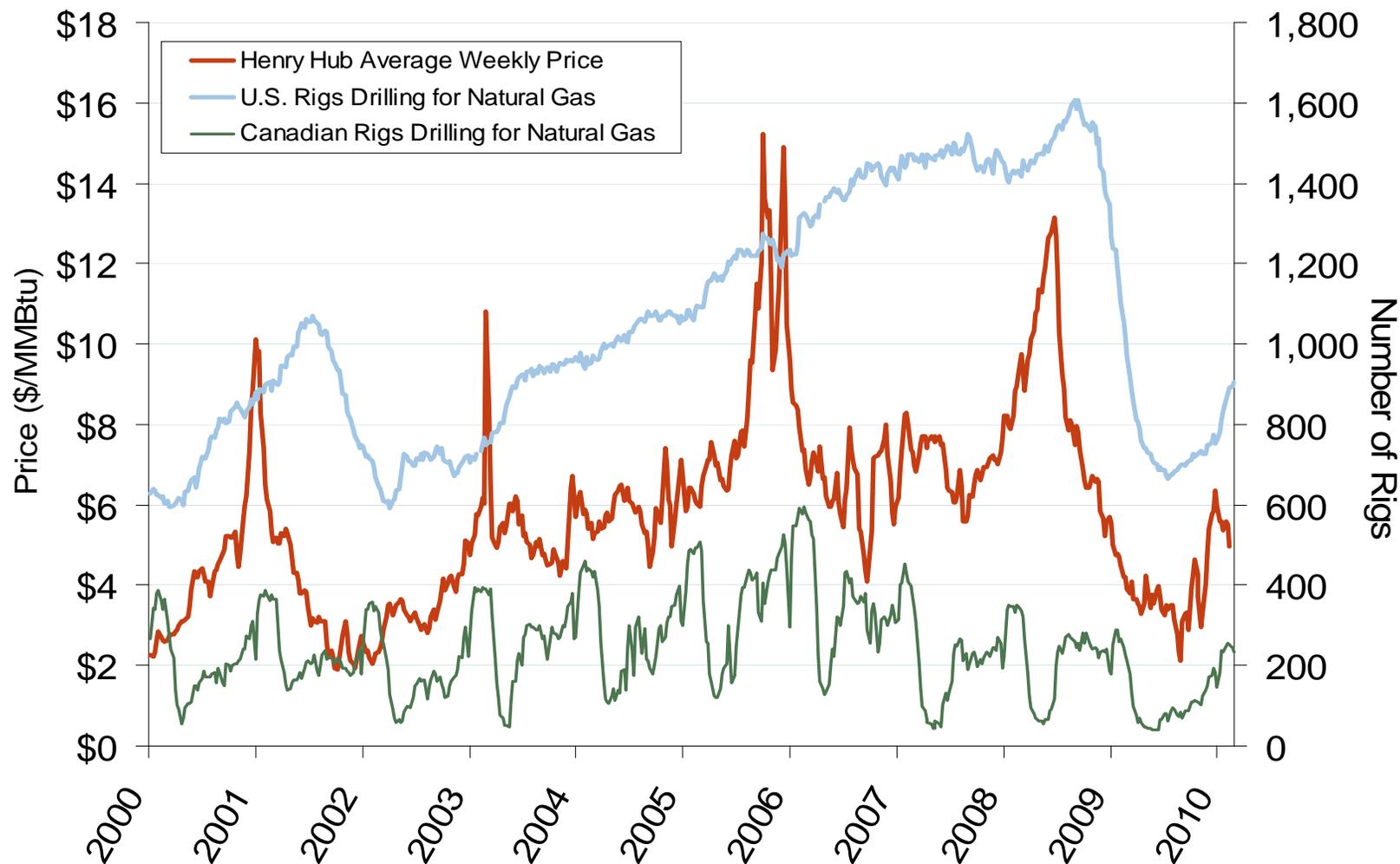
U.S. Dry Gas Production



Source: Derived from EIA and Bentek data.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

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

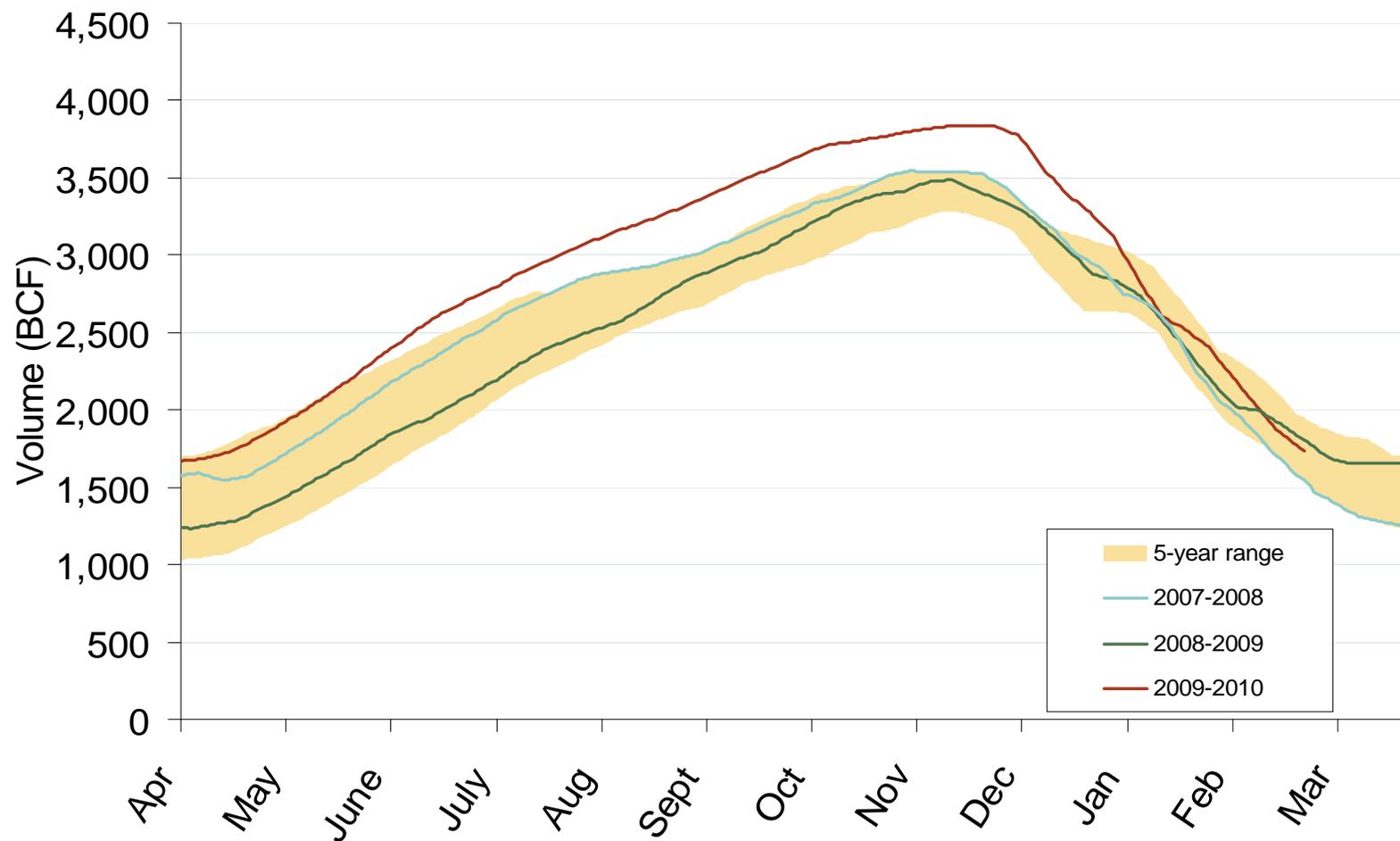


Source: Derived from *Platts* and *Baker Hughes* data.
March 2010 Midwest Snapshot Report

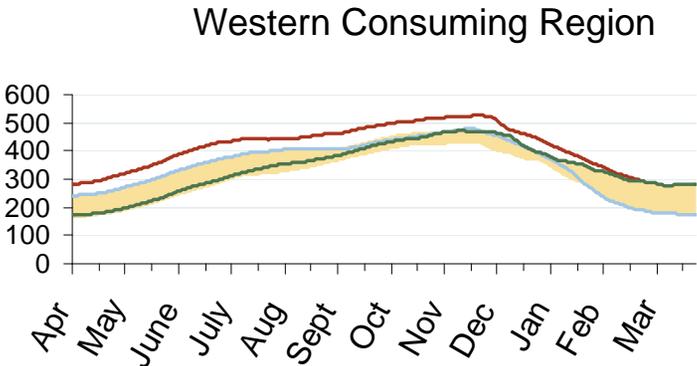
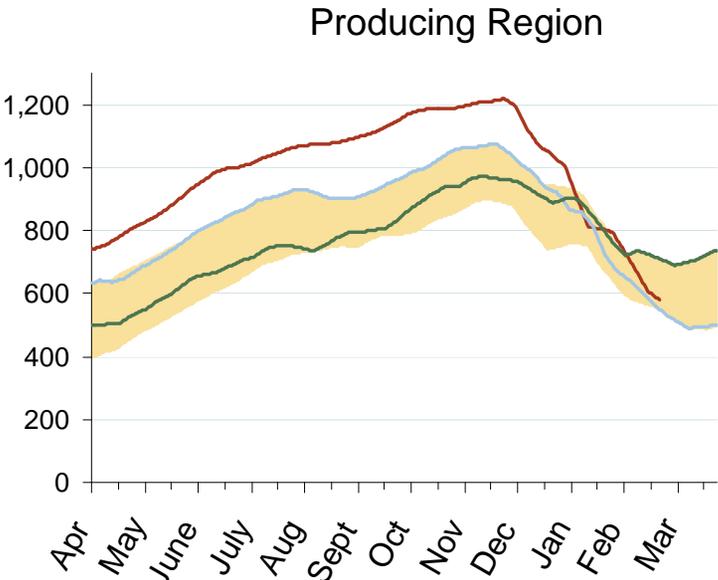
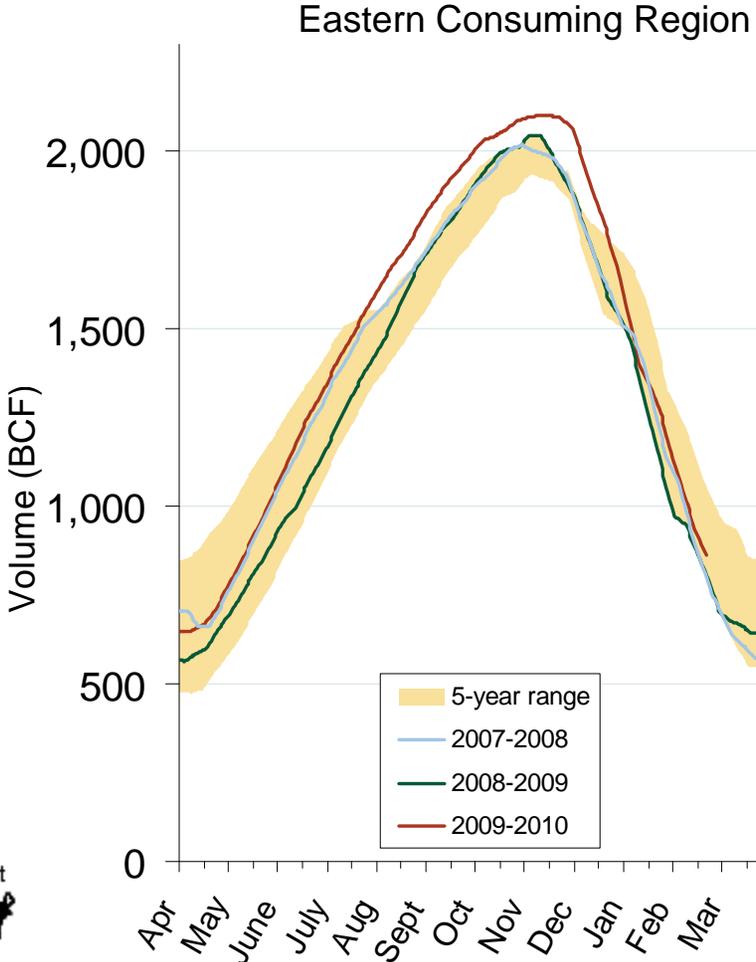
Updated March 5, 2010

2007

Total U.S. Working Gas in Storage



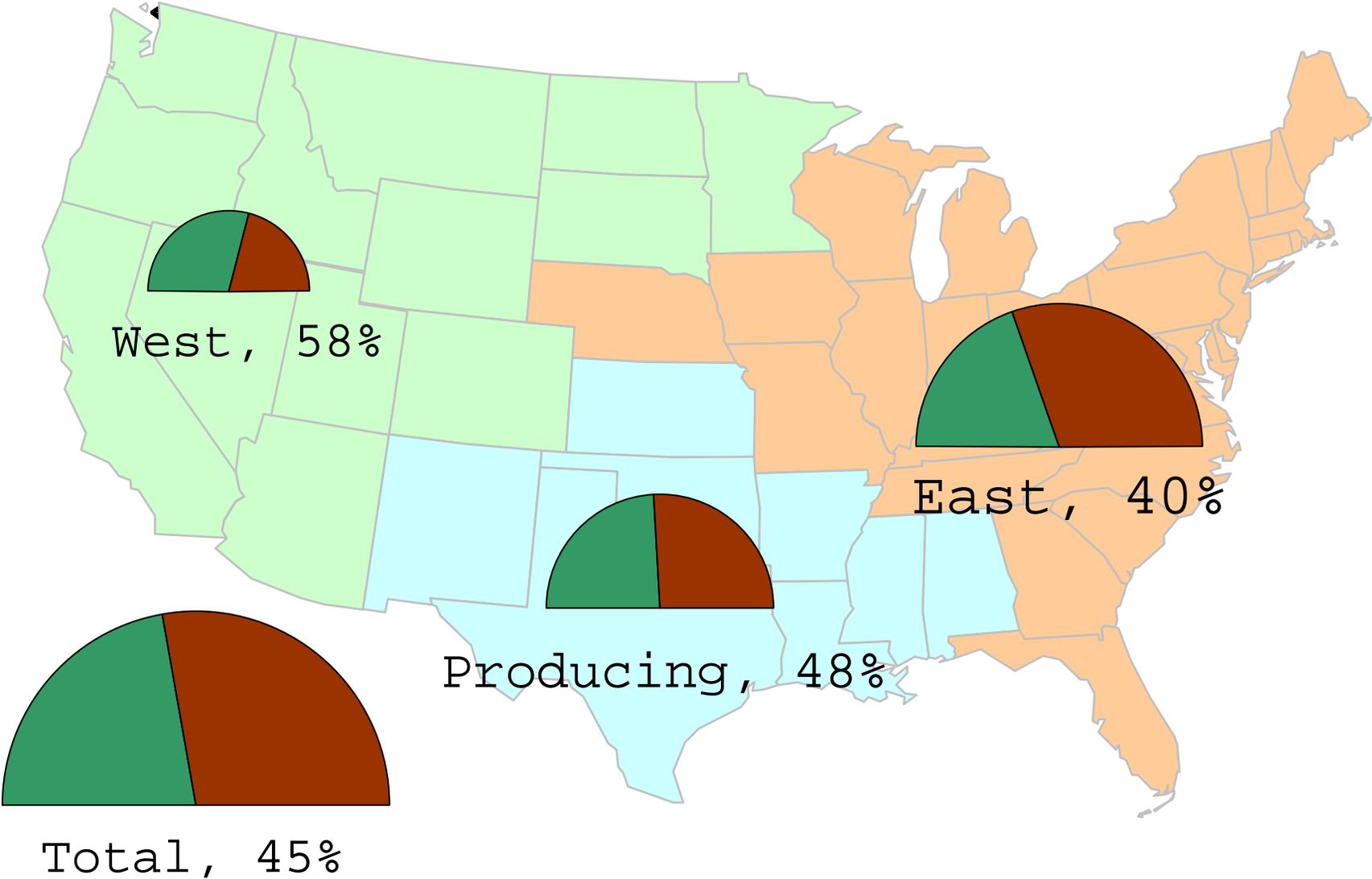
Regional Totals of Working Gas in Storage



Source: Derived from EIA data.
March 2010 Midwest Snapshot Report

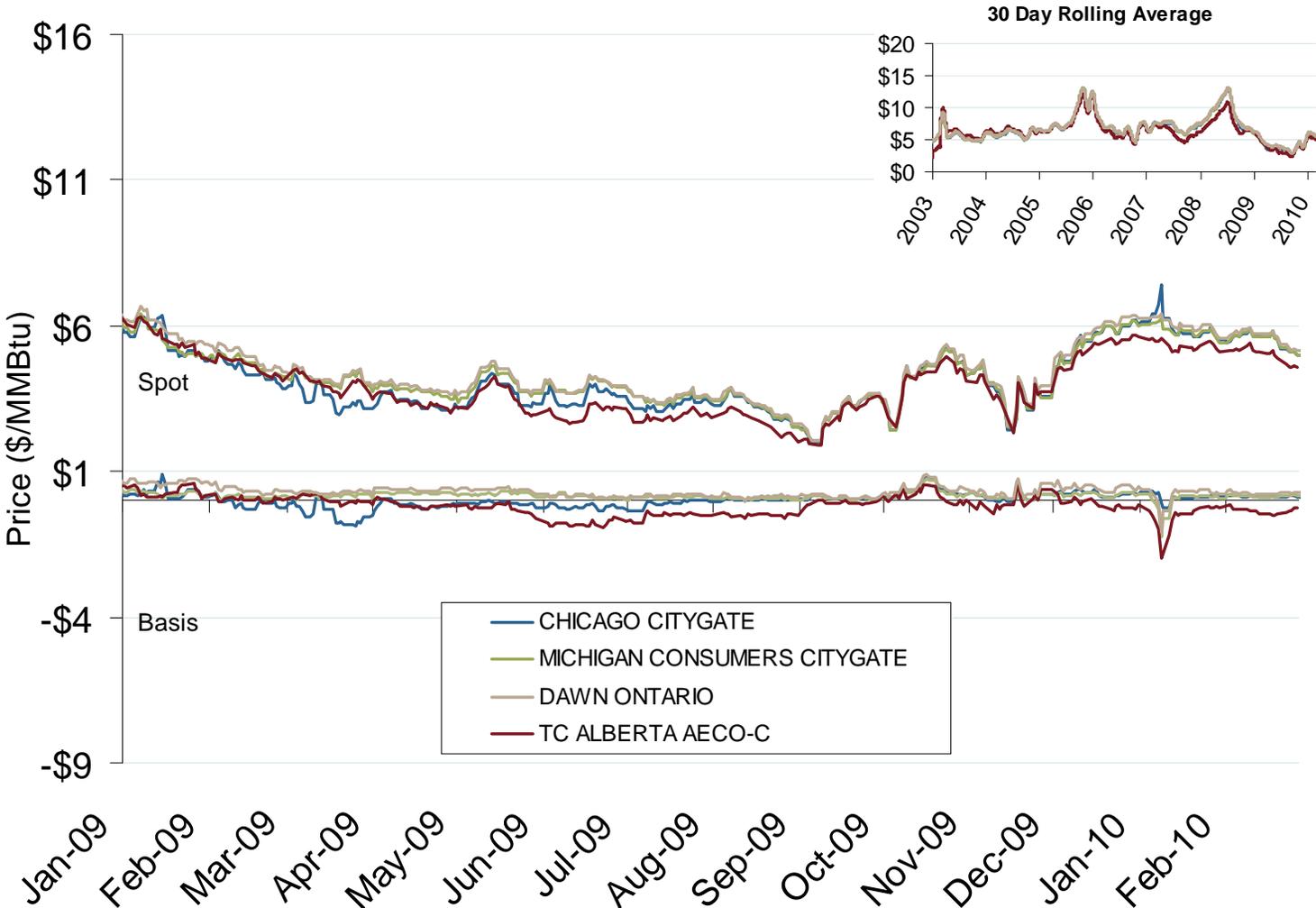
Updated March 5, 2010

Natural Gas Storage Inventories – February 26, 2010



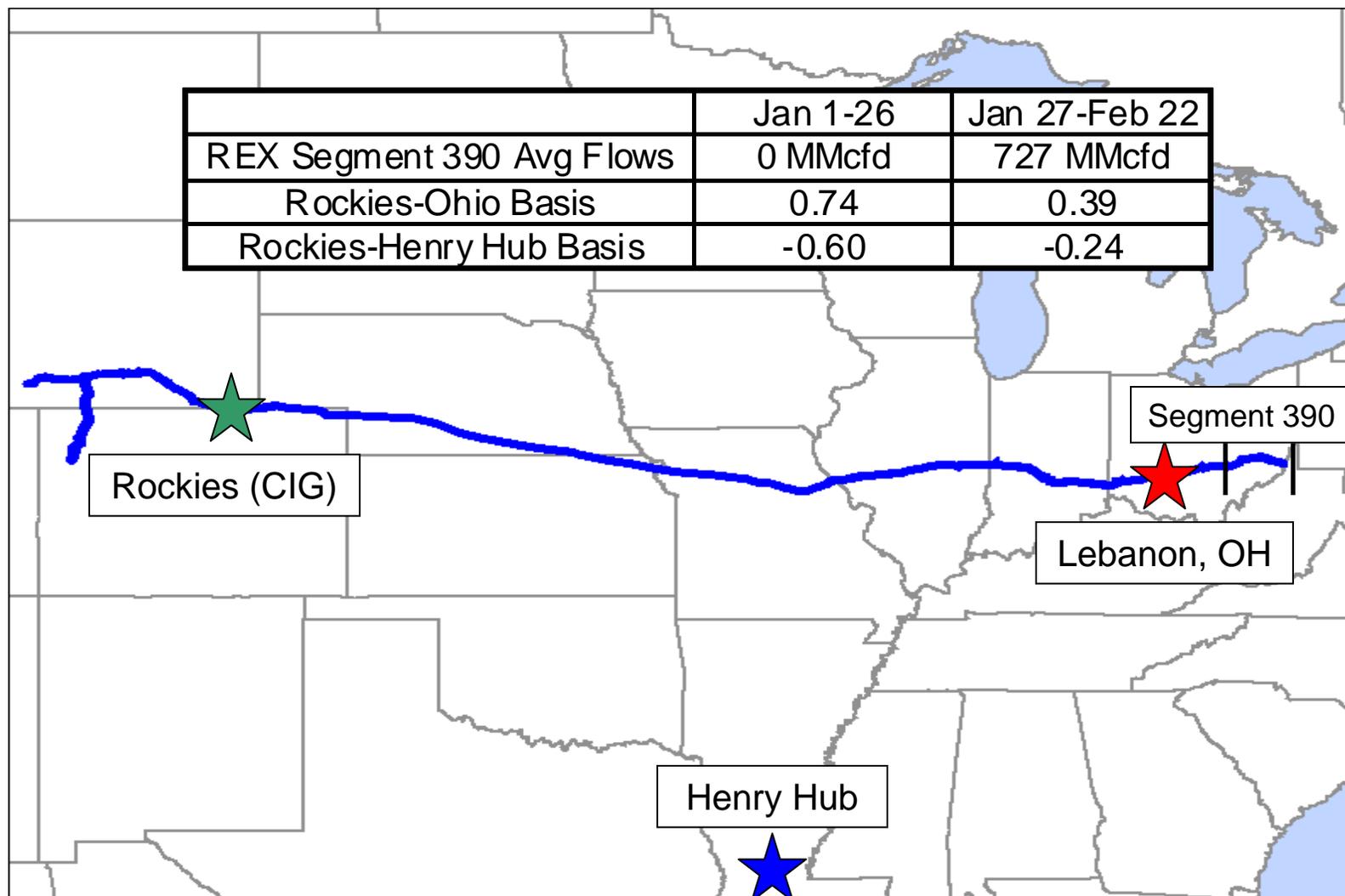
Source: Derived from EIA Storage and Estimated Working Gas Capacity data.
March 2010 Midwest Snapshot Report

Midwestern Day-Ahead Hub Spot Prices and Basis

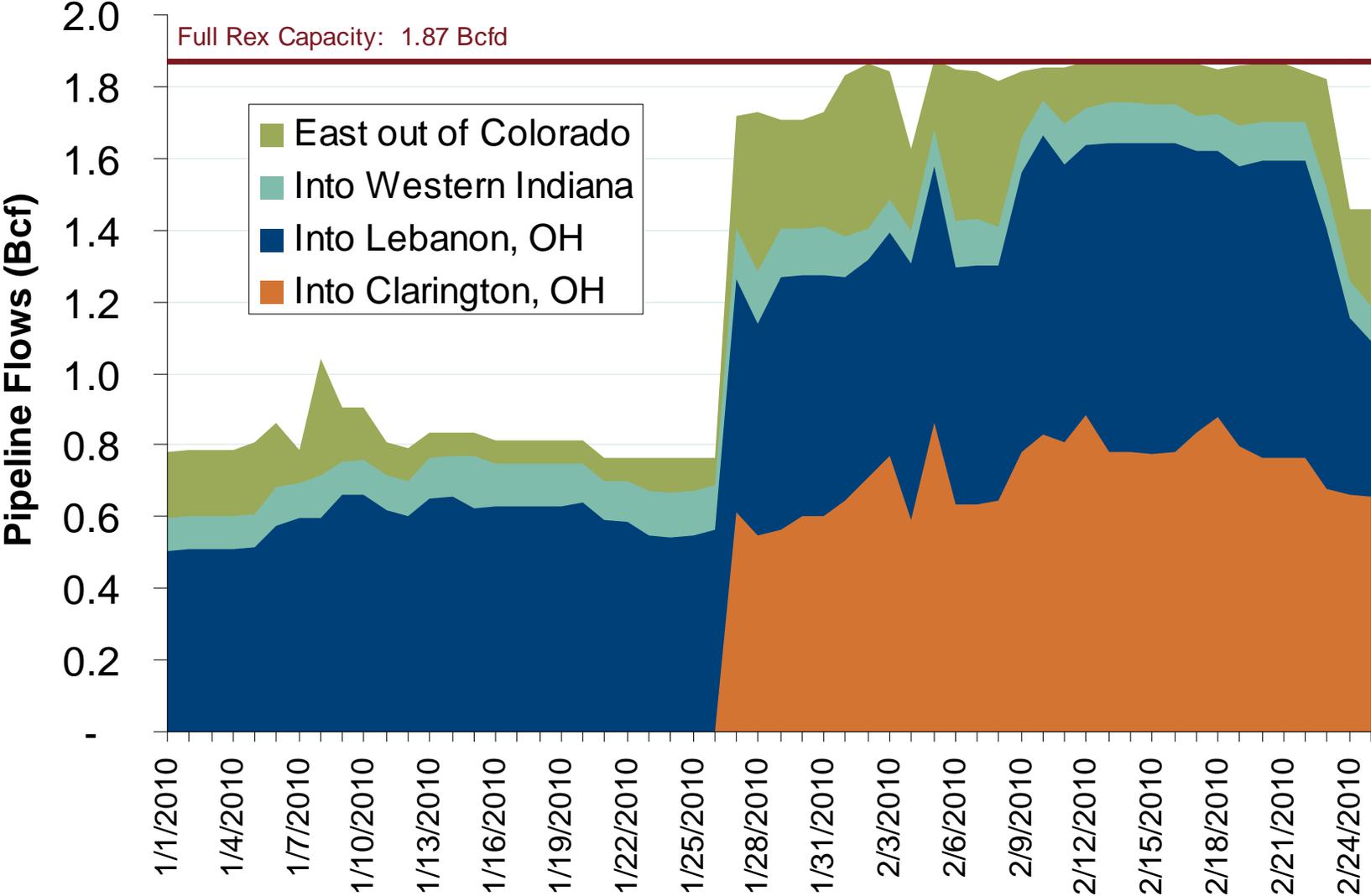


Source: Derived from *Platts* data.
March 2010 Midwest Snapshot Report

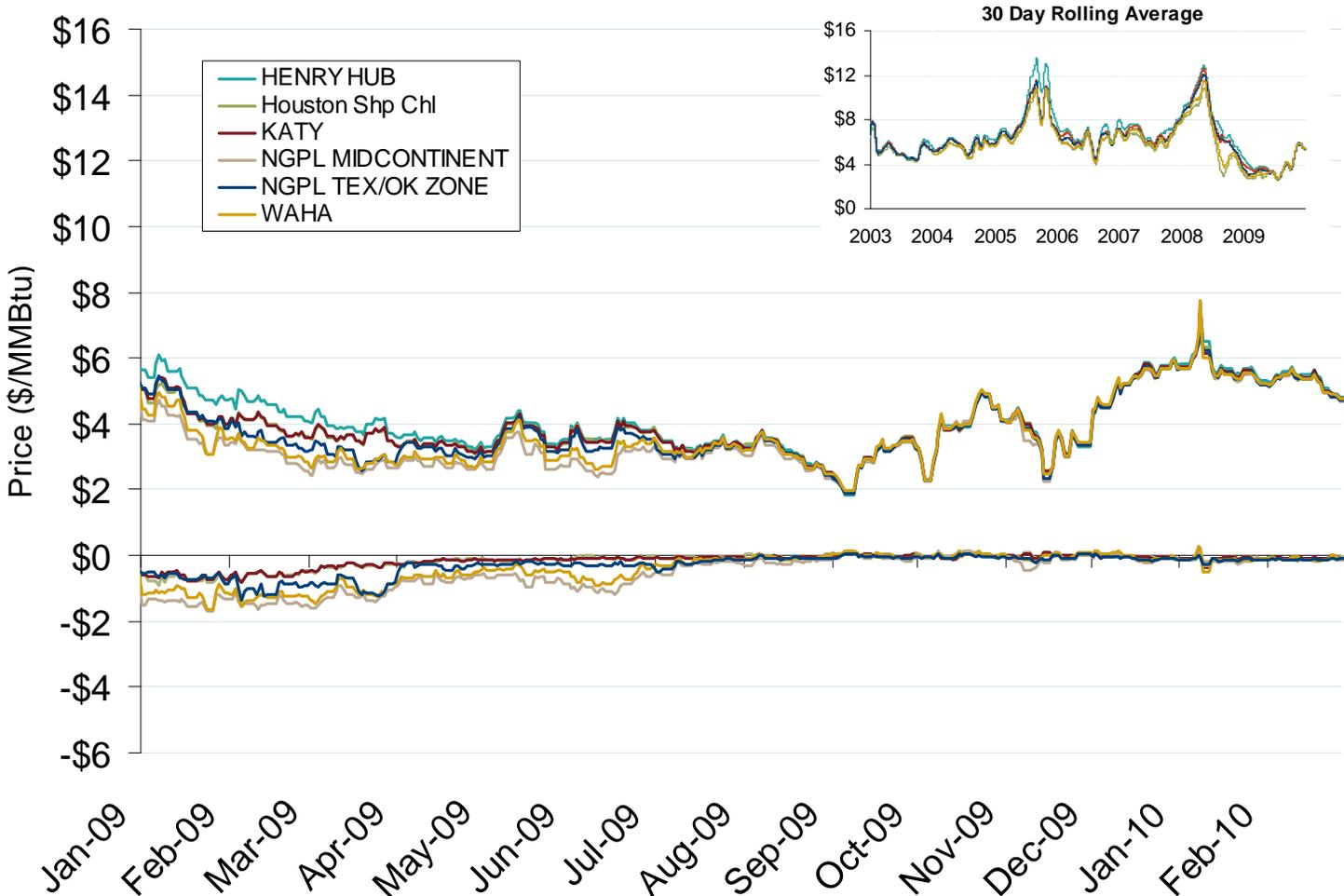
Rockies Express-East Segment 390 Returns to Service



REX Flows Reach Capacity



Gulf Day-Ahead Hub Spot Prices and Basis

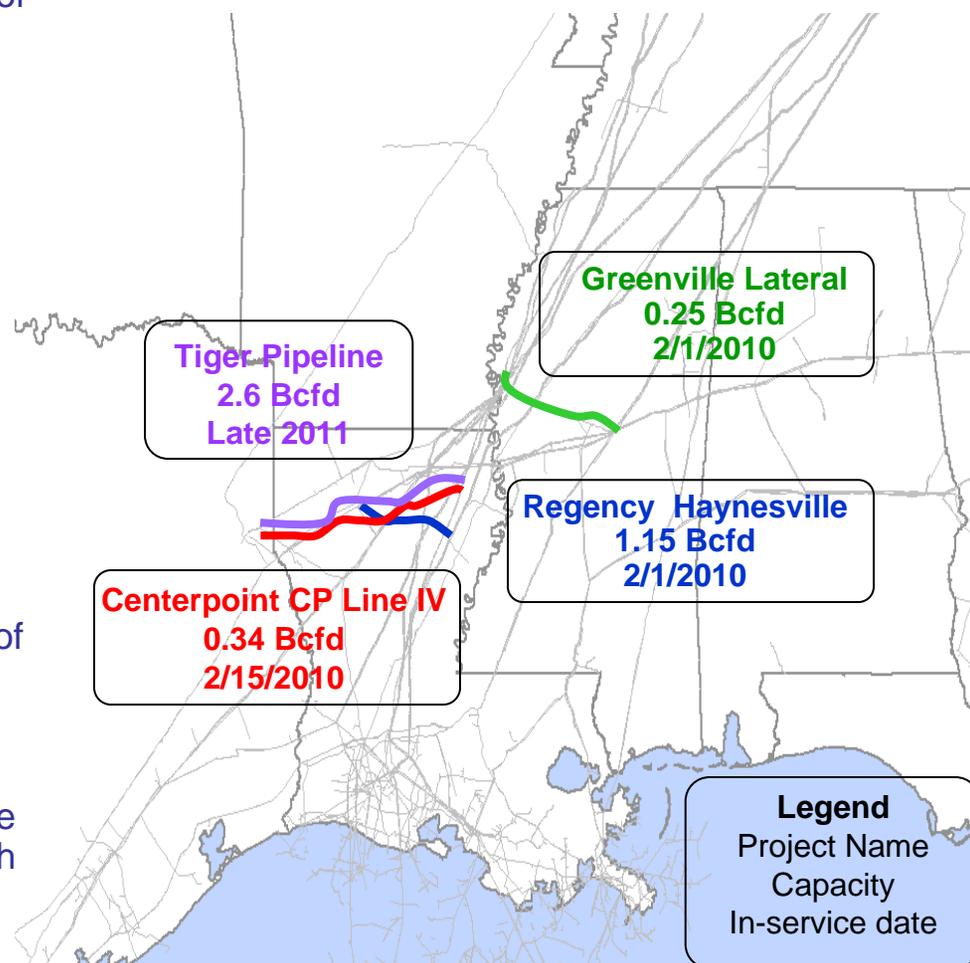


Source: Derived from *Platts* data.
March 2010 Midwest Snapshot Report

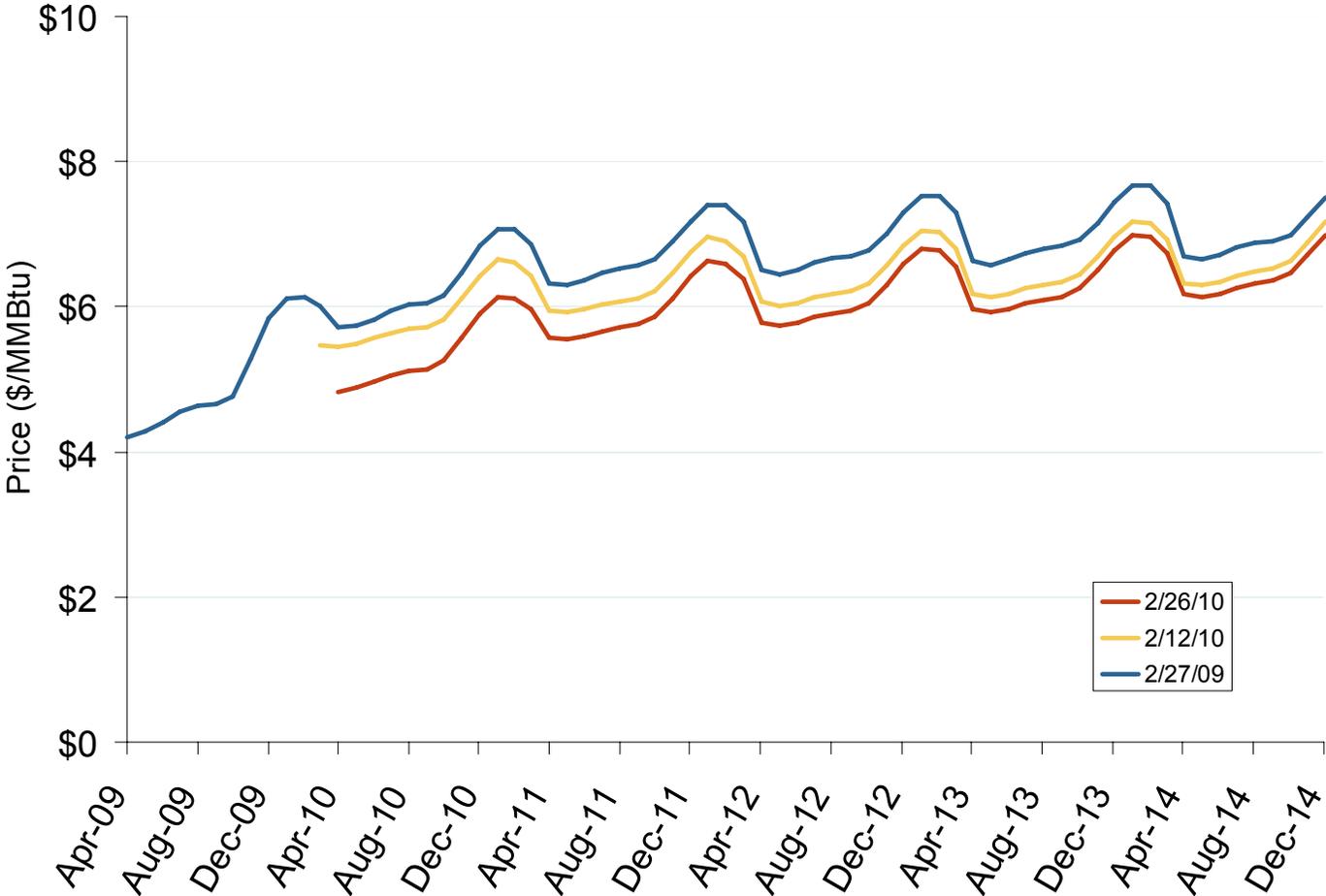
Updated March 5, 2010

Southeast Infrastructure Additions

- **ETP's Tiger Pipeline** – Will add 2.6 Bcfd of takeaway capacity from the Haynesville, Bossier Sands, and Fort Worth supply basins into the Perryville Hub in northern LA. Will interconnect with Texas Gas, Tennessee, TETCO, Trunkline, ANR and SESH.
- **Texas Gas Greenville Lateral Stage 2 Expansion** - adds 250 MMcfd of capacity in Mississippi through additional compression, giving Fayetteville shale producers increased access to markets served by ANR, Trunkline, Sonat and TETCO.
- **CenterPoint CP Line Phase IV** - Stage 4 compression expansion adds 340 MMcfd of capacity to the CP Line.
- **Regency Energy Partners Haynesville Expansion and Red River Lateral** - This 1.2 Bcfd intrastate line is designed to move Haynesville shale gas to interconnects with Texas Gas, Tennessee, Trunkline, Sonat, Columbia Gulf and ANR at the Perryville Hub.

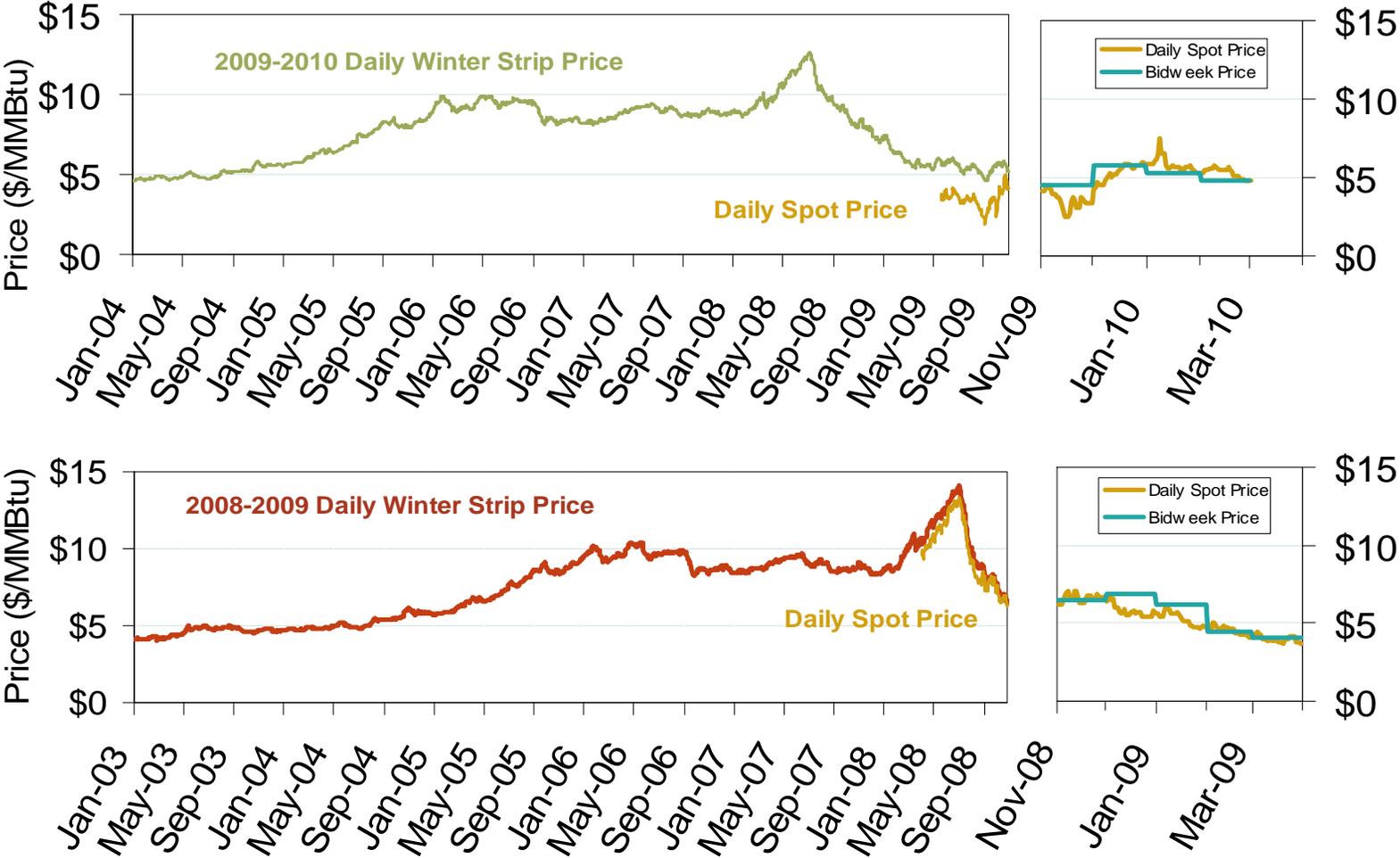


NYMEX Natural Gas Forward Price Curve



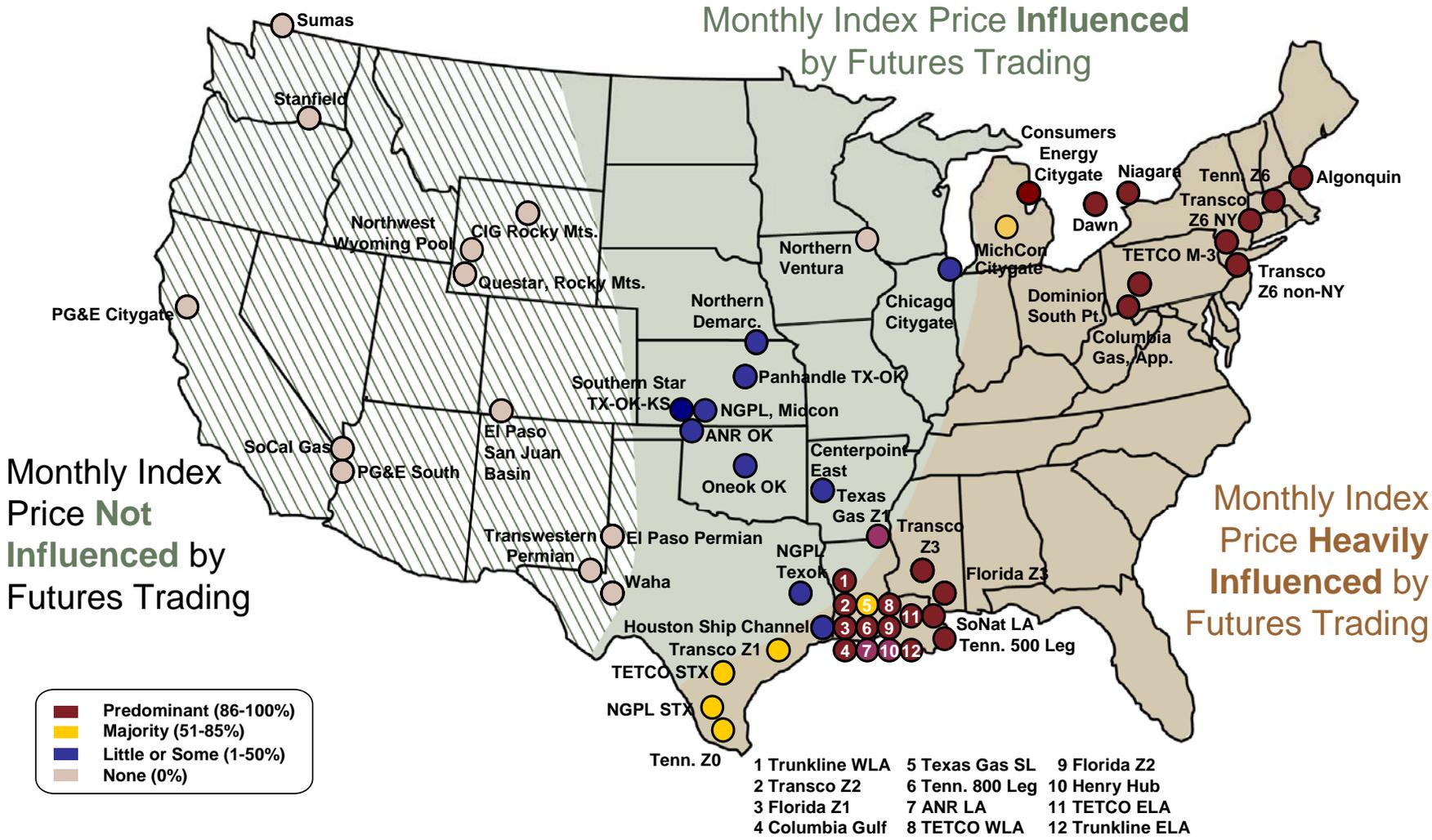
The NYMEX futures contract trades in 10,000 million Btu units. The blue series shows the forward price curve for these contracts 1-year ago. The red and yellow curves show prices for contracts traded on the current and previous months.

Natural Gas Winter Futures Strip and Daily Henry Hub Spot and Bidweek Prices



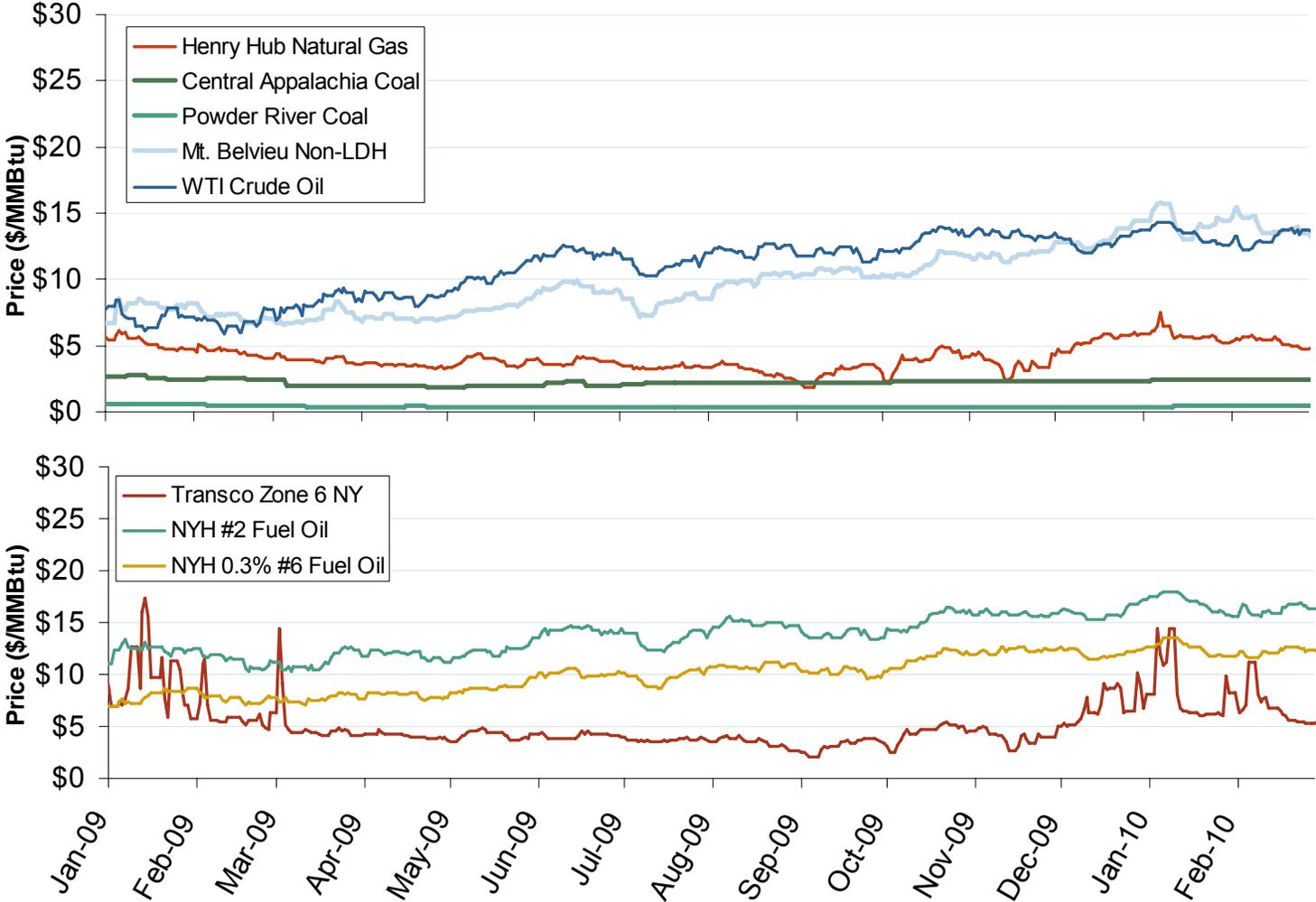
Source: Derived from Platts and Nymex data.

Use of Physical Basis in Natural Gas Price Indices at Major Trading Points, 2009



Source: Derived from *Platts* data for January through June 2009 indices.

Oil, Coal, Natural Gas and Propane Daily Spot Prices

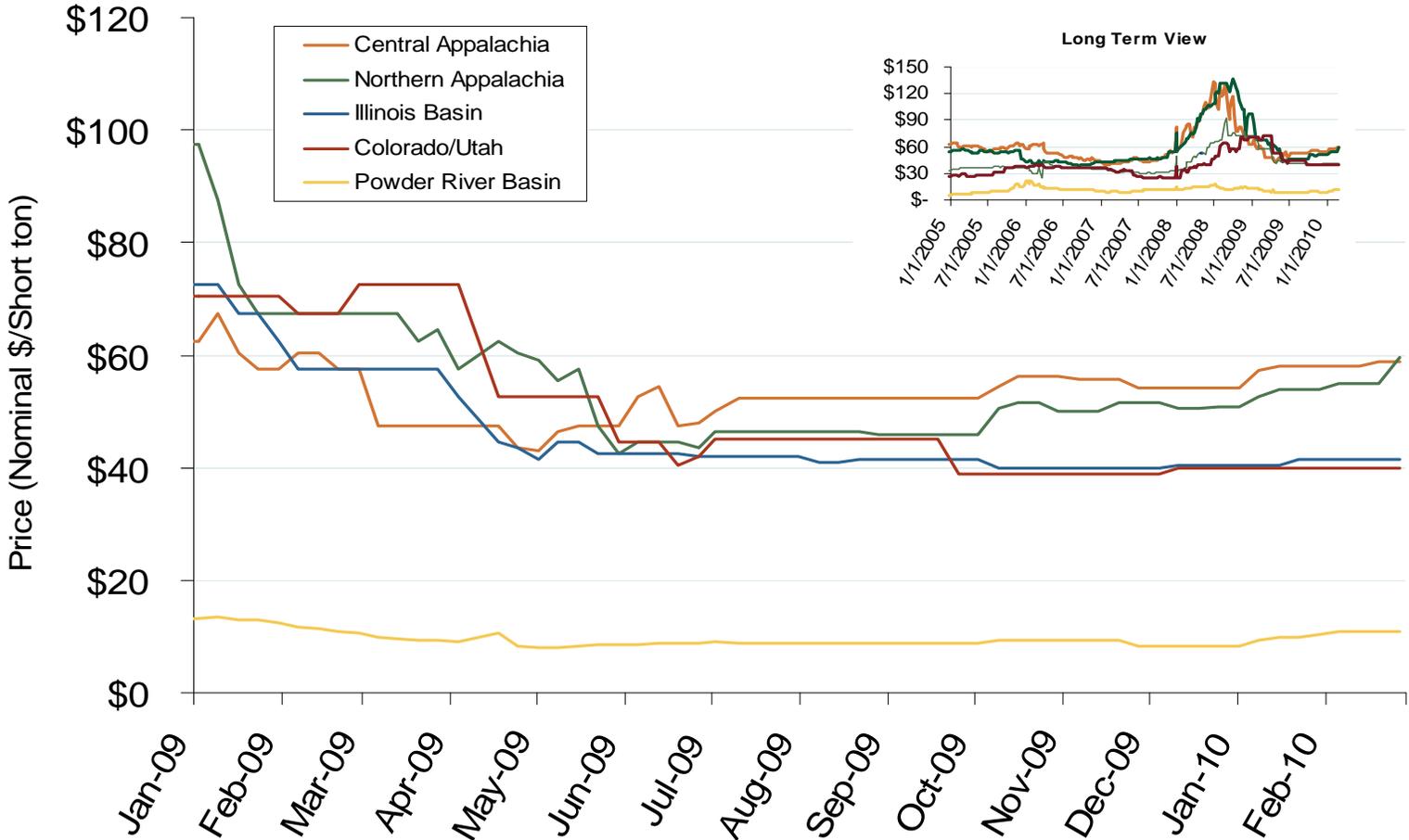


Source: Derived from ICE and Bloomberg data.

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 5, 2010

Regional Coal Spot Prices

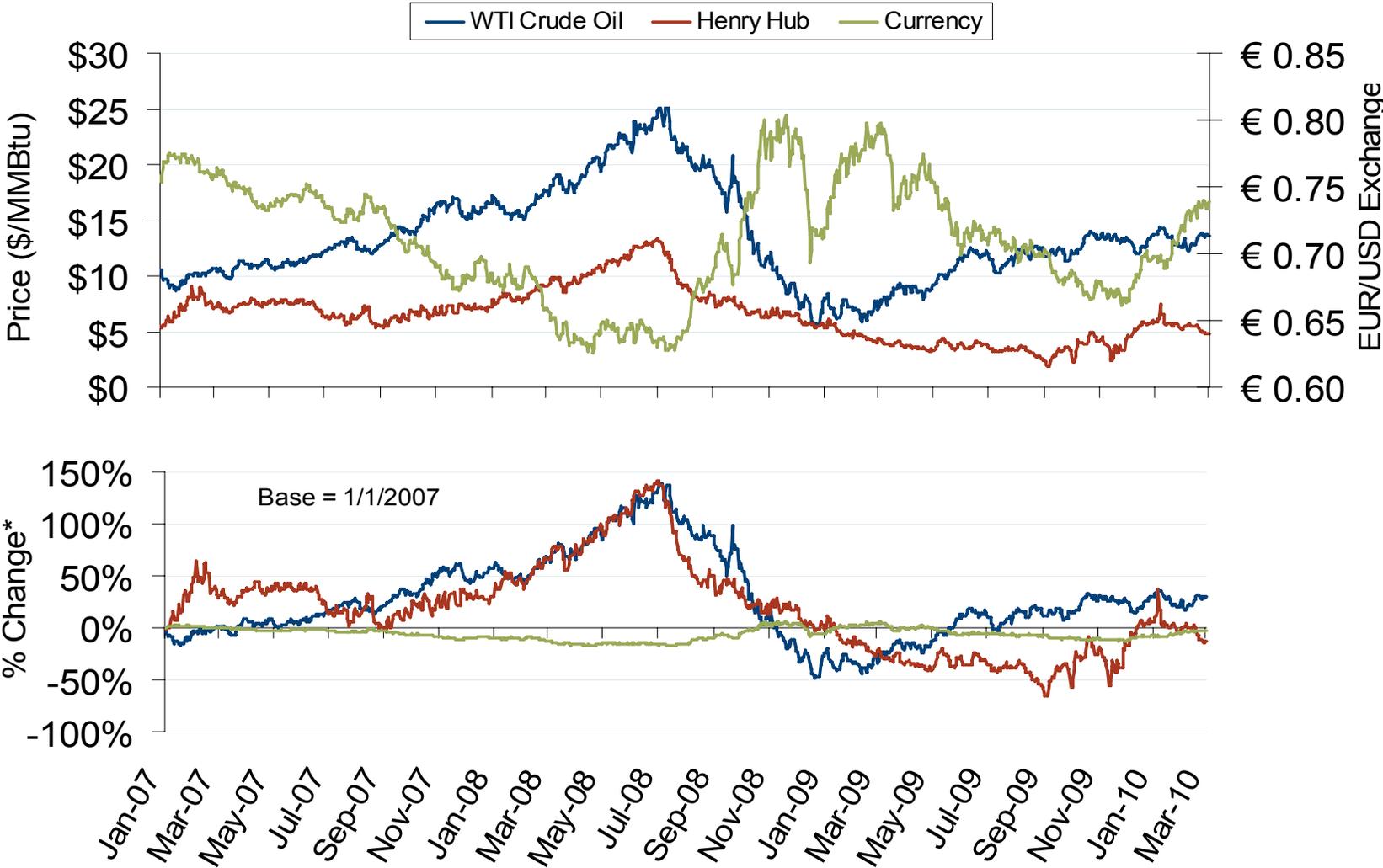


Note: the Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances.

Source: Derived from *Bloomberg* data.
March 2010 Midwest Snapshot Report

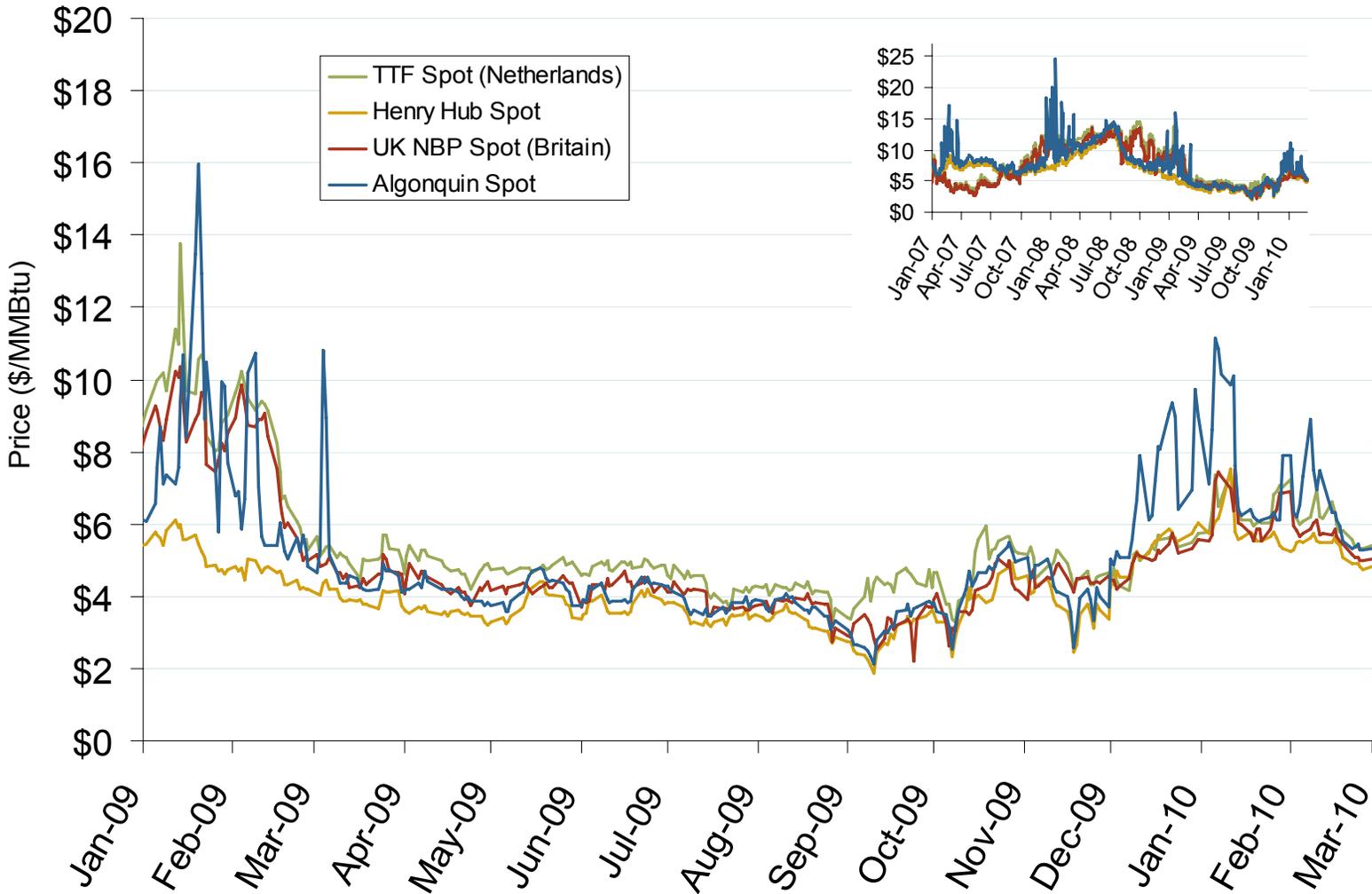
Updated March 5, 2010

Oil, Natural Gas and Currency Spot Prices



Source: Derived from *Bloomberg* data.

Atlantic Basin European and US Spot Natural Gas Prices



Source: Derived from *Bloomberg* and *ICE* data.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

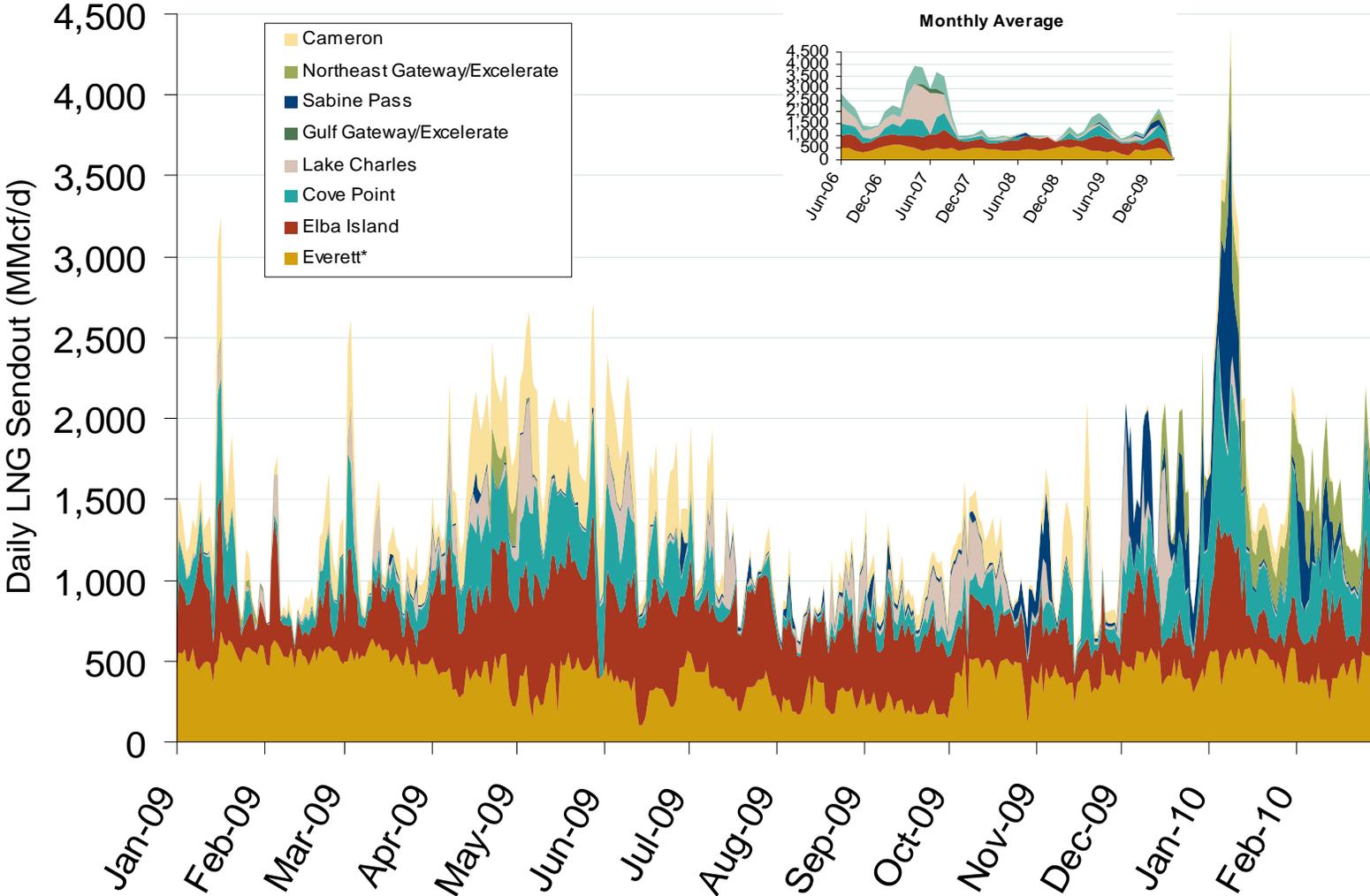
World LNG Estimated March 2010 Landed Prices



Source: Waterborne Energy, Inc. Data in \$US/MMBtu.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

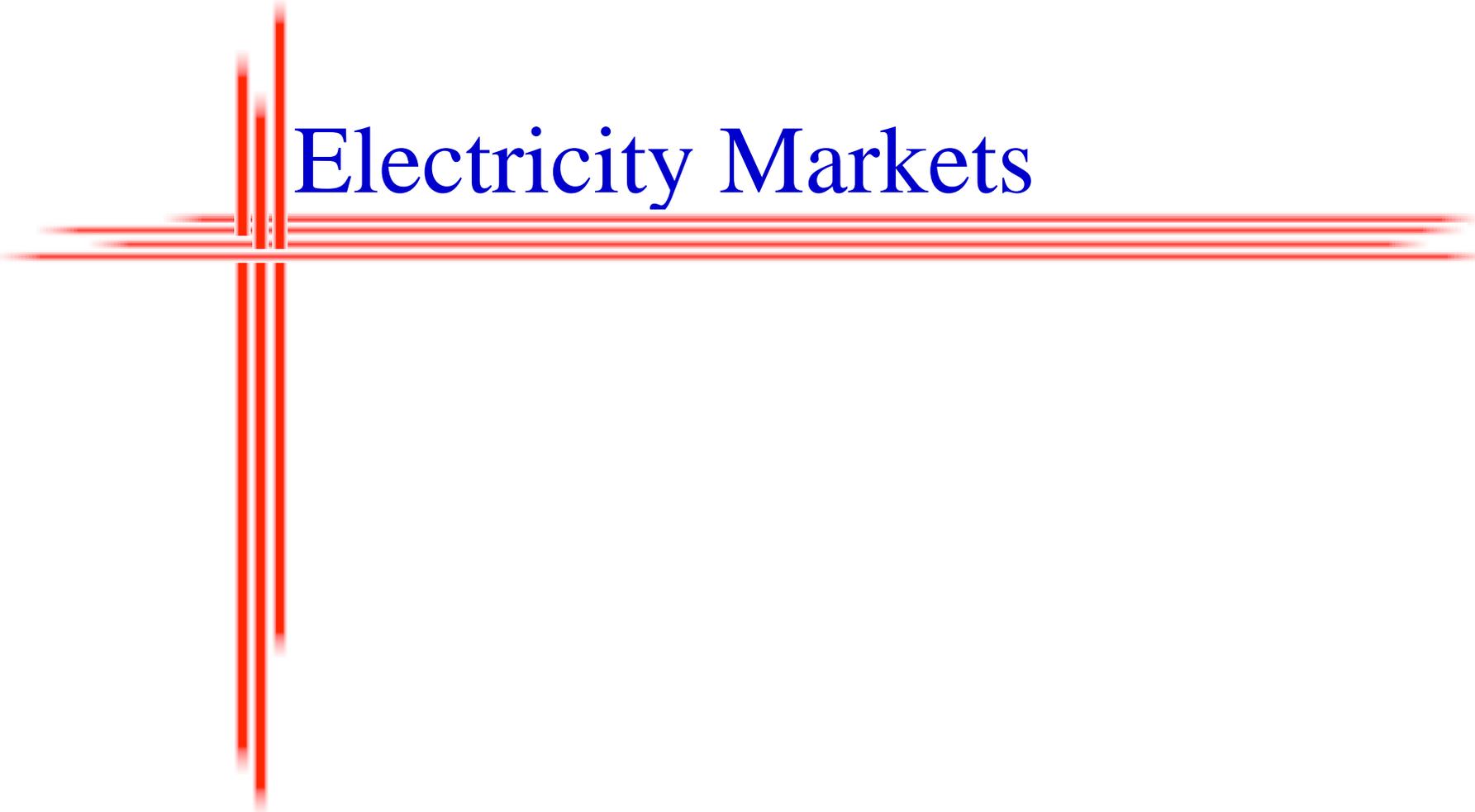
Daily Gas Sendout from Existing U.S. LNG Facilities



Source: Derived from Bentek data.

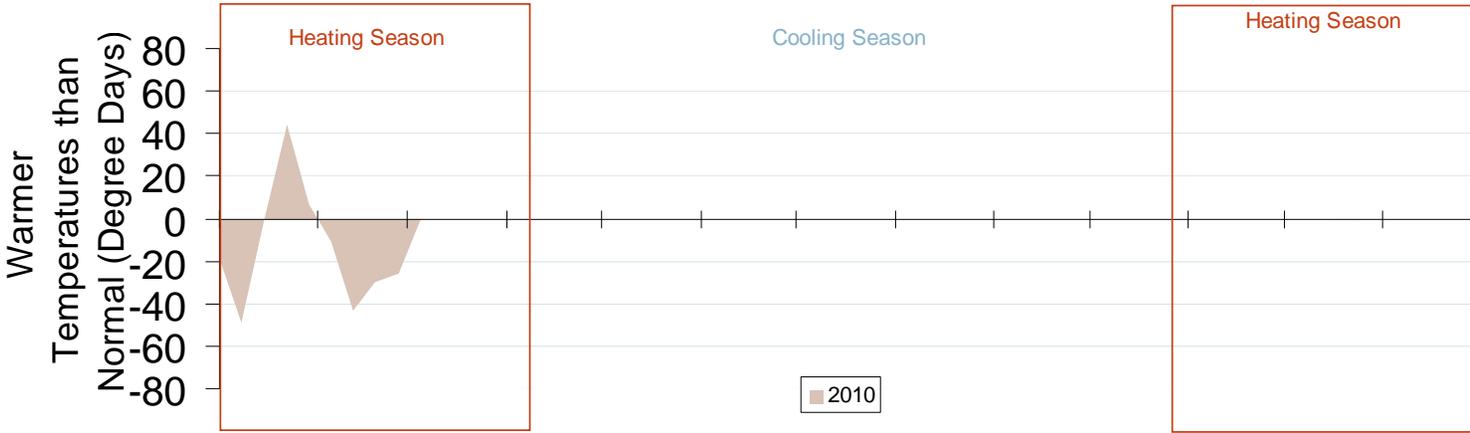
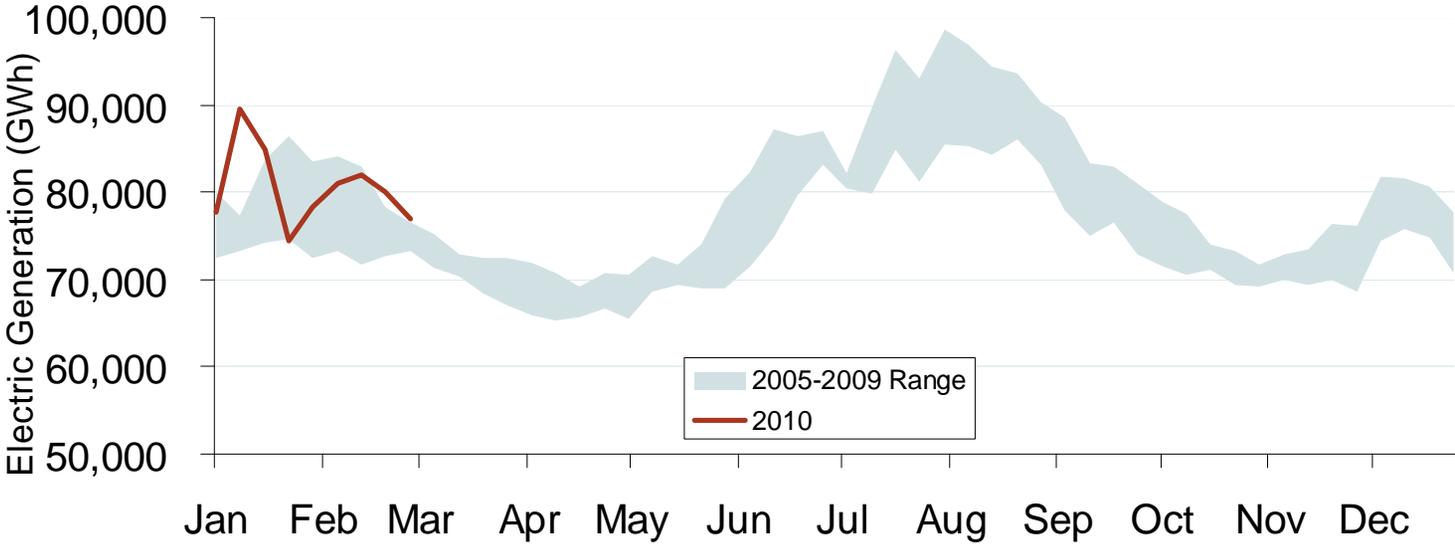
* Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston Gas, and LNG trucked out of the terminal. Excludes Freeport LNG which flows via intrastate pipelines.

Updated March 5, 2010



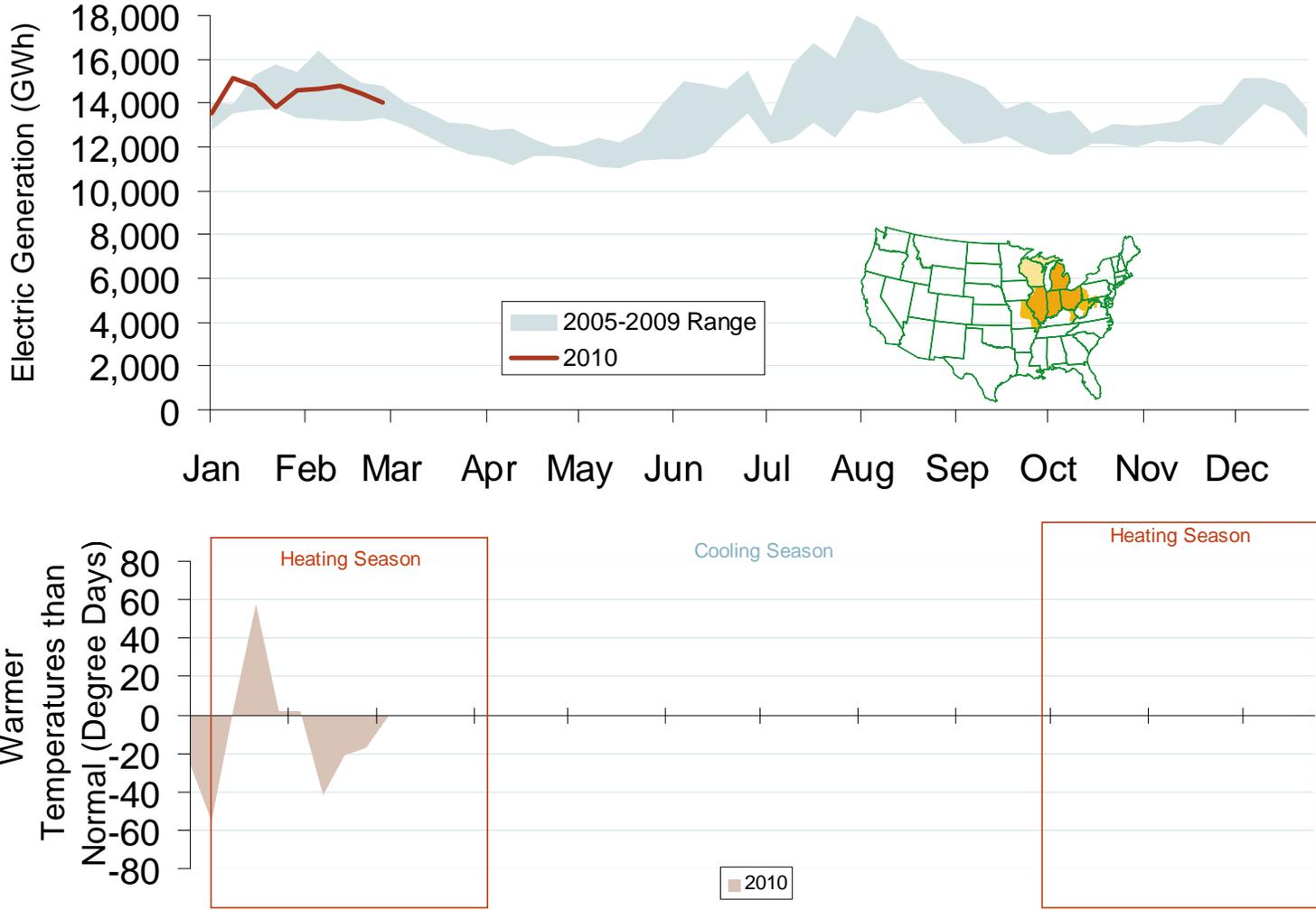
Electricity Markets

Weekly U.S. Electric Generation Output and Temperatures



Source: Derived from EEI and NOAA data.
March 2010 Midwest Snapshot Report

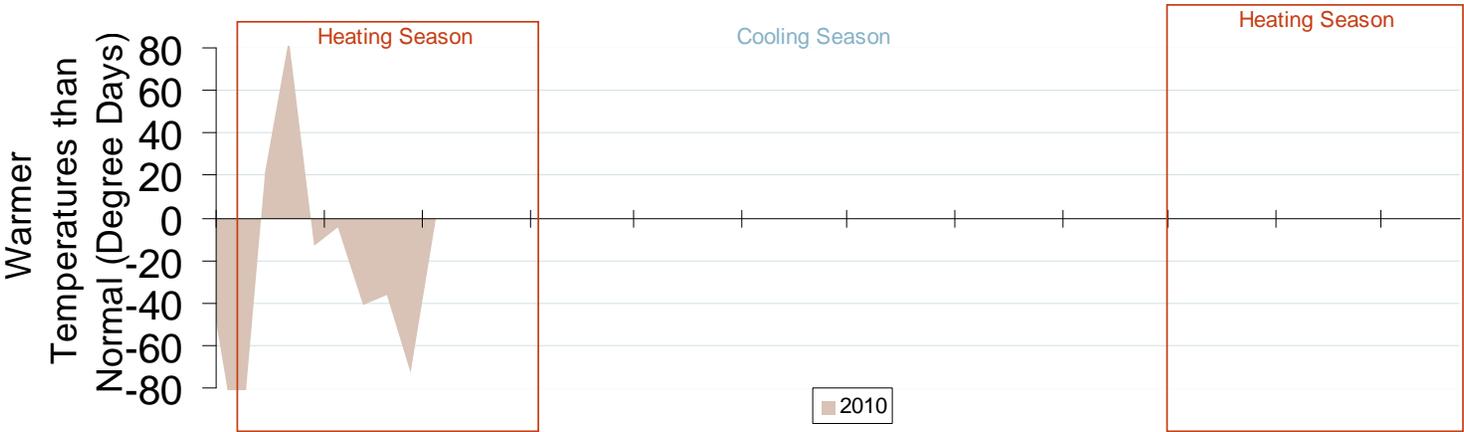
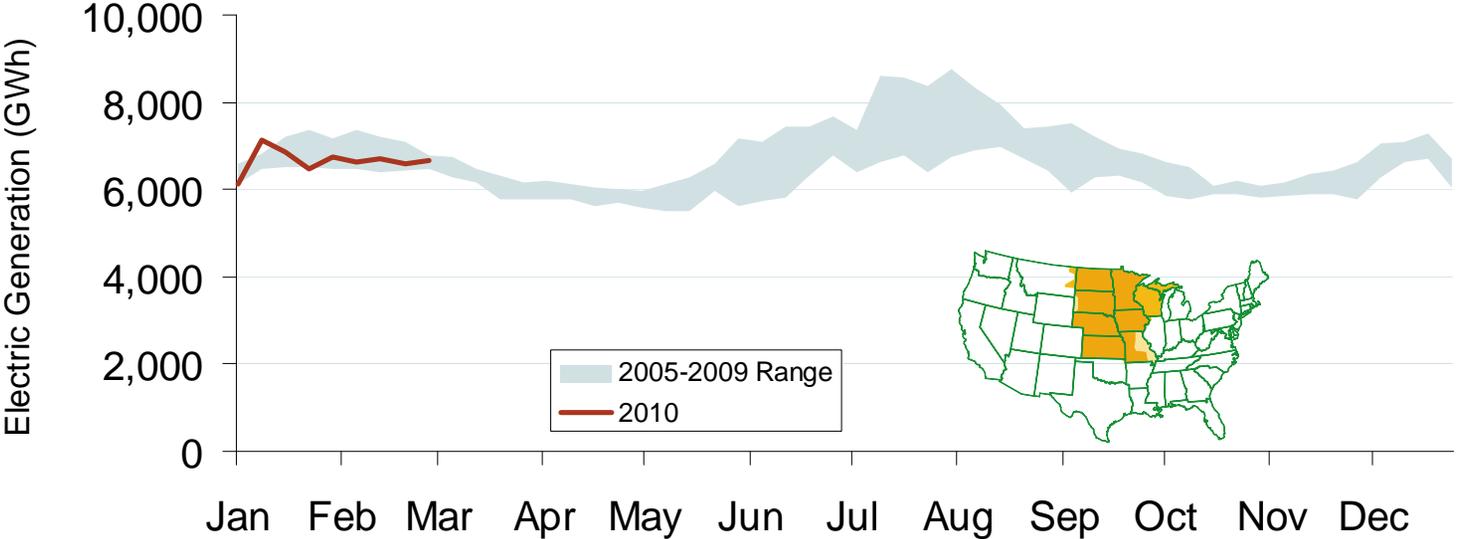
Weekly Electric Generation Output and Temperatures Central Industrial Region



Source: Derived from EEI and NOAA data.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

Weekly Electric Generation Output and Temperatures West Central Region



Source: Derived from EEI and NOAA data.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

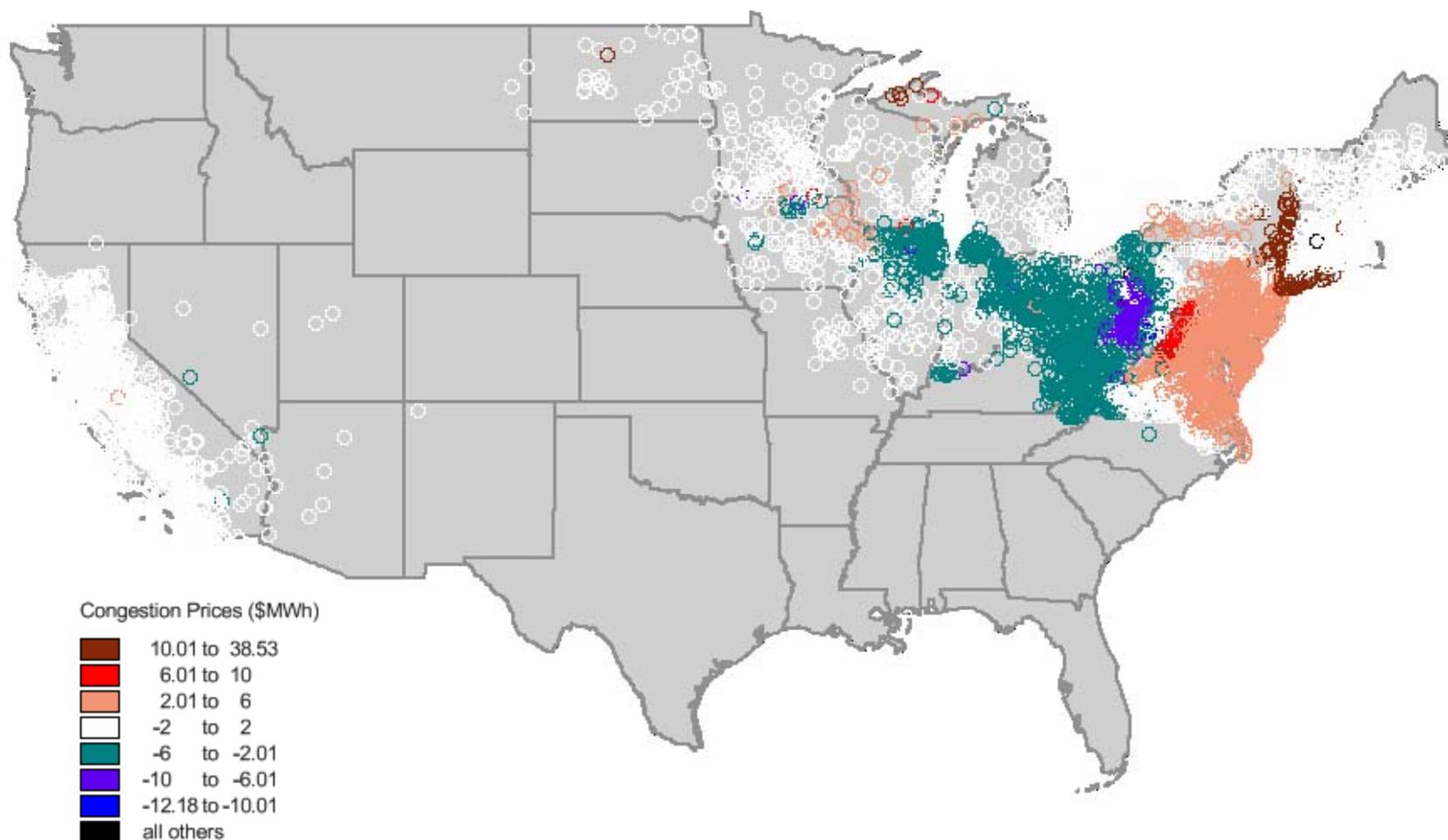
Weekly Electric Generation Output and Temperatures South Central Region



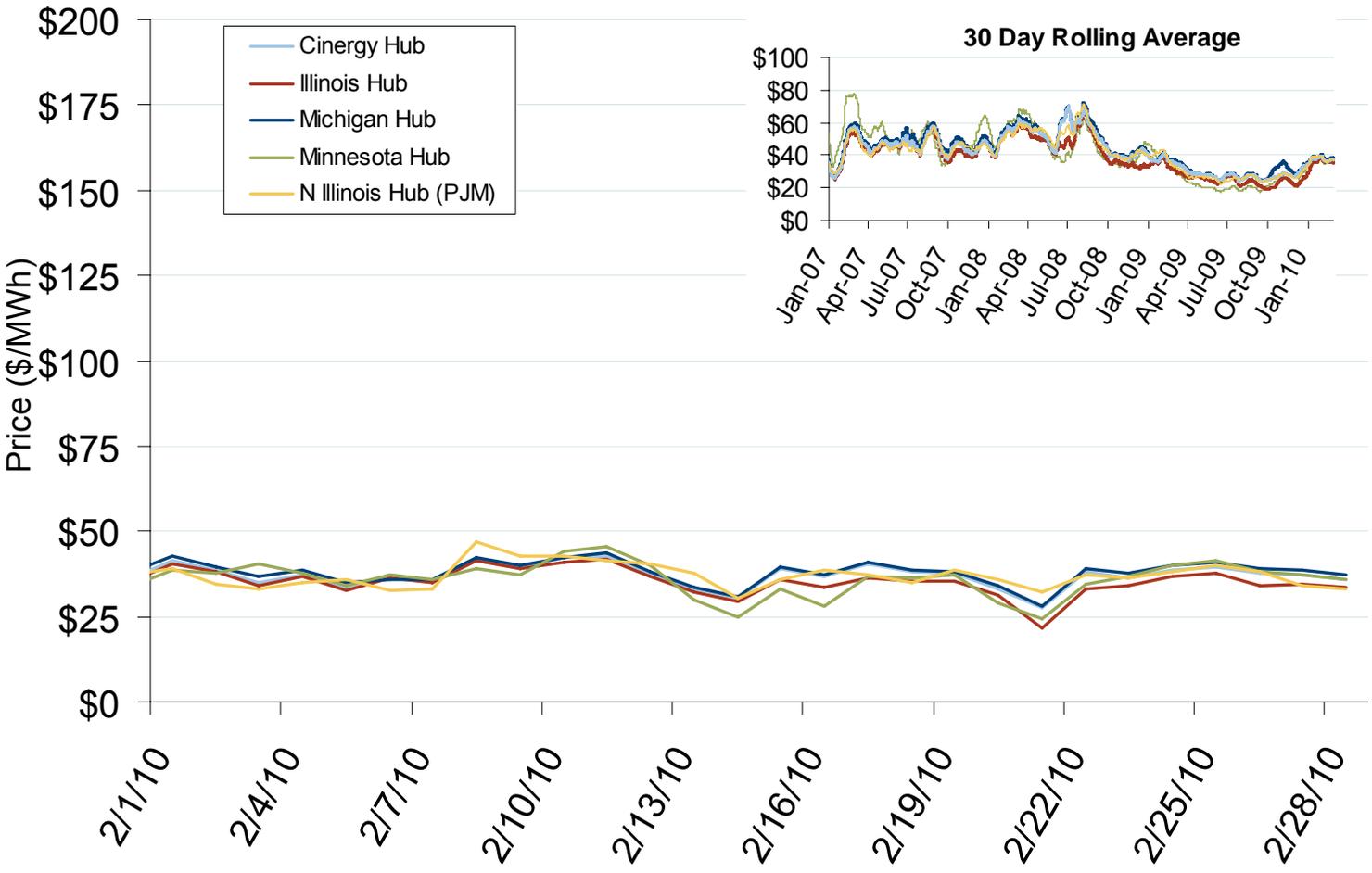
Source: Derived from *EEI* and *NOAA* data.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

Day Ahead On-Peak Congestion Average Monthly Prices February 2010



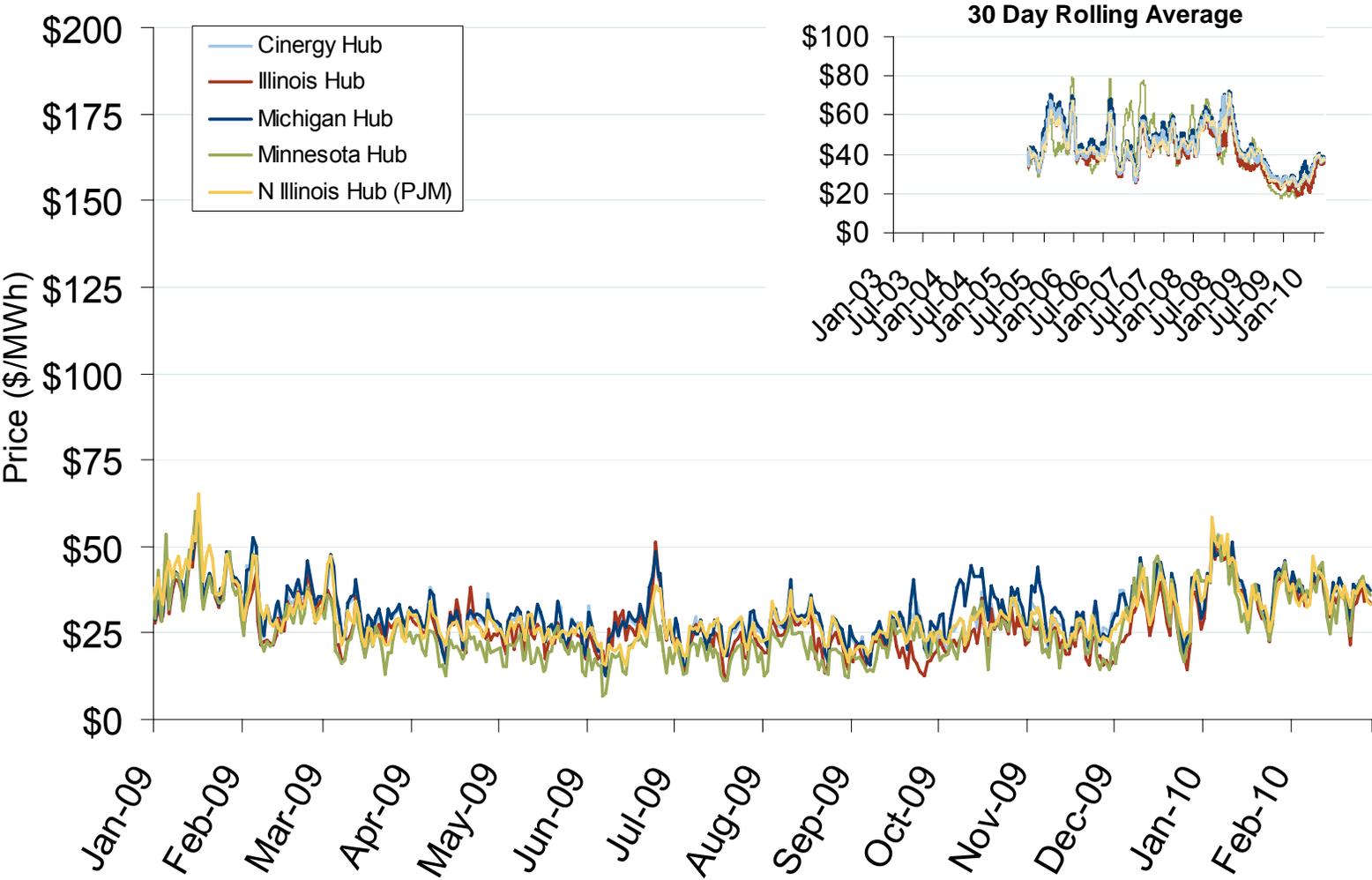
Daily Average of MISO Day-Ahead Prices - All Hours



Source: Derived by Bloomberg from MISO and PJM data as reported by Bloomberg.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

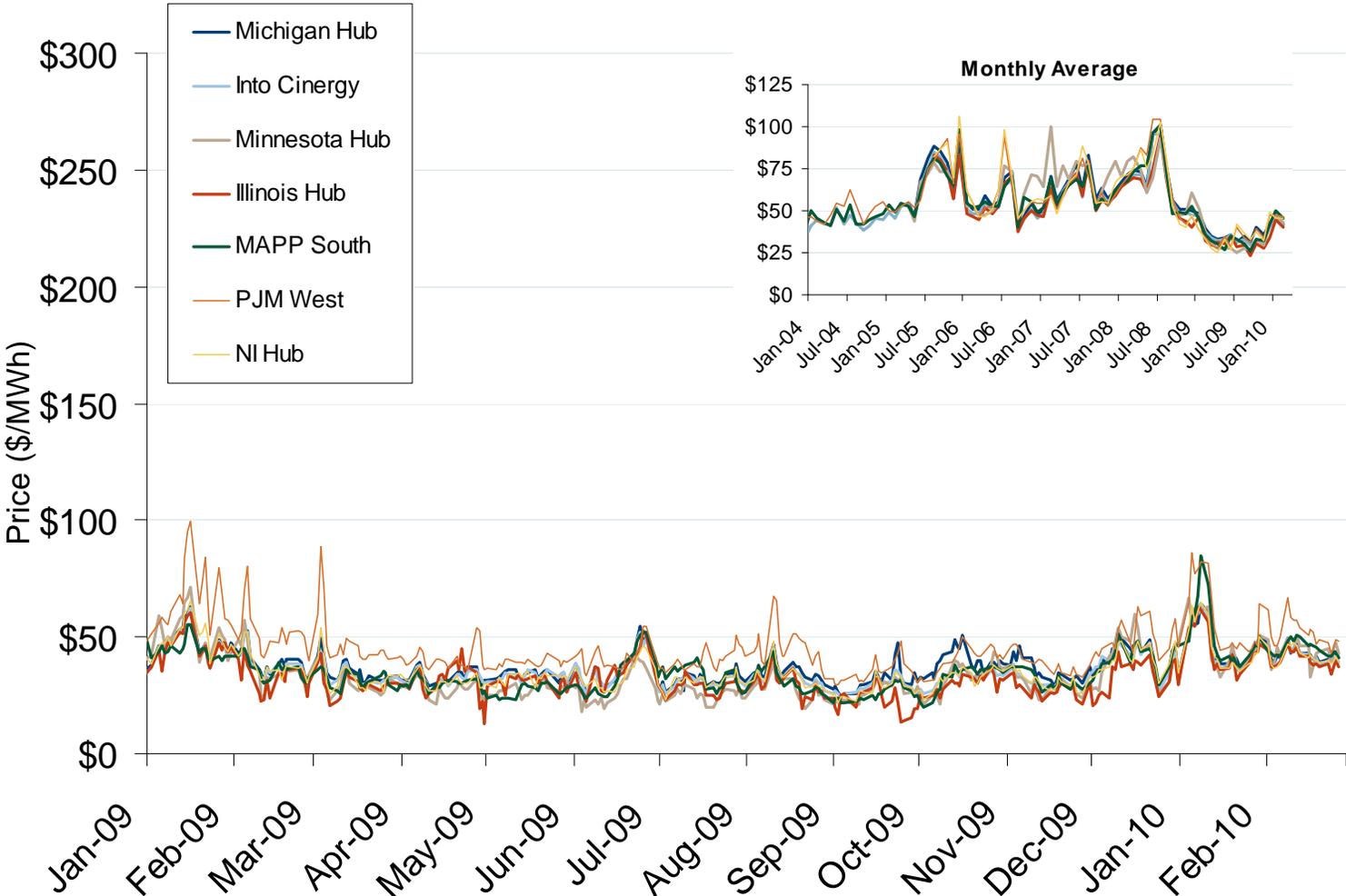
Daily Average of MISO Day-Ahead Prices - All Hours



Source: Derived by Bloomberg from MISO and PJM data as reported by Bloomberg.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

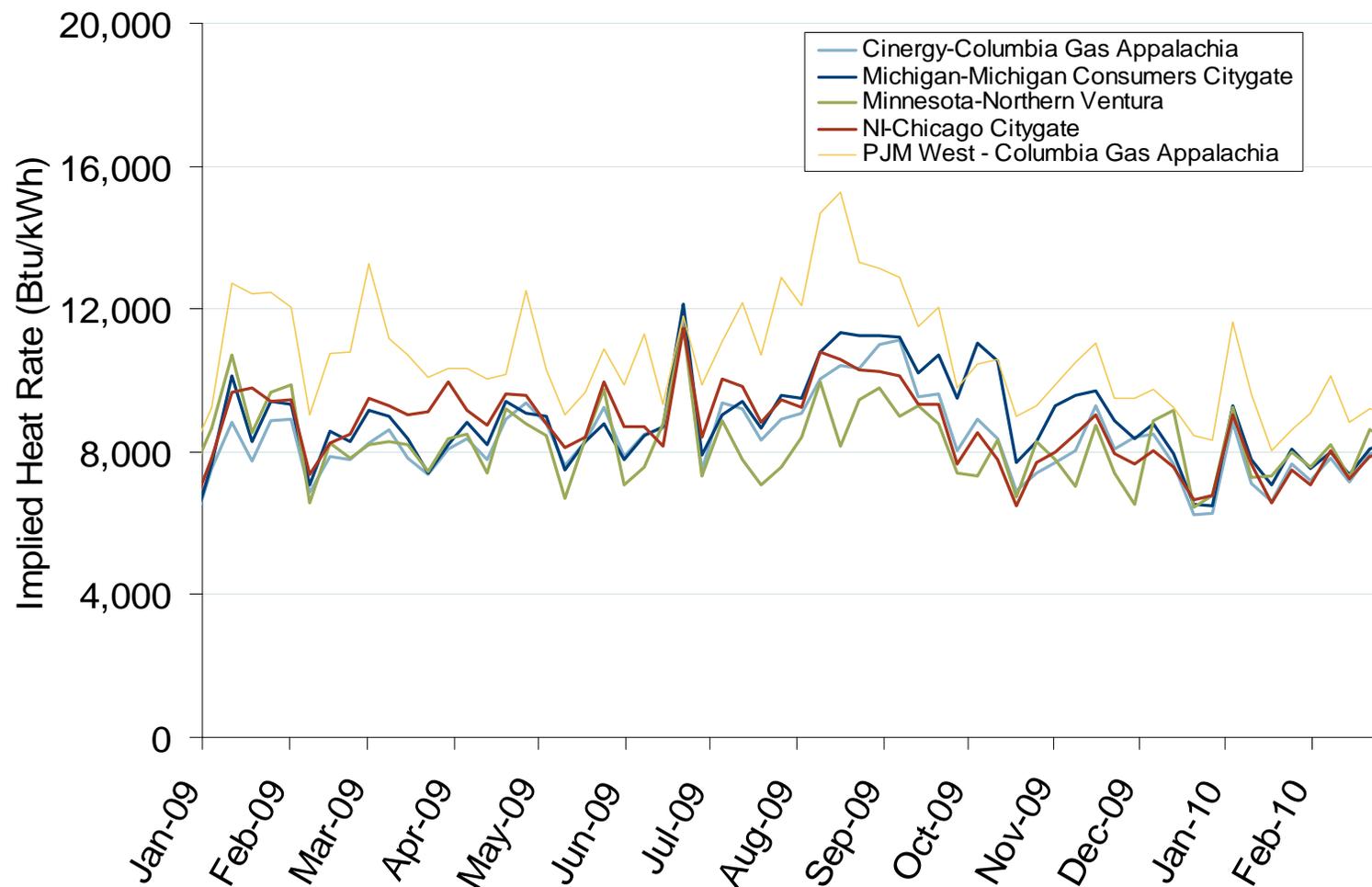
MISO/PJM Bilateral Day-Ahead On-Peak Prices



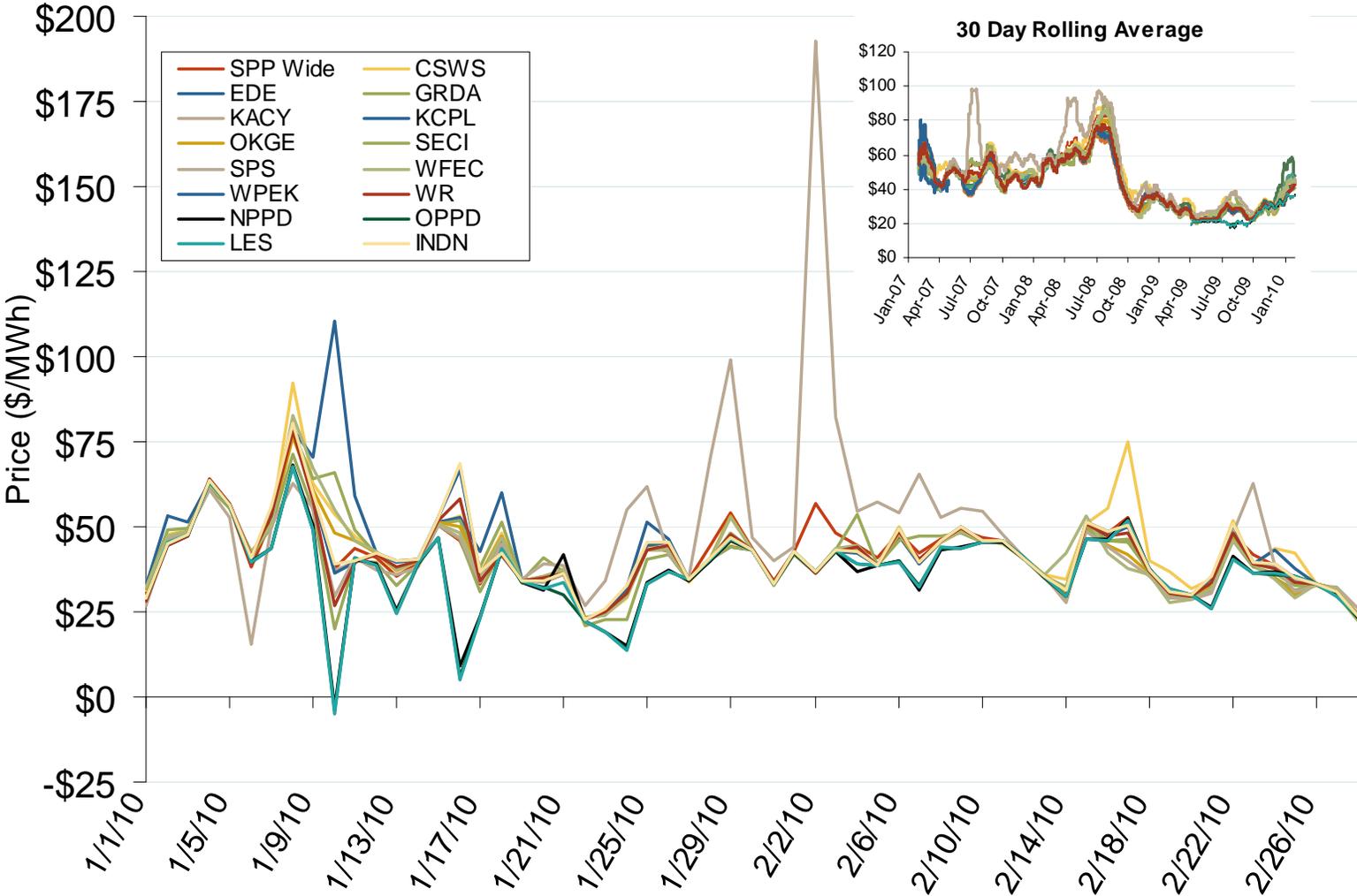
Source: Derived from *Platts* data.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

Implied Heat Rates at MISO and PJM Hubs Weekly Averages

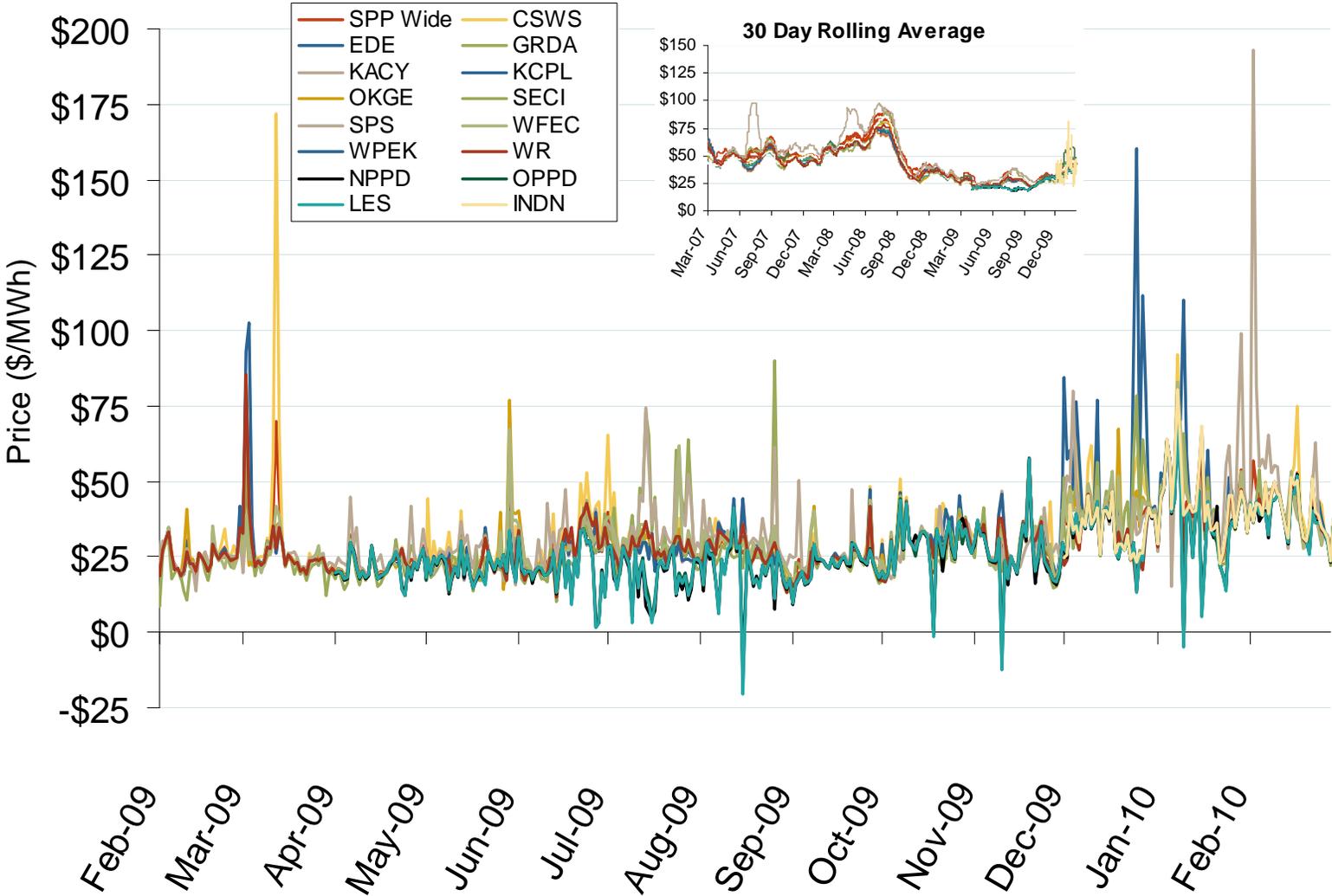


Daily Average of SPP Real Time Prices - All Hours



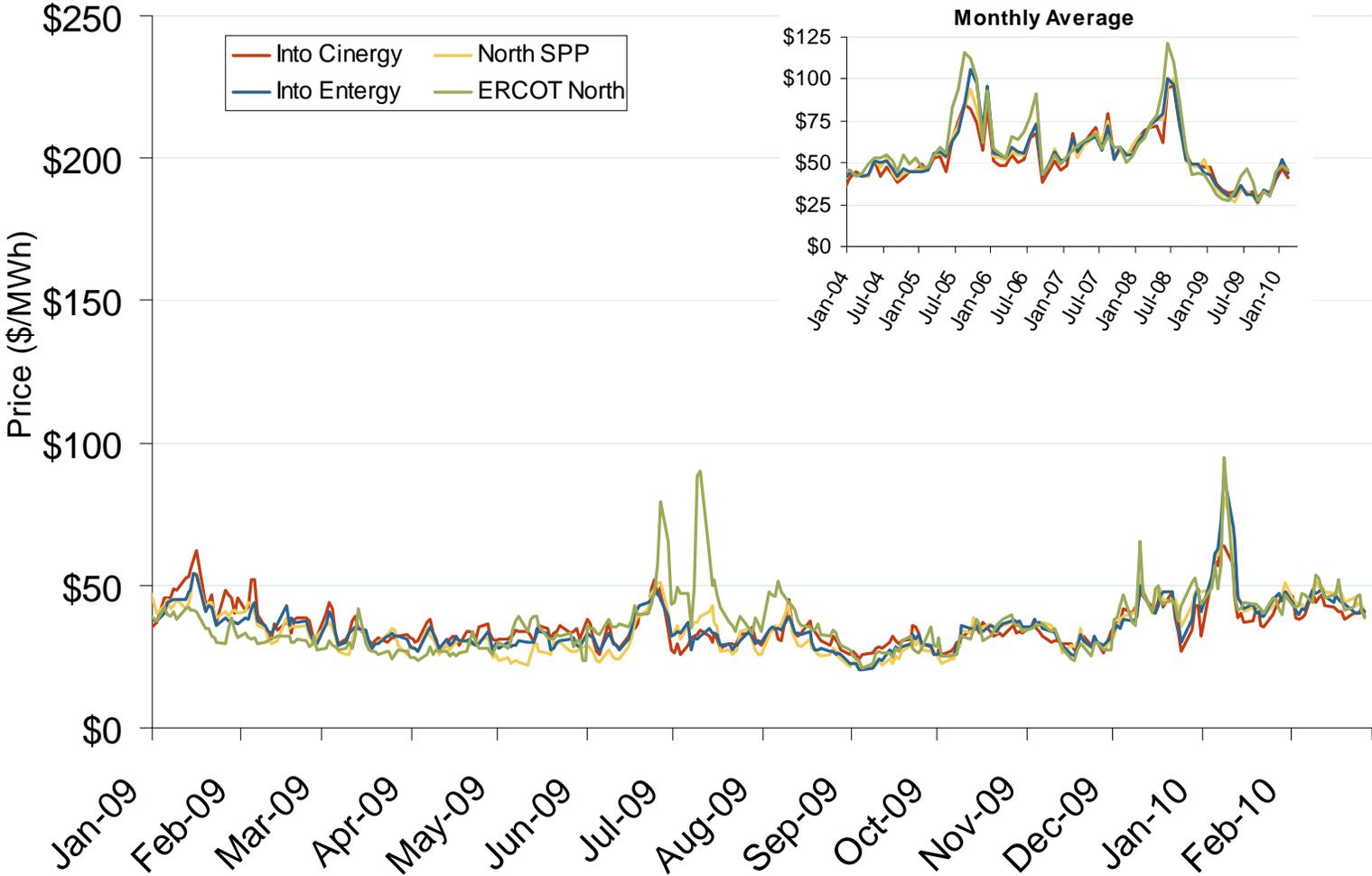
Source: Derived from SPP data.
March 2010 Midwest Snapshot Report

Daily Average of SPP Real Time Prices - All Hours



Source: Derived from SPP data.
March 2010 Midwest Snapshot Report

Central Daily Bilateral Day-Ahead On-Peak Prices

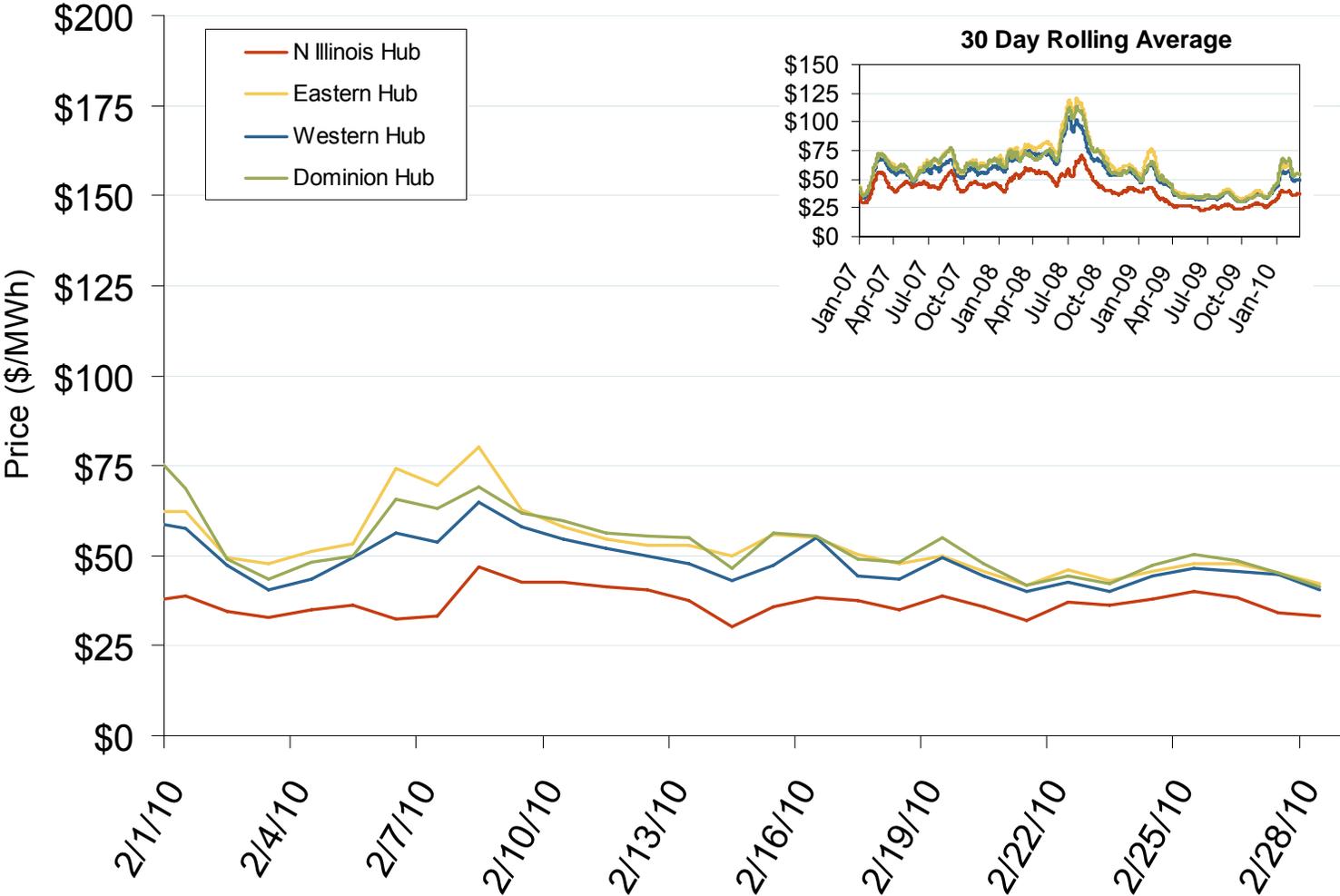


Source: Derived from *Platts* data.
March 2010 Midwest Snapshot Report

High Winds Briefly Shut Down 8 SPP Wind Farms December 24, 2009

- Wind gusts of 40-60 mph triggered automatic shutdown of 8 wind farms in western Oklahoma, @ 3:15 and 5:15 am.
- Both times, approx. 625 MWs were dropped when the wind farms had been running at full capacity.
- 4 farms returned 325 MWs to service within 5 minutes of tripping. While the remaining 4 farms remained out 20 minutes to several hours.
- Flowgates in Kansas and Oklahoma encountered intermittent congestion.
- Negligible price impacts.

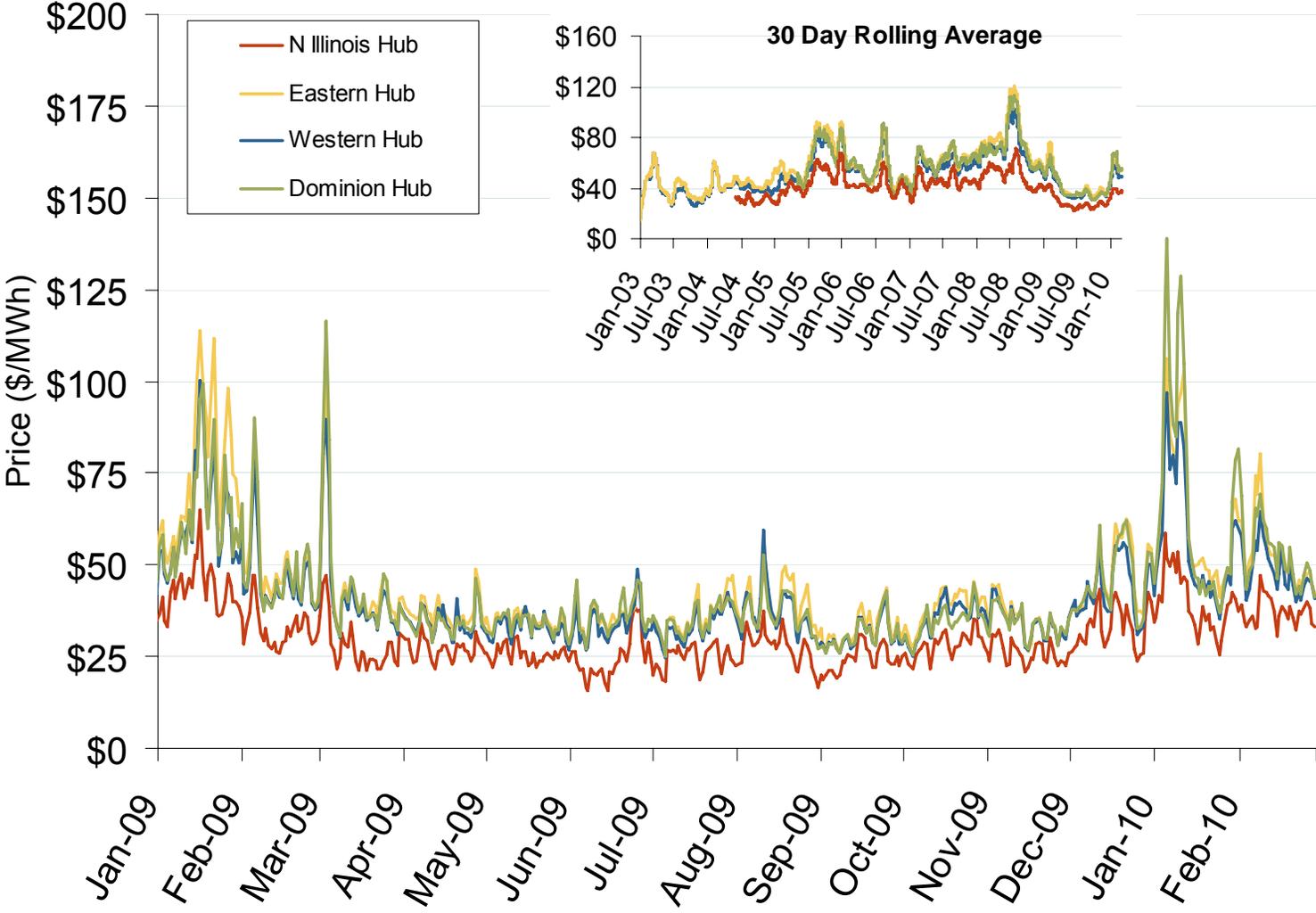
Daily Average of PJM Day-Ahead Prices - All Hours



Source: Derived by Bloomberg from PJM data as reported by Bloomberg.
March 2010 Midwest Snapshot Report

Updated March 5, 2010

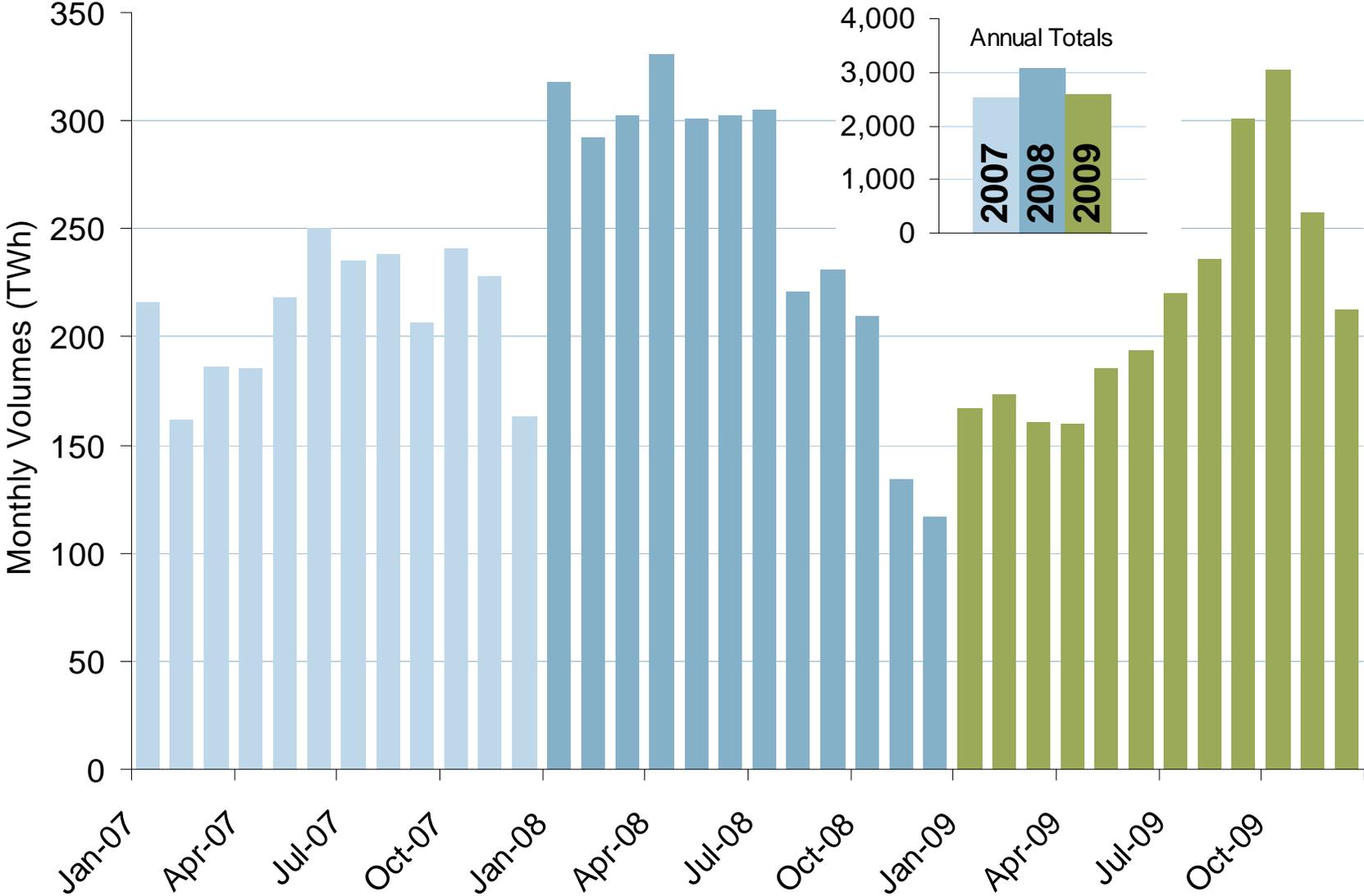
Daily Average of PJM Day-Ahead Prices - All Hours



Source: Derived by Bloomberg from PJM data as reported by Bloomberg. March 2010 Midwest Snapshot Report

Updated March 5, 2010

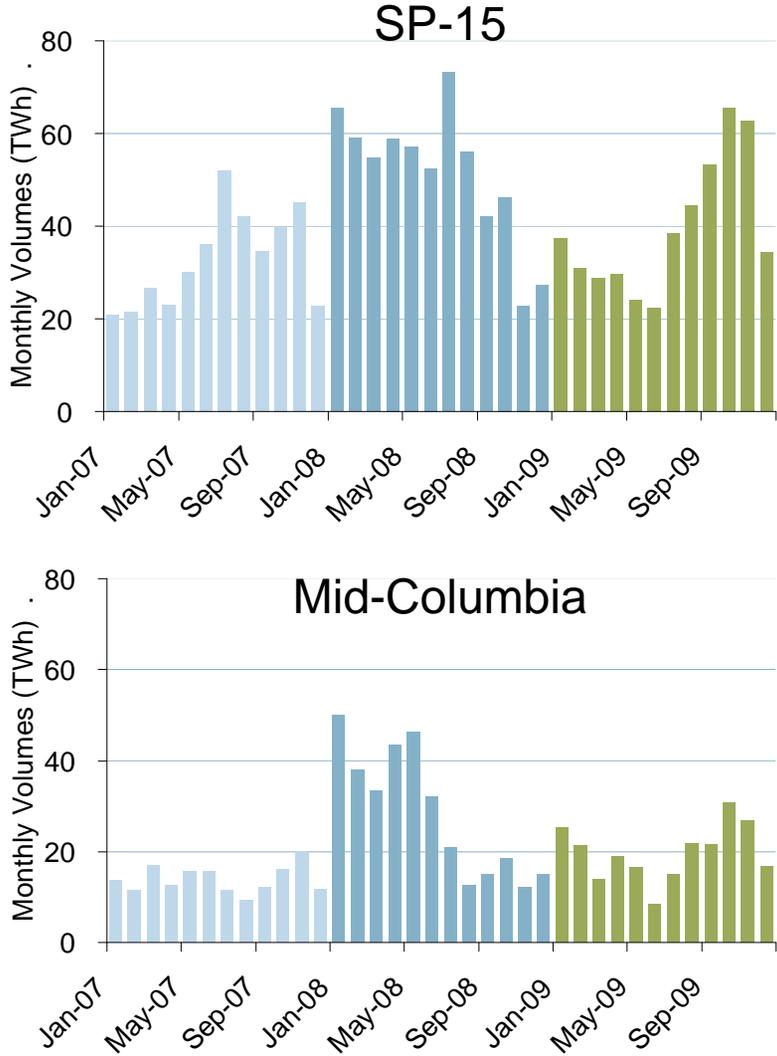
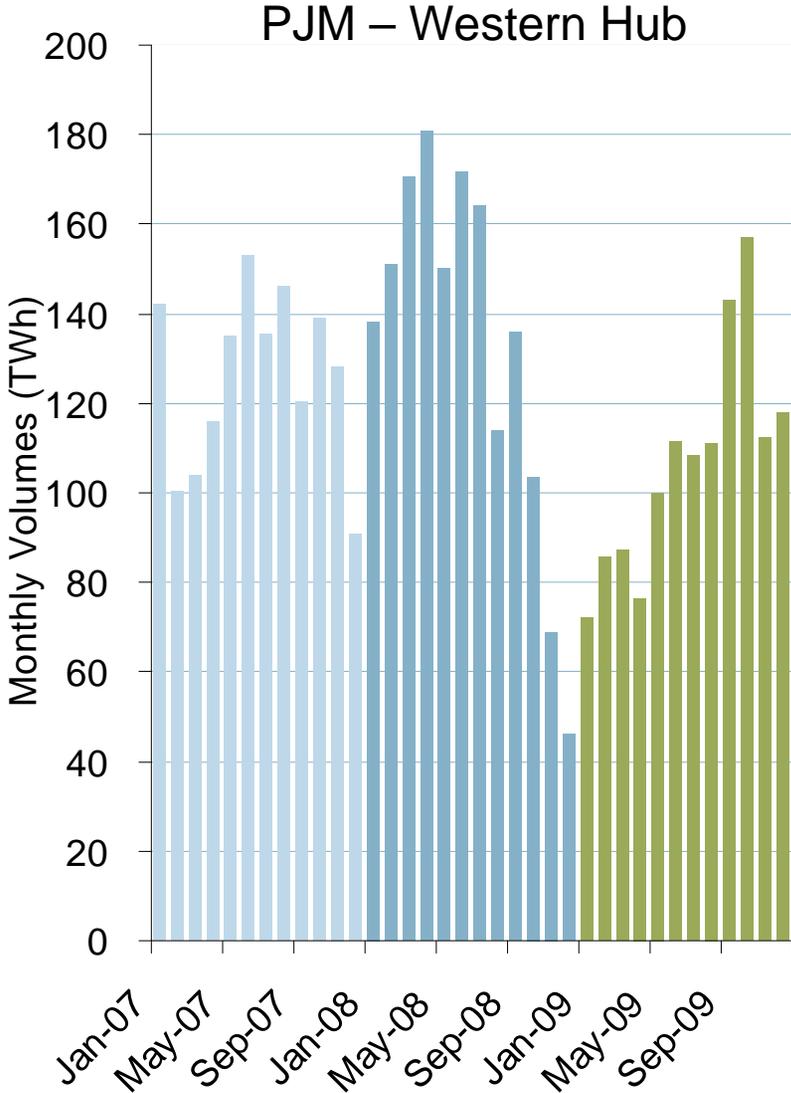
2009 Financial Power Volumes on ICE



Notes: Derived from IntercontinentalExchange (ICE) data. Financial-Swap volumes aggregated by trade date. March 2010 Midwest Snapshot Report

Updated February 3, 2010

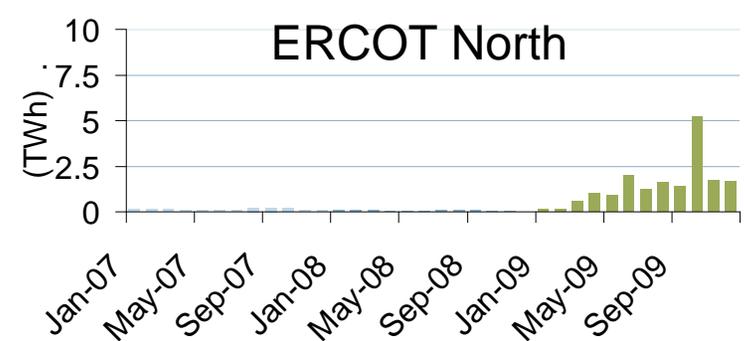
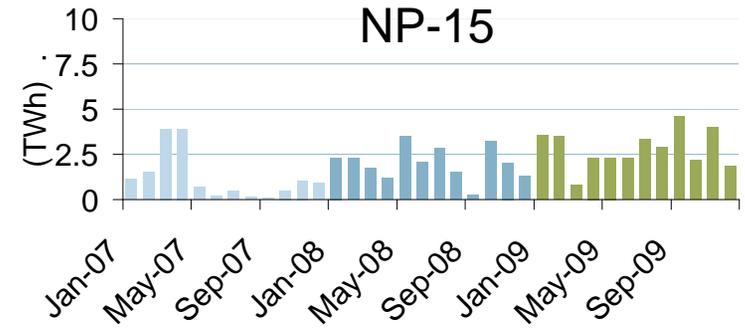
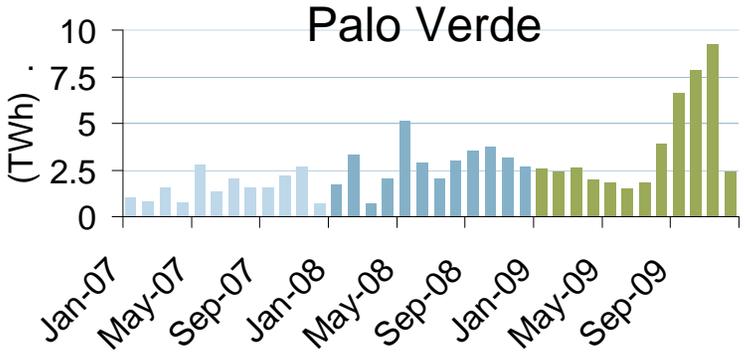
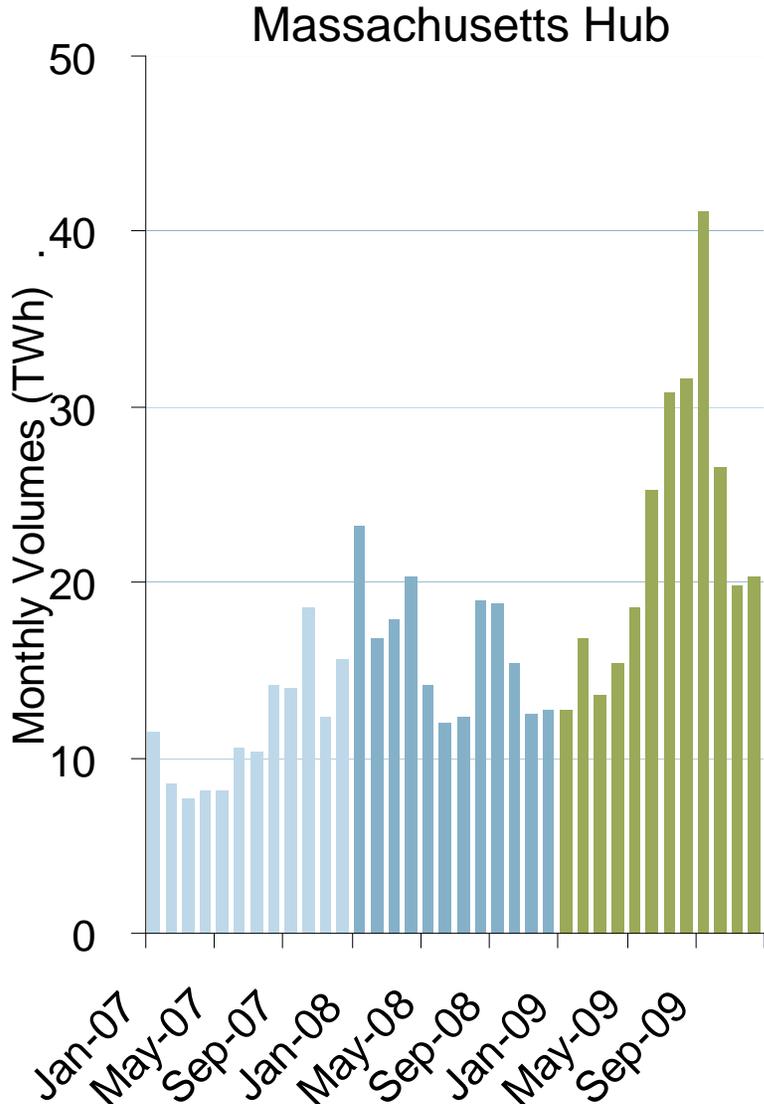
Financial Volumes on ICE at Major Hubs



Notes: Derived from IntercontinentalExchange (ICE) data. Financial-Swap volumes aggregated by trade date. March 2010 Midwest Snapshot Report

Updated February 3, 2010

Financial Volumes on ICE at Other Select Hubs



Notes: Derived from IntercontinentalExchange (ICE) data. Financial-Swap volumes aggregated by trade date. March 2010 Midwest Snapshot Report

Updated February 3, 2010