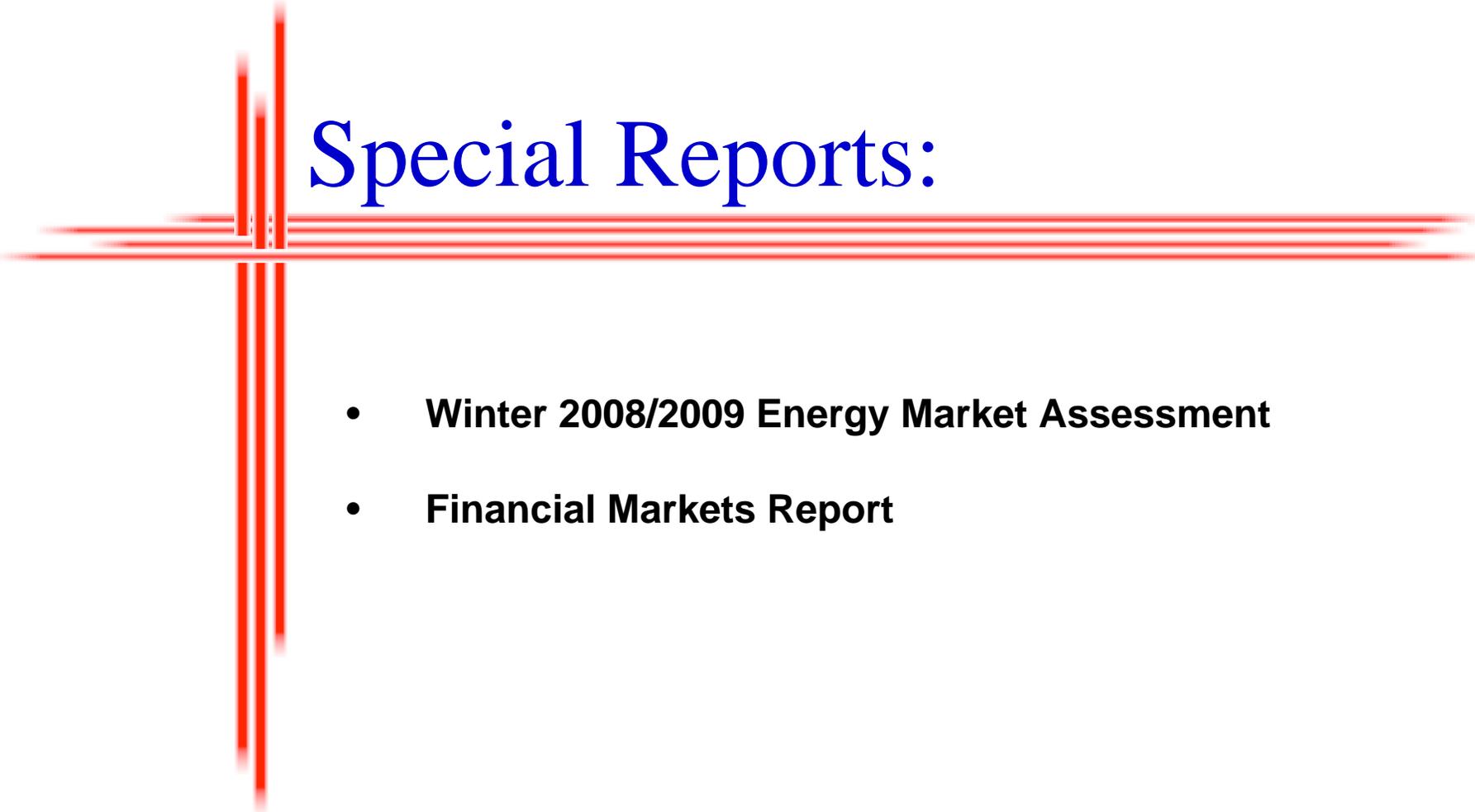


OE ENERGY MARKET SNAPSHOT

Mid-Atlantic States Version – October 2008 Data

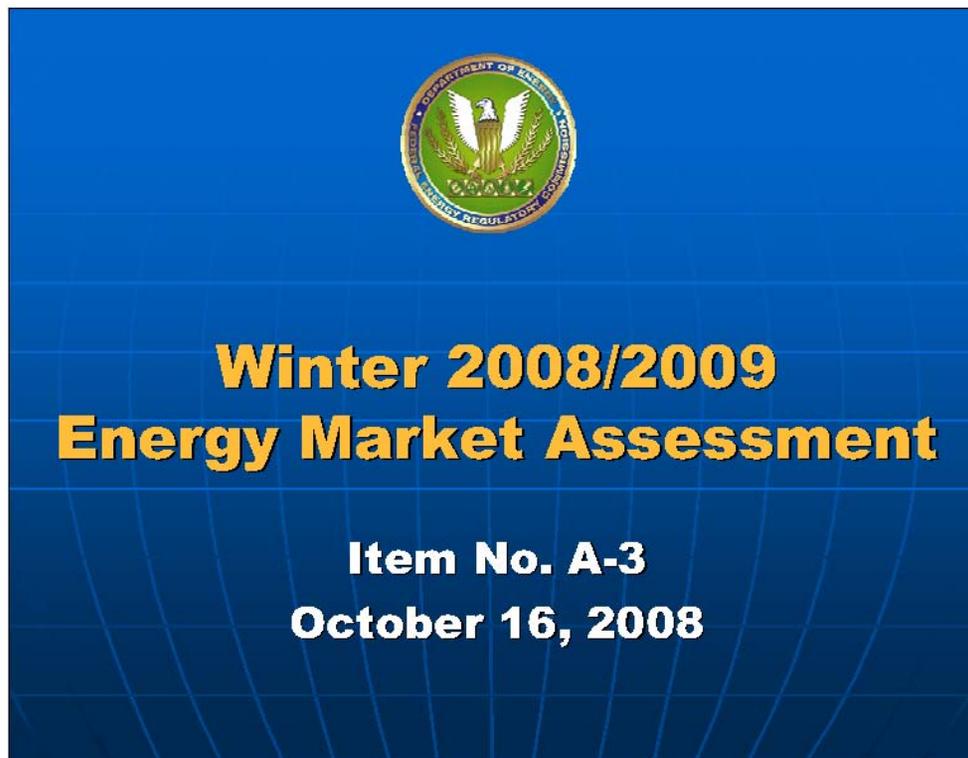
- **Special Reports**
- **Electricity Markets**
- **Natural Gas and Fuel Markets**

Office of Enforcement
Federal Energy Regulatory Commission
November 2008



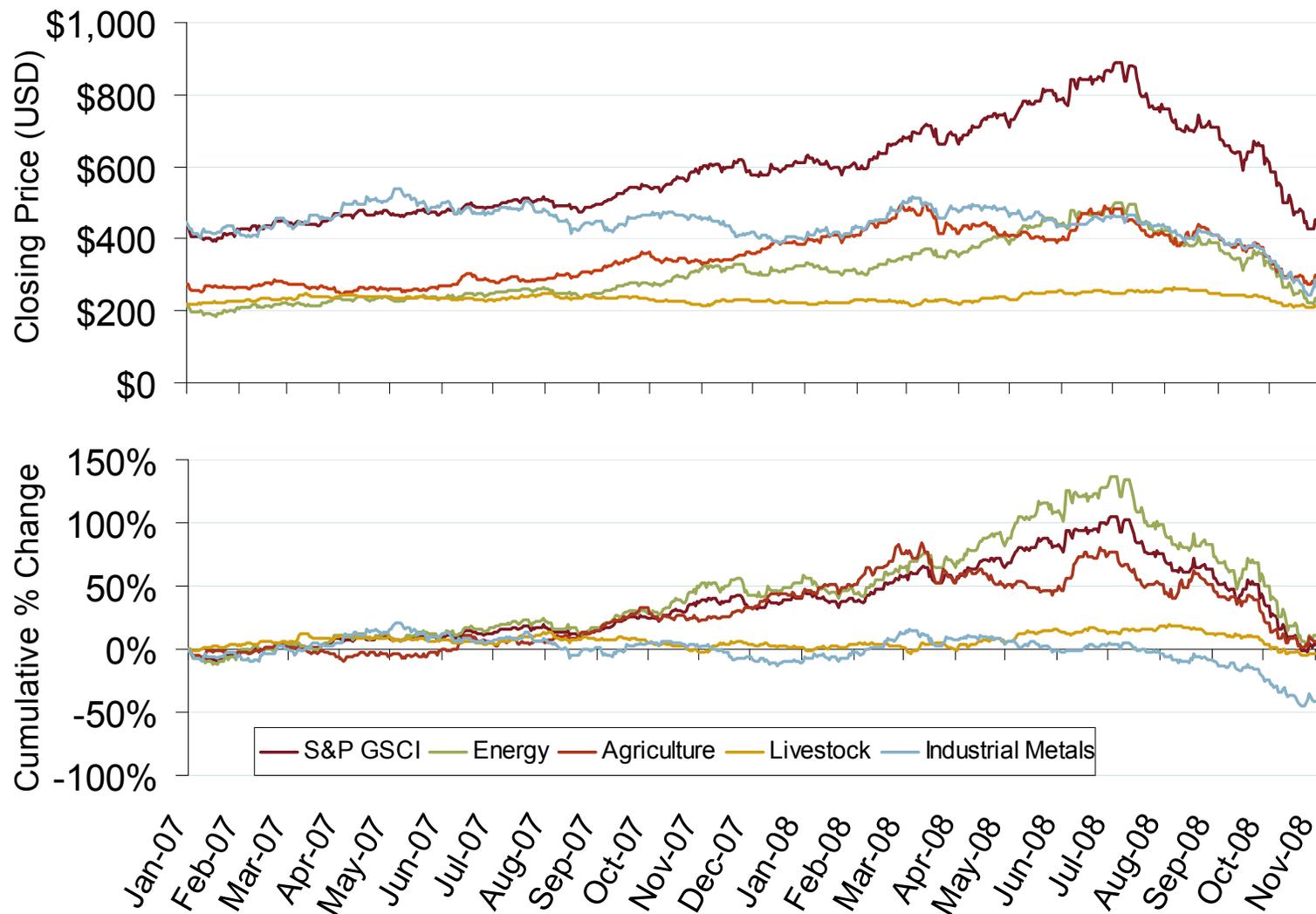
Special Reports:

- **Winter 2008/2009 Energy Market Assessment**
- **Financial Markets Report**

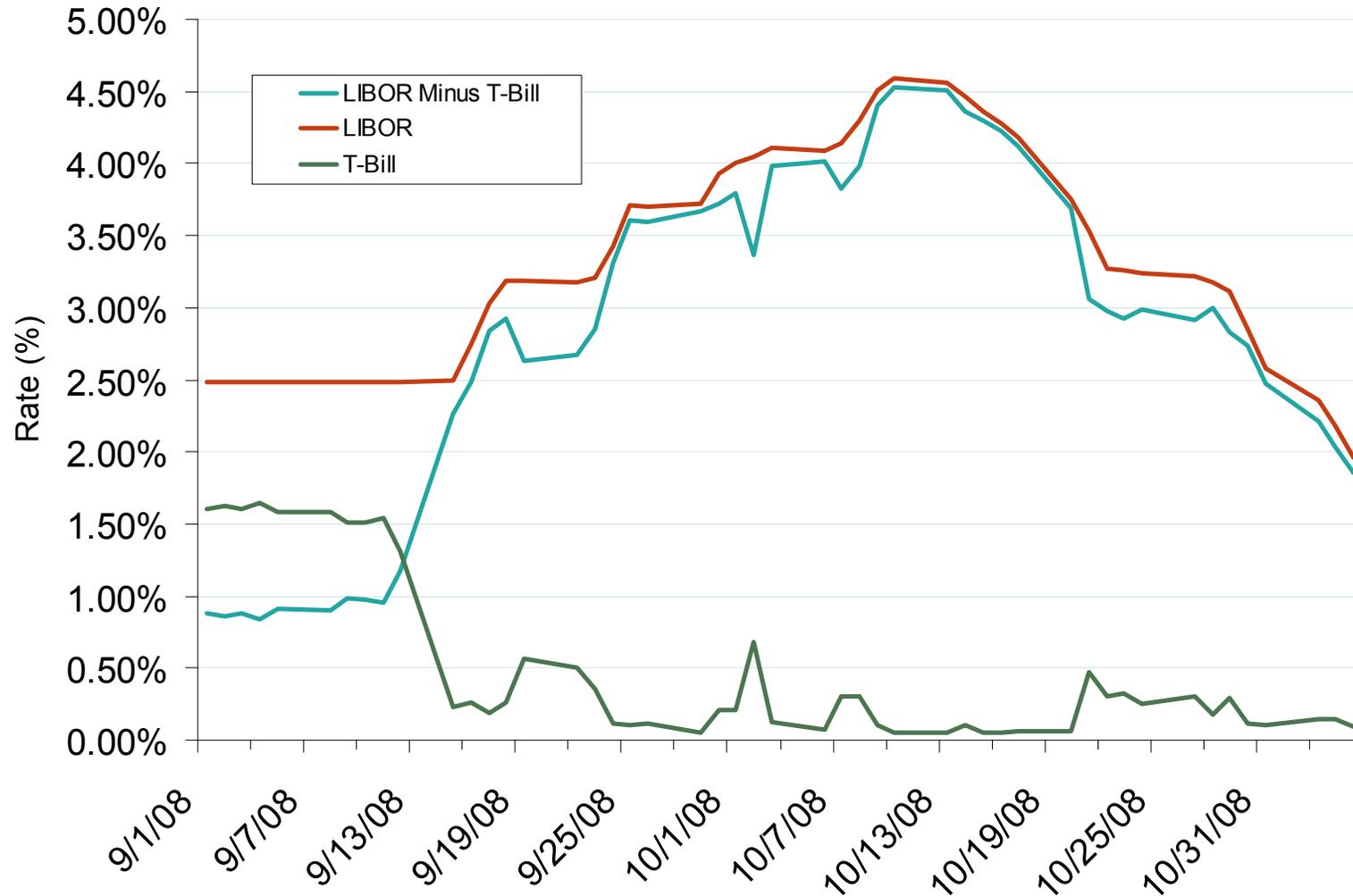


<http://www.ferc.gov/market-oversight/mkt-views/2008/10-16-08.pdf>

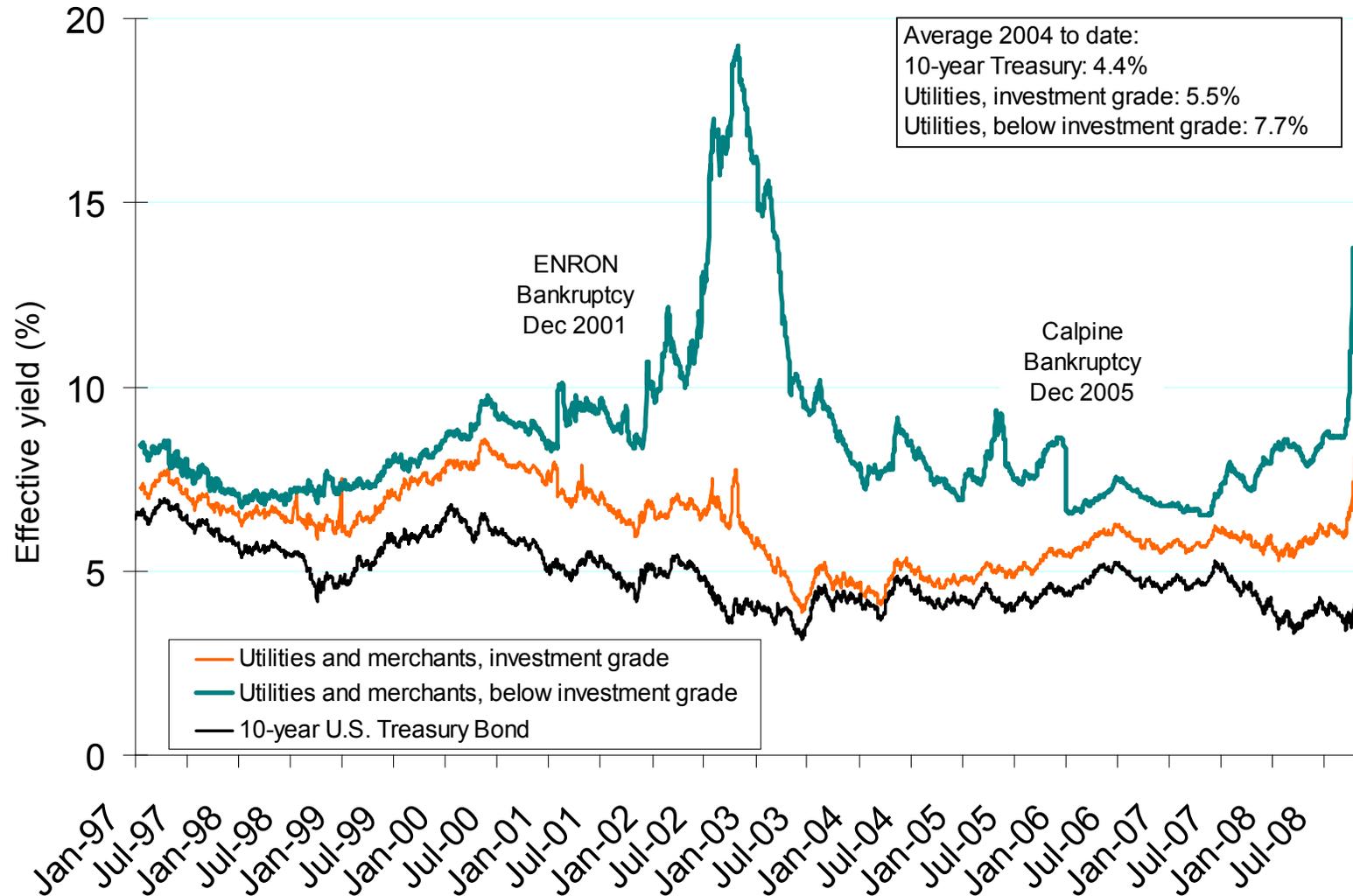
S&P Goldman Sachs Commodity Index Official Closing Price



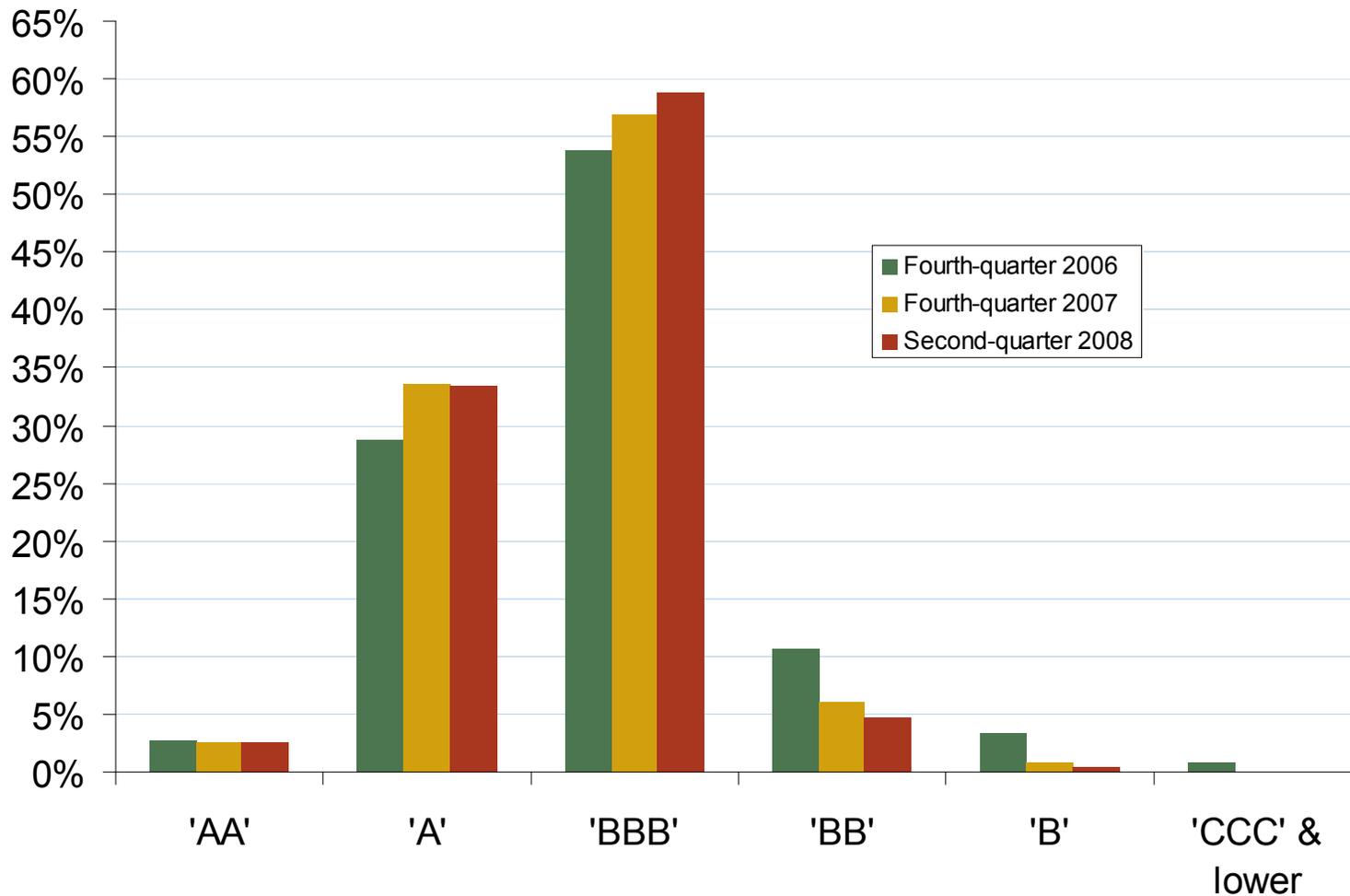
One Month LIBOR and One Month US Treasury Bill Rates



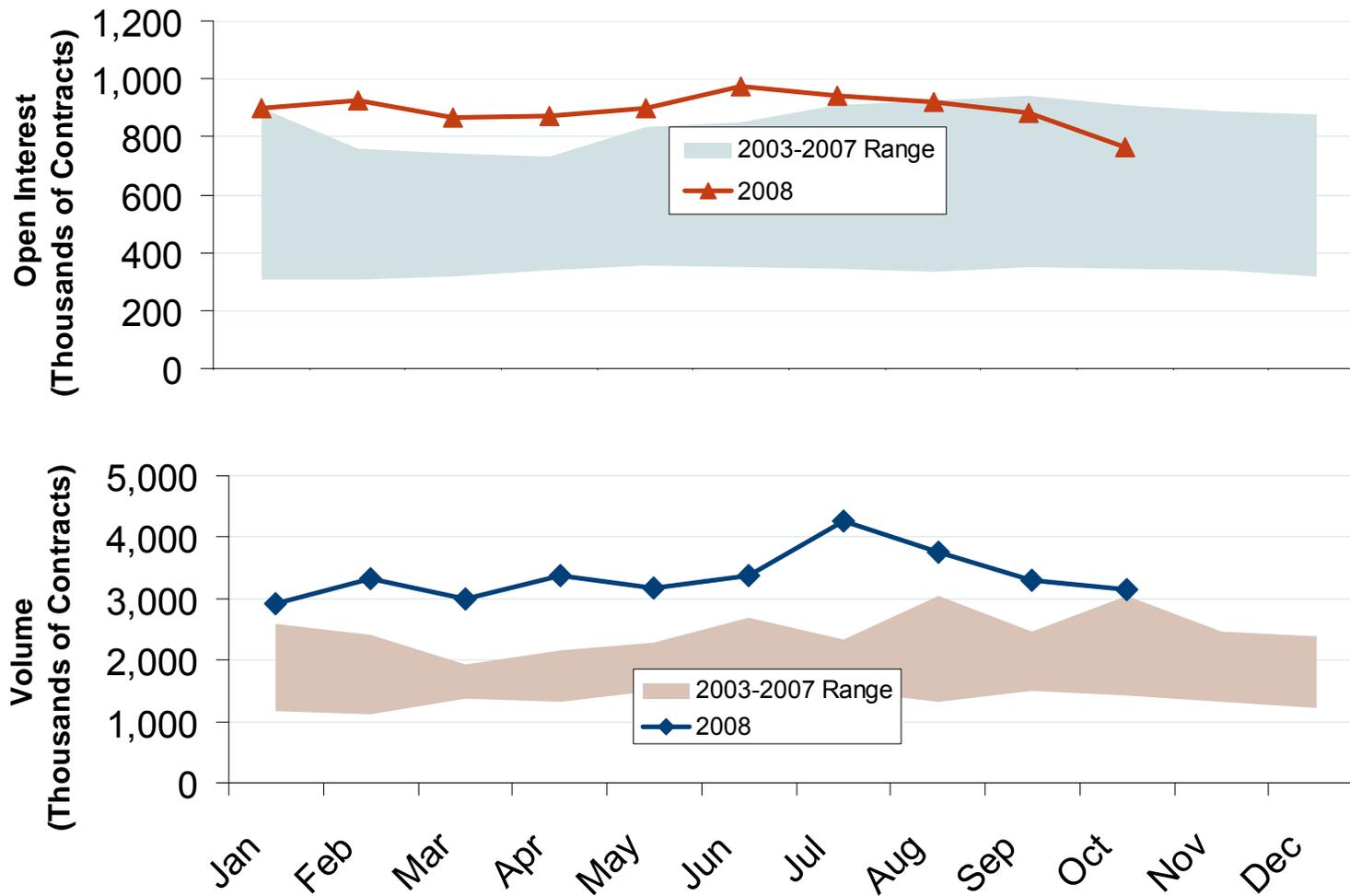
Yields of Utilities, Merchants and Ten Year Treasury Bonds



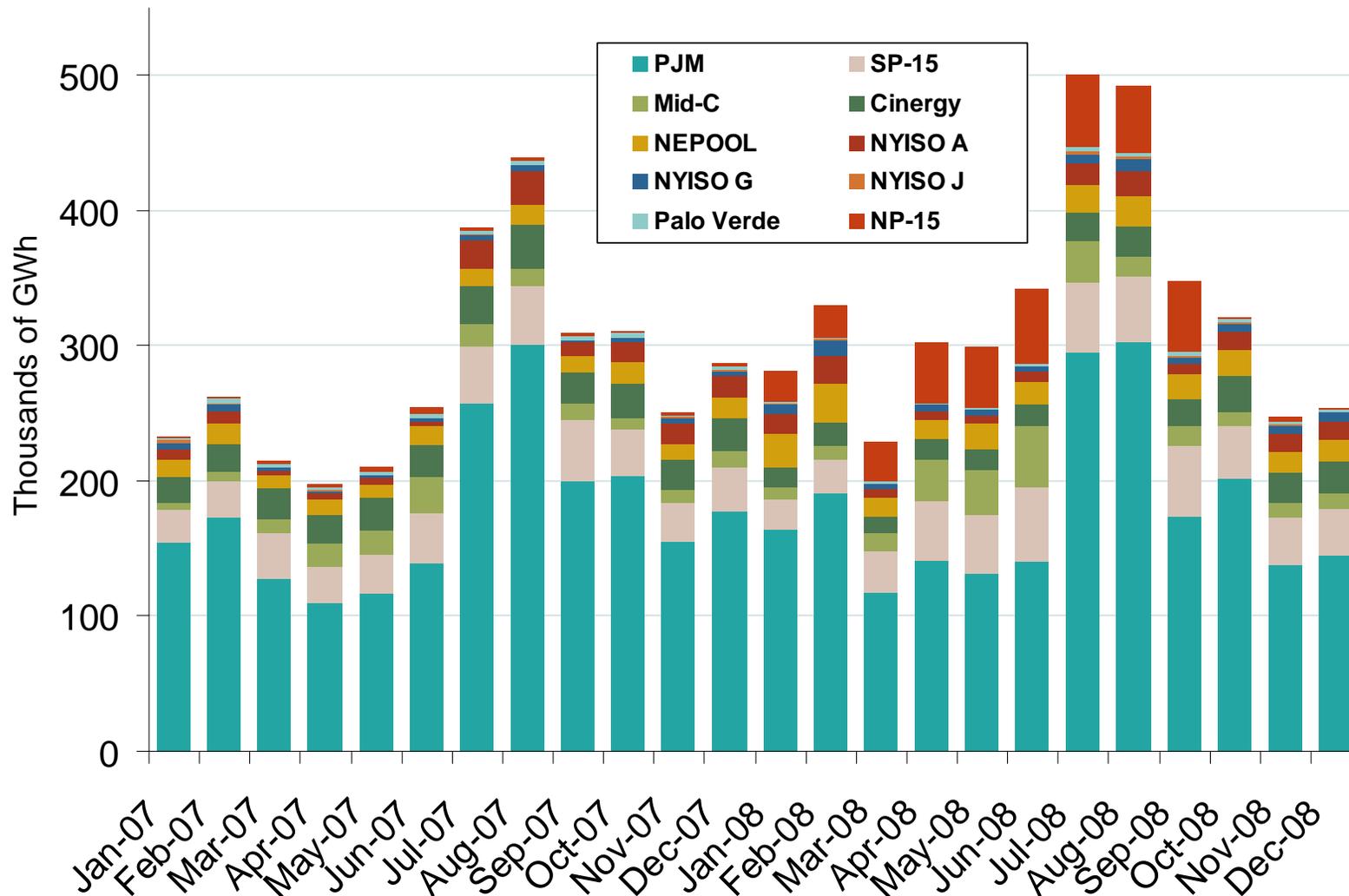
U.S. Electric and Gas Utility Ratings Distribution



NYMEX Natural Gas Futures Month-End Open Interest and Total Monthly Volume

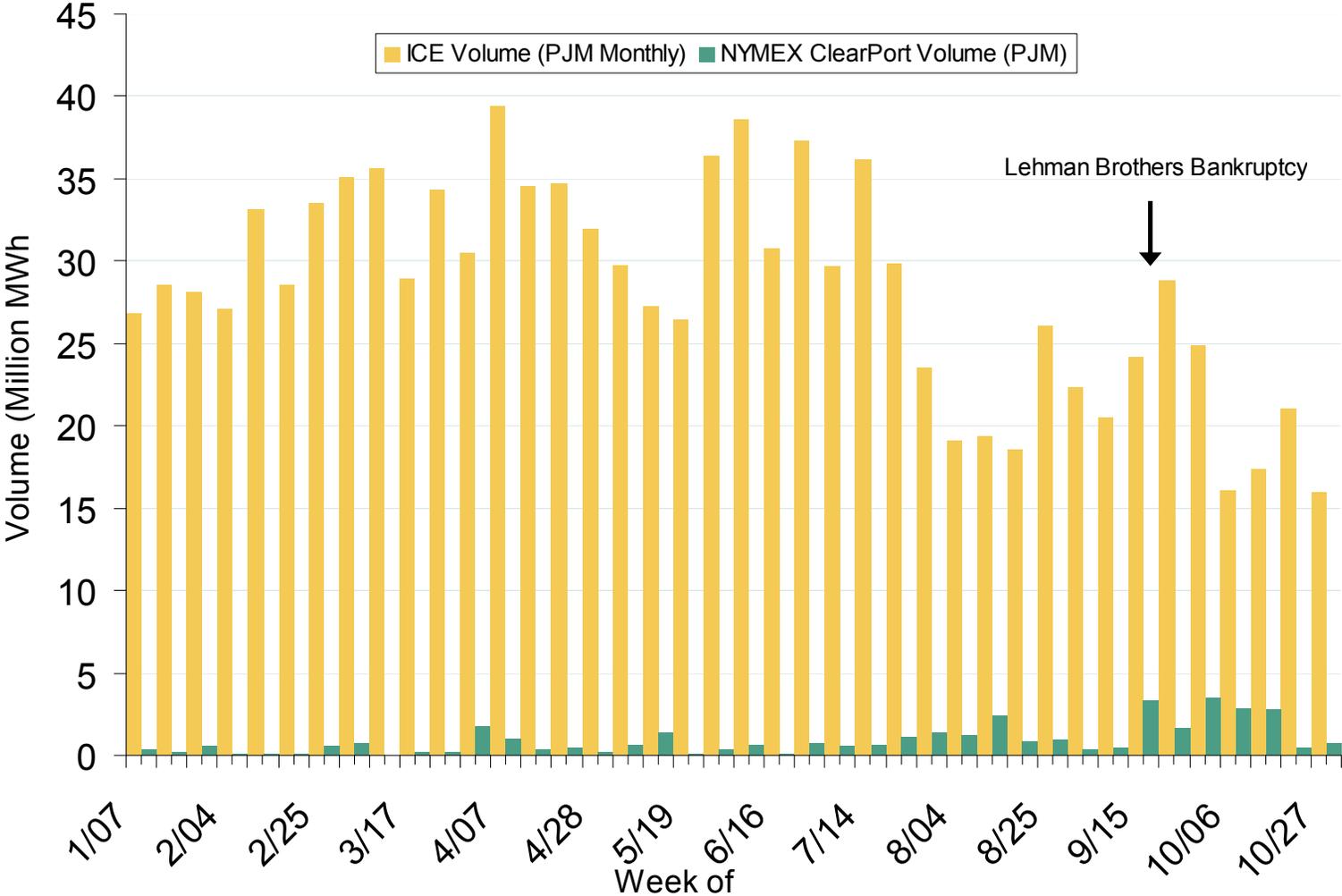


Financial Trading on ICE by Contract Month



Source: Derived from ICE data. ICE on-peak swaps (financial) volume include monthly, dual monthly, quarterly, and calendar year contracts traded for each month.
November 2008 Mid-Atlantic Snapshot Report

PJM Financial Trading Volumes on ICE and Nymex Monthly Contracts by Trade Week

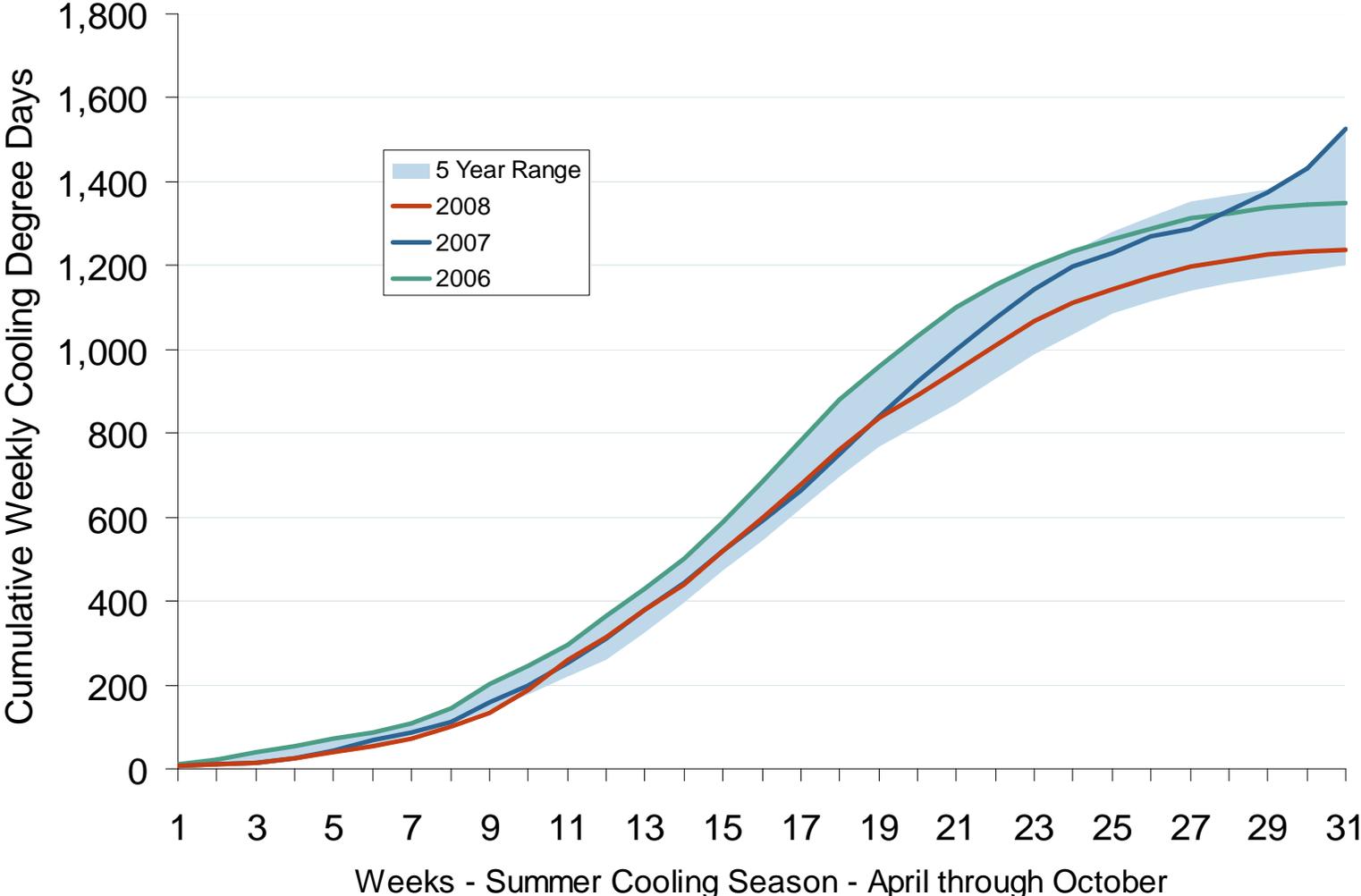


Source: Derived from ICE and NYMEX ClearPort data. Volumes are Weekly Totals of Month Long Term Products Only, Excluding Holiday Weeks and Off-Peak Hour Deliveries.
November 2008 Mid-Atlantic Snapshot Report



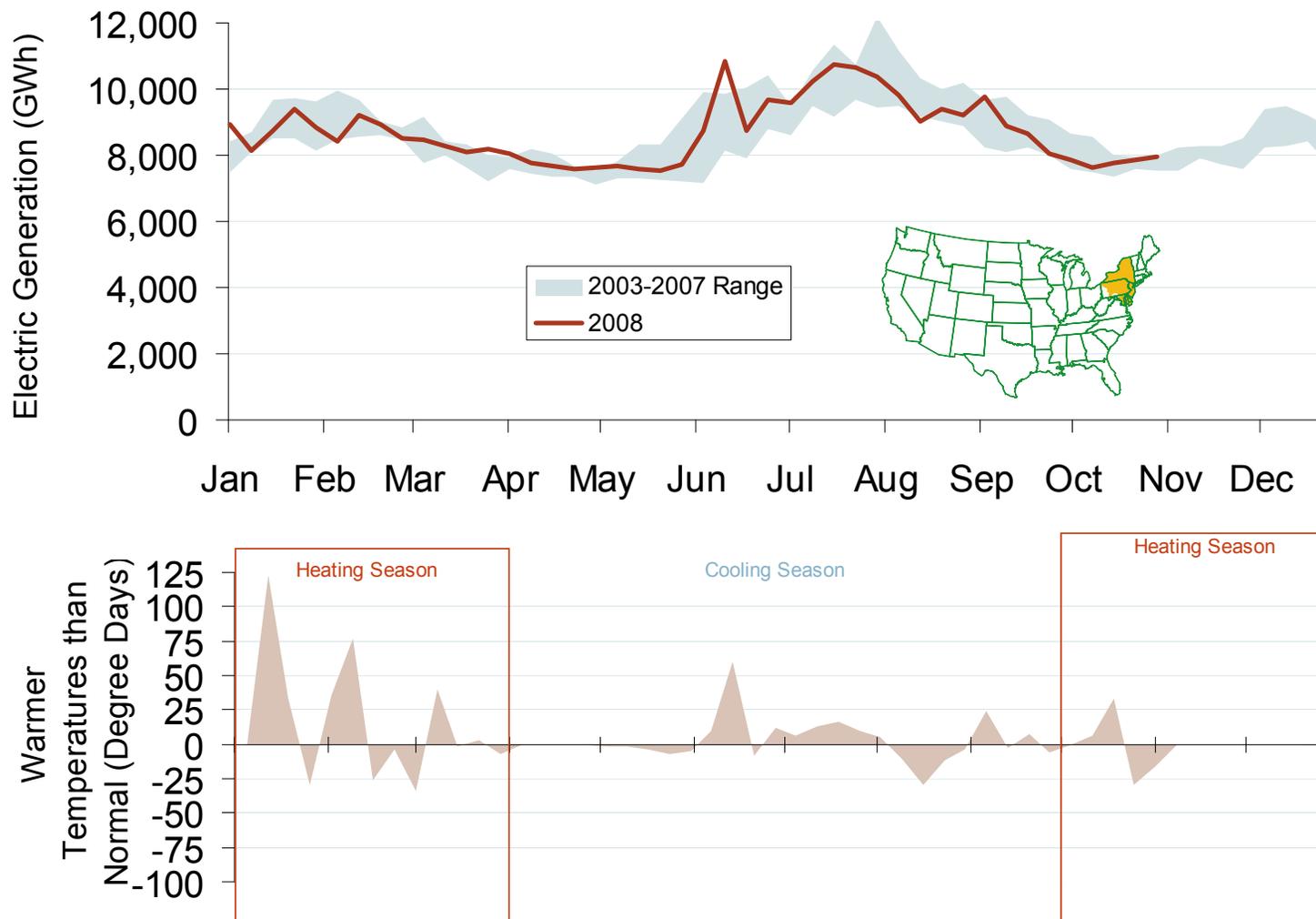
Electricity Markets

U. S. Summer Cumulative Cooling Degree Days

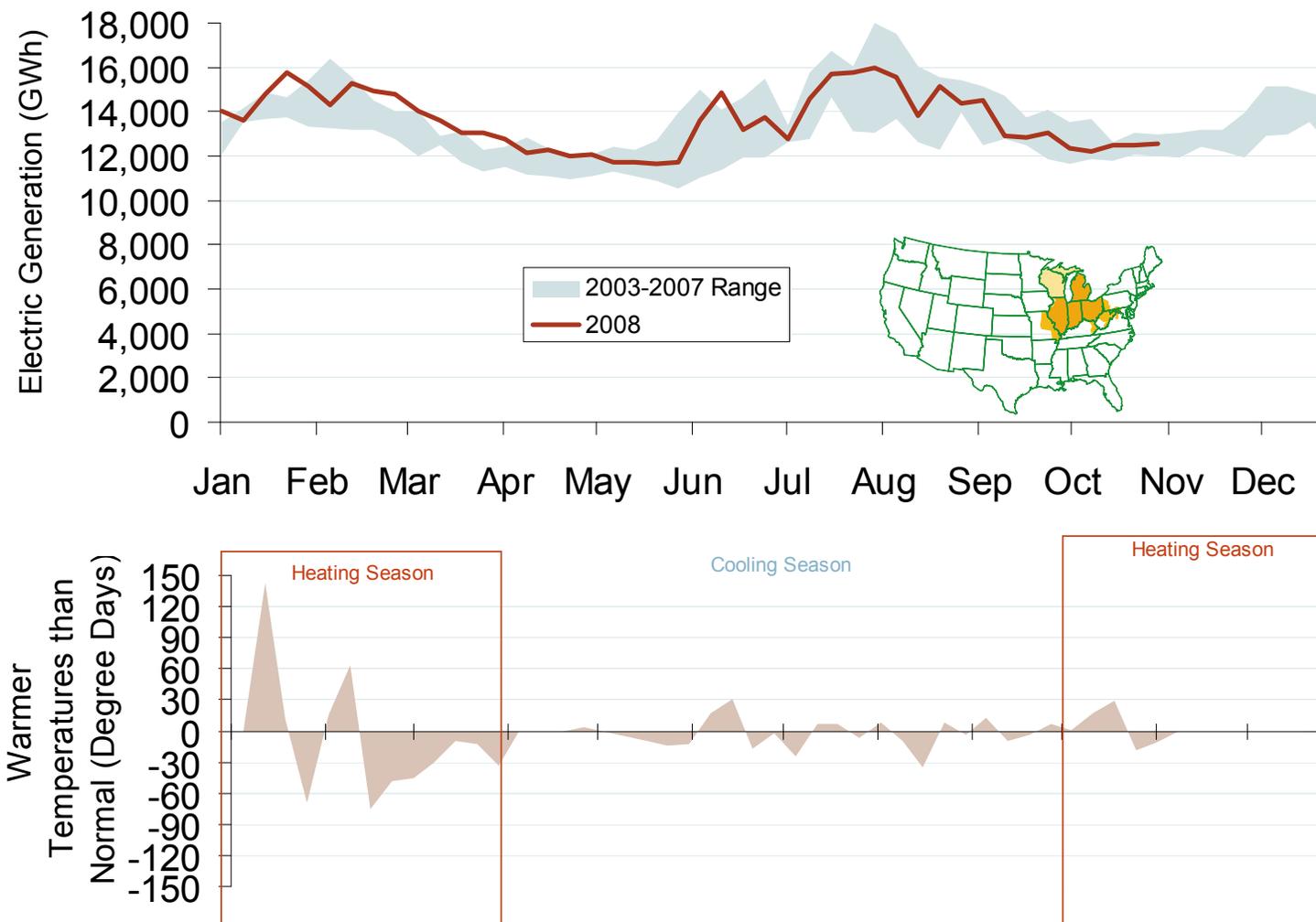


Source: Derived from NOAA data.

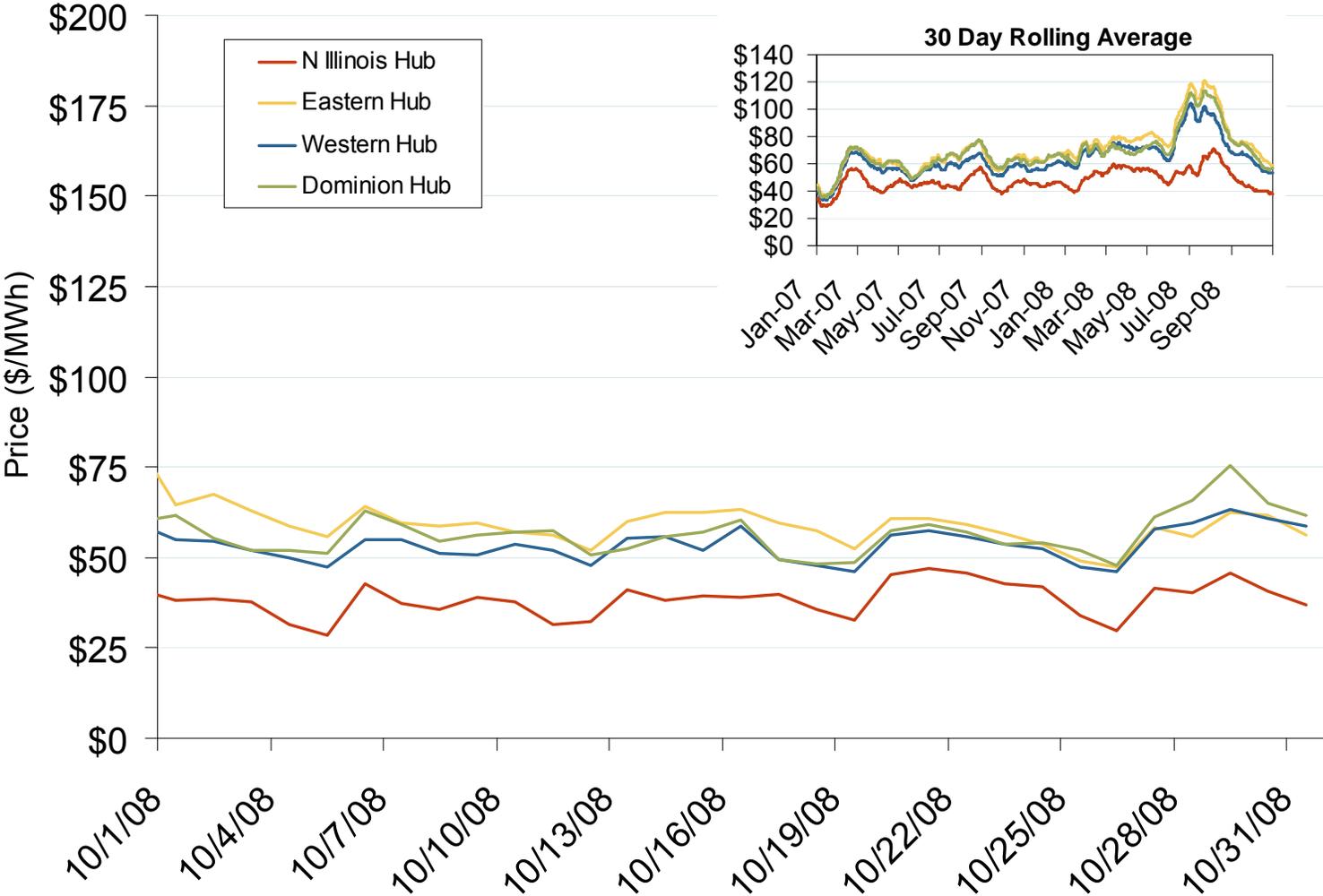
Weekly Electric Generation Output and Temperatures Mid Atlantic Region



Weekly Electric Generation Output and Temperatures Central Industrial Region



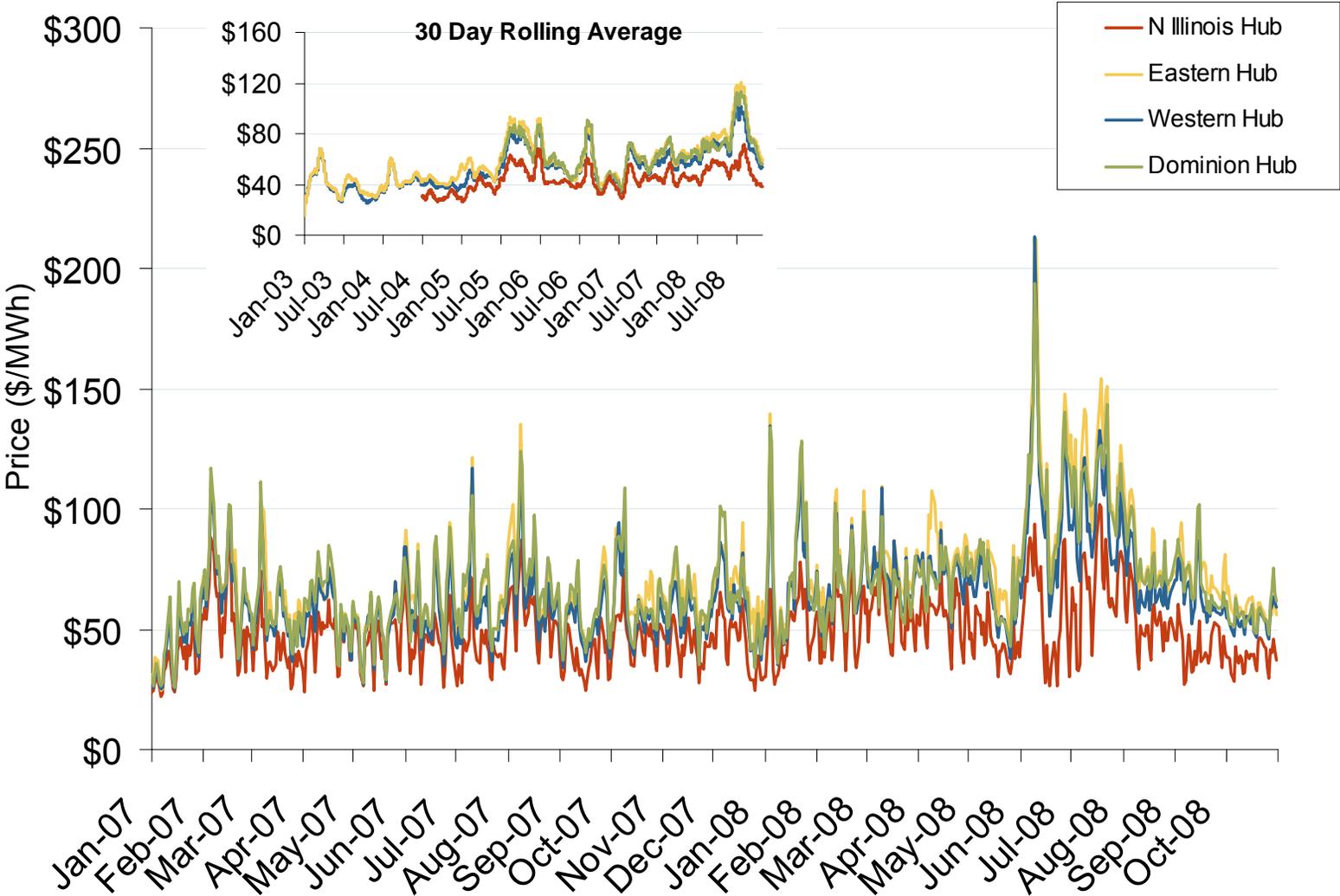
Daily Average of PJM Day-Ahead Prices - All Hours



Source: Derived by Bloomberg from PJM data as reported by Bloomberg.
November 2008 Mid-Atlantic Snapshot Report

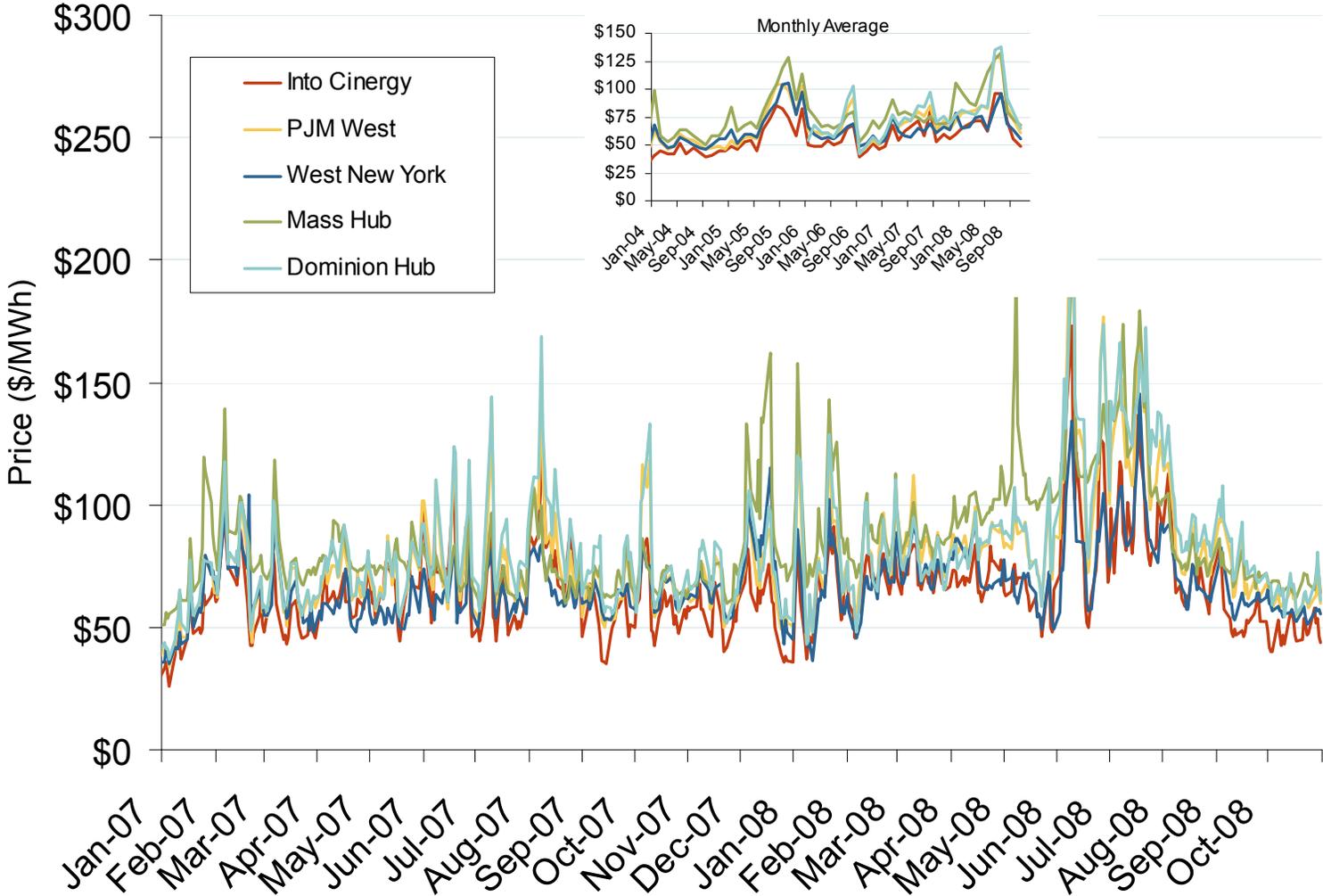
Updated November 7, 2008

Daily Average of PJM Day-Ahead Prices - All Hours



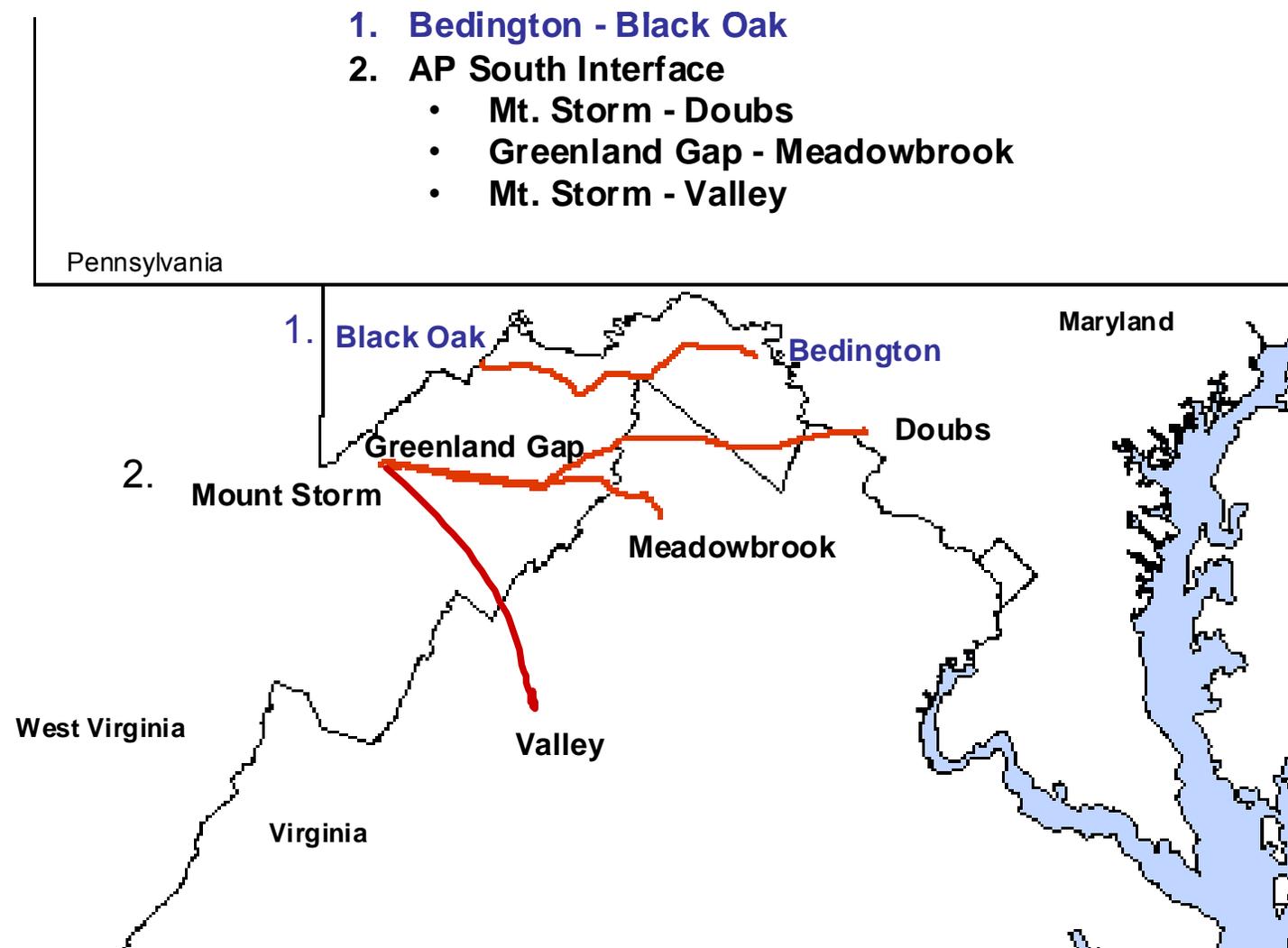
Source: Derived by Bloomberg from PJM data as reported by Bloomberg.
November 2008 Mid-Atlantic Snapshot Report

Eastern Daily Bilateral Day-Ahead On-Peak Prices



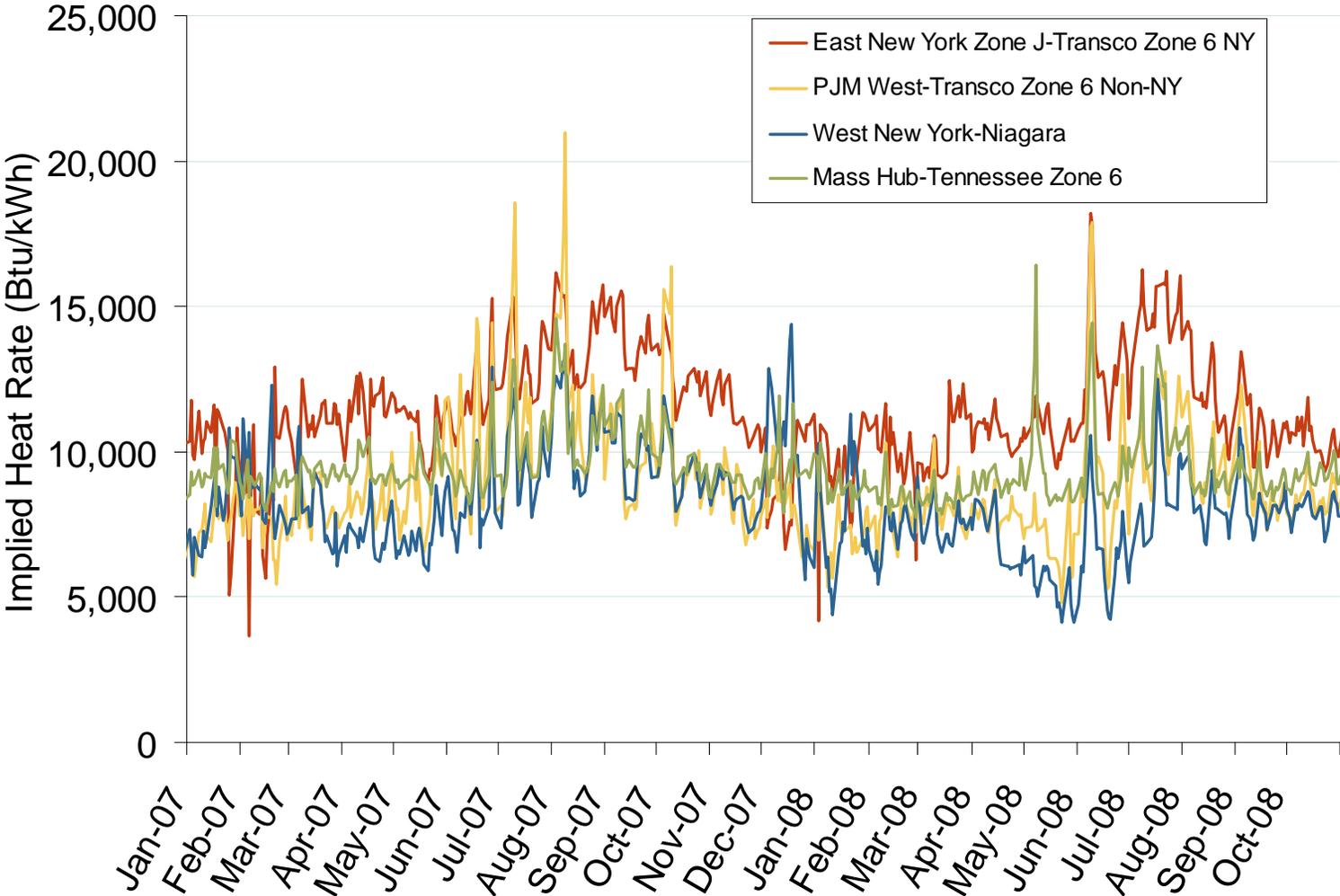
Source: Derived from *Platts* data.
November 2008 Mid-Atlantic Snapshot Report

PJM's Bedington – Black Oak and AP-South Interfaces



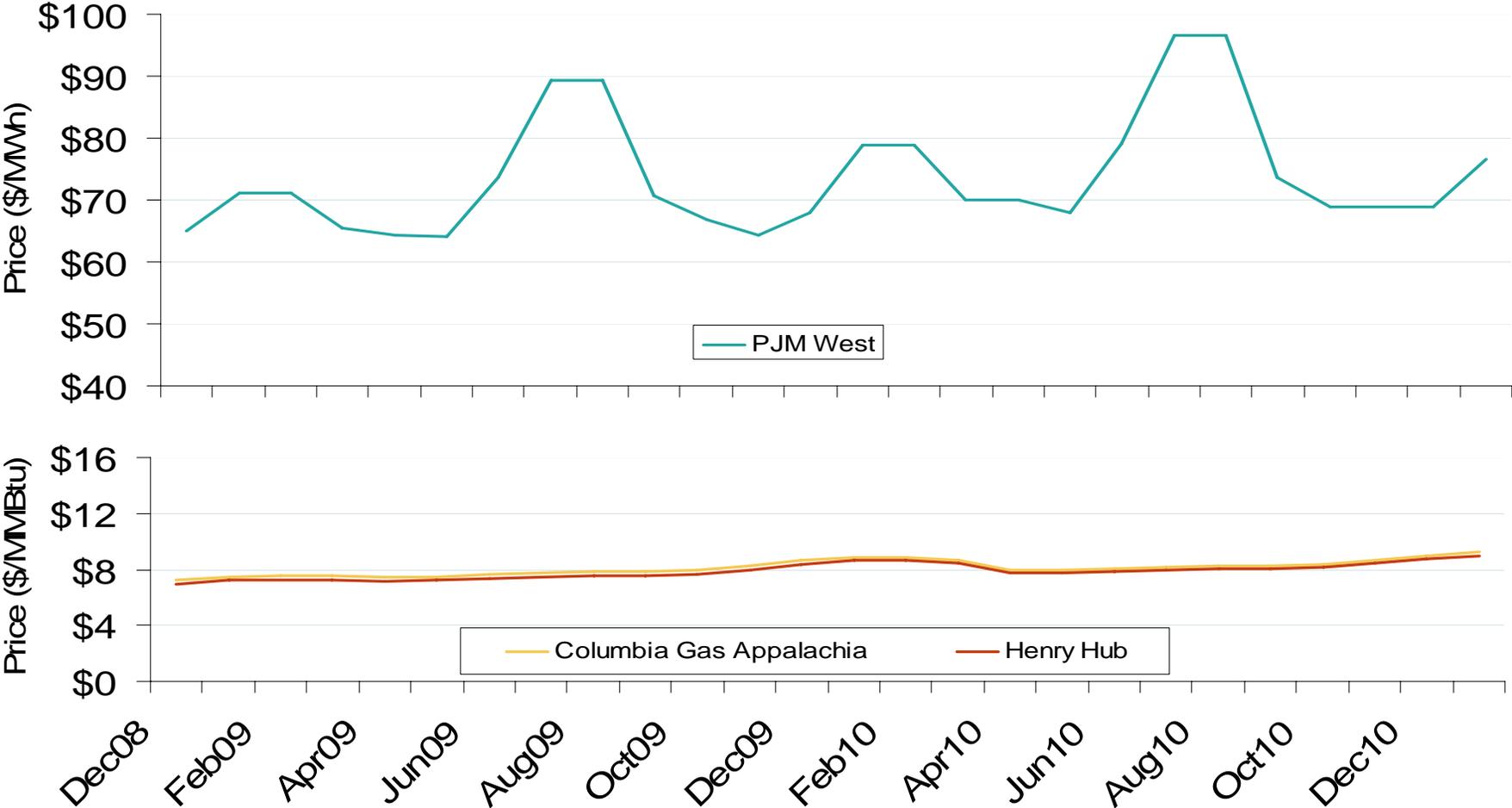
Source: Derived from Energy Velocity.

Implied Heat Rates at Eastern Trading Points



Source: Derived from *Platts* data
November 2008 Mid-Atlantic Snapshot Report

PJM West Electric Forward Price Curve and Selected Natural Gas Forward Curves

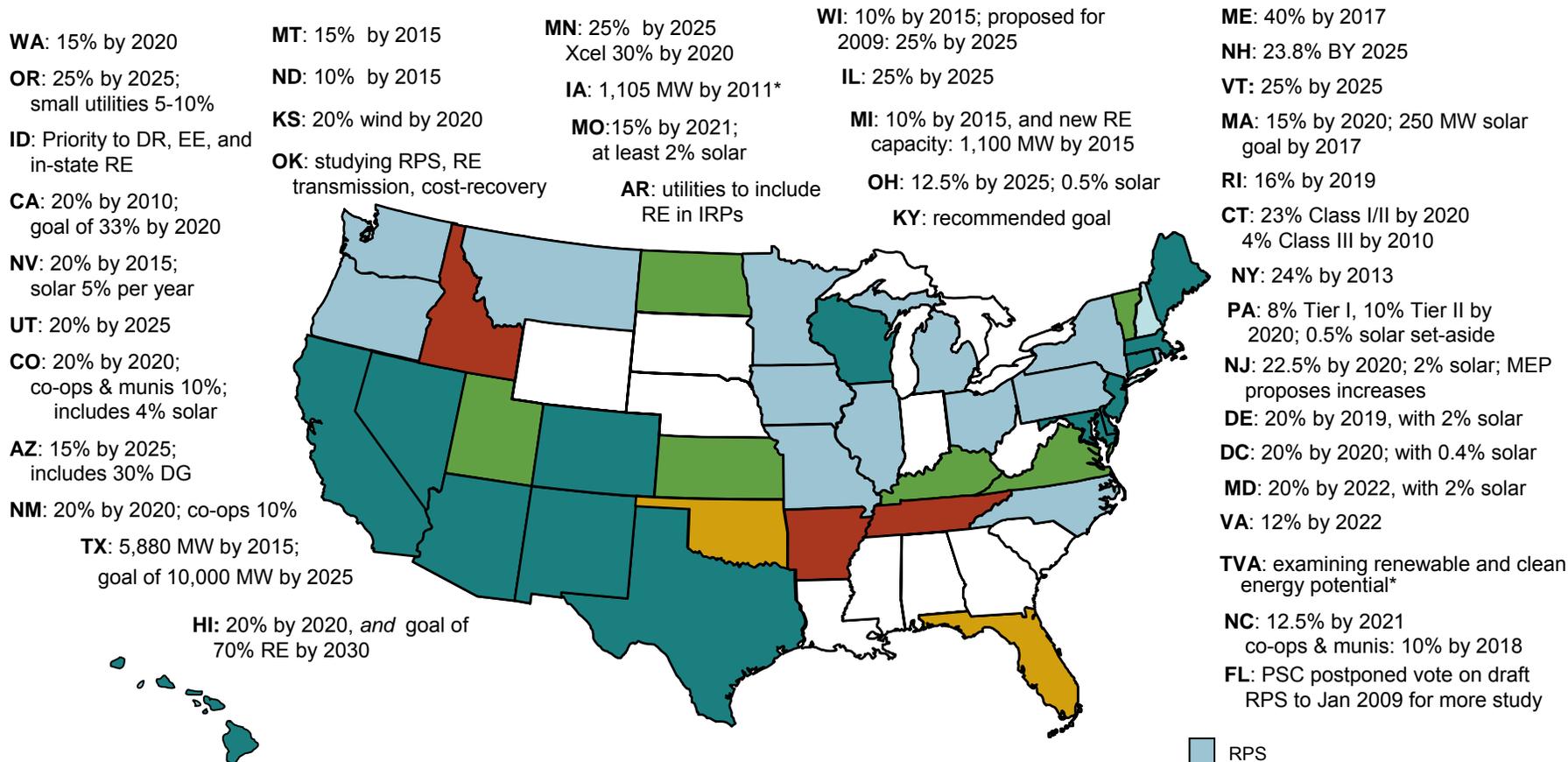


Source: Derived from Nymex data.
November 2008 Mid-Atlantic Snapshot Report

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Renewable Energy Portfolio Standards (RPS)

28 states plus D.C. have an RPS



Updates at: <http://www.ferc.gov/market-oversight/mkt-electric/overview/elec-ovr-rps.pdf>

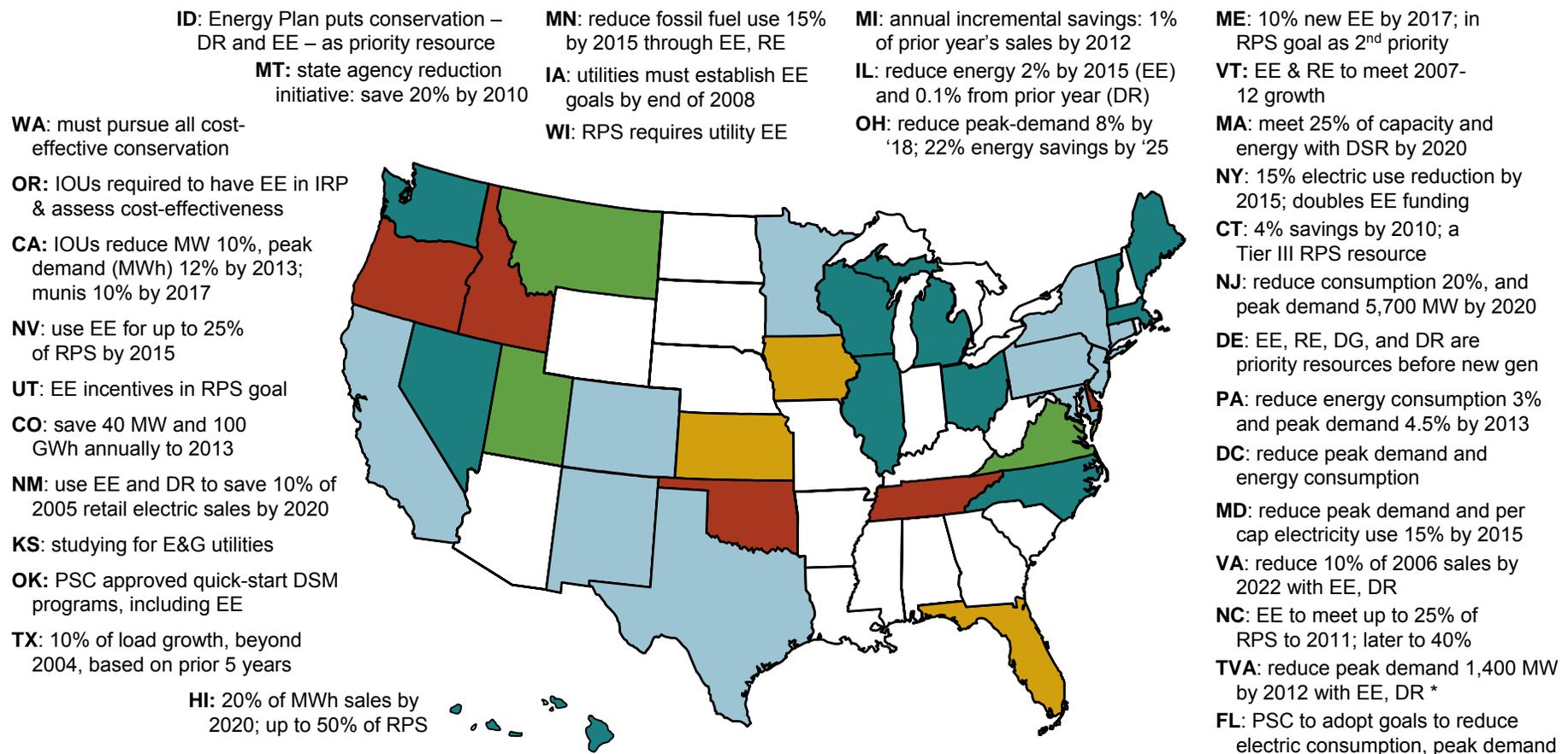
Notes: Alaska has no RPS; * Iowa has a goal of 1,000 MW of wind by 2010; TVA's "Renewable Energy and Clean Energy Assessment" is from the Public Power Authority; it is not a state policy.

Abbreviations: DG: distributed generation; DR: demand response; EE: energy efficiency; IRP: integrated resource plan.

Sources: Derived from data in: EEI, EIA, LBNL, PUCs, State legislative tracking services, Database of State Incentives for Renewables and Efficiency, and the Union of Concerned Scientists.

Updated November 7, 2008

Energy Efficiency Resource Standards (EERS)



Updates at: <http://www.ferc.gov/market-oversight/mkt-electric/overview/elec-ovr-eeps.pdf>

* TVA's "EE and DR Plan" is from the Public Power Authority, and is not a state policy.

Abbreviations: CHP – Combined heat & power; DG – distributed generation; DR - demand response; DSM - demand side management; DSR – demand-side resources; EE - energy efficiency; E&G: electric and gas utilities; IRP – integrated resource plan; RPS: Renewable Portfolio Standard

Sources: ACEEE, EPA, Regulatory Assistance Project, Union of Concerned Scientists, State regulatory and legislative sites, trade press

- EERS by regulation or law (stand-alone)
- Energy efficiency part of an RPS law, rule, or goal
- Voluntary standards (in or out of RPS)
- Energy efficiency goal proposed / being studied
- Other energy efficiency or demand-side rule or goal

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Collaborative Greenhouse Gas (GHG) Programs

Collaborative Regional GHG Programs:

- Three North American groups with goals to lower regional GHG emissions were initiated by state Governors.
- 32 U.S. states, D.C., eight Canadian provinces, and six Mexican states are Participants or Observers.
- Observer jurisdictions do not commit to group GHG reduction goals, but participate in proceedings should they opt to join later.

Western Climate Initiative (WCI):

- Created February 2007
- Partners: 7 states, 4 provinces; Observers: 5 states, 1 province*
- WCI announced its design for a market-based, *multi-sector* cap-and-trade program, Sept 2008:
 - 15% CO₂ reduction below 2005 levels by 2020
 - Phase I to take effect Jan 2012

Midwest Greenhouse Gas Reduction Accord:

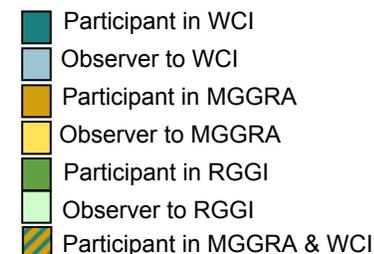
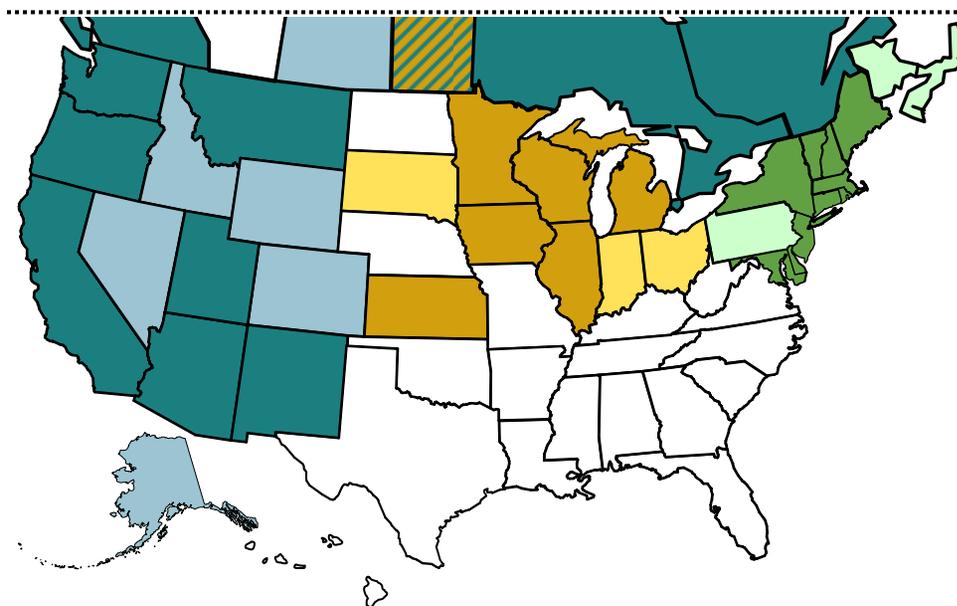
- Established November 2007
- Participants: 6 states, 1 province; 3 Observer states, 1 province
- *Preliminary* GHG policy recommendation: 15 – 25% reductions by 2020, 60 – 80% by 2050

Regional Greenhouse Gas Initiative (RGGI):

- Takes effect Jan 2009
- 10 Participant states; Observers: 1 state, D.C., 3 provinces.
- Market-based cap-and-trade effort to reduce *power-sector* CO₂ emissions.
- 10% CO₂ reduction by 2018 covers over 200 plants
- 188 million allowances to be sold in 6 auctions

Auctions:

- 1. 9/25/08:** 12.5 million allowances cleared at \$3.07/allowance, raising \$38.5 million.
 - 6 states participated: CT, MA, ME, MD, RI, VT; these 6 will offer 1/6 of allowances at next 5 auctions
- 2. 12/17/08:** first 6 states plus NY, NJ, NH, DE to participate
 - 31.5 million allowances
- 3 to 6:** All ten states on same percent basis as prior auctions.
 - 2009 dates: 3/18, 6/17, 9/16, 12/16



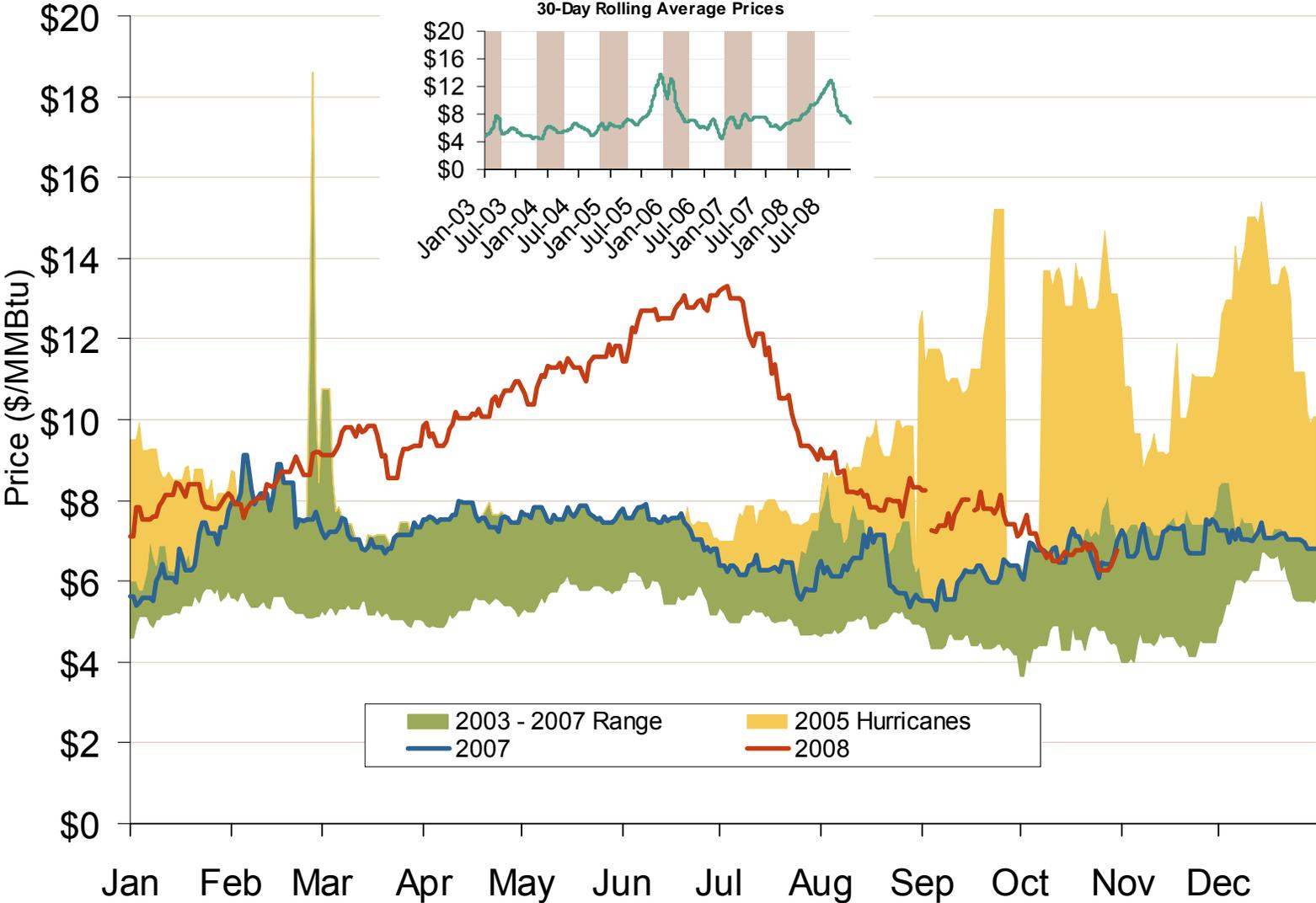
Updates at: <http://www.ferc.gov/market-oversight/mkt-electric/overview/elec-ovr-ghg.pdf>

Notes: Kansas is a MGGRA participant and WCI observer. Ontario is a Partner to WCI and MGGRA Observer.
Sources: Regional initiatives: www.rggi.org, www.midwesternaccord.org, www.westernclimateinitiative.org, trade press, Pew Center.



Natural Gas and Fuel Markets

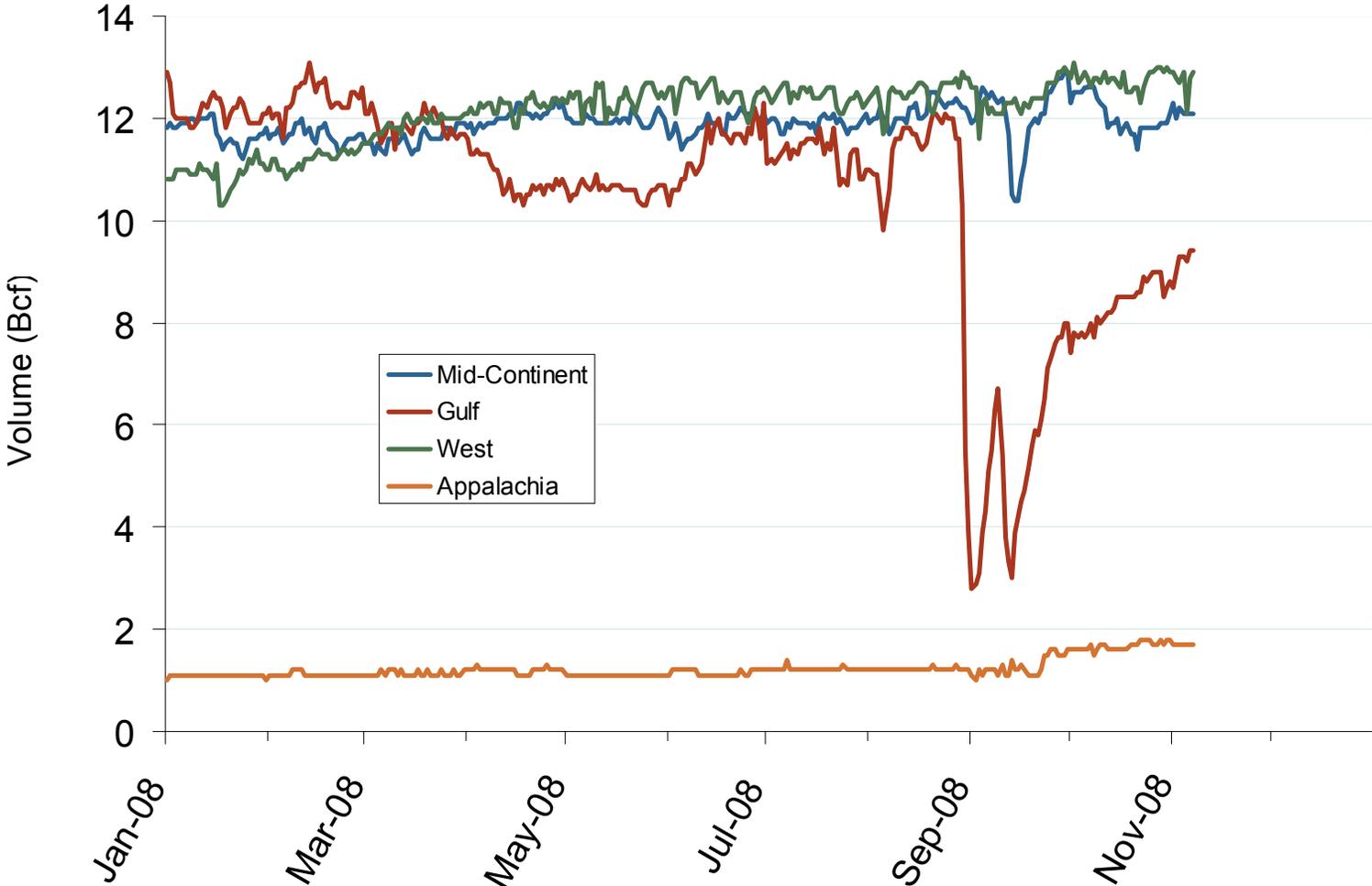
Henry Hub Natural Gas Daily Spot Prices 2007, 2008 and 2003-2007 Year Range



Source: Derived from *Platts* data.
November 2008 Mid-Atlantic Snapshot Report

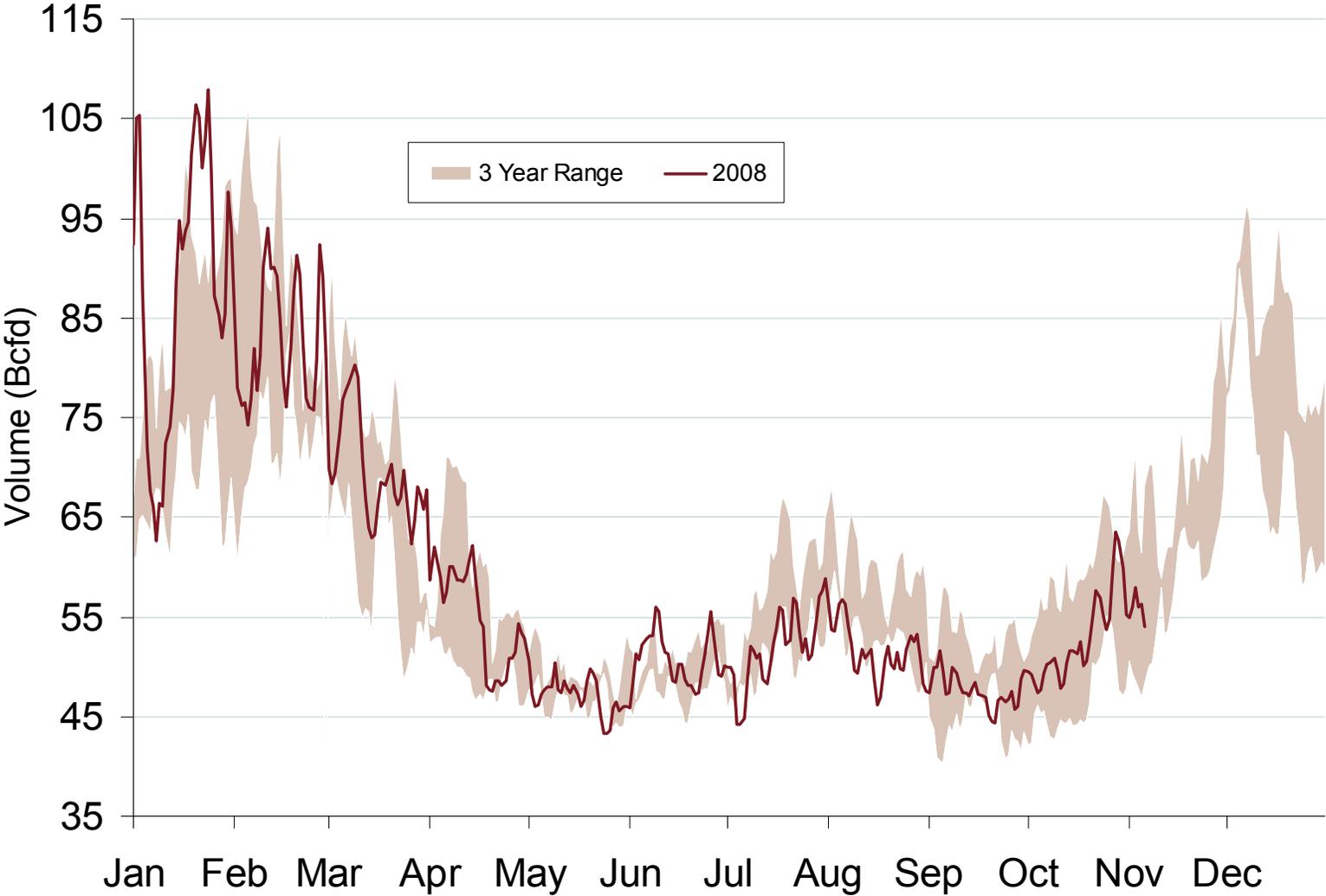
Updated November 7, 2008

Regional Natural Gas Production for 2008



Source: Derived from *Bentek* data.
November 2008 Mid-Atlantic Snapshot Report

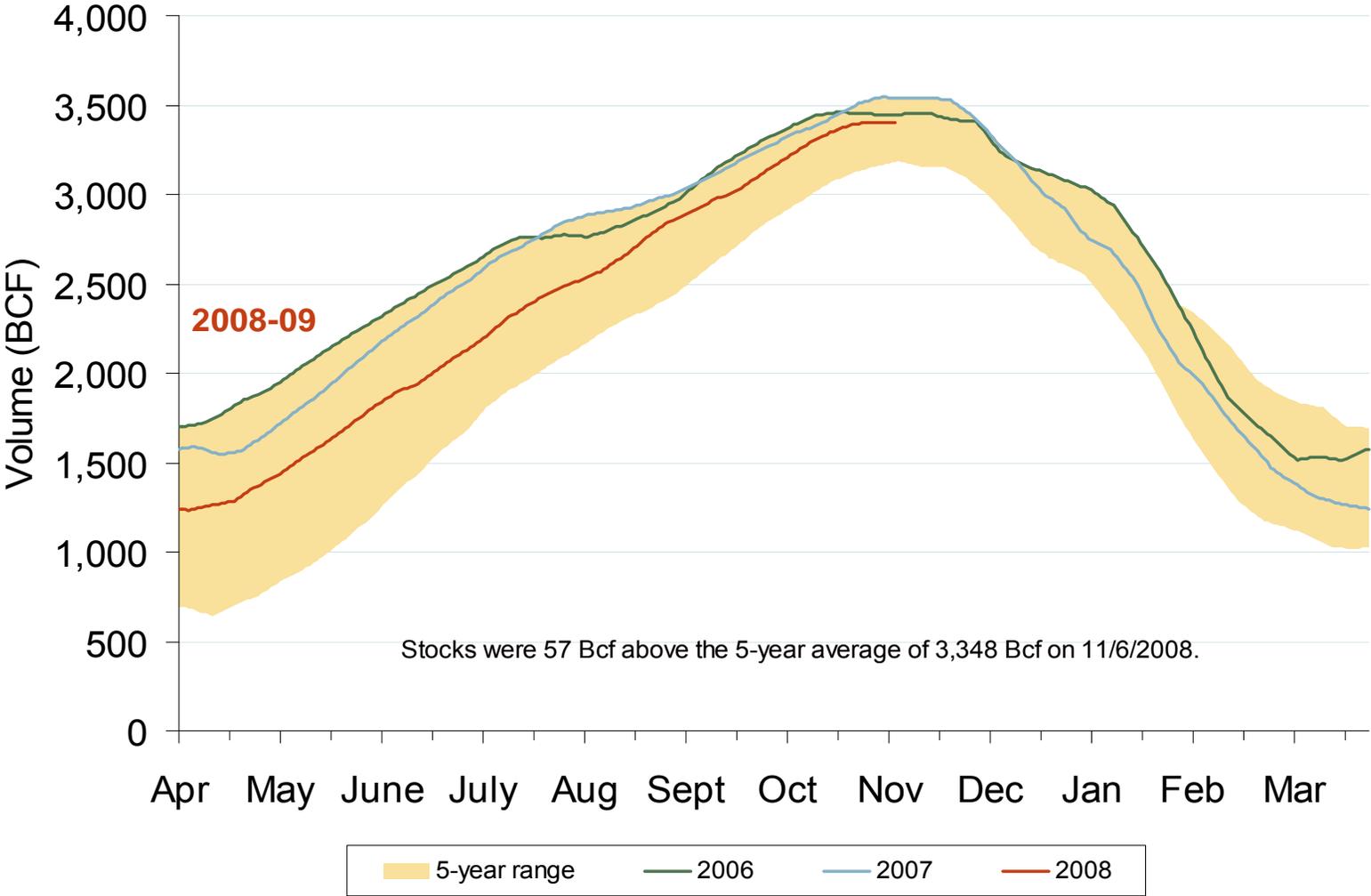
Total U.S. Natural Gas Demand (All Sectors)



Source: Derived from *Bentek Energy* data.
November 2008 Mid-Atlantic Snapshot Report

Updated November 7, 2008

Total U.S. Working Gas in Storage

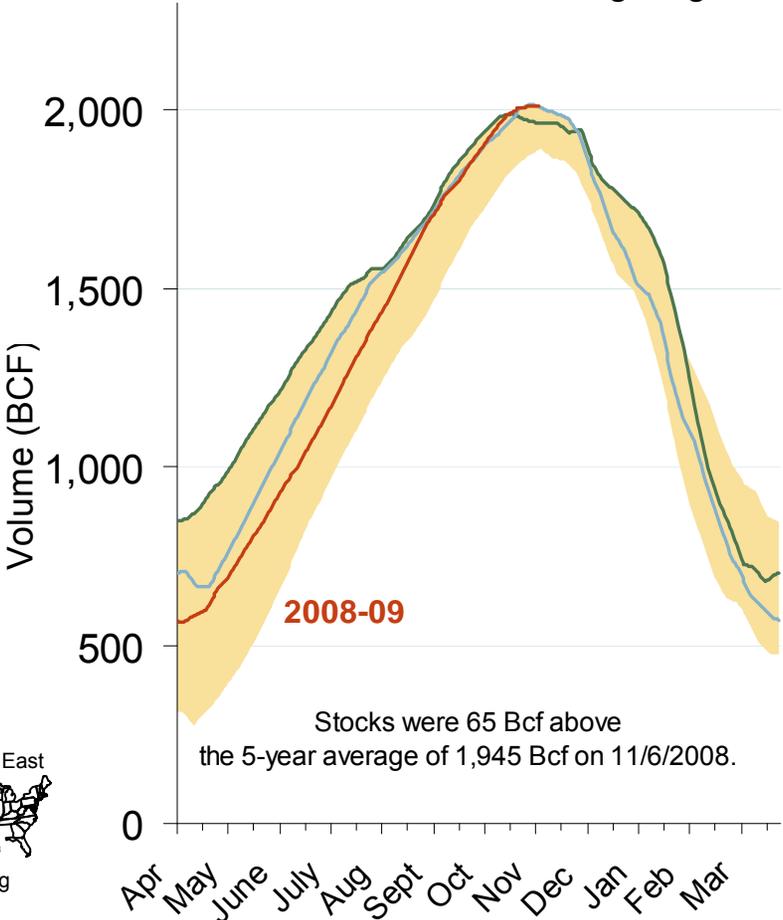


Stocks were 57 Bcf above the 5-year average of 3,348 Bcf on 11/6/2008.

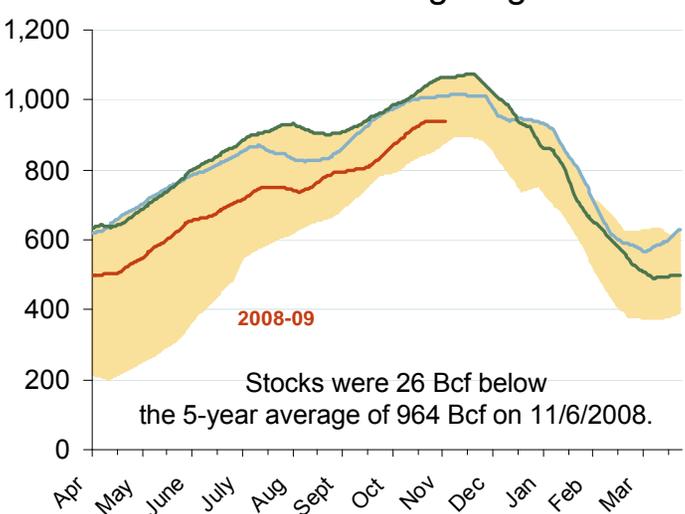
Source: Derived from EIA data.

Regional Totals of Working Gas in Storage

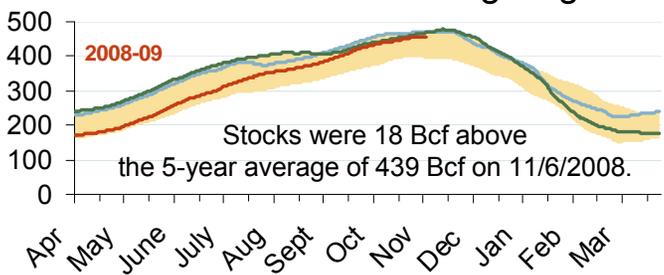
Eastern Consuming Region



Producing Region

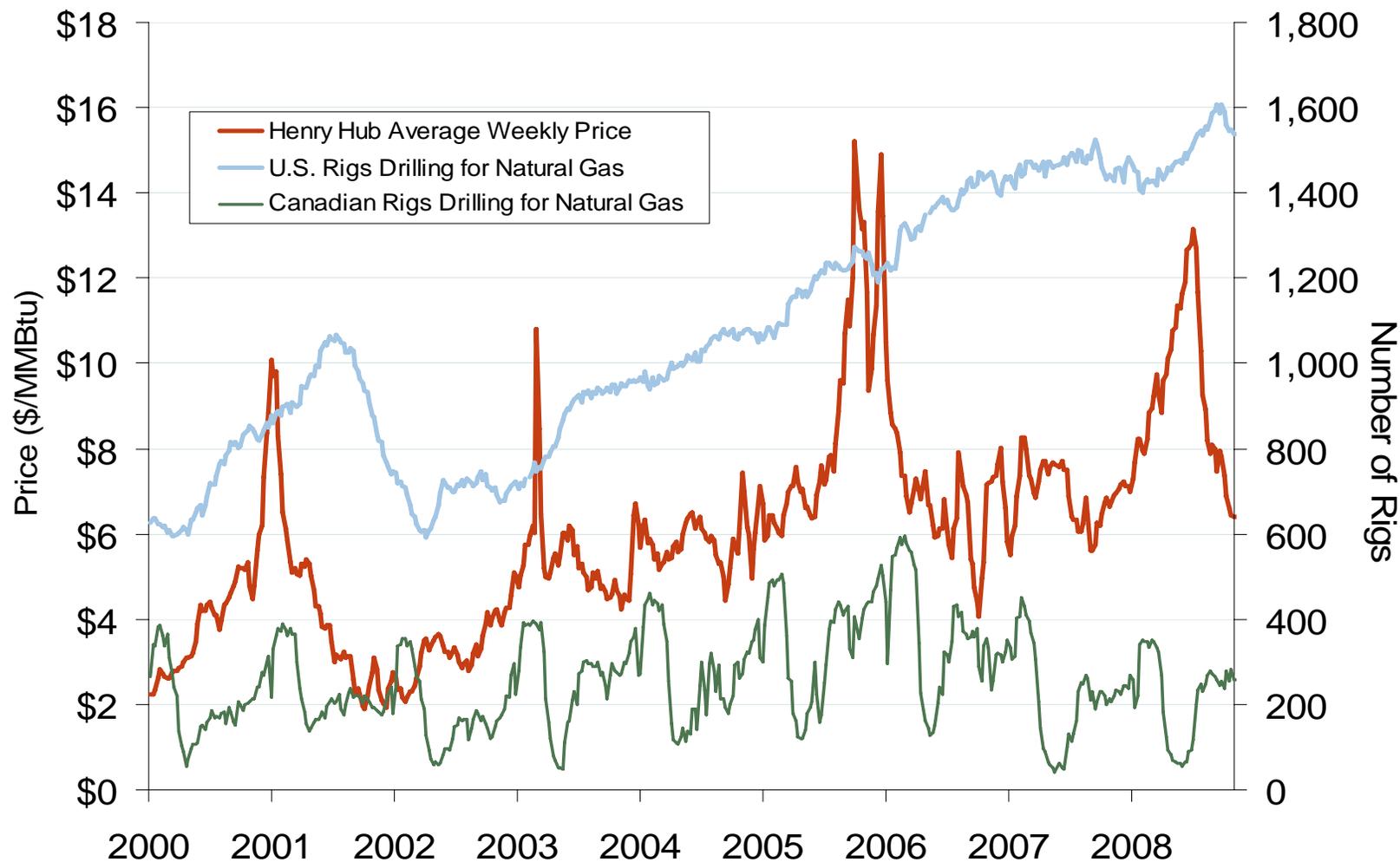


Western Consuming Region

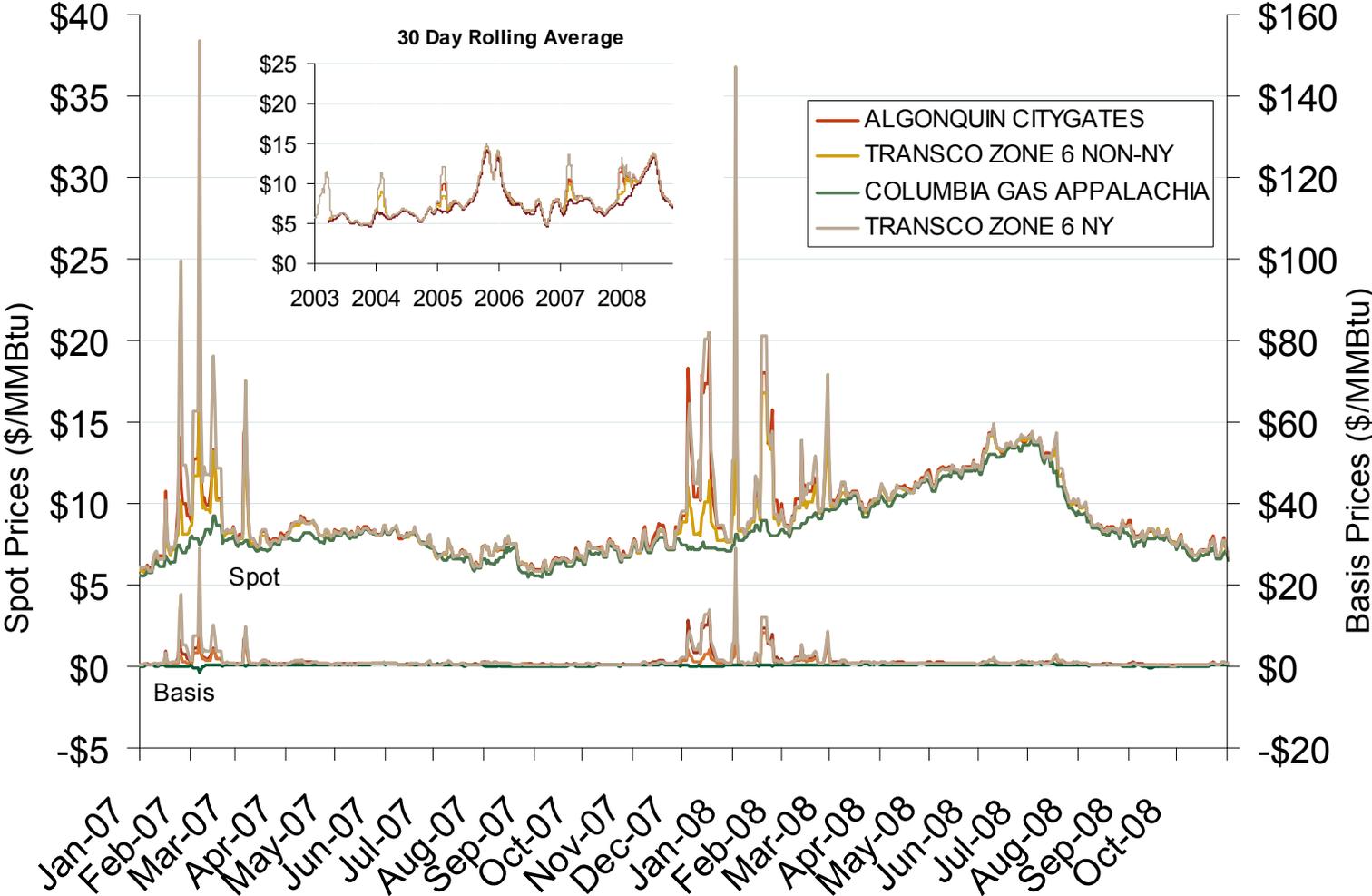


5-year range 2006 2007 2008

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

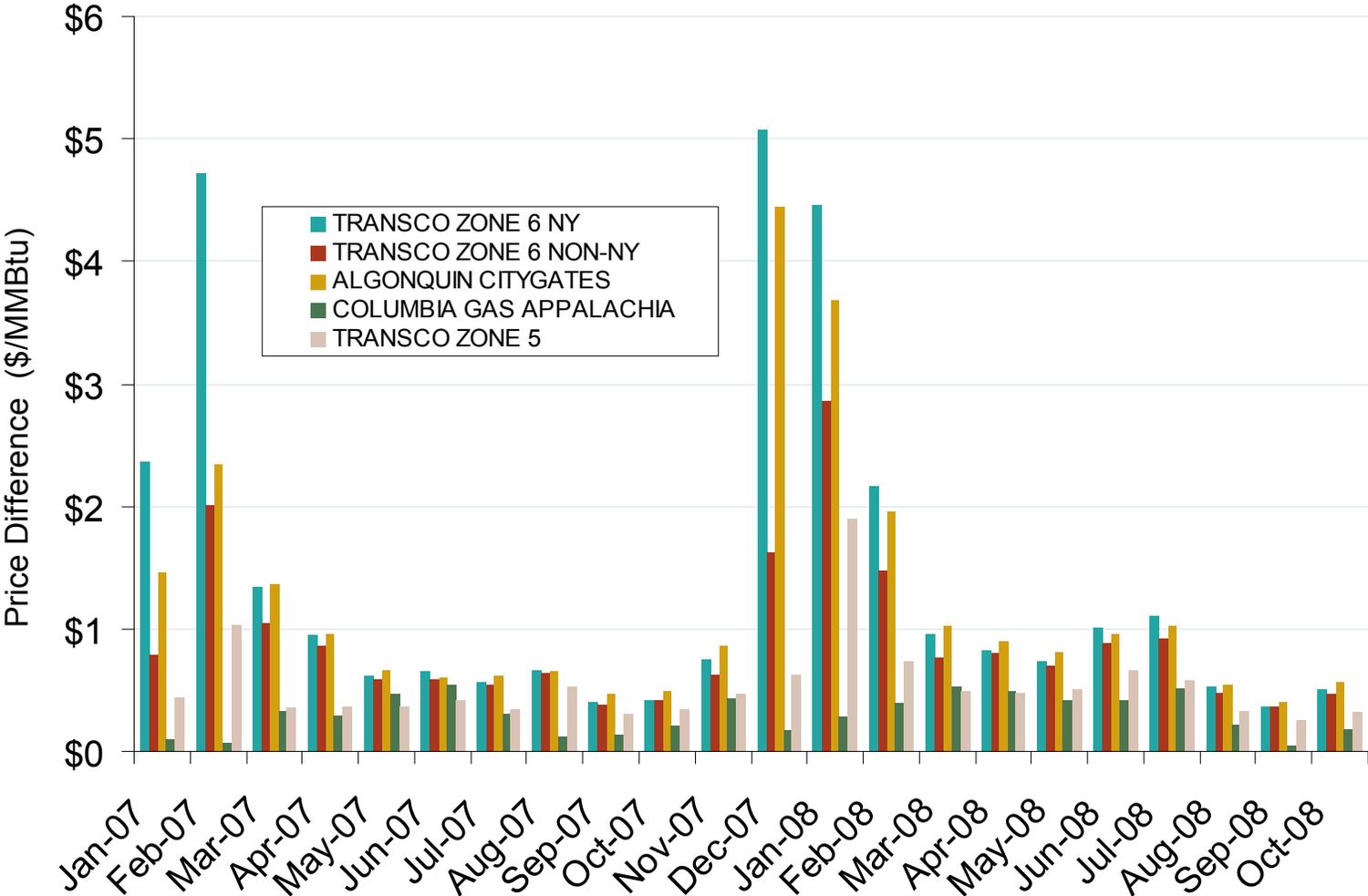


Northeastern Spot Prices and Basis



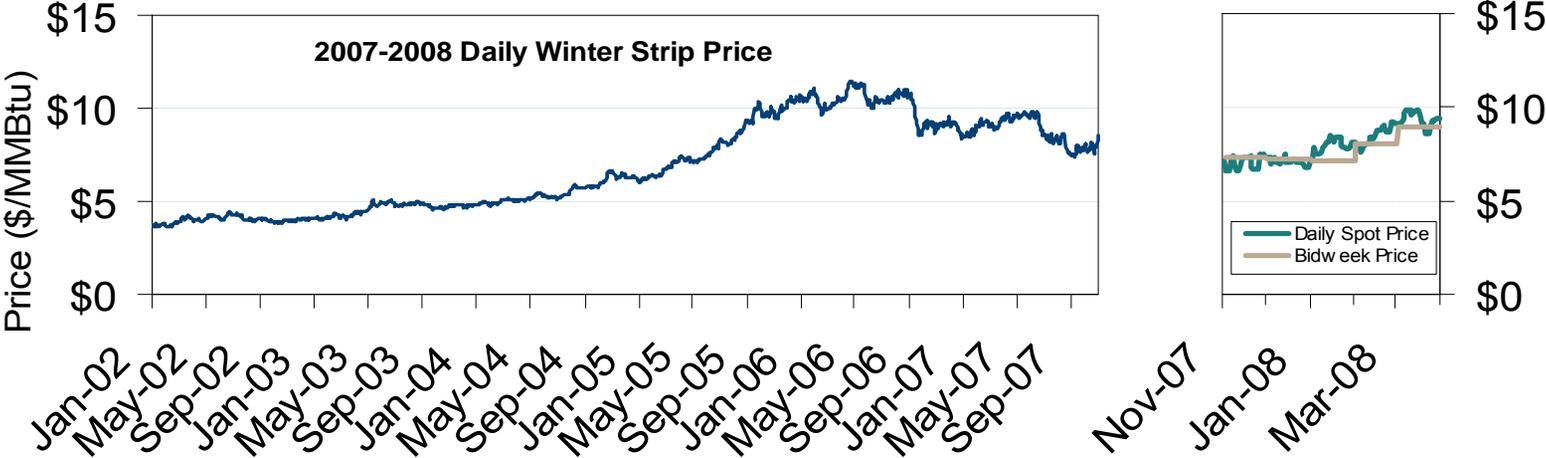
Source: Derived from Platts data.
November 2008 Mid-Atlantic Snapshot Report

Northeastern Monthly Average Basis Value to Henry Hub



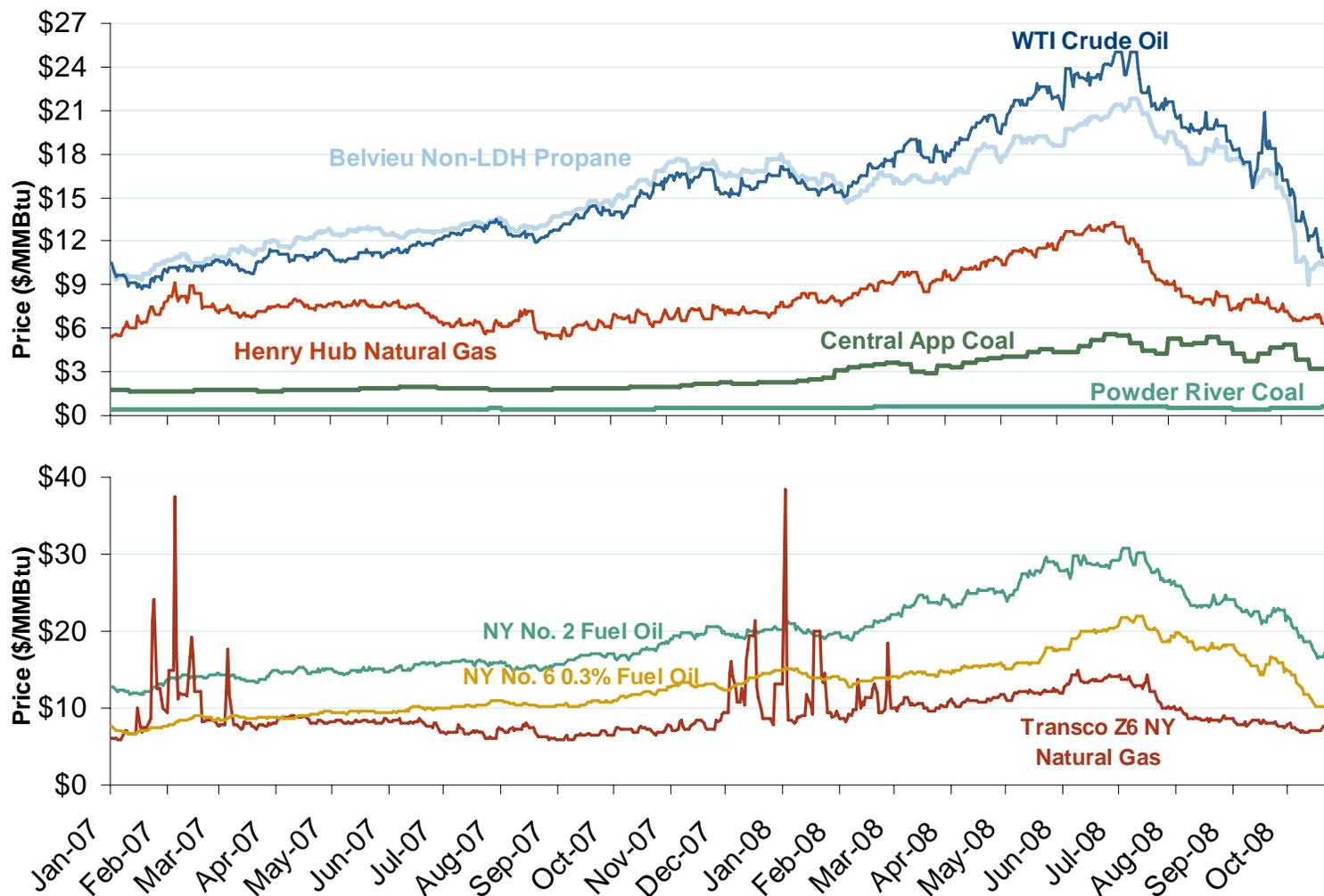
Source: Derived from Platts data.
November 2008 Mid-Atlantic Snapshot Report

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



Source: Derived from Platts and Nymex data.

Oil, Coal, Natural Gas and Propane Daily Spot Prices

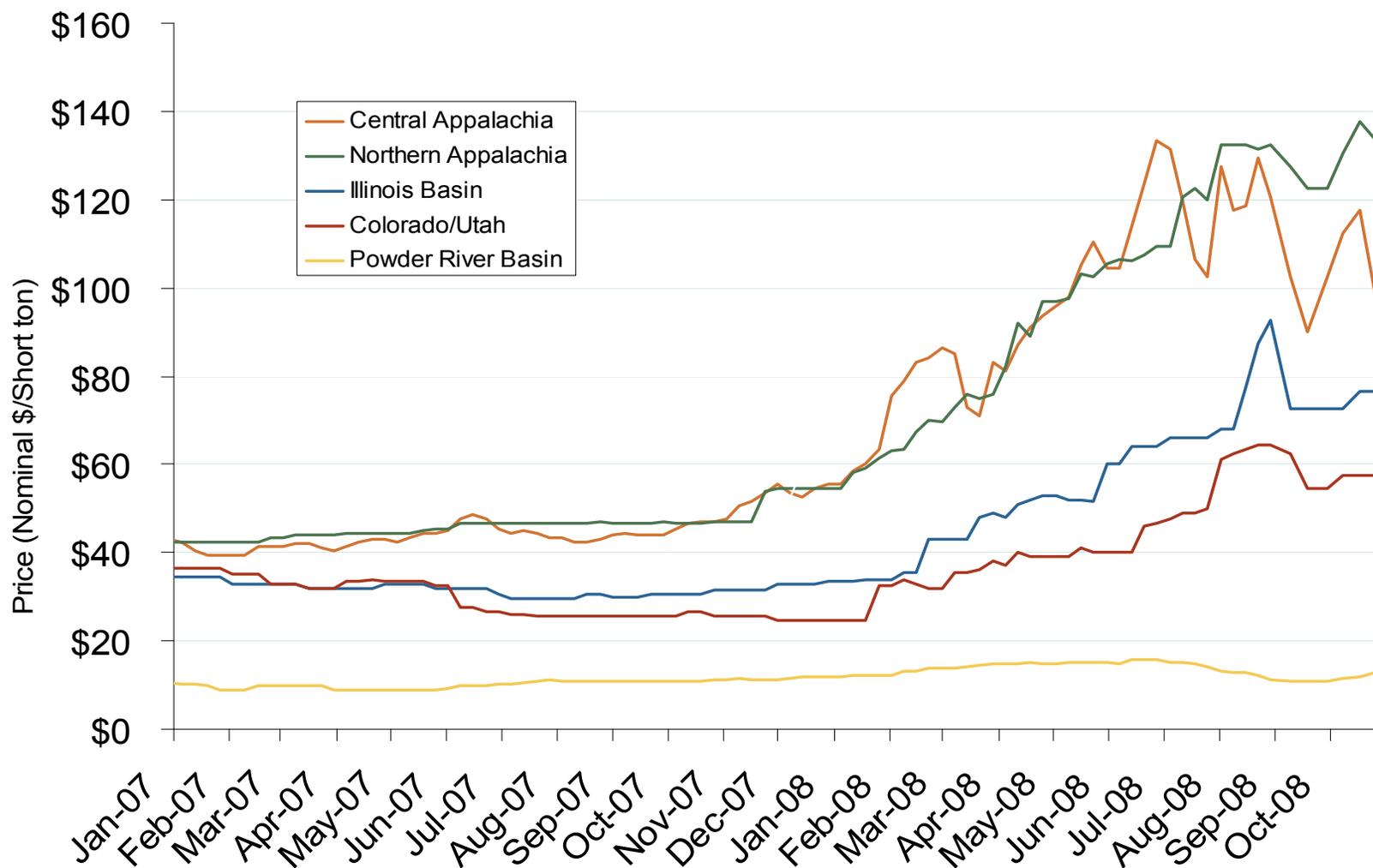


Source: Derived from ICE and Bloomberg data.

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.

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Regional Coal Spot Prices

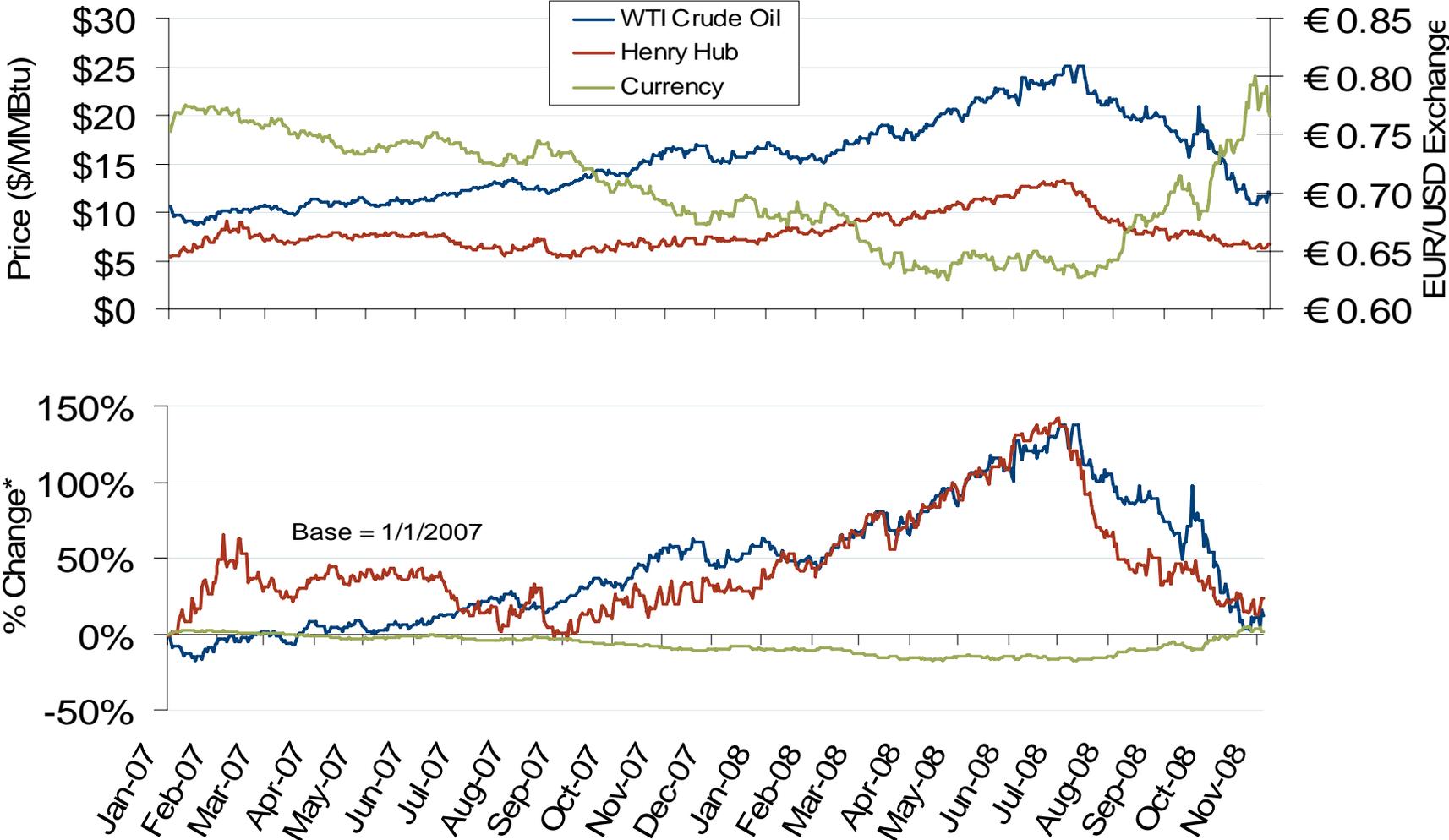


Note: Does not reflect the delivered price of coal; excludes incremental cost of emissions allowances.

Source: Derived from *Bloomberg* data.
November 2008 Mid-Atlantic Snapshot Report

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Oil, Natural Gas and Currency Spot Prices

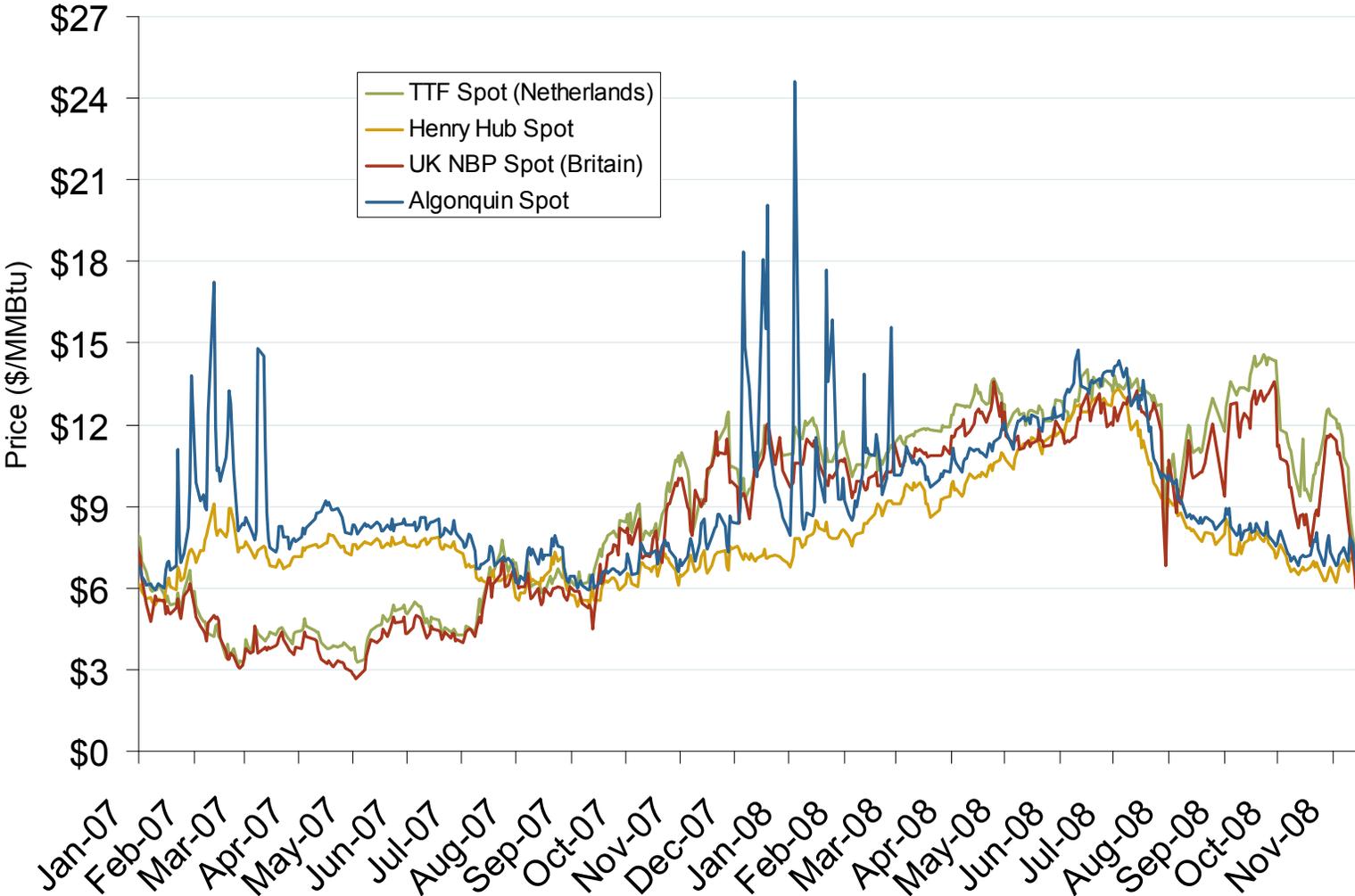


Source: Derived from Bloomberg data.

World LNG Estimated November 2008 Landed Prices



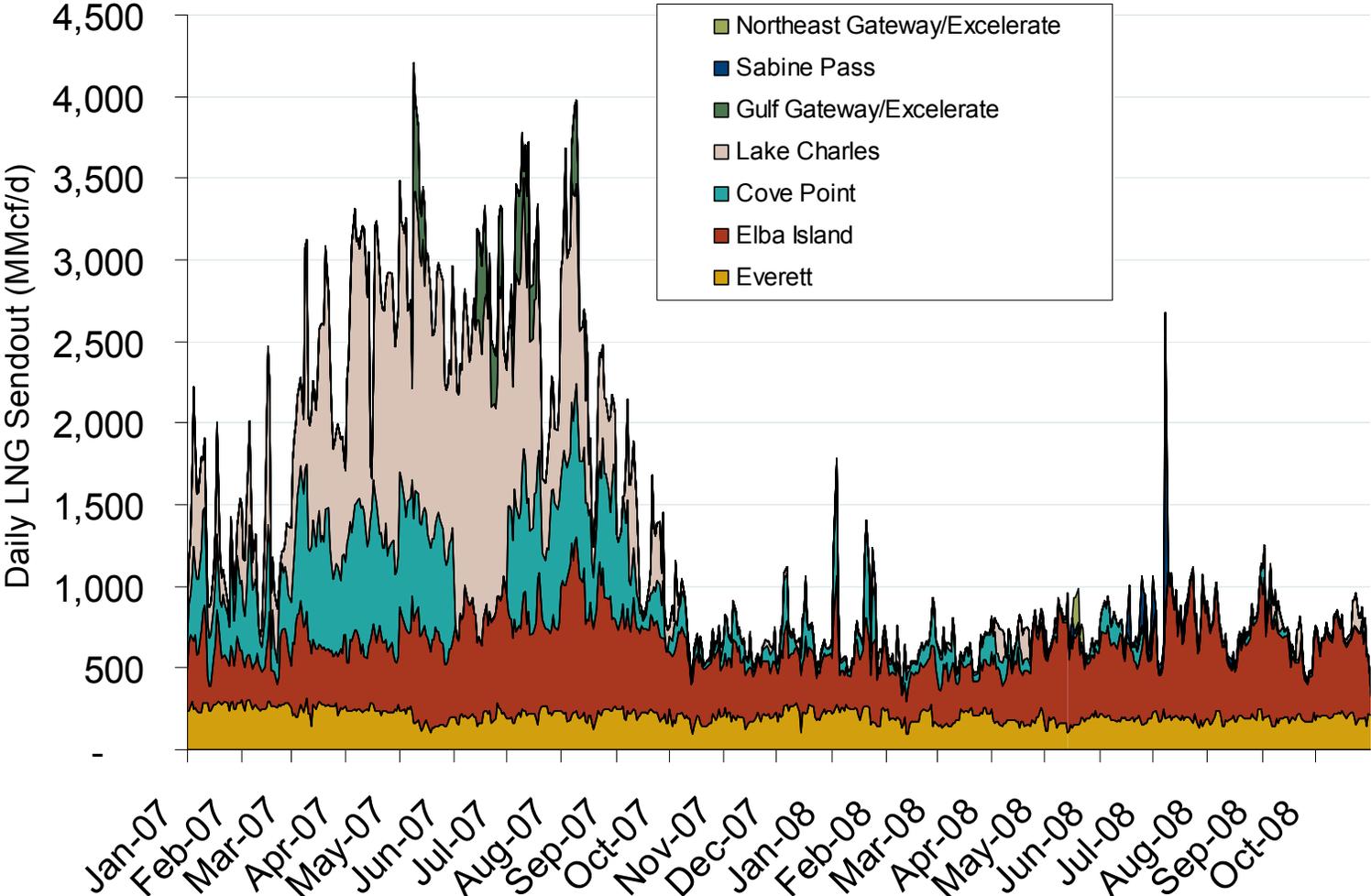
Atlantic Basin European and US Spot Natural Gas Prices



Source: Derived from *Bloomberg* and *ICE* data.
November 2008 Mid-Atlantic Snapshot Report

Updated November 7, 2008

Daily Gas Sendout from Existing U.S. LNG Facilities



Source: Derived from *Bentek* data. Excludes Everett LNG delivered via truck and consumed by the Mystic plant as well as Freeport LNG which flows via intrastate pipelines.
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