OE ENERGY MARKET SNAPSHOT

Southeast States Version – June 2008 Data

- **Market Fundamentals**
- **Prices and Market Analysis**

Office of Enforcement
Federal Energy Regulatory Commission
July 2008

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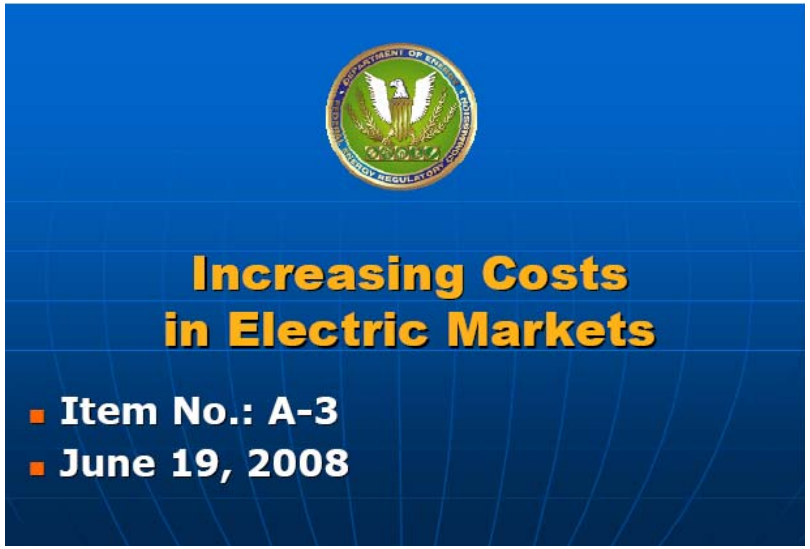
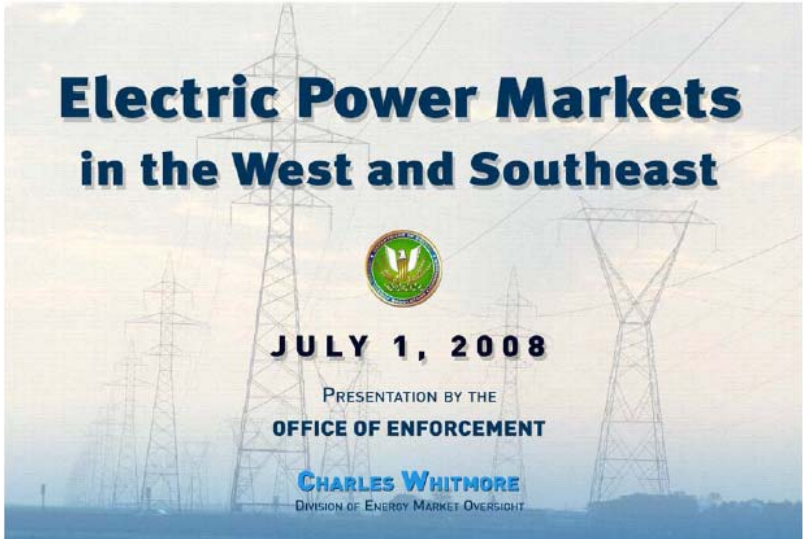


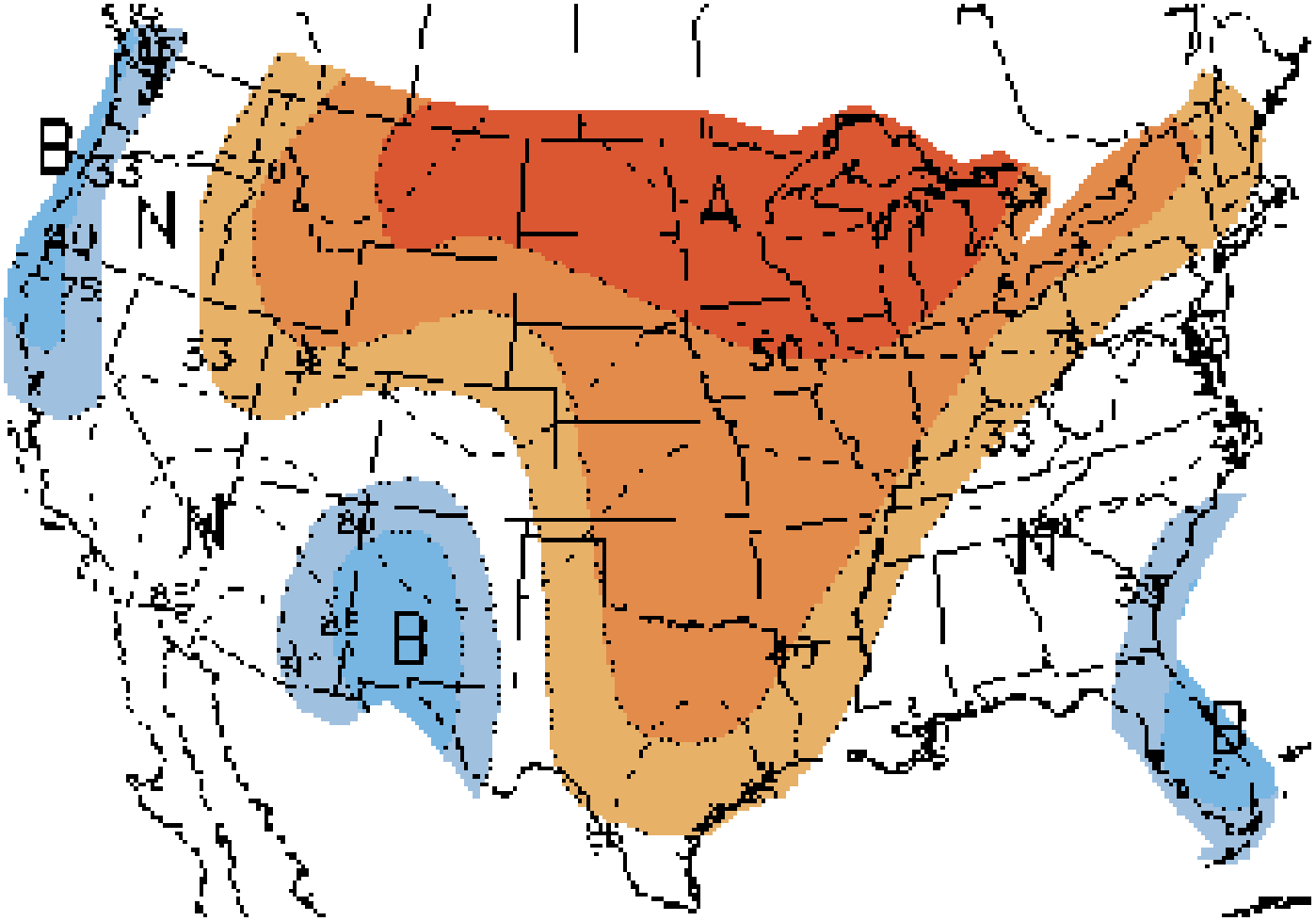
http://www.ferc.gov/legal/staff-reports/06-19-08-cost-electric.pdf



http://www.ferc.gov/EventCalendar/Files/20080701154408-FERC.pdf

Market Fundamentals

NOAA's 8 to 14 Day Temperature Forecast
Made July 8, Valid for July 16 – July 22, 2008



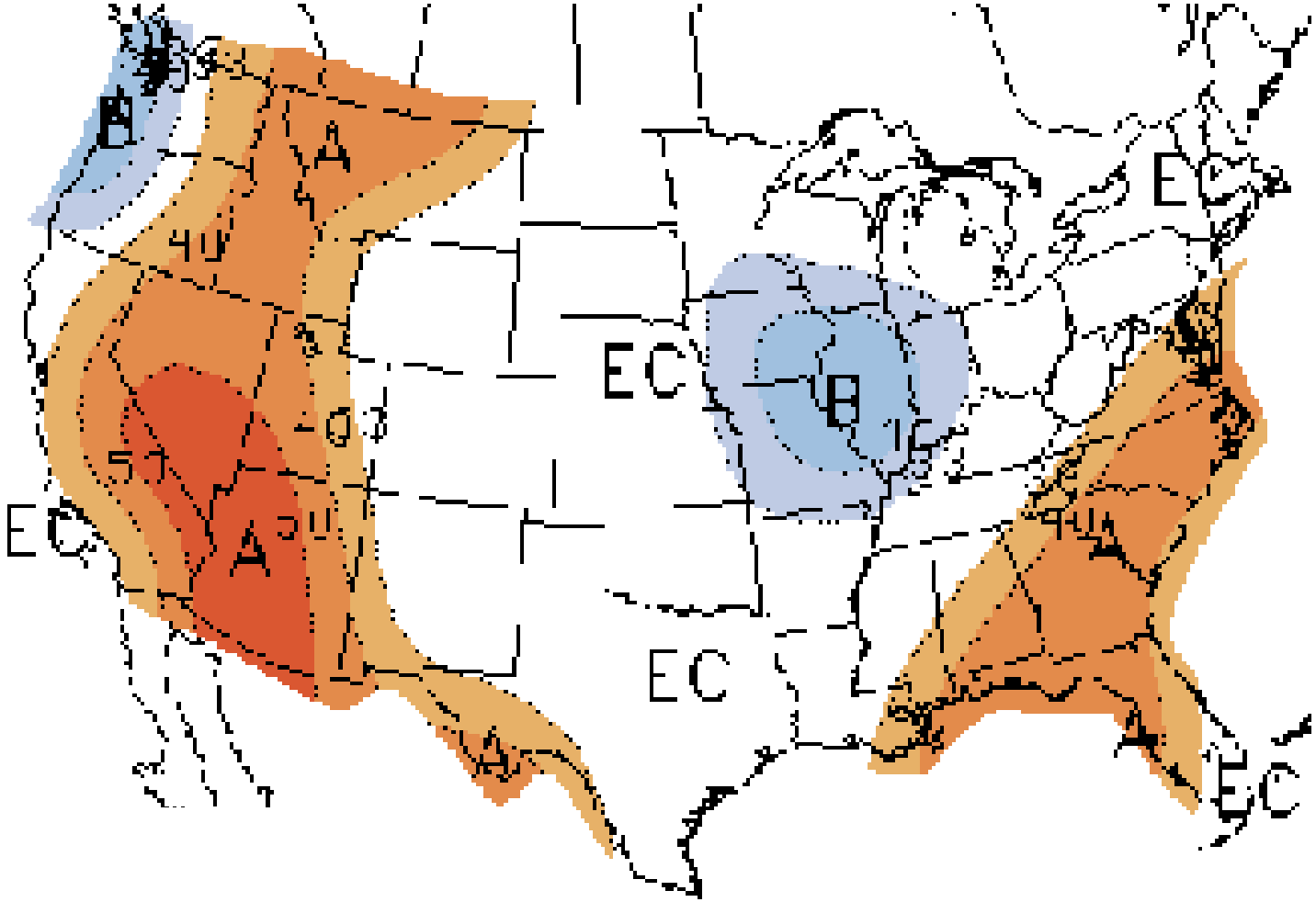
Note: "A" areas are above normal and "B" areas are below normal. Normal is based on the last 30 years of data.

Source: NOAA

Updated July 9, 2008

3012

NOAA's Monthly Temperature Forecast
Made June 30, Valid for July 2008



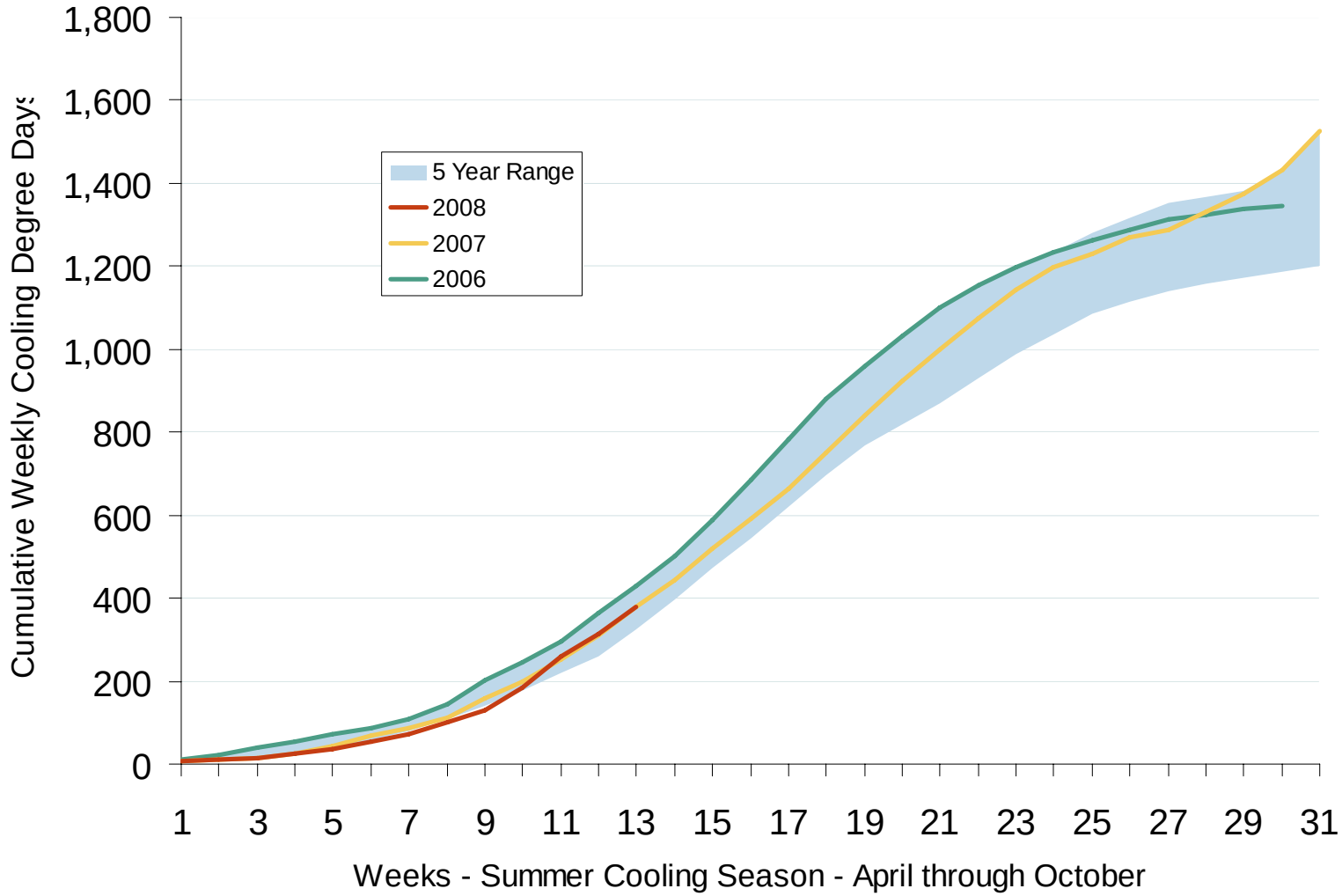
Note: "A" areas are above normal, "B" areas are below normal and "EC" means equal chance. Normal based on the last 30 years of data.

Source: NOAA

Updated July 9, 2008

3012

U. S. Summer Cumulative Cooling Degree Days



Source: Derived from *NOAA* data.

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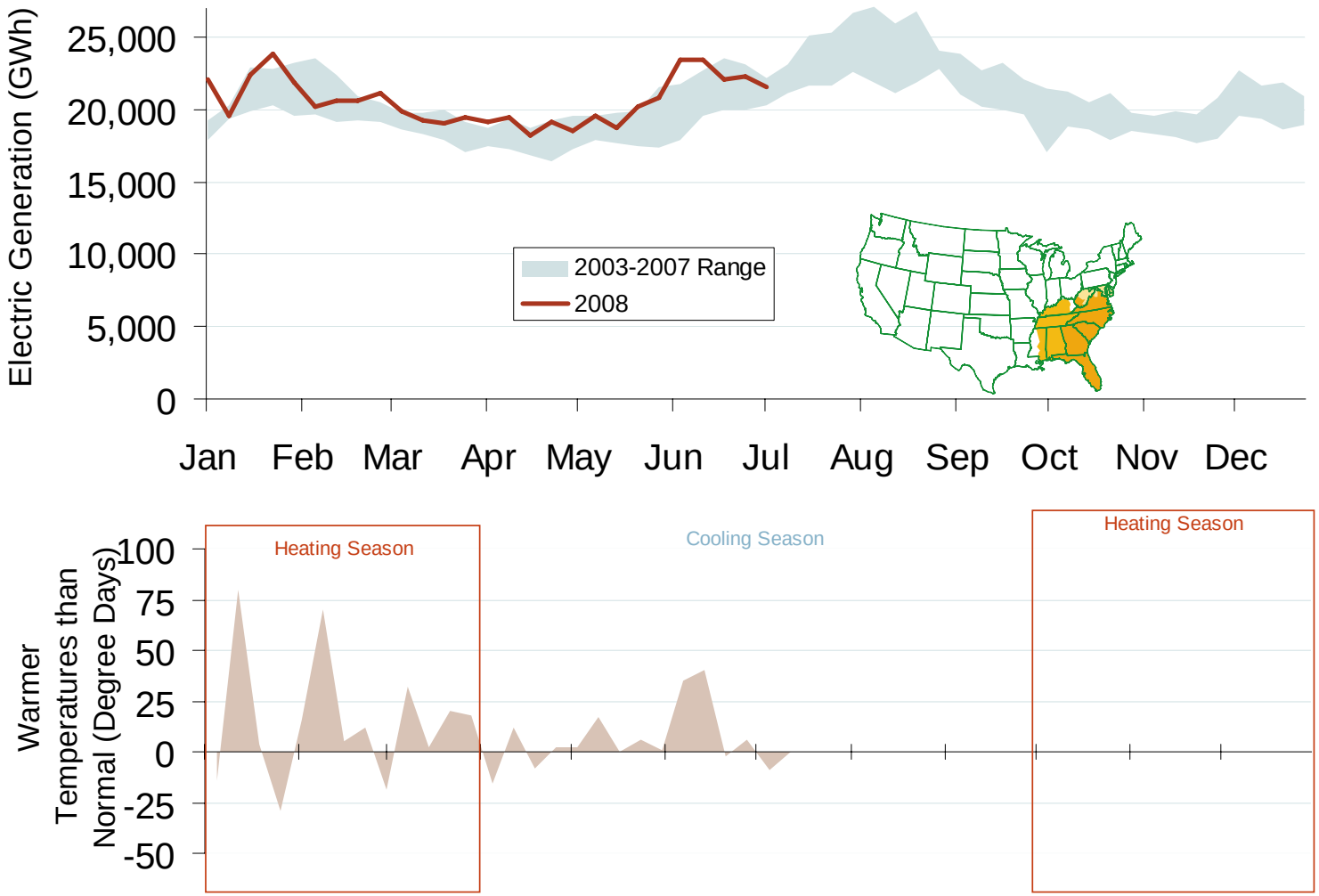
Weekly Electric Generation Output and Temperatures Southeast Region



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

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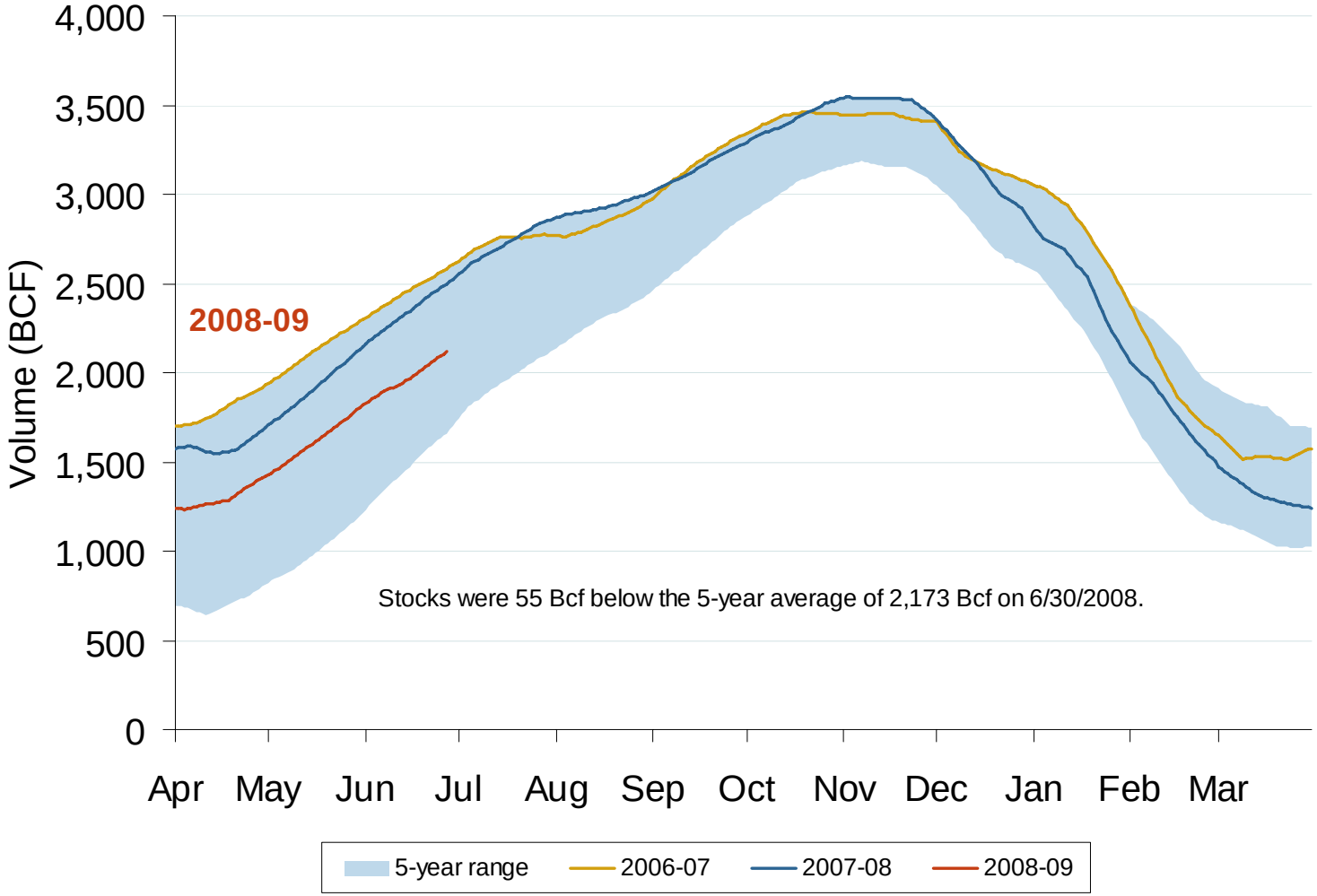
Total U.S. Working Gas in Storage



Source: Derived from *EIA* data.

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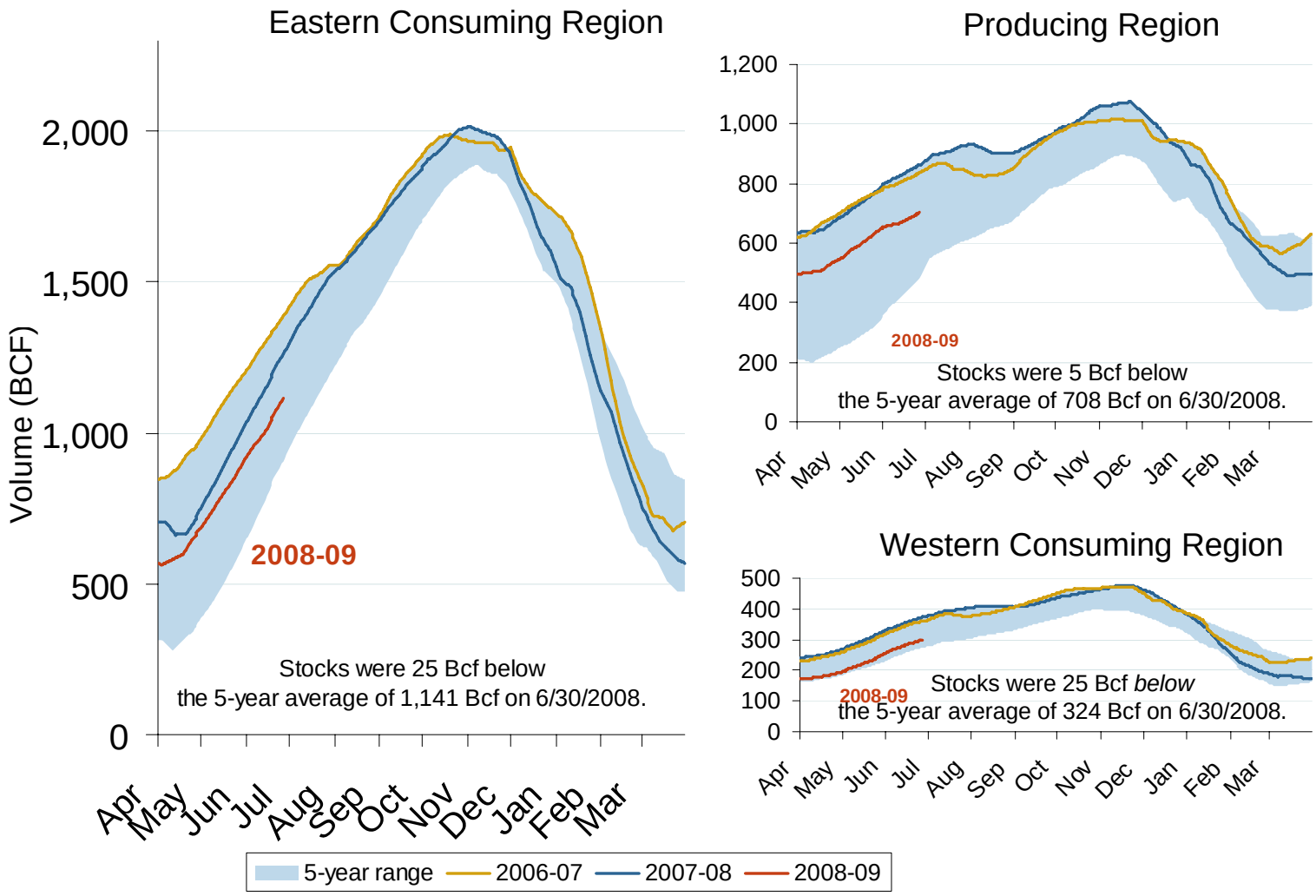
Regional Totals of Working Gas in Storage



Source: Derived from *EIA* data.

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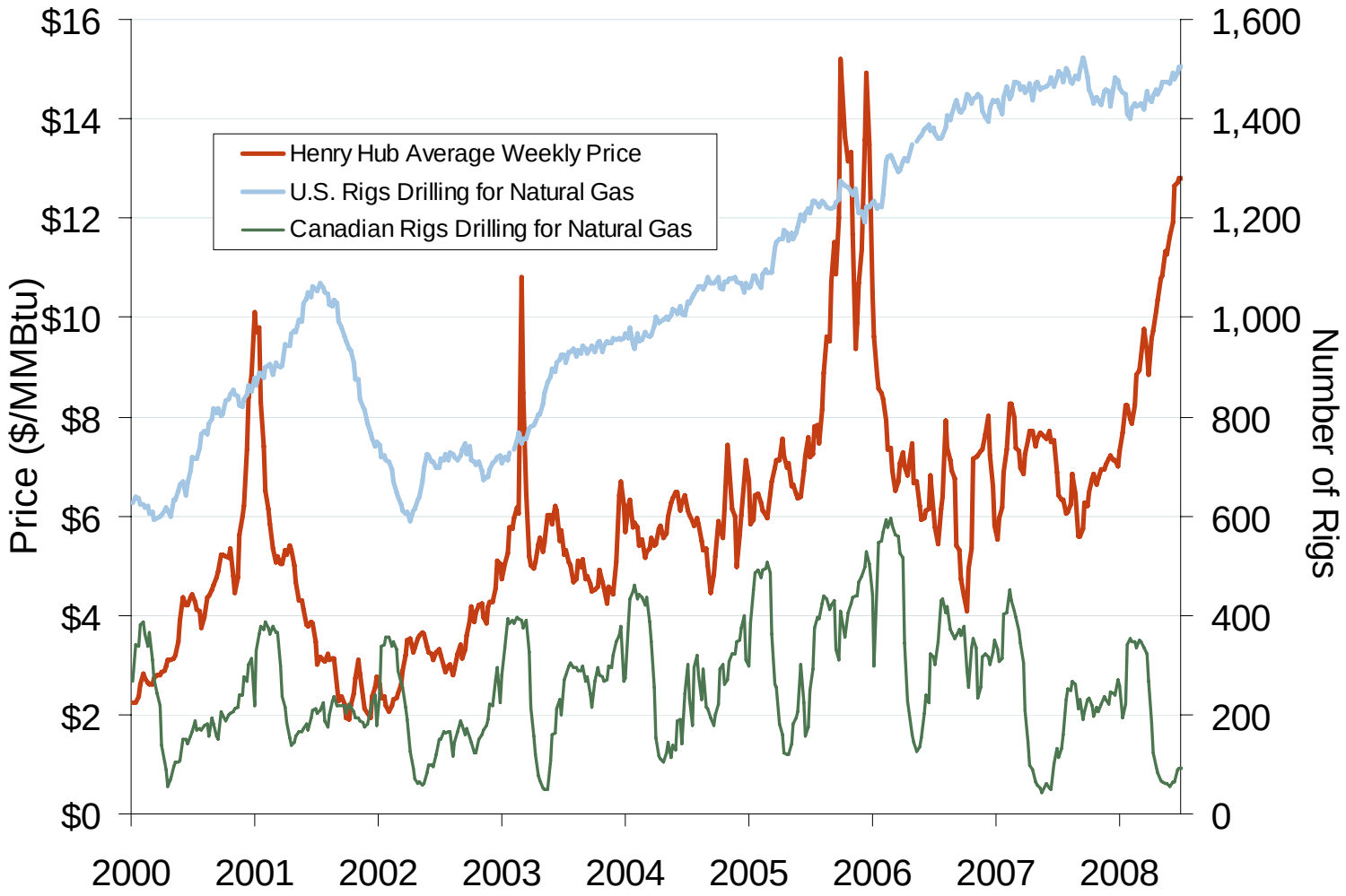
U.S. and Canadian Natural Gas Drilling Rig Count and Daily Spot Prices



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

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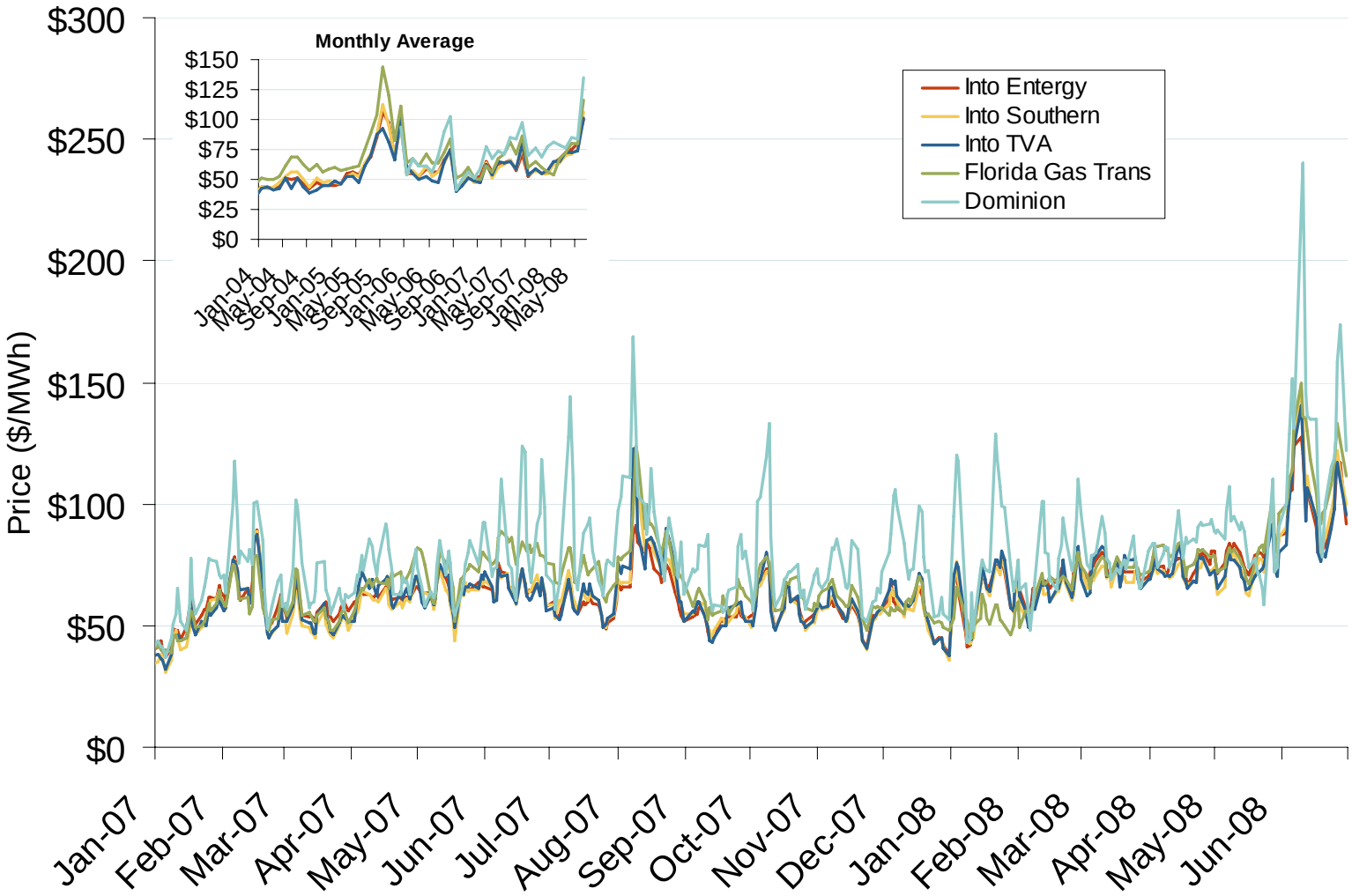
2007

Prices and Market Analysis

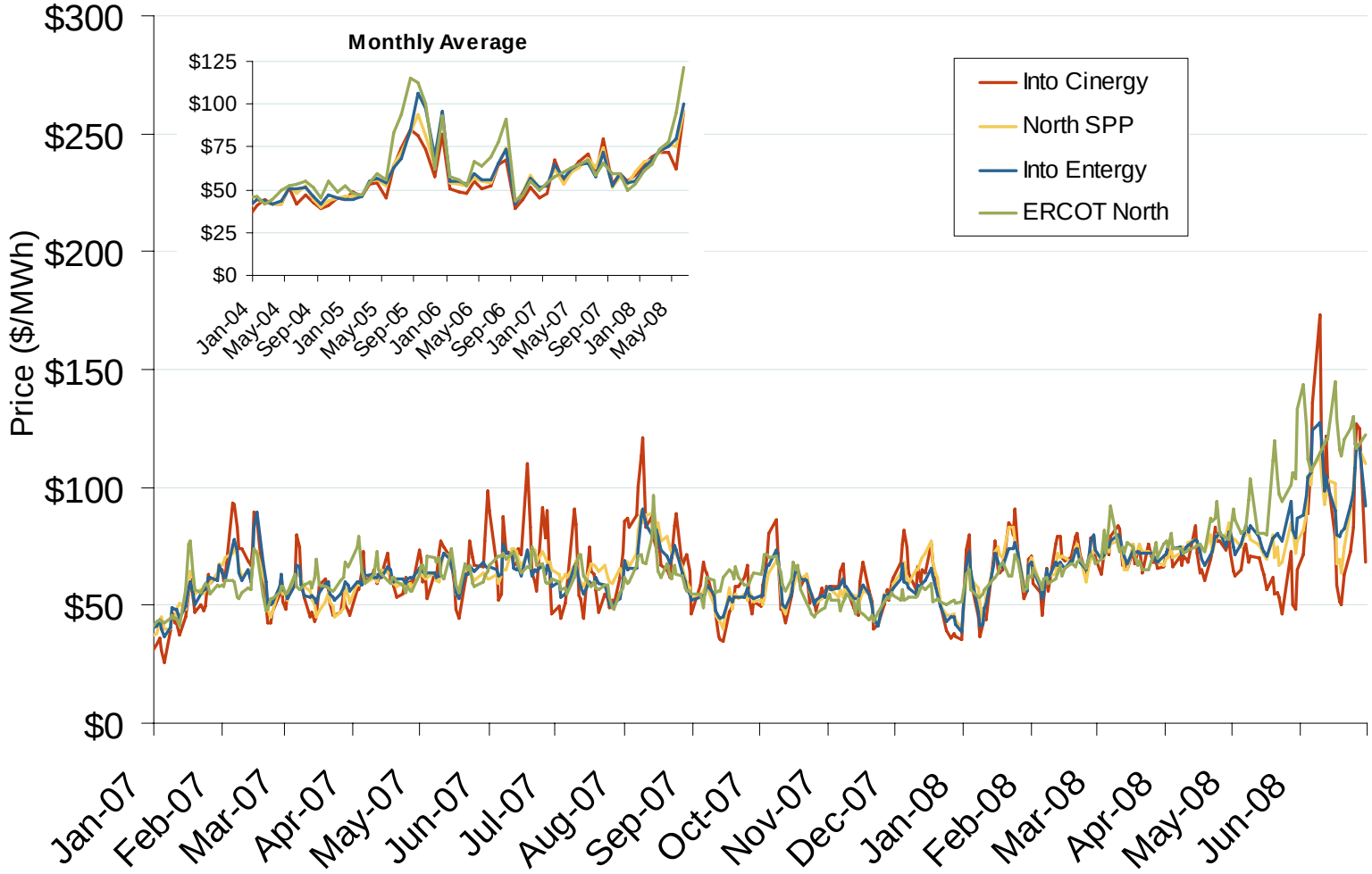
Southeastern Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from *Platts* data.

Updated July 9, 2008

Midwestern Daily Bilateral Day-Ahead On-Peak Prices



Source: Derived from *Platts* data.

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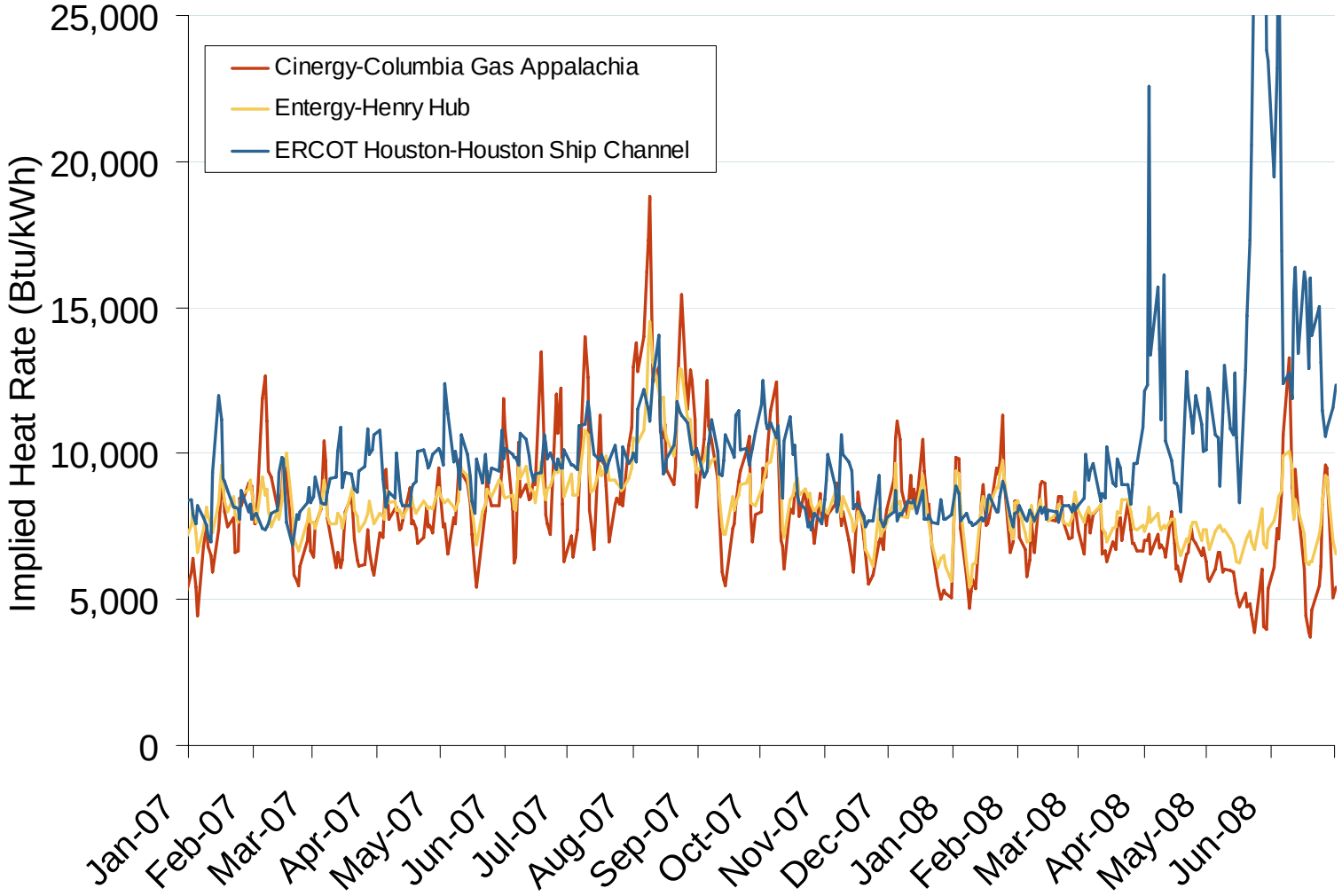
Implied Heat Rates at South Central Trading Points



Source: Derived from *Platts* data

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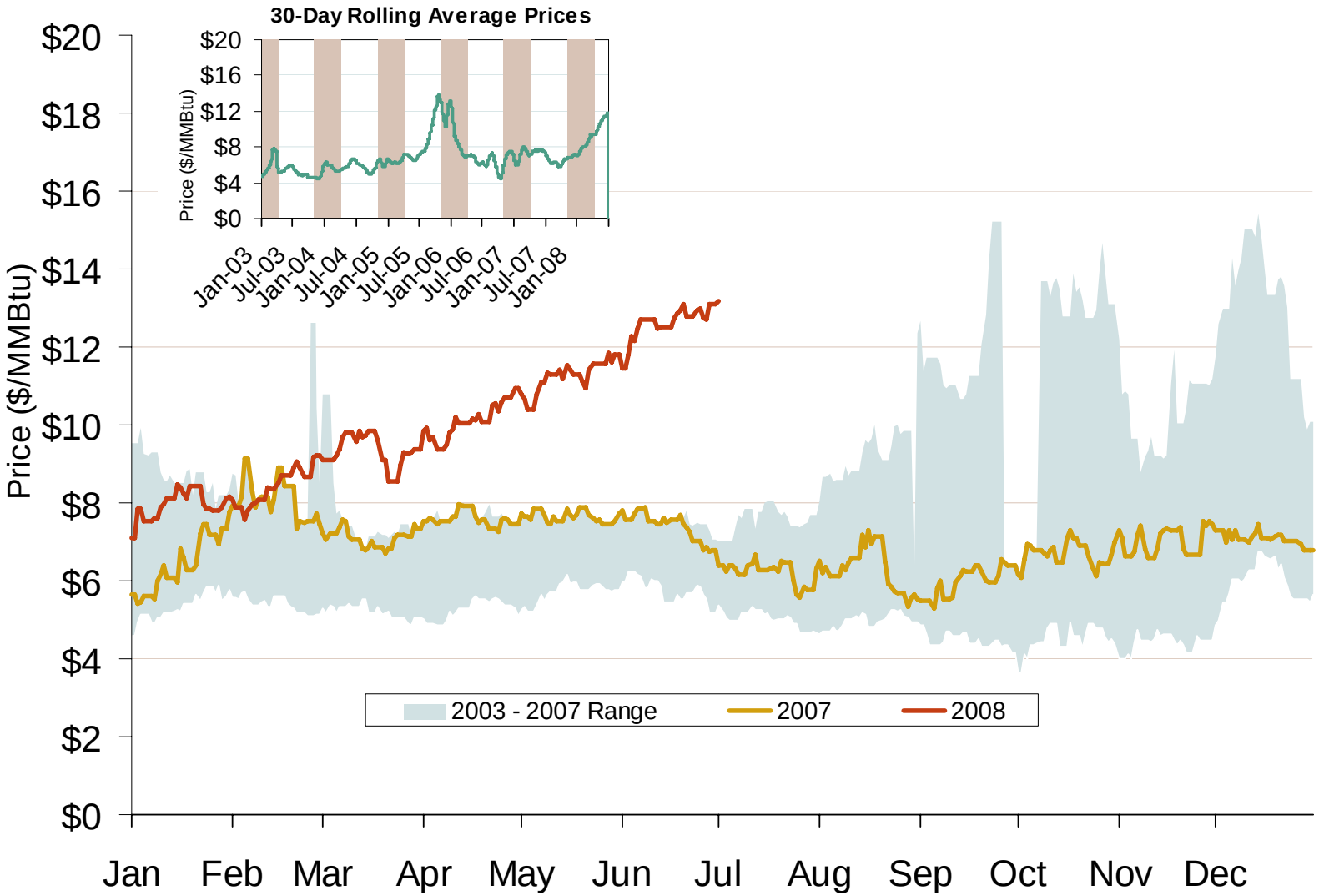
Henry Hub Natural Gas Daily Spot Prices 2007, 2008 and 2003-2007 Year Range



Source: Derived from *Platts* data.

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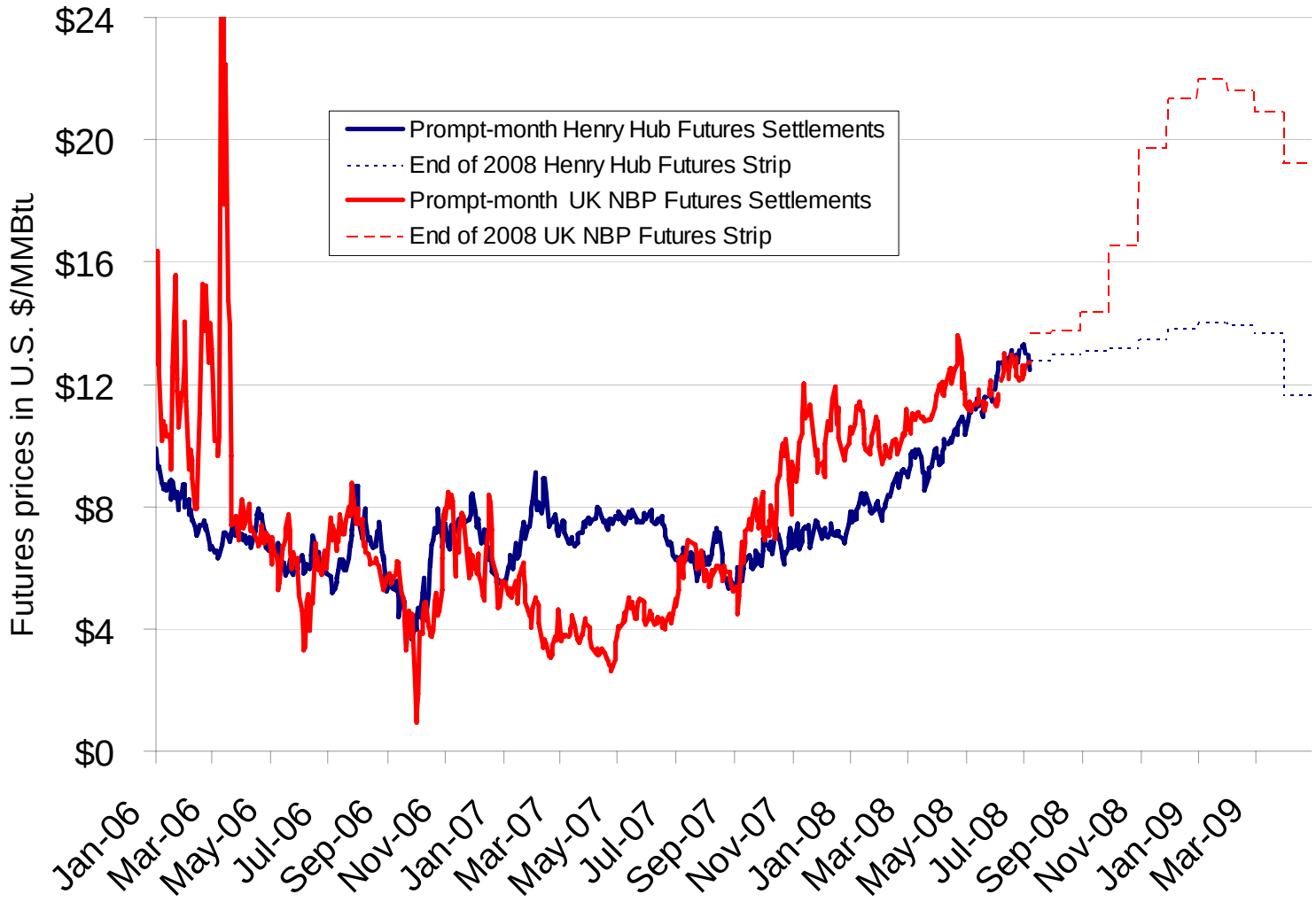
2085

US and UK Gas Futures Prices



Source: Derived from *NYMEX* and *ICE* data.

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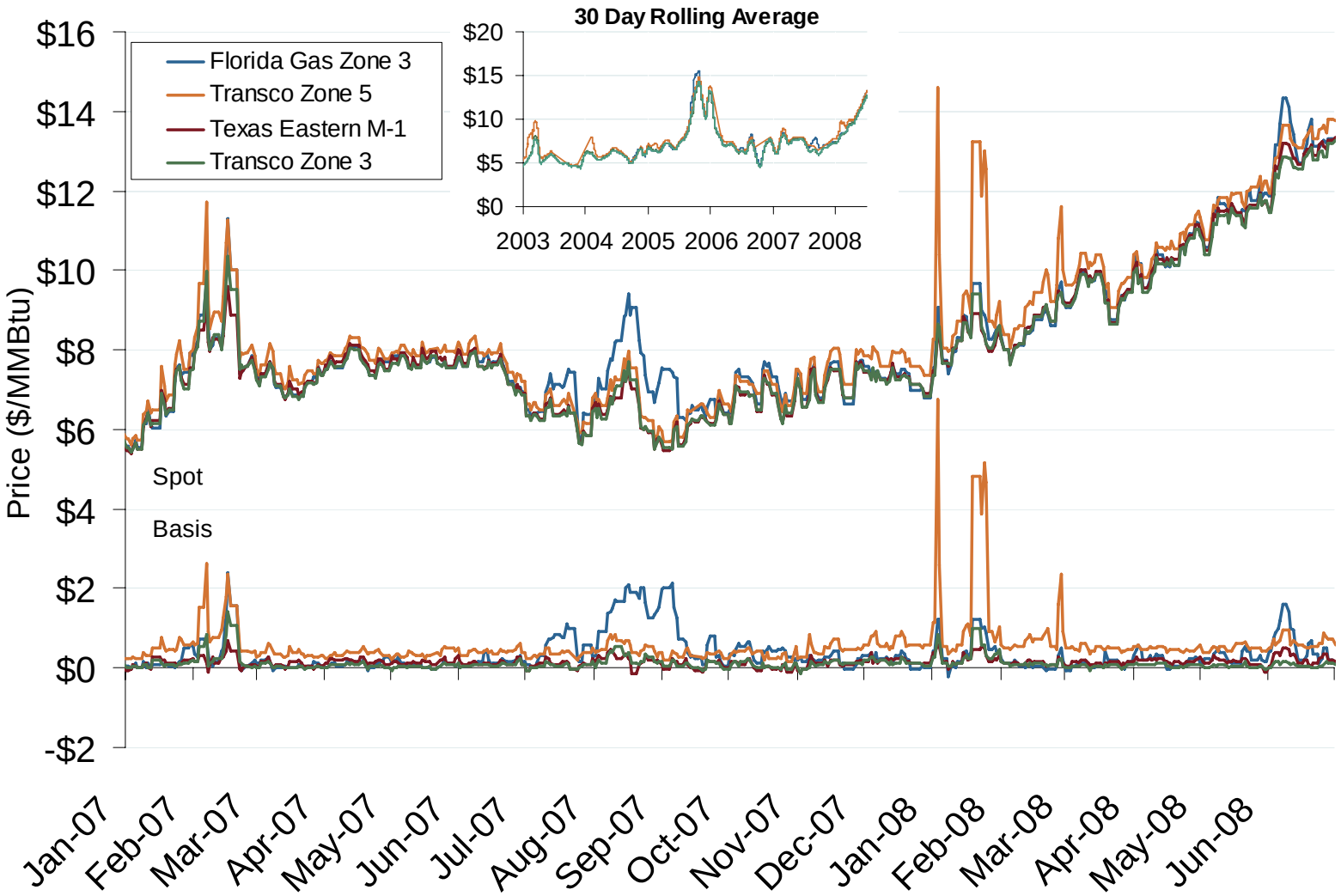
Southeastern Day-Ahead Hub Spot Prices and Basis



Source: Derived from *Platts* data.

Updated July 9, 2008

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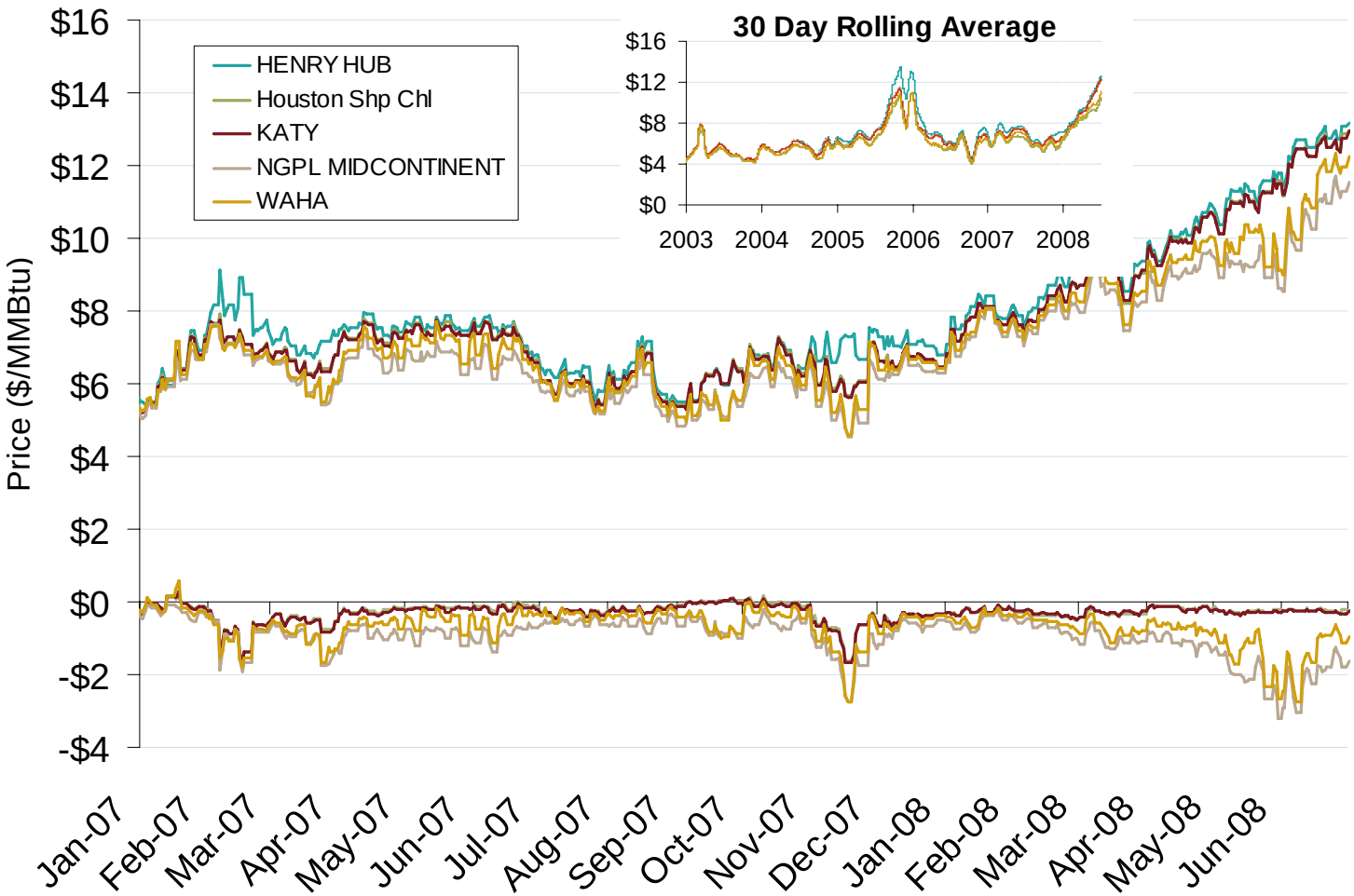
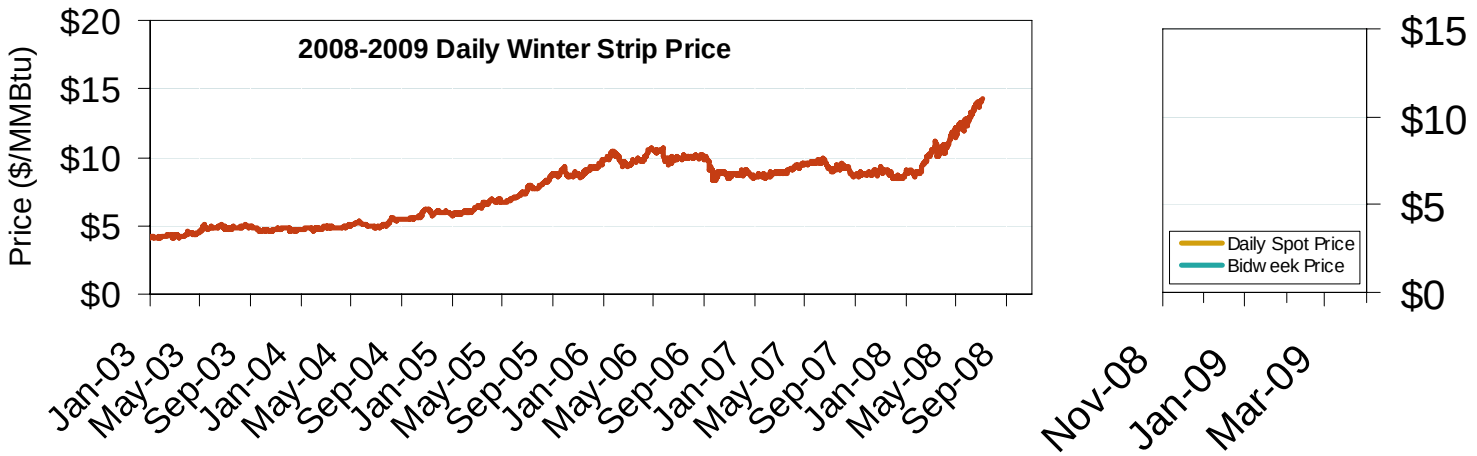
South Central Day-Ahead Hub Spot Prices and Basis

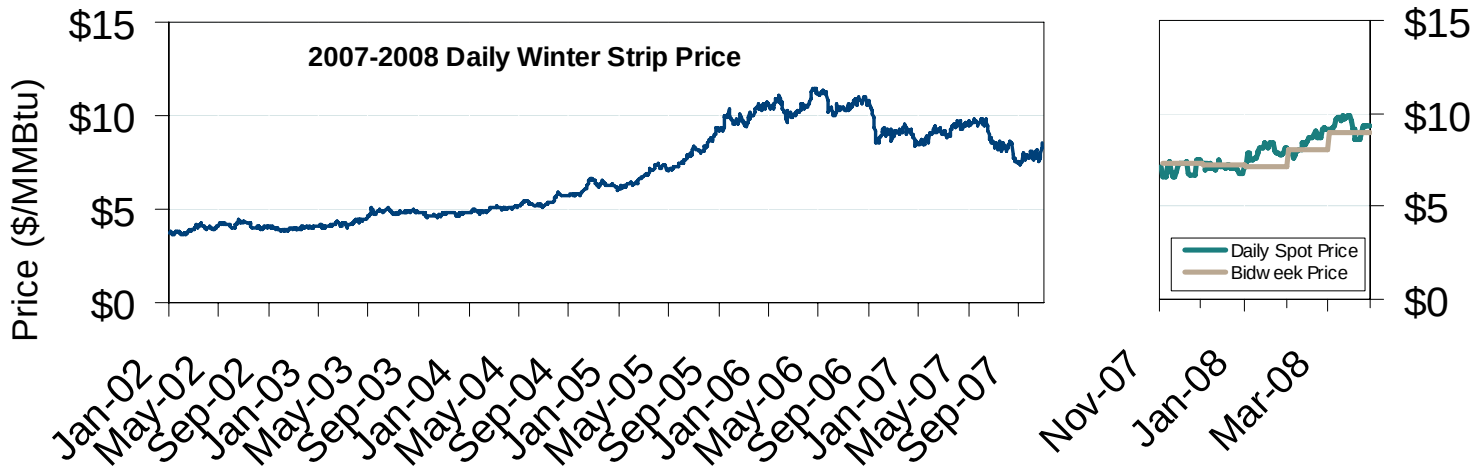


Source: Derived from *Platts* data.

Updated July 9, 2008

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





Source: Derived from *Platts* and *Nymex* data.

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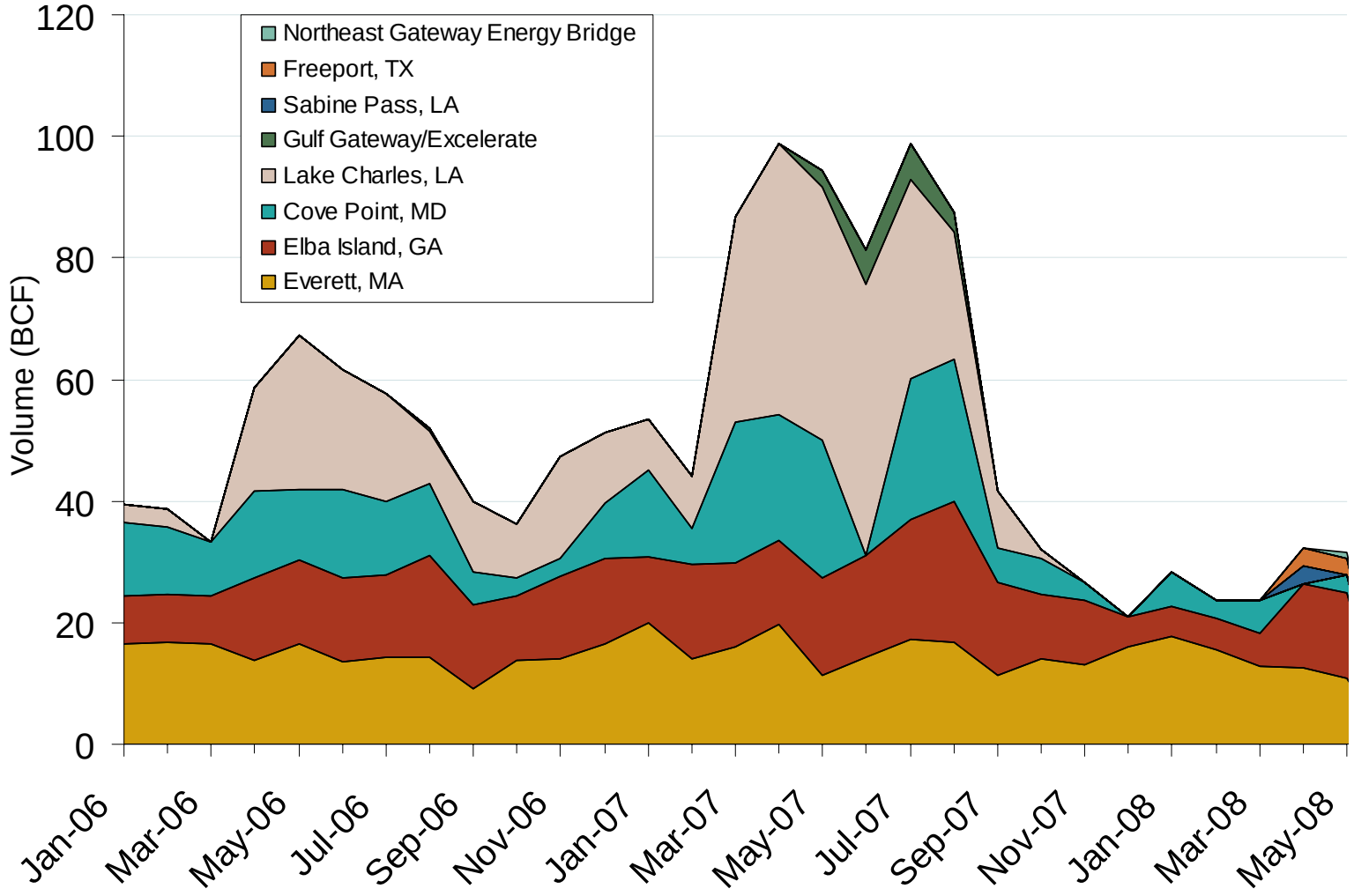
Monthly Gas Imports at Existing U.S. LNG Facilities



Source: Derived from *DOE Office of Fossil Energy* data.

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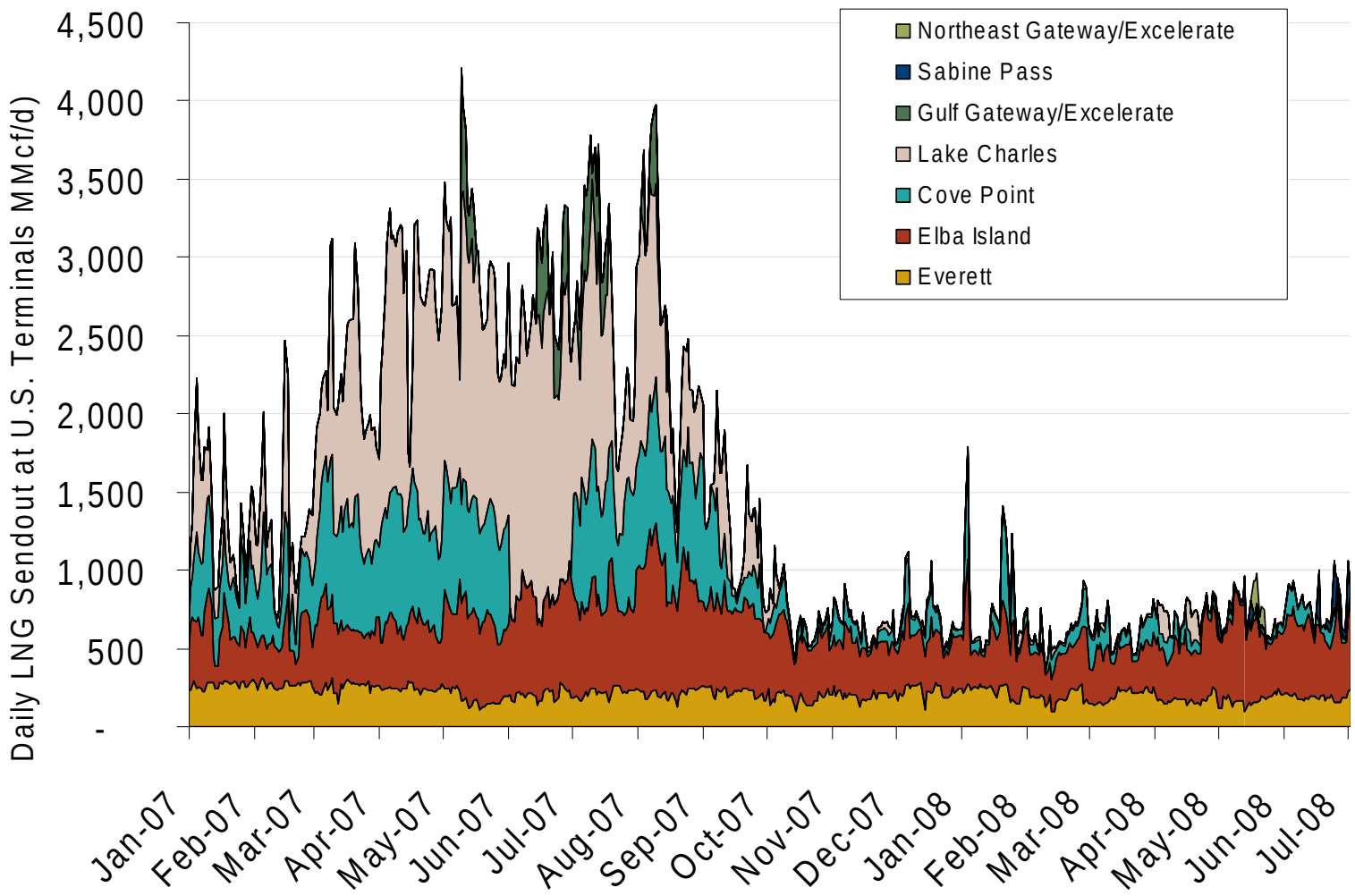
Daily Gas Sendout from Existing U.S. LNG Facilities



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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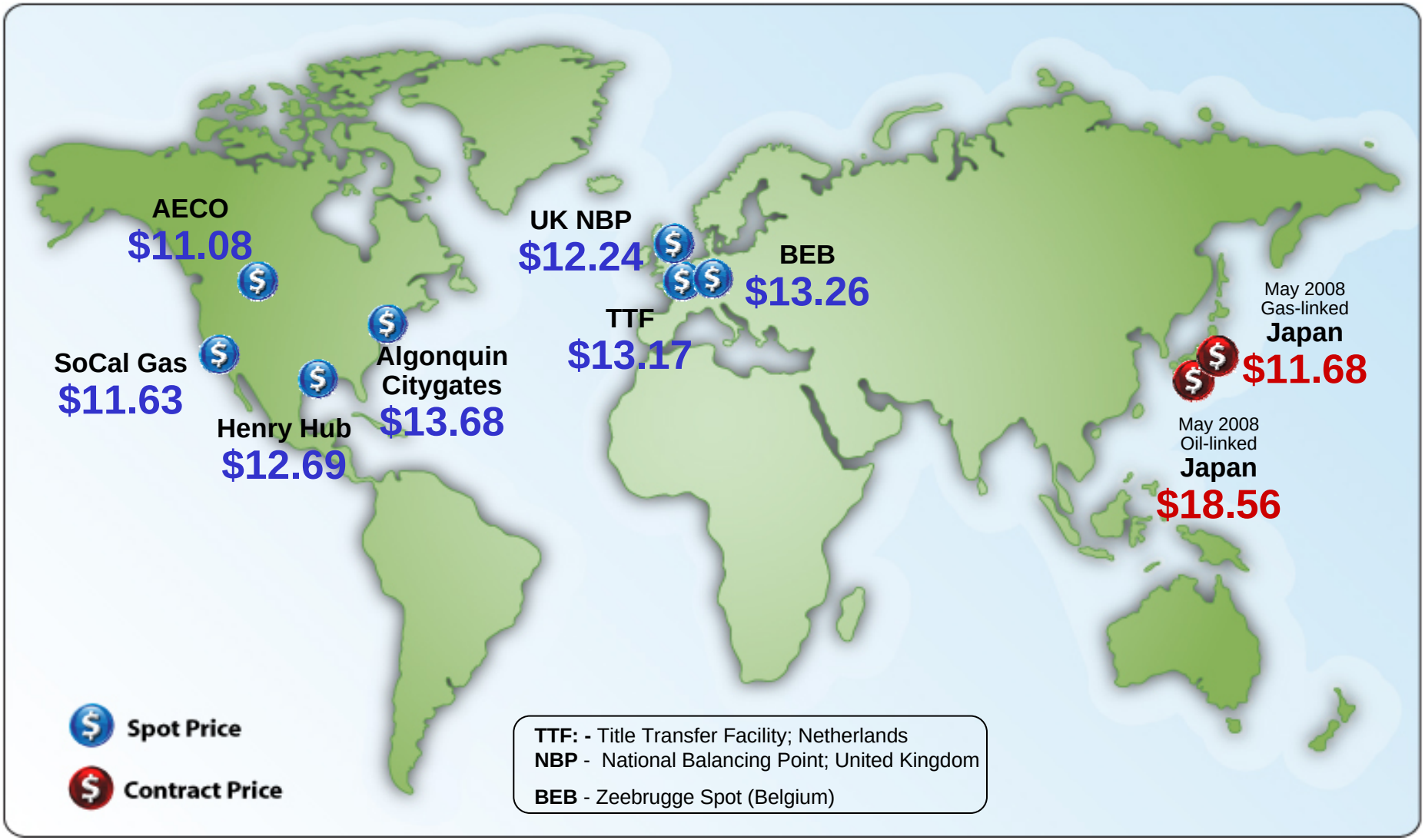
World Natural Gas Prices for June 2008



Source: Derived from *Bloomberg, ICE, ICAP and LNG Japan Corp.* data. Spot Price is a monthly average of daily prices. Contract Price is a monthly price. All prices in $US/MMBtu.

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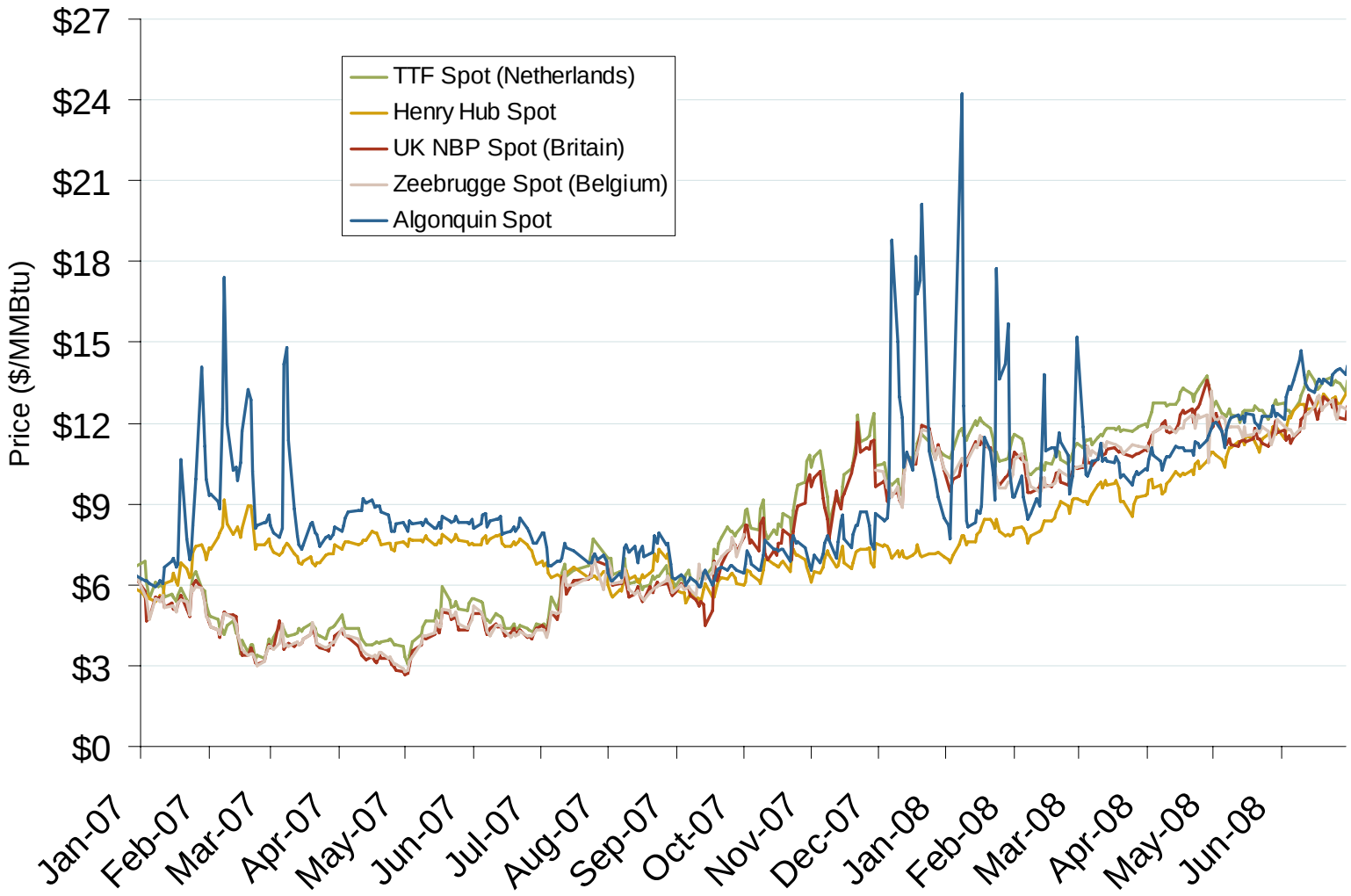
3017

Atlantic Basin European and US Spot Natural Gas Prices

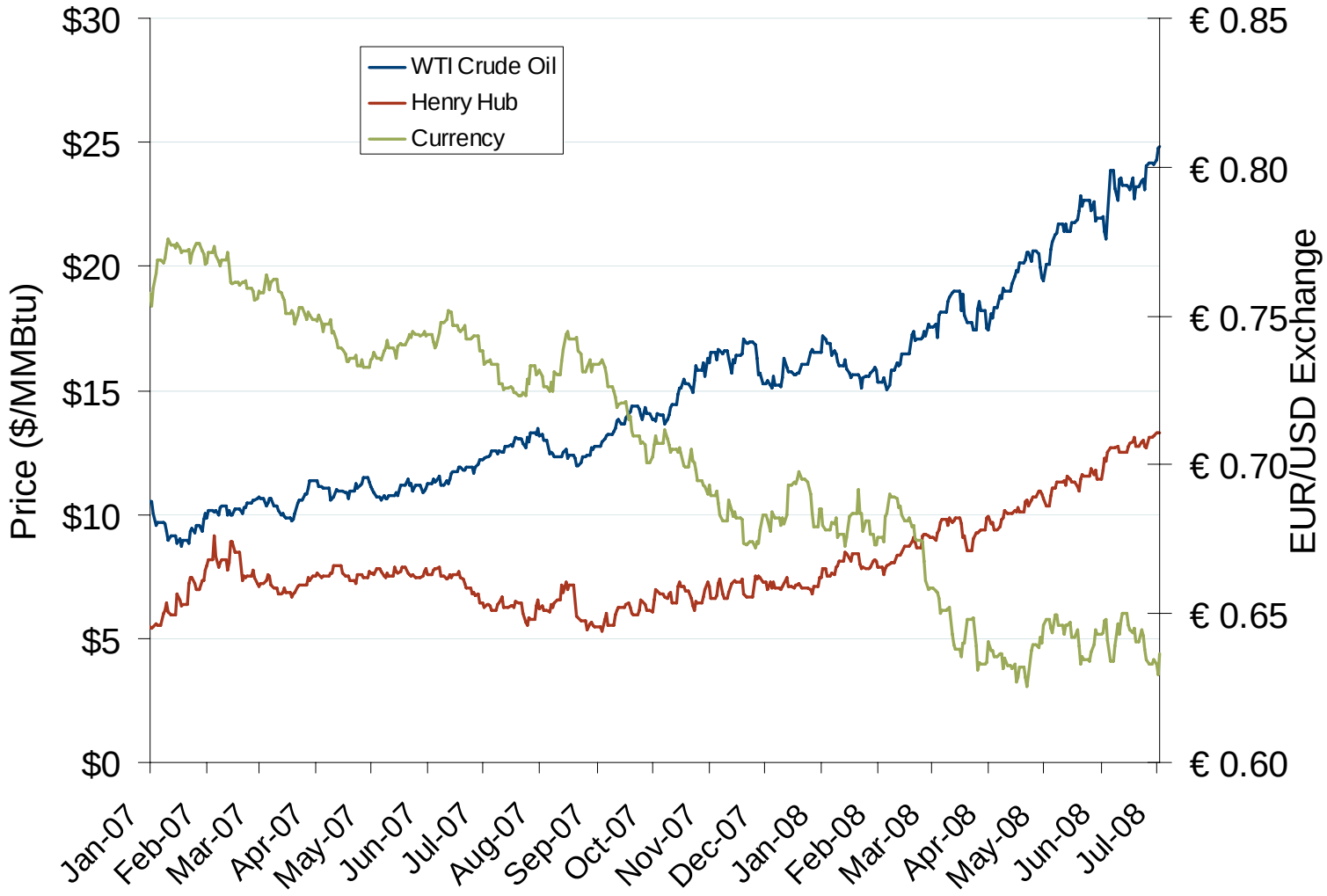


Source: Derived from *Bloomberg* and *ICE* data.

Updated July 9, 2008

3008

Oil, Natural Gas and Currency Spot Prices

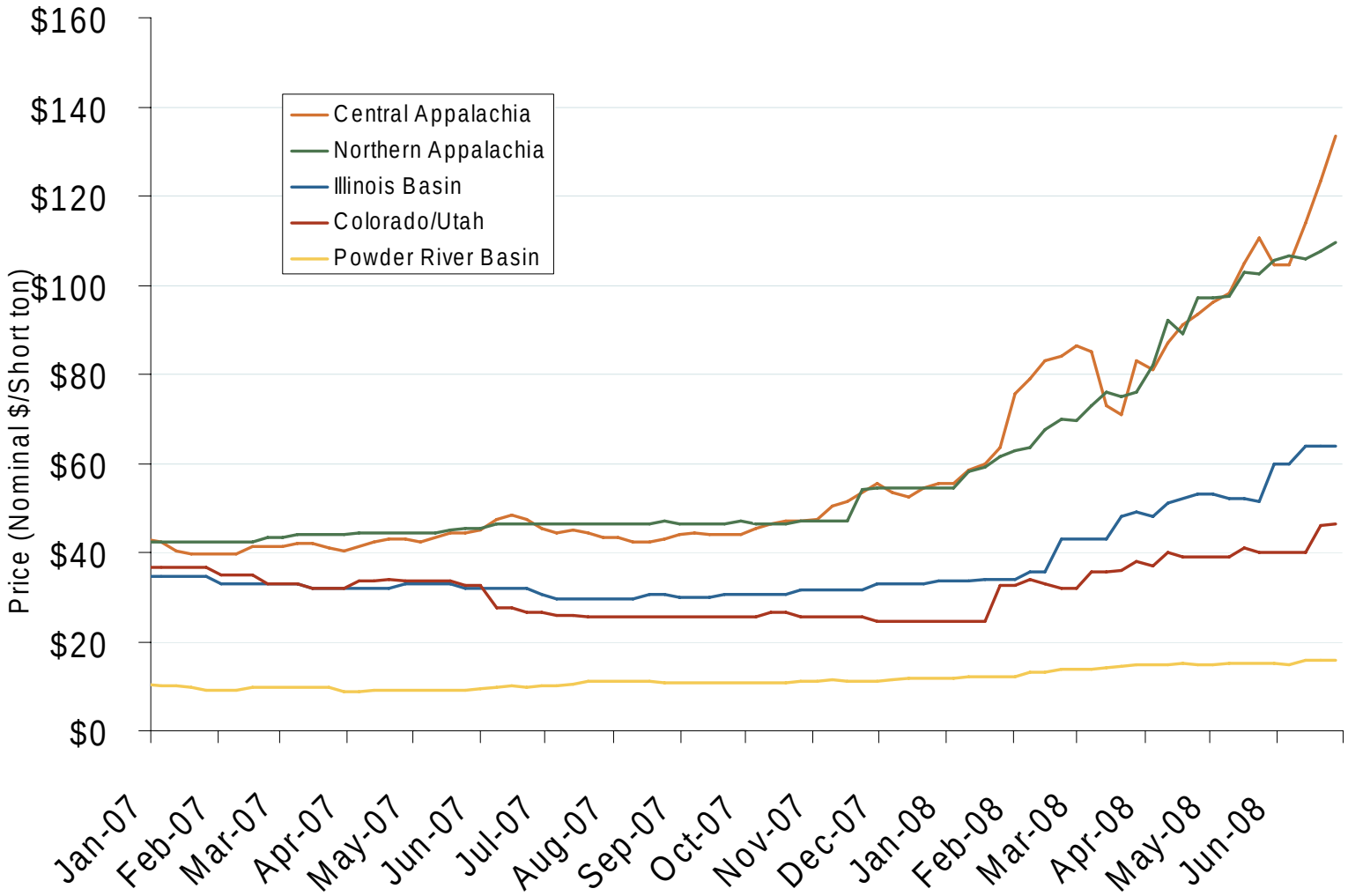


Source: Derived from *Bloomberg* data.

Updated July 9, 2008

3009

Regional Coal Spot Prices



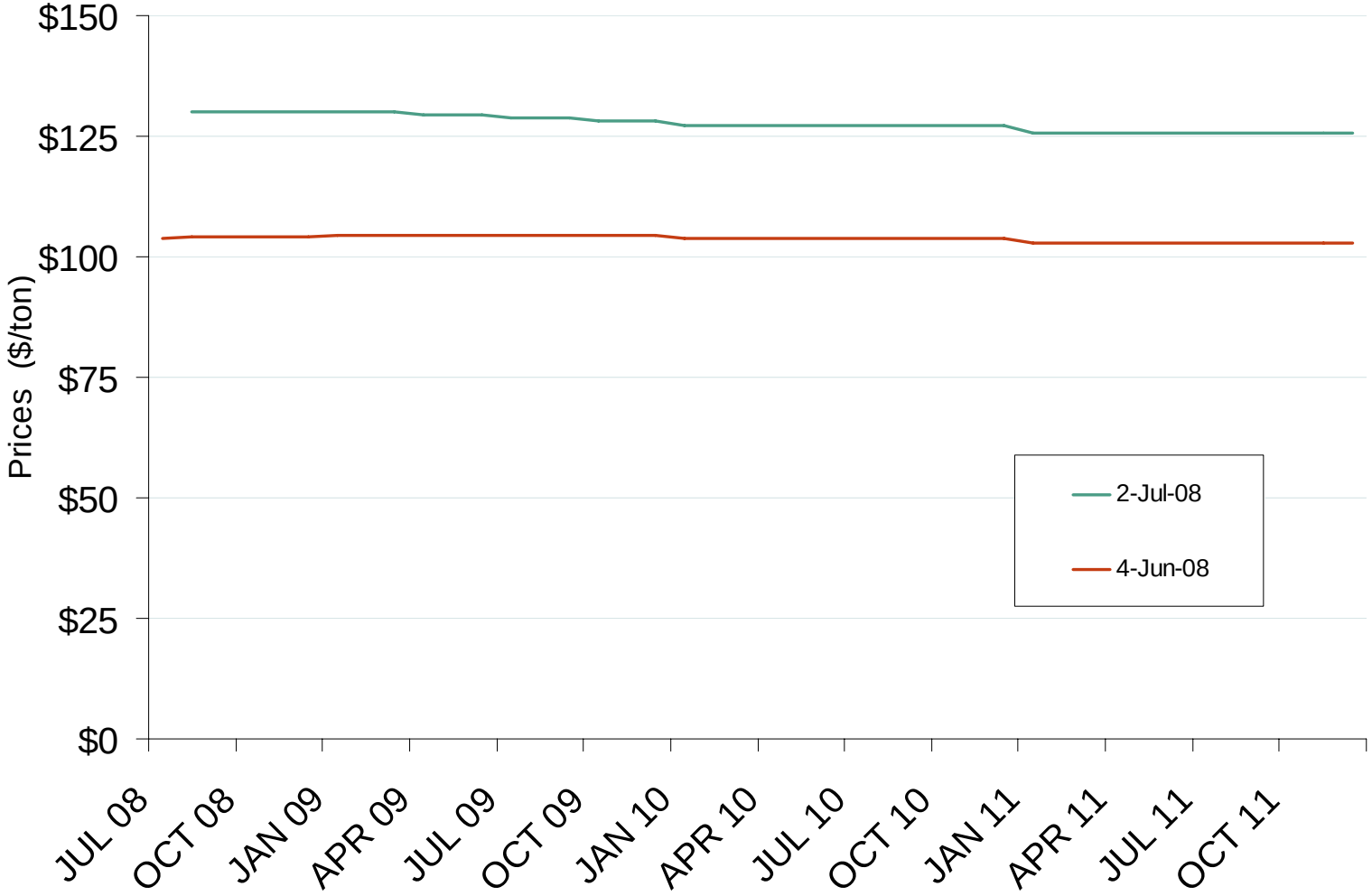
Note: Does not reflect the delivered price of coal; excludes incremental cost of emissions allowances.

Source: Derived from *Bloomberg* data.

Updated July 14, 2008

3002

Central Appalachian Coal Futures Prices



Source: Derived from *Nymex* data.

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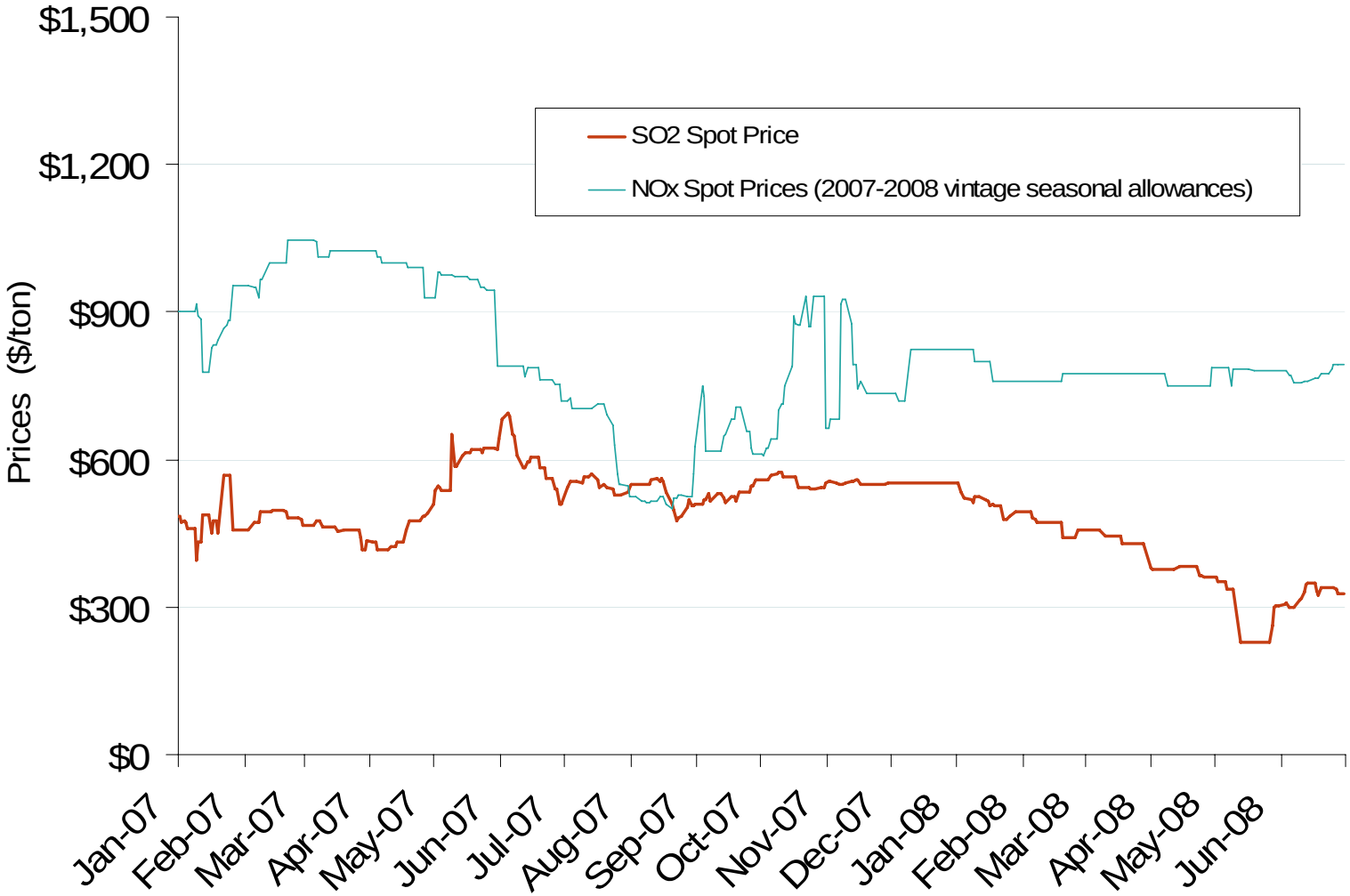
3003

SO_2 Allowance Spot Prices and NOx Seasonal Allowance Spot Prices



Source: Derived from *Cantor Fitzgerald* data.

See notes on following pages.

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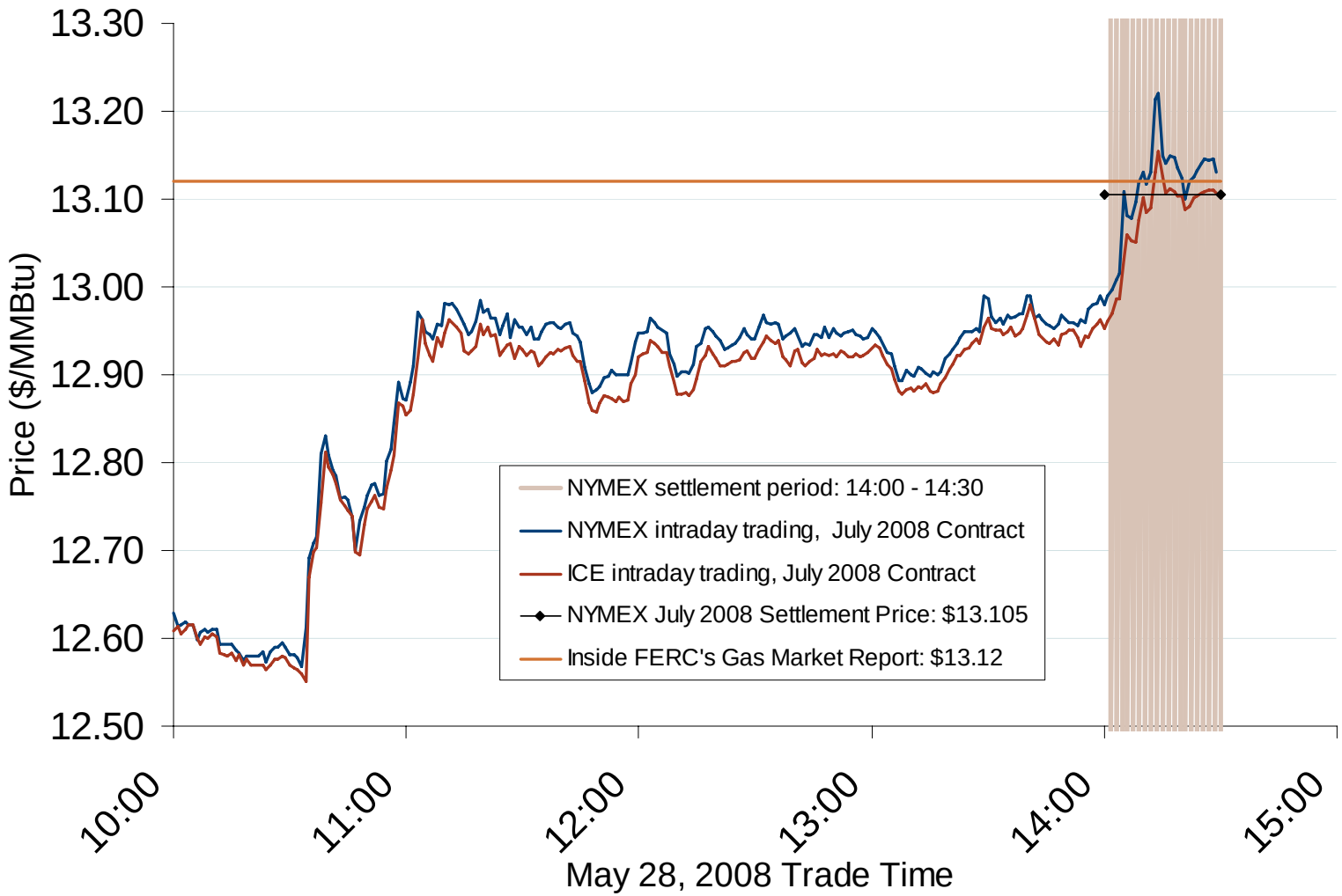
3004

July 2008
NYMEX and ICE Contract Final Settlement Day



Source: Derived from *Nymex and ICE* data.

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Renewable Energy Portfolio Standards (RPS)

WA: 15% by 2020

OR: 25% by 2025; small utilities 5-10%

CA: 20% by 2010; goal of 33% by 2020; 50% goal on Nov ballot

NV: 20% by 2015; solar 5% per year

UT: 20% by 2025

CO: 20% by 2020; co-ops & munis 10%; includes 4% solar

AZ: 15% by 2025; includes 30% DG

NM: 20% by 2020 co-ops 10%

TX: 5,880 MW by 2015; goal of 10,000 MW by 2025

HI: 20% by 2020, *and* goal of 70% RE by 2030

MT: 15% by 2015

ND: 10% by 2015

KS: 20% wind by 2020

OK: studying RPS, RE transmission, cost-recovery

MN: 25% by 2025 Xcel 30% by 2020

IA: 1,105 MW by 2011*

MO:11% by 2020; ballot initiative for mandate

AR: utilities to include RE in resource plans

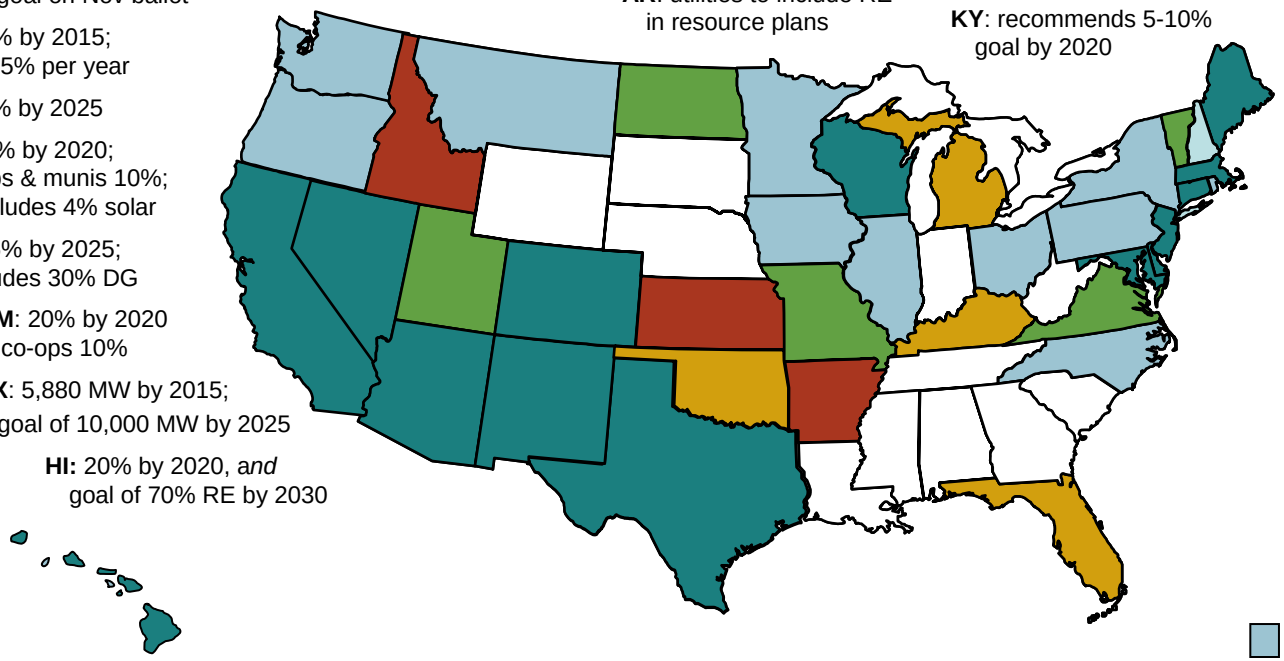
WI: 10% by 2015

IL: 25% by 2025

MI: different bills passed by House and Senate

OH: 12.5% by 2025, with 0.5% solar

KY: recommends 5-10% goal by 2020



ME: 40% by 2017

NH: 23.8% BY 2025

VT: 25% by 2025

MA: doubles RPS - 15% by 2020; goal of 250 MW solar by 2017

RI: 16% by 2019

CT:23% Class I/II by 2020 4% Class III by 2010

NY: 24% by 2013

PA: 8% Tier I, 10% Tier II by 2020; solar set-aside

NJ: 22.5% by 2020, with 2% solar

DE: 20% by 2019, with 2% solar

DC: doubles RPS - 20% by 2020; no less than 0.4% solar

MD: 20% by 2022, with 2% solar

VA: 12% by 2022

NC: 12.5% by 2021 co-ops & munis: 10% by 2018

FL: law directs PSC to write RPS regulations

- RPS
- Strengthened/ amended RPS
- Voluntary standards or goals
- Proposed RPS or studying RPS
- Other renewable energy goal

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

Notes: Alaska has no RPS; DG is distributed generation; * Iowa has a goal of 1,000 MW of wind by 2010
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.

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Energy Efficiency Resource Standards (EERS)

ID: evaluating DR, EE, and RE as priority resources

MT: state agency reduction initiative: save 20% by 2010

MN: reduce fossil fuel use 15% by 2015 through EE, RE

IA: utilities must establish EE goals by end of 2008

WI: RPS requires utility EE

MI: legislation before Senate: incremental savings increasing from 2009 to 2012

IL: reduce energy 2% by 2015 (EE) and 0.1% from prior year (DR)

OH: reduce peak-demand 8% by 2018; effect energy savings of 22% by 2025

ME: 10% new EE by 2017; in RPS goal as 2nd priority

VT EE & RE to meet 2007-12 growth; new EE fund

MA: pending bill - acquire all cost-effective resources

NY: 15% electric use reduction by 2015

CT: 4% savings by 2010, and a Tier III RPS resource

PA: pending bills -- EE savings of 2.5% by '13; new EE fund

NJ: reduce energy consumption 20% by 2020 using EE, DR, CHP; reduce peak 5,700 MW by 2020

MD: reduce peak-demand and per cap electricity use 15% by 2015

DE: promote EE and conservation by a Sustainable Energy Utility

VA: reduce 10% of 2006 sales by 2022 with EE, DR

NC: EE to meet up to 25% of RPS to 2011; later to 40%

TVA: encourages customers to save 1200 MW per day 2008-2012

FL: Law directs PSC to adopt goals to reduce electric consumption and peak demand by EE and DR

WA: must pursue all cost-effective conservation

CA: IOUs reduce MW 10%, peak demand (MWh) 12% by 2013; munis 10% by 2017

NV: use EE for up to 25% of RPS by 2015

UT: EE incentives in RPS goal

CO: save 40 MW and 100 GWh annually to 2013

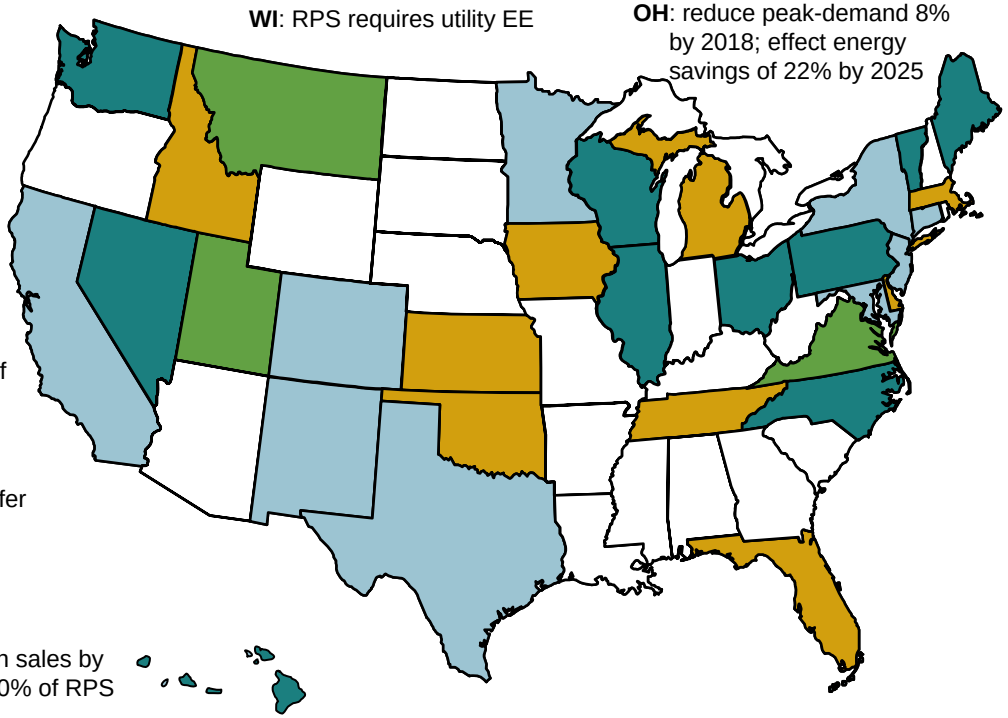
NM: use EE and DR to save 10% of 2005 retail electric sales by 2020

KS: studying for E&G utilities

OK: implement DSM and EE to defer or avoid new plant construction

TX: 10% of load growth, beyond 2004, based on prior 5 years

HI: 20% of MWh sales by 2020; up to 50% of RPS



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

- EERS by regulation or law (separate from RPS)
- Energy efficiency part of an RPS rule or goal
- Voluntary standards (in or out of RPS)
- Energy efficiency goal proposed / being studied

Abbreviations: CHP – Combined heat & power; DR - demand response; DSM - demand side management; EE - energy efficiency; E&G: electric and gas utilities; RPS: Renewable Portfolio Standard

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

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