Page 1 of 33

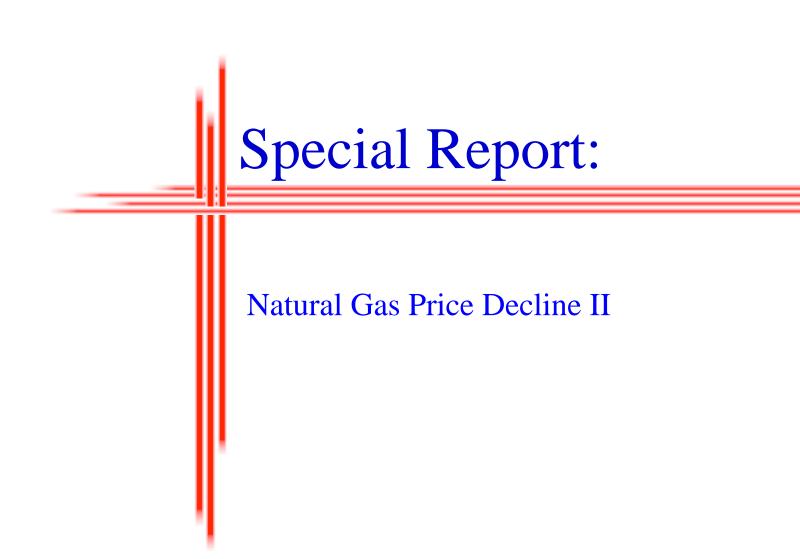
Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

# OE ENERGY MARKET SNAPSHOT

Mid-Atlantic States Version – August 2008 Data

- Special Report
- Market Fundamentals
- Prices and Market Analysis

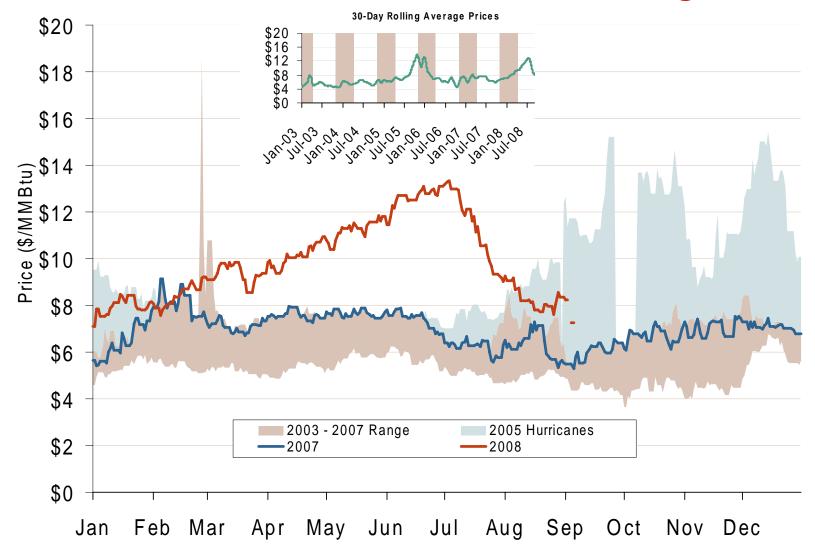
Office of Enforcement Federal Energy Regulatory Commission September 2008



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

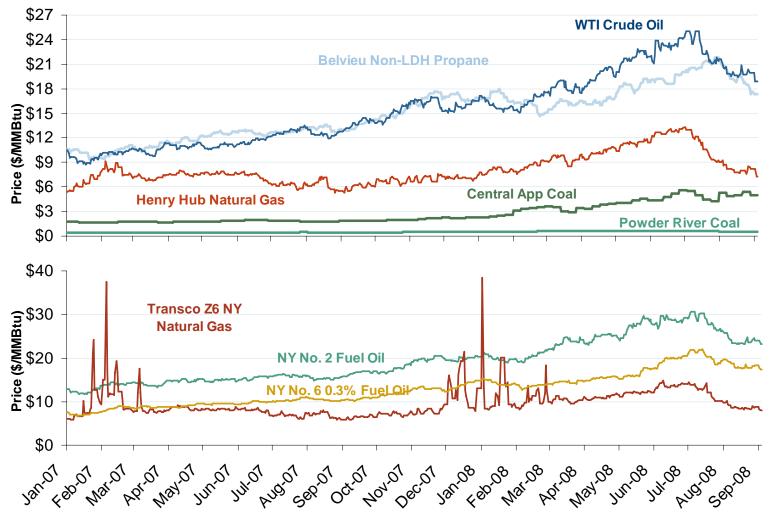
Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

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



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

#### **Oil, Coal, Natural Gas and Propane Daily Spot Prices**

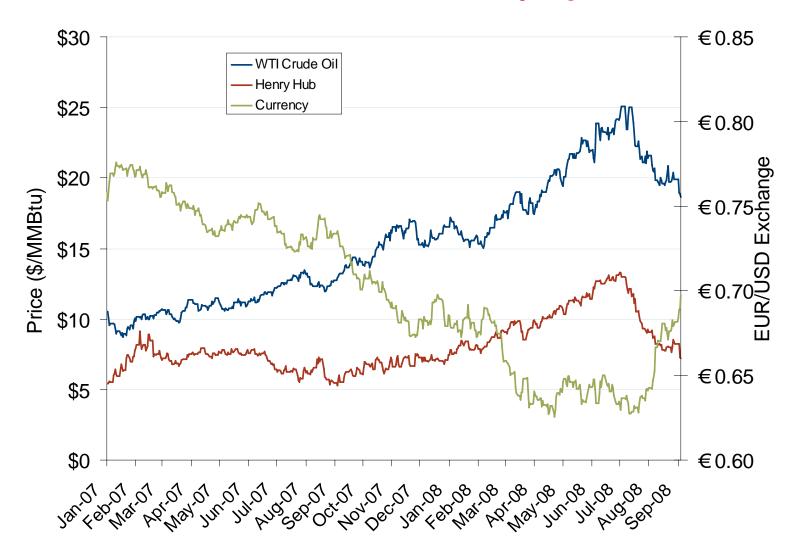


Source: Derived from ICE and Bloomberg data.

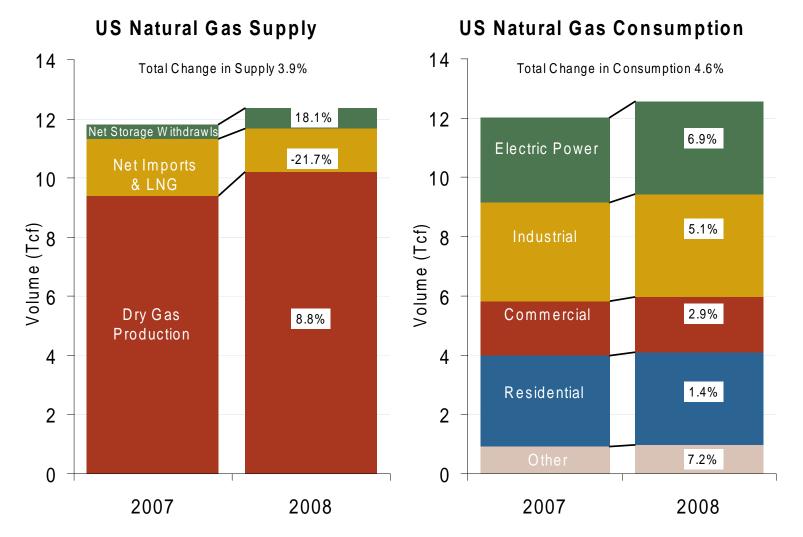
Note: Coal prices are quoted in \$/ton. Conversion factors to \$/MMBtu are based on contract specifications of 12,000 btus/pound for Central Appalachian coal and 8800 btus/pound for Powder River Basin coal.

September 2008 Mid-Atlantic Snapshot Report

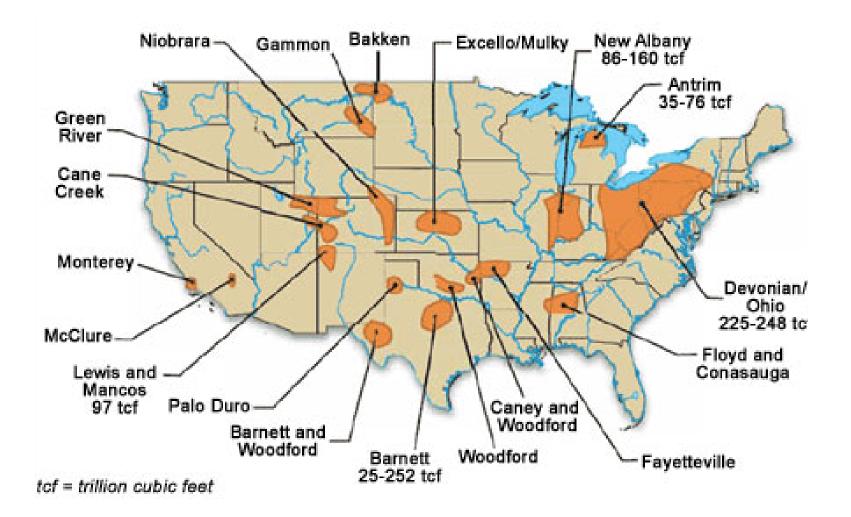
#### **Oil, Natural Gas and Currency Spot Prices**



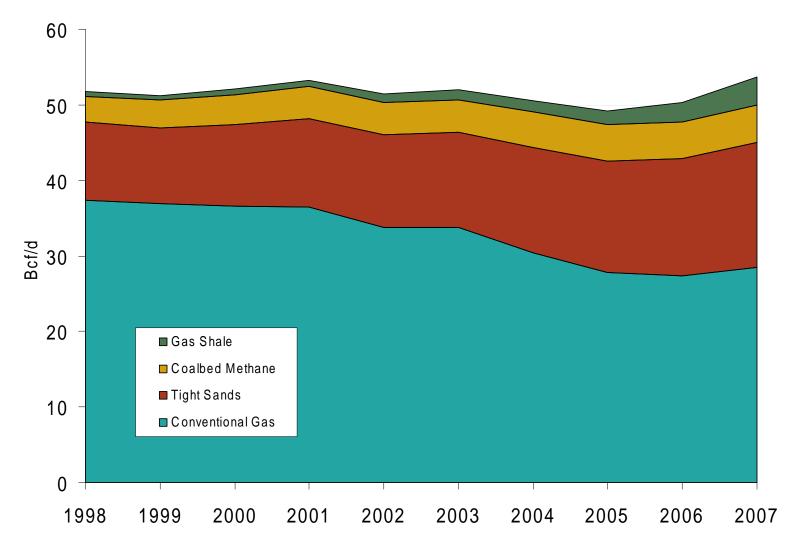
# U.S. Natural Gas Supply and Consumption Jan-Jun



# **Major US Shale Basins**

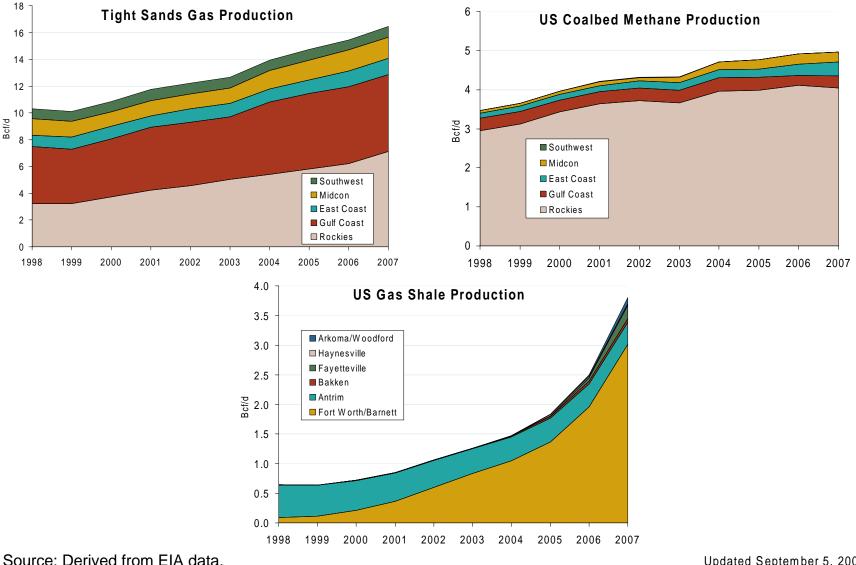


### **US Natural Gas Production**



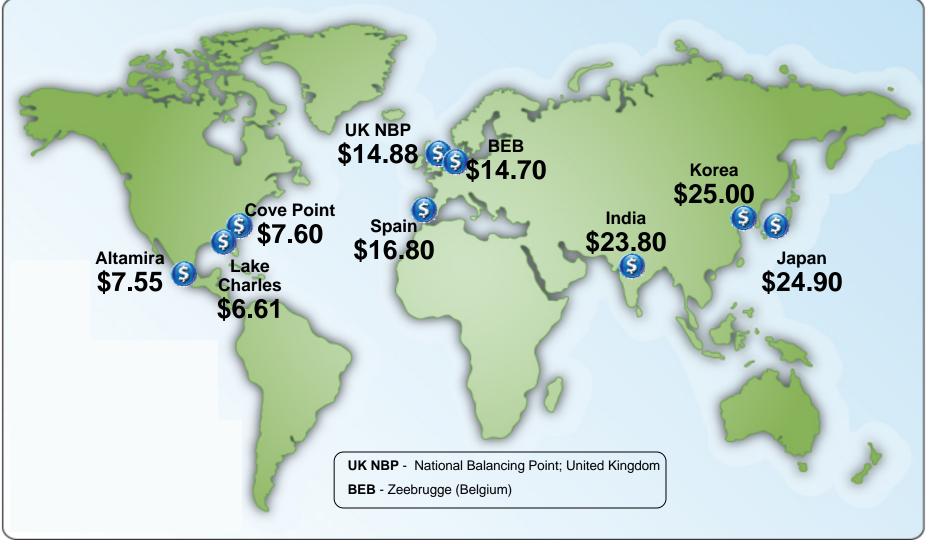
Source: Derived from EIA data. September 2008 Mid-Atlantic Snapshot Report

#### **"Unconventional" Natural Gas Production**



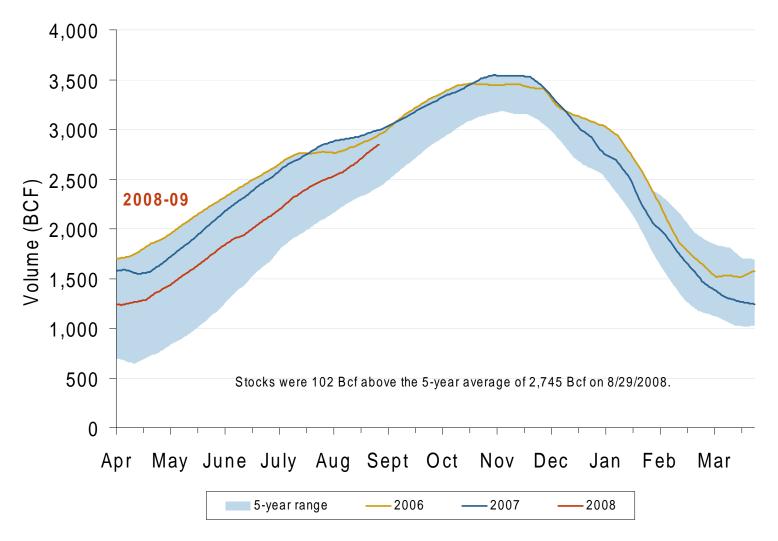
September 2008 Mid-Atlantic Snapshot Report

## **World LNG Landed Price Estimates for October 2008**

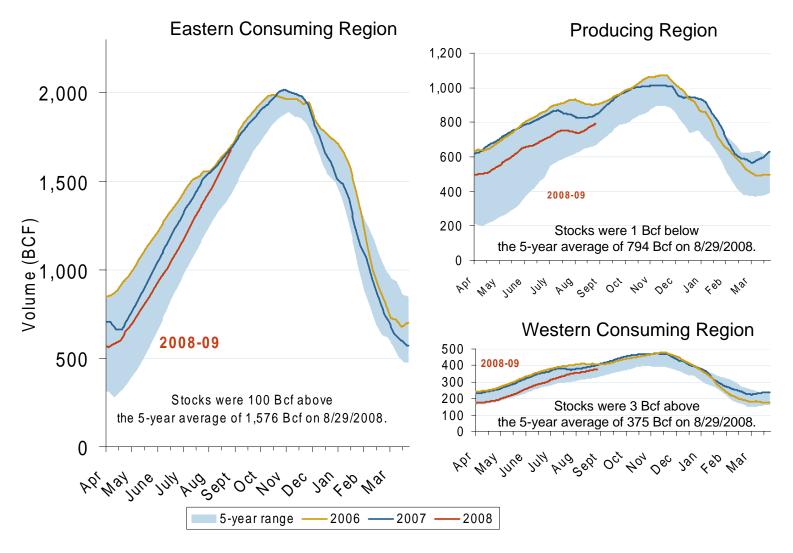


Source: *Waterborne Energy, Inc.* data in \$US/MMBtu.

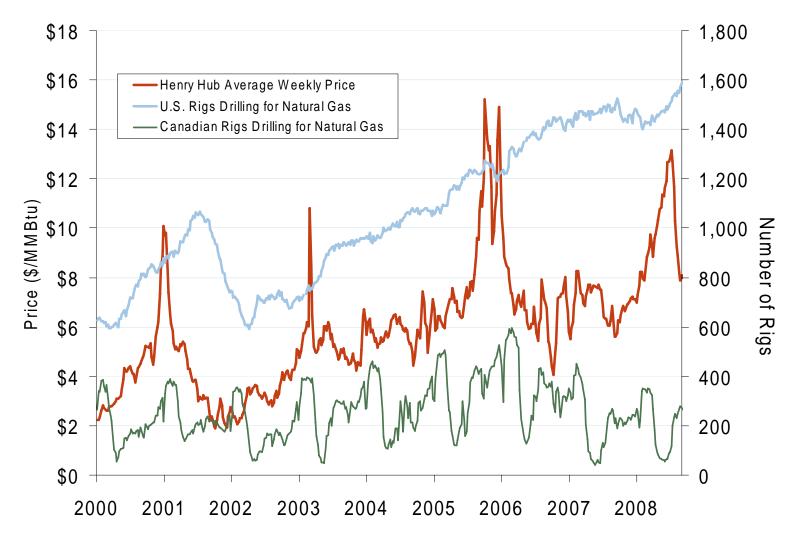
## **Total U.S. Working Gas in Storage**



#### **Regional Totals of Working Gas in Storage**

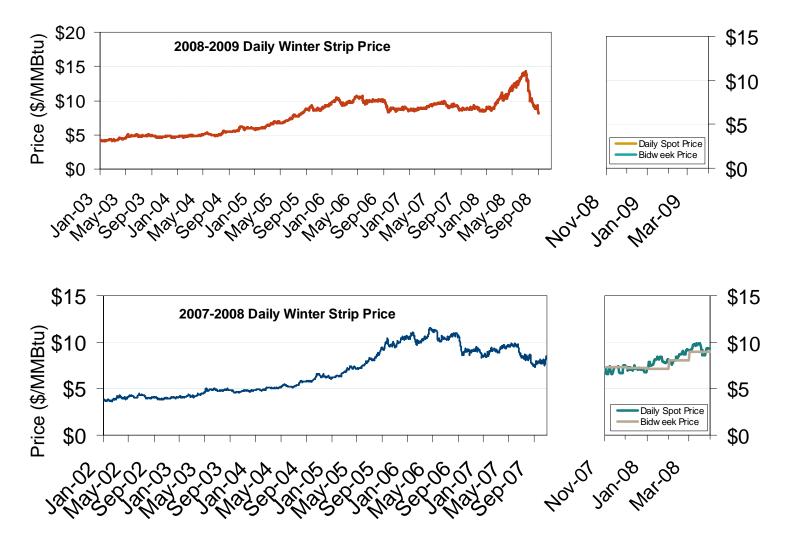


# U.S. and Canadian Natural Gas Drilling Rig Count and Daily Spot Prices



Source: Derived from *Platts* and *Baker Hughes* data. September 2008 Mid-Atlantic Snapshot Report

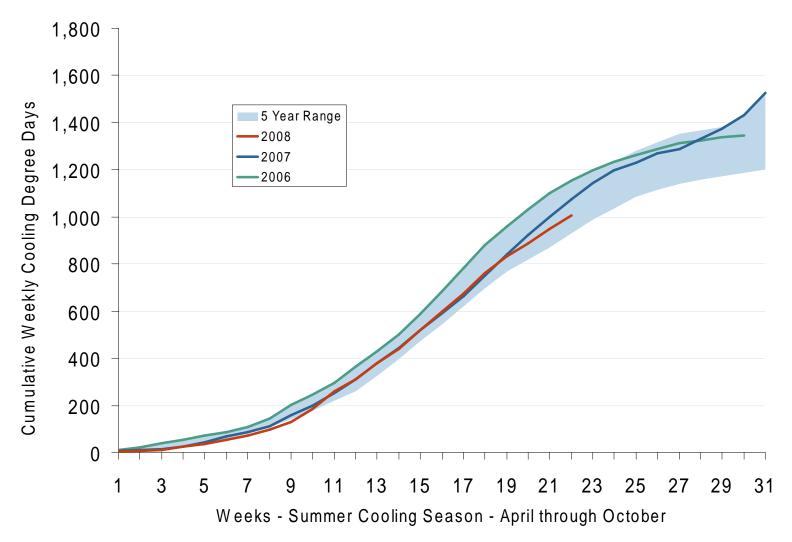
# Natural Gas Winter Futures Strip and Daily Henry Hub Spot and Bidweek Prices



Source: Derived from *Platts* and *Nymex* data. September 2008 Mid-Atlantic Snapshot Report

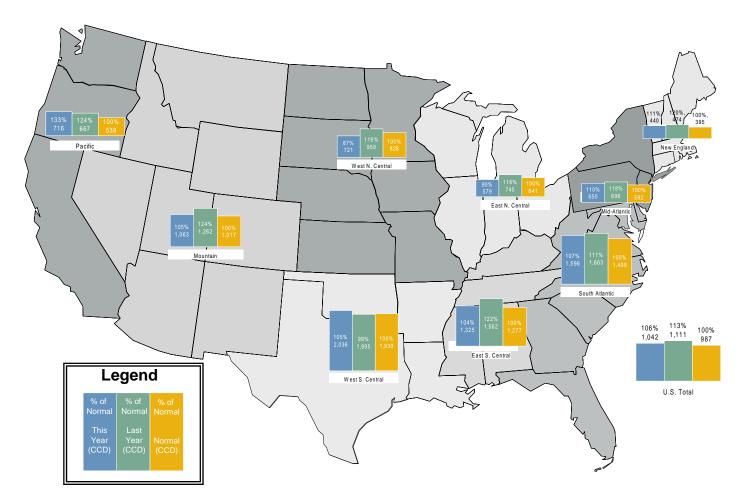
# Market Fundamentals

# **U. S. Summer Cumulative Cooling Degree Days**



Source: Derived from NOAA data.

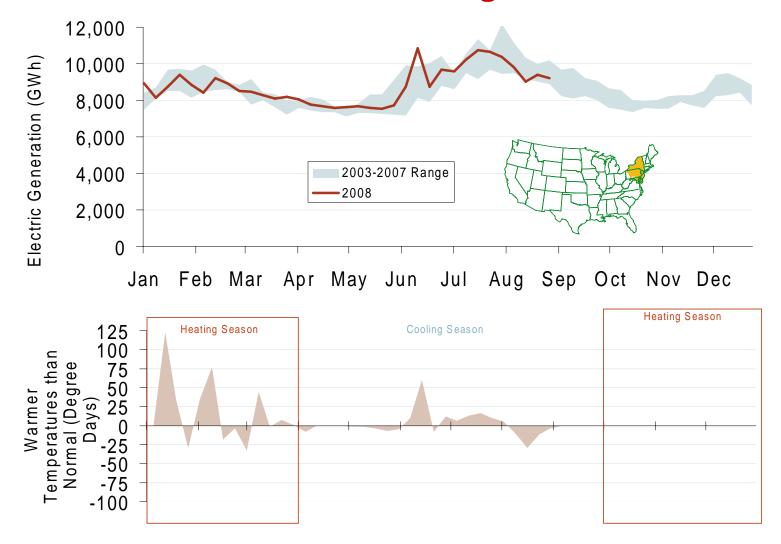
# Regional Cooling Degree Days 2008 Through August



#### **PJM Electric Market: Generation Output and Temperatures**

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

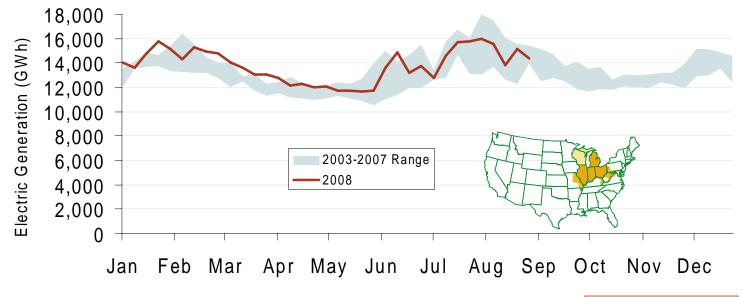
### Weekly Electric Generation Output and Temperatures Mid Atlantic Region

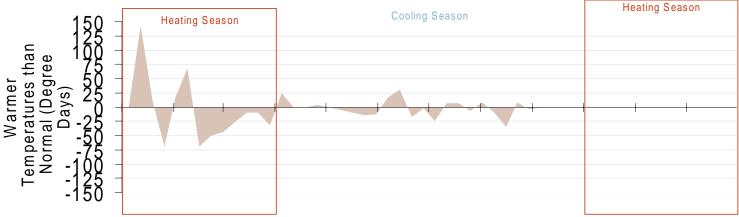


#### **PJM Electric Market: Generation Output and Temperatures**

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

#### Weekly Electric Generation Output and Temperatures Central Industrial Region

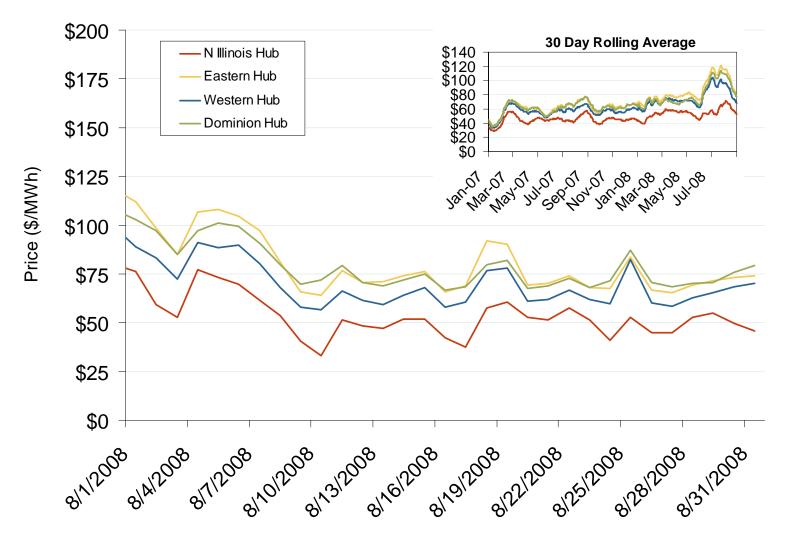




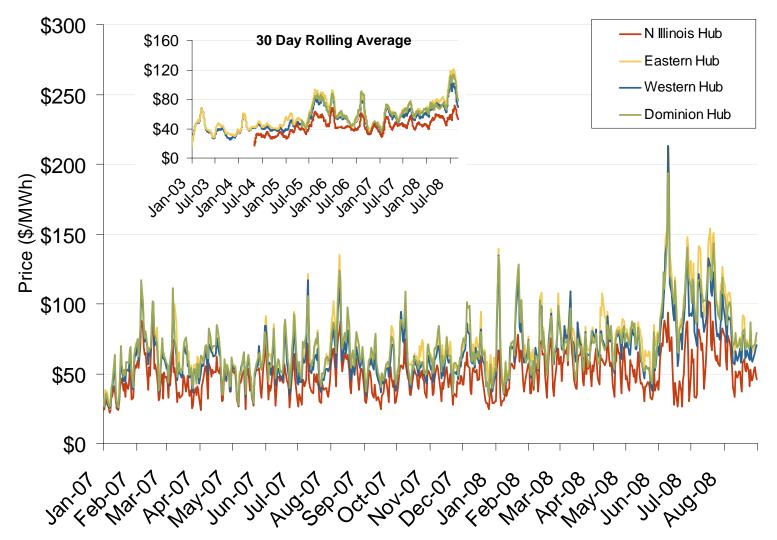
# Prices and Market Analysis

- Electric
- Natural Gas
- Other Markets

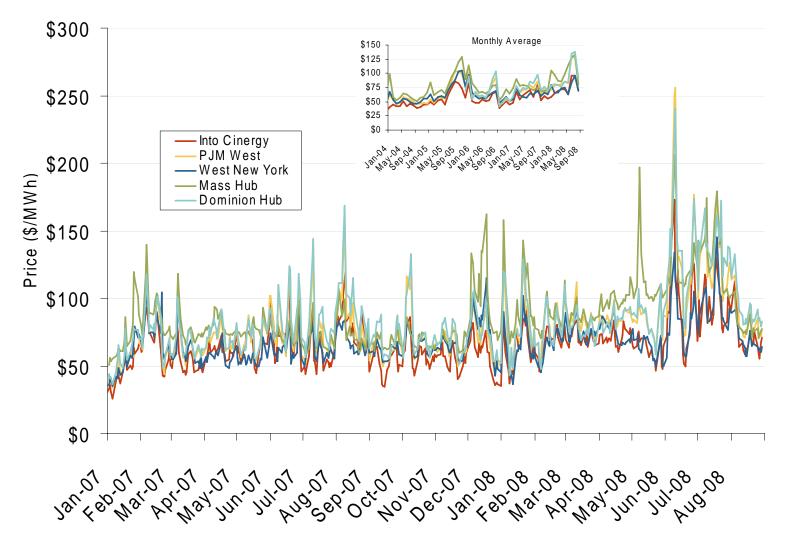
### **Daily Average of PJM Day-Ahead Prices - All Hours**



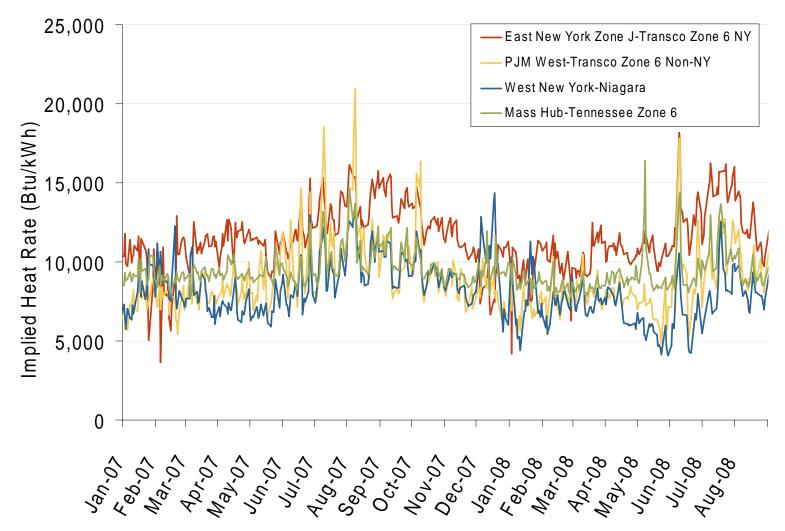
#### **Daily Average of PJM Day-Ahead Prices - All Hours**



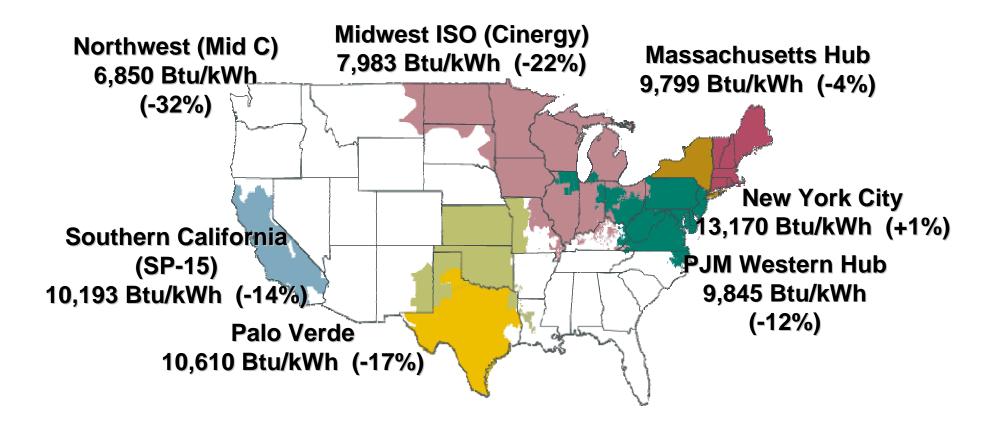
### Eastern Daily Bilateral Day-Ahead On-Peak Prices



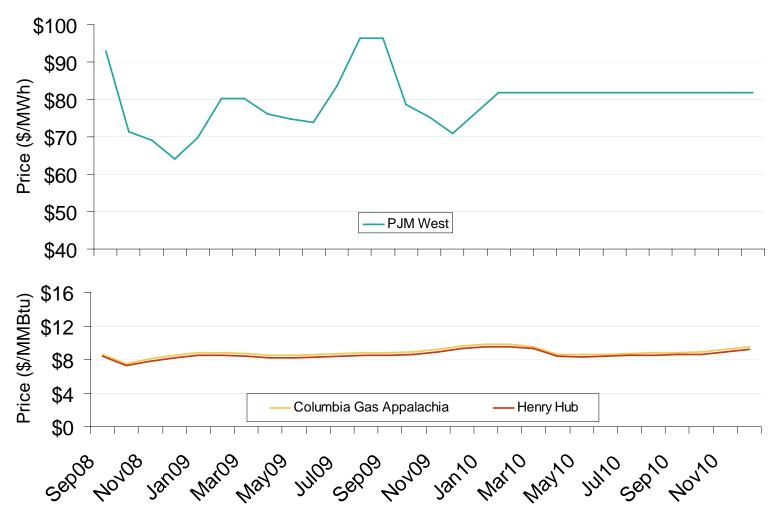
#### **Implied Heat Rates at Eastern Trading Points**



# June-August Implied Heat Rates, 2008 vs. 2007

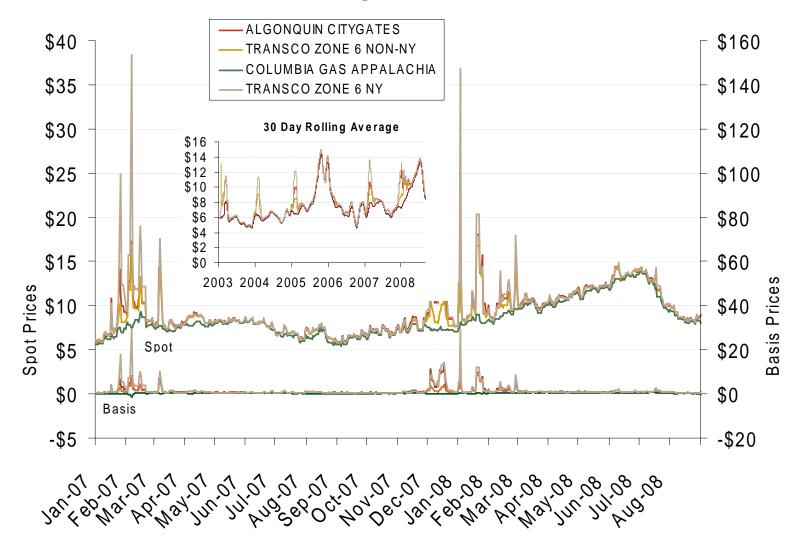


## PJM West Electric Forward Price Curve and Selected Natural Gas Forward Curves



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

#### **Northeastern Spot Prices and Basis**

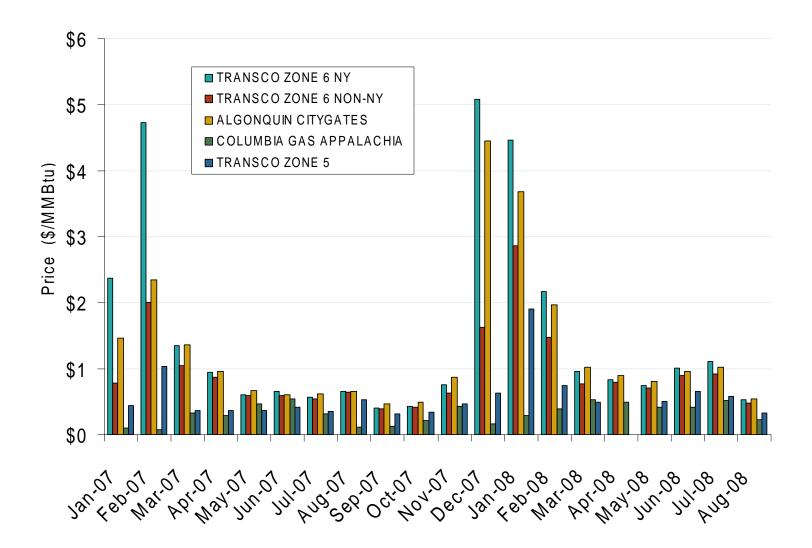


Source: Derived from *Platts* data. September 2008 Mid-Atlantic Snapshot Report

#### Northeast Natural Gas Market: Average Basis to Henry Hub

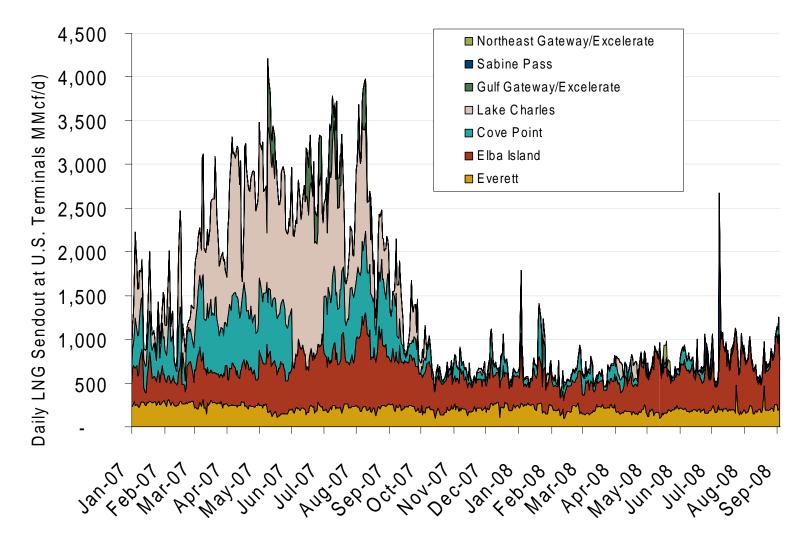
Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

#### Northeastern Monthly Average Basis Value to Henry Hub



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

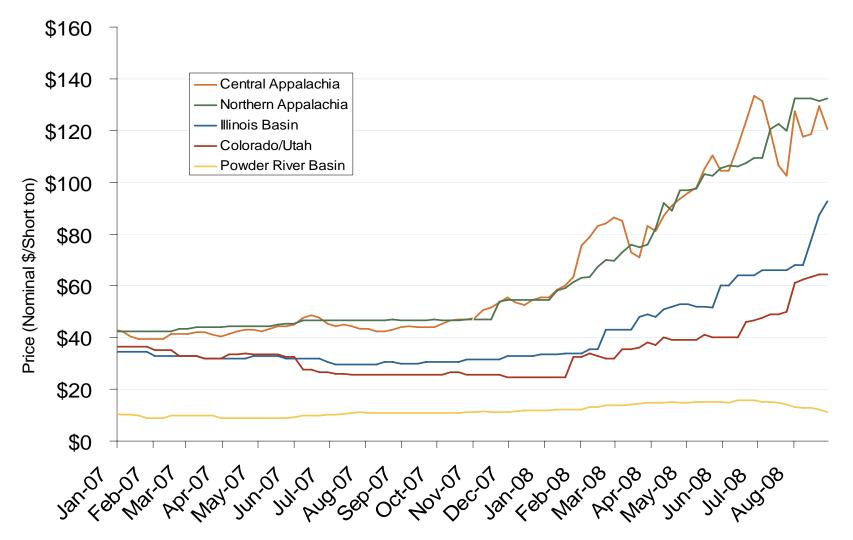
# **Daily Gas Sendout from Existing U.S. LNG Facilities**



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.

September 2008 Mid-Atlantic Snapshot Report

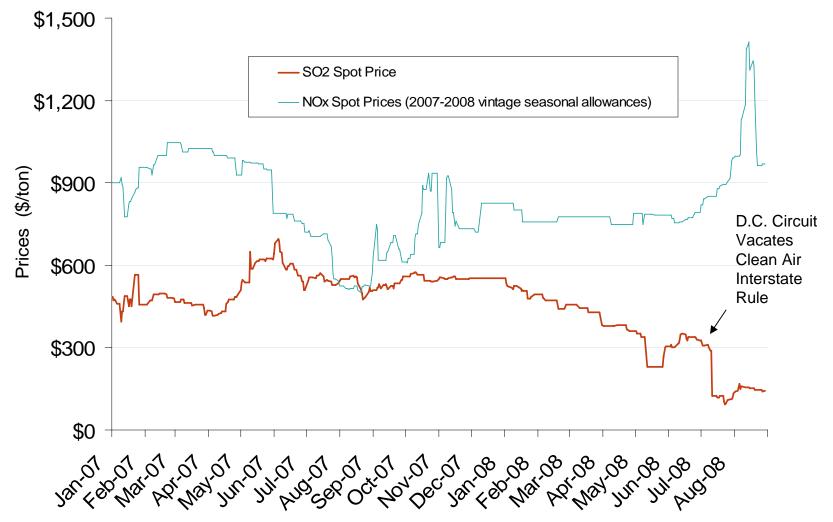
# **Regional Coal Spot Prices**



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

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

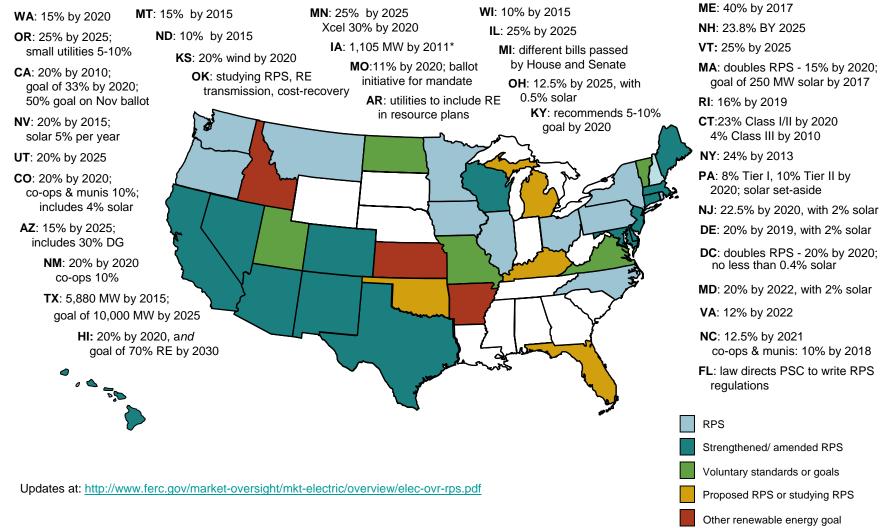
### SO<sub>2</sub> Allowance Spot Prices and NOx Seasonal Allowance Spot Prices



Source: Derived from *Cantor Fitzgerald* data.

See notes on following pages. September 2008 Mid-Atlantic Snapshot Report

#### **Renewable Energy Portfolio Standards (RPS)**



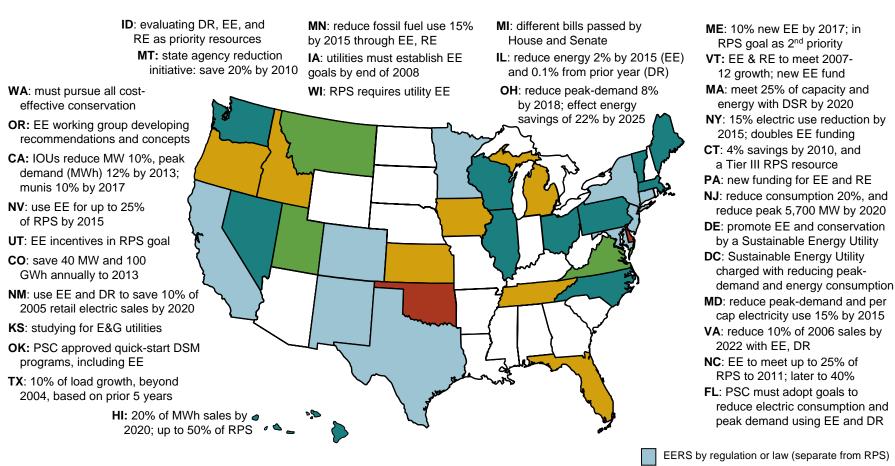
**Notes:** Alaska has no RPS; DG is distributed generation; \* Iowa has a goal of 1,000 MW of wind by 2010 **Sources:** Derived from data in: EEI, EIA, LBNL, PUCs, State legislative tracking services, Database of State Incentives for Renewables and Efficiency, and the Union of Concerned Scientists.

September 2008 Mid-Atlantic Snapshot Report

#### **Electric Market Overview: Energy Efficiency**

Federal Energy Regulatory Commission • Market Oversight @ FERC.gov

## **Energy Efficiency Resource Standards (EERS)**



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

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

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

September 2008 Mid-Atlantic Snapshot Report

Energy efficiency part of an RPS law, rule, or goal

Energy efficiency goal proposed / being studied

Other energy efficiency or demand-side rule or goal

Voluntary standards (in or out of RPS)