## OE ENERGY MARKET SNAPSHOT

Western States Version – September 2012 Data

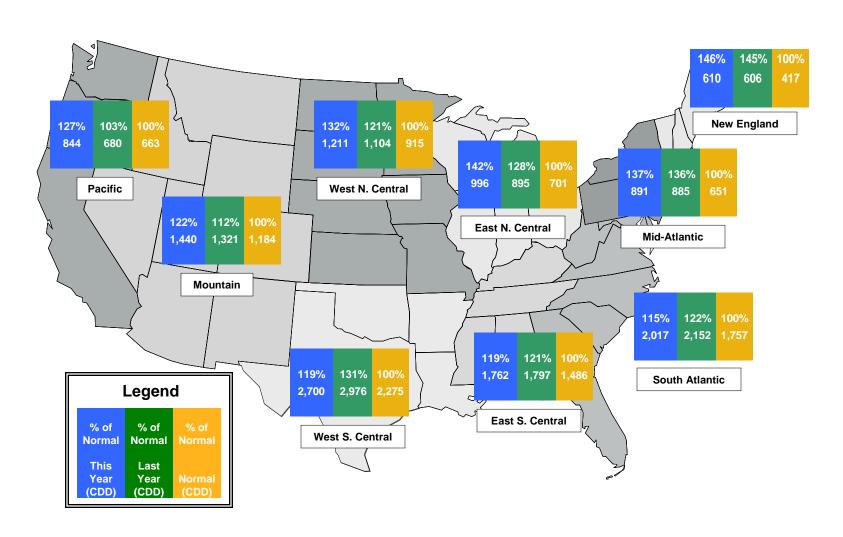
Office of Enforcement
Federal Energy Regulatory Commission
October 2012

### Infrastructure Report

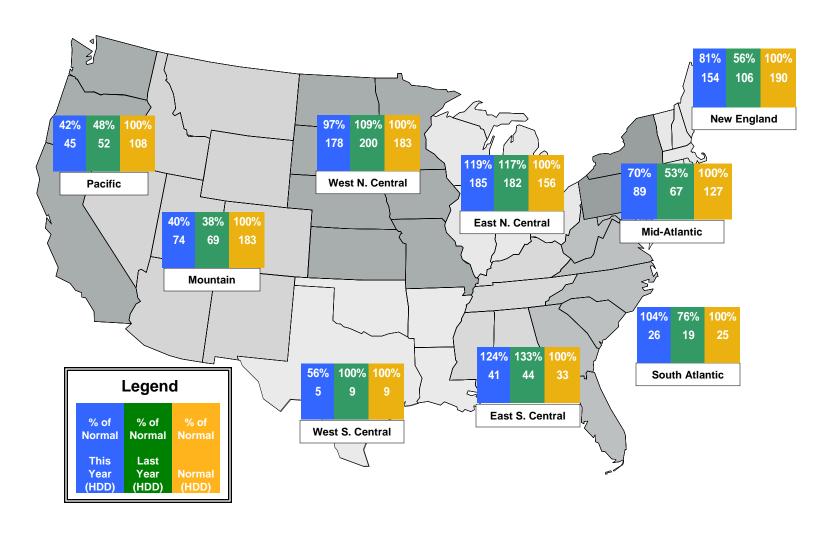
September Infrastructure Report

# Weather

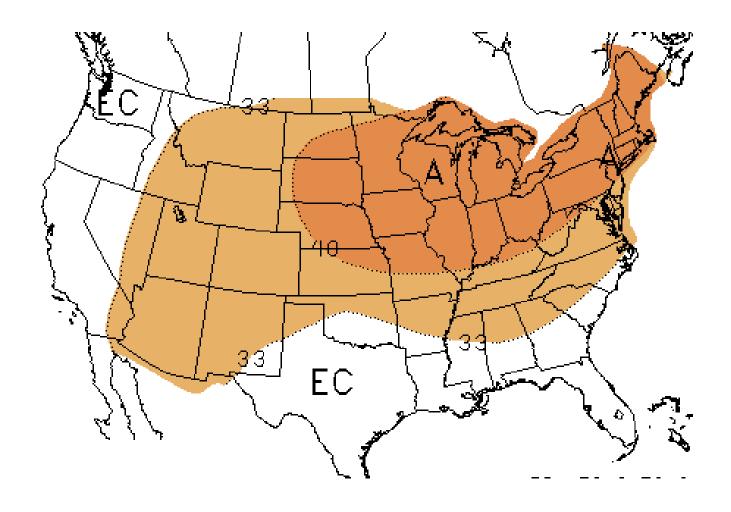
#### Regional Cooling Degree Days – January to September 2012



#### Regional Heating Degree Days – July 2012 to September 2012



#### NOAA's 3 Month Temperature Forecast Made September 20, 2012, Valid for October 2012 – December 2012

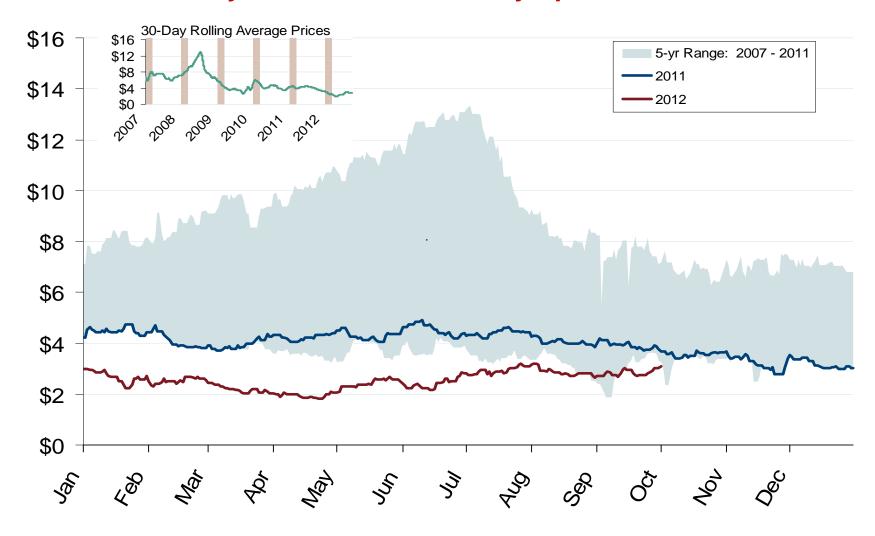


Note: "A" areas are above normal, "B" areas are below normal and "EC" means equal chance. Normal is based on the last 30 years of data.

Source: Derived from NOAA data.

## Natural Gas and Fuels Markets

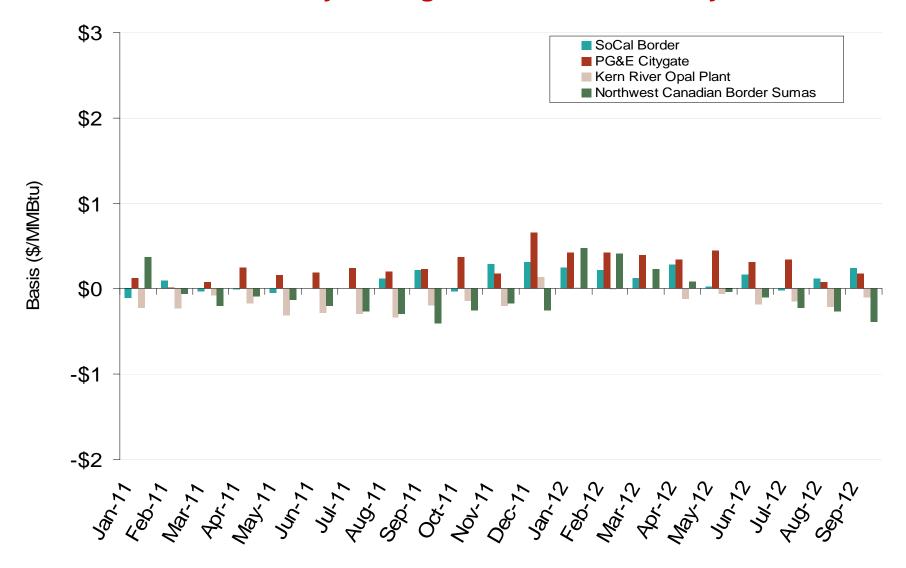
#### **Henry Hub Natural Gas Daily Spot Prices**



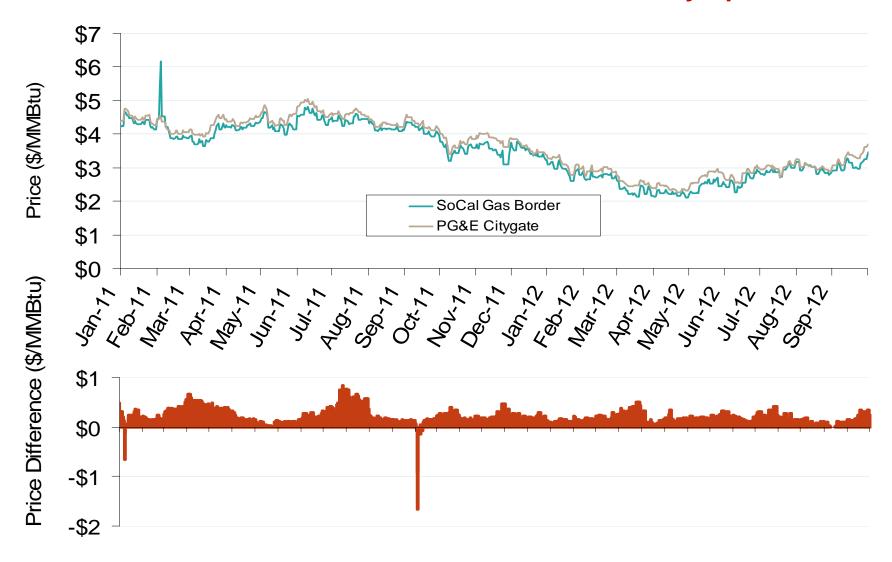
#### Western Day-Ahead Hub Spot Prices and Basis



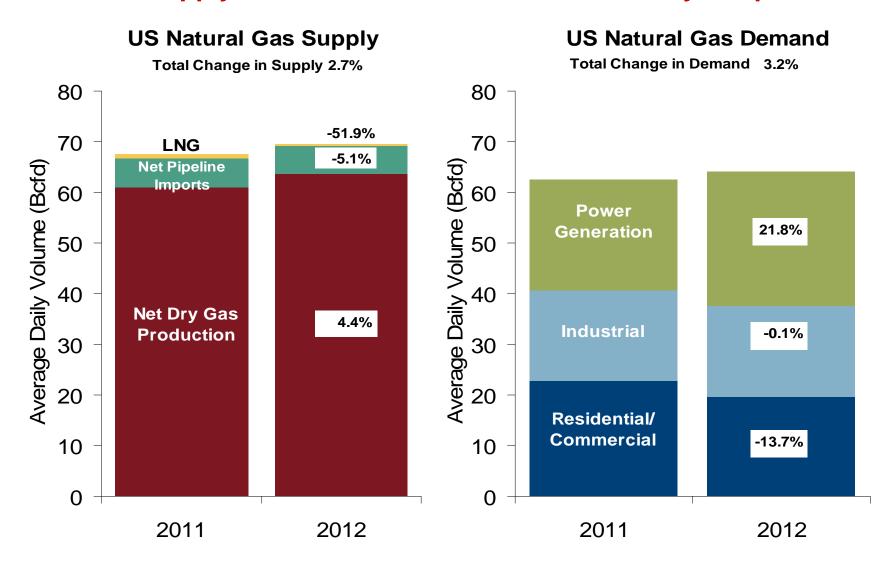
#### Western Monthly Average Basis Value to Henry Hub



#### Difference in Northern and Southern California Daily Spot Prices

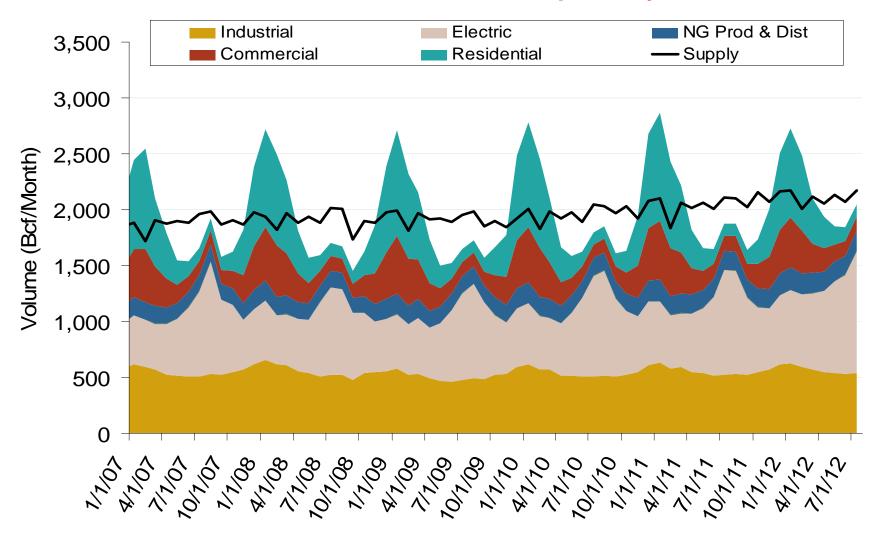


#### U.S. NG Supply and Demand 2011 vs. 2012: January - September



Note: Balance includes all amounts not attributable to other categories.

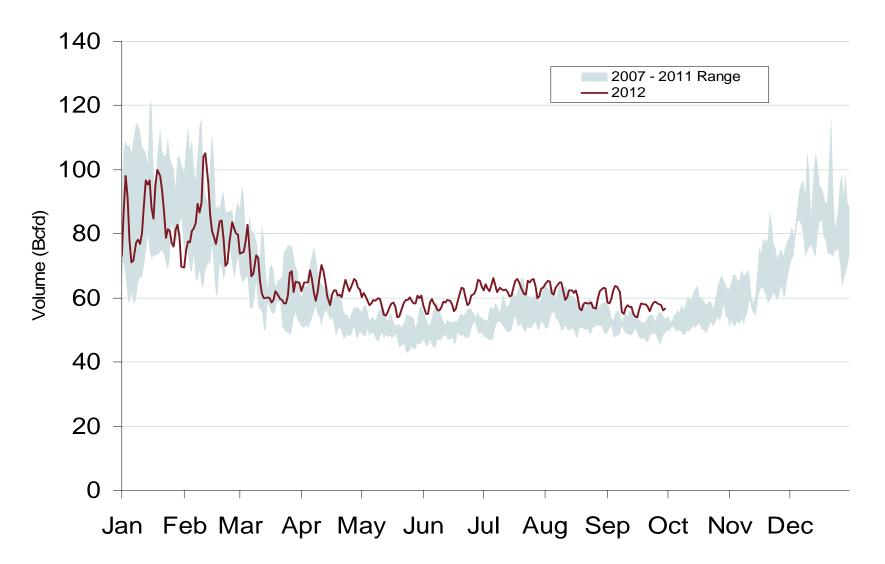
#### **Annual U.S. Natural Gas Consumption by Sector**



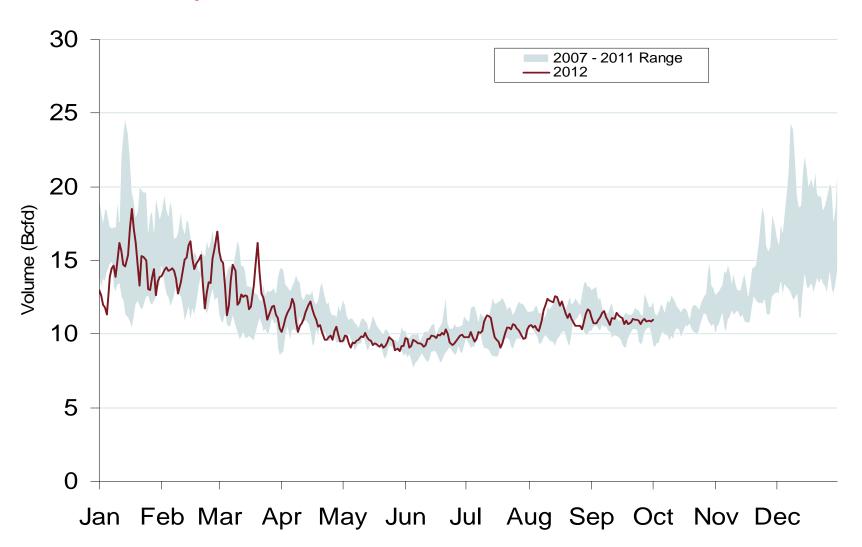
Notes: Supply includes lower 48 state production, net pipeline imports, and LNG imports

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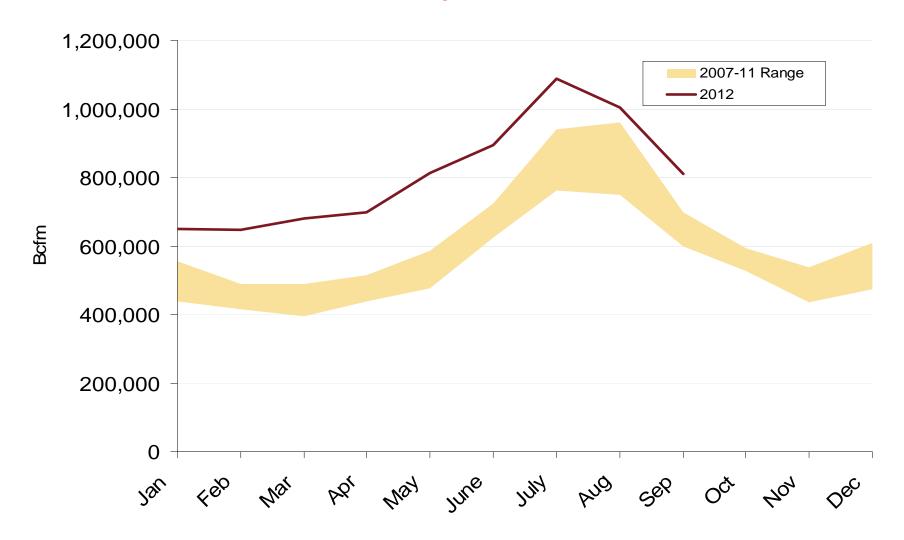
#### **Total U.S. Natural Gas Demand All Sectors**



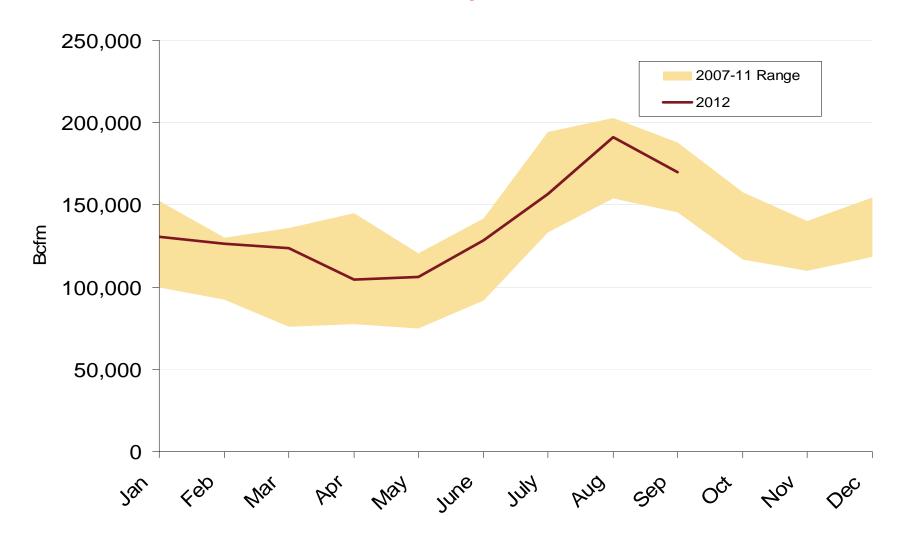
#### **Daily Western Natural Gas Demand All Sectors**



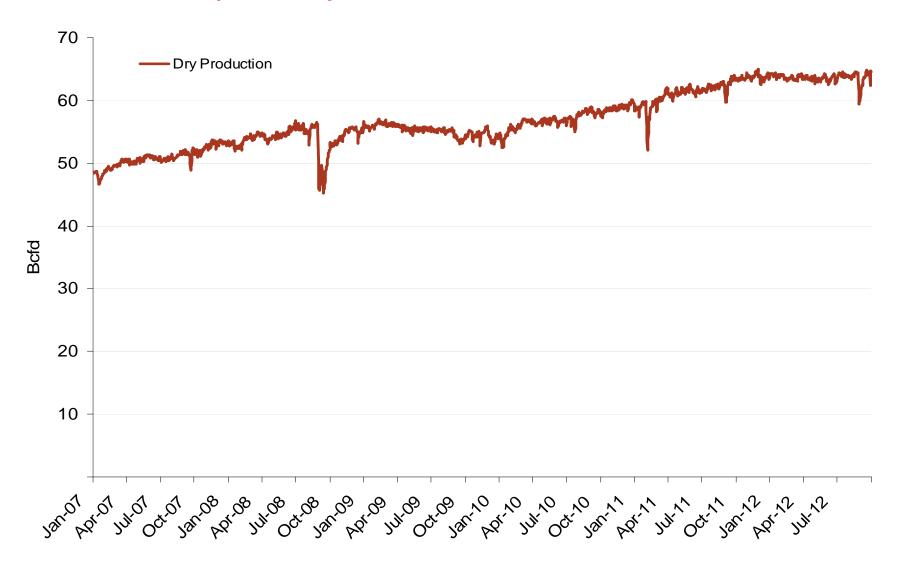
#### **U.S. Natural Gas Consumption for Power Generation**



#### **Western Natural Gas Consumption for Power Generation**

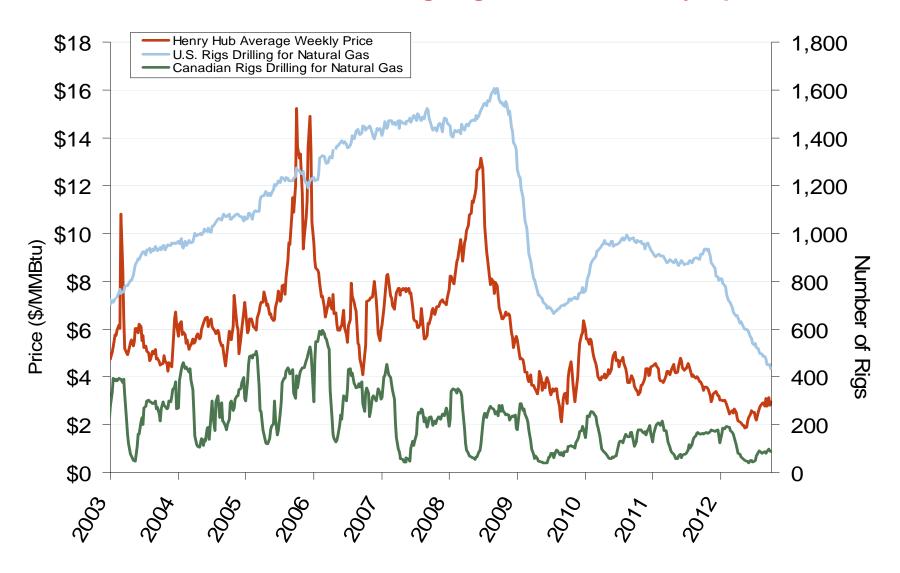


#### **Monthly U.S. Dry Gas Production – Lower 48 States**



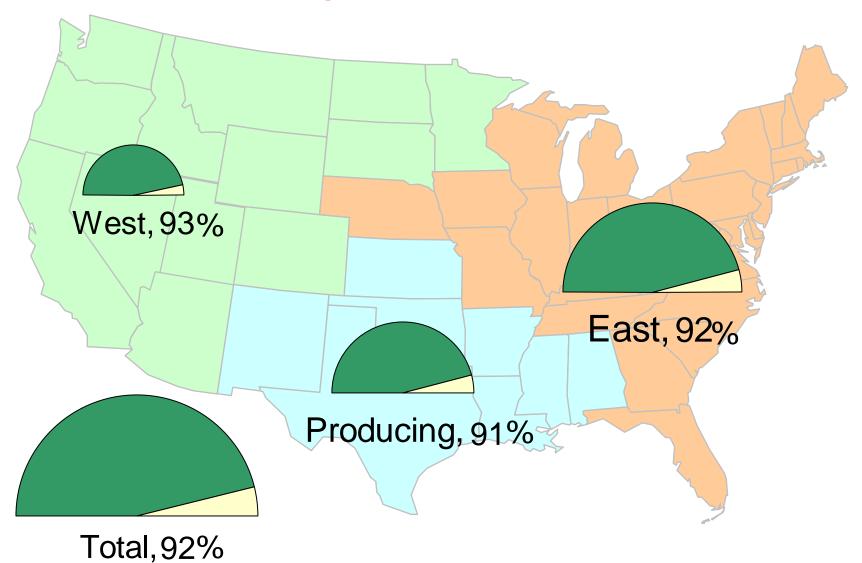
Note: Prior to July 2010, chart was derived from a combination of EIA and Bentek Energy data

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

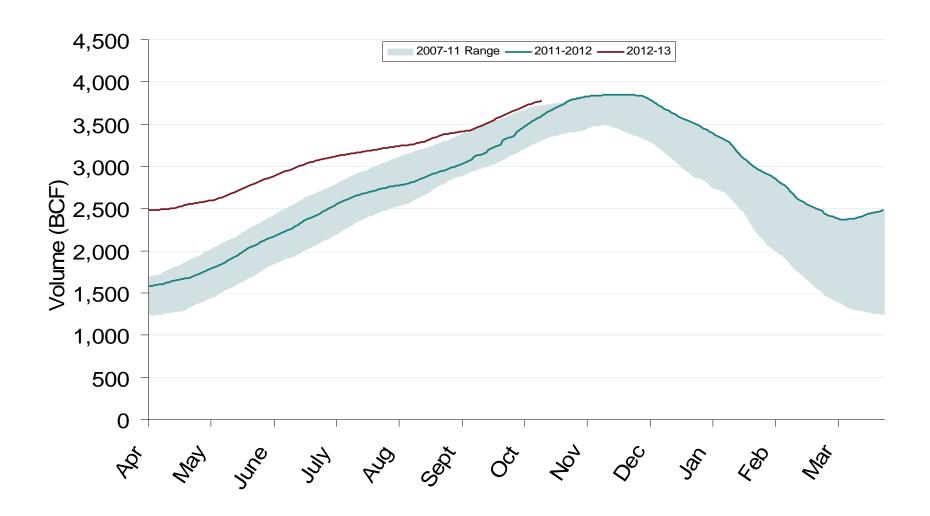


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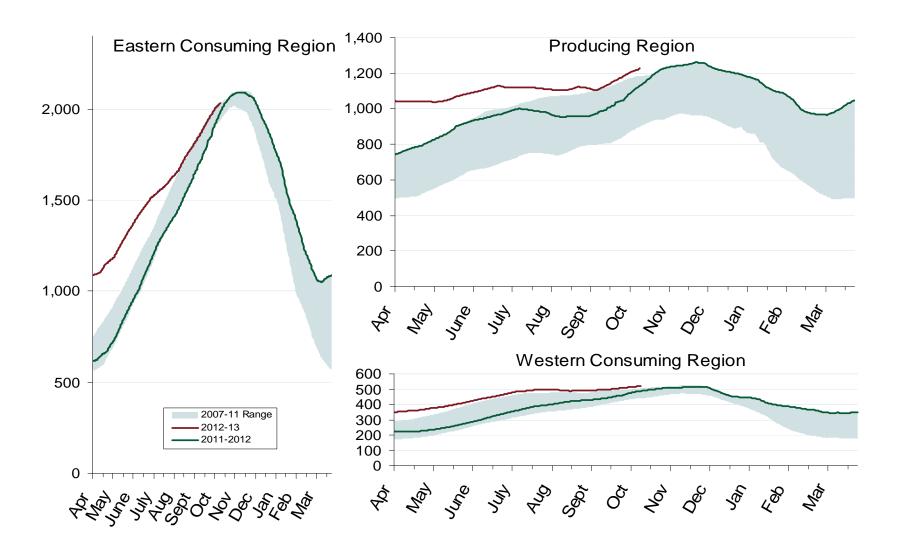
#### Natural Gas Storage Inventories – October 12, 2012



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



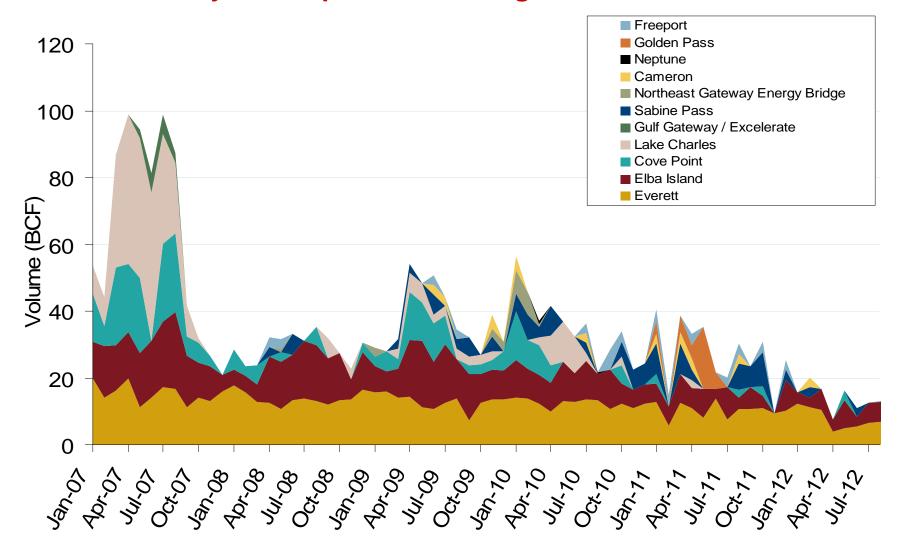
#### **Regional Totals of Working Gas in Storage**



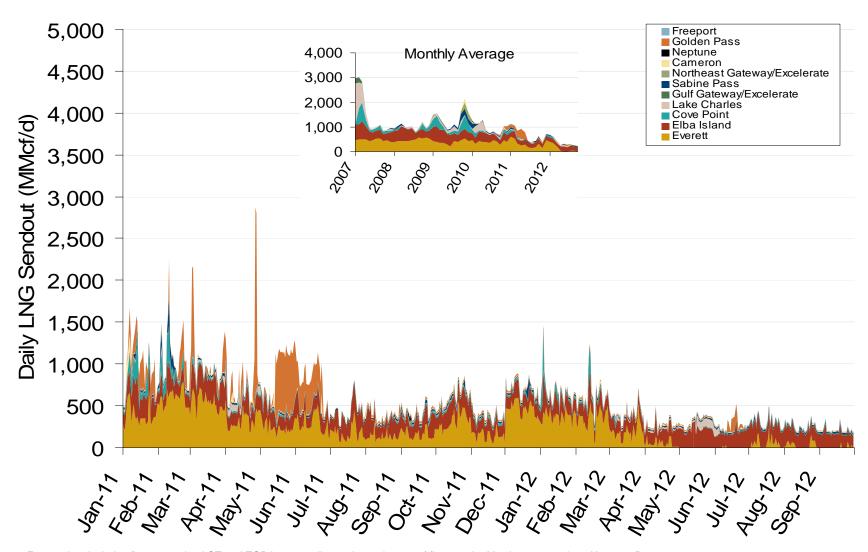
#### **World LNG Estimated November 2012 Landed Prices**



#### Monthly Gas Imports at Existing U.S. LNG Facilities



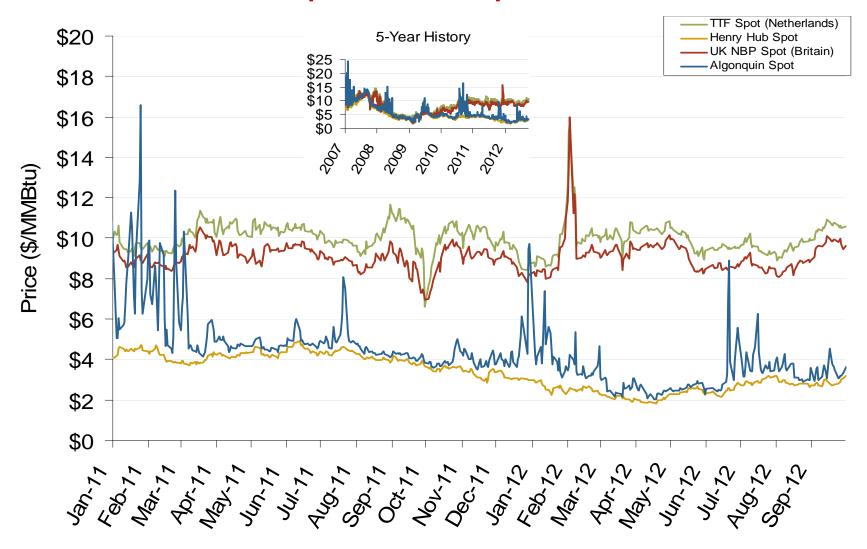
#### Daily Gas Sendout from Existing U.S. LNG Facilities



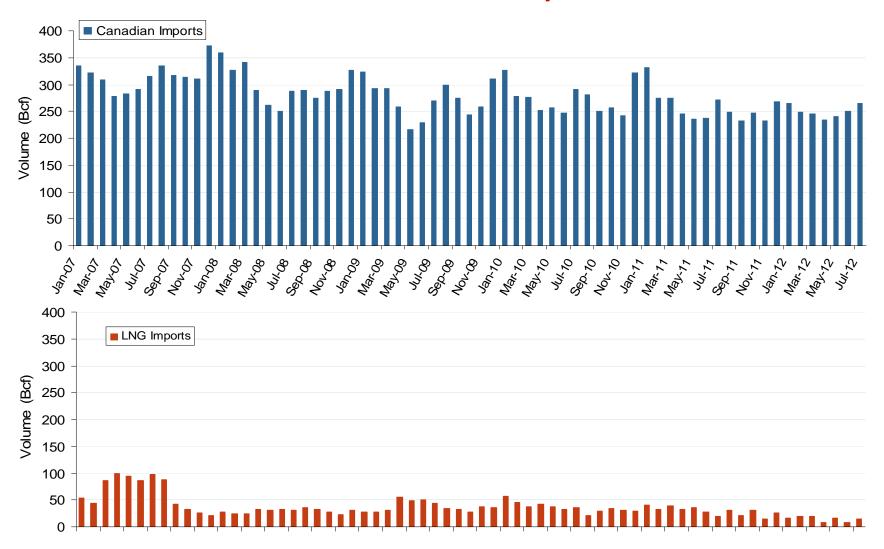
Notes: Everett data includes flows onto the AGT and TGP interstate lines, plus estimates of flows to the Mystic 7 power plant, Keyspan Boston

Gas, and LNG trucked out of the terminal. Excludes flows to the Freeport LNG which flows via intrastate pipelines and flows to the Mystic 8 and 9 power plants.

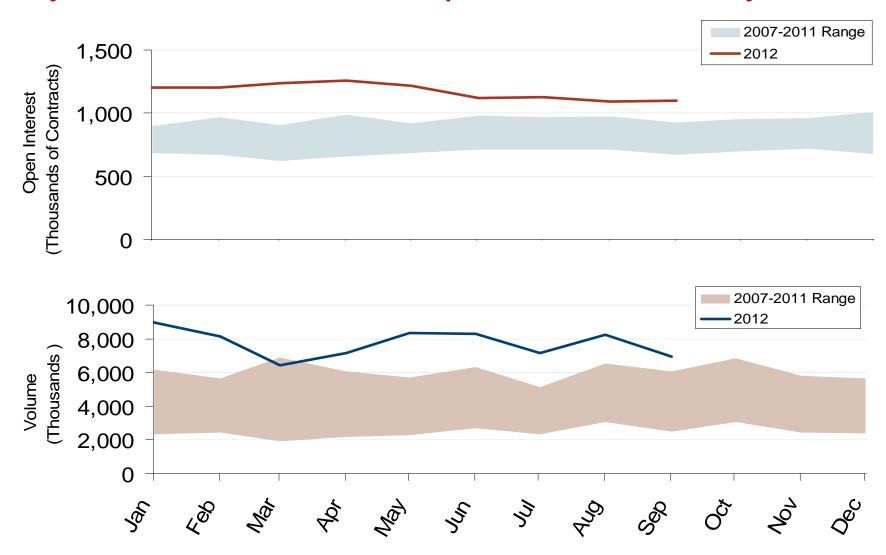
#### **Atlantic Basin European and US Spot Natural Gas Prices**



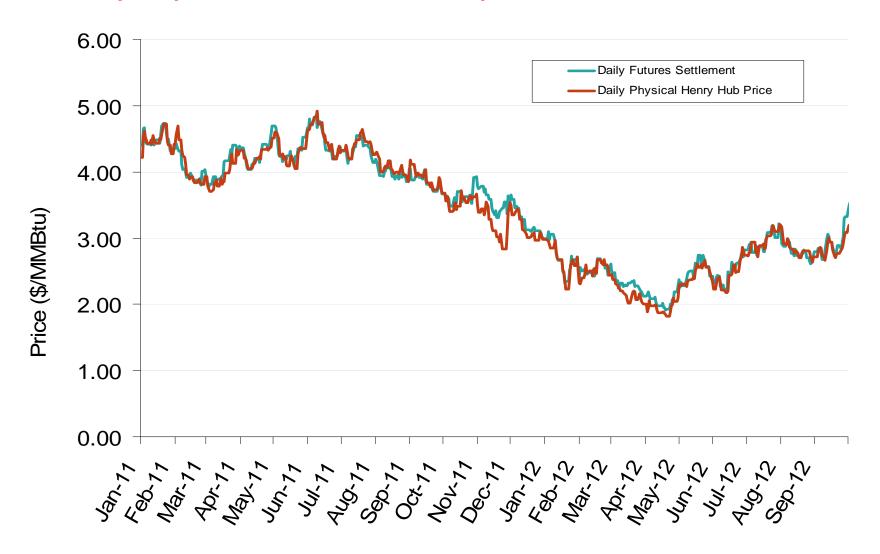
#### Canadian and LNG Natural Gas Imports Into the U.S.



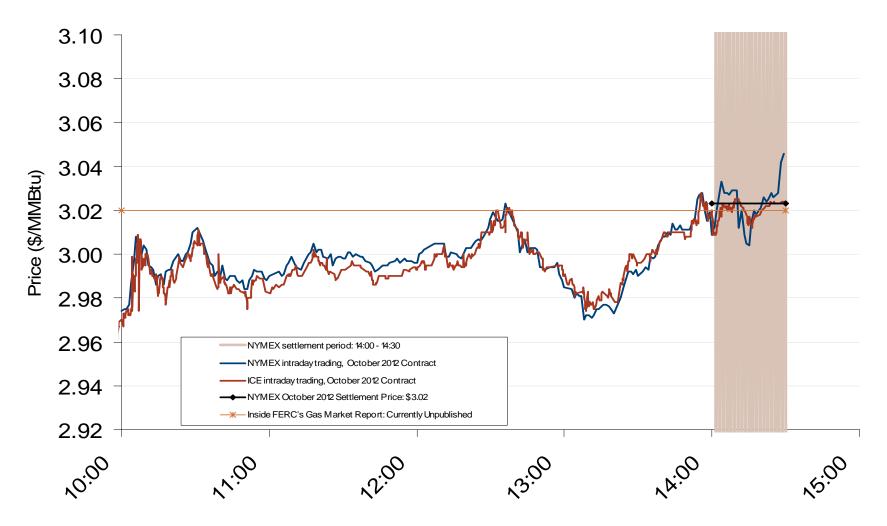
#### Nymex NG Futures Month-End Open Interest and Monthly Volume



#### **Daily Physical Index Price & Daily Futures Settlement Price**



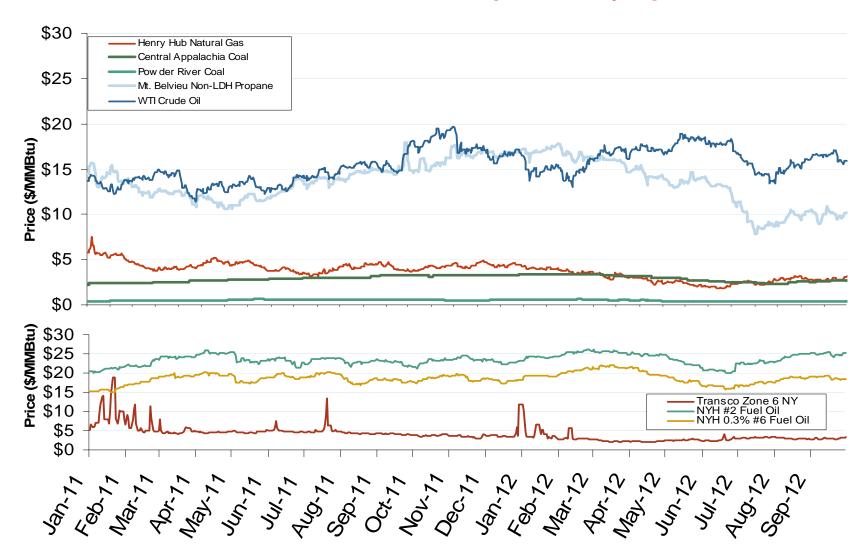
#### Nymex and ICE Contract Final Settlement - September 2012



September 26, 2012 Trade Time

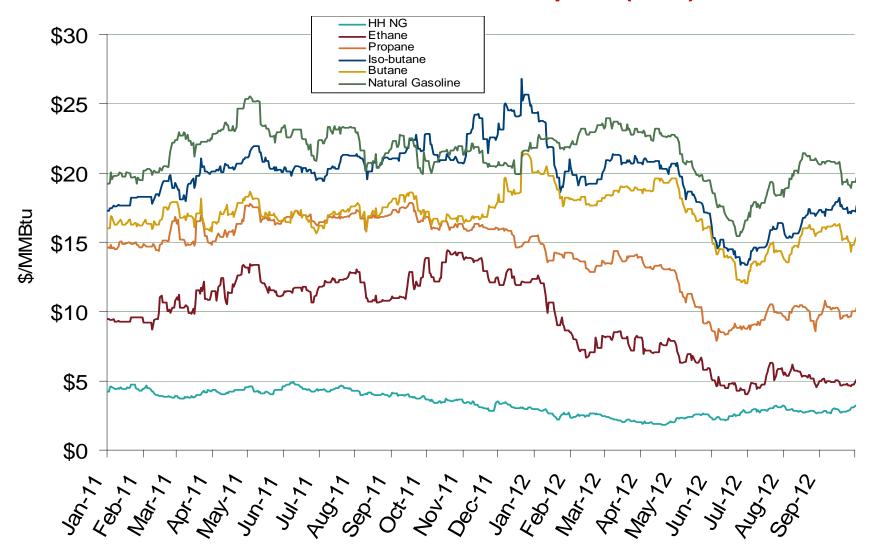
Notes: The final settlement day for this Nymex contract is three business days before the start of the contract term (which is the 1st day of the month)

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

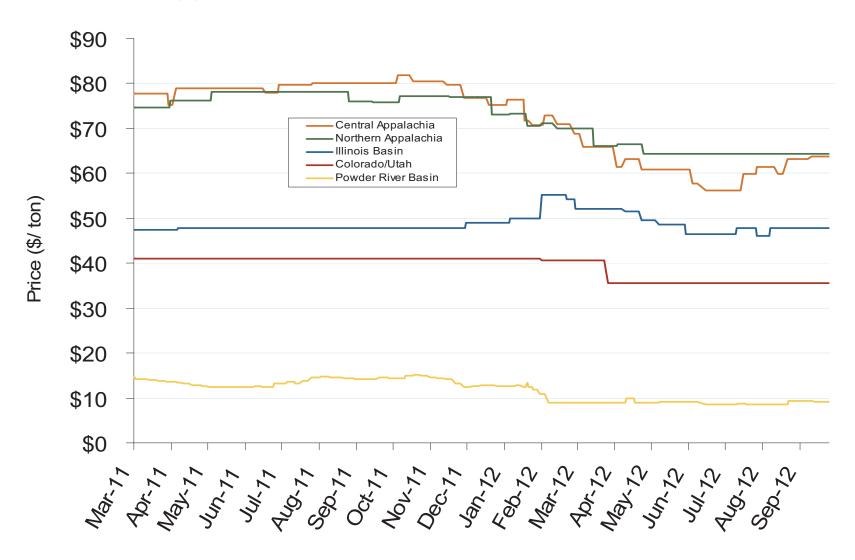


Notes: Coal prices are quoted in \$/ton. Conversion factors to \$/MMBtu are based on contract specifications of 12,000 btus/pound for Central Appalachian coal and 8800 btus/pound for Powder River Basin coal

#### U.S. Natural Gas vs. Natural Gas Liquids (NGL) Prices

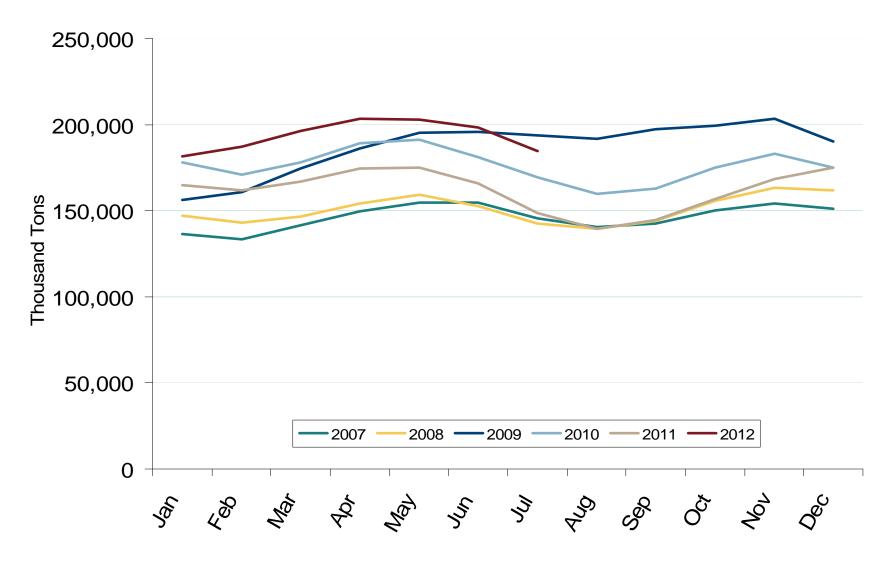


#### **Central Appalachian and Powder River Basin Coal Prices**



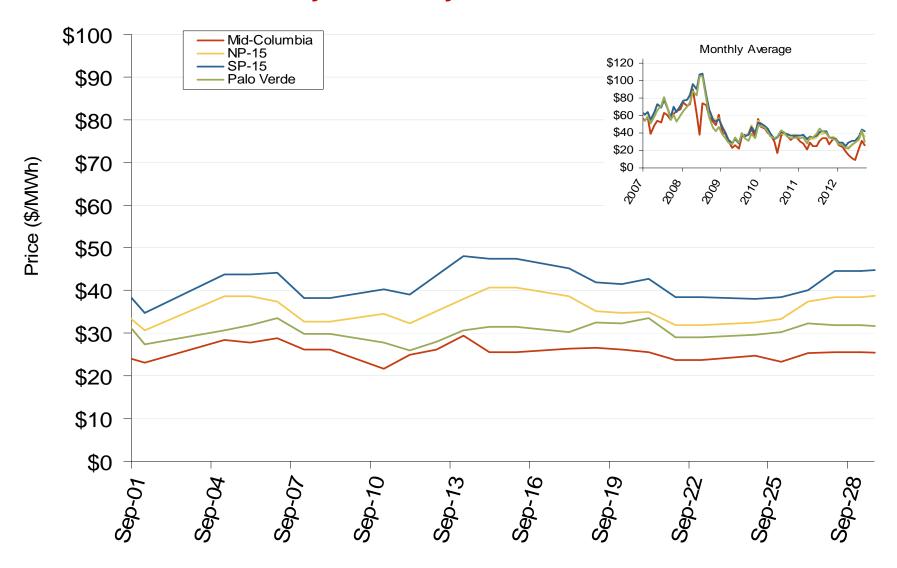
Notes: The Central Appalachian (CAPP) coal is priced at Big Sandy. All others are mine mouth prices. Prices do not include transportation costs to a plant, as those can vary widely by contract specifications. Prices exclude incremental cost of emissions allowances

#### **U.S. Coal Stockpiles at Electric Power Generating Facilities**

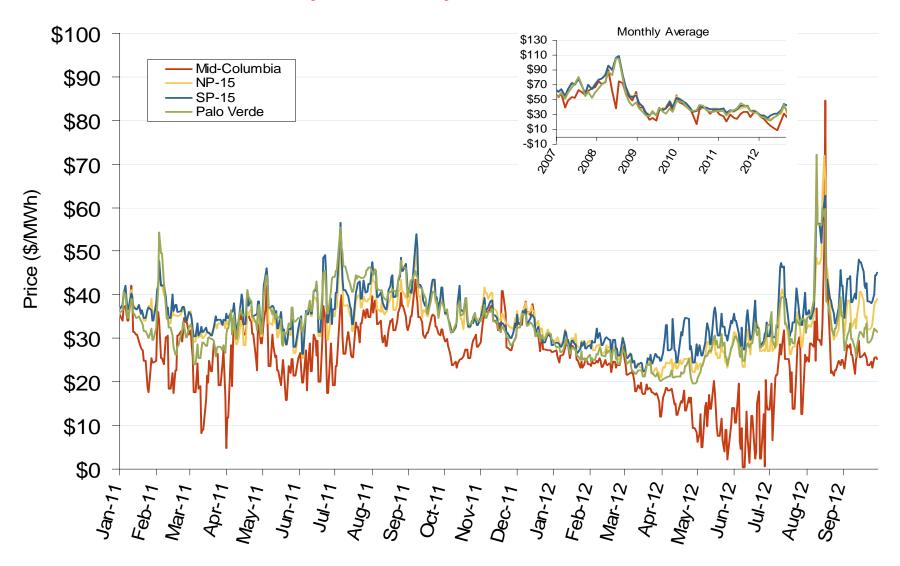


## Electricity Markets

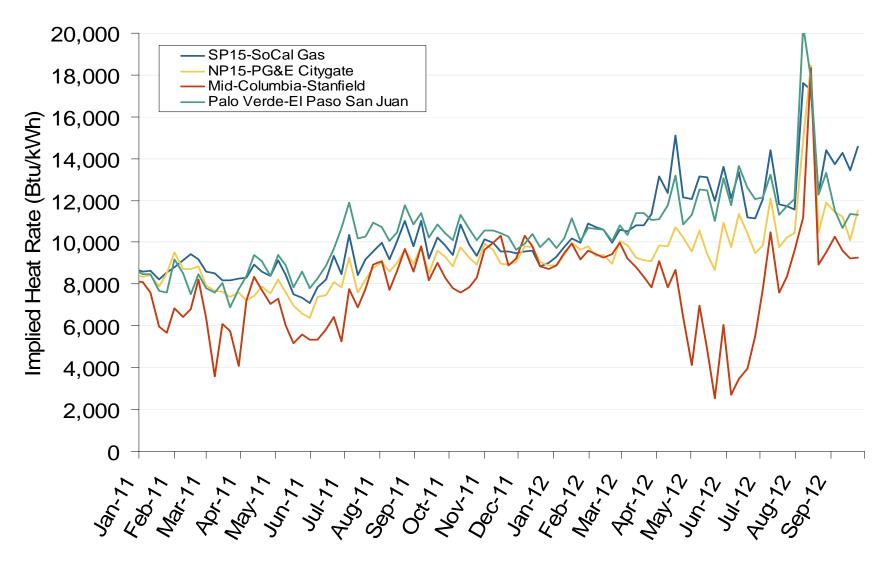
#### **Western Daily Index Day-Ahead On-Peak Prices**



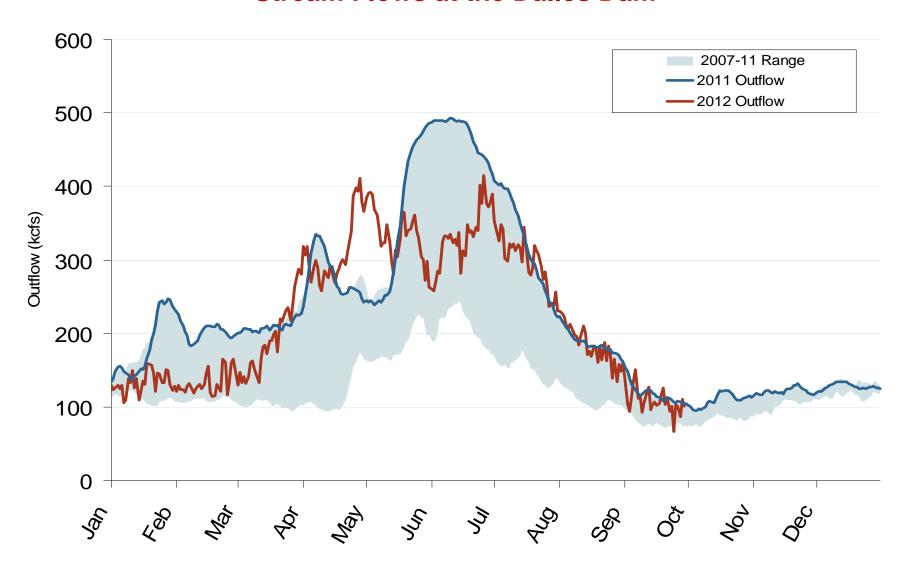
#### Western Daily Index Day-Ahead On-Peak Prices



#### Implied Heat Rates at Western Trading Points - Weekly Avgs.

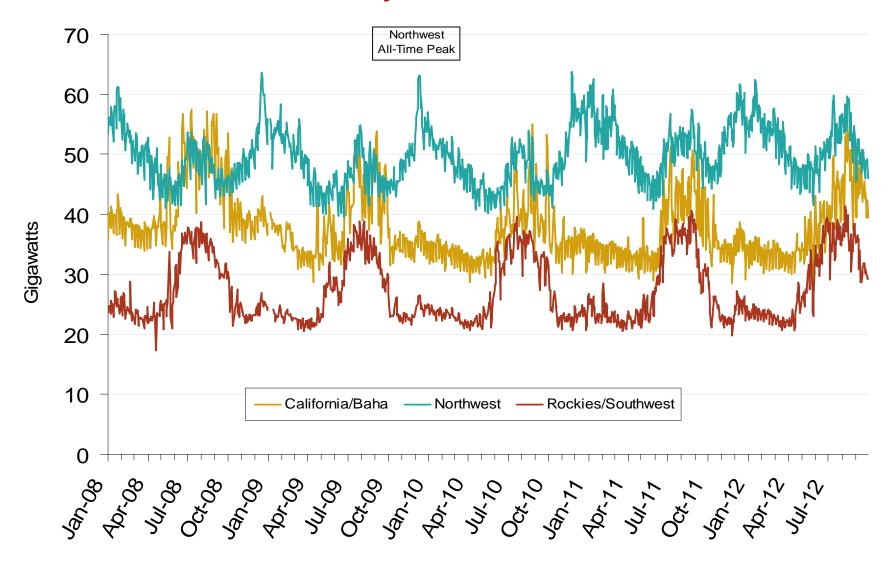


#### **Stream Flows at the Dalles Dam**



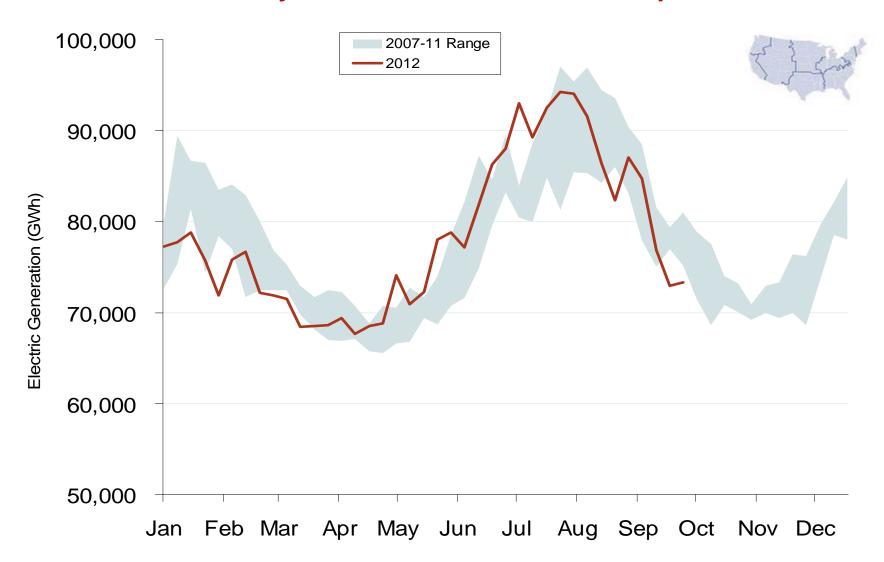
Notes: Trend lines are 7-day moving averages Source: Derived from *USACE* data

#### **Western Daily Actual Peak Demand**

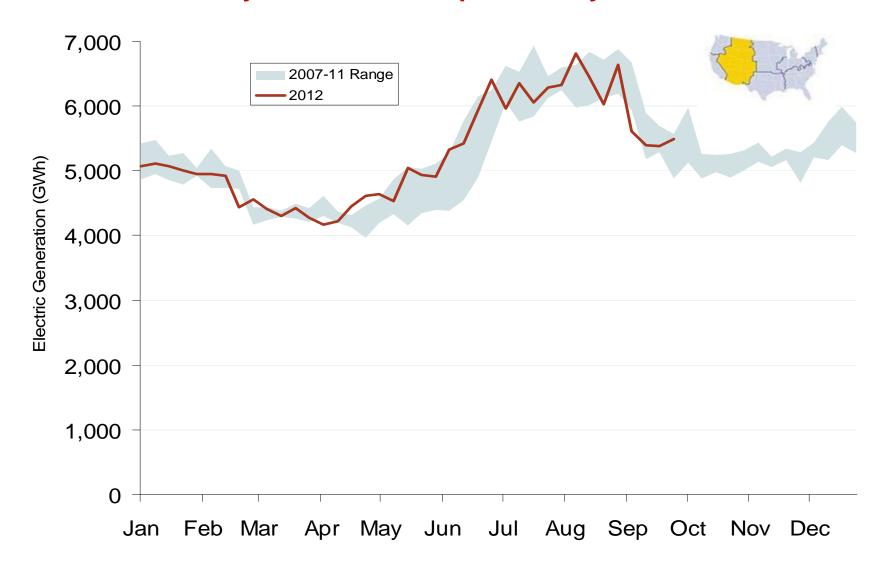


Notes: Data prior to 9/14/2010 does not include weekends and holidays. Some data for 12/31/2008 – 1/9/2009 are not available from WECC Source: Derived from WECC Daily Report data available at http://wecc.biz

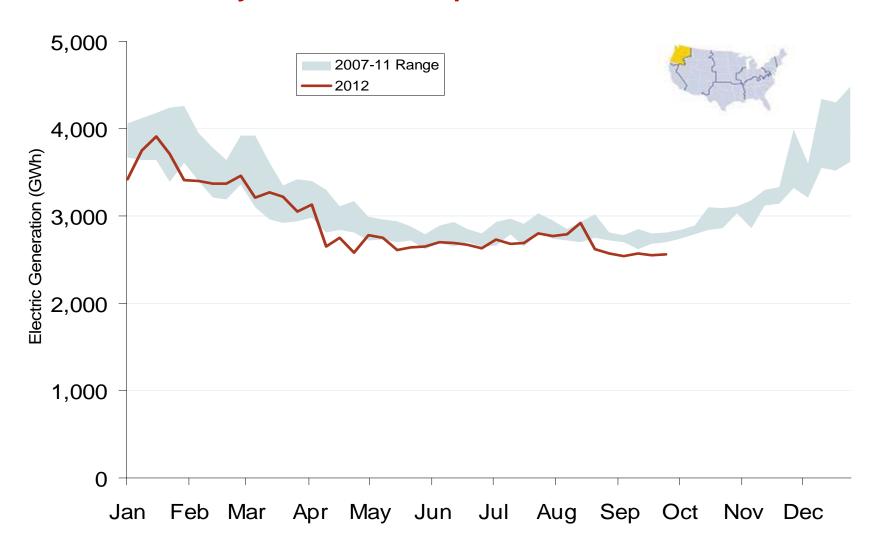
#### **Weekly U.S. Electric Generation Output**



#### **Weekly Generation Output - Rocky Mountains**



#### **Weekly Generation Output - Pacific Northwest**



#### **Weekly Generation Output - California**

