

Utility Segment Update

RETAC Meeting
October 2, 2014



Gas Supply

- Over the last several years, shale gas extraction from increasingly efficient horizontal drilling has dramatically reduced gas prices. Shale gas now makes up approximately 40% of total US48 gas production.
- Over 40% of shale production now comes from the northeast fields of Marcellus and Utica. The northeast is expected to be net long gas on an average annual basis by 2015.
 - Pipeline infrastructure projects are under development to broaden distribution.
- In spite of these new supplies, severe winter weather reduced gas inventories to their lowest levels since 2005 and caused price spikes in some market areas.
 - Large injections coupled with a mild summer has allowed the gas industry to rebuild inventory.

Coal Supply

- Generators expect Y/Y coal consumption to increase in 2014 due to severe winter weather.
- No significant issues with coal availability.
- Generators are considering supply from other basins.
 - PRB to ILB
 - CAPP to ILB/NAPP
- Suppliers remain willing to discuss optionality and fixed/variable pricing structures to move coal.

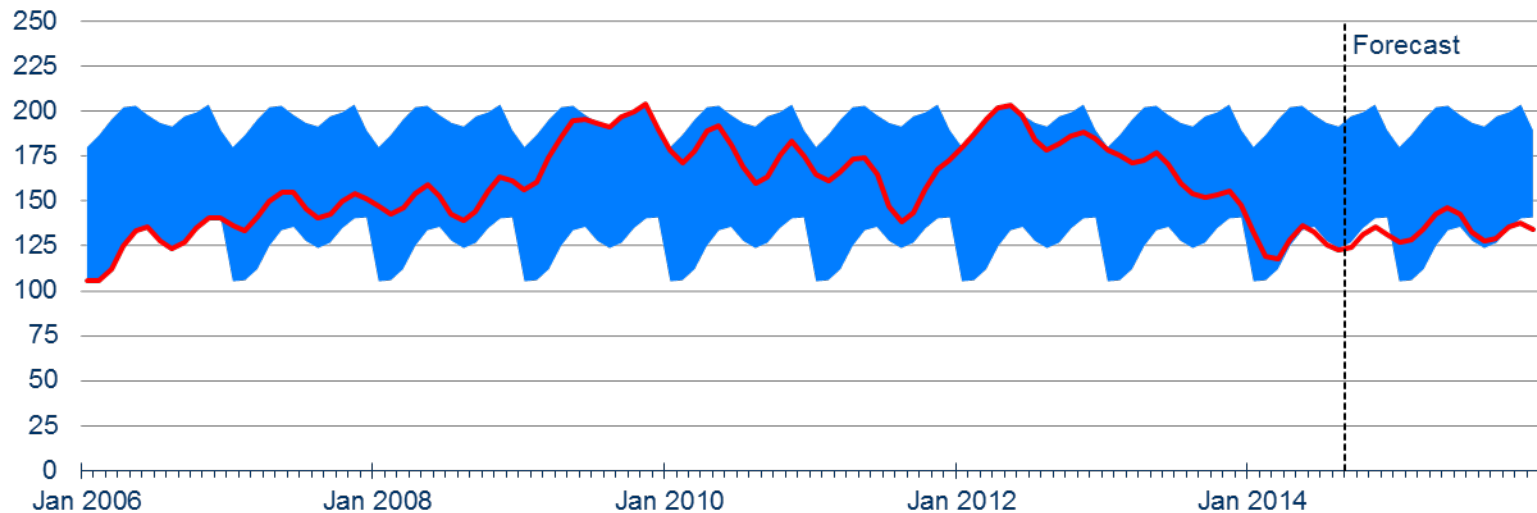
Coal Inventory

- Some generators who ship from western origins have plants moderately to significantly under 20 days of inventory.
 - The number of plants will increase if rail service doesn't improve.
- No inventory concerns mentioned for generators served from eastern origins.
- Generators balance inventory levels with burn and rail service expectations.

Utility Coal Inventory Levels

U.S. Electric Power Coal Stocks

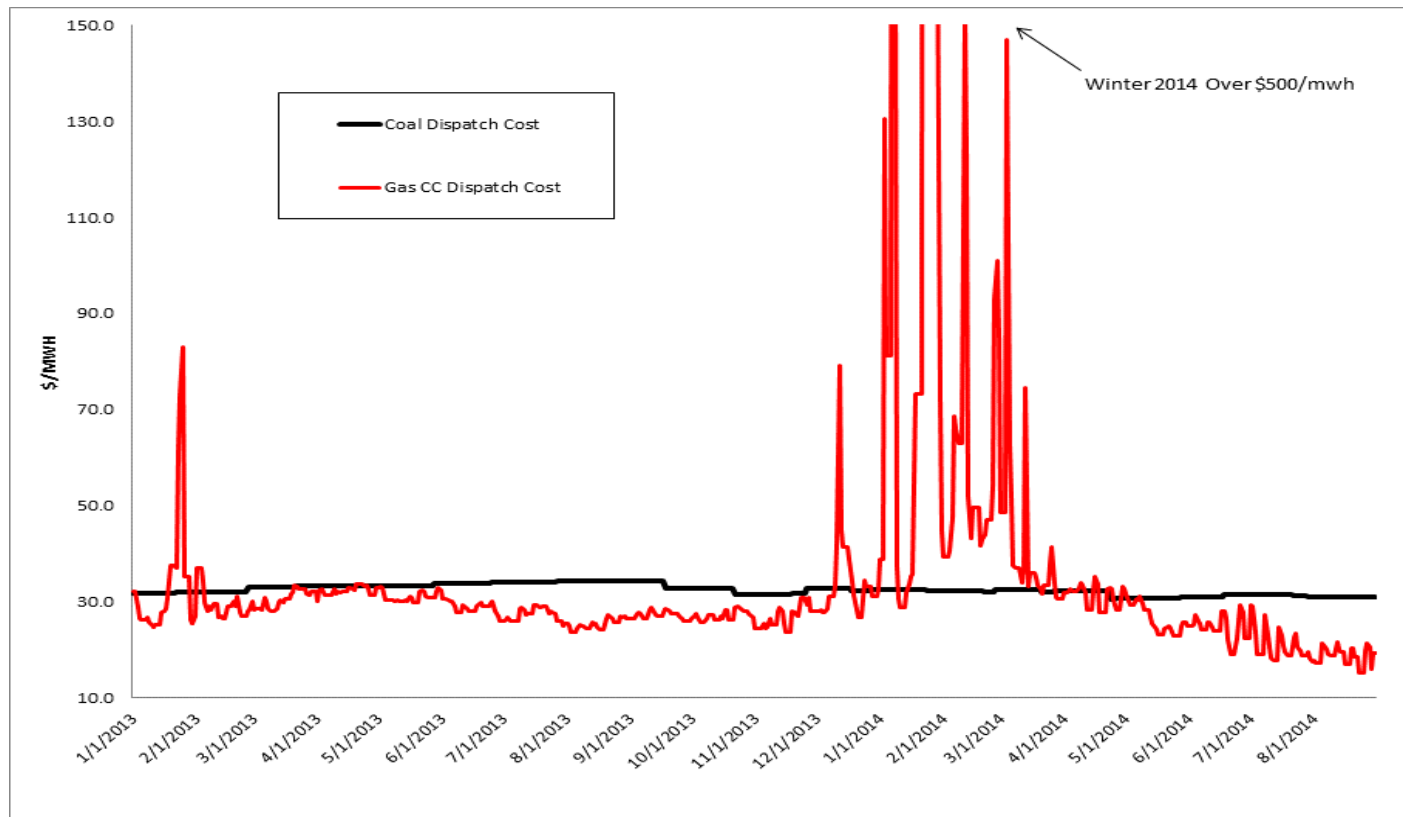
million short tons



Note: Colored band around stock levels represents the range between the minimum and maximum from Jan. 2006 - Dec. 2013.

Source: Short-Term Energy Outlook, September 2014.

Dispatch Cost of Coal & Gas CC Generation



Dispatch Cost:

Coal = Delivered coal price X 10,000 heat rate + \$2/mwh VOM

CC = Tetco M3 gas X 7,000 heat rate + \$2/mwh VOM

Current Rail Service

- Service from western origins remains a concern.
 - Shortage of crews and power
 - Cycle times have increased
- Service from eastern origins is better however it also needs improvement.

Current Rail Service- Verbatim

- “Cycle times are 60% higher than the previous two year average”
- “Much longer cycle times, lack of consistent rail equipment to meet our monthly nominations, and poor communication”
- “Inconsistent deliveries continue to be a problem”
- “Western – struggles continue, little if any steady improvement, no bandwidth to add sets; Eastern – fewer challenges, still constrained”

Future View

- Fuel switching will continue.
- Generators will maintain strategy of enhancing flexibility.
- Fuel supply issues.
 - Gas volatility will remain a concern
 - Less supply and higher prices may result if coal operators close mines due to lack of demand.
- Rail issues have prompted generators to reconsider coal supply options.



Utility Segment Update