

Breakout Session 2: Interstate Pipeline Operations



Current Interstate Pipeline Operations in the Marcellus

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Why Gas? Why Now?

- Project drivers
 - Market
 - Supply
- Projects in Pennsylvania
- What's in it for me?

Gas Demand Drivers



- Despite estimates, demand for gas for power generation may greatly increase
 - Uncertainty over coal
 - Current relatively small contribution of renewables
 - Nuclear approval process takes time
 - Move away from oil-fired generation in Mexico
- Industrial demand for gas set to make a comeback as gas costs decline
 - Canada will use gas to “mine” tar sands for oil production
- Increased penetration of natural gas in the Mexican market is increasing demand over all sectors

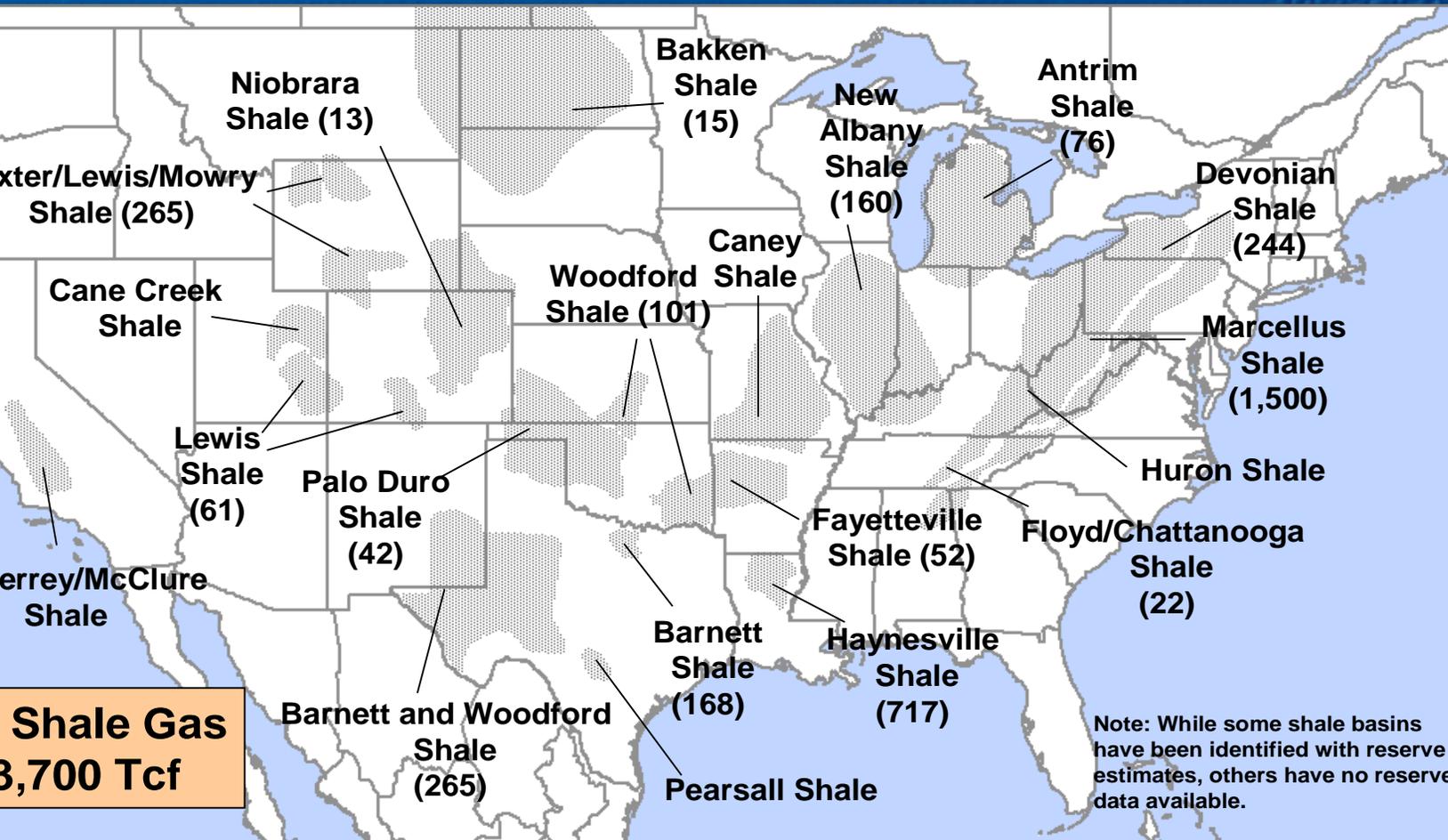


Gas Supply Drivers

- Major development of unconventional reserves, especially shale
 - Has reduced Henry Hub price in U.S.
- Abundance of underground storage in U.S. and Canada
 - Allows gas to be purchased and stored during periods of low demand (when cheaper), used during peak demand
 - Reduces need for production, imports during peaks
- Market pricing
 - North American mindset is to pay market clearing prices for gas
 - Will delay growth in LNG imports as long as indigenous gas supply continues to be developed and is less expensive than LNG

United States Shale Basins

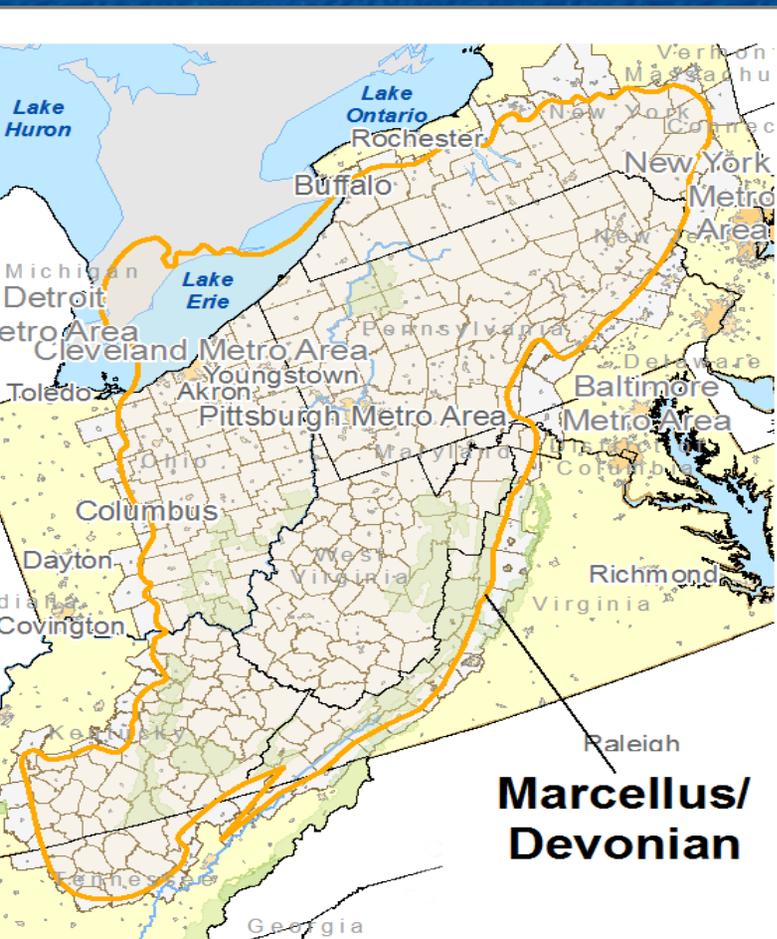
Maximum Reported Gas-in-Place (in Tcf)



Shale Gas
3,700 Tcf

Note: While some shale basins have been identified with reserve estimates, others have no reserve data available.

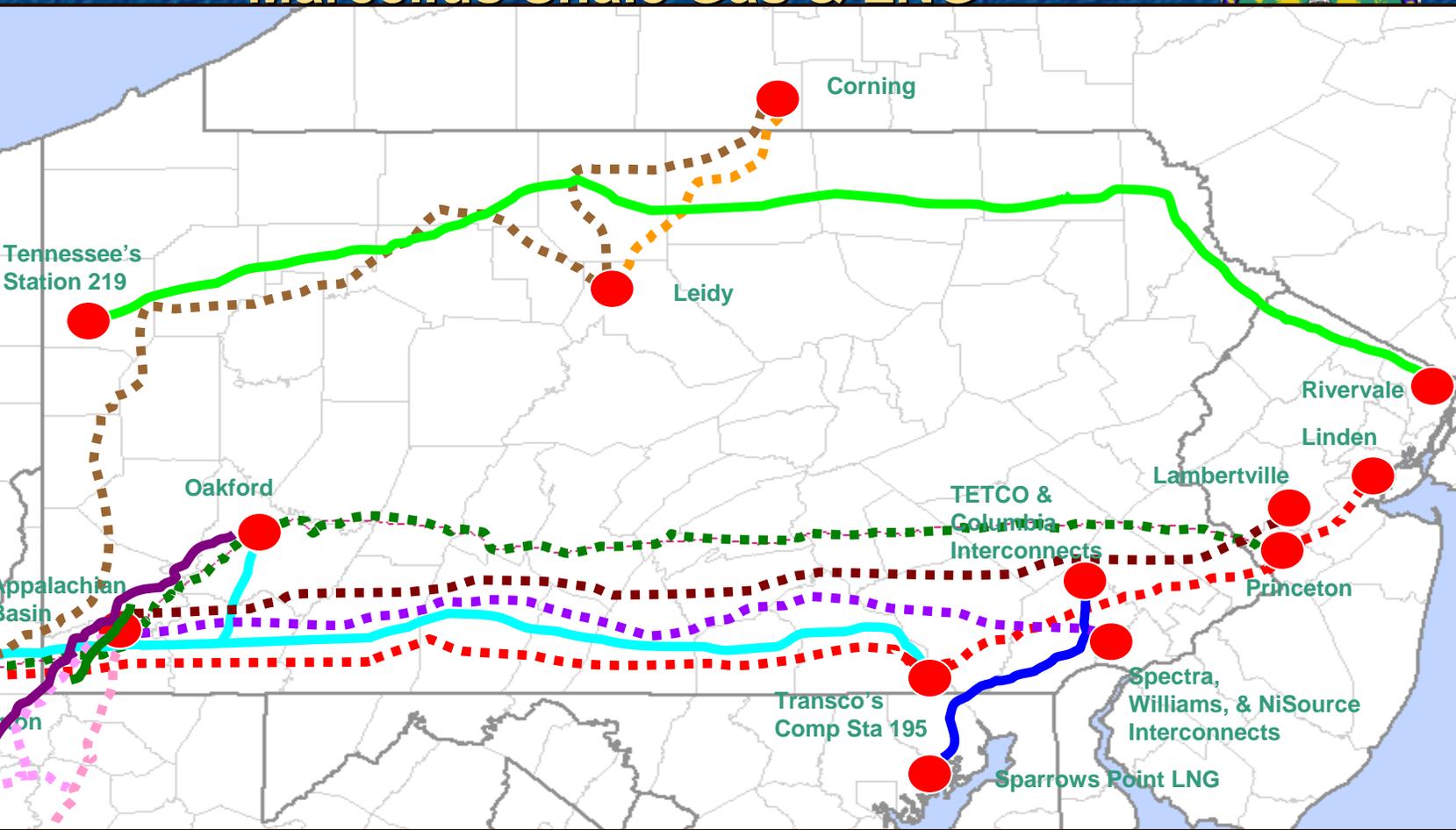
Marcellus Shale in the Appalachian Basin



- The Marcellus Shale spans six states in the northeastern U.S.
- Covers an area of 95,000 square miles at an average thickness of 50 ft to 200 ft
- Estimated depth of production is between 4,000 ft and 8,500 ft
- As of September 2008, there were a total of 518 wells permitted in Pennsylvania and 277 of the approved wells have been drilled
- The average well spacing is 40 to 160 acres per well
- The technically recoverable resources is estimated to be 489 Tcf*
- The amount of gas in place is estimated to be up to 1,500 Tcf

Source: Exhibit 19 and text - Marcellus Shale in the Appalachian Basin, DOE's Modern Shale Gas Development in the United States; A Primer, dated April 2009. * Technically recoverable number from Marcellus by Tom English, The Pennsylvania State University.

Natural Gas Projects Transporting Rockies Gas, Marcellus Shale Gas & LNG



Completed or Pending Projects

- Atlantic Express Inc.
- 300 Exp (Tennessee)
- Rockies Express Pipeline East
- thern Bridge, TIME 3, TEMAX (TETCO)
- Appalachian Gateway (Dominion)

Potential Projects

- Northeast Supply (Williams)*
- New Penn (NiSource)
- Keystone (Dominion/Williams)
- Appalachia to Market Expansion (TETCO)
- REX Northeast Express (KM)
- Projects 2010 -12 (Equitrans)

What's in it for me?



- Diversification of supply = more choices for gas users = reduced gas price volatility...

In other words, when the supply is ample and the demand market competitive, gas prices can, and do, go down...

New and Expansion Projects the NE Help Reduce Prices



Historically, winter demand for natural gas results in pipeline constraints, causing price spikes

- New pipelines have been difficult to construct because of local opposition
- Difficulty in securing capital to cover the high initial fixed cost of expansion

This trend began to change in late 2007

- 1.8 Bcf/d of new natural gas pipeline capacity brought into service in 2007
- 2.2 Bcf/d of northeastern pipeline additions in 2008
- Another 3.9 Bcf/d of new pipeline capacity will be built by year-end 2009
- Of the 3.9 Bcf/d, 3.2 Bcf/d of capacity is from Northeast or Canadian LNG terminals or natural gas from the Rocky Mountains via REX
- The remainder is to move this supply as well as Marcellus Shale around the region

The addition of this new capacity in 2009, on-top of the additions over the last two years, helps to reduce price spikes in the region

- Transco Zone-6 New York forward basis price shows a 40% reduction (\$1.76 MMBtu vs. \$2.95 MMBtu) between December 2009 and December 2008

Refunds Do Occur



Columbia Gas of Pa. customers get refund due to low gas prices

- A “large sustained” drop in gas prices after the utility filed its quarterly purchased-gas rate adjustment led to an over collection

Under Pa. law, a utility cannot profit by charging consumers more than what it pays for gas

- “This refund shows how companies are held accountable for over-collections”
- “While the cost of natural gas is low compared to recent years, it still costs money to heat a home”
- “It is nice to get back something for a change”

The refunds will go to residential, commercial and industrial customers

- Customers serviced between October 1, 2008, and September 30, 2009
- One-time credit in the November billing cycle

Questions

