

# Pennsylvania Natural Gas Summit- PUC Jurisdiction

Paul Metro  
Chief, Gas Safety Division  
Pennsylvania PUC

# Public Utility Commission

■ Mission Statement - The Pennsylvania Public Utility Commission balances the needs of consumers and utilities to ensure safe and reliable utility service at reasonable rates; protect the public interest; educate consumers to make independent and informed utility choices; further economic development; and foster new technologies and competitive markets in an environmentally sound manner.

# Gas Safety Division

- The Gas Safety Division is responsible for enforcing federal and Commission pipeline safety regulations as they apply to the certificated Natural Gas Utilities and Hazardous Liquid Lines located in Pennsylvania. Acting as an agent for the federal Office of Pipeline Safety and the U.S. Department of Transportation, the Gas Safety Division enforces the federal pipeline safety regulations as adopted by the PUC .

# What is a Public Utility – Natural Gas

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- *Public utility*—Persons or corporations owning or operating in this Commonwealth equipment or facilities for producing, generating, transmitting, distributing, or furnishing gas for the production of light, heat, or power to or for the public for compensation. The term does not include a producer or manufacturer of gas not engaged in distributing the gas directly to the public for compensation. – 52 Pa Code 59.1

# Gas Safety Division

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- The division monitors compliance with Federal and State regulations by conducting frequent inspections of pipeline facilities and records of regulated gas utilities. It also investigates incidents which could include fires, explosions and major outages

# Gas Safety Division

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- Types of fuels that we inspect:
  - ❖ Natural Gas
  - ❖ Propane
  - ❖ Hazardous Liquids
  - ❖ Landfill Gas

# Gas Safety Division

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- Almost 4 million natural gas customers in PA
- Regulate 36 natural gas utilities, 14 intrastate pipelines, 4 hazardous liquid lines, 4 LNG facilities
- 40,000 miles of gas mains

# Gas Safety Division

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- Types of Inspections:
  - Pipeline construction
  - Corrosion
  - Leakage Surveys
  - Damage Prevention
  - Incident Investigation

# Gas Safety Division

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- 9 Inspectors across the state
- If you're not sure whether an issue is related to gas safety....call the PUC Gas Safety Office

# Gas Safety

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- Number One Safety issue - Reduce line hits through focused inspections, investigations, and enforcement while reducing inspections in other non-problem areas

# Gas Safety

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- Risk Assessment Strategies
- Damage Prevention, Corrosion, Operator Qualification
- Through re-focused inspections reduce gas interruptions and outages
- Distribution Integrity Management

- Pipeline Replacement
- Pennsylvania has 3,600 miles of cast iron and 9,000 miles of unprotected bare steel pipes
- Bare Steel and Cast Iron pipes account for 5% of distribution pipe and 95% of leaks
- Reliability and Safety Issue
- Replacement Costs - \$13 Billion over 20 Years

And you think your job is tough!



# **GAS RELIABILITY TASK FORCE**

**LINE HITS ARE THE PUC'S NUMBER  
ONE SAFETY AND RELIABILITY  
PROBLEM – GAS, ELECTRIC, WATER,  
SEWER, TELEPHONE**

- **APPROXIMATELY 30,000 LINE HITS  
PER YEAR (CONSERVATIVE)**
- **APPROXIMATELY 3,300 NATURAL GAS  
LINE HITS Annually**

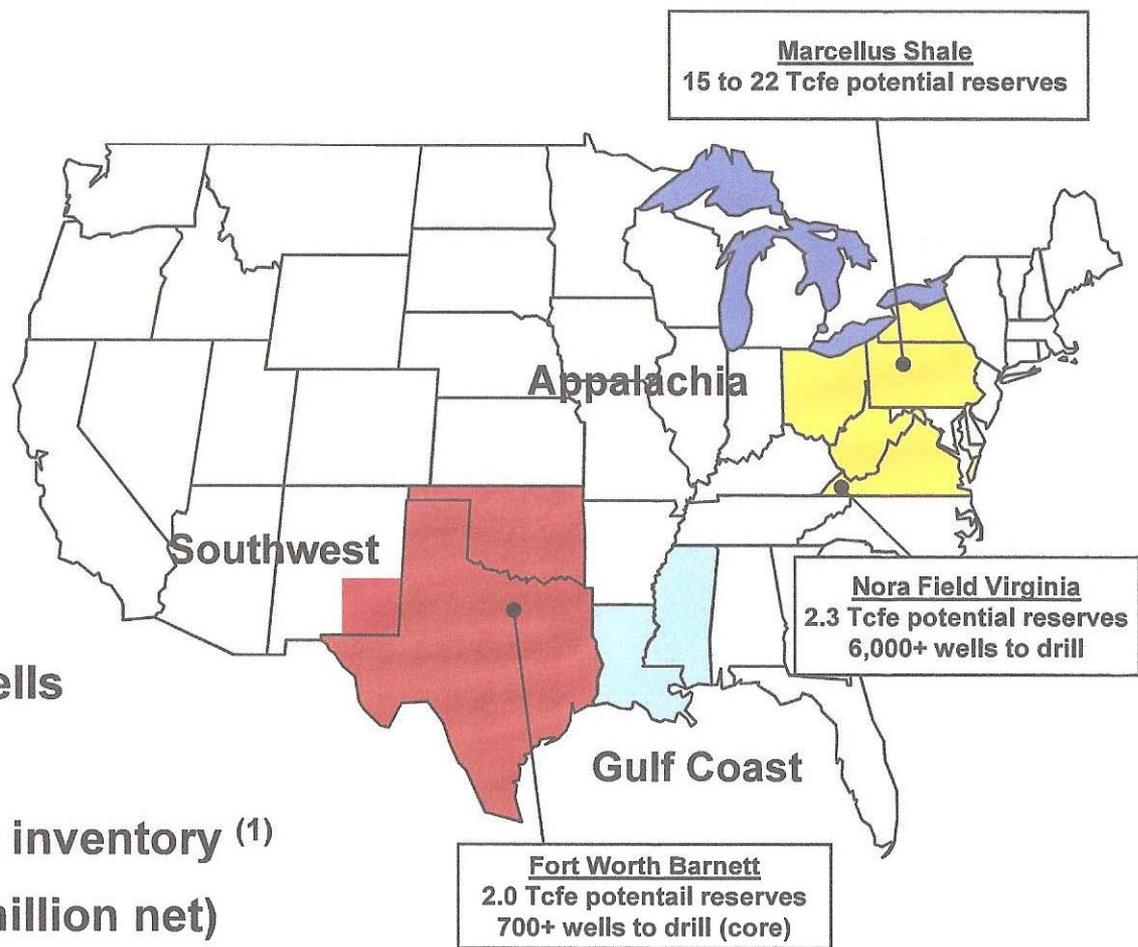
# Marcellus Shale

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- Pennsylvania – Largest proven reserve of natural gas in World
- Enough natural gas to supply the lower 48 for next 12 years for total gas and electric supply

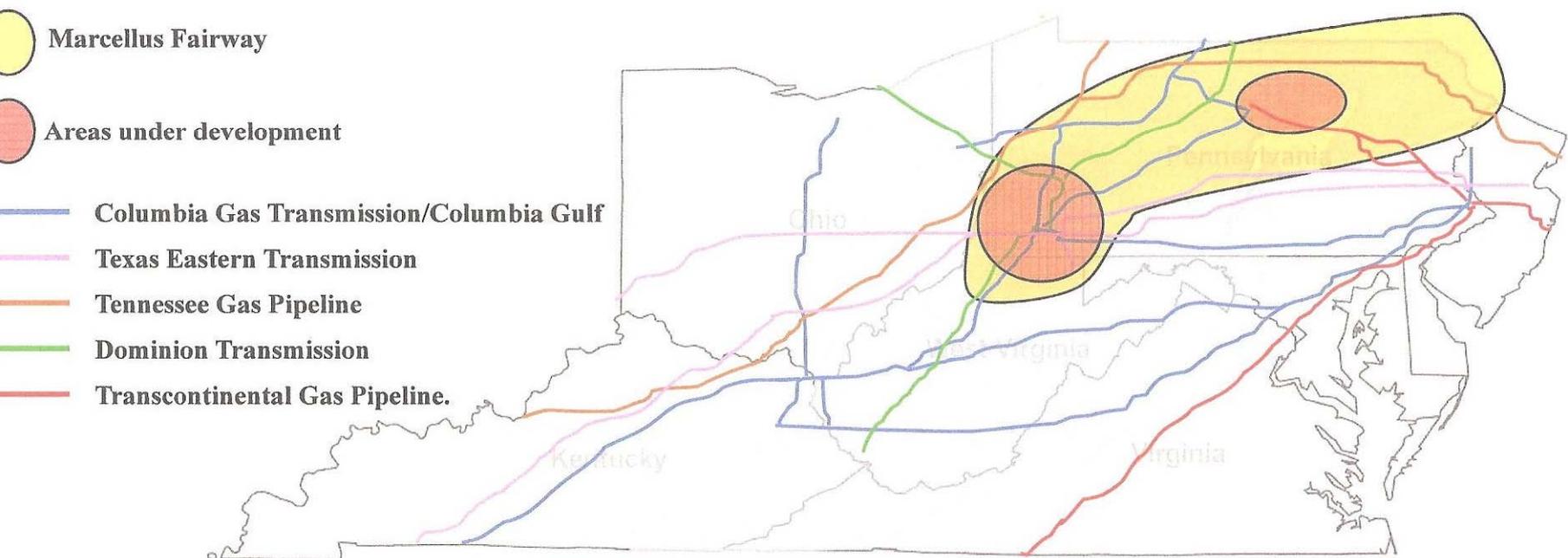
# Range Resources Overview

- Market Cap ~ \$7 billion
- Top 20 E&P company
- 10<sup>th</sup> most active driller
- Reserve base <sup>(1)</sup>
  - 2.2 Tcfe
  - 82% natural gas
  - 18 year reserve life
- Operations
  - 2008 – 968 (715 net) wells
  - 30 rigs drilling
- Large acreage and drilling inventory <sup>(1)</sup>
  - 3.4 million acres (2.7 million net)
  - 11,000+ drilling projects in inventory



(1) As of December 31, 2007

# Existing Gas Pipelines Sufficient in Near Term



- Existing pipelines can support near-term development in southwestern Pennsylvania
- Range has short-term firm capacity of up to 150 MMcfd and interconnects with multiple pipelines
- Gating element in southwestern Pennsylvania may be gas processing and liquids handling

# Jurisdictional Issues

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- The PA PUC has an agreement with the U.S. DOT to enforce the federal pipeline safety regulations with regards to jurisdictional public utilities
- Non-public utilities are the responsibility of the U.S. DOT's Pipeline and Hazardous Material Safety Administration (PHMSA)

# Jurisdictional Issues

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- Example 1 – a pipeline is constructed by a well owner to transport his natural gas to an interstate pipeline. At this point, the pipeline is not jurisdictional to the PUC because the pipeline doesn't reach the threshold for the definition of a public utility. Depending on the size of the pipe and the location, the pipe may be jurisdictional to PHMSA

# Jurisdictional Issues

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- Example 2 – Well owner constructs a pipeline to transport his gas to an interstate pipeline and offers, for compensation, capacity on his line to other gas producers. This pipeline is now jurisdictional to the PA PUC because the line meets the definition of a public utility – transporting gas for compensation.

# Jurisdictional Issues

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- Pipelines that the Gas Safety Division are particularly concerned with safety:
  - Pipelines operating at high pressure and located in high consequence areas (areas with a concentrated population area)

# Jurisdictional Issues and Marcellus Shale

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- Marcellus Shale gas wells and pipelines are at high pressure greater than 100 psig
- High BTU content
- Increased intra state transmission pipeline construction

# Jurisdictional Issues

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- Safety Inspection Gap with regards to non-utility operators - no PUC safety inspections and PHMSA doesn't have the inspectors to inspect
- PUC has addressed this issue with the Legislature

# Local Municipality Concerns

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- Compressor station location – very loud and usually greater than local noise ordinances if they exist
- Are being located in residential neighborhoods
- Emergency Responder training
- Right of Way issues

# Damage Prevention

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- New Hope, Bucks County – US Department of Transportation investigated the need for Excess Flow Valves
- Pennsylvania leads the nation in installation of excess flow valves



# Damage Prevention

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- Moon Township Incident – US  
Congressman Tim Murphy sponsors a bill to require contractors and excavators to call 911 in the event of an emergency
- Signed into Law in Dec 06 – Pipes Act



# Gas Safety Stats

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- Reportable Incident Five Year Average:
  - 3 Line Hits
  - 2 Corrosion
  - 1 Automobile
  - 1 Environmental Forces
  - 1 Operator Error

# Pipeline Safety Act of 2006

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- If an excavator or contractor hits a natural gas pipeline or hazardous liquid line and creates an emergency situation (leaking gas), excavator or contractor must call 911
- Pa One Call Law

# Pipeline Safety Act of 2006

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- Any owner or operator of a pipeline facility who fails to respond to a location request in order to ensure accurate marking of the location of the pipeline facility shall be subject to a civil action or assessment of a civil penalty (\$1 million)

# Gas Facility Damages

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- 2006 Data Shows Approximately 20% of Gas Line Hits due to Water Utilities

Line Hits are the #1 reliability problem

# 811

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- 811 was implemented May 2007
- 811 – Call before you Dig – rings to the Pennsylvania One Call System

# Plum Boro

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- Gas Explosion – 5 Mar 08
- 1 Fatality
- 1 Injury
- 19 Homes Damaged
- 5 Severely





# Plum Boro



# The End

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- Paul Metro
- Gas Safety Division Chief
- PA One Call Board Member
- 717.787.7063