Like Deja Vu All Over Again

24th International Conference
On Ground Control in Mining

Peter B. Lilly
August 2, 2005
Introductory Comments

• CONSOL Energy Commitment to Conference
  – 24 Year Participation
  – 27 Papers
  – Planning and Financial Support
• Now is a Positive Period for Coal
  – Enthusiasm at CONSOL and on Wall Street
• Lagging Mainstream Perception
  – ABC News Producer
    “We didn’t even know that the coal industry still existed”
  – Yogi Berra
    “It’s déjà vu all over again"
Coal - Reality versus Perception

- Consider the U.S. Coal Industry:
  - Accounts for Over Half of All Electricity Produced
  - Generates $60 Billion in Total Annual Revenue
  - Employs More than 100,000 People
  - Accounts for More than 750,000 Jobs

- Yet is Still Unfamiliar to National Mass Media
  - And Even to Local Professionals Outside of the Industry
Geotechnical Contributions

• We Marvel at the Work You Do

• Substantial Contributions to:
  – Safety
  – Productivity

• You and Your Necessary Work are Truly Appreciated
Industry Safety Improvement

Total Fatalities
U.S. Coal Industry

- We’ve Come a Long Way
- Must Strive to Eliminate All Injuries and Fatalities
- A Safe Mine is a Productive Mine!
Industry Projections - Production and Employment

• Production and Employment are Projected to Increase

Figure 102. Coal production by region, 1970-2025 (million short tons)

Figure 105. U.S. coal mine employment by region, 1970-2025 (number of jobs)

• Scientific Method, Innovation, and Visionaries Still Needed
CONSOL Energy - Leadership

CONSOL ENERGY AT A GLANCE

- Eastern U.S. producer of high-Btu bituminous coal and coalbed methane gas
- Leading producer of Pittsburgh 8 seam
- Largest U.S. producer of coal from underground mines
- Largest operator of longwall mining systems in the U.S.
  - CONSOL operates 23% of U.S. longwalls
- 2nd largest producer of gas in Appalachia
CONSOL Energy – Vast Strategic Reserves

STRATEGICALLY LOCATED U.S. MINES & RESERVES

Northern Appalachia
- Reserves: 2.598 billion tons
- Production: 53.7 million tons

Central Appalachia
- Reserves: 428 million tons
- Production: 13.7 million tons

Illinois Basin
- Reserves: 880 million tons

PRB
- Reserves: 439 million tons

Utah
- Reserves: 33.5 million tons
- Production: 0.3 million tons

Profile of CONSOL Coal
- Reserves: 4.509 BNt
- 2004 Production: 67.7 Mt
- Avg. Reserve Life: 22+ years
- Operating Mines: 17

Note: Reserves as of 12/31/04; production is CY 2004.
CONSOL Energy – Increasing Performance

GROWTH IN CONSOL ENERGY
COAL PRODUCTION

- Other
- Robinson Run
- Bailey/Enlow Fork
- Loveridge
- McElroy Expansion
- Base Production

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CONSOL Energy – Increasing Coal Prices

YEAR-OVER-YEAR INCREASE IN COAL PRICES

Q1 2005 Increase was ahead of Guidance

*2005 assumes $34.00, per guidance.

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Industry - Increased Demand Outlook

- Utility Demand for Steam Coal Will Remain Strong

**Figure 66. Annual electricity sales by sector, 1970-2025 (billion kilowatthours)**

- History
- Projections
- Commercial
- Residential
- Industrial

**Figure 69. Electricity generation by fuel, 2003 and 2025 (billion kilowatthours)**

- Coal
- Nuclear
- Natural gas
- Renewables
- Oil

Energy Information Administration (EIA)

- In the Short Term, Coal is the Only Fuel That Can Respond to Increased Baseload Demand for Electricity
STEAM COAL MARKETS ARE CHANGING

- Scrubbed units are being retrofit – Quickly
- Scrubbing causes power plants to price coal based on delivered Btus; sulfur content becomes irrelevant
  - This increases the value of location. Coal markets will become more regionalized.
- Scrubbed units run harder as emission allowance prices rise, increasing the burn of high sulfur (high-Btu) coal

SCRUBBING CREATES A “MARKET WITHIN A MARKET”

INSTALLED CAPACITY (EAST)-228 GIGAWATTS

<table>
<thead>
<tr>
<th>Year</th>
<th>Scrubbed Gigawatts</th>
<th>Installed Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>49</td>
<td>118% Increase in Market Opportunity</td>
</tr>
<tr>
<td>2010</td>
<td>107</td>
<td>113</td>
</tr>
<tr>
<td></td>
<td>204</td>
<td>246</td>
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</tbody>
</table>

MILLIONS OF TONS (High BTU-equivalent basis)

Updated on July 6, 2005
## CONSOL Energy – Proximity to Customers

### CONSOL’S LOCATION ADVANTAGE

Radius from CONSOL's Pittsburgh Seam Reserves

<table>
<thead>
<tr>
<th>Within 50 Miles</th>
<th>Within 150 Miles</th>
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</thead>
<tbody>
<tr>
<td>Coal-fired generating stations</td>
<td>24</td>
</tr>
<tr>
<td>Major generating units</td>
<td>66</td>
</tr>
<tr>
<td>Megawatts</td>
<td>17,000</td>
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<tr>
<td>Coal ton equivalency</td>
<td>40 MM</td>
</tr>
</tbody>
</table>
ENLOW FORK EXPANSION (EFX)

- Location: Washington County, Pennsylvania
- Coal Seam: Pittsburgh No. 8
- Average Height: 6 ½ feet
- Recoverable Reserves: 200 million tons clean
- Annual Production: 7 million tons clean
- Mining Method: Longwall & Continuous Miners
- Project Status: Permitting – In Progress
- Transportation: Rail -- CSX and NS
- BTU / pound: 13,150
- Sulfur, %: 1.78
Production versus Employment
U.S. Coal Industry

Production (million short tons)
Number of Miners

Year


0 100,000 200,000 300,000 400,000 500,000 600,000 700,000 800,000

0 200,000 400,000 600,000 800,000

Statistics via NMA

#17
What Lies Ahead

• Geology and Mining – Two Sides of Same Coin
• Best Parts of Most Reserves – Both Surface and Underground – Have Already been Mined.
• Challenge to Advanced Exploration and Technology
• Environmental Regulation
  – Permitting Difficulties
e.g., New Mine Can Take 7-8 Years to Permit and Construct
  – Re-evaluation of Excessive Trends and Interpretations
• Employment Education and Training
  – Challenge to Industry, Colleges, and Training Schools to Work Together to Train New Generation
  – If You Prepare ‘em, We’ll Recruit ’em