

Coal mining-current methods and relationships of public/private

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COAL: Buried Treasure on the Thunder Basin National Grassland

I would like to give you a brief look at the Peabody Energy Corporation. Peabody Energy, headquartered in St. Louis is the largest coal producer in the United States. In 2000, our operating subsidiaries mined 181.6 million tons of coal, approximately 16.9% of the nation's production. Mainly from surface and underground mines in Wyoming, Arizona, Indiana, Montana, Colorado, Illinois, West Virginia, Kentucky and New Mexico. This coal fuels more than 9% of the electricity generated in the United States.

In 2001, we expect to mine more than 100 million tons of low-sulfur, sub-bituminous coal from our three surface mines in the Powder River Basin of Wyoming, Rawhide, Caballo and North Antelope /Rochelle.

Today, I will be providing information about coal and coal mining in the Powder River Basin and more specifically on the Thunder Basin National Grassland. I will also discuss aspects of surface and mineral ownership from the state to the local level with a specific focus on coal. Information will be provided about the economic contribution of coal mining to the national, state and local economies. Finally I would like to broadly overview the spectrum of information we collect and maintain as part of our mining operations. This information contributes significantly to the overall knowledge base within the Thunder Basin.

The United States government owns over half of Wyoming's surface. The Federal footprint expands to 70% of the state when federal mineral ownership is considered. I

will be focusing on the Powder River Basin and then the Thunder Basin National Grassland. At this time I would like to orient you to the general locations of these areas. As many of you well know, the Powder River Basin begins in southeastern Montana and extends across the northeastern corner of Wyoming. The Thunder Basin National Grassland is located in the northeastern quadrant of the state.

The Powder River Basin coalfield includes over 1 trillion tons of coal reserves "in place". Over 60 billion tons of these preserves are known to be economically recoverable with today's technology. The Powder River Basin contains a truly extraordinary world-class seam of coal generally known as the Wyodak. This seam ranges from 60 to 90 feet in thickness and geologically resembles an enormous, elongated bowl that is roughly 80 miles across and 120 miles long.

There are 14 large surface coalmines in the Powder River Basin of Wyoming, all producing coal from the eastern edge or outcrop of the Wyodak seam. These mines are all located at a point where the coal seam is most shallow. As the seam moves west, it gets progressively deeper and actually thicker, as it quickly reaches depths that are not economically recoverable with either today's surface or underground mining techniques.

Powder River Basin coal represents 32% of the coal produced in the United States. This enormous coal reserve contains coal that is low in sulfur and also low in inherent nitrogen oxides when burned in power plants. As a result, coal production in the Powder River Basin has increased from 95 million tons per year in 1980 to nearly 323 million tons per year in 2000. Powder River Basin coal is delivered to 124 United States power plants in 26 states. Whether viewed as an economic or as a domestic energy

security and reliability issue, continuous coal production from the Powder River Basin is critically important to the United States.

It is equally important to the people of Wyoming. In 1999, Powder River Basin coal production generated nearly \$202 million plus in state and local property taxes, \$193.5 million plus in federal royalties (50% of which comes back to the state of Wyoming), plus almost \$116 million in AML fees, and \$72.9 million plus in black lung taxes. Added to that are tens of millions of dollars in payroll taxes, income taxes, etc. In total, coal produced in Wyoming represented over \$3.2 billion to the total economy of the state in 1999.

Much of the private surface estate in the Powder River Basin is underlain with federal coal reserves. The Thunder Basin is a mosaic of state, federal, and private lands totaling over 1.8 million acres. The United States Forest Service manages 572,000 acres as national grassland. It would appear that a significant portion of the grassland surface is privately owned. In fact, the surface ownership mix is approximately 50% private to 50% federal and state.

The coal reserve on the Thunder Basin National Grasslands is predominately federally owned and managed by the Federal Bureau of Land Management. The state of Wyoming also owns coal reserves on the grassland, generally in conjunction with its surface estate in sections 16 and 36. Coal mining on the grassland is covered under two federal land use management plans under the auspices of two separate federal agencies, the Department of Agriculture (US Forest Service) and the Department of Interior (Bureau of Land Management). Surface coal mining is directly regulated by the state of Wyoming with oversight by yet another federal agency, the Office of Surface Mining.

There are five large surface coalmines located on the Thunder Basin National Grassland. These five mines produce coal of premier quality as compared to other coal mined nationally as well as within the Powder River Basin itself. Coal from these mines contains the highest heating value within the Powder River Basin and some of the lowest sulfur content of any coal mined in the United States. Approximately 60% of the total 322 million tons of coal shipped from the Powder River Basin in 2000 came from these five mines alone. This equates to approximately 19% of all coal produced in the United States.

The contribution from these five mines to national, regional, state and local economies are equally impressive. In the year 2000 alone, these mines cumulatively employed over 1895 people. The total benefits and wages for that year equaled approximately \$166.8 million plus dollars. Goods and services purchased in 2000 totaled over \$363 million dollars. Government payments, including federal and state royalties and bonus payments, production taxes and property taxes were over \$400.9 million.

In 2000, the average production rate of the mines on the grassland was approximately 40 MM tons each. At these production rates, the mines must periodically replenish reserves by applying for and purchasing new federal coal leases. Today, the grassland-based mines have pending applications filed for federal coal reserves totaling almost +2.3 billion tons of mineable coal.

If one conservatively assumes a bid price of \$0.24/ton for these reserves, bonus bids would total over \$552 million alone. To date, the grassland mines have cumulatively paid over \$459 million in bonuses for additional federal coal reserves. A 12.5% royalty is also paid when the coal is mined. Based on the very conservative

assumption of an average coal price over time of \$4.00/ton, royalty payments on coal mined from the pending leases would total over \$1.2 billion. The federal treasury and the state where the lease is located share these monies equally.

Before I conclude today, I would like to touch briefly on the type of data and information we are required to collect, maintain and analyze in order to produce coal.

Our modern mining operations are highly regulated. For example, one mine alone holds 320 permits from 14 different State and Federal Agencies.

The primary permit is known as the permit-to-mine required by the Federal Surface Mine Control and Reclamation Act. This permit contains detailed information concerning the pre-mine environmental baseline condition and the mine and reclamation plans for the entire life-of-mine. The permit-to-mine for the North Antelope/Rochelle complex is housed in 38 three-ring binders and contains 1000's of pages of text, over 300 maps and 100's of tables, charts and graphs. Environmental information includes, land use, history, archaeology, paleontology, climatology, geology, hydrology, soils, vegetation, wildlife, wetlands, and alluvial valley floors. These subject areas must be studied and monitored in detail prior to, during and, for many of these areas, after mining as well. Mitigation plans are developed as part of the mine and reclamation planning process to minimize impacts to resources inventoried prior to and during mining. The major objective is to return the mined land to a use equal to or higher than the pre-mine land use. In the case of the mines in the Powder River Basin, reclamation plans are developed to support livestock grazing and wildlife habitat on the post-mine landscape.

At the end of the day, it is evident that coal produced on the Thunder Basin National Grassland is indeed a treasure. We have briefly discussed its value to local,

state and national economies as a plentiful, affordable, available and clean energy resource. I will conclude with the thought that the vast reservoir of information collected in conjunction with these coal-mining operations has value as well. Certainly in the geographic location and context in which it is collected, but perhaps to enhance understanding in the broader landscape as well.