

RESERVE DATA BASE JUNE 1987

PURPOSE

The United States is blessed with an abundance of coal, a reliable source of readily available, low cost energy. The question is, "HOW MUCH?" This report examines this issue by asking three basic questions:

- What is the domestic coal reserve base?
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- What rules, laws, or regulations impact the availability of coal resources?
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- What effect do these regulations have on the reserve base?

In order to answer the first question, a large amount of coal reserve information supplied by the various State Bureaus of Mines was examined, and a revised Demonstrated Reserve Base (DRB) was developed. These results were then compared with published information supplied by the U.S. Geological Survey, the Bureau of Mines, and the current keeper of the national reserve estimate, the Department of Energy's Energy Information Agency.

Regulations affect recoverable reserves in two basic ways direct impact, such as outright prohibitions due to land use conflicts, and indirect impact, such as taxation. Federal, state, and local regulations were reviewed to determine what impacts on coal resource availability could be identified using four different categories:

- Regulations having economic impact;
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- Regulations having physical impact;
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- Regulations preventing accurate determination of resources; and
- Regulations being considered that impact all three of the above.

FINDINGS

The DRB is riddled with inconsistencies which result in a significant overstatement of available coal reserves in the United States. A review of information supplied by State Mining Agencies showed that there were significant differences in the manner in which reserve estimates were generated. Additionally, in those states where resource estimates had been recently revised, such as Illinois, the original reserve estimates were found by the state to be overstated by an estimated 70%. This was due in large measure to conflicts in land use. Data from the various states which include such errors have been used to prepare the DRB which is maintained by the Department of Energy.

In 1985, the Department of Energy reported that the DRB in this country was nearly 486 billion tons. This resource estimate fails to factor for economic recovery. Using broad assumptions as to average recoverability by mining type (surface or deep), the National Coal Council developed an estimate of recoverable coal showing that the reserve base was more on the order of 170 billion tons, a reduction of 65%. Although this figure suggests that the country still has significant reserves of coal, it also shows that the available amount of recoverable coal is not infinite. Policy decisions based on the perception of nearly infinite coal reserves can have severe long-term consequences.

Many federal, state, and local laws, rules, regulations, and policies adversely impact the amount of coal that can be recovered. So many in fact that no comprehensive analysis could be undertaken. The study found that there is significant conflict and overlap at all levels of government in the proposal, approval, and implementation of these laws, rules, regulations, and policies.

Regulations having direct effects on the recoverability of reserves include the Federal Coal Leasing Laws, Surface Mining Control and Reclamation Act, Federal Mine Safety and Health Act, and Clean Air Act. They are all administered by different departments within the Federal Government and they all have significant effects on the ultimate economic recoverability of coal in the United States. The report recommends that the Secretary of Energy should develop and propose legislation that would impose an "Energy Impact Statement" similar to the Environmental Impact Statement which would force legislative, administrative, and regulatory bodies to consider the impact of new or proposed laws, policies, and regulations on current and future energy supply and security as well as the economic impact that such laws, policies, and regulations may have.

RECOMMENDATIONS

- Develop and implement better standards for categorizing reserves which recognize realistic reserve estimation criteria, mineability, and recovery criteria as well as the impacts of competing land uses. This effort should be coordinated and utilized by all parties developing and implementing this policy so that a single reliable data base is developed.
- The Secretary of Energy should establish a high-level interagency working group to study all current and proposed laws, regulations, and policies concerning the coal industry and their impact on the ability to fully access coal reserves.
- The Secretary of Energy should initiate a comprehensive survey of all coal producers to obtain an in-depth and detailed view concerning the economic and physical impacts of regulation on the recoverable coal in the DRB.