That's where coal slurry pipelines come in. They can provide the extra capacity needed to haul increased amounts of coal and serve as a competitive yardstick to keep other transportation costs in line. The railroads have been delaying construction of major pipeline systems by denying them passage across their rights-of-way. This has blocked several pipeline systems that could have been operating today. As matters stand now, the earliest date for a major long-distance coal slurry pipeline appears to be the early 1980s. The industry definitely looks forward to making a contribution to the nation's energy needs in the years ahead.

Active major coal pipeline proposals would deliver Wyoming coal to Texas and the Mid-south; Colorado coal to Texas and Utah coal to the West Coast and the export markets of the Orient. In the eastern United States one major line has been proposed to deliver coal from Illinois and Kentucky to utilities in Florida and Georgia. And others carrying coal to the Northeast are being considered.

The need for these pipelines has been recognized and the right-of-way problem is not the hurdle it once was. The passage of eminent domain legislation in several key states and the successful prosecution of court actions in other states have effectively cleared major obstacles. One pipeline company has gone far enough to work on an environmental impact statement and expects within the next 30 months to initiate construction.

The barriers are crumbling, but they have not been eliminated. The eastern pipeline builders say they definitely will need either state or Federal eminent domain. The State of Florida enacted a statute this year and a new Federal bill has been introduced that probably will go to hearings soon.

I have always said slurry pipelines would overcome the railroad obstructions as soon as the American people know that there can be a cheaper way to deliver coal. We are fast approaching that point.

Rebuttal Coal Slurry Pipelines Are No Energy Solution

By J.O. DAVIES

Editor's Note: This rebuttal was solicited to present the opposing view to the previous article entitled "Coal Slurry Pipelines Can Provide Energy" by Robert McNeil.

The writer seems to present the view that coal slurry pipelines are a panacea for the nation's energy ills. Of course, this view has been fostered in recent years by backers of these lines, who also have been busy painting railroads as monopolistic rate gougers.

The slurry writer's main premise seems to be: The nation's energy needs require an expanded use of coal, and railroad pricing practices have discouraged this expanded development; therefore, slurry pipelines are needed.

Only the first part of that premise is true: The nation indeed must increase its use of its abundant resources of coal. But to accuse railroads of hindering this development is like accusing the Allied Forces in World War II of hindering the liberation of Europe.

Railroads are making large capital commitments to coal traffic, and they are making these commitments at a time of skyrocketing costs. In the past five years, Burlington Northern (BN), which hauled more coal last year than any other single railroad, has invested more than \$665 million for roadway and rolling stock for coal service. In the five-year period between 1979 and 1983, BN plans to invest more than \$1.5 billion in coal-related facilities and equipment.

Other railroads, in the East and in the West, also are making heavy

investments to handle anticipated increases in coal traffic. But if they are to continue to make these investments, they must receive adequate returns.

Thus, in a very real sense, national energy policy supports and requires approval of coal transportation rates that allow railroads to continue with their investments in the nation's energy future.

Persons concerned with the current national debate of whether slurry pipelines or foreign shippers can supply coal to U.S. utilities more efficiently than American railroads should consider the wisdom of the parable of the bird in hand versus the two in the bush.

They should ask themselves why, since the technology of coal slurry has existed for decades, is there only one line in operation in the United States today. It is not because railroads have blocked their construction through right-of-way cases. Backers of at least two of the current slurry proposals say they have the necessary rail crossing rights to construct their lines. Why haven't they started construction? Is it because other forces besides railroads -environmental groups, persons concerned about their water rights -are exhibiting as much concern about the construction of slurry lines as are railroads?

In this light I think it is important that it be emphasized that the concept of slurry pipelines and the issue of nationalized eminent domain is not, as the slurry pipeline promoters would have you believe, a strict pipeline-

versus-railroad dispute. Many, many others are vitally concerned and disturbed. More than 50 western and nationwide organizations have opposed slurry pipelines for many reasons, a major one of which is objection to a Federal condemnation law which would permit slurry lines to cross farm and ranch lands all over the West, overriding state authority in that area. This, of course, would set a precedent for further Federal encroachment over areas traditionally reserved to state jurisdiction.

And on the matter of foreign coal, how much of that coal is actually being burned by American utilities and how much remains in its native country, useful only as a red herring to take attention away from the fact that American coal hauled by American railroads remains the nation's best energy buy?

For example, Department of Energy figures (March 1979) show that the City of San Antonio, Texas, despite all of its protestations about high coal rates, paid a delivered price of \$1.52 per million BTUs for coal to fire its steam generators while comparable prices of oil and natural gas were \$1.98 and \$2.21 respectively. Rail rates for the shipment of coal more than 1,600 miles from Wyoming to San Antonio currently are less than 1.2 cents per ton-mile. The rail industry average for shipping coal in 1978 was approximately 1.5 cents. Compare this with rail revenue per ton-mile for all commodities in 1978 averaging 2.4 cents per ton-mile, and it becomes obvious that charges that railroads are gouging coal consumers are not based on fact.

Perhaps the greatest irony of the writer's pitch for coal slurry pipelines is the rationale that slurry pipelines are needed for competitive purposes. These pipelines' 'take-or-pay' contracts, that would freeze out all competing modes by locking up the traffic for decades, make this claim of competition incredible.

It is also false logic to assume that the existence of slurry pipelines

would hold down rail coal rates. Instead, these pipelines could have an opposite effect by taking future projected traffic, that would result in higher unit costs per ton for remaining rail coal shippers.

The writer also ignores the simple fact that coal slurry pipelines are unnecessary, that railroads can handle the traffic. Study after study has come to this conclusion.

An information circular entitled "Long-Distance Coal Transport: Unit Trains or Slurry Pipelines" released by the U.S. Bureau of Mines in 1975, concluded that: "The capacity of the railroads to cope with substantially more western coal does not seem to be an unduly serious matter."

A 1976 study by the Hudson Institute agreed, stating: "We feel railroads should be able to haul initial requirements with little effort and, given investment in cars and motive power, should be able to increase haulage as fast as the mines can increase production."

A third report prepared in April 1976 for the Department of Transportation, entitled "Rail Transportation Requirements for Coal Movement in 1980," involved a survey of a number of major railroads in each of the three regions in the United States.

In the report, it was predicted that increased coal traffic could help rather than hinder the movement of other commodities, noting that "the majority of the railroads are planning for projected total traffic, including anticipated increases in other commodities, on their system. All of them indicated they would be able to absorb the anticipated coal traffic without any adverse effect on movement of other commodities.

The report also stated that "The anticipated coal traffic increases, even though affecting individual railroads unevenly, would not place unmanageable strain on rail capacity."

In early 1978, the Office of Technology Assessment, at the instruction of Congress, conducted a study of all the issues surrounding the controversy.

On the question of capacity to move coal, the OTA said: "The capacity of rail systems can be expanded faster than can coal mining or electric power generation using coal, provided the necessary investments in local rail facilities are made." And: "The choice between transportation modes will not be determined by their respective capacity limitations."

The Department of Transportation -- also in early 1978 -- released a report by its Coal Transportation Task Force which echoed this finding. Estimating that the demand for rail transportation of coal will require an investment of more than \$10 billion, the report said: "While some problems may exist, we believe that this investment can be made." And: "In many instances ... the rail coal hauling capacity already exists and the expected new traffic will allow the railroads to make better and more efficient use of their heavy past investments."

These findings show that railroads can handle the projected coal traffic. Backers of slurry pipelines admit that pipelines can only handle part of the traffic. Naturally, they want the more profitable routes.

Pipelines, by the nature of their design, serve large volume shippers. An effective national coal transportation system must meet the needs of not only the big-city, large-volume utility but all utilities, even those who will never be on a pipeline route. Only railroads can do this. The national energy policy would not be served by coal slurry lines decimating rail traffic and thereby denying railroads the revenues required to build up their systems for service to all coal consumers, big or small.

The final fallacy in painting coal slurry pipelines as a panacea for the nation's energy ills comes into focus when one realizes that they are less energy efficient than railroads. Coupled with their total redundacy, this last fact puts a large puncture in the hot-air slurry balloon of national energy service.