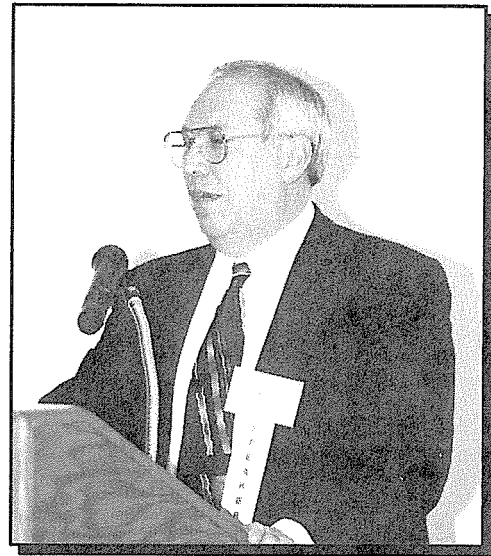


*Charles Roybal is Senior Regulatory Matters Representative for BHP Minerals in Farmington. He is responsible for managing compliance with federal, state, tribal and local laws and regulation pertaining to environmental, safety, contractual, employment, water rights and related issues. A 1971 graduate of UNM, he subsequently received a J.D. from Harvard Law School. Previously, Charles was the executive director of the New Mexico Mining Association, and has served as deputy secretary and general counsel of the New Mexico Energy, Minerals and Natural Resources Department and as an assistant attorney general.*



## COAL INDUSTRY OUTLOOK: CURRENT AND FUTURE WATER NEEDS

Charles E. Roybal  
BHP Minerals  
300 W. Arrington, #200  
Farmington, NM 87401

I would like to start out by welcoming Tom Bahr and the staff of the Water Resources Research Institute to Farmington. When I received the invitation, I couldn't help but reminisce about earlier days with Tom. He was my boss at the state Energy, Minerals and Natural Resources Department. In fact, he was the first Secretary of the new department formed by the merger of the former Energy and Minerals Department and the Natural Resources Department.

Tom and Governor Garrey Carruthers provided invaluable philosophical guidance for those under their command. This guidance proved to be invaluable to the work I was to do later on in my career. One dictum I adhere to is "stick with a homegrown set of values for your work." They never quoted Sarte, Descartes or any of those folks; instead, they relied on the wisdom of well-known American philosophers. One such philosopher was Dizzie Dean. The Dean axiom for business that they would always

cite is, "You gotta dance with the one what brung ya." A coal miner knows intuitively exactly what this axiom means. It means that coal mining and other extractive industries add real wealth to our country's economy. Mae West was another prominent figure they liked to quote. In the course of her illustrious career she made the statement, "Whatever is worth doing once, is worth doing several times." For a company that is involved in mining, that clearly states BHP's philosophy. We like to look for numerous opportunities to develop resources because we know that continued growth is good for the company and for the country. Finally, Tom and the Governor would talk about one of my personal heroes, Yogi Berra. Yogi gave us a philosophy, that describes my personal approach to planning. He said, "When you come to a fork in the road, take it." My method of planning, my vision for the future is often summed up by Yogi's statement.

## NEW MEXICO COAL INDUSTRY OVERVIEW

I would like to give you just a quick overview of the New Mexico coal industry. Approximately 26.8 million tons were produced at six mines in New Mexico in 1995, a good part of that was produced in the San Juan Basin. The employment in the coal mining industry is about 2,000 employees. This constitutes 2,000 of the highest quality jobs in the state and clearly some of the highest quality jobs in the region.

Most coal mined in New Mexico is for mine mouth coal-fired electricity generation. Thus, coal is marketed in this region by wire after converting the coal heat value to steam and running the steam through turbines to produce electricity. That is effectively how we move the energy that was contained in the coal resource. San Juan Basin coal does not transport well because of its quality in terms of heat generation capability, sometimes expressed as BTU value, and the coal's ash content. These two qualities alone prevent our coal from being transported by train without further effort to enhance by methods such as coal washing. Also the mining costs are significant, especially when compared to regions like the Powder River Basin.

The Raton Basin's coal, which is of a higher BTU value, is the only New Mexico coal that does not have this impediment, and that coal is marketable some distance by rail. Transportable as it is, the recent experience with Pittsburgh and Midway's Wisconsin Electric Power Company contract demonstrates that even coal of that quality has difficulty competing if it has to move long distances.

Another aspect of our industry is that we are pervasively regulated. We are so regulated as an industry, that expectations of privacy are actually lower at a coal mine than in other types of industry facilities. Some of the regulators who come out and visit us regularly are the Office of Surface Mining Control and Reclamation, operating under the Surface Mining Control and Reclamation Act, the Mine Safety and Health Administration under the Mine Safety Acts, and the Environmental Protection Agency. We also are accustomed to working very closely with tribal regulators in safety and environmental areas.

The interests of the coal mines and our utility customers are closely aligned. BHP Minerals operates three mines. The San Juan and La Plata mines supply the Public Service Company of New Mexico's San Juan Generating Station. The Navajo Mine provides coal for the Arizona Public Service Company's Four Corners Power Plant. BHP produced 13.7 million tons of coal in 1995, roughly one-half of New Mexico's production. We employ 996 employees and pay a \$42 million annual payroll, 74% of our employees are Native American, a vast majority of them Navajo. We paid \$101.5 million in state, local, tribal and federal taxes and royalties in 1995.

This gives you a little bit of an overview of our facilities, our three mines. The La Plata Mine is very close to the Colorado border and serves the San Juan Generating Station, connected to that station by a 22-mile haulroad. Six miles go across the Ute Mountain Ute Reservation, and BHP exercises a Ute employment preference as well as pays compensation for use of the haulroad. Our largest mine is the Navajo Mine. It feeds the Four Corners Power Plant.

### Water Usage

BHP's water rights are obtained under Permit No. 2838 from the state engineer. Historically, we have some advantages under that permit. One of the main advantages is that the permit is acknowledged by the Navajo Nation in our lease agreements. In fact, the leases contain a guarantee of sufficient water from the Navajo Nation. For the most part, the water is used by our utility customers for the operation of their power plants under agreements between BHP and those utilities.

Our main use of water by the mining facilities is for reclamation. During the first two years of our revegetation efforts, we keep our native grasses and plants under irrigation. Our aim is to establish a self-sustaining, diverse vegetative cover equal to or better than existed in pre-mining. If you know the San Juan Basin, you will recognize that about 60% of our mining is in badlands areas. Reclamation in this setting is always a challenge, but we think that what we have achieved in terms of revegetation for post-mining, grazing and wildlife use is very good reclamation. Under the Surface Mining Control and Reclamation Act, we must not only go out and establish vegetation, we also are responsible for a

minimum of ten years for vegetation to sustain itself, and we bond for that length of time. Other uses we make for water include dust suppression and some construction, but these are minor in comparison to water use for reclamation.

### The Future of the Coal Industry

The electric power generation industry is changing because of deregulation, as the Public Service Company representative explained earlier today. That means we need to cut costs of our product to the power plants in order to remain competitive because the major part of their costs is the cost of coal. With electricity deregulation, plants that are at the higher end of the production cost curve are going to be in jeopardy because they are not going to be able to compete well. The Four Corners Power Plant is better situated than the Public Service Company of New Mexico; however, we are focusing on how to cut costs, and again, the cost of coal is a very important component of the cost of power.

Another issue with which we have been confronted recently is the impact of the Navajo-Hopi Settlement Act. Under the terms of that act, the Navajo Nation is allowed to select 35,000 acres within New Mexico as compensation for giving up some of the disputed joint-use areas to the Hopi Tribe. The Navajos can now select federal lands in New Mexico. One issue presented by the latest selection is whether the Navajos can select land where the Bureau of Land Management only owns the mineral rights. They have done that in certain cases. The lands that they select under the terms of the Act must be within 18 miles of the Reservation boundary. Through this Act, the Navajo Nation has been able to select a majority of our remaining recoverable coal reserves. By the terms of the Act, the selected lands become part of the Navajo Reservation which raises several issues including the ability to tax and to impose environmental regulations. In addition, there are employment preference issues. Although we exercise employment preferences at all three facilities, that does not mean the whole impact of the Navajo Preference Act has been felt in all three facilities. Numerous questions remain and will be resolved in the course of negotiations. We have started to discuss the issues raised by the selections with the Navajo Nation. If the Navajo Nation's goal

for selecting mineral-only lands was merely to achieve a diversion of the federal portion of the royalties from these lands, we could support this effort. In fact, we understand the Navajo Nation has very severe income needs, and, in the face of declining federal budgets, it makes sense for the Nation to go out and look for revenues.

The last issue, looking ahead, is our Navajo South Project. Even with deregulation and the potential for highly competitive markets, there is a possibility that somewhere around 2005 there will be new power markets. We are at the feasibility stage of determining how those demands can be met. When we look at the future, especially markets in California, we hope that through a partnership with a company called Calpine, that BHP and the Navajo Nation would supply the coal, transmission corridors, and probably water for the project. In this scenario we envision the need for a new mine and power plant.

Although the future may appear dangerous because of competitive uncertainties, BHP remains confident that there will be opportunities to develop the coal resources in this area. In so doing, we will continue to provide high quality jobs, contribute significantly to the federal, state, tribal and local treasuries while providing fuel for our electric power needs. One of the key elements to making that vision work is the continued availability of water in sufficient quantities to allow the company to meet its responsibilities.