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Conference keynote address

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Before too many years have passed, I think, the people of the United States will be thankful that we had an energy crisis last year. For some Americans, it has meant real hardship. For many of us in government it has meant long, hard hours of work with seemingly little progress. But for most Americans it has meant little more than inconvenience. . .with homes and offices slightly colder than we might like, and those hassles with lines at the local filling station. So far, we've gotten off easily. We've had a warning, one strident enough to wake us up. And, apparently, we have taken heed. If we do now what has to be done to assure adequate energy supplies, then one day a few years from now we will be able to look back gratefully to the time and the circumstances that startled us into action.

Our new awareness is symbolized in several ways by this Conference. It has broad-based sponsorship. It encompasses almost every traditional and potential energy source, from fossil and nuclear fuels to the sun, the wind, the fuel cell, and our proliferating solid wastes. Industry's increasing concern with energy management also is properly emphasized. An average cutback of just 10 percent in industrial energy use, much of which could be achieved through relatively simple improvements in operations, could realize energy savings equivalent to 1.5 million barrels of oil per day. And by slowing down to conserve gas we are beginning to find out that we can not only save some money--and probably some lives--but also get to know our fellow citizens, and our country, a little better.

Of course, no amount of conservation can be expected to do the whole job. Our country and its population are still growing and our energy requirements inevitably will continue to rise. We still depend heavily on crude oil--much of it imported--and though we hope to lessen that dependency, it will take time. Meanwhile, we are still faced with the problem that confronted us even before the recent embargo: a shortage of the refinery capacity needed to transform crude oil into the various consumer products we require. As of last September, plans announced for new and expanded refining facilities would give us an additional 2 million barrels of daily capacity. We will probably need at least another 5 million over the next decade if we want to meet our growing requirements for petroleum products. And that assumes that we will be steadily reducing per capita demand all the time.

Even if enough refineries are built and we have access to adequate volumes of crude oil, we can be sure that the crude is going to cost us more, much more, than it has in the past. Already we are paying better than twice the price we paid for imported crude just a few months ago. Prices for domestically produced crude inevitably will rise as well, and the same can be said for natural gas as it becomes scarcer.

Among the fossil fuels, that leaves us with coal. And, as far as the Department of the Interior is concerned, coal is this country's best bet between now and the end of this century.

Why? Because coal is by far our most abundant energy source. We have almost 200 billion tons of it that we can recover economically right now with today's technology, and that is enough to last us for hundreds of years at the rate we are using it. The fact is, of course, that we are using it too seldom. Although coal represents nearly 90 percent of our total fossil fuel reserve, it now supplies less than 18 percent of our energy needs. In the face of what has been happening on the oil and gas scene lately, you'll have to admit that doesn't make a whole lot of sense.

The Secretary of Interior, Rogers Morton, doesn't think so either. In line with the President's Project Independence goal, Secretary Morton has committed his Department's resources to an all-out effort that will make coal the fuel for most of our country's stationary heat and power generation. To that end, an Interdepartmental Coal Task Force has been established to come up with policy recommendations. . .a "national coal strategy". . .that will point the way toward making coal once again our principal energy source. Thomas V. Falkie, our new Director of the Bureau of Mines was the Secretary's choice to head the Task Force, and he expects to have his group's recommendations in the Secretary's hands early this summer.

Meanwhile, Interior has budgeted substantially for energy research in the coming fiscal year--well over half a billion dollars. And the lion's share of that. . .nearly $400 million. . .is for research that in one way or another has to do with coal. We'll be working on many different facets of coal: exploration, extraction, refining and conversion, and the problems that can be anticipated in converting central power stations from oil to coal. And that is only the beginning of a greatly expanded effort because, as we all know, coal has plenty of problems. We are looking for markedly increased production--up to 2 billion tons annually by 1985--and the markets for that much coal depend to a large extent on our solving some of its problems.

Take environmental acceptability, for example, which has up to now presented a substantial barrier to wider use of coal under power plant boilers. Interior has asked for $343 million this fiscal year for R&D. Our R&D will include work on ways to overcome the sulfur problem, either by converting coal to low-sulfur fuels or by removing sulfur compounds during or followin g combustion. Over the next five years, we expect to be putting something in the neighborhood of $3 billion into the total R&D effort.

Sulfur is only one of coal's problems. Getting it out of the ground at the rate of 2 billion tons a year, and doing it in ways that minimize the risk both to the coal miner and the environment, is another. We may need a threefold increase in production in just a little over a decade. Just that increase alone is the equivalent of 280 new mines, each averaging 5 million tons a year. . .in terms of the capital investment required, somewhere between $20 billion and $30 billion. It would mean opening a new mine every week, if we had started three weeks ago.

And it will require new workers, perhaps up to 300,000 of them over the next ten years, who will have to be attracted and trained to work effectively and safely within a technological context that will be steadily changing. This will be steadily improving too. Health and safety in coal mining has improved in recent years, but that improvement has been accomplished primarily by the placing of greater emphasis on healthful and safe operations rather than by the introduction of advanced technology. Coal mining is still riskier than it has to be and we believe that the major improvements from this point on must come through the development of a safer and more healthful mining technology.

Interior is working, under the research provisions of the 1969 Coal Mine Health and Safety Act, to assure that. Our multimillion dollar mining research program attacks virtually every hazard encountered in coal mining today. We are working, for example, to make haulage and roof-support systems continuous in ways that will eliminate production bottlenecks as well as safety hazards. We're making good progress with a system for degassing coal seams ahead of mining, which promises not only to minimize the hazard of explosive methane, but also to make sizable quantities of gas available for residential use. And we expect to develop and demonstrate technology that can make longwall mining more widely applicable in this country, because we're convinced that it can yield real dividends on both the safety and productivity fronts.

Results from this sustained R&D effort are now beginning to come out of the pipeline, and I predict that the coal mining industry and the public are going to be impressed with them. Up at Prestonsburg, Kentucky, a new mine is being developed right now that will soon be a showplace for some of these results. There, equipment and techniques expressly developed for safer conventional mining will be demonstrated in actual mining practice. Moreover, although we purposely will not be striving for productivity in this operation, we expect that it will reveal opportunities for productivity gains. A similar demonstration, in a continuous mining section, is scheduled to begin later this year at a coal mine in Illinois.

Now the gains in health and safety that have been made so far, and those to come, must not in any way be compromised. At the same time, if coal is to remain competitive for the foreseeable future, productivity rates must be improved at underground and surface mines. Both have experienced productivity declines in recent years. We've asked for nearly $47 million to address the problem this year. The program will seek not only improvements in present mining methods but also wholly new technology and new mining systems. Secretary Morton has set the goal. . .a doubling of current productivity rates by 1985, and our R&D people are determined to reach it. They are also determined to solve the recovery challenge for the fuel values inherent in the thick coal seams of the West. Excellent progress is being made in Bureau of Mines experiments in underground coal gasification, and in systems for rapid restoration of surface mined land, which are essential for the extraction of coal in arid parts of the West.

We believe the practical, workable technology that will come out of this wide-ranging research and development effort is part of what the coal industry must have if it is to help meet the Nation's growing energy needs. But there is something else it must also have. And that something is a degree of certainty.

Before the industry can attract the capital and marshal the resources required for long-range investment in new mines, it must have some reasonable assurance concerning the framework within which it will have to operate, the conditions it will have to meet. What will be permitted in the way of surface mining, and what will be required in the way of reclamation? What will be the impact of air quality control regulations?

In this latter connection, it is interesting to note the findings of a recent study by the Interior Department's Bureau of Mines which compared the sulfur content of coals available to each Air Quality Control Region with the emission standards established for each region. . .standards now scheduled to go into effect on July 1, 1975. The Bureau found that roughly a third of the coal tonnage produced annually--somewhere between 200 million and 300 million tons--will not be burnable once the new standards take effect.

Such a prospect cannot help but dampen enthusiasm for any large scale heavy investment in new coal production capacity. Who is going to pour capital into a new mine, knowing in advance that he won't be able to market its product?

Strict enforcement of clean air standards would shut down half our coal-fired electric generating capacity and much of our industry. So, we can anticipate that some kind of relief will be forthcoming. But, the point is that the coal industry does not know what kind, or for how long, or under what conditions. And so would-be coal producers--operators of those 280 new mines that we need to more than double production by 1985--are waiting. The longer they wait, the longer the country will wait for coal, and the less likely the national prospect for energy independence.

The Interagency Coal Task Force that I mentioned earlier is facing up to this problem, and from that group will come answers that can break the paralysis of decision now gripping the coal industry.

From the way I've been emphasizing coal you may be guessing that I have a fat portfolio of coal stocks. Well, I don't. In fact, my industrial background had a lot more uranium in it than coal. Furthermore, I'm convinced that nuclear energy will play a mighty big role in the energy future of this country, as will our vast western deposits of oil shale, our tar sands, our geothermal deposits, and power from the sun and the wind. Our country is just beginning to grow and it has abundant energy resources to nurture that growth. All of them can and will be used in time.

But, superabundance and a unique combination of circumstances have made this the time for coal. By meeting today's challenge, coal can give us the time we need to develop and use all of our energy resources in the best interests of all of our people.