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REMARKS BY E. W. LITTLEFIELD, PRESIDENT, UTAH CONSTRUCTION AND MINING COMPANY, PRESENTED BEFORE INDUSTRY PANEL WYOMING GOVERNOR'S CONFERENCE ON URANIUM 11/1/68

GENTLEMEN:

Perhaps it is significant that the first Wyoming Governor's Conference on uranium is being held approximately two decades after the uranium industry came into being. Had it been held earlier, the cast of characters would have been different, for in 1954 an investment firm in Salt Lake City published a bulletin entitled "The Original Uranium Digest, Facts and Figures on the Uranium Mining Industry, Special Situations for the Discriminating Investor". It lists for consideration 130 companies. Only 5 of those are in existence today, and only two are engaged in the production of yellow cake. Only 2 companies represented here at this Conference made the list, and Utah Construction and Mining Company was not one of them. Considering the casualty rate in the uranium industry, those of us who have survived and prospered are the fortunate exceptions. We must be thankful, like the turkeys who survived Thanksgiving.

Out of the many who started, only 15 companies now are producing uranium concentrate. The list of survivors is an exclusive list and bears some comment, for conspicuous by their absence are the names of the giant companies one might have expected to find in what now appears so promising a field. Of the larger and older mining companies, only Anaconda, Amax, and Homestake are on the list. Of the oil companies, only Kerr-McGee and Getty. Of the chemical companies, only Union Carbide. The rest of us were new names to the mining industry, some with no previous experience and some like Utah Construction and Mining with limited experience.

Perhaps this can be explained when we remember that the uranium industry was born of the Government's desire to bring into being a domestic source of uranium for the production of atomic weapons. In 1949, any peacetime uses for uranium seemed nebulous and remote, a vague hope for the future. The incentives that the Government offered were seductive to some and spurned by others, and I suppose that it's fair to say the richer companies insisted on matrimony and rejected the Government's advances and those of poorer purses but braver hearts succumbed to temptation and yielded to a temporary dalliance.

Our company's uranium activities in Wyoming are a case in point. We were an old established company in heavy construction but relative newcomers to mining. We were operating relatively small iron ore mines in Utah and British Columbia, a small coking coal mine in Arkansas, and had recently taken an interest in a larger iron ore venture in Peru and a copper mine in Arizona.

We also believed implicitly in the future of the energy market, and wanted to participate in it. We had neither the capital nor the skills to engage in petroleum or natural gas, but we saw our opportunities in uranium and in coal in the Western United States. We set our geologists on the hunt for both, and in both we have been successful.

The first major uranium opportunity that came our way was the Lucky Mc Mine, discovered by Neil McNiece and Lowell Morfeld in 1953. The property came to us in 1955 after it had been examined and rejected by virtually every major mining company in the business. We took an option on a 60% interest, embarked on an extensive property acquisition program. Within a relatively short time drilling of these properties had greatly expanded the known reserves. After considerable difficulty we arranged the financing and by 1958 were shipping yellow cake under a contract with the A.E.C.

In 1957 we acquired reserves in Shirley Basin, began producing from an underground shaft in 1960. Later the traditional underground mining was discontinued and we produced thereafter by a new solution-mining method which we adapted from the technology developed by the petroleum industry for secondary recovery of oil.

By 1960, when Utah acquired the remaining 40% of Lucky Mc, the outlook for the industry was far from bright. It was becoming increasingly apparent that the Government's procurement program had been all too successful and it began to seek ways to limit or stretch out its commitments. We were one of the companies that joined in the "stretch-out program" in the hope that this might keep us alive until a civilian market might develop. One must remember that as late as 1962 the A.E.C. was forecasting a demand in 1980 of only 13,000 tons annually and this wasn't very exciting to an industry that had produced 18,000 tons in 1961.

To date in Wyoming we have stripped 46 million yards, mined 2.8 million tons of ore, produced 16.8 million pounds of U_3O_8, and sold 16.3 million pounds for over $127 million. We have in hand orders for another 12 million pounds for future delivery, of which 2.2 million pounds are under contract to the A. E.C. and 9.8 million pounds to civilian customers. We have at Lucky Mc reserves estimated at 4.7 million tons of 0.23% ore, virtually all mineable by open pit methods.

Now we are part of an industry that is in transition from making swords to making plowshares. The change in outlook has taken place so rapidly that it is difficult to comprehend. Since 1962 the A.E.C. has successively revised its estimates of cululative demand through

1980 from 70,000 tons of U_3O_8 to 140,000 tons, then to 172,000 tons, and its most recent forecast indicates a cumulative demand of 245,000 tons and an annual requirement of 38,000 tons in 1980. Private estimates run even higher. This has stimulated the search for new ore and last year for the first time in 8 years new reserves added exceeded the quantity mined during the year.

The question is no longer whether we have too much uranium but whether we have too little. Optimism has replaced pessimism. All this is heady wine and it is timely to ask ourselves whether we as an industry are equipped to meet the new demands that are placed upon us. In the past our trackrecord for predicting the future accurately leaves much to be desired. Now the stakes are higher and we cannot afford the luxury of error.

We cannot altogether escape the fact that the shape of the industry today is in part a product of its past. I would have to credit the A.E.C. with performing a difficult task extremely well under trying circumstances. However, in the beginning the Government paid different prices to individual producers based on their estimated costs of production, and this in turn brought into being producing properties whose costs of production vary widely and I suspect more widely than would have been the case if the usual disciplines of the market place had been present. As a result the ability of individual companies to compete in the free market place varies widely.

Furthermore, the curtailment of procurement in November, 1958 by the industry's only customer caused exploration for new deposits to virtually cease and the existing producers for the most part lived off their reserves. Now as a result the reserve position of the individual producers varies widely and fortunate is the company that finds itself now with a strong reserve position of ore that can be produced at relatively low cost. The ability of the individual companies to accelerate their search for new reserves and to expand their operations is also necessarily influenced by their size and financial condition, and this in turn varies widely. Some of the companies in the industry must depend entirely on the cash flow from uranium while others that are larger and more diversified can divert cash flow from other operations into their uranium activities.

As we make the transition to a market dominated by a demand for uranium for peaceful pursuits we must recognize that we are now part of the nuclear energy industry. We are the raw material branch of that industry but our ability to compete will be influenced by the performance of all other components of this industry that play a significant part in delivering to the public utilities all the factors necessary to produce power by nuclear means. We must never forget that we are in competition with all other forms of energy.

I suggest to you that the game is changing. Selling our output to the A.E.C. is a different problem than selling to a multitude of civilian customers. The Government could set prices arbitrarily at whatever level was required to obtain the quantity needed for its purposes. Now competition will set prices based in part on the supply-demand relationship within the uranium industry, but importantly also on the ability of the nuclear plants to compete with conventional thermal plants.

Nor is price the only factor involved. The utility industry is not going to invest billions of dollars in nuclear-fired facilities without reasonable assurance that uranium will be available in adequate quantities and at reasonable prices over a period of time sufficient to amortize their investment. Obviously we cannot service the predicted demand from existing reserves and new reserves must be brought into being in unprecedented quantities if we are to validate the existing demand projections and to sustain their continued growth.

When you think of all the unanswered questions, you cannot help but applaud the courage of the public utility companies in placing the orders that they have for nuclear-fired reactors and of the reactor manufacturers for entering into the commitments that they have made. Much of the costs of producing electricity by nuclear means is not yet nailed down by experience. The price of uranium is higher than the unreasonably low figures that were being suggested a few years ago. The cost of fabricating the nuclear plants that have been sold is considerably higher than had been anticipated by the manufacturers, and delivery schedules are slipping, and some of the new plants have encountered operating difficulties in the shakedown period. Change in safety standards and other design criteria have caused further cost increases and production delays. I am convinced that these are temporary problems and will be overcome but they could temper the near-term demand. They are factors that will influence decision making by the utility companies and we must remember that these private buyers have a choice.

However, our problems do not loom large in comparison with our opportunities. On the demand side, forecasts of future consumption will require us to increase our volume of output by 1980 to somewhere between 3 1/2 and 5 times the 1967 level. To sustain the 1980 demand we must increase our estimated reserves to a size somewhere between 4 1/2 and almost 7 times the existing reserves. This is a promising prospect of unprecedented proportions. The discovery of new reserves is going to be a costly and expensive effort, for I think that it is fair to conclude that we have found the uranium that is easy and inexpensive to find. New discoveries will demand more sophisticated efforts and the cost of discovery will mount. New discoveries must be made.

If they are not made by those now in the industry, they will be made by others, for the prize to be won is too great to go begging. We have already witnessed the entry of new companies into the search for uranium, and many of these companies may be short on experience but some of them are strongly financed. Unjust as it may seem to those of us who weathered the early and stormy days of uranium, these newcomers undoubtedly will preempt part of the market for which we have been so patiently waiting. However, given our headstart, we in the industry should continue to give a good account of ourselves.

Perhaps I can best demonstrate the faith that my company and I have in the uranium business by announcing to you that our Board of Directors has approved an appropriation of $20 million to double our uranium output by opening up our Shirley Basin property as an open pit mine and constructing a new mill there. Two weeks ago we ordered a fleet of scrapers, and we expect to start stripping operations early next year. Approximately 22 million yards will have to be stripped in advance of mining and this will require about 15 months. We anticipate commencing mill construction in late 1969 and the first concentrates should be ready for delivery 15 months later. We believe in Wyoming and in uranium and we are putting our money where our mouth is.