

and technology. He is the highest expression of the fundamental tendency of self-development of the physical universe and the biosphere which accounts for our species' origins and qualitative advances.

Whether this all had meaning, whether this heritage is transmitted to future generations, now depends entirely on whether we have the courage to provide the needed leadership.

California Industrialist Hits Delays In Developing New Sources Of Natural Gas

Following are excerpts from a speech by Joseph R. Rensch, president of the Pacific Lighting Corporation, titled "Politics and Energy Brinkmanship." The speech was delivered Jan. 17 to the Comstock Club in Sacramento.

I appreciate the opportunity to appear before you. I have taken the title "Politics and Energy Brinkmanship" hoping to convey in those four words the key issue in what I believe to be the most serious problem facing the state of California at this time — the coming crisis in our energy supplies.

The cutting edge of the energy crisis is the sharp decline in the supplies of natural gas from our existing sources in the continental United States...At worst, we face a severe energy depression — much more punishing than the Great Depression of the 1930s. The decisions that are made as precious time runs out in the days and months ahead will dictate just how bad that impact will be.

A great many of the decisions that must be made in resolving our energy dilemma rest in the hands of governmental agencies and those in political office. There is a dangerous game of energy brinkmanship going on in the political arena, and California is playing this game to the hilt....

Conservation must be given top priority. Unfortunately, there is a widespread misunderstanding that conservation alone will totally or largely resolve the problem...Nuclear power is an important source of energy and must be developed on a much broader scale than it has up until now. But there are only three new plants which could be operating within the next five years. The first nuclear power plant in California was put into service in 1963. Today, after 14 years, nuclear power still provides less than 2 per cent of the state's stationary energy supply...Many positive conservation steps can and must be taken. A "no-growth" policy is not one them, however. The problem with "zero-growth" is that it does not provide for the inescapable increase in our labor force. There are 13 million young men and women, now living in this country who will be entering our labor force within the next ten years. This represents almost a 15 per cent increase in our nation's labor force and jobs are going to be needed for these people. A "zero-growth" policy in the face of that would guarantee a severe unemployment situation.

Unfortunately, what I am talking about today is the prospect of "negative growth." This is much more serious than talk of "zero-growth," bad as that is. "Negative growth," or a significant reduction in jobs,

can and will result from the energy shortage I am describing today. The immediate question on gas supplies is pivotal.

There has been a serious decline in gas supplies in southern California and if no new supplies are brought in by late 1980, that part of the state faces economic chaos...By 1980, southern California gas supplies will be less than half what they were in 1970....

...By 1979 as the situation worsens, gas will no longer be available for many other customers such as the larger hospitals and government facilities.

Then, in the early 1980s, without new gas supplies, we will be forced to turn off the very small businesses and industries which have no alternate fuel capability — and, finally, the residential customers. A conservative estimate of the initial unemployment impact which will occur if we start turning off these many thousands of businesses and industries without alternate fuel capability is a loss of 700,000 southern California jobs....

And for all practical purposes there are no realistic energy alternatives (to natural gas —ed.) for the small residential consumers...The gas distributors saw this problem coming many years ago. In 1969, Pacific Lighting proceeded to develop its own projects to supply its subsidiary Southern California Gas Company from new sources. These proposed projects include gas from coal gasification in New Mexico and, in partnership with Pacific Gas and Electric Company, liquefied natural gas (LNG) from South Alaska and from Indonesia. PG and E and Pacific Lighting have also been working closely together for many years to assure California's participation in the large gas reserves on the North Slope of Alaska.

Extensive delays have kept these projects from coming into being by now. Gas from the North Slope and coal gasification are not expected now until 1983. As a comparison between two countries faced with a similar problem, we contracted for our supplies of natural gas in Indonesia over three years ago, against some very tough competition from Japanese buyers. We entered into a contract for our share in September, 1973; the Japanese signed up for their gas about three months later. But that is where the parallel stops. The Japanese proceeded to build their facilities — with their government supporting rather than impeding their efforts — and as a result, the first deliveries of LNG to Japan will start this year. We, on the other hand, are still struggling through governmental processing striving to get this large supply of new gas in by the critical year of 1980.

As a matter of fact, only the two LNG projects can bring gas to California by 1980. It will take three years to

finance and construct the facilities, after all of the approvals have been obtained. As it stands there are only two terminals which are sufficiently advanced so that they can be completed by 1980; one is planned for Terminal Island in Los Angeles and the other is at Oxnard. It is critical that we have at least one of these approved and started in time to be put into service by late 1980....

Unfortunately, LNG is an unknown quantity to many people, and those who choose to oppose our energy projects can conjure up frightening concepts about it. LNG has a good safety record. It has been shipped and transferred safely to and from terminals throughout the world for nearly 20 years...It is obvious that safety is the issue that can be best used to delay construction of badly needed LNG terminals. We consider it to be critical that delays at the State level be headed off. We are encouraged by what we believe is the Governor's understanding of the need for LNG. But we are discouraged by actions now underway in the State legislature which would add additional regulatory review of LNG terminal sites by the State Energy Commission and, thus, prevent us from

constructing the terminals in time to avoid economic chaos.

The cost of these delays is almost immeasurable. First and most important, of course, are the economic consequences and the human hardships that will result in an energy-short economy. Second is the increase in costs of these projects as a result of inflation. For each day of delay, the cost of our coal gasification project increases over \$220,000; the cost of our South Alaska LNG project increases over \$300,000 each day. The cost of our Indonesian project increases over \$500,000 for each day and the cost of the North Slope project increases over \$2 million for each day of delay. And it's the beleaguered consumer who ultimately picks up this unnecessary cost. The third problem caused by delay is the probable loss of supplies to competitive markets. We face competition for both the South Alaska gas and the Indonesian gas supplies, and we can be assured they will be lost if we face any extensive further delays.

The brinkmanship and the negativism in processing these projects has gone on long enough. It's time to talk about what we *can* do instead of what we cannot do.