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WILL THERE BE ENOUGH FUEL?

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The title of this talk, "Will There Be Enough Fuel," is deceptive. It is deceptive because the problem facing America today is not so much "will there be enough fuel," but "will the country have enough money to pay for the types of fuel that are available." The message I would like to leave with you today is that although there will certainly be sources of energy in the future, they will cost more, much more. However, if the food distribution industry takes the proper steps now, it can live with those costs. Conversely, if elements of the industry do not plan now for future cost increases, they will be in serious economic trouble.

Some of you are now squirming in your seats, looking at your watches and wondering why you are sitting listening to another talk on an energy crisis which most of you simply do not believe exists. Why should you? Everyone in this room came here in a vehicle which burns fuel, and yet not one person here is worried about where the fuel to get home will come from. None of you has seen lines at gasoline stations. In fact, gasoline prices are going down again. Yesterday, in Bryan, Texas, I paid 45 cents a gallon for regular gasoline. The newspapers are telling us that there is a surplus on the world petroleum market. How, you will ask, can there be a shortage in view of these events? How can we believe that the energy crisis is anything but a conspiracy between big

oil companies or Arab countries or whichever particular whipping boy you have a grudge against?

Such suppositions, which all of you have heard, are far from reality. Reality here is that the energy crisis is very much with us not only on a national basis but also on an international basis. This nation is currently dependent on petroleum and natural gas for more than three-fourths of its total energy consumption. In addition, our domestic production of petroleum has been declining from a peak of about 10 million barrels a day since 1970, and last year, we imported 38 percent of our petroleum at a cost of more than 25 billion dollars. Even more frightening than this is that last spring, for the first time in history, the United States imported over 50 percent of its total monthly crude oil usage from foreign countries. These countries, by and large, have no great love for us, our institutions or our way of life. These countries, at the drop of a hat, can turn off the spigot that keeps this country running.

It is easy to forget what happened in 1972. Then, we imported roughly 20 percent of our domestic petroleum; it was the time of cheap foreign crude. So, the threat of a boycott and the diversion of small amounts of petroleum from the United States, caused severe dislocations in our economic system and triggered the recession that we all remember much too

well. But more importantly, it interfered with our basic lifestyle. Think back to 1973 when we talked about forbidding driving on Sundays, when we jockeyed to buy 10 gallons of gasoline at the neighborhood gasoline station, and when schools and public institutions were developing shutdown plans (at Texas A&M we were down to a 3 week oil supply). I was in San Antonio at the height of this scare and I needed to get back to College Station quickly. But, there was simply no gasoline for sale - at any price, at any time, at any place that I knew of. This experience quickly brought home the importance of energy to my lifestyle.

Now, most of us have forgotten. We have forgotten because there are no lines, no people standing around. If that 20 percent of our usage was so vital in 1973, imagine how vulnerable we are now, importing more oil than we produce.

But the problem is more than just oil. The problem also extends to natural gas. Our natural gas production has been declining consistently since 1973 with very little prospect of either oil or gas production ever again meeting domestic needs. The situation was complicated by the fact that until the recent Federal Power Commission (FPC) ruling on gas prices, federal regulations were aimed at keeping the price of gas low. The Congress has expressed dismay that such a policy has increased gas usage. I am not an economist, but I know enough about basic economics to understand that nothing is going to get what little gas we have left into production, get a fair value on gas and encourage the thoughtful use of gas except removing controls and letting the market set the price.

You will be told that there is plenty of gas and that it is being held

back to drive the price up. That, I am afraid, is a pure fabrication. I have listened to distinguished geologists from all over the country argue among themselves as to whether, at the present rate of consumption, there are 10 years, 20 years or, as the most conservative say, 30 years of natural gas left. The point comes home very quickly that whichever of these men is wrong, even if they are off by 10 or 15 or 20 percent, the natural gas supply, if depleted at the rate at which it is currently being depleted, will run out within the lifetime of every person in this room.

The elements of a future crisis are likely to remain and get worse unless there is a continuous emphasis to reduce the world's heavy dependence on petroleum resources and to develop alternate energy sources. The problem is that we haven't much time and it is going to cost a lot of money. In the past 100 years, energy consumption in the United States has grown at the rate of 3 percent a year, increasing to about 4 percent from 1965 to the 1973 embargo. Even if we grow at a slower rate, by 1985 our total energy requirements will still be more than 50 percent of what they are today. Those of you that deal with finance know that, at 3 percent per year, sooner or later you will double your money. A 3 percent per year growth in energy use means that at some point, you will need twice as much energy or you will need to find some way to use the energy you have twice as efficiently.

It seems clear that there will be alternate energy sources in the future. These include: solar, geothermal, synthetic fuels and coal. All of these forms of energy, however, involve some technological problems. These problems can be solved, but they will be expensive to solve. For example, although it might seem that we can get free energy from the sun, both development of significantly

new types of equipment and large amounts of capital will be required to integrate solar systems into the conventional energy distribution networks. Consequently, although these new alternative energy forms hold great potential for the future, they will cost money and take time.

If, as is generally thought, many of these new developments will not be technologically or economically feasible until the end of the century, how will the food distribution industry be affected now? The effect on the industry can already be seen. The most obvious is the effect on transportation. As petroleum costs have risen, the transportation costs have risen, and these costs have manifested themselves throughout the distribution system, resulting in higher costs for the consumer. In general, this has affected the industry in a fairly uniform way.

The not so obvious effect is that of the increased cost of petroleum and natural gas on electricity rates. Petroleum and natural gas are used to generate electricity. As the cost of these products escalates and as these energy sources become more scarce, the only alternative is for electricity rates to go up. In 1973, I paid 1.5 cents per kilowatt-hour for electricity. Now I pay over 3 cents and I will be paying more in the future.

Now let us return to the question I originally asked you. Where will you find the funds to pay for these increased costs? A partial answer to that question appears to me to be conservation, but conservation defined in a slightly different way. Conservation, in my mind, is using what you have more efficiently, such as using more efficient vehicles, more efficient heating and cooling systems, and more efficient lighting for your stores. How can this

be achieved in the food distribution industry?

We at Texas A&M have studied public building operation and found that, in general, most of these buildings were designed and built for a time when energy was cheap. When electric energy was sold at 1.5 cents per kilowatt hour, it did not make sense to spend money on high-efficiency air conditioning systems. We now believe that given the higher cost of energy, one can retrofit most existing heating and ventilating and air conditioning systems to achieve 30 percent reductions in fuel consumption with modest capital investments. However, investing money in retrofitting existing systems is going to require a change in the way many people in this industry think. Most people would rather invest in things which translate into more sales, not lower costs.

Imagine what rising fuel costs will ultimately mean in terms of cost of operation. We have studied the operation of a typical southern supermarket. On the average, the typical store requires 30 kilowatt-hours per day per 100 square feet of selling area to operate. For a 20,000 square foot store this means 65,000 dollars per year in electric bills alone. A 25 percent saving, which we feel can be achieved, translates into 16,000 dollars per year. Furthermore, if utility costs double again in the next few years and there is a high probability they will, then this represents a saving of 32,000 dollars per year.

What should individual stores do? I believe they need to do two things. First, they need to establish a real energy management program. If a particular store doesn't have one, they need to contact federal and state agencies, universities or others who can help establish a program for them. Such a program should include a careful examination of energy use in

store operations and reasonable suggestions for obtaining energy savings. Second, they need to enlist the services of a reputable engineering firm to conduct a thorough study of how the store's equipment uses energy and to recommend changes in operations and

capital investments, which in the future will generate savings in energy usage.

If these things are done, I believe that you will be in a better position in your industry to answer the question of where the money will come from to pay for skyrocketing energy costs.