

“OFFSHORE DRILLING—HOW SOON, HOW SAFE?”*

By Richard R. Hammer, *District Supervisor of Sales,*

Texaco Corp, New Haven

Many Americans are deeply concerned about the prospects of offshore drilling for oil and natural gas supplies. That's what I'd like to talk about today — the importance of offshore drilling.

There is good reason why we must seek to increase energy supplies by developing our offshore resources.

We still have an energy problem in this country. It's real; it's serious; and it's not going to be solved for a number of years. Despite what you may have heard or read, no one suddenly created the problem. The simple fact is that our nation is using more energy than it is producing.

Supplies of domestic oil and natural gas are inadequate to meet domestic demands. As a result, every day the U. S. imports some 6 million barrels of crude oil and refined products. Unless we take steps now to increase our own energy resources, the U.S. will have to import even larger amounts of foreign oil.

We all came to realize during winter 1973-74 that over-dependence on foreign imports was no myth.

And neither is the cost of foreign oil a myth — a cost which has quadrupled over the past year. As long as we are so heavily dependent on foreign sources, we will have to compete with the rest of the world for this oil. And, the more we depend on foreign oil, the more susceptible we will be to another oil embargo.

We have been offered what I would like to call a three-part “battle plan” to win the fight against energy shortages in this country. All three parts of it must work.

Part one can be called the long-term strategy — the development of alternate energy sources. These include solar, nuclear fusion, geothermal, ocean power and others.

Unfortunately, the technology and the timetables place these new energy resources well into the future. We need to get working now on the research and development necessary to make them feasible — but mean-

*Presented at the 91st Annual Meeting of the Connecticut Society of Civil Engineers, Inc., Yankee Silversmith, Wallingford, Connecticut, April 15, 1975.

while we have to be concerned about our energy supply over the next 15 to 20 years.

A second part in our battle plan is tactical — what we must do today to combat energy shortages. Using energy wisely can help slow down increases in energy demand, thereby reducing the amount of foreign imports we need. This tactical phase must hit hard, gain the advantage, and hold that advantage until the reinforcements — the third part of our battle plan — arrive. These reinforcements will provide the time needed to develop the future alternate energy sources.

This all-important third part is the development of new domestic supplies of oil and natural gas that scientists say still lie beneath the land surface of our country and its continental shelf.

America is not running out of oil and natural gas. It's estimated that about 55 per cent of our recoverable oil and about 66 per cent of our recoverable natural gas are still in the ground waiting to be found.

Some of this will be found under land areas, though most of the more promising onshore areas in the lower 48 states have already been explored. The most promising areas are Alaska and beneath the nation's outer continental shelf.

The U. S. Geological Survey estimates that, with today's technology and economics, up to 130 billion barrels of crude oil and 790 trillion cubic feet of natural gas can be recovered from the OCS. Up to 20 billion barrels of that oil and 110 trillion cubic feet of the natural gas are thought to be under the Atlantic OCS, which has not yet been explored at all. Other promising areas are in the Pacific, the Gulf of Alaska and the unexplored portions of the Gulf of Mexico.

Potential OCS reserves could provide as much as 20 years' supply of crude oil and 35 years' supply of natural gas. These estimates are based on current technology. They do not reflect probable improvements in technology which would increase the amounts of petroleum recoverable from the OCS.

Even now, offshore drilling accounts for about 17 per cent of all the crude oil and natural gas produced in the United States. Thousands of wells — primarily in the Gulf of Mexico — are safely producing oil and natural gas to meet the nation's energy needs.

Nevertheless, there continues to be widespread concern over offshore drilling, especially in the Atlantic.

Six main arguments are used in opposing offshore drilling. Let's talk about them one-by-one, and let me give you some logical and factual information in reply to these arguments.

The first and primary argument against offshore drilling is that it will damage or destroy the marine environment.

No one in the petroleum industry questions the need for a clean, safe environment. The American people have every right to expect proper safeguards to prevent the pollution of our nation's waters.

However, the petroleum industry does believe that demands to stop all marine exploration are unreasonable. We believe, too, that the industry's actions have been completely consistent with environmental goals.

Let's look at the record. Over the past quarter century, more than 18,000 oil and gas wells have been drilled in U. S. Waters. There have been only four significant oil spills. Admittedly, that's four spills too many. But what often has been overlooked — or ignored — is that these spills caused no lasting damage to the environment, not even at Santa Barbara. It was not an ecological disaster.

Two separate academic studies found no evidence of permanent environmental damage as a result of the Santa Barbara spill. Unfortunately, it was the spill that received all the publicity, not the scientific findings afterwards.

Pollution is a major concern of the industry. Regulations developed by the U.S. Geological Survey and strictly followed by the industry control the discharge of any pollutants overboard from offshore platforms. Even samples of discharged water must be taken, analyzed and the results reported.

In the actual drilling operation, every possible precaution is taken to prevent the uncontrolled release of fluids or gases from the well. There's a whole shopping list of safety devices including the well casing itself, down-hole automatic safety valves, blowout preventers — all designed to reduce or eliminate the chance of pollution.

That brings us to the second major argument of those who oppose offshore drilling — the safety of the drilling platform. Modern drilling production rigs are built to rigid engineering standards which eliminate, as much as possible, danger of damage by natural forces. The platforms now used in the Gulf of Mexico are designed to withstand hurricanes; the platforms in Alaska's Cook Inlet easily withstand ice floes propelled by swift currents and 30-foot tides; and drilling rigs are being operated safely in

the North Sea, certainly one of the world's most violent and unpredictable bodies of water.

Automatic and manual controls are installed on every drilling rig so that a well can be shut down immediately if there are any indications of trouble. Besides constant monitoring during normal drilling operations, all operations stop and the well is completely shut down during severe storms.

A third argument used by offshore drilling opponents is the possibility of oil spills when oil produced from offshore platforms is moved to onshore facilities.

To minimize this risk, pipelines are used, whenever it is economically feasible, to transport crude oil. And pipelines are always used to transport natural gas.

These pipelines must meet exacting specifications to minimize the risk of rupture. They are heavily weighted and, by government regulations, must be buried in the seabed wherever the water is less than 200 feet deep.

Barges to carry crude oil from a field site to onshore facilities normally are used only in shallow water areas with mild sea conditions.

Let me emphasize that, even though pipelines are considerably safer to use for transporting crude oil, the safety record for both pipelines and surface vessels is outstanding.

No one can absolutely guarantee that there will never be another oil spill. But the petroleum industry does take possible precaution to guard against accidents. The industry doesn't want an oil spill any more than you do. Apart from the concern which we share with all citizens about even temporary damage to the environment, an oil spill creates opposition the industry certainly doesn't want; it can be costly; and it is just plain poor business.

Argument number four is based on the claim that offshore drilling will damage the fishing industry.

Right now, there are some 2,900 petroleum platforms in Gulf of Mexico waters. Over the past 25 years — a period of rapidly expanding drilling activities in that area — the commercial fishing catch in the Gulf has become bigger and bigger.

The petroleum industry doesn't claim that offshore drilling operations have improved commercial fishing. We do claim we haven't harmed it. And this view has been repeatedly borne out by testimony of public officials.

scientists and educators who have carefully studied the effects of offshore operations on the fishing industry in the Gulf.

The fifth argument is the fear that drilling rigs will create what is called "visual pollution" of the Atlantic Coast.

Now, admittedly, a drilling platform is not considered by everyone to be a thing of great beauty. But the most promising areas for finding oil and natural gas on the Atlantic OCS are believed to lie 30 to 100 miles at sea. This would put the drilling rigs well out of sight and sound of land. The conception of a forest of drilling rigs blotting out the horizon is simply not an accurate picture of the way it will be.

The sixth argument against offshore drilling questions whether any economic benefits would accrue to the people of the coastal states. Well, I'm not equipped to foretell just what it would mean to us here in Connecticut in the future, but common sense tells us it will bring new investment money into our communities and provide new job opportunities.

It may also lead to lower state and local taxes on our citizens. In Louisiana, the oil industry provides better than 50 per cent of the revenue raised within the state for operation of the state government. Specifically, during 1974, the petroleum industry paid an estimated \$733 million to Louisiana in severance taxes, royalties, lease bonuses and rentals.

I realize there's a difference between Louisiana and Atlantic Coast states — Louisiana receives payments from both onshore and offshore oil and natural gas production in state waters. Neither onshore production nor production in state waters is anticipated for Atlantic Coast states.

However, the petroleum industry favors a system whereby appropriate levels of government within the adjacent coastal states would share in the revenues generated by offshore leasing and petroleum development in federal OCS waters.

If current laws can be amended to bring this about, what could this mean to individuals in our state? Here are a few examples:

A three-bedroom brick home outside Baton Rouge, valued at \$32,000 cost its owner \$28.79 in property taxes in 1973. Property taxes for a similar home here, according to my rapid calculations, would be \$1,140.00. An automobile license costs a Louisiana resident \$3, compared to \$15 that you pay here in Connecticut.

There's another economic factor to be considered. That's the higher

prices paid for fuel along the Atlantic Coast, particularly in the Northeast. Oil and natural gas supplies must be transported from other areas. Transportation costs money ; money that must be added to the price the consumer pays. The East Coast, especially, is heavily dependent on expensive imported oil. And some New Englanders are using natural gas imported from Algeria in liquefied form which costs from three to five times as much as the price established by the federal power commission for domestic natural gas sold on the interstate market.

It all comes down to this : If the U.S. is to move ahead economically, demand for petroleum will have to increase in the years ahead. The question then becomes : will we maximize domestic oil and gas production in order to minimize dependence on expensive foreign imports ?

To reduce our dependence on foreign countries, I'm convinced we must move into offshore frontier areas. These areas offer the most promising opportunities for discovery and production of new supplies of oil and natural gas.

This will be a time-consuming and costly undertaking. It takes from three to 10 years to bring a field into full production once it has been located. Millions upon millions of dollars are invested in each well, after the initial payments of millions of dollars to the government just for the privilege of looking for oil and natural gas in offshore areas. And, until a well begins to produce — if it does — there is no return on the multi-million dollar investment.

Just for the first nine months of 1974, a group of 30 U.S. petroleum companies made capital investments of about \$14.7 billion. That's 56 per cent above the same period in 1973. And, despite what has been reported by the media, this is \$1.5 billion more than these companies earned over that nine month period. The rest of the money was borrowed capital.

Time is running out. The time to act is now, before our energy situation and our dependence on foreign oil become irreversible. And one of the places to act first is in the offshore frontier along our Atlantic OCS.