

The Economic Club of New York

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Questioners: Allan J. Mayer, General Editor
Newsweek

Anthony Parisi, Energy Editor
Business Week

Introduction

Chairman James W. Davant

Mr. Swearingen, Mr. Estes, members of the Club, and guests, welcome to this meeting of the Economic Club of New York. Our topic tonight is energy and our speakers both have impressive qualifications for addressing it. Mr. Swearingen and Mr. Estes are members of the Chicago and Detroit Economic Clubs respectively. And the Economic Club of New York is very pleased indeed that they have considered to take the time to share some of their views with us.

The question period will begin at the conclusion of the second speech. Mr. Allan J. Mayer, General Editor of *Newsweek* magazine specializing in energy will question Mr. Swearingen. Mr. Anthony Parisi, Energy Editor of *Business Week* magazine will question Mr. Estes. Our program went to press too early for the inclusion of these names so I'm going to ask them to stand for a moment to identify themselves. Mr. Meyer and Mr. Parisi. Thank you gentlemen. (Applause)

The question period, as always, will be spontaneous and unrehearsed. There has been no previous consultation between the speakers and the questioners, I understand. (Laughter) In the middle 50s, Frank Pryor, the legendary chairman of Standard Oil of Indiana, began his search for someone to head the company. He said he was looking for a man with ideas and the guts to fight for them. And so in 1958, a soft-spoken Southerner named John Swearingen was named president. He had joined the company in 1939 having earned a Master of Science degree from

Carnegie Mellon University by the time he was 20. Too many businessmen shrink from confrontation with the critics of business, but John Swearingen is an exception. He has debated some of our most formidable detractors and in the process has earned a reputation as a steadfast and effective spokesman for a free economy. Mr. Swearingen is a native of Columbia, South Carolina and a graduate of the University of South Carolina with a BS degree in chemical engineering. He is a past chairman of the National Petroleum Council and a Director of the Chase Manhattan Corporation and the American Petroleum Institute. We don't know very much about his personal life. He's a very private person. But we do know that he is a crack-shot at skeet and a dangerous gin rummy opponent. Ladies and gentlemen, Mr. John E. Swearingen, the Chairman of the Board of the Standard Oil Company of Indiana. (Applause)

John E. Swearingen

Chairman of the Board, Standard Oil Company of Indiana

Thank you very much Mr. Davant. I don't know that those last two qualifications that you mentioned have anything to do with my remarks this evening, but perhaps the audience can judge that. Good evening ladies and gentlemen and members of the Economic Club of New York and guests. It is an honor to be invited to address this distinguished group and I thank you for the opportunity to join with Pete Estes in discussing energy problems and their possible solutions.

This subject is being talked about more widely today than at any time since the six-month, the

Arab embargo of 1973-74 when the reality of energy shortages was first impressed on the public consciousness. There is, however, a difference in the tenor of the discussions. A little more than three years ago, the chief complaint centered around the inconvenience of waiting in line for limited supplies of gasoline, and the widespread suspicion that the shortages were deliberately contrived.

Today, I believe most of the public along with many government officials and members of Congress are beginning to understand that our energy problems are real and are potentially severe. As far as public attitude is concerned, credit for the change is due in part to the very real gas shortage last winter and in part to the warning sounded by President Carter in his television addresses to the nation and to Congress. His program to cope with energy shortages in this country is deficient in many respects, and I would like to examine some of the defects with you in a few moments. But there can be little doubt that the President has done the nation a true service in calling attention to the issue dramatically and treating it with the seriousness which it deserves. We can only hope in the months ahead that Congress will treat the matter with equal concern.

Now certainly as members of the Senate and House consider various proposals for energy conservation, they must keep in mind the essential role of energy in our industrially-based economy. The parallel between our growth and energy consumption and expansion of our gross national product is familiar to all of us. Furthermore, the pattern is repeated throughout the

world. Where energy use is high, output of goods and services is high. Where energy use is low, technology is less developed and the output of goods and services is low.

Now this is nowhere better illustrated than in the case of the largest American industry – agriculture. Including both farm production and food processing, agriculture consumes about 15% of the energy used in this country. Energy – mainly petroleum energy – has made it possible for American farmers to grow abundant supplies of food for ourselves and for much of the rest of the world as well. For instance, we can now grow 3 ½ times as much corn per acre as we could 30 years ago, but we use four times as much energy in the process for cultivating, fertilizing, and harvesting.

Some of the examples can be drawn from virtually any other industry. The expansion of GNP in the past two decades driven by increased energy use has provided jobs for some 23 million additional Americans. It is inescapable that economic growth must continue if we are to provide large-scale employment and improved standard of living for our growing population. And it is equally certain that growth cannot occur without sufficient energy to sustain it.

The broad problem with which we must concern ourselves is one of paying the price required for producing and delivering the energy required to support and sustained and reasonable rate of growth. It is basically an economic problem. Yet at the same time it is very much a political problem. And why I would emphasize strongly that it is an issue of worldwide significance.

Much of the reason for the dilemma in which we and other nations find ourselves involves our heavy dependence on a single energy – petroleum. Oil and gas provide some 65% of the free world's energy. In Japan, the figure is 70%. In Western Europe, it is 75%. In the United States, oil and gas account for 73% of the energy that we consume.

Now the needs of the industrialized nations continue to grow. And as the less developed countries of today move toward greater use of modern technology, their needs too will increase. In the next decade, world oil consumption, even at only a 3% compound rate of growth, will increase more than 40%. Now world oil supply, on the other hand, is limited. In the long term, say 30 to 50 years, oil will probably be largely replaced by other energy sources. But the immediate difficulty is not one of total oil supplies, rather it is one of geography, of politics, and economics. Eight out of every ten barrels of prude reserves, of crude oil, in the non-Communist world are located in the Middle East and Africa – virtually all of it under the control of governments that are members of the OPEC group, that is the Organization of Petroleum-Exporting Countries.

Now while oil exports to the rest of the world from the Soviet block have been growing modestly in the last few years, they still represent less than 2% of the free world supply. And studies of the economies of both Russia and China indicate that these nations too may join in competing for Middle East and other OPEC oil in the not too distant future. But even without their entry, competition for oil supplies among the industrial giants – Western Europe, the United States, and

Japan – will become the dominant feature of the world oil situation contributing heavily to the economic power which the producing nations can exert over price and supply and to their political influence as well.

Today, as members of OPEC jostle for position and seek to reconcile their differences with regard to the future oil price increases it is the Arab nations that hold the key to meeting world demand. Saudi Arabia, in particular, with its proved reserves of about 160 billion barrels is the crucial country. Every other country in the world can produce at capacity. And the Saudis alone can still determine whether the world will be short of oil or not. The critical question is not whether the Saudis are capable of producing larger volumes of oil, but whether they are willing to do so.

Now Saudi Arabia faces a dilemma of its own, although of a very different kind from ours. There is a problem of surplus – surplus oil and surplus funds. Their already huge prude reserves are being increased year by year and no one can predict how much more oil can be found in Saudi Arabia if an all-out exploration effort were to be mounted there. At the same time, even though the Saudis have refused so far to put into effect the full 10% price increase instituted by the rest of the OPEC members this year, their revenues from sale of oil exceed the financial requirements of their domestic programs and investment of surplus funds in ways they consider to be in their own best interest is a steadily mounting problem.

The power of OPEC, and its Arab members in particular, to influence world energy supplies is awesome, exceeded only by their power to affect the economies of the importing nations. The economies need no reminding of the problems created by the massive flow of petro dollars to the Middle East. The United States alone paid \$35 billion last year for imported oil contributing substantially to the current deficit in our balance of payments. Considering both the volume of imports we will need in the future and the impact of inflation, this figure could well be two to three times as high as it was last year within the next ten years. The effects of any further price increases, severe enough in this country, could be devastating to the smaller, less developed nations seeking the benefits of greater industrialization.

Now it seems a little short of incredible that the United States has permitted itself to lapse into such heavy dependence on outside sources, on the whims of foreign powers for its essential energy – yet lapse we have – even since the warning sounded by the Arab oil embargo of 1973-74. Then we imported 36% of our oil, or about 17% of our total energy needs. Last year with the demand increased and domestic production declining, we imported about 42% of our oil, or more than 20% of all the energy we use. Our crude reserves of oil and gas are being depleted as we continue to consume both resources faster than we are finding new supplies. We are far more vulnerable politically and economically to an embargo in May 1977 than we were in October 1973.

Now this overall problem of increasing energy demand coupled with the declining ability to

provide our own secure supplies was the one to which Mr. Carter addressed himself in his public appearances last month. As he rightly observed, it is imperative that the nation move promptly to recognize its energy dilemma and to take steps to solve it. It is not imperative, however, that we move in the directions and to the extent that the president has proposed.

Emphasis on conservation is at once the main strength and the essential weakness of the Carter program – strengths because curtailing use of energy must be part of any comprehensive energy policy – weakness because reducing consumption will not by itself solve the problem. After all, a surgeon does not use one hand with which to operate while keeping the other firmly in his pocket.

The principal mechanism for reducing energy consumption is envisioned in the administration plan as a higher price. There would be little quarrel with this principal if, as Mr. Carter implies, our consumption were notoriously wasteful. This, however, is not the case. Those who criticize America for wasting energy are fond of pointing out that with only 6% of the world's population, we consume 32% of its energy. They avoid mentioning, however, that in this country we also produce 31% of the world's gross national product.

Now particularly in the industrial commercial sector, conservation programs in recent years have already cut fuel consumption significantly. Here problems arise because plants were designed and built to use oil and gas at a time when both fuels were cheap. Curtailing consumption in

these installations, along with switching to new sources of energy, will require substantial new investment. Industry must be given both time and incentive to strike a new balance between capital costs and the higher operating costs that will inevitably accompany higher energy prices. The defect in the Carter proposals for energy – cost increases – lies in the suggestion that they be levied on consumers in the form of taxes, some of which would be rebated, some of which would be used for unrelated government programs, and none of which would be earmarked for the development of new domestic supplies of energy.

The pressing need in this country today is not merely to conserve resources – important as that certainly is. We must at the same time take effective action to utilize the resources we have – oil, gas, coal, and nuclear power, and move ahead in the development of such things as synthetic oil from shale and tar sands, solar power, and geothermal energy.

Now it is true that the president called for greatly expanded use of coal as an alternative to our present dependence on oil and gas. Little or nothing, however, is offered as a solution to the problems that have prevented such expansion in the past. Environmental restrictions on the direct burning of high sulphur coal, the capital cost of converting major industrial plants from oil to coal, and providing effective, yet sensible emission controls, the cost involved in opening new mines, the opposition to strip mining, and the fact that our railroad system will be hard-pressed to handle the task of transporting greatly increased amounts of coal.

Now all of these difficulties can be overcome, but not in a short time, and not when the financial resources generated by higher consumer energy prices are diverted into non-energy channels.

There are a number of possibilities for expanding our energy supplies in the midterm future, that is from the years from 1985 on into the 21st century. One of the most widely publicized of these is crude oil from oil shale. Of the two possible processes for obtaining crude oil from shale, the one most nearly developed technologically, above ground retorting, continues to be economically unattractive. We now estimate that commercial production would be feasible only if the product could sell for about \$25 a barrel compared to the \$14.50 a barrel landed cost of imported crude oil today.

The second, an in-situ combustion process may provide a more competitively priced fuel if it performs as hoped, but it requires much technical development before it can be applied on a large scale. Crude oil derived from Canadian tar sands can probably be produced at about \$18 to \$20 a barrel. In fact, one small plant which was built some years ago at much lower than current construction costs, is operating today, and another government-supported plant is planned for mid-1978. One has to remember, though, that this is not a domestic energy source. We have only a few small tar sand deposits situated inside the United States. It is possible technologically to make a synthetic crude oil from coal. But with existing technology, its cost would be about \$30 to \$40 a barrel, two to three times that of imported natural crude oil. High quality gas can also be produced from coal, and commercial quantities may be available as early as 1985 at a cost now estimated at the equivalent of about \$25 a barrel for oil.

Now these are a few examples of the kinds of alternative energy sources that can be made available for the midterm future, if we are willing to pay the price. And that price, as we have seen, is extremely high. It is higher than today's world price for oil and much higher than the prices of only a few years ago. Now clearly, these sources will not contribute to solving our energy dilemma unless one of three things happens – the price of oil on the world market is drastically increased, some technological breakthrough which we cannot identify today greatly lowers the cost of these substitute fuels, or the American people decide that these fuels are so essential to our political, military, and economic security that we are willing to subsidize their production.

In the last alternative, we would have to regard the cost as a form of insurance against the devastating effects of a cutoff of foreign oil supplies. Now even further ahead, we will need geothermal and solar power, and perhaps other unconventional power sources as well. But we must realize that lead times and costs for developing these sources are also very great. Limited solar heating for homes and buildings is a near-term possibility, although the cost of installing such a system in the average home would be about \$10,000, and it would only supplement conventional fuels. Conversion of sunshine to electric power appears much farther in the future although research is underway today. The technical problems are enormous and costly. A 100-megawatt plant which is not a large one would require covering up two square miles of land with mirrors and costs are estimated to be 12 to 15 times those involved in producing electricity from a new coal-fired plant. The cost of collecting solar energy in space and transmitting it to earth is

unknown, but undoubtedly is very large indeed. Now alternatives to a petroleum-based economy do exist, costly as they may be. But they are not available today and none of them can be of any significant help in the immediate future, that is the next eight to ten years.

Now Mr. Carter offers conservation as a solution to this interim dilemma. His is a one-handed policy and one hand is not enough. His proposal to limit energy growth to 2% a year carries serious implications. We must question whether such a limitation is possible without jeopardizing economic stability, the healthy expansion of our gross national product, efforts to reduce unemployment, even the very basis for funding needed government social programs. But even if a 2% growth were possible, it leaves unsolved the greatest of the basic problems I mentioned earlier, our heavy dependence on crude oil imports.

The president proposes to limit them arbitrarily to 6 million barrel a day by 1985. Yet even with a projected savings by conservation, meeting total energy demand would require producing domestic oil and gas at the equivalent of some 22 million barrels a day. That compares with some 19 million barrels a day in 1976. The essential and perhaps the fatal flaw in the administration plan is that it fails to make adequate provision for developing the domestic resources we have and which can be made available in the near-term future.

The United States almost certainly has large quantities of oil and gas still to be discovered. Our offshore continental shelf contains many promising areas for exploration, as does the state of

Alaska and its offshore territory. We believe that the continental United States offers many good prospects for future discoveries and all such areas need to be explored as quickly as possible. In addition, a great potential for increased production of oil and gas exists in deep drilling and the development of enhanced recovery methods. Costs for both will be greater than those we have been accustomed to paying for our petroleum energy supplies, but the resources are undoubtedly there.

One simple but necessary economic condition must be met before they can be tapped and their energy supplied to consumers. That simple condition is that the price received by producers must be greater than the cost of exploration and production. The Carter proposals seem to have overlooked this basic principle. By controlling the price of domestic crude oil at a level below replacement cost, the government will ensure steady depletion of our domestic reserves and our increased dependence on foreign oil. The heart of the solution is economic. Whatever its technological resources – and we have many – the oil industry cannot increase exploration for new reserves of oil and gas without additional capital, and the Carter program includes virtually nothing that will help in this direction. Essentially the package provides a narrow definition of new oil, that is, oil produced from wells drilled no closer than two and a half miles from nor less than 1,000 feet deeper than existing wells. And in the case of offshore oil, only that from leases issued after April 20th of this year. Only this limited amount of oil would command world market prices.

Some incentive to accelerate reinvestment is present in the program, but the means of doing so is missing. As a result, there can be only a limited expansion of our effort to find new oil. Old oil is to be held at current price levels plus only a factor to offset general inflation. And even here, the GNP deflator, the least adequate measure of inflationary pressure, is the factor used. The cost of petroleum exploration and production and plant and facility construction is increasing much faster than the GNP inflation index would indicate.

Now in the case of natural gas, far too little is proposed to ease the shortages brought on by nearly 23 years of price control. At the very least, prices for new natural gas should be allowed to reach a level where they're competitive with imported oil on an equivalent energy basis. Instead, it is proposed to extend present controls to gas consumed within the state where it is produced. Our assessment of the Carter program indicates the petroleum industry would have even less money available for investment than it has under current law. The result, far from encouraging the search for new oil and gas, would probably be a decrease of as much as 10% in the number of wells drilled.

One answer stands out with such clarity that to miss it or ignore it seems incomprehensible. Higher prices in an unregulated market, rather than higher prices in the form of taxes, would be a strong inducement to oil and gas producers to invest in domestic exploration and would provide the means for them to do so. A gradual phase-out of all price controls on domestic crude oil and natural gas is by far a preferable alternative to the Carter plan. Bringing domestic prices to the

world level over a period of, say five years, would have the same impact on consumers as the administration proposal to tax oil production and the conservation benefits would be the same. But whereas the tax-based program makes the consumer pay for energy he doesn't get, de-control would assure an increase in supply in conjunction with lower demand.

In any measure for the de-control of crude oil and natural gas prices there should be some provision that added revenues resulting from de-control be reinvested in the search for new energy supplies and in the building of facilities for refining and transporting. Even in the absence of de-control, the proposed excise tax on crude oil should be rebated to producers to the extent they make these investments.

Now this has not in the past been a total popular suggestion. Somehow in the minds of many people and a considerable number of their representatives in Washington it is acceptable to pay a world market price for oil to the OPEC nations, but unacceptable to pay that same price to American producers. This reasoning has never made any sense to me. In this regard, it is clear that what we call the energy crisis in America is really an economic crisis. Our experience with the Space Program of the 1960s provides ample evidence that Americans can do almost anything we are willing to pay for. We can increase recovery of oil from known reservoirs. We can produce oil from shale. We can liquify or gasify coal. We can explore and develop the deep waters of the continental shelf. We can exploit the tremendous quantities of methane trapped in the deep brines along the Gulf Coast and in coal and in shale beds.

In short, we can provide ample supplies of energy here at home if the price of those supplies are high enough to cover the cost of producing them and allow a reasonable profit. This is the message that should be given to the American people instead of the “share the shortage, share the misery” conversations so popular in Washington today. The economic aspects of our energy problem are solvable, but the political obstacles will never be overcome as long as substantial numbers of people continue to believe that they can have more energy without paying for it.

Now far from helping to shatter that illusion, the administration is proposing a reverse solution. It is asking consumers to pay for energy they will not get. Now once again, the American people and their Congress are faced with a critical decision, whether to continue living with the fantastic notion that abundant energy can be had for bargain basement prices or to face up to the real world and take the actions that we know are necessary. I can only hope that reality and reason will prevail. Thank you. (Applause)

Chairman James W. Davant: Thank you Mr. Swearingen. Our next speaker, when he was 18, gave up the dairy business to join the General Motors Corporation. That was in 1934, the year Joe Louis won his first bout and the Dionne quintuplets were born in Canada. His coworkers in the tool crib wouldn't call him Elliott, so he's been called Pete ever since.

In the 40s, it was his enviable privilege to work as a research engineer with C.F. “Boss” Kettering, certainly one of the most creative, intelligent Americans of our time. It was Boss

Kettering who, during the Roosevelt administration, told a discouraged business friend, “Well, there’s one thing we can be thankful for. We don’t get as much government as we pay for.”

(Laughter)

Mr. Estes’ record at GM is remarkable. He was a member of the Kettering team that produced the first high compression engine which ushered in a new era of motoring efficiency and performance. In 1961, he became General Manager of the Pontiac Division. Three years later, Pontiac registrations had nearly doubled. He then steered Chevrolet to record sales in 1965 and successfully turned back a strong challenge to Chevy’s traditional leadership. He was a great friend and associate of ours and of Jim Roach.

I am pleased to welcome to this forum for the first time one of the nation’s most accomplished and effective business leaders. Ladies and gentlemen, Mr. Elliott M. Estes, the President and Chief Operating Officer of the General Motors Corporation. (Applause)

Elliott M. Estes

President and Chief Operating Officer

General Motors Corporation

Thank you. Thank you very much, Jim, and thank you for inviting me here to address this prestigious audience. And I’m particularly pleased to be on the same program with John. A

couple of weeks ago I told a meeting of the American Petroleum Institute that I couldn't think of anybody facing tougher challenges than the petroleum and the auto industries. But I also said that I couldn't think of anyone better able to tackle and overcome them. We're confident that we can do our part for the job and I'm sure that the people in your industry feel the same way, John, as you so eloquently outlined a few moments ago.

You know Winston Churchill who knew about tough challenges is supposed to have said that the three hardest things in the world to do are to climb a wall that's leaning toward you, to kiss a woman that's leaning away from you, and to make a good after-dinner speech. (Laughter) Now, I'm not sure my talk is going to be any good tonight, but I'll tell you one thing, it will be short, not much more than 20 minutes.

Now in that time, this metropolitan New York area will consume the equivalent of almost a half million gallons of oil according to our rough calculations. That should give you some idea of America's appetite for energy. Many people think of factories or automobiles as the largest users of energy in this country and we seem to get a lot of publicity in that regard. But in truth, the residential and commercial sector is not the largest and fastest growing energy user with industry and transportation following in that order.

At GM, we commend President Carter for telling the people the unpleasant truth, that our domestic shortage is real, not contrived, and it's getting worse. Nobody can solve a problem until

they recognize it exists. At GM, we also endorse the general objectives of the president's plan. The country has needed a rational, comprehensive energy policy for a long time. We've been asking for it and we're supporting President Carter's efforts to fashion one.

However, we'd like to see more reliance, as John pointed out so well, on the workings of the free market rather than taxes and more emphasis on increasing domestic energy supplies from both conventional and unconventional sources. If the price of energy reflected its true value, producers would have more incentive to find, develop, and market new energy supplies and consumers would have more incentive, of course, to practice conservation. The beauty of the free market is that it would address both the supply and demand sides of our energy situation at the same time.

Now some of those arguing against de-control claim that it would be inflationary. A simple solution to that might be to just phase de-control in gradually, say over a two or three, or even four or five-year period, whatever it took. I'm sure we've also all heard the argument that the free market won't push prices high enough to achieve the magnitude of savings that the country needs. We ought to give the free market a chance, however. It's been a long time since it's had a chance to work on energy and we think the doubters would be surprised at the effectiveness of the good, old free market, supply and demand.

Now economists Robert E. Hall and Robert S. Pindyck, members of the Policy Study Group of

the MIT Energy Laboratory, concluded in an article recently in *The Public Interest* that the economics, quote, “The economics of the nation’s energy problem involves little more than the principle that higher prices result in less demand and more supply. They suggested that demand falls about 1% for each 4% increase in price and supply rises about 1% for each 5% increase in price. Now using this formula, and applying it to our artificially low prices, they conclude that the U.S. consumption is 8% higher than it would be otherwise while supply is about 6% lower.

The economists reported that the net effect of our policy of depressing prices to domestic energy producers created a gap between supply and demand equivalent to around 5 million barrels of crude oil a day. That’s a growing gap and we’ve been filling it with foreign oil – an increasing share of course coming from the Middle East. The United States would have to import around 8 million barrels of oil; it will have to import about 8 million barrels of oil every day this year. And one of President Carter’s goals is to reduce imports to below 6 million barrels a day by 1985. If those economists’ calculations are anywhere near correct, it seems clear that the workings of supply and demand would more than meet that objective.

The administration’s proposal does include some additional incentives for domestic energy producers and that’s certainly a step in the right direction. But it may not be enough and there’s no question that their plan would only further confuse and add a set of complex taxes to an already complicated multi-tier pricing system. Like most Americans, we don’t like additional taxes of any kind and we think taxes are a mighty poor substitute for supply and demand.

Unlike higher prices, taxes won't contribute to the vast amounts of capital that will be needed to finance future energy developments unless they're used to possibly subsidize exploration, development, and facilities, as John suggested, maybe even construction. But we all know that doesn't seem very likely.

Conservation is important, just as the president said. But the real answer, the lasting one, is to develop more energy of our own. We don't lack either the resources nor the technology to do that. It's our political decisions that are holding us back, keeping economics and technology from working together to provide the energy that we need.

Now one important area where there's absolutely no disagreement is the need to improve automotive fuel economy. At GM, we recognize that we have a major responsibility to see that the energy used in transportation is used efficiently and every day that way. In our plants as well as our products, we make significant savings. In fact, we were working on improving fuel economy well before the oil embargo was imposed and we've been able, as you know, to improve our average sales-weighted fuel economy by nearly 50% since 1974 models were introduced. We've gone from 12 miles per gallon in 1974 models to 18 miles per gallon today. We'll improve our mileage even more with our '78 models. Our preliminary data shows that our average fuel economy will be more than 19 miles per gallon, and that is of course if the 1977 emission standards are carried over for 1978, and I guess if that doesn't happen, it won't make

much difference anyway because we won't be building any. Now that will be a 60% improvement over 1974.

We publicly pledge to do our best, to use whatever resources we have and whatever energy and brains we have to meet the government mandatory mileage standards all the way up to 27 ½ miles per gallon by 1985. As you know, it's 18 in '78, 19 in '79, 20 in 1980, and then 27 ½ in 1985. It's not going to be easy, and it's going to be expensive. Our capital spending for plants and tools worldwide will top \$3 billion annually for the first time this year and we expect it to stay at about that high a level at least through this decade and maybe longer, and we're going to have a fight to hold it down to \$3 billion.

Building lighter weight vehicles is an important part of our strategy for improving mileage as you all know. Our all new full-size cars for 1977 – this might be a little commercial in case any of you don't have a good automobile right now – they're proof that our engineers can reduce weight and bulk without giving up utility, function, or sale-ability, and at the same time increase the fuel economy. As you know, they're up about 3 miles per gallon from last year's regular-size cars. And then to be introduced on October 6th, our intermediates will get the same treatment for 1978. These new mid-sized cars will get about 3 miles per gallon on the average more than their 1977 counterparts. Even so, they'll still offer our customers plenty in terms of passenger and luggage room, safety, comfort, convenience, value, and style – good looks that is. And, of course, that's particularly important in our mid-size or intermediate cars as you may know.

If emissions permit, we also hope to take advantage of the greater efficiency of the diesel in the years ahead. We'll be introducing our first U.S.-produced passenger car diesel this fall. The engine will get about 25% more miles per gallon than a comparable gasoline engine. And diesels could play a particularly important role in our efforts to continue building six-passenger vehicles for people who need them and we see there are a lot of people who do.

Now if we assume that those mandatory mileage standards are met, up to the 27 ½ in 1985, we can project a savings of about 13% in total fuel consumed by all passenger cars on the road – that's the whole 105 million – between 1977 and 1985, a 13% reduction. President Carter, you will recall, called for a 10% reduction in gasoline consumption by 1985. Now it's clear that the existing law which includes stiff penalties for failure will ensure that passenger cars will do more than their share to meet his 1985 gasoline consumption goal.

Now one thing that's made those mileage standards seem so tough is the fact that our industry must meet an increasingly stringent exhaust emission regulations at the same time. With today's reduction technology – that's the technology for emission control that's on the street – we can't meet emission levels lower than the 1977 federal standards without sacrificing fuel economy. And in California, for instance, our 1977 cars average two miles per gallon less because the state enforces tighter emission regulations than the rest of the country.

Recently, however, we've seen results that boost our confidence in our second generation catalyst system which we've been working on now for several years. We call it the Phase 2 catalyst system. It includes a new catalyst which takes care of all three regulated pollutants, not just two. It also includes a closed loop electronic feedback system and an oxygen sensor in the exhaust system to tell the electrically-controlled carburetor exactly what to do.

I'm glad to be able to tell you tonight that we believe that we can phase this new technology into our product lineup in the early 1980s in accordance with the Dingle-Broyhill Amendment which is now being considered in Congress. This new technology combined with further electronic engine controls will enable us to continue the job of cleaning up automotive pollution, even to the very low levels that are specified in that Dingle-Broyhill bill, and do it with nominal fuel economy losses. Just a few percent compared to, say 15% losses without it. We believe this technology and the timetable in the Dingle-Broyhill bill will do the best job for both the customer and the country in cleaning up automotive air pollution while allowing us to continue to do the job of improving the fuel economy which in our opinion is equally important.

We've already disclosed plans – some of you may have seen – to use this system on a few thousand cars powered by Pontiac 4-cylinder and Buick V-6 engines in California in the next 1978 model year starting this fall. Then for 1979, we plan to install it on all of those particular 4- and 6-cylinder engines that are sold in California and also in the high altitude areas of other states where the same kind of restrictions apply. Several thousand more cars then would get into

the system in that year of '79. In 1980, we propose that all GM engines that are sold in California and high altitude areas would come with this system. Now we have a couple of thousand vehicles involved in that year. This field experience should enable us to extend the use of the system until it is in all our cars in the country in 1982, across the board, all automobiles.

Now there are two main reasons why we need to phase it in this way. First, as you all know, it enables us to learn as we go. And it doesn't matter how much testing we do – proving ground or otherwise – there's just no substitute for field experience. We did, as many of you know, installed a catalytic converter on all of our cars at one time with our 1975 models and it really, it turned out to be one of the most successful advances in automotive technology in many years. And I'm proud of the leadership that GM played in that development.

We went across the board with it and we didn't have as much trouble as we had feared or nearly as much as a lot of other people, incidentally, predicted. But we could have done a better job of improving fuel economy if we'd had a little more real world experience. Now the second reason we need to do it this way involves the long lead times that are required. This is a very sophisticated system compared to the relatively simple catalytic converter. It's going to take time to engineer this Phase 2 system for each of our engines that we build – to test it, to buy the tools, to build it, and possibly even build some new facilities for some of the components. We're not quite sure yet what's involved in the way of facilities.

An important part of the lead time requirement is to secure also the necessary amounts of noble metal rhodium. That's the new catalytic material that's needed for the Phase 2 system. Rhodium currently is available only from mines located in South Africa and the Soviet Union. And it'll take time for the mines – now geez, I'm sure glad you got that message without any further emphasis – it'll take some time for the mines to increase production to meet our needs, or for us to learn how to use less rhodium. I did that quite subtly, but, geez, it worked great. (Laughter)

Now that's one new technology that we're excited and enthusiastic about at General Motors. Another entirely different is an electric car that is suitable for use as a shopper or a commuter vehicle in two and three-car families. You know with that we send the emission problem over to ConEd and that's why we're happy about it. We made real good progress in the laboratory on the chemistry for a new battery, a zinc/nickle oxide battery. It's lighter and has more storage capacity than lead-acid batteries. That's really been the problem in developing a good practical electric car. We believe that this kind of battery could make electric cars viable alternatives to the gasoline-powered ones if we can develop it. And we've started a pilot operation at Delco Remy to hope to develop the manufacturing processes that are needed to build this battery and most importantly to reduce its potential cost.

Our general objectives for an electric car are a top speed of 50 miles an hour, 100-mile range, room for two passengers plus room for groceries, maybe a couple of little kiddies and the like. The car would probably be about the size of a Chevette or slightly smaller we hope. But it's

going to be a far cry from a golf cart. It's a real automobile. In our opinion, it has to be. Our first electric car may not be ready to help us meet that 27 ½ in 1985. In fact, I don't know how we'd fare with that. We're not too sure. We did see that the rebate is real high on the electric car but we don't know how you figure the miles per gallon. We think that would be a kind of a good project for them to work on in Washington for a while anyway. (Laughter) But we are hopeful that maybe in the late 80s this vehicle could make quite an energy impact on some of our problems. As I say, one reason of course that the electric car is so attractive is that it's the only way we know today to burn either coal or nuclear energy in a passenger car. That will sink in in a minute. (Laughter)

But we still have to have petroleum to provide conventional liquid fuel for transportation for a number of years – 20 to 50 years. We say that there's that much out there. It really depends on whose estimates you use how long the petroleum is going to last. The better job we do of stretching those supplies through conservation and by limiting the use of petroleum by those who can – limiting it from use by those who can use other forms of energy – are going to help make it last considerably longer.

The best way to accomplish both of those things – conservation and allocation – is by letting that good, old free market work. With strong competitive forces already working to improve automotive fuel economy and since existing federal standards already ensure that automobiles contribute their share of the conservation and then some, we wonder why a scheme of taxes and

rebates is needed. Frankly, we don't think it's even needed.

At GM, our commitment to doing this fuel economy job and doing it right is both strong and deep. We recognize this not only as a tremendous challenge, but as a whale of an opportunity, especially for our technical people, for our engineers, scientists, and technicians. Fuel economy is a very saleable item and I'm sure you know that GM is always interested in what sells.

Throughout GM I think you'll find engineers who are really excited about this challenge and about doing this job that we've committed ourselves to do. A young engineer at our tech center outside Detroit said just the other day that making progress on emission controls was important and it was satisfying to beat the competition, but fuel economy, improving efficiency, that's really what engineering is all about. Improving efficiency, he said, is to engineering what saving lives is to being a doctor. And that young man meant every word he said I'm sure.

I can't remember a more exciting time in our business. Electronic engine controls, advanced catalytic converters, the use of lightweight materials like aluminum, plastics, and high-strength steel, using computers to design components and even entire vehicles. I said the other day that the computer allows our engineers and designers today to put a better car in their rough drawings than we had a few years ago after 18 months of good, old, hard prototype testing. These things are all here today.

To continue to provide Americans with personal mobility and freedom, we'll have to find

different engines one of these days or adapt present engines to run on alternate fuels. Diesels, electrics, hydrogen-powered, gas turbines, the breeder, fusion, biomass – that's a great word. You know the scientists keep coming up with these ones all the time to confuse all of us. And a quick word for biomass, it's either corn stalks or garbage, I don't care which. (Laughter) They did tell me, though, that it only takes – John, you better get some land – it only takes 46 million acres to provide enough biomass to power all of our 105 million vehicles for 10,000 miles a year on alcohol. And then they went one step further and they said you only need 46 million acres, and you know how many acres are available for that, 400 million. So, now, John mentioned the fact that it takes a little bit of petroleum to cultivate all that ground so I think they might have missed something there. I'm not too sure. All those tractors burning coal while we're trying to get the corn stalks to grow so we can get the alcohol so we don't need anymore to put in the tractors. Now, I don't know how all that comes out.

But we're going to use, I'm sure, seriously, all of those sources that are available to us and it's just a matter – maybe it'll be a combination of all the several sources I mentioned. Whatever it takes, I know that we can provide it if we don't give up on our ability to solve tough problems. And this is certainly not the time to do that. This is a time to rediscover that ability of economics and technology to work together in a free market to bring us new levels of progress and success. This is a time to let American ingenuity, determination, and enthusiasm for the really tough challenge to come to the fore. The only limits on progress, the only constraints on our future, are the ones we put there ourselves. And this is the time to make sure that they're all removed.

(Applause)

QUESTION AND ANSWER PERIOD

CHAIRMAN JAMES W. DAVANT: Now we've reached the time for the question period. Mr. Mayer will ask the first question and then he will alternate with Mr. Parisi in asking questions. Mr. Mayer.

ALLAN J. MAYER: Thank you Mr. Davant. Mr. Swearingen, before we get to your comments on the president's program, let's talk about the overall energy situation. You painted a pretty grim picture of the world's energy future as bleak, correctly so. You talked about industrialized nations scrambling for supplies and developing nations entering that competition. The question is how grim do you think it's going to be? And I wonder, for example, do you agree with the recent report which you're probably familiar with from the MIT workshop on alternative energy strategies which talked about the possibility of massive oil shortfalls as soon, perhaps, as 1981, even if we double coal production, increase our reliance on nuclear 25 times and oil prices go up 50%.

JOHN E. SWEARINGEN: If I can paraphrase your question, it had to do with my opinion about the Wilson Report at MIT and how soon do I believe a real shortage of fuel in the world will take place. I would just remind you that the computer was basically was invented at MIT by Professor

Forrester, who was employed in the Club of Rome studies just a few years ago and I think there's some hangover in Mr. Wilson's current study from the Club of Rome studies. I think it is basically a very pessimistic outlook. I tried to explain in my prepared remarks that I believe our problem is an economic problem and not a physical problem. I will say, in answer to one particular part of your question, if the Saudi Arabs decided they were not going to increase their production any further than it is today, or if they decided for their own reasons, whatever they might be, to cut back their production starting tomorrow morning, we'd have a worldwide shortage of oil tomorrow. We wouldn't have to wait until 1981 or 1985. I believe there's enough opportunity to find energy around the world, in the United States and elsewhere, that we can have an adequate supply for everything we can see being required until the end of the century if we don't hamstring ourselves and are willing to pay the price to get it. (Applause)

ANTHONY PARISI: As you indicated, the 1985 model year, cars will be a lot smaller, they'll all be made of lightweight materials. Would you mind telling us what you think the car of 1985 will be like and what it will cost?

ELLIOTT M. ESTES: Well, I didn't indicate that the inside of the car necessarily would be any smaller. We're dedicated in our program that started a couple of years ago to continue to provide each of our customers the kind of transportation he wants – whatever it may be. If he wants to haul a trailer or take his four kiddies and a load of luggage and go on vacation, we're going to do our best, not only in '77, '78, '79, and '80 and '81 which is really the first phase of our redesign

program which will include redesigning every single car. We're going to try to not take anything away from the customer and still give him that fuel economy that we know he wants and that we have to give him. Our '77 regular-size and luxury cars, I think, have satisfied that, at least the marketplace says they satisfy that demand. Now what happens to get to 1985? We've still got to worry, in our opinion, about the six-passenger car and the luggage, at least for maybe until the end of the decade. We don't know how long. There are still many, many families of five people in the United States, many, many single car families, and they, we are fairly sure, want a six-passenger car now. So the interior room, we say, is pretty well set where it is today in our current mix. In other words, we have six-passenger cars with lots of luggage. We have maybe five and a half or six-passenger cars in the intermediate sector with less luggage. And then we have compact cars that are smaller yet and subcompacts. We're going to try to maintain that mix because apparently that's what our customers want. And if we don't satisfy our customers, we're not going to sell automobiles. And if we don't sell automobiles, all of you know what happens. It didn't take very many in 1974 and '75 to put us in dire straits. And we've got to protect that so we have to do this job the way the customer wants it done. Now what's that, I think you're asking me how are you going to build a Chevrolet Impala in 1985 to match that 27 ½? That's kind of what you're asking me. And we now have, I have to say that we've made an awful lot of progress. I imagine the next question is why did you say a year ago that they'd have to be all Chevettes, because I did say that. (Laughter) And they would have had to be all Chevettes last year and even today. Now I think we're down to only 93% Chevettes today and then 7% in the Novas or something. But we've made an awful lot of progress, and I'll tell you, we're dedicated

to having a six-passenger car on the market – now that's a pretty good scoop – by 1985. It may have a 4-cylinder engine. It may have a 6-cylinder engine, turbo-charged. It may have a diesel engine. And it may have considerable aluminum and it may have some plastic and we're going to have some cost problems. But I'll tell you, we're dedicated to getting the job done. And I think we're doing things today that we didn't think even a couple of years ago we could do. I hate to be as optimistic as I am about this because maybe someday you're going to say you didn't quite make it. But I'll tell you, we think we can get the job done. And we're getting more encouragement from our work every single day that shows the kind of technical, logical progress that we can make. Now sometimes we fall on our face and that's why we hesitate to predict these things. You know the rotary engine is a good example – \$100 million in six years and it's a dud. And so we made no progress on that even though we predicted it. But we see some real ways – the diesel, the electric can help this. Maybe some more front-wheel drive, maybe more aluminum, maybe more plastic, just more efficient structures.

ANTHONY PARISI: (Inaudible)

ELLIOTT M. ESTES: The government – you have to put that in context – the Department of Transportation have to set the fuel economy standards for '81, '82, '83 and '84 and they ask each manufacturer to present a scenario on how they would accomplish this. And the scenario that we presented did not have any V-8s by 1985. We now have four or five scenarios we're looking at including diesels and some other things and there could be some V-8s back in there. That was

just one scenario and it was an example of how we might get there. So I would like to say that we're not sure there aren't going to be V-8s, number one, and we don't know for sure whether it will be 40% diesels. But that's one of the ways, 25 to 40% diesels; we'll accomplish this we think.

ALLAN J. MAYER: Mr. Swearingen, to get down to your criticism and analysis of the president's energy plan, your principal quarrel with it seemed to be the pricing problem. And we raised similar objections in an interview we had with James Schlessinger a few weeks ago. What I would like to do is just very briefly read you what he said and I'd like to hear your comments on his answer to your objection. He says that in the president's plan, certainly our price is right. It is far more than the oil companies obtain elsewhere in the world. It is almost double the price of oil in the North Sea for example. And he goes on to say that as to the question of regulation, that with an administered price worldwide, namely a price administered by the oil-exporting nations, we are not going to be able to withdraw our controls over crude prices. What's your reaction to that?

JOHN E. SWEARINGEN: Well, my reaction to that is I think Mr. Schlessinger is smart enough, that he shouldn't have said it. (Laughter and Applause) After all, there's no such thing as a free lunch and I repeatedly made this remark earlier, that supplies will not be forthcoming unless the price exceeds the cost of extraction. I think running through the president's entire program are two points of philosophy. Mr. Schlessinger hasn't admitted this. This is my analysis of what has

been said and what I read. The first is that the architects of that program do not believe that the free market system will work or should be permitted to work, that a regulatory system is preferable. Second, they do not believe there's any substantial amount more oil and gas to be found in this country. Now if you start from those two premises, I can see how they could design the kind of a program they have. But I disagree with both premises. (Applause)

ANTHONY PARISI: Mr. Estes, you suggest that the U.S. rely on the market mechanism for pricing oil. De-controlled, all oil – including so-called old oil – would of course shoot up to the world level. And that's an artificial level set by a cartel of sovereign nations. That inevitably would result in windfall profits and a call for an excess profits tax.

ELLIOTT M. ESTES: Do you want to stop there for a minute?

ANTHONY PARISI: No, I'd like to finish this one question. What is a reasonable profit? Where does it become excessive?

ELLIOTT M. ESTES: That's really a question for John, isn't it, instead of me? But I'll talk about our case. We've got to have earnings and we can't have a very bad year in the next five or six years or we're not going to accomplish what we have to accomplish. We've got to spend \$3 billion a year, minimum, to get this job done. You know what we ought to be talking about? We ought to be talking about excess dividends because the rest of those earnings are being plowed

back in to get the job done for the country, for our customers, our dealers, and everybody in this room. And I don't know, I can't seem to get that across, but it seems to me that we ought to have an excess dividends tax if you want to have one. But we need earnings; both of our industries are going to have to have record earnings, in my opinion. I don't know how we're going to ever do it, but we're going to have to have record earnings in the next number of years in order to be sure to carry on the program that we now have. And I think we ought to talk about whether the dividends are excessive and maybe we ought to look at inflation in that regard and so on and so on. I don't know how the rest of you feel, but I think that we ought to talk about dividends instead of earnings because we've just got to have those high earnings to do the job that we want to do for the country. (Applause)

ANTHONY PARISI: Can I ask the same question of Mr. Swearingen?

JOHN E. SWEARINGEN: Yes, I'd be glad to respond to that question also. I'd like to try to put this a little bit into perspective here when you talk about excess profits or obscene profits. And I think you can, if you choose, coach some of the members of Congress to say that any profit level that anybody might choose is obscene. (Laughter) But I would like to point out this to you. Mr. Carter's program involves taxes on a number of things – on gas, on running fuel in power plants, on different types of crude oil, and on gasoline. And a great deal of comment has been made about his proposal to levy taxes on gasoline of the order of \$.50 a gallon. The big hue and cry from Washington is, oh, this will never fly, we're never going to pass any such thing as this. I'd

like to point out, however, that \$.50 a gallon is the equivalent of about \$21 per barrel on crude, if that's applied, in addition to the current average price of crude oil in this country which is about \$9.00, you would come to about \$30 a barrel. And this is more than enough to bring into being all of these alternate sources of oil which I spoke about in my prepared remarks – \$.50 a gallon. Now you throw up your hands and say \$.50 a gallon, my God, what a huge price this is going to be. I'd like to point out to you that every day millions of Americans voluntarily drive on the toll roads of this country. And have you ever set out to figure out what the premium price you pay is for driving on a toll road, the convenience of driving on a toll road, instead of the parallel old road where you pay no extra fee? Around Chicago where I live, you drop \$.30 in the toll booth about every ten miles and I expect it's about the same way here. This will figure out to about \$.25 to \$.30 a gallon on the gasoline you burn. And there are millions of people that do this every day. The choice really is whether you're willing to pay a higher price for adequate supplies or whether you want to have a lower price and do without. And I don't believe that question has ever been put to the American public. When the public is asked, do you want to pay a higher tax on gasoline, they say no. Obviously they don't want to pay anymore for gasoline. But it's never put in the context, are you willing to pay a higher price, \$.25, \$.30, \$.50 gallon or do without? I think the answer to that question is pretty obvious. The American public doesn't want to do without and that this is not an extravagant price to pay. Now, I don't want to belabor my stand here at the podium. You talk about an administered price. You speak as though the people who have something that we want to buy shouldn't charge what the traffic will bear. It seems to me this is what a market system is all about. If you will remember, and if you don't remember, if

you'll go back and check the record, you will find that in 1973 when the Iranians were the ones who pushed the world price of oil up to almost its present level, the argument was we're going to push the price up to the level where alternative fuels become economic to use. And that's just about where we are today, but we're going to have to go farther than that because of the inflation that's taken place around the world. The last part of your question had to do with what is a reasonable profit level? Well, we can take a poll among the people who are sitting here in this audience today. You're all involved in different kinds of businesses. My recollection of the profit rate in all industry is something under 15% on equity, and on capital employed; it gets more down in the range of 10%. I think if you also look at the record, you will find that the oil industry's return on capital hasn't been very much different from...as a matter of fact, from industry in general. I could launch into another whole discussion about replacement cost accounting. This is an extremely important thing in the oil business. You spoke of inventory profits, or perhaps it was you, Mr. Mayer, who spoke of inventory profits. There isn't any business, oil business or any other business, that can sell its product at a price below its replacement cost and remain in business. And this is especially true with a business like the oil and gas business where we carry a ten-year inventory underground. To my way of thinking, we must have higher prices to bring in these alternative sources of supply. We must declare our independence on foreign sources for a substantial part of our essential energy use. And we must give the people who are able to do this the incentives to go out and find and develop the required materials for our industry. Thank you. (Applause)

ALLAN J. MAYER: Mr. Swearingen, you noted in your prepared remarks that OPEC, and particularly the Saudis, have awesome power. What's your reading of what OPEC, and again particularly the Saudis, are likely to do in the coming weeks regarding pricing and production?

JOHN E. SWEARINGEN: The question is what do I guess the Saudis are going to do about pricing of their oil. I have no way of knowing what the Saudis are going to do. They took a position to moderate the price increase proposed by the other members of OPEC last December. While the others raised their prices 10%, they raised their prices only 5%. The other countries also adopted a plan to increase an additional, well; I guess it was in two bites, 8% and 5%, which is to come up again in July of this year. I have no idea what is going to occur at this time. As to whether the other countries will go through with their announced plans, whether the Saudis will join them, or whether there will be some compromise. Again, I would remind you that the Saudis attached some conditions to the position which they took last December in trying to moderate price increases. And the two conditions that I'm paraphrasing now were that, one, the rest of the world will try to use the oil that was produced in a better manner than they had been accustomed to in the past, would have to curtail the growth in consumption. I believe yet the rest of the world has to implement any significant program in this direction. The second was to recognize the Saudis' political problems in the Middle East. They were not explicit as to what they expected of the United States and the rest of the world in settling the Arab-Israeli confrontation. But I think there's little doubt that if some positive move is not made in that direction, there will be some reaction from the Saudis. Now what that will be and when it will occur, I have no crystal ball to

say.

ALLAN J. MAYER: If I could follow on that, specifically with regard to the political connection, since the change in government in Israel there's been renewed talk of the embargo as a weapon. And I think President Sadat said today or yesterday, he raised that spectre again. If you were President of the United States, would you be trying to fashion an energy policy which counted on the possibility of an embargo as a likelihood?

JOHN E. SWEARINGEN: If I were President of the United States, would I be trying to fashion an energy policy which counted on the possibility of an embargo? First, I'm not President of the United States. If I were President of the United States, I would be very much concerned about this happening. I think the situation in the Middle East is a very dangerous one where a renewal of hostilities by either side, for whatever reason that side decided to start it, could cause an embargo. I think the consequences, as far as the United States is concerned, of another embargo that might last six months if it were like the last one, or could last considerably longer, would be very serious indeed as far as our own economic development is concerned. The last one threw the Western world into a tailspin. I think another one could do the same, or perhaps even worse because we are more dependent on this oil now than we were before. If I were President of the United States, the two things I would do just as rapidly as I could possibly do it, one is to build an emergency supply of oil in this country. Congress passed such a bill a year ago; as yet almost no steps have been taken to implement this. This has to be a matter of very highest priority. The

second is that I would do everything I could possibly do to explore the continental shelf of this United States to find out whether we have any oil and gas there or not. The way I express this is we are playing in the world's biggest poker game for stakes that are almost beyond comprehension. Whether we spend \$100 billion to make oil out of shale or \$200 billion to dig more coal, or we continue to pay the foreigners \$35 to \$40 billion a year to buy their oil, we're playing for enormous stakes. We have a hole card in this game and that is whether we have any oil and gas on the continental shelf of the United States, and we've never looked there. We're playing in this game blind. And I think this is absolutely incredible. Now I'm not saying we've got to go out here in the Baltimore Canyon off Cape Cod and start producing oil and gas there, if it is there. We have to know whether there's any there or not. After we find that out, we can decide whether we want to produce it or not. But at the moment we don't even know whether it's there. These are the two things that I think demand high priority and which, as nearly as I can see, the government is either doing nothing or it's actually doing the opposite because they have postponed additional sales of offshore acreage which would lead to development and exploration offshore. (Applause)

ANTHONY PARISI: Mr. Estes, you expressed a little concern about meeting the federally-imposed mileage standards, at least the long-range goal of 27.5 by 1985. Do you, in fact, think a reprieve will be necessary as was necessary for the original emission standards?

ELLIOTT M. ESTES: Do I..

ALLAN J. MAYER: Do you think a reprieve from that deadline will be necessary?

ELLIOTT M. ESTES: No. No, I don't really think so. I think it's important enough that we conserve our energy in this country, that we've got to do the kind of job it takes. Now, as I said, it's easy. We can just say, well, we're just going to make all small cars, but that wouldn't really accomplish what we're talking about anyway. In our opinion, we've got to convince the people. We've got to move them gradually into a car that gives that kind of fuel economy. And there may be a few sacrifices. We've got to teach people that a 4-cylinder engine is a good engine. And maybe we've got to teach them that a 6-cylinder regular-sized Chevrolet is a heck of a good car. But this is going to take some time. But, no, I don't think, at least at the moment we don't have any intention to ask for a postponement of the 27 ½ miles per gallon.

ANTHONY PARISI: On this subject, one other question. What is GM's position on the gasoline tax?

ELLIOTT M. ESTES: Well, I guess I thought I covered that fairly well. We don't like any kind of taxes. (Laughter and Applause) And particularly when you're trying to substitute a tax for the good, old supply and demand marketplace, we say no. And that's what the gasoline tax is. I think John and I have both covered that subject adequately. We say we need, that money needs to be put into the exploration that he's talking about rather than in the taxes. And we question, if it is taxes, whether it will ever get to where it belongs in that regard. (Applause)

ALLAN J. MAYER: Mr. Swearingen, I'd like to ask you what is in one sense a foreign policy question, but in another sense bears directly on the oil business. And that is the tradeoff on, or rather your reaction to President Carter's emphasis on human rights in foreign policy specifically as it relates to South Africa, the likelihood being that if there is trouble in the Mideast, tankers will have to go around the Cape. And if South Africa isn't particularly friendly with us or is unstable, that route could be jeopardized. How realistic is the fear, do you think that is? And do you think the president is not fully aware of the consequences of the human rights dimension to his foreign policy?

JOHN E. SWEARINGEN: This is a rather involved question. I'm not sure I can answer it. You asked me how I feel about the president's policy on human rights, especially as it's applied to Africa and what bearing does this have on the supply of oil and the long tanker route from the Middle East to other parts of the world? I certainly have to applaud the president's concern about human rights. I think this is a concern of every person who thinks about the world situation, anything really other than himself. Yet there's a time and place for everything. I think that if the Russians were to, and the Chinese, were to take a very substantial position in Central and Southern Africa – and they already have a...Communist-sympathizing people have a position in Angola, that this does pose a threat to the oil lifeline if you wish to call it that. It's a lifeline more important to Europe than it is to the United States. But it's important to both of us. The whole effort to establish a naval base at Diego Garcia in the Indian Ocean is an example of the concerns that our government has in this regard. Whether this will lead to the establishment of another

fleet in the Indian Ocean, I have no way of knowing. I guess I'd have to end up by saying that I have some concern about whether this is a matter of top priority or whether it's a matter of high priority. It should be looked at in the light of a decision involving some other matters of very high priority for the United States as well. (Applause)

ANTHONY PARISI: Mr. Estes, sales of compacts and subcompacts are up 6% so far this year. But that's because foreign subcompacts have been selling so well. Sales of domestic small cars are actually off somewhat. What's happening? Is the domestic industry failing to make a small car that U.S. buyers like?

ELLIOTT M. ESTES: Well, I guess, I think we'd have to admit that the sales of, particularly the Japanese small cars, are doing exceptionally well, and particularly well I guess in the last month. There seems to be some indication of that market strengthening since the president's message, and that may be true. In our case, and that's all I can speak in our industry, the Chevette in the last two 10-day periods has been increasing over last year at the rate of 15 to 20%. We think we see strength in our own subcompacts. Obviously we've got some real severe competition from the Japanese particularly and we recognize it. And if you're asking me why we're not doing better than we are against them, I think we'd have to say that price is a factor, number of models is a factor. They have umpteen models. I don't know, Toyota, for instance, I think has ten models. And Datsun has 15 models. Why don't we have that many models? We don't have the base of production in those categories that they have to be able to do that. So they've got more

variety to offer. They're in a good price position and they build a good automobile. And they build it with high quality. I don't admit – and I say that our Chevette has as good a quality as any Japanese vehicle – as far as I'm concerned, our Wilmington plants do an outstanding job of building that car. But there isn't any question that we have our work cut out for us to hold those imports where they ought to be. And you say, where should that be? And I say, well, there's always going to be a market for imports, but maybe that ought to be around 1.2 million to 1.4 million area a year, and they're getting up a little bit higher than that right now. One other factor, of course, is that some of the import dealers have more emphasis on that car because that's what they sell. That's the only car they sell. And I think we have to admit that in our case a Chevrolet dealer has a tremendous variety and maybe when the customer comes in the door, he may misjudge him sometimes. And he wanted a small car and he tries to sell him a large one. He may lose him on that basis. A customer that walks into a Toyota or a Honda dealership, it's not a duel. There's no question what he came for, and I think maybe that's another factor. Our domestic manufacturers, all of us, have a real job to do to keep the imports down. And I'll just say that in General Motors' case we're dedicated to doing it. But we do see strength in the subcompact end of the market just in the last month. And as a result, I think we announced the other day, we're going to double the production of Chevettes starting next month. And we're also going to make some shifts to get the second shift onto our Lordstown plant which also builds subcompacts at the start of the 1978 model year. So it's just one of the tough jobs we have and that's to hold them down, no question.

(Applause)

CHAIRMAN JAMES W. DAVANT: Let me again thank our two speakers, Mr. Swearingen and Mr. Estes, and also our two questioners, Mr. Mayer and Mr. Parisi. It's been a stimulating evening. To all of you, a cordial goodnight. The meeting is adjourned. (Applause)