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U.S. FOREIGN ENERGY POLICY

HEARINGS
BEFORE THE
SUBCOMMITTEE ON ENERGY
OF THE
JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES
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SEPTEMBER 17 AND 19, 1975

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U.S. FOREIGN ENERGY POLICY

WEDNESDAY, SEPTEMBER 17, 1975

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ENERGY
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to notice, at 10 a.m., in room 1114, Dirksen Senate Office Building, Hon. Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senators Kennedy, Ribicoff, and Javits; and Representative Long.

Also present: John Stark, executive director; Michael J. Runde, administrative assistant; George D. Krumbhaar, Jr., minority counsel; Robert Hunter, Carey Parker, and Mark Schneider, legislative assistants to Senator Kennedy; Gary Klein, legislative assistant to Senator Javits; and John Stewart, subcommittee staff member.

OPENING STATEMENT OF CHAIRMAN KENNEDY

Chairman KENNEDY. The hearing will come to order. This is the first meeting of the Energy Subcommittee of the Joint Economic Committee. We want to express a word of appreciation to the Members who are here, as well as to the other Members who will be coming in and out during the course of this meeting this morning, and our later meetings.

We think it is an indication by both the chairman of the committee, Senator Humphery, and the other Members about the importance of the whole energy issue to the whole thrust and purpose of the Joint Economic Committee, and we intend to meet our responsibilities and hope to make a useful contribution to the understanding of the various economic implications involved. And these next two hearings, both today and on Friday, relate to the foreign policy implications and to some of the domestic concerns involved an area which we really haven't focused on during the debate and discussion in the Senate of the United States in the formulation of energy policies. And we are very hopeful that during the course of the hearings, both this morning and again on Friday, we can provide some valuable and useful information to the Senate and the House of Representatives on this particular complex and extremely important and vital question.

We feel this is timely for several reasons to begin the subcommittee's work on the subject of foreign energy policy. The Secretary of State, who will join us Friday morning, outlined 2 weeks ago a new set of proposals for the United States and the global economy, in his speech

prepared for the United Nations. We have just achieved an agreement between Israel and Egypt in the Sinai. Next week the OPEC nations will meet to decide whether to increase the world price of oil. And on October 13, the Paris preparatory meeting for the Conference on International Economic Cooperation will reconvene.

Clearly, results flowing from all these events will vitally affect the world energy situation, and will have profound implications for our energy policies.

As we deal with vital domestic energy issues, therefore, it is also important for us in the Senate to understand the broader international setting.

We face a number of important questions, beginning with the degree of independence from oil imports that is in our national interest. Should we seek to be totally independent—a virtually impossible goal for many years—without regard for domestic economic consequences? Or should we seek instead to work toward a genuine interdependence with other nations? If we choose to work with other nations—producer and consumer, rich and poor—how should we go about it? And how should we work with these countries on the recycling of the massive flow of petrodollars?

At the same time, how can we in the United States affect OPEC decisions on the price of oil—while minimizing the risk of another oil embargo by Arab producers? How can we avoid oil policies that invite future OPEC price increases as the \$2 tariff already has done?

Finally, what is the impact of the sharp rise in oil prices on the world's poor countries, and what should we and other nations be doing to help?

These are only a few of the questions we must answer before we can create policies on energy—both at home and abroad—that will make sense for this Nation and for its relations in the outside world.

These questions are not academic. Answers to them will help determine the assurance of energy supplies for plants and factories in my State of Massachusetts and throughout the Nation. They will determine whether we can be confident of adequate supplies of home-heating oil this winter and next; and they will determine whether these supplies will be at prices that our citizens can afford. And in the broader picture, no other area of our foreign policy requires more thought and sustained effort than energy.

And so today I am pleased to welcome our three distinguished witnesses:

Peter G. Peterson, chairman of the board of Lehman Brothers; Prof. Richard N. Cooper of Yale University; and Mr. James P. Grant, president of the Overseas Development Council.

Would you, Senator Ribicoff, like to make an opening statement?

OPENING STATEMENT OF SENATOR RIBICOFF

Senator RIBICOFF. Yes. I think Senator Kennedy started out most auspiciously on this subcommittee to address himself to this particular phase of this problem. I would like to share some thoughts with you gentlemen that you might comment on. I spent the last 3 weeks in August with Senator Russell Long, the chairman of the Finance

Committee, in London, Geneva, Vienna, Bonn, and Paris, basically on trade, but inextricably tied up with the problems of energy. In Vienna, we spent about 3 hours with the Secretary of OPEC and met a group of sophisticated young men, educated in the United States and in England. And what comes out of that trip are just a couple of thoughts, a couple of observations.

I think OPEC is here to stay. I mean, those statements that the cartel is going to break up and they are going to fade away; they are self-deluding and are illusions. Confrontation will be rejected by OPEC and it is apparent to me that they would welcome discussions on a continuing basis. They understand the economic interrelations between OPEC, between their needs and their countries, and the West—and when I talk about the “West,” I am talking basically about the European community and Japan and the United States. And they understand economic recession and inflation and their impact upon their own economies. And while they are not going out of their way to do the West any favors, they are not going to make decisions that will basically hurt themselves either. So there is an interrelationship.

Furthermore, and ending up with IEA in Paris and OECD, one point stands out: That you are never going to have a Western policy, a consuming policy, until there is an American policy on energy, whatever it is; whether it is a good policy or a bad policy. But, my point is, it isn't possible internationally for the oil-consuming countries to have an international policy until the United States has a domestic policy. That is a theme that was brought out to me cogently, which indicates the importance of the United States coming to a decision.

Now, I just throw those two observations out. I will be elaborating on them in a report to the Senate Finance Committee; but I was very pleased when I noticed that Senator Kennedy was calling these hearings because I believe them to be very important and perhaps we can get your comments.

Chairman KENNEDY. Could I ask the Senator when he talks about a domestic policy, whether he is talking about domestic policy vis-a-vis the OPEC countries, or—

Senator RUBINOFF. No; I am talking about a domestic policy in the United States. Because until the United States has a domestic policy, whatever it is, it is impossible for the United States to work in collaboration with other countries to have an international policy. If you don't have a policy at home, you can't have one abroad. And it became very fascinating to me to see the almost complete dependence and the wish fulfillment on the hopes for an American economic revival, when you realize how much all the Western economies are tied up to the United States.

But I give these observations out and I will develop them in my questions after listening to you gentlemen. But as you make your comments, you might consider these. These are personal observations I gathered from talking to private and public people involved in trade and energy where it counts.

Chairman KENNEDY. OK, fine. Mr. Peterson, would you be good enough to lead off? I know you have a limited time, so we will try to comply with that so you can get out of here in time for a plane.

**STATEMENT OF PETER G. PETERSON, CHAIRMAN OF THE BOARD,
LEHMAN BROS., AND FORMER SECRETARY OF COMMERCE**

Mr. PETERSON. Mr. Chairman, as I understand your concept in this series, it is as much to invent questions as to come up with answers. And I think this is admirable, because to some extent part of our difficulties in the international energy policy area is that we have invented answers before we have asked the questions, and I think we probably ask some of the wrong questions.

For example, one of the questions that has been asked over the last couple of years is how do we confront the OPEC countries, rather than to what ends do we want to confront them; and perhaps just as important, can we confront the OPEC countries?

Now, I suspect the ambivalence and confusion this country has had over international energy policy is in trying to come to grips with the painful realities that President Kennedy referred to 16 years ago in his declaration of interdependence. I think what we are finding is it means just that, Senator, vulnerability. And we are having some trouble coming to grips with what we really mean by that.

To the extent we had lack of progress in the international energy policy, that is because we had a curious combination of exaggerated fears on the one hand and exaggerated perceptions of America's perceptions of America's vulnerability on the other hand. So I think the questions we want to address today is what is it we are afraid of, exactly, and we should try to make explicit what these fears are.

Another question, given the switch in our balance of power, what is it we expect to achieve?

Now, part of our international energy policy over the last couple of years has been essentially a confrontation of policy. And in my view, it has turned out to be both self-contradictory and self-destructive. I, at least, am encouraged by Secretary Kissinger's statement before the United Nations and by Under Secretary Charles Robinson's very constructive proposals, and I am delighted you are going to have both of them here.

Now, why do I say that a confrontation strategy, in my view is counterproductive? Well, before you can confront, it seems to me it implies an ability to join forces; that is, a confrontation without full compliance is to me a rather meaningless kind of confrontation. So, if you have a confrontation scenario in which at the first sign of confrontation your allies are departing you in droves, it seems to me, in a sense, it has been self-deductive and self-destructive.

As recently as last spring and prior to the International Energy Agency meeting, a high-ranking member of the United States delegation said that it was the objective of the U.S. policy to break OPEC. Now, all the confrontation scenarios I have seen made explicit, Senator, end up with the United States being a kind of paper tiger in which we spoke very loudly, but really carried a rather soft stick.

We wasted, it seems to me, a great deal of time by distracting our selves from making progress in those areas with our allies that we could make progress in, instead of proposing confrontations, which in the final analysis, the allies were unwilling to support.

Now, this schizophrenia we have about the oil producers, that I think Senator Ribicoff is referring to, is one of the reasons, in my view,

we have not had a dialog with the producers up to now. It seems to me there are two different sets of groups and reasons why we have not had a dialog and they represent two different schools of thought as to what the problem is. I might say I had a friend from Chicago who said that there are two kinds of people: Those who say there are two kinds of people and those who don't. So I realize I am oversimplifying this a bit, but the first group was essentially saying that we are going to break this cartel both economically and politically, so why talk with them. The second school of thought, as I heard it articulated, was that since the market forces are going to bring down the OPEC prices anyway, why not wait and let it happen, because if we engage in discussions, we may legitimize high prices and we may get into discussions of indexation that we don't want to get into.

Now, to confirm Senator Ribicoff's point on the question of market forces, I would remind you that the total productive capacity of OPEC countries, when I last say it, was about 39 million barrels a day. It is currently underutilizing 11 million, or roughly 30 percent of its capacity. In certain Arab countries, it is over 30 percent.

In spite of that and the twin result of a mild set of winters and a recession, Senator, there seems very little evidence at this point that the market forces are going to bring it down.

The point I would like to make is that if we are going to enact confrontation scenarios, we'd better be sure they are going to work. And in my view, most of them, and in fact all of them I have seen, are not credible. And only when we are in a monopoly situation, given the very different circumstances of Japan and other countries, do I think we are likely to have a credible confrontation scenario. And that is, in my view, most unlikely.

There is also a school of thought that suggests there is something inconsistent between a dialog with the OPEC countries and a discussion about prices. I think particularly since at least our current policy hasn't been very effective in reducing prices, that one could argue he has little to lose and perhaps something to gain with a dialog. For example, if the United States is changing toward a mode of some cooperation with regard to the OPEC countries and the Third World, then I think it could be, or at least it is a reasonable argument, that this kind of a mode, that this process of a dialog might literally have more impact on at least a sensible discussion of prices than not. Because I think the argument would be if we make forthcoming moves and the response to this is another series of extraordinary increases, that it might discourage us from moving in a direction that is consistent with their interests, as Senator Ribicoff has pointed out.

Now, I would suggest that perhaps there are two broad objectives we should be focusing on internationally. The first is a positive one, which is an increase in supply globally, and I will elaborate on that in a moment. The second is a series of defense moves to minimize our vulnerability and finally creating an interdependent framework with the producing world.

If you look at the U.S. energy policy, I think it is fair to say a great deal of the rhetoric and perhaps in the year 1976 this is to be expected, but a great deal has focused on the concept of U.S. independence, rather than global interdependence. I would suggest to you that it is going to become increasingly important to focus on global demands and

global supply. I realize that domestic politics favors the other rhetoric, but I think that if you are going to come to grips with what Senator Ribicoff was talking about; namely, that extraordinary vulnerability of these economies, then the concept of unified economies requires that we must think of the global supply. And if we are going to do that, I think we have to minimize the traumatic impact on global economies of a lack of supply.

Therefore, the thrust of our policies, it seems to me, should be to increase the production of oil in a variety of areas in the world, particularly certain kinds of areas. And in the short term, we should minimize vulnerability through conservation and emergency stockpiling.

On the first point, on the global production, I would argue that we should be the leaders in trying to maximize world output of oil. We should be the leaders in trying to diversify oil production as broadly as possible. I think we should be the leaders in encouraging competition in the production of this oil. And we should, in particular, encourage oil production in countries who will find it difficult to cut back production because they need the revenues by the very nature of their economies. Now, when I talk about increasing the global supply, let me make a refinement. It is not simply the actual demonstrated fact of this production; but it is the perception of our capabilities as it is extremely important if the OPEC countries are to believe that we have a variety of alternatives. And if they simply see us as diddling and doddling, as Senator Ribicoff has suggested, then there is really little incentive indeed for them to have a meaningful discussion on the question of prices.

If I may say so, Senator Ribicoff, I think it is simply a question of the confusion and uncertainty of this country that is affecting people abroad and it is having an enormous impact on investment in this country. And we shouldn't be surprised if those in this country who normally you would expect to increase their investment in oil production, if they are looking for other places to put their money. Because if there is one thing the investment community of the world hates, it is uncertainty. And this continuing confusion and uncertainty is certainly counterproductive.

So, it is not at all production as such that is important; it is the demonstrated potential for alternative sources of production that I think is equally important. A friend of mine once said, it is important we show the producing countries whether we have a deuce or an ace in our hand. And during this time of uncertainty, we shouldn't expect them to behave as though we had an ace in our hands, since we don't ourselves know.

Let me illustrate that domestically and internationally. Domestically, I think it is less than a crime that we alone, amongst most of the countries of the world, have not explored the offshore reserves of this country to demonstrate whether we have large reserves or not. The thrust seems to me to get in as much money as we can for the rights of these leases. I would suggest, at least according to my thesis, that a high priority crash effort is required to demonstrate a potential in all areas offshore. The same can be said about other areas of energy sources. If we can look at this globally, you'll see what I mean. Let me suggest a couple of numbers to you.

I was told recently by an expert of the enormous potential of a country like India. There was something like 10 exploratory wells done last year. The comparable number in the United States, I was told, was something like 7,000.

Second, I have been told that the fraction that came through in this country was something under 10 percent, and that the average production was 30 to 40 barrels per day. Now, I don't claim to be an oil expert, so I am probably telling you more than I know, but I am simply trying to suggest the hit rate and the production rate may be less in this country than in other areas of the world.

I think an interesting question your subcommittee might address its attention to—and Mr. Grant is certainly going to talk about this—is the incredible trouble of running at a \$38 billion deficit in the less developed countries. So consistent with my thesis, a major thrust of our international energy policy should be to maximize and diversify the global supply. And I would simply ask if it might not be an interesting tradeoff between very large aid concessions from this country, on the one hand, and on the other hand, having a massive world program in which we help these countries develop their energy supplies. I think a reasonable case can be made on a cost-benefit basis for the latter.

So, what I am suggesting, therefore, is I hope the future thrust of our international energy policy will be toward a large expansion in the exploration of our oil on a global basis. This can be done bilaterally in some cases, and multilaterally in other cases. We should never underestimate the United States—and I trust, all of you Senators discovered this in your trips abroad—for there is enormous respect for United States know-how in the area of drilling technology and know-how in this whole field.

And consistent with how it is in their interests; it is also in the interest of the United States to give these countries American help and multilateral help.

Next, with regard to the International Energy Agency, which I think was another question, I would say its efforts at import sharing during an emergency and its efforts toward emergency stocks is certainly a very good direction to take. I think it is the logical place to start this much expanded effort on global diversification and increase in supply. And, I would have to say candidly, that it is hard for me to visualize a worse subject to have made an issue early in the formulation of that group than the issue of floor prices. Because in my view, the concept of floor prices is both conceptionally unsound and politically unworkable. It, in effect, suggests that your interest is in high prices, and it is really directly related to whether you are a producing country or a consuming country. And I have talked to many foreign friends of ours, who are not producers, who say, in effect, that what you are trying to do is not only establish once again American independence, but you are trying to assure that we have high-cost energy, which we don't intend to have.

I think it has become a political red herring and has tended to equate the International Energy Agency with floor prices. And, in my view, the sooner that this becomes a nonissue and the more we can focus on other issues, the better.

Now, I said it is politically unworkable. What I meant by that is for the price to be high enough to be meaningful, it becomes then too high to be politically feasible in those countries which are essentially consumers of oil, rather than producers. And I have talked to a large number of senior officials of foreign governments. And when you press them on the fact of what do you mean by a floor price, then it is not a coincidence that a country like Japan—that imports too much energy—finally admits it couldn't support a floor price. No political leader could and survive.

And as you gentlemen know, the instinct for survival is important, both in terms of politics and nonpolitics.

So, I think it is politically not sustainable.

Next, I would turn to the need for developing alternative energy sources, particularly synthetic fuels. Now under current estimates, the objective for synthetic fuels was about 1 million barrels a day by 1985, which is an objective I don't think anybody at this point really thinks is attainable. But, even if it were attained, it is less than 5 percent of our total requirements, even if we do attain it.

So, I think the obvious question is whether there aren't some ways of attacking that plan at lower cost to the economy, rather than something that inflates the costs across the entire economy.

Next, a few words about defense moves. I think the concept of complete self-sufficiency is obviously completely unreal. And what we are trying to do is attain a state where if the oil imports were cut off, we could sustain this economy without undue costs. Now, you have seen the estimates from the Federal Energy Administration, I am sure, that talk about the impact of perhaps \$2 million with another embargo and \$50 million to \$100 million. And the cost-benefit ratios to me are very important. I can think of nothing more important than getting started on an emergency defensive program which would include national programs for restricting consumption that could be made immediately operational, like maintenance of energy stockpiles and refineries that could be made available.

One of the problems you have in formulating an emergency stockpiling program is for what period of time are we talking about? And I would suggest the minimum period of time within which we have to have emergency stockpiles is about 2 years. And if I can venture, for a second, into a field I don't know much about, I would suggest the reasons here are largely political. I think this is about the longest period that any responsible person could suggest that we will have a period of relative peace, given the Egyptian-Israeli agreement. And unless further progress is promptly made toward the solution of the key festering issues in that part of the world. I think it is not unreasonable to plan for an explosion as soon as the Iranians, the Iraqis, and the Jordanians and others have accumulated a sufficient number of arms from the Soviet Union by means of financial resources provided by the other OPEC countries. So that an attack on Israel at that time might prove feasible, in my opinion.

Meanwhile, of course, if Mr. Sadat were to fall, for any number of reasons, including not meeting the expectations of his people regarding the economy, and he should be replaced by a more radical leader, this timetable could be greatly accelerated.

Now, I won't bore you with all the rationale for stockpiling, but I would like to suggest this idea briefly to you. It seems to me that doing this would give you flexibility, and I do mean flexibility on a number of scores. The whole concept of relying entirely on price to reduce consumption bothers me for a variety of reasons, but one of the reasons that it bothers me is because it puts all of our eggs in the price basket. And it seems to me, gentlemen, that the so-called elasticity aspects of supply and demand that we read about are nothing more than estimates. We should never forget that. And if you will forgive me the pun, it stretches my imagination at times to see the precision we attribute to some of the so-called estimates on the effects of prices on demand.

I had a statistician professor at the University of Chicago who said you should never put a ring of pearls around a sow's neck, and it seems to me we are really doing that by depending very heavily on the precision of those estimates. I think in a sense we could even consider a tradeoff of some or all of the oil tariffs for stockpiling purposes, since that has certain relevance in terms of the economy.

The questions on stockpiling are pretty simple; namely, what should you store? Should you store crude oil or refinery? Where should you store it? What quantities should you store? What are the timetables? Who should own it? And questions of that sort.

But it seems to me that our naval petroleum resources are an obvious place to store it. If you wish, we can discuss this subject further, but I think there are few things more important to get started on on an emergency basis than this particular effort.

Another area is conservation. I would like to suggest that while I am not an adamant proponent of concept of formal rationing and allocation procedures, because I think they don't work in an economy of this complexity except in the time of war; neither do I feel it is politically sound to rely entirely on pricing. And I would question, Mr. Chairman, whether in our domestic energy policy we have put sufficient emphasis on mandatory conservation practices that do not involve elaborate allocation and regulatory rationing procedures. I think politically, and to the rest of the world, that if we had mandatory conservation that affected us all, it would be a very important symbolic step of the type Senator Ribicoff was talking about in showing the world that this country has come to terms with certain aspects of the problem. Our energy consumption is still twice that of our allies, with roughly equivalent GNP's, and I find it very hard to believe we could not come up with some mandatory conservation program in such areas as heating and lighting and temperatures and automobile standards and so forth that did affect us all and therefore was, in a sense, a burden sharing in this country, because I think I appreciate the political problems of relying entirely on price and its nonegalitarian aspects, if I can use that phrase.

Let me comment for just a moment on the financial aspects. You have one of the great experts of the world here in Dick Cooper, so I won't comment very much on this, because I will be in a little bit of trouble, but let me just say this. We went through a period where we greatly overstated the problems we were going to have; that is, that we were going to have $1\frac{1}{2}$ trillion surpluses in OPEC, which were a major part of the resources of the world, and so on. Now we have

reached the point where it is a nonproblem. I would want to remind us that we had the twin coincidence, really, of a mild winter and global recession and we want to be awfully sure that our forecasts don't continue to assume that.

Now, the two main areas to talk about are the so-called safety net concept, that I am sure you have explored. Originally this concept rather troubles me, because I thought it was part of, and probably still do, of a so-called confrontational approach in which we in the West would then confront the OPEC countries. I am somewhat relieved, and have been relieved recently, to hear it is very temporary and limited. And I would strongly urge you to make it both temporary and limited, because the concept of the United States underwriting this debt is a concept that bothers me.

It is argued we should underwrite the debt because it is going to promote solidarity in the consuming world. The question I would ask is: Promote solidarity to do what? The answer usually is to support our position in the Middle East. I would question whether these countries are going to support the position of the United States in the Middle East. And in any event, if the Middle East producing countries should decide that they want to exert leverage on these countries, they can certainly do it with more direct nonfinancial means by simply suggesting that the supply of oil will not be available. So the concept of solidarity at the price of us underwriting that debt is one I would urge you to explore very thoughtfully.

Another part of the financial picture that I think is ameliorating in this country, but which was part of the rhetoric of confrontation—and earlier this year I had an opportunity, in conjunction with some explorations of the Pan American investment to explore—is the concept of certain U.S. investment policies. As you may recall, at that time there were some strong attitudes of the notion that you should limit OPEC long-term loans and investment in the United States. And when I pressed for the reasons for this, I was interested in the answers.

And again, they rested on this exaggerated fear and perception of our power. The answer, namely, was that if they cannot invest in our long-term loans and capital, they will have to put their money in short term. And if they put their money in short term, the rates will go down and the risks will be high. And since investors do not like low returns and high risks, it was hoped that prices would come down. This tends to overlook the fundamental point that they have the clear alternative of reducing production. And I would argue that in an interdependent world we should be more concerned about a drought of foreign investment in this country than we should a flood—and it is odd that we use a word like “flood” when it comes to global interdependence, which of course raises all kinds of horrible specters.

As I look at the number of foreign investments, they are minuscule in this country compared to the others, and I find very little interest in the part of that part of the world to make long-term investments, particularly in this climate.

Now, a final word on why do we fear a dialog with this part of the world, or why have we feared it. Again, I want to emphasize that I think both the Secretary and Under Secretary Robinson are now

moving in what I would consider to be more fruitful directions. Part of the problem has to do with sharing power and giving these countries larger stakes in some of the organizations of the world. I think I would argue that the thrust of our policy with regard to the OPEC countries should be to say to them in effect that you are now a global power and with global power goes global responsibilities, and we do want to bring you into these institutions, and as part of that we would like you to play a much larger role in some of the concessionary things and the things that Jim Grant will be talking about.

So, to sum up an overly long statement, I would say there are at least three thrusts that perhaps deserve a little more emphasis in our international energy policy. The first would be to put much more emphasis on increasing the global supply of oil, with particular emphasis on diversification in certain kinds of countries and increasing competition.

The second thrust would be to do something immediate to minimize our vulnerability, because the supply options have too long a time frame. And I think there is nothing more important in that regard than to getting going with a crash program on emergency storage and conservation.

I think, finally, that it is extremely important to start a cooperative dialog with the OPEC countries.

And as I just finished saying, I think we should be quite frank in saying to them that in the same way that they have gotten a large share of the rewards of a global economy, it is important that they share in the responsibilities of a global economy. And I think I can see more benefits than risks in asking them to join the club of global economic powers.

Thank you.

Chairman KENNEDY. Thank you, Mr. Peterson.

Our next witness is Mr. Cooper.

STATEMENT OF RICHARD N. COOPER, PROFESSOR, DEPARTMENT OF ECONOMICS, YALE UNIVERSITY

Mr. COOPER. Thank you, Mr. Chairman. I am happy to have the opportunity to testify this morning. I would like to divide my remarks into two categories: First, the international financial aspects of the current level of oil prices; and second, energy policy proper.

The increase in oil prices in late 1973 and early 1974 resulted in a tremendous increase in total payments from the oil-importing countries to the oil-exporting countries. It was probably the most severe financial shock per unit of time that the world has ever seen, not excluding world wars. In the course of one quarter, 15 percent of world payments was rechanneled into new directions. This shock was a major aggravation, though it was not the prime cause, of the present world recession.

The OPEC countries have spent their revenues more rapidly than many earlier estimates projected they would. Their imports rose over 80 percent in 1974, with most of the increase in real terms, though about 25 percent of that was just inflation. But even after that substantial increase in imports, they sustained very large trade surpluses.

These surpluses acted as a deflationary, or a contractionary influence on the world economy. Moreover, the imports into OPEC were not widely distributed as to source and, as a result of that, as well as a result of the world's recession, many small countries have built up large new external debts during 1974 and 1975. Some of the debt is directly to the OPEC governments and some of it is to international institutions, such as the International Monetary Fund and the World Bank; but most of it is to private markets, especially to banks in the Eurocurrency market. The increase in net external debt probably amounted to well over \$20 billion in 1974 for the nonoil-producing, less developed countries of the world.

Now it has to be said at once that this borrowing has helped greatly to sustain world demand in a period in which world demand was slipping away rapidly in the major industrial countries. But it has put some of the smaller European countries and the oil-importing, less developed countries into a perilous position financially. They cannot continue to borrow at the rate they have been doing, and they can't really expect to repay their current borrowings until there is a very sharp improvement in their export earnings, which are now reduced by the world recession.

The safety net facility of Secretary Kissinger and Secretary Simon is directed at the OECD countries, and does not offer any direct help to non-OECD countries. The International Monetary Fund can help less developed countries, but that help is limited in amount and is not generous on terms until the gold sales, which are now agreed upon in principle, are allowed.

The principal task, it seems to me, of the United States and of the other industrial countries, notably Germany and Japan, is to get us out of the present world recession. If that doesn't happen fairly soon, I feel that there is going to be a secondary contraction arising from the forced slowdown in many of the smaller countries in the world, which have thus far been sustaining demand through their borrowings. Indeed, the OECD Secretariat already suggests a 10-percent decline in imports into these countries over the next year. I believe the United States should take up seriously the French-German proposal, to which recent Japanese actions could be added, for a joint expansion of the three or four major economies of the world. It is not only desirable for our own economy, I believe, but it is important for continued viability of an open world economy.

In the absence of such expansion and in the presence of large, overhanging debts, I fear we are going to find increasing resort to import controls and other restrictions around the world.

Let me turn from the question of international finance to the question of energy, and the implications of high oil prices for energy policy in the United States. My position in brief is that the OPEC increase in oil prices does call for a response by the oil-importing countries and by the United States in particular, but that that response should be primarily with respect to augmenting long-term supply of energy rather than with respect to restricting consumption.

My views are heavily conditioned by a study of a colleague of mine at Yale, William Nordhaus, on the longrun availability of energy. He projected energy demands to the year 2150, so it is a long-term study, and he then asked how it could be supplied and at what cost.

Petroleum has the desirable property of easy portability, and hence petroleum will be in demand for certain uses for many years to come, notably for aircraft and for certain kinds of automobile transportation. But many of the current uses of petroleum have easy substitutes—not at once, of course, but over a period long enough to alter the capital stock so as to use the alternative sources of energy.

Nordhaus' calculations concern the longrun costs of supplying energy and they therefore abstract from market structure; that is, they are not concerned with the existence of an OPEC cartel or with the existence of tariffs and other factors that in fact affect the market prices of energy. On his calculations, the cost of petroleum energy in the year 2000, which is far enough ahead to allow substantial new investments in energy, would still be well under \$5 a barrel in 1970 prices. Now that would have to be escalated, of course, to allow for inflation, but such allowance would still yield a price below \$6 a barrel in today's prices. This calculation assumes free trade in oil and in particular assumes that OPEC does not restrict its supply. It is based, as I said, on costs rather than actual market conditions.

The cost of energy rises gradually through the 21st century, assuming that no new technology is discovered in the energy area, which assumes we continue to know only what we know now with respect to nuclear energy, coal, petroleum, and other sources of energy. In that respect Nordhaus' projections are very conservative ones, because it is difficult to imagine a century and a half passing without major technological breakthroughs in the energy area.

Nordhaus goes on to consider the costs of complete energy self-sufficiency by the United States. After a suitable time is allowed for new investment, this would increase energy costs to the United States by about 60 percent over what they would be in the free trade regime; that is, to something like \$7 a barrel in 1970 prices.

Now these figures suggest to me that the current prices of oil, even after correcting for inflation, are higher than necessary to restrain consumption to the desirable degree and that they would be more than high enough to stimulate new investment in oil and in alternative sources of energy, provided they were regarded as reasonably certain.

I conclude from this—and here I seem to disagree with Peter Peterson, although on many points I agree fully with his statement—that we should not impose additional taxes on consumption of oil, nor should we ration oil consumption at the present time. That is to say, I do not see either a shortrun or a longrun purpose to be served by restraining, through additional policy actions, the consumption of oil. If an argument could be put forward that we could restrain oil consumption enough in the United States and in the other consuming countries to break OPEC, that would have some force. But that argument, as far as I am aware, has never been put forward and certainly not in numerical terms. One would have to ask, I think, how many barrels per day reduction in consumption would be required in order to break OPEC. It would be more than President Ford's program for reduced consumption, or other proposals that I have seen, I am sure. So, I don't see that as a feasible target, at least on a basis of conservation proposals that have been put forward so far.

Moreover, I worry very much about the impact of further policy-induced reduction in the consumption of oil on the economy at large.

Given the fundamentally contractionary posture of the Federal Reserve System, which will perceive any increase in any price, including policy-induced prices of gasoline, as another sign of inflation, steps to restrain consumption through higher taxes will prolong the recession. The simultaneous inflationary and contractionary forces of additional taxes on oil are two forces the economy does not need at the present time.

To say this is not to say that we should not encourage a conservationist attitude in as many ways as possible. I have no doubt that in the course of time the already higher prices of gasoline and other oil products will induce conservation, as greater interest develops in insulating homes, for example, and much greater attention is paid to the mileage that automobiles get. I am pleased to see that finally, after years and years, General Motors has brought out an automobile in this country that it claims can get more than 30 miles to a gallon, compared with last year's models, many of which got less than 10 miles to a gallon. These developments will take place simply under the inducements of the higher prices that we already have.

I believe, therefore, that the concentration of a national energy policy should be on stimulating supply rather than on restricting consumption. I am optimistic about the effects of prices on behavior in our market economy, for I think the current prices provide more than adequate incentive to new investment, both in petroleum and in nonpetroleum sources of energy, provided that there is some assurance that these present high prices are going to last. And the key problem, as Mr. Peterson has emphasized, is one of uncertainty. We know that the Middle Eastern countries can provide oil at very low prices. There is, therefore, always the possibility, perhaps not a very large one at the present time, either as a result of a collapse of OPEC or as a result of deliberate predatory pricing by OPEC, that oil prices could fall substantially. This eventuality would undermine any long-term heavy investments in the energy area that are made on the assumption of higher prices.

This uncertainty, it seems to me, acts as a substantial deterrent to long-term energy investments in this and in other countries. We therefore need some kind of device to introduce greater certainty into long-term energy prices as they affect producers. Secretary Kissinger's proposal for a floor price on oil can be interpreted as being aimed at this problem. The problem is a real one. Like Peter Peterson, I believe the floor price idea is not the best solution to that problem.

To deal with this problem, I would introduce contingent subsidies in the pursuit of greater self-sufficiency or, as I prefer to call it, greater diversification in the production of energy. The basic idea of a contingent subsidy is relatively simple. There is a general public interest in reducing our dependence on the Middle East as a source of a critical raw material to this and other industrialized countries. Since there is that general public interest, it is appropriate, if necessary, for the general public to pay for the reduction of that dependence. Now, it may not be necessary. OPEC may succeed in maintaining high prices for the next several decades, in which case there is more than adequate price incentive to make the necessary investments in alternative energy sources.

But, as I said earlier, that is not a certain prospect. Therefore, we need to introduce greater certainty for the investors. And to this end, I would offer a contingent subsidy such that if OPEC's prices fall below, let us say, an equivalent of \$6 a barrel in 1974 prices, then the Government would absorb an appropriate fraction of the fixed costs—not the operating costs—of carrying heavy investments in high-cost sources of oil, coal, and other sources of energy.

In addition to this, I would also have the Government subsidize research and development in promising but still undeveloped technologies, such as coal gasification, solar energy, energy from the sea—where as the result of temperature layers in the ocean it is possible to generate electricity—and production of hydrogen—hydrogen offers the most promising longrun alternative to petroleum as a highly portable source of energy. I would also support a substantial expansion of AEC's capacity to enrich uranium. It is not in the U.S. interest, it seems to me, to have a shortage of enriched uranium in the world, for it will lead to a proliferation of capacity outside the United States to enrich the uranium and to reprocess nuclear waste materials.

How does all this bear on our major trading partners, Europe and Japan? It happens that the main opportunities for a development of alternative sources of fossil fuels are in North America. While offshore oil developments are possible in Europe and are going forward rapidly, and they seem to be possible in the vicinity of Japan, the information we have so far suggests that while these are promising, they are still small relative to the capacity of North America, particularly in coal.

While all that is possible should be done by Europe and Japan, the main opportunities are in North America. Therefore, I agree very much with Senator Ribicoff that it is not possible to have a viable energy policy for the oil-consuming nations as a group without major leadership by the United States, and without holding out the possibility of greater self-reliance in North America, with the understanding that we would share with Europe and Japan, as under the IEA arrangements, in any serious emergency. For this reason, it is also in their interests that the United States diversify its sources of energy. We cannot expect fully equivalent action by Europe and Japan. We can, however, expect parallel action where that is possible, as for example, in nuclear energy. But the main leadership rests on the United States to reduce the vulnerability of all of these countries to capricious or other disruptive actions by the OPEC countries.

It is important that this country move more rapidly than it has to date to create an environment in which the necessarily heavy investments in those alternative energy sources will take place.

Thank you, Mr. Chairman.

Chairman KENNEDY. Thank you, Mr. Cooper.

Our next witness is Mr. Grant.

STATEMENT OF JAMES P. GRANT,¹ PRESIDENT, OVERSEAS DEVELOPMENT COUNCIL

Mr. GRANT. Mr. Chairman, I join my colleagues at the witness stand in welcoming this opportunity to respond to your invitation to

¹ The views expressed in this testimony are those of the witness, and do not necessarily represent those of the Overseas Development Council, or others of its directors, officers, or staff.

testify on the overall shape of U.S. energy policy with respect to the outside world, and with particular reference to its broader international context, focusing on the vital choice between "independence" and "interdependence." These questions, and particularly those aspects involving U.S. relations with the developing countries, have been the subject of continuing interest and attention at the Overseas Development Council for the past 3 years as it has carried on its research and study as an independent, nonprofit organization concerned with increasing American understanding of the issues involving the United States and the developing countries.

Included as appendixes to my testimony are two recent assessments by ODC staff, one describing the situation of the oil dependent developing countries and the other identifying key areas for potential cooperation or conflict between exporters of the Organization of Petroleum Exporting Countries, OPEC, and the industrial states of the organization for Economic Cooperation and Development, OECD.

The United States, in my judgment, does not yet have an adequate set of policies for responding either to our long-range energy needs in a global context, or to our need for a comprehensive and long-range approach for working with the newly powerful OPEC nations. We deal with these countries today very much on an ad hoc basis.

Fortunately, the combination of the Egyptian-Israeli accord negotiated by Secretary of State Henry Kissinger in late August, the comprehensive new set of policies toward the developing countries announced by the United States on September 1, and the scheduled resumption of the Paris negotiations on energy and other matters do provide the opportunity for a new approach more responsive to our national needs in an era of increasing interdependence. These hearings are, therefore, most timely.

Any consideration today of U.S. energy policies needs to take into account three basic facts: First, the current energy crisis is due in considerable part to long-run secular factors which need to be addressed; the nonoil exporting countries, and particularly the poorest, as noted by Richard Cooper and Peter Peterson, are the hardest hit by the soaring price rise in energy cost; and there is as yet no agreed global approach to the longrun energy problems.

OVERLOAD OF GLOBAL SYSTEMS

The jarring changes the world has experienced in the past 2 years have resulted from two quite different sets of circumstances—short-term and cyclical factors on the one hand, and longer term and more permanent kinds on the other. The short-term circumstances include the unprecedented business boom of the early 1970's that was caused by the simultaneous expansion of all the industrial economies for the first time since World War II, unprecedented droughts that drastically limited available food supplies, and the Middle East conflict that resulted in the oil embargo.

Next, it is equally clear that these crises are also partially due to longer range secular factors. Viewed from the perspective of the 1980's the crises of the mid-1970's will almost certainly appear as essentially the product of continuing rapid economic and population growth

within the constraints of a frequently finite physical system and relatively inflexible political and economic situations.

Mr. Chairman, the unprecedented rates of economic growth, and particularly the 5 to 6 percent rates of increase in the global outputs of goods and services of the late 1960's and early 1970's, are outrunning the capacity of human institutions to respond and adapt. Like the short circuits in an overloaded electrical system, a rash of societal breakdowns is resulting from man's apparent inability to adapt his institutions fast enough to permit a continuation of the rapid increases in output of the recent years. Systems overload have become the order of the day as the world moved from the \$1 trillion economy of the late 1940's into the \$3 trillion economy in constant prices of the early 1970's. We have begun to see the ecological overload: Pollution in the cities, eutrophication of lakes, and diminishing global fish catches. The unprecedented increases of the 1960's and early 1970's in population and affluence have so expanded demand that the demand-supply relationship for a growing list of commodities shifted to a seller's market from what for many years had been a buyer's market. Oil is a good illustration of the shift, and of how heretofore weak sellers have utilized their new power to settle long-standing economic and political grievances. These same forces for increased demand have led to actual shortages for a few critical commodities, notably food and fertilizers. "Stagflation"—double-digit inflation accompanied by stumbling economic output—is yet another symptom. Events are making increasingly clear that we can no longer confidently extrapolate a growth pattern for the next 25 years, to a \$10-\$12 trillion gross global product, that is similar to the trend line of the 1960's and the 1950's. This will raise serious political problems in an era of high population growth rates and raise expectations of perpetually increasing personal material well-being. It makes urgent the need to craft new systems more responsive to making the changes which are required in areas of tight supply if reasonably rapid rates of growth are to be maintained and the burdens of slowdowns in growth are to be allocated with some degree of equity.

The global problem of system overload has been made more difficult to solve because of the growing parallel crises arising from the fact that there have been rapid increases in growth without adequate sharing between the powerful industrial societies and the more numerous poor countries. The establishment of the United Nations Conference on Trade and Development, UNCTAD, in 1964 to give the developing nations a forum with the industrial countries for settling their grievances is one manifestation of this issue between countries.

The sense of righteousness of the OPEC countries in pressing for higher oil prices, and the psychological identification with them of most developing countries, even those most injured by higher oil prices, are a consequence of the failure of UNCTAD and other mechanisms to slow the widening gaps between rich nations and most poor nations. There is a growing conviction in the developing countries that their increasing interdependence with the industrial countries is on the basis of widespread inequality, while the interdependence of the developed countries with each other is on the basis of far greater equality. The just-concluded Seventh Special Session of the United Nations may

represent a historic landmark, with the rich nations of the world agreeing for the first time to undertake serious negotiations with the poor countries on a whole range of issues.

The second underlying factor I want to emphasize here is that the poorest countries of the world are most severely affected by the current crisis.

The developing countries face great difficulties in getting the financial resources required to buy the energy resources needed until they can attain a greater degree of energy sufficiency or increase their foreign exchange earnings. There is general agreement that the impact of the increase in world oil prices has fallen most heavily on the oil deficient countries of the developing world. The oil import bill for the non-OPEC developing world as a whole is estimated to have increased by \$10 billion to about \$17 billion, even though they have reduced consumption far more, proportionately, than has the United States. While the OPEC countries have returned some \$2.5 billion in the form of foreign aid disbursements in 1974 and the figure should be considerably higher in 1975, the net loss of resources by the developing countries is severe.

Their problems have been greatly aggravated by rapidly rising prices for food, fertilizers and manufactures that have paralleled and in some cases preceded the oil price rises of late 1973, and by the falling prices and quantities of their exports as a result of the current global recession. The aggregate current account deficit of the developing countries skyrocketed from \$9 billion in 1973 to an estimated \$28 billion in 1974, and is projected to reach \$35 billion in 1975. Growth is slowing in most developing countries and serious retrogression is starting in many, most notably for those countries with a billion people commonly referred to as "MSA's" from the U.N. designation of them as the countries "most seriously affected" by recent world economic events. It is tragic that this poorest quarter of mankind which has contributed the least to the long-term energy supply problem—they account for only 2 percent of total commercial energy consumption—should be the ones most seriously affected. Neither the OPEC countries, who through their cartel action precipitated the oil price rise, nor the United States, which far more than any other country has contributed to the long-range depletion of cheap oil and the creation of a sellers' market in energy—as noted earlier, we use twice as much energy per capita as the West Germans and more than 50 times as much as the average South Asian—has accepted responsibility for helping with the financial problems of these countries who are almost entirely innocent bystanders.

Several new international institutions have been created or proposed to help meet these shorter term balance of payment needs. Almost certainly more effective measures will be required.

Dick Cooper brought out, I think quite forcefully, the serious debt problems these countries now face and the exhaustion of their further borrowing capacity. This leads me to the discussion of what I consider to be the critical need for a global, multiyear approach.

The need—and potential—for a more global American approach to the world energy issues was aptly described in the Overseas Development Council's "Agenda for Action 1975: The U.S. and World Devel-

opment," May 1975, by contrasting U.S. policy toward two major long-range global problems which had become critical in 1973 and 1974 by reason of extraordinary events—food because of droughts, Russian grain purchases, and U.S. farm policies; and oil by virtue of OPEC cartel action:

The U.S. response to the long-range aspects of world hunger and food insecurity was—with the exception of, inadequate and tardy, action on food aid—one of leadership in mapping out a systematic, comprehensive and long-range program to attack the problem, involving a broad range of participants—developed, developing, socialist, both U.S.S.R. and China, and oil-exporting nations. It was a response that did not seek short-run national gain at the expense of other nations but instead treated a common global illness with the medicine of international cooperation.

In the case of the oil crisis, by contrast, the U.S. originally responded to OPEC policies of confrontation by proposing a scheme of counterconfrontation—by organizing the members of the OECD, seeking an unrealistic cut in oil prices, and decreasing the dependence of the United States on oil imports. Even the major developing country importers, for example Brazil and India, were excluded from the organization. In contrast to the food case, no long-term global program was offered. Instead, the U.S. reaction was to protect its own narrowly defined interests first and the interests of other industrialized nations only second. * * * One fact that was lost sight of in the heat of confrontation was that, even without the oil crisis, a major shortage of low-cost oil would have been due in the 1980's—given the rate of increase in demand. The 1974 oil crisis could be viewed in one sense as an expensive but timely forewarning of the need to make changes in energy use patterns before it was too late.

This contrast in response to two parallel global problems is sharpened further when one realizes that as of September 1975 there is still no comprehensive study of even midterm, to 1985, global energy requirements and alternative responses that compares in depth and quality with those made in the food field by the Food and Agriculture Organization and the United States.

DEPARTMENT OF AGRICULTURE

Hard as it may be to understand when global interdependence is so widely spoken of, the Project Independence study by the Federal Energy Administration, "A Time To Choose: America's Energy Future," the energy study undertaken by the Ford Foundation and the recently published "Creating Energy Choices for the Future," June 1975, by the new U.S. Energy Research and Development Administration, discuss U.S. needs without a meaningful analysis of the global problem, failing to include the situation confronting the two-thirds of mankind living in the developing countries. The recently issued study of the Organization for Economic Cooperation and Development, OECD, "Energy Prospects to 1985," similarly focuses almost exclusively on the industrial countries. Of the report's more than 400 pages, only 5 pages are devoted to the subject of cooperation with the nearly 2 billion people living in the nonoil exporting developing countries and four to the OPEC countries. The two very brief chapters devoted to the relationship between OECD nations and those two categories of countries—there is none devoted to the centrally planned economies—are excellent, but nowhere are their implications taken into account seriously in the central body of the report and its recommendations.

In other words, what I am underlining here is that we don't currently have anything like the knowledge base to address the energy problem globally that we had in the food field for some years.

A major issue is the source of the financial resources for developing countries, if they are to make the investments required to develop new energy sources. This investment will be far larger than what is required in the food field. However, there is an international consensus that in the food field there must be an increase—from \$1.5 billion currently to \$5 billion—in the flow of external resources to spur food production, and major international structures have been established for this purpose. Nothing has been done to increase the flow in the energy field, however.

A third issue is the need for greatly expanded research on energy alternatives particularly appropriate for developing countries which would capitalize on their special circumstances. This has been done with great success in the food field, most notably with wheat and rice, and there are comparable opportunities in energy. Secretary Kissinger's reference to an International Energy Institute in his September 1 address holds out hope of research progress in energy similar to that in food grains.

These are all ways of indicating that, whereas in the food field we had the FAO and the World Council and a whole family of institutions and years of research, there is nothing comparable in the energy field.

The preceding indicates some of the potential for increased global cooperation in energy. It indicates the benefits that might flow from the convening of a World Energy Conference, similar to that for food. And I agree quite fully with Pete Peterson that there is a need for a major global address to the problem of increasing world energy supplies. There is going to be an increased food supply we know, but none of the mechanisms are now in place for energy.

Such a conference would provide further benefit by making it far more difficult for the OPEC countries to institute arbitrary price increases. OPEC and OECD nations are now working cooperatively to help the developing countries to meet their short- and long-term food needs in a manner which will also be of major ultimate benefit to them as well; there is an equal or even greater need for a global cooperative energy effort to convert the situation from the present zero sum game context, in which one party's gain is another's loss, to the positive sum game context now emerging with respect to food.

Now the preceding issues involve cooperation between OPEC and OECD, in the context of third countries. There are other issues which pertain more strictly to relations between OECD and OPEC.

The fourth issue, the issue of price has been discussed.

Another issue, the fifth issue, touched by Peterson and Cooper is the challenge of creating an investment climate that encourages the OPEC countries to invest their resources for domestic as well as world developmental purposes—a climate that encourages them not to squander their great, but finite inheritance on arms, or on excessive consumerism. We currently do not have really a long-term approach as to where we would like to see Iran, Venezuela, and Saudi Arabia to be developmentally 10 or 15 years hence, nor an effective policy of working with them on this matter; nor do we have, as noted earlier,

any effective policy regarding their surplus sums, and how we should ask these countries to invest their moneys here.

In contrast, our focus has been on sales of arms to these countries, like Iran and other countries, which promises to be self-defeating in a few years.

A sixth major issue involves the future relationship of the richer OPEC countries within the advanced industrial market economy countries. There is the issue of at what point, if any, they—like Japan—should be treated as members of the OECD “club” in terms of their investments and their participation in financial councils of the OECD and of the world community. And I quite agree with Pete Peterson on this. There is a need to pull them in and then saddle them fully with responsibilities.

As I pointed out in my article, appendix B to this statement, last May:

So far this set of issues has not been approached comprehensively or collectively by the OECD countries. Confrontation has been in order of the day on the issue of the oil price, with the United States, in particular, acting as though OPEC were a belligerent in the new “cold war”; it has been marshaling allies, urging oil conservation to reduce demand, seeking a major price rollback, and generally failing to engage in a dialog with producing nations until it is in the much stronger bargaining position. At the same time, all the industrial countries have been competing vigorously to sell goods of varying usefulness, or potential harm, to the new rich, with the United States clearly the “winner” in terms of arms sales and private contracts for technicians and equipment in the expanded development efforts of the OPEC nations.

Finally, I would like to close on this note. Secretary of State Kissinger said in the closing words of his address to the World Food Conference, words that are in the best tradition of America:

Let the nations gathered here resolve to confront the challenge, not each other.

Let us agree that the scale and severity of the task require a collaborative effort unprecedented in history.

And let us make global cooperation in food a model for our response to other challenges of an interdependent world—energy, inflation, population, protection of the environment.

I urge that with the interim accord in the Middle East having removed the near threat of an oil embargo as a consequence of the long-standing Arab-Israeli conflict, and Secretary Kissinger’s address to the United Nations of September 1, having shifted the central thrust of the dialog between developed and developing countries from confrontation to negotiation, the time is ripe for a U.S. initiative on energy paralleling that on food.

Thank you.

Chairman KENNEDY. Well, thank you very much, Mr. Grant, and the members of the panel.

[The appendixes attached to Mr. Grant’s statement follow:]

APPENDIX A

ACCESS TO ENERGY: PERSPECTIVES OF DEVELOPING COUNTRIES*

(By Helen C. Low, Research Associate, Overseas Development Council)

Two thirds of the world’s people account for only about 15 per cent of total commercial energy consumption. The United States alone, with six per cent

*Modified from “The Oil-Dependent Developing Countries,” in *Current History*, vol. 69, No. 407, July–August 1975.

of the population, consumes twice as much energy as the entire developing world. Viewing energy use as central to economic growth—the process by which human energy is matched with higher ratios of tools and techniques to mobilize and convert resources for man's use—the developing countries are concerned that the readily accessible, and hence relatively inexpensive, fuel supplies will have been squandered before they are in a position to utilize them fully in the development of their economies and the achievement of a more adequate quality of life for their people.

World consumption of energy has increased rapidly, the level almost tripling in the period between 1950 and 1970. In 1950, 2.6 billion tons of coal equivalent of commercial fuels were expended, compared with 7.2 billion tons in 1970. Ninety seven per cent of this energy consumption derived from fossil fuels, only three per cent coming from hydro, nuclear and other sources. The urgency felt by developing countries in claiming an increased share of energy resources arises from a recognition that as fossil fuels are being depleted, they are becoming more and more expensive to exploit. A discussion in terms of advanced techniques to permit extraction of oil from deep ocean floors or to enrich uranium from low grade ores tends to overlook the basic question of how much energy is expended in making the incremental energy available. In some cases, more energy may be used up than is gained,¹ as may occur, for example, in the extraction of oil from shale, or in the use of steam to increase the recovery rate from oil fields. In the escalation of costs resulting from the progressive exhaustion of more accessible reserves, countries with limited financial resources will be left further and further behind in development.

The concern of developing countries about access to energy supplies is heightened by a growing awareness that no ready replacement for fossil fuels is expected in the foreseeable future. At best, nuclear fission is not likely to supply much more than a quarter of total energy needs by the year 2000 and, in the opinion of many, its use continues to pose fundamental problems. Nuclear fusion and large scale solar energy development are still in the conceptual stage. The developing countries themselves can make little contribution to the massive research efforts which must be mounted to develop these resources.

At the other end of the scale of research and development is the developing country concern that scant attention is given to the diffuse energy needs of the large part of their population whose principal fuel is firewood. It is estimated that 58 percent of the energy consumption in India in 1970–71 came from non-commercial sources and that two-thirds of this was firewood and charcoal.² Research at the level of adapting such small-scale projects as windmills, methane tanks and small solar devices, to local conditions would greatly benefit many people;³ it would avert the serious harm now being done by widespread erosion as forests are denuded for firewood and by soil exhaustion as cowdung is burned rather than being used for fertilizer.

The developing world encompasses a wide spectrum of economies, ranging from those in which a large portion of the population lives predominately outside the monetary sphere to those with rapidly burgeoning and increasingly complex industry. Many developing economies have substantial elements of both a subsistence and a modern sector but the proportions differ so widely that generalizations are difficult. As a whole, developing countries are at a stage in which energy consumption increases faster than the increase in GNP. This ratio of incremental energy consumption to GNP tends to be higher for developing than for industrial countries. One study shows that a 10 percent increase in GNP in a group of developing countries, was accompanied by a 13 to 16 percent increase in consumption, compared with a 9 percent average increase in a group of industrial countries.⁴ Moreover, while a zero energy growth rate can be seriously proposed for the United States without a decrease in the level of living through the use of avail-

¹ For a discussion of net energy yields, see Wilson Clark, "It takes energy to get energy: the law of diminishing returns is in effect," *Smithsonian*, 5, No. 9 (December 1974): 84–90. See also Amory B. Lovins, "World Energy Strategies," *Bulletin of the Atomic Scientists*, XXX, No. 5 (May 1974): 302–12.

² P. D. Henderson, *India: the Energy Sector* (Washington, D.C.: World Bank, 1975), pp. 27, 180.

³ See B. H. Billings, "A Proposal to the United Nations Environment Programme for a Programme in Non-Polluting Energy," prepared for the Advisory Committee on the Application of Science and Technology to Development, Twentieth Session, Geneva, Oct. 21 to Nov. 1, 1974 (E/AC. 52/XX/CRP. 7).

⁴ Sam Schurr, ed., *Energy, Economic Growth and the Environment: Resources for the Future* (Baltimore: Johns Hopkins University Press, 1972), pp. 182–183.

able and projected technologies and a realignment of priorities⁵ such a proposal is not feasible for a developing country that has not yet moved very far in terms of utilization of its resource base.

ENERGY SOURCES AND USES IN DEVELOPING COUNTRIES

Energy consumption in the developing countries, including Communist Asia, grew from 9 percent of the world total in 1950 to almost 16 percent in 1970. During this time, the share of world population accounted for by these countries increased from 67 to 70 percent. Since energy use rises rapidly with increased income, the poorest 25 percent of the world's population—one billion people—only used some 2 percent of the world's total energy consumption in 1970. This compares with the approximately 30 percent consumed by 214 million Americans.

The rate of increase in per capita energy use has varied among regions, ranging from an average of 3 percent in Africa to 3.4 percent in Latin America to 5 percent in non-Communist Asia during the 1960s, compared with 4.2 percent in the United States.⁶

Petroleum accounted for almost 64 percent of the energy consumed by non-OPEC developing countries in 1972, coal for 22 percent, natural gas for over 10 percent, hydroelectric, nuclear and imported electricity together for less than 4 percent of the total. This marked a significant change from 1961 when petroleum had contributed 57 percent and coal 32 percent.⁷ This pattern of fuel source in the developing countries differs notably from that of the world as a whole which in 1971 used petroleum for 44 percent of its needs and coal for 33 percent.⁸ A comparison of the two indicates that the developing countries as a group are much more highly dependent on oil to supply their energy needs than is the rest of the world—a factor which has accentuated the impact of the 1973-74 oil price increase on their economies.

Energy consumption varied widely among the developing countries in 1971, reflecting a broad spectrum of resource endowment and differing degrees of resource utilization. On a per capita basis it ranged from 11 kgs. and 13 kgs. of coal equivalent in countries such as Burundi and Upper Volta to 1,270 kgs. and 1,773 kgs. in Mexico and Argentina respectively.⁹

The table below shows the rates of growth of national product, population and energy consumption during the decade of the 1960s for seventeen countries with widely differing economic situations. Fifteen of these are energy-deficient countries, (the varying extent of dependence being apparent from a comparison of net energy imports with total energy consumption). Indonesia and Nigeria, both OPEC members, have been included to point out that in terms of the level of national product and energy consumption on a per capita basis, they face the same challenges as do others of the lowest per capita income group. While oil is plentiful, it has not yet been widely used within the domestic economy, per capita consumption being 59 kgs. of coal equivalent for Nigeria and 123 kgs. for Indonesia in 1971. Their immediate concern is to utilize the revenues from limited oil reserves (22 years for Indonesia and 17 years for Nigeria of presently known reserves at 1973 rates of extraction)¹⁰ to build a sound base for the continued development of their economies.

⁵ Energy Policy Project of the Ford Foundation, *A Time to Choose: America's Energy Future* (Cambridge, Mass.: Ballinger Publishing Co., 1974), Chapter IV.

⁶ James W. Howe and the staff of the Overseas Development Council, *The U.S. and World Development: Agenda for Action, 1974* (New York: Praeger Publishers, 1974), Table C-1, p. 174.

⁷ James W. Howe and the staff of the Overseas Development Council, *The U.S. and World Development: Agenda for Action, 1975* (New York: Praeger Publishers, 1975), p. 214.

⁸ Derived from United Nations, Department of Economic and Social Affairs, *World Energy Supplies, 1961-70 and 1968-71*, Statistical Papers, Series J, No. 15 and No. 16 (New York).

⁹ United Nations, *Handbook of International Trade and Development Statistics: Supplement 1973*, Publication Sales No. E/F. 74. 11. D. 7, pp. 102-115.

¹⁰ *The U.S. and World Development*, op. cit., p. 241.

Countries	GNP per capita, 1972 (millions)	Population growth rate, 1960-70 (percent)	GNP growth rate, 1960-70 (percent)	GNP growth rate per capita (percent)		Energy consumption per capita, 1971 (kgs. of coal equivalent)	Energy consumption growth rate, 1960-71 (percent)	Energy consumption, 1971 (million metric tons)	Energy net imports, 1971 (million metric tons)
				1960-70	1965-72				
Bangladesh.....	\$70	2.6	4.2	1.6	-1.6	135	23 5.8	12 10.8	2 4.9
Pakistan.....	130	3.2	7.2	3.9	1.7	4 139	23 5.8	4 10.8	2 4.9
Brazil.....	530	2.9	6.0	3.0	5.6	515	6 7.0	49.5	25.5
Chile.....	800	2.2	4.4	2.2	2.2	1,487	3 7.3	14.8	4.9
Costa Rica.....	630	3.3	6.2	2.8	4.1	448	11.2	.8	.5
Dominican Republic.....	480	2.9	5.2	2.2	5.0	255	3 7.7	1.1	1.1
Ghana.....	300	3.0	2.1	- .9	1.0	186	8.2	1.6	1.2
India.....	110	2.2	3.7	1.5	1.4	186	4.9	102.7	17.5
Ivory Coast.....	340	3.4	8.1	4.5	4.1	282	17.1	1.2	1.0
Kenya.....	170	2.9	5.6	2.6	4.1	172	5.3	2.0	1.3
Korea.....	310	2.4	8.7	6.2	8.5	860	14.3	27.9	14.7
Niger.....	90	2.9	3.2	.3	-5.1	25	18.3	.1	.1
Philippines.....	220	3.0	5.7	2.6	2.4	292	10.0	11.1	10.3
Sri Lanka.....	110	2.4	4.4	2.0	2.0	128	3.9	1.6	1.4
Thailand.....	220	2.7	8.0	5.2	4.2	312	19.0	11.0	9.9
Indonesia.....	90	2.6	3.5	.9	4.3	122	1.4	14.4	7 -45.24
Nigeria.....	130	2.5	4.8	2.2	5.4	59	17.9	3.3	7 -93.22

¹ Based on IAEA estimates for early 1970's.

² Pakistan and Bangladesh together.

³ 1961-71.

⁴ Government of Pakistan figures for 1972-73 show 9,900,000 metric tons.

⁵ Grew at 10.7 percent in 1966 to 1971.

⁶ 1960-70.

⁷ Negative figures indicate net exports.

Sources: Cols. 1 and 4 from World Bank Atlas, 1974; cols. 2, 3 and 5 from report by chairman of the Development Assistance Committee, Development Cooperation: 1974 Review (Paris: OECD, 1974), table 110, pp. 323-325; cols. 6, 7, 8 and 9 from Arthur D. Little, Overview, and U.N., World Energy Supplies, 1971.

ENERGY POTENTIAL IN DEVELOPING COUNTRIES

A survey of the energy potential of developing countries indicates that a large number of them are energy-poor insofar as known and projected resources are concerned. Taken as a whole, the non-OPEC developing countries produce about 70 percent of the petroleum they consume.¹¹ About a dozen of them, including Angola, Bolivia, Colombia, Congo, Malaysia, Mexico, Peru, and Zaire are virtually self-sufficient or are net exporters on a small scale. A few such as Brunei, and Trinidad and Tobago, export significant quantities of oil but are not members of OPEC. Longer term prospects may be promising for a number of others. If the largely oil-sufficient countries are excluded, the remainder, about 80 countries, are at present heavily dependent on oil imports, which in 1970 accounted for about two thirds of their oil consumption.

But of proven global reserves of 627 quadrillion barrels recorded at the end of 1973, only 4.6 percent were located in non-OPEC developing country areas.¹² Gas reserves show non-OPEC developing countries accounting for 6 percent of proven world reserves. As for coal, this group accounts for about 10 percent of presently known reserves. There is a presumption that further exploration will disclose further sizable reserves of fossil fuels. Considerable hydro capacity exists in a number of locations but there are serious drawbacks to the usefulness of a substantial portion of the sites. Nuclear plants are in operation or under construction in several developing countries. Whether wider use will be made of this energy source in developing countries in the foreseeable future will depend on adaptation of plant design to a small scale at a cost-competitive price, since only a limited number of countries have industrial concentrations large enough to utilize a nuclear unit of 800 mw capacity. While higher oil prices have made reactions of much smaller size cost-competitive with oil-fired plants, other impediments to their use have appeared, such as long waiting lists, rapidly mounting costs of plant, and inadequate design and testing of smaller scale reactions.

VULNERABILITY OF THE OIL-DEPENDENT COUNTRIES

The impact of the increase in world oil prices has fallen most heavily on the oil-deficient countries of the developing world and they are bearing much of the brunt of global adjustment. The oil-import bill for the non-OPEC developing world as a whole is estimated to have increased by \$10 billion to about \$17 billion. The resulting drain on the balance of payments was exacerbated for many by crop shortfalls around the world which necessitated the import of increased quantities of grain at increased prices, and was compounded by the recession in the industrial countries which cut into their export markets both for raw materials and nascent manufactures. The aggregate current account deficit of the developing countries skyrocketed from \$9 billion in 1973 to an estimated \$28 billion in 1974 and is projected to reach \$35 billion in 1975.

Hardest hit of all has been the low-income group of oil-deficient countries which have become known as the "MSAs" from the UN designation of them as the countries "most seriously affected" by recent world economic events. Instead of lessening over time, their predicament has become steadily more acute. Their ranks have grown from 33 in mid-1974 to 39 in April 1975, with a total population of approximately 1 billion and an average per capita income of only slightly over \$100. This predicament is illustrated by India whose import bill increased from \$3.2 billion in calendar 1973 to an estimated \$5 billion for 1974. The cost of petroleum and related products increased from \$447 million to \$1.3 billion; fertilizers more than tripled in cost, from \$205 million to over \$600 million and agricultural imports increased from \$605 million in 1973 to \$1.2 billion in 1974. India's exports increased in value from \$2.96 billion in 1973 to around \$3.85 billion in 1974, primarily because of higher prices for its sugar and tea exports. The international community has taken several steps to help them, notably through the Oil Facility of the IMF under which the MSAs purchased SDR 600 million (about \$740 million at prevailing rates of exchange) through February 1975. A fund to subsidize the 7 per cent interest payments on further purchases by MSAs from the facility has recently been put into operation. But

¹¹ United Nations, Department of Economic and Social Affairs, *World Economic Survey, 1973, Pt. II, Current Economic Developments* (1974), p. I-42.

¹² Derived from Joseph A. Yager and Eleanor Steinberg of the Brookings Institution, *Energy and U.S. Foreign Policy* (Cambridge, Mass.: Ballinger Publishing Co., 1974), Table A-6, p. 452.

problems of external financing remain intractable for the MSA countries: Their ability to increase foreign exchange earnings through trade is negligible; their borrowing capacity has been largely exhausted; their import bills are dominated by hard-to-reduce items—oil, grain, manufactured goods—all with escalating costs in relation to MSA country export prices.

Even for the more fortunate countries of the developing world, their capabilities for cushioning the adverse events—the drawing down of reserves, expansion of short-term debt, postponement of development programs—have now largely been depleted. The World Bank projects a decline in per capita income in these countries, as well as for the MSAs, in 1975, and a trade deficit of more than 3 per cent of their GNP. When account is taken of the global net impact of the oil price increase over time, this group of countries may bear the long-term brunt of the deficit burden.

The oil price increase does more than pose difficult problems of financing external deficits. The retrenchment was severely felt, both in the cutback of other imports and in the curtailed use of petroleum products themselves. The Indian Government vividly illustrated the internal implications when it pointed out that: a shortfall of 1 million tons of fuel in the agricultural sector would deprive 10 million acres of irrigation with a resultant decrease in 5 million tons of foodgrain; a shortfall of 1 million tons of fossil fuel in the fertilizer industry would result in the loss of about 8 million tons of foodgrain; a shortfall of 1 million tons of Kerosene would leave 50 million rural homes without light; a shortfall of 1 million tons of diesel fuel would decrease the functioning of transport facilities by 20 per cent; a shortfall of 1 million tons of fuel oil to bolster the coal-burning thermal stations would upset power generation plans.¹³

As a result of the oil price increase, India was forced to reformulate its current Five Year Plan. Kenya lowered the goals of its current plan by one third. For Sudan, among others, the external debt problem was aggravated. Sri Lanka and Tanzania adopted measures to curtail the less essential uses of oil.

In weighing alternative approaches to meeting energy requirements in ways that leave their economies less vulnerable to disruptions in supply or price, developing countries face the dilemma posed by high or prohibitive costs for domestically-assured supply. Some of them have no viable alternative to continued extensive dependence on the outside world. Many can mitigate this dependency to some extent by developing the most promising of their internal sources. But virtually all—except those which prove to have adequate domestic petroleum reserves at reasonable costs of exploitation—will remain vulnerable for the foreseeable future. They are acutely aware of the lack of multilateral measures to ensure reliable supplies of fuel at stable prices.

INTERNATIONAL COORDINATION OF ENERGY POLICY

Several considerations highlight the desirability of international coordination of energy policy from the point of view of developing countries. One is the need for an alternative to the continued vulnerability of their economies to disruptions of price and supply, on the one hand, and an attempt at economic autarky on energy policy, on the other. Self-sufficiency in energy can prove to be an extremely costly undertaking; it is not a choice open to most developing countries. A second consideration is the need for a long-term and broadly-agreed program for the rational use of the world's depletable resources, as seen by those who can least afford to pay more or to do without them. A third factor is the need for coordination of the research and development effort required to achieve a breakthrough to utilization of the non-exhaustible energy resources of the planet. The sooner this is achieved, the sooner the pressure on depletable resources will be eased. At the other end of the research scale, attention should be directed to the widespread needs for energy in small scale and diffuse uses. Techniques such as methane, while not providing a major contribution to a country's energy supply, offer considerable promise of bettering the lives of millions of people. A fourth factor is the global scope of environmental impact which the energy policies of individual countries are causing. Oil spills in the oceans and radiation levels in the atmosphere cannot be safely left to decisions at the national level.

Whether there is a possible and practical level at which energy policy can be coordinated internationally in the foreseeable future is a question which is just

¹³ Arthur D. Little, Inc., *An Overview of Alternative Energy Sources for LDCs*, a report to U.S. Agency for International Development, Aug. 7, 1974, p. III-H-18.

beginning to be seriously addressed. Limiting factors and conflicting interests crowd in on all sides when the possibility is raised. But the underlying urgencies remain. Perhaps the matters could usefully be explored in a framework analogous in some ways to that now being worked out for food. The World Food Conference, held last year in Rome, brought together all sectors of the world community, the USSR and the People's Republic of China included, to approach a worldwide problem in global terms. Goals were set and means proposed for dealing with them in various time frames. A set of institutions covering the major facets of the food scene and involving all the key participants were proposed and accepted. Whether this kind of approach could be applied to world energy problems is work exploring. The shock of the OPEC action may prove to have opened up awareness of the global energy predicament in a constructive way.

APPENDIX B

CHAPTER VII—THE OPEC NATIONS: PARTNERS OR COMPETITORS?

(By James P. Grant)

A new group of nations with great economic influence, the Organization of Petroleum Exporting Countries (OPEC),¹ has emerged on the world scene in the mid-1970s. The more than fourfold increase in the price of oil decreed by these nations in 1973 is leading to the biggest sudden shift of financial resources from one group of nations to another that history has ever witnessed. OPEC's oil revenues in 1974 surpassed \$100 billion, a 500 percent increase over its 1972 revenues. While poor oil producers such as Indonesia were able to use most of their increased revenues for additional imports, the richer oil producers, particularly those of the Persian Gulf and Venezuela, had surplus on current account totalling over \$50 billion for 1974. The import needs of these countries as a group probably will not match their export earnings until about 1980, by which time they will have accumulated a capital surplus of somewhere between \$200-\$300 billion. This chapter describes the key issues raised by this massive resource shift, assesses the major new assistance efforts launched by the OPEC countries, and explores briefly the issue of how the United States and other industrial market-economy countries should relate to this great new power on the international stage.

Even before the OPEC price intervention, the world faced a long-term energy crisis comparable to, and in many ways even more severe than, the global food situation. Reserves of cheap oil are limited, and by the 1980s, the world will need to find alternate energy sources that may cost 25 to 50 times as much as the production of oil in the Persian Gulf. Much higher energy costs were in the cards for the not too distant future; the only question was when this would happen. Given this energy prospect, the developing oil producers—particularly the poorer countries, such as Indonesia and Nigeria, and those with relatively very limited reserves, such as Venezuela—of course considered a higher price for their non-renewable resource long overdue.

The United States bears a major share of the responsibility for OPEC's new power role. The average American uses more than two times as much energy as the average German, and nearly 100 times as much energy as a South Asian, making the United States by far the world's largest user of oil; until recently, however, the United States was able to meet almost all of its demand from domestic sources. It was the major entry by the United States into the international oil market in the early 1970s—after it was no longer able to meet most of its rapid annual increase in demand from domestic supplies—that virtually doubled the growth in demand for oil from developing-country producers, thereby in a sense overloading the world's oil-producing and marketing system.² The U.S. move converted the world oil market from one favoring buyers to one favoring suppliers—suppliers who, in this instance, had major outstanding grievances with the principal buyers over the low price of oil and the dispute with Israel.

¹ The states with full membership status in OPEC (those with the right to vote, right to veto, and the obligation to abide by OPEC policies) are: Algeria, Ecuador, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabi, United Arab Emirates, and Venezuela. Gabon is an Associate Member with the right to vote but no veto power. Trinidad, Tobago, and Peru have Observer Status which must be renewed prior to each OPEC meeting.

² See Chapter VIII.

Both the need for developing alternate energy sources—at much higher costs—by the mid-1980s and the shift from a buyers' to a sellers' market in the 1970s had been sensed if not fully foreseen by knowledgeable experts. What these analysts did not anticipate, however, was that Arab frustration over U.S. policy toward Israel and the price grievance shared by all developing-country oil producers would be sufficient to convert OPEC into an effective oil cartel. Indeed, the OPEC cartel is made up of as unlikely a group of economic partners as can be imagined: it includes radical and feudal Arabs, traditional antagonists such as Iran and Iraq, tiny but rich Kuwait and vast but poor Indonesia, white Venezuela and black Nigeria, and (from the U.S. point of view) friends such as Indonesia and Saudi Arabia and radical critics such as Algeria and Iraq. Despite its varied membership, OPEC's cohesion appears likely to continue for at least several years, particularly now that the long-standing border dispute between Iran and Iraq has been settled.

OPEC's policies require two responses from the world community: first, a comprehensive long-term global energy strategy comparable to the one now being hammered out with respect to food, and second, a quick solution to the short-term balance-of-payments and other problems raised by the abruptness of the 1973 oil price increases. Unfortunately, the fourfold energy price rise struck the world scene in the controversial context of the Middle East war in late 1973. The initial OPEC policies of harsh confrontation have tended to elicit a similar response from the United States, which for one year explored the use of virtually every lever short of force to roll back oil prices and sought to unite the OECD behind a common response. A certain amount of counter-organization among consumers is obviously necessary to avoid unbridled additional price increases and to reduce the vulnerability of the OECD countries at a time of continued Arab-Israeli confrontation. Planning for conservation, development of alternate energy sources, and oil price negotiations are likewise useful. As yet, however, there appear to be no official U.S. policies for responding to long-range energy needs in a global context—or for addressing the need of the poorer developing countries to develop alternative energy sources—on any scale comparable to the plans for meeting the world food insecurity problem. U.S. efforts to mobilize consumers have tended to exclude major oil-importing developing nations such as Brazil and India while including relatively minor "old rich" oil importers such as Luxembourg and Denmark.

OLD RICH—NEW RICH COOPERATION

The question of cooperation between OECD nations and OPEC nations arises on a number of important fronts. The first is the issue of how OPEC and OECD resources can best be channeled to help the countries most seriously affected by recent price rises. A related second issue is the desirability of the "old rich" and the "new rich" joining in a global cooperative developmental effort, including special programs for food, fertilizer, and hopefully energy production and distribution. There is a need for a global approach to ease the transition to higher production costs of energy over the next ten years. A third set of issues relates to ensuring that OPEC resources are recycled in a way that will ease the balance-of-payments straits for the most seriously affected industrial and development countries,⁸ a key question here is who will bear the risk of loss in the event of default by the poorest credit-risk nations. Agreement on oil price is a fourth issue. Oil producers (like American farmers and raw-material producers everywhere) want to be assured of a fair price and an acceptable floor. The oil importers want to bring the price down, and—even more important—they do not want it to go up further. A vital fifth issue involving the Arab producers is, of course, the Arab-Israeli conflict and its resolution. Sixth is the challenge of creating an investment climate that encourages the OPEC countries to invest their resources for domestic as well as world developmental purposes—a climate that encourages them not to squander their great but finite inheritance unnecessarily on arms, or on excessive consumption—just as Argentina did when, in a few years of consumerism, it wiped out the large reserves it had acquired during World War II. Finally, there is the range of issues involving the future relationship of the richer OPEC countries with the advanced industrial market-economy countries and the question of whether—and if so, how—the former will be treated as members of the OECD "club" in terms of their

⁸ See Chapter V.

investments, participation in private financial councils, and role in the dominant institutions of the market-economy world.

So far this set of issues has not been approached comprehensively or collectively by the OECD countries. Confrontation has been the order of the day on the issue of the oil price, with the United States, in particular, acting as though OPEC were a belligerent in the new "cold war"; it has been marshalling allies, urging oil conservation to reduce demand, seeking a major price rollback, and generally failing to engage in a dialogue with producing nations until it is in a much stronger bargaining position. At the same time, all the industrial countries have been competing vigorously to sell goods of varying usefulness (or potential harm) to the new rich, with the United States clearly the "winner" in terms of arms sales and private contracts for technicians and equipment in the expanded development efforts of the OPEC nations.

OPEC NATIONS AS AID PROVIDERS

Hard figures on OPEC aid commitments and disbursements are virtually nonexistent. Data provided by the OECD, other multilateral institutions, and the press tend to differ widely. There are many reasons for these discrepancies, including varying definitions of aid and military assistance and differences in the time periods concerned. It is nevertheless clear that the OPEC countries became major aid providers in 1974, rivaling and in some ways exceeding the performance of the advanced countries and far surpassing in all respects the aid efforts of the communist countries. Faced with pleas for help from the developing countries sorely hurt by the price rises of 1973⁴ and needing continued diplomatic support in their confrontations with the United States, which was adamantly insisting on a sharp oil price rollback, the OPEC nations in 1974 committed approximately \$10 billion and disbursed more than \$2 billion in aid to other developing countries.⁵ New reciprocal as well as common interests have created the strongest coalition of developing countries to date—with the more numerous poorer members providing diplomatic support for their OPEC brethren, and the latter providing the rest with both economic aid and political support for their demands on the industrial countries for increased economic equity.

HOW MUCH? FROM WHOM? FOR WHOM?

Bilateral financial aid commitments from OPEC nations are estimated to have totalled approximately \$11 billion between 1970 and 1974, beginning modestly in 1970 and rising to approximately \$2.7 billion in 1973 and \$7.2 billion in 1974 (see Table D-8, p. 262). An additional \$3.6 billion was committed between 1970 and 1974 (\$2.4 billion in 1974 alone) to international agencies to be used for multilateral assistance. In addition, during 1974, \$3.2 billion was offered to the IMF in connection with its new Oil Facility and over \$1 billion was made available to the World Bank. Thus the total assistance pledged by OPEC countries on concessional to near-market terms in the first nine months of 1974 amounted to \$13.7 billion.⁶ Disbursements were of course at a much lower level, totalling approximately \$4.5 billion from 1970 to 1974, of which \$2.6 billion is estimated to have been disbursed in 1974. While comparisons need to be made with care, it might be noted that the DAC countries in 1973 disbursed \$7.2 billion of concessional aid directly and \$2.2 billion through multilateral agencies; their 1974 commitment figure was somewhat higher, approximately \$11 billion.

⁴The short-run balance-of-payments outlook for oil-deficit developing countries is one of sharp deterioration in 1974, compared to 1973. An even further deterioration is likely in these countries in 1975 as their exports decline (in response to the lower rate of expansion in the OECD countries) and as the prices of their essential imports remain high. Preliminary analysis by the OECD indicates that about half of the deterioration in the external payment situation of developing countries in 1974 can be attributed to oil price increases and about half to higher prices of imports of manufactured goods and food imports. As one illustration, India's import bill increased from \$3.2 billion in 1973 to an estimated \$5 billion in 1974. The cost of petroleum and related products increased from \$447 million to \$1.3 billion; fertilizers more than tripled in cost, rising from \$205 million to over \$600 million; and agricultural imports increased from \$605 million in 1973 to \$1.2 billion in 1974. India's exports increased in value from \$2.06 billion in 1973 to around \$3.85 billion in 1974, primarily because of higher prices for its sugar and tea exports.

⁵Most figures in this section are from Working Document DD-403 of the OECD, Dec. 6, 1974. See Tables D-8 and D-9, pp. 262-63.

⁶These figures exclude most military assistance and related economic support for defense purposes to several Middle East countries. Also not counted are the concessional oil sales agreements between a few developing countries and OPEC countries.

The largest OPEC donors are Saudi Arabia, Iran, Kuwait, and Venezuela. During 1974, Iran and Saudi Arabia made large commitments—primarily through bilateral channels—totalling \$3 billion each. Kuwait committed \$1.3 billion, mostly for bilateral programs. Venezuela pledged \$750 million, over 95 per cent of which was committed to multilateral mechanisms. Indonesia and Nigeria, with per capita incomes well below \$250 even with their new oil revenues, are not major aid providers.

A useful insight into the evolution of the program of one major donor, Iran, has been provided by the chairman of the Development Assistance Committee (DAC)⁷ of the OECD following his discussions with Iranian officials in Teheran in January 1975:

"In March 1974, Iran began to commit to foreign assistance and investment that part of its earnings from oil which it was estimated would be in excess of Iran's capability to absorb through greatly increased imports for its domestic programmes. The excess for foreign transactions is estimated at \$14–\$16 billion for the four-year period from March 1974 to March 1978. This estimate was agreed upon within the Iranian government after intensive efforts had been initiated to assure maximum feasible expansion of Iran's import capacity.

"Iranian authorities reported that by December 31, 1974, they had made commitments of some \$9 billion of their projected surplus—\$4 billion for developing countries and \$5 billion for developed countries. The \$5 billion to developed countries for "assistance" in recycling is in deposits with central banks of industrial countries, investment in industrial firms and other purposes.

"The \$4 billion resource flow to developing countries includes over \$1 billion for the purchase of World Bank bonds and as funds for developing countries through the IMF oil facility. About \$3 billion will be provided directly to developing countries in projects and programmes, mostly through five- to ten-year loans at concessionary rates (one-half to two and a half percent). Disbursements on the \$4 billion of commitments will reach at least \$1.5 billion (3.6 per cent of GNP) by March 1975, the end of the first year of Iran's aid programme. Disbursements of official development assistance (ODA) on DAC criteria will be about \$600 million or 1.4 per cent of GNP.

"By any standard, in a brief few months, Iran has launched a remarkably diversified and effective programme of project and programme financing. Major recipients are India, Pakistan, Sudan, Egypt, Syria, and Sri Lanka. Projects totalling over \$60 million have been assisted with grant aid in Morocco, Afghanistan, Senegal, Jordan, and Pakistan, and there is a loan to Bangladesh as part of the consortium."

Venezuela, on the other side of the world, has concentrated primarily but not exclusively on its immediate region, having agreed to provide funds over a several-year period through the Inter-American Development Bank (\$500 million, of which \$100 million in 1974, \$50 million in 1975), the Caribbean Development Bank (\$25 million, of which \$5 million in 1974), the Central American Bank for Economic Integration (\$40 million, of which \$10 million in 1974), and the Andean Development Corporation (\$60 million, of which \$20 million in 1974). The terms of Venezuela's assistance vary widely. Thus the special, \$500-million trust fund to be loaned by Venezuela to the Inter-American Development Bank for loans to its least developed members carries an interest rate of 8 percent, whereas another \$100 million is being lent to the Bank at highly concessional rates. The funds made available to the Caribbean and Central American Banks have a maturity of up to 25 years, a grace period of up to seven years, and a 2–6 percent rate of interest. Venezuela also allotted \$500 million to the World Bank, through January 1975, at an interest rate of 8 percent and an average maturity of 11 years; \$540 million⁸ to the International Monetary Fund's facility for financing oil imports; and \$100 million to the United Nations Emergency Fund for the countries most seriously affected by the recent price rises.

Venezuela has also committed \$20 million for use in Central America and the Caribbean through bilateral arrangements and is considering financing a \$200-million refinery in Costa Rica. In addition, it reportedly plans to contribute about 70 percent of the funds needed by the Central American countries for a coffee stockpile to stabilize and support coffee prices. One Venezuelan program now being implemented is a five-year arrangement permitting the Central American republics to borrow back, on a long-term basis, up to half of the money they pay

⁷ See also pp. 193–94.

⁸ Of which \$270 million was disbursed in 1974.

for their oil imports from Venezuela. Under this arrangement, part of the purchase price of imports is to be paid directly to Venezuela, and part is to be deposited at interest in a local bank account in the importing country. The principal is to be paid to Venezuela at the end of the fifth year—unless it is used in the interim for a mutually agreed development project, in which case it can be repaid at 8 percent interest over a period of up to 25 years. The funds deposited by Venezuela in a country participating in this arrangement can be used either for projects approved directly by Venezuela or for projects in which the World Bank, the Inter-American Development Bank, or AID are participating and whose soundness they have certified.

Given their limited management capacity, most OPEC donors have made extensive use of special development funds patterned after the prototype of the Kuwait Fund for Arab Economic Development (KFAED), which has lent some \$500 million in its twelve-year life. The Arab Fund for Economic and Social Development, with an initial capital base of \$340 million, was set up in 1972 as a multilateral version of KFAED. Saudi Arabia has launched and provided much of the financing for the \$900-million Islamic Development Bank, which has also received contributions from Libya, the United Arab Emirates, and Kuwait, among others. OPEC assistance to poor African countries is being channeled mainly through the \$200-million Special Arab Fund for Africa, the African Development Bank, and the KFAED.

As suggested above, the reason why the OPEC countries so far have resorted mainly to arrangements of this type is that most of their governments and private sectors still lack the capacity to assess projects on any significant scale. Only Venezuela and Kuwait have some capacity in this area, and even they are relying extensively on others. This means that for project development, appraisal, and implementation the OPEC countries—unlike the DAC countries, which tie their aid heavily to the use of their own technicians and equipment—have to rely on third-party capabilities. There is a major new opportunity here for both private-contractor initiatives and for useful cooperation between OPEC donors and other aid donors, multilateral and bilateral, with additional project-development and implementation capacity.

As for the direction of OPEC assistance, approximately one third of OPEC-country 1974 bilateral commitments, or \$2.7 billion, went to the most seriously affected Fourth World countries and over \$4 billion to other developing countries; the bulk of the latter sum went to Egypt, Syria, and Jordan. Prior to 1973, aid disbursements by the Arab oil producers were directed overwhelmingly (83 percent) to these three countries, mostly in forms analogous to American economic security assistance to Israel and to the countries of Indochina. Thus the OPEC countries have been diversifying their assistance to include some of the Fourth World countries, although Egypt, Syria, and Jordan still receive a majority of all OPEC bilateral aid (60 percent of both bilateral commitments and disbursements in 1974).

The principal Fourth World beneficiaries of OPEC 1974 bilateral commitments appear to be Pakistan (\$957 million), India (\$945 million),⁹ Mauritania (\$153 million), Malagasy Republic (\$114 million), Sudan (\$107 million), Sri Lanka (\$86 million), Somalia (\$82 million), Yemen People's Democratic Republic (\$14.2 million), and Bangladesh (\$82 million). The commitments to Fourth World countries exceeded somewhat the additional cost (\$2 billion) of their oil purchases; their disbursements (over \$700 million), however, were still at a far lower level (see Table D-9, p. 263).

BURDEN SHARING

By existing international standards, the OPEC nations are doing well at sharing the development assistance "burden" with other donor countries. As The Economist aptly summed up the situation in its report of February 15: "The oil exporters are mainly poor but generous" (see Table D-7, p. 261). The official U.N. target for transfers of concessional resources from developed to developing countries is 0.7 percent of donor-country GNP. OPEC 1974 disbursements of \$2.6 billion—out of a collective GNP of less than \$200 billion for nearly 300 million people—are nearly double that target. The figure for 1975 almost certainly will be higher, given the much higher 1974 commitment level. The DAC countries, which in 1974 disbursed approximately \$11 billion—out of a collec-

⁹ Approximately \$230 million is expected to have been disbursed as of Mar. 31, 1975, in the form of concessional sales of oil (similar to U.S. concessional sales of food under Public Law 480) from Iran and Iraq.

tive GNP of \$3.5 trillion for nearly 750 million people—are providing aid at a level of 0.3 percent of GNP. The U.S. level is estimated to be 0.2 percent of GNP in 1974. The current level of OPEC disbursements also exceeds the combined net flows of \$750 million provided by the U.S.S.R. (0.16 percent of GNP) and the \$500 million provided by China (0.3 percent of GNP).

The combined oil earnings of the United Arab Emirates, Qatar, Kuwait, Libya, and Saudi Arabia account for about 50 percent of total OPEC earnings from oil exports. The total population of these countries is almost 13 million; their combined oil revenue is approximately \$50 billion, or almost \$4,000 per capita—somewhat less than the OECD per capita GNP average of \$4,735. Like the OECD countries, the richer of the OPEC countries can well afford to extend concessional credits and grants to poor countries.

The rest of the OPEC countries, however, are not in a comparable position to afford aid. The eight countries that account for one-half of total OPEC oil revenues have a per capita GNP averaging less than one-twelfth of the OECD per capita income average. Even if populous Nigeria and Indonesia are excluded, the per capita GNP of the remaining six OPEC countries is one-fifth that of the OECD countries.

FUTURE PROSPECTS FOR OPEC AID

Disbursements of OPEC aid can be expected to rise in 1975, 1976, and 1977 because of the high aid commitments in 1974. New aid commitments, however, may well be smaller in the next three years than in 1974 for reasons discussed below. Any analysis of the duration and size of OPEC aid needs to take into account two principal factors: financial ability and motivation. The liquidity of many of the OPEC countries will decline rapidly later in the 1970s. Several authorities have predicted that, by 1980, the OPEC countries as a whole will be running a current-account deficit. Indeed, Iran's concessional lending can be expected to drop sharply by 1980—when it is again expected to become a net importer of capital and when its per capita income still will be very substantially below the OECD average. Other OPEC countries—Saudi Arabia, Libya, and some of the small Persian Gulf states—will then still be accumulating very substantial surpluses and may be expected to remain major sources of development assistance. However, by 1980, all of the OPEC countries, and particularly those with limited petroleum reserves, such as Venezuela, will be even more conscious of the fact that their oil revenues will ultimately run out, making them totally reliant on their income from petrodollar investments at home and abroad.

TABLE 1.—OPEC PETROLEUM RESERVES, PETROLEUM PRODUCTION, AND POPULATION

	Estimated petroleum reserves (billion barrels)	Production, 1973 (million barrels/day)	Reserves at 1973 production rate (years)	Population, mid-1975 (millions)
Saudi Arabia.....	140.8	7.7	51	9.0
Kuwait.....	72.7	3.1	65	1.1
Iran.....	60.2	5.9	28	32.9
Iraq.....	31.2	2.0	44	11.1
Libya.....	25.6	2.2	32	2.3
United Arab Emirates.....	25.5	1.5	45	0.2
Nigeria.....	19.9	2.0	27	62.9
Venezuela.....	14.2	3.5	11	12.2
Indonesia.....	10.8	1.3	22	136.0
Algeria.....	7.4	1.0	20	16.8
Qatar.....	6.5	0.5	31	0.1
Ecuador.....	5.7	0.2	78	7.1

Sources: Oil figures are from Business Week, Jan. 13, 1975, p. 80, and population figures are from Population Reference Bureau, "1975 World Population Data Sheet."

Each OPEC nation's foreign policy context over the next few years also will be a major determinant of the scale of its aid. If the Arab-Israeli confrontation is still intense, and if the OECD countries are still vigorously attempting to obtain an oil price rollback, the OPEC nations may find it valuable to distribute concessional aid widely to help hold together their present broad base of developing-country support on these two issues. On the other hand, if international economic and political tranquility is restored (especially if there is a resolution of the Arab-Israeli dispute), OPEC's concessional aid levels may be expected to

decline to the level of the U.N. target of 0.7 percent of GNP. If the aid levels prevailing among DAC aid givers in 1980 are as low as the World Bank now projects (between 0.2 percent and 0.3 percent of GNP), this will be a further incentive for OPEC aid to decline.¹⁰

It is possible, however, that OPEC assistance might, even in such an increasingly tranquil world setting, remain high; this might prove true, for example, if OPEC members maintain or develop strong ties with other developing countries similar to Algeria's present support for the Group of 77, or Saudi Arabia's ties with Moslem countries, or Venezuela's and Iran's links with their respective neighbors. Some OPEC countries also might have a particular interest in making quasi-concessional investments in commodities or production facilities in developing countries. For example, the Persian Gulf countries might have a strategic or other special interest in stepping up fertilizer and food production in South Asia, the Sudan, and Sahelian Africa, particularly in areas with large Moslem populations.

There is as yet no comprehensive institutional mechanism for linking the development cooperation programs of the OPEC nations with those of the OECD nations or the multilateral institutions—nor have the OPEC countries created a cooperative mechanism for coordinating their own programs. Yet there should be room for greatly increased cooperation between the OPEC nations and the OECD countries and the multilateral institutions, since the OPEC countries are heavily dependent on the programming, managerial, and implementation skills of others for the success of their programs. With imaginative leadership, there should be substantial prospects for involving the "old rich" and the "new rich" in coordinated programs under the leadership of multilateral structures such as the Consultative Group on Agricultural Production and Investment recently established on the recommendation of the World Food Council.

There is a special danger that, as OPEC liquidity diminishes and its aid commitments also diminish later in this decade, Fourth World countries will be among the first to be hurt. The longer-range development needs of poorer countries are all too often sacrificed to short-run political objectives—as evidenced recently by the priority being given by the United States and the Arab OPEC countries to assisting countries involved in the Arab-Israeli conflict. To avoid this situation, there is need for a joint OECD-OPEC multi-year agreement to provide—in approximately equal amounts from the "old" and the "new rich"—an additional flow of some \$4 billion annually over the next five years to the Fourth World countries. The U.S. share of this undertaking should be about \$1 billion.¹¹ To the extent that such aid is channeled through multilateral institutions, there is a need to give the OPEC countries a say in policy more commensurate with their financial contribution—through measures such as the establishment of the Agricultural Development Fund proposed by the World Food Council and through appropriate adjustments in existing multilateral funding mechanisms.

OPEC NATIONS AND THE INTERNATIONAL ECONOMIC ORDER

The United States in early 1975 had not yet evolved a longer-range vision of how the newly powerful OPEC nations might relate to the existing international economic order. There is now a unique opportunity for nearly 300 million people (a population equal to that of Western Europe, North America, or Latin America) to progress developmentally at a rate never before seriously con-

¹⁰ See Table D-4, p. 258. The World Bank's GNP forecasts for 1980 are \$411 billion (in 1980 dollars) for the 300 million people of the OPEC nations, and \$8 trillion (an increase over the \$3.1 trillion in 1973) for the 750 million people in the OECD countries. If the OPEC countries, excluding Nigeria and Indonesia, were to honor the U.N. official development assistance target of 0.7 percent of GNP, total OPEC official aid would be at the \$2.5 billion level; if these countries were to follow the DAC example, however, the total might be well under \$1 billion.

¹¹ This additional billion dollars might be made up of increased food aid (as described in Chapter III of this volume) and expanded grants and concessional loans (as suggested in Chapter I). In addition, a significant portion could come from the proposed Export Development Credit Fund approved by both the House Foreign Affairs Committee and the Senate Foreign Relations Committee in 1973. This Fund would use repayments of old aid loans to pay for part of the interest charges on credits furnished U.S. exporters to encourage them to export to markets in the poorest countries—markets that have been denied U.S. exporters for lack of suitable export credits. This arrangement would not only furnish goods and services badly needed by the Fourth World countries on terms they can afford, but would also create jobs in the United States in a time of recession. See Tables B-3 and B-4, pp. 223-24.

sidered possible for so populous a group of heretofore poor nations. There is also an urgent need to reduce and avoid the obvious frictional problems that normally characterize the emergence of major new powers. Certain OPEC nations are becoming new power centers, either within their regions (as is true of Venezuela, Nigeria, and Indonesia) or even globally (Saudi Arabia, Kuwait, and Iran). Mention need only be made of Germany before World War I, of Japan and Italy before World War II, and of the Soviet Union and China more recently—and of the oil embargo and price shocks of 1973—to illustrate the point that adjustment costs can be very high. However, as we learned after World War II in our relations with Japan, Germany, and Italy, accommodation and economic cooperation can have highly beneficial results for all sides. The longer-run stakes involved are very large indeed; and if the rapidly progressing OPEC countries can establish a new and more symmetrical interdependence with the “old rich,” all or most developing countries should benefit to some degree, and new patterns of accommodation and cooperation that could be of great value for the future may be established.

Iran as well as Kuwait and Saudi Arabia apparently desire a close economic relationship with the OECD nations—a greater interdependence on the basis of greater economic equality. Subject to a further de-escalation of the Arab-Israeli conflict, it is possible to envisage the advanced market-economy countries welcoming such countries into the “system,” much as Japan has been integrated into it in the past twenty-five years. Algeria, Libya, and to a lesser extent Venezuela have, on the other hand, seen themselves as leaders of the Third World in a broad confrontation with the “old rich” designed to hammer out a new international economic order.

If the industrial market-economy countries decide to take a comprehensive global approach to all or most international economic issues analogous to that being followed in the case of food, this distinction between the Middle East oil producers and other oil producers is not particularly important—again assuming the Arab-Israeli conflict is solved or brought under long-term control. But if a long period of confrontation were to emerge between the North and the South or parts thereof, or if the Arab-Israeli dispute were to flare anew, it is likely that the industrial countries will instead seek bilateral relationships with selected developing countries. If a more acute North-South confrontation were to emerge, a major effort addressed to “welcoming” the richer oil producers—including maximum encouragement of OPEC investments in the advanced economies—would undoubtedly be considered. This would not be true, however, if the Arab-Israeli controversy were to continue at or above present levels of intensity; the industrial market economies, and particularly the United States, might then seek stronger ties of cooperation with non-Arab oil producers, as well as with developing countries generally, in order to reduce the likelihood (or effectiveness) of another Arab oil embargo.

OECD COOPERATION IN THE DEVELOPMENT OF THE OPEC NATIONS

As noted earlier, the United States has been slow to develop its thinking as to the desirable longer-range relationship between the OPEC countries and the industrial market-economy countries. This has been due to its prolonged (and unrealistic) effort to obtain a substantial oil price rollback as well as to the continuing uncertainties of the Arab-Israeli conflict. The former, hopefully, is no longer a serious issue, and the latter should not preclude a strategy of long-range accommodation with the many non-Arab OPEC nations.

Part of any successful long-range accommodation must necessarily include effective development cooperation. Despite their present highly favorable financial position, all of the OPEC countries except Venezuela lack adequate industrial know-how and skilled manpower and are seeking to acquire advanced technology to accelerate their development before their oil resources are depleted. For Venezuela, this may be a limited period of eleven years; for Iran, it may be somewhat longer, perhaps twenty-eight years. For populous Indonesia and Nigeria, with their relatively limited years of reserves at current rates of production and their low per capita incomes, this is a highly valuable and fleeting opportunity to develop forward momentum that will carry them out of poverty. It would be a tragedy if any of these countries were to expend much of their oil inheritance on needless arms, inefficient investments, and overconsumption before establishing alternative viable productive capabilities for themselves.

As of early 1975, the United States had taken only some preliminary steps toward encouraging the development and ultimate viability of the OPEC nations by its decisions to participate in joint bilateral commissions with Saudi Arabia and Iran. It was, moreover, still opposing the efforts of multilateral institutions to assist the development efforts of such poor OPEC nations as Nigeria and Indonesia. There was also still debate about the extent to which the OPEC countries should be encouraged to invest their billions of surplus funds in the United States—even though the benefits of this potential inflow seem to far outweigh its disadvantages. The United States has long asserted the valuable contribution of its investors to the economies of other countries, yet Congress is at present considering legislation to limit foreign investment in the United States. It would seem that the possibility of any harmful side effects of foreign investment in this case, as in others, could be minimized through the surveillance of such investments under laws and regulations that clearly state the permissible limits of foreign control. Massive investments by the OPEC countries would not only provide needed capital, but would give the OPEC investors a stake in the health of the U.S. economy and in establishing international standards for host-country treatment of foreign investors.

CONCLUSION

The relationship between the OPEC nations and the industrial countries for the first eighteen months after the oil price rises of 1973 has reflected a general "winners-losers," or "zero-sum game," approach. The opportunity to create a more positive and cooperative relationship to the long-run mutual benefit of the United States, the OPEC nations, and the rest of the world is not yet lost.

Realists have claimed that the world never changes until it is compelled to do so by force or threat of force, leading (at best) to negotiation. But there have been occasions—the current global campaign against hunger may be one—when the world has changed because statesmen have perceived a common interest in solving a common problem to the benefit of all parties. Such a perception should guide U.S. policy makers in shaping U.S. relations with the OPEC countries.

Chairman KENNEDY. I think this hearing has been very helpful in our hearing three different viewpoints on these important issues: Mr. Peterson's review gave us three important steps that are clearly in our national interest, not only with regard to the domestic implications but also in our relationships with countries around the world; Professor Cooper was certainly able to project our present economic state of affairs at the economic conference and summit that were held just over a year ago and gave that with extraordinary accuracy and perception; and has given us some idea and view in terms of the broader implications in terms of the economic reactions with the international community; and finally, Jim Grant, who I think has outlined as clearly and precisely as I have seen done what these long-range implications are in terms of the 1 billion people who live in the less developed countries of the world; and it points up that we do need the kind of long-term attention to these problems that we have given to the food issue. This is clearly not being done, and of course reminds us of our responsibilities in these areas.

Let me, if I could, ask a few questions. I guess we will go under the 10-minute rule.

There are three areas that I would like to get some reaction from the panel on. First of all, I think most precisely, in terms of decisions that are going to be taken and will have the greatest impact, both to American citizens, and certainly in terms of the broader national community—those will be the decisions that will be made at OPEC in the very near future. Some of you have talked about the ambivalence of American policy and its position with regard to OPEC, where we have been

in a period of confrontation, and more encouraging recently in a spirit of greater cooperation and willingness to try to adjust some of our differences.

But—and I might ask Mr. Peterson this—why is that, on the eve of the OPEC nations meeting, the United States really has such little influence in terms of the decisions that will be made there, which will have broad kinds of implications, not only with regard to the United States but other consuming countries and to the third and fourth world countries that Jim Grant has talked about? Why is that so? Is that just the nature of the beast? Since we have accepted decisions over a period of the last 2 years that have been counterproductive, has it been that that put us in this shape? Why is it that we have few opportunities to influence their decisions? Is it really out of our hands?

If so, why is that?

Mr. PETERSON. Well, at the risk of enormous generalization, I would say there are some economic realities and also some political aspects to this. On the economic side, I think it must be clear to the OPEC countries that we don't have alternatives at this time to their energy and that we not only don't have them now, but we don't yet have an energy policy that suggests we are going to have these alternative sources in anything like the near term. So I suppose if you were sitting in their seat, as it were, and you had a highly limited resource that will be depleted over the next 20 or 30 years, if I can use a financial term, you would make a present value, you know, a calculation of what it is worth. You look around the world and really don't see much in the way of alternative energy sources, and you will see then there really isn't much economic pressure for you to lower prices.

So I think what I am saying, Senator, is that I think our lack of—well, our relative impotence at this current time is partly explained by the fact that we don't have an energy policy and we don't have alternative energy sources. For example, imagine that instead of being where we are on some of these energy sources, both here and around the world, we actually had demonstration projects in places like offshore and some of these synthetic sources, both here and around the world, as I suggested earlier, then I think this would have a significant effect. But it is clear to them we don't.

On the conservation side, it is pretty clear that this country politically has not found the will to do much; and therefore, there is very little reason to believe that with the recession turning around and with the colder winters, that conservation will suddenly be put in effect. Quite the contrary; if you were sitting where they are sitting, you would probably assume energy consumption is going to grow, which is what it has been doing.

On the political front I would have to say that as encouraged as I am by the recent initiatives of this country, to some extent we are living with the legacy and effects of earlier policies. And it is very difficult, I would suggest, on the eve of meetings that are, you know, months and months in preparation, to now start this dialog that is going on. And I think it is entirely possible, had the dialogs taken place a year ago, and had this interdependence really been established and had we shown we were going to work together, we would have had a negotiating dialog that might have been different.

I know it is very easy for me to speculate and second guess, but I am suggesting it is awfully late to have started that dialog process.

Chairman KENNEDY. We have seen a number of projections of what the economic implications are going to be in terms of saving approximately 2 million barrels a day and moving toward energy independence. I know those estimates have been various, but I think any minimum evaluation would show it is significant and the impact is profound; and I think it is going to be extremely dramatic, particularly in my part of the country which is petroleum dependent. But in your context within the international community, sir, how do you balance the role that the U.S. economy is going to play in continuing to be inflationary and recessionary, against the concern that some of our allies and Third World countries have about the price that we are prepared to pay for the saving of the 1 million barrels this year and the 2 million barrels next?

What kind of tradeoffs can you talk about? Is this really worth it in terms of the kind of goals that Mr. Peterson suggests?

I don't think any of us disagree with the importance of alternative sources and conservation. I think we are going to move in those directions, quite frankly, without the dramatic impact on the economy which other measures can have. What can you say about the ripple effect? What can you say about the kind of tradeoffs we see here? Is it really worth it, in other words?

Mr. PETERSON. I think—and Dick Cooper and I may or may not disagree with this, but we will wait and see—but I think again part of the price we are paying, Senator, for the delay in effective energy policy is we are now confronted with a very unpleasant choice. And the reason I happen to believe we must engage in stockpiling and mandatory conservation is my appraisal of the implications of another embargo. I think they are sufficiently high and sufficiently dramatic that we simply have to get ready for that.

Therefore, I see some immediate conservation steps as not just desirable in a general context, but desirable because we waited too long and we must minimize our vulnerabilities. So, I think—

Chairman KENNEDY. On this point here, do you think the Sinai agreement has reduced our vulnerability in terms of the possibilities of an embargo?

Mr. PETERSON. Well, as I suggested—and I am going to use a terribly bureaucratic phrase of “the worst possible case” which I guess is the expression now—I have been talking about the worst possible case. I think it is obviously, Senator, a constructive achievement in supplying us 1 year or 2, but I think to rest U.S. policy on the assumption that the issues that remain, which are far more difficult and divisive, are solved or will be is a fairly charitable assumption.

So I would simply put a high enough probability on that event, that I think the effects are so dramatic that we ought to prepare for it.

As far as the tradeoff is concerned, here again we have this term “elasticity”—and Dick Cooper, I am not trying to suggest that price doesn't play a major role, because it does, and I am not saying it wouldn't have a significant effect—but I am suggesting there is an element of uncertainty in what the effect of price is. Now, in the same way, Senator, I think the effects of reducing consumption of oil also

have differential effects on the economy. And there are certain kinds of effects that probably could have much bigger GNP and job-type effects than others.

Now, I intentionally picked the arena of lighting and heating, as areas that I think need to be explored where we could all share them. I would suggest that selecting fields for conservation efforts over the next couple of years could have a minimal effect on the GNP and jobs, if we select them with some purpose in mind. I agree with you that there is a tradeoff here. I am sorry we had to wait so long, though.

But, if the choice is not getting prepared for a potential embargo, then I think that is a large risk and too large a risk to take.

Chairman KENNEDY. Thank you.

Senator Ribicoff.

Senator RIBICOFF. I think this has been a very interesting discussion.

Chairman KENNEDY. Oh, Professor Cooper had a comment. Was it on this point?

Mr. COOPER. As I indicated in my statement, I think that the rationale has yet to be given for a major assumption on the part of the United States that allocation and rationing is needed.

I think as is also clear from my statement, I think this country is vulnerable and we have to do something about it. However, I am baffled by a proposal which essentially runs along these lines: In order to reduce our vulnerability, we have to take steps to reduce consumption now, which in fact would be much easier to take care of if the contingency arose that made us vulnerable. That is, I think it would be much easier in dealing with the American public on this issue to take severe conservation measures if, in fact, we had another embargo. So one has to weigh the relatively light measures, which are in fact politically feasible now, against, on the one hand, the probabilities of an embargo or some other severe restriction on imports into the United States, and on the other hand, the real cost to the economy in taking even relatively light measures. In doing that, in my own mind, Senator, I find a tradeoff simply an unattractive one. It seems to me we ought to do two things: One is a lot of contingency planning for emergency action in case an emergency arises. Now that may well involve rationing, for example, which could become instantaneously acceptable in the case of a serious embargo, which at the present time doesn't seem to be acceptable.

On the other hand, we could take those measures which encourage conservationist changes in habits. Examples of that would be a combination of publicity, plus possible tax incentives to insulate homes, therefore reducing, and in many cases substantially reducing 20, 25, or 30 percent of the fuel consumption required for home heating at a given temperature.

Second, one might well consider—and there has been a lot of publicity given to it—stronger incentives to get gasoline consumption up on automobiles like with a horsepower tax and that kind of thing. These incentives would be to change habits without going to mandatory emergency or quasi-emergency measures until the emergency actually arises.

Senator RIBICOFF. Gentlemen, underlying all of this testimony is the fact that the United States itself does not have an energy policy. Right now the Congress and the President are in confrontation, are

in deep dialog. You gentlemen represent a knowledgeable and sophisticated, in the best sense of the word, group of men. I would like to hear from the three of you individually as to what your recommendations would be to the President and to the Congress in their present impasse as to what our present energy policies should be.

Mr. Peterson, you can go first, unless you want to defer to the others.

Mr. PETERSON. Well, Jim Grant can speak. Go ahead.

Mr. GRANT. No; you go ahead.

Mr. PETERSON. I guess the risk of going first is unattractive in this area.

Well, in my mind, it would have, I suppose, several aspects. I think on this political problem of decontrol, that I would hope that we can soon resolve this problem with some kind of a compromise that is at least palatable, if not pleasant for all concerned. I have nothing particularly original to contribute on that, but to suggest that I think the concerns are the impact on inflation now at a very critical time, and I think this can be handled through a compromise on phasing. I think there are both political and economic concerns about oil company profits, which I think could be handled through the design of some kind of windfall profit's tax. I think there is also some concern that the money, indeed, be used to expand energy supply, instead of for other purposes. I would think that we can construct something in which we were assured that the money was going for those particular purposes.

With regard to new energy sources, I cannot overemphasize my own view that what we desperately need, as I suggest, is the demonstration of a potential increased supply and we need this at the earliest possible date. Therefore, I think crash programs of a demonstration nature in offshore and other areas is just absolutely an essential part of energy policy in doing what is required, whether it be the type of thing Dick Cooper is talking about or loan guarantees, or whatever is required to demonstrate whether we do or do not have these reserves.

You see, Dick Cooper, where you and I might differ is in regards to whether there is or is not energy in the North American Continent, or India. When I was in the Commerce Department, I was appalled at the range of estimates on what our actual reserves were offshore. One day I asked for a range of estimates, and they ranged from 40 billion to 130 billion barrels of oil. This suggested there are huge areas of the world we do not know what the range of supply is, whether it be here or elsewhere. So I think we must have a crash program in that area.

I guess I do differ on conservation. My view is we should rely on price and some mandatory conservation, because I think it will appeal to the American sense of burden sharing. Where I differ with Dick Cooper is I think it is sufficiently important to stockpile; I think it is important not only to have the emergency measures, but to start toward the stockpiling program itself right now. I think some kind of conservation effort would have both real and symbolic effect.

Senator RIBICOFF. As far as decontrol, would you go along with the President's 39 months, or would you extend that?

Mr. PETERSON. Senator, this is the proverbial ring of pearls around the sow's neck.

Senator RIBICOFF. Well, let's try.

Mr. PETERSON. I mean, frankly I don't have the precise wisdom to suggest whether the number is 38 or 44 months. We have attained the point now, I think, where some kind of compromise is indicated and I can't make a case that suggests 5 months one way or the next as decisive. I think the concept of moving toward a one-price system without complex allocations is a sound one, but I would be personally quite prepared to put the safeguards in over a period of time.

Senator RIBICOFF. Professor Cooper.

Mr. COOPER. Yes; as I indicated earlier, as far as consumption is concerned, I see no reason at the present time other than a symbolic one with respect to the rest of the world, for adopting either mandatory controls, such as rationing of some kind, or higher taxes, including the tariff. It seems to me either of those actions involves danger to the—

Senator JAVITS. I didn't hear the definition dangers. Would you mind repeating it? You spoke rather low.

Mr. COOPER. The dangers to the national economy are two related ones: If one is speaking about higher taxes on oil, we will get an increased passthrough into many prices, leading to an increase in the Consumer Price Index in a period when the American public has been very disturbingly jostled by inflation. Public expectations about future inflation are declining slowly. A visible increase in prices at this time such as food or gasoline at the pump, might reverse that tendency in expectations, and such a reversal would itself tend to increase inflation.

Second, the Federal Reserve with, sad to say, some help from the Joint Economic Committee, is talking about increases in the money supply, which are far too low for our economy at the present time. If prices rise further, for any reason, and the Federal Reserve stays on the track it is now on, that will brake the economic recovery. So we will simultaneously aggravate inflation and recession, given the current policies of the Federal Reserve.

A skillful program of rationing would not be as damaging in these two respects as higher taxes. On the other hand, I am as wary as anyone of the great complexities involved in instituting a rationing program. One has therefore to ask: Are these hardships necessary? I have yet to hear a persuasive argument for putting American consumption of petroleum through the wringer at the present time. Now, what are the tangible gains from that? There are, to be sure, certain symbolic gains vis-a-vis in foreign policy terms, both with respect to OPEC and with respect to other consuming nations. But to get consumption down to a level that would put real pressure on OPEC would require conservation far greater than the administration or anyone else I am aware of is now considering. OPEC has already demonstrated its capacity, in the face of the worse recession we have had in 35 years, to cut back OPEC production far greater than even the pessimists would have guessed 18 months ago. So the cost-benefit ratio of further policies to reduce consumption looks very unfavorable to me.

Having said that, however, I think there are many things that can be done to encourage conservation of energy. The higher prices we

already have will induce much conservation over time, and that conservation can be accelerated by better publicity and by further, sharp-shooting incentives in particular areas.

Let's take common household things, like when you turn lights off in a room and when you don't. Engineers can construct tables on the savings in electricity involved in turning lights off, as compared to not turning them off. This is the kind of thing that can be reduced to a relatively simple formula and publicized in every public school. It is the kind of thing that kids like and can understand and take home. This could serve a national purpose.

Another example is insulation. The average homeowner doesn't have any idea how much heat he loses through uninsulated housing. The capital cost-current savings tradeoff involved in insulating a house is unknown to him. One can—and I know, because I did it—save 25 percent in fuel annually by a single capital expenditure on home insulation.

More intense publicity, combined with the price incentives that already exist today, can go a considerable way toward reducing consumption. Then there is the automobile industry. The automobile firms are moving slowly, but they are moving in the right direction. Perhaps a combination of moral and tangible pressure could be put on them to move even more rapidly toward fuel conservation by their products.

When it comes to decontrol of prices, therefore, my concern is mainly with the impact on supply and not the impact on demand. To increase our long-run supply, we badly need decontrol of natural gas prices. They have been controlled for much too long at much too low a level. "Decontrol" is perhaps the wrong word, for I would maintain controls, but at a much higher price. There will be the price effect that I talked about earlier. But I think it is necessary in the natural gas area to stimulate additional supply.

When it comes to oil, the case is quite different. Already, at the margin, we do not have control of oil prices now. The stimulus is there to seek new oil. It is only old oil that is subject to control. Again, I appreciate fully the difficulties of running a two-price system and the allocation that has to take place under that kind of regime and the complications that can result and the pain in the neck involved to American business firms in dealing with the Government on the details of their business.

On the other hand, as I indicated in my testimony, I believe that current oil prices are too high for the long run and that we can satisfy global energy needs for a number of decades to come at oil prices lower than the ones now prevailing. I worry, therefore, about a price decontrol that allows domestic producers, old producers as well as new producers, to earn the current high oil price set by OPEC. Prevailing oil prices are likely to get capitalized in value, in property values. Once that takes place, it will be exceedingly difficult to get prices down again. If you believe, as I believe, that the current prices are too high for the long run, then it would be undesirable to adopt a policy that involved capitalization of the current high prices and hence the creation of political pressures to maintain those high prices, even in the face of new supplies which gradually should lower prices in the future.

Therefore, I am reluctant to decontrol the price of old oil.

I could well see an argument for a higher price of oil than \$5.50 a barrel. That seems to me to be largely a distributional question, rather than an allocational question. But I do not see the case for moving the price of old oil all the way up and, in effect, allow OPEC to determine U.S. energy prices even in the long run.

So I come, finally to the response of Senator Ribicoff's question. The main burden of energy policy in the United States should be on the side of supply and should take the form of contingent subsidies. It may be helpful, just to indicate how that might work in a somewhat hypothetical but concrete case, to illustrate: We know that offshore oil drilling and coal gasification and the development of some of the geographically remote energy sources is going to involve very substantial investments. Those investments will involve incurring heavy fixed costs, which must be amortized over a long period of time. Under the contingency subsidy plan prospective investors in such energy would be told that if world energy prices fall below some threshold level in, say, 1985, the portion of fixed costs that they have incurred in the next 5 years that turned their operation into a loss would be picked up by the Government.

In other words, the Government would commit itself now to make expenditures in the future, if necessary in the face of falling world energy prices in order to cover the appropriate portion of fixed costs in investments that are made in the next 5 years. This seems to me to provide the necessary floor for investors, and one could, in fact, even use the floor price term, except that the contingent subsidy plan doesn't put a floor on energy prices to consumers. Rather, it puts a floor on the losses of firms investing now on the assumption of certain energy prices in the future. It would provide the kind of assurance that a number of investors think necessary before going ahead with heavy investments in alternative energy sources. With that kind of assurance, the present high prices of oil, or even somewhat lower prices of oil, would provide an adequate incentive to make investments in alternative sources of energy.

Finally, as I mentioned in my statement, I would be more forthcoming in the atomic energy area than the Government seems to be, and I would also make research expenditures in the more exotic sources of energy, such as solar energy and energy from the oceans, which I am told could be an attractive source for generating electricity.

Senator RIBICOFF. Well, that is in terms of overall policy. But if you will pardon me, you haven't yet answered my question. We've got this impasse, and Senator Jackson and President Ford get into the room and say,

Now, we've got this impasse between Congress and ourselves, Professor Cooper, so what should we do with the particular impasse? Should we decontrol completely, or have a price freeze complete?

So, what would you tell them?

Mr. COOPER. Decontrol natural gas and make a compromise on old oil.

Senator RIBICOFF. What would your compromise be on old oil?

Mr. COOPER. \$7 a barrel.

Senator RIBICOFF. \$7 a barrel on old and new oil?

Mr. COOPER. New oil, as I understand it, is currently not subject to control.

Senator RIBICOFF. Well, the President is willing to go to \$11.50, I believe.

Mr. COOPER. Ideally, a recommendation in a particular bargaining situation should reflect the nuance knowledge of those involved in bargaining, which outsiders like ourselves do not have.

Senator RIBICOFF. But you see what you've got here. You've got a political decision to be made, and you've got Senators and Congressmen that must make that decision, taking into account the impact on the country and their constituents. They depend upon advice of experts. Now, we've got a political confrontation here. I think all of us are concerned about how you eliminate a political confrontation for the benefit of the country as a whole. That is why I was anxious to get your point of view.

Mr. PETERSON. Senator, could I add a couple of other points that I would consider? Since this is a bargaining process, particularly if it were part of a package that involved these other things I talked about, including emergency efforts, I would be prepared personally to take the oil import tariff off, which essentially reduces some of the inflationary aspects and has some positive effects in terms of the economy. And I think I would be prepared, as far as political compromise, to put a seal on that price.

But, I would also say, Mr. Cooper, that whether or not there are high prices 5 years from today or 7 years from today, particularly if you start stimulating other energy sources, hopefully will be determined by people other than OPEC. I am not prepared to suggest that that is a forever situation.

Senator RIBICOFF. Mr. Grant.

Mr. GRANT. I hesitated when you asked the question originally, because I don't profess to be an expert on these domestic issues per se. And I will let the other's comments stand.

But, I would like to say one thing more, if I may. You have currently emphasized—and I would agree—that we don't have a domestic energy policy. I would like to emphasize that we don't have an overall, global policy either. And I think one thing we are learning now in this energy field is that even if we had a "perfect" domestic policy, unless we had a global policy, we wouldn't really have an effective policy. And I underline that point a part of our basic problem.

Now, it is quite clear that two or three events have taken place in the last 3 weeks that should have a profound effect on whether the prices go up to any significant degree or not at the next OPEC meeting. The first is the agreement in the Middle East. That pause clearly changes the atmosphere. I would say as far as oil price is concerned, even more importantly what we have is what happened yesterday at the United Nations; that the kind of general atmosphere of accord on the general north-south set of issues between developing countries in the southern hemisphere and ourselves is putting a very severe restraint on what the OPEC countries can do.

As Professor Cooper has underlined, the third and fourth world countries are in deep economic distress today on the one hand, and second, the OPEC countries really can't move aggressively without the diplomatic support of the third and fourth worlds. And they do not dare get themselves isolated where the third and fourth worlds are against them.

Also, so far the OPEC nations have been able to keep the support of the third and fourth worlds in large part because the United States has refused to sit down seriously with the third and fourth world countries. In fact, of all the industrialized countries in the last few years, the United States has been the most adamant in its unwillingness to discuss their problems. And this has made them depend on the OPEC countries for both diplomatic and financial support. In turn, OPEC has gained confidence that it can rely on support and protection from the third and fourth world countries.

It is clear, therefore, that a total policy requires not only the things we call domestic, like the stockpiling and conservation you talked about, but it also needs a very intelligent global policy. And I would then go on to add specifically here that if the present accord that seems to be evolving out of New York leads to a major cooperative effort with developing countries as a whole, it would be very much harder 6 months from now, or 12 months from now, or even 2 years from now—if there is a breakdown in the Sinai—for the OPEC countries to succeed in any very aggressive ventures.

I would also argue that if we were, Senator, with respect to the OPEC countries, to develop a major policy of encouraging their investment in OECD countries, we would then have a counter hold on them so that they would have to be careful of what they did to us the next time a crisis came about.

Finally, we haven't seriously addressed the question of how do we help Venezuela, Saudi Arabia and Iran with getting to their developmental objectives. We have sold them a lot of equipment, like arms and equipment sales, but there has been no serious effort to sit down with Iranians and the Saudis and say "where do you want to be 10 or 15 years from now? How can we help you developmentally?"

So this would not be in terms of money, but the kind of skills that they need. We have not asked them "What do you want?" And my guess—well, not my guess, it is my judgment that a range of measures like this, the cost of which would basically be relatively modest, would enable you to make it virtually impossible for the OPEC countries to sustain a major irresponsible either additional price increase or embargo.

Chairman KENNEDY. Senator Javits.

Senator JAVITS. If I can have your attention? It will only be for 1 minute, because I have to go to the floor. But what you said is fascinating, and you answered many questions I have. I would especially like to accord my agreement with Mr. Peterson on the issue of conservation. I think it is absolutely horrendous and shocking that we are as wasteful as ever and that we persist in the error of our ways and that there is even a political controversy about where to change. I see no pride or profit in selfishness, and yet that is exactly what we are doing; nor in protecting selfishness. And I say that with really pain in my heart, because it is so costly to us. It goes without saying this conservation must be led by the President of the United States. And if conservation is not cranked into our energy program effectively, our energy program is going to lose about one-quarter of the way.

But we all agree on that, so I am perhaps belaboring the obvious.

But certainly, this country is very, very derelict in that regard. And I believe that profound moral evangelism must come from the Presi-

dent first. In this case, he is the one national spokesman we have who would do it. It isn't just enough to repeat it in speeches; it has to be a national and massive movement, like saving the country in time of war.

I would like to ask just one question. A proposal has been made by the Vice President to spend \$100 billion in 10 years for the very things you are recommending; research, including if necessary esoteric type research, demonstration projects and so forth. And by the way, Professor Cooper, ERDA has now the authority to give guarantees, et cetera, to facilitate demonstration projects exactly as you outlined them. We don't even need any new authority. We do need money.

The question I would like to ask you, and especially Mr. Peterson, who is head of an important banking firm, is: Would \$100 billion so spent, in your judgment, be inflationary? If so, why? If not, why not?

Mr. PETERSON. To what do I owe this unique opportunity to embarrass myself publicly?

Senator JAVITS. Well, don't answer if you don't choose to, but I think it is vitally important, because unless we are bold, we are going to fall by the wayside.

Mr. PETERSON. Senator, while I think we need bold steps, I would like to caution against anything that comes as though the U.S. Government is going to fund so much of both the equity and the debt, as it were, as to make it, in effect, either a riskless project or a Government project. I am going to sound like an unadorned Republican, I suppose, in this statement, but I see very little evidence to suggest that projects that have little risk and enormous Government involvement are likely to achieve their goals.

So an aspect of this situation that I consider very important is to inject these operations with private equity capital. In other words, I would like to see some minimum level of risk by the private sector, so that it, in effect, feels a very large sense of responsibility for seeing that the project is successful. And that is a serious concern I have about total underwriting of risks in this field.

Senator JAVITS. I thoroughly agree with you. And the basic suggestion, of course, is a guarantee suggestion. So that you are saying, if I interpret you correctly, that with an adequate percentage of private enterprise risk, thus testing the practicality of the individual project, then you do not—and please correct me if I am wrong, you do not see that it would be inflationary, but would be constructive if it had an adequate proportion of private enterprise risk?

Mr. PETERSON. Well, the next question, after you have established the basic principle, is does it need to be \$100 billion?

Senator JAVITS. Oh, I agree with that.

Mr. PETERSON. I think that is an extremely important question. You can tell by the trend of my thinking that I think it is extraordinarily necessary to get a wide number of demonstration projects in every field and that I think we must do it urgently. The mere presence of those demonstration facilities, plus all of the other exploration that is going to be going on around the world could, Senator, change the dynamics of this situation. Therefore, I would withhold judgment on what you might call the second tranch of investment until I had a little more impact on how these various crash programs are working.

Senator JAVITS. But it will take Government guarantee in a substantial amount to even bring about those demonstration projects?

Mr. PETERSON. Yes; but by what I said, Senator, you can see I would not guarantee everything.

Senator JAVITS. I understand.

Yes, Mr. Cooper.

Mr. COOPER. I would like to comment on your question about whether it would be inflationary. The answer is an unambiguous no, provided other policies are appropriately adjusted. I have no idea whether \$100 billion is, from the energy point of view, the right or wrong figure, but spread over 10 years and on a smooth basis in a growing economy, that starts out at less than \$7 billion a year. At the present time the U.S. economy is in very deep recession. Unemployment is over 8 percent of the labor force, and is widely distributed geographically and occupationally and utilization rates are generally below 70 percent. I think one can safely say that under present circumstances, an injection of an additional \$7 billion of demand in this economy can be absorbed comfortably without inflationary effect.

Five years from now, if the economy were running at full capacity, then one would have to worry about the state of the economy at that time and whether one would need additional taxes or other fiscal compensation for it. But, at the present time, the answer to your question is no.

Senator JAVITS. Thank you very much.

Chairman KENNEDY. Congressman Long.

Representative LONG. Thank you, Mr. Chairman. In your statement, Mr. Grant, with respect to the development of international world policy and global policy in this regard, well, I find this of much interest to me, and let me say I, to a great extent, share your views. Let me take this one particular aspect of this, and particularly taking it in view of something you said with which I agree, and that is the political-diplomatic tenuous situation in which the OPEC nations might find themselves in a relatively short period of time with respect to making substantial increases in prices or even maintaining their existing price structure that you have, based upon the low productive costs that they have, and let me say this. Take the history of cartels and their ability to hold together, and particularly the international cartels and their ability or inability to hold together, now would it be worthy of consideration or do we just completely disregard and forget any effort at all toward the breaking up of this cartel?

Not many months ago, I think it was either here, or I read it, a professor from MIT had suggested that we might adopt a system of secret bidding on all prospective oil imports in an effort to encourage, in effect, the oil producers to cheat on one another, which would be an effort to breakup the cartel. Also, it has been argued that if we didn't have the multinational oil companies to carry out basically, I guess you would call it a prorationing of the cutbacks as they occur because of the glut on the market, that OPEC would not be able to maintain the price level even that it has at the present time, much less give any consideration to raising the price of this oil.

Now what about if you took both of these and if you took Professor Adelman's theory and his suggested approach to this, and at the same time you got the Justice Department, through its Antitrust Division, to bring very substantial actions against the major oil companies with respect to their ability to prorated these cutbacks? Now, might not

that have some effect, coupled with the diplomatic pressure they are coming under, some effect to breakup this cartel, or is breaking it all up just a dream of a lot of people without any substance to it?

Mr. GRANT. Well, on both of these questions—and you are pushing me to issues in which I really don't profess to have a great deal of expertise—I would agree with your basic conclusion that there are a whole range of things that can be done that will soften up the OPEC cartel and that will make it infinitely harder for them to make a major price rise, and which furthermore would increase the likelihood of a price softening.

Now, as to the specifics of whether the secret bidding procedure would work, I don't know what all the costs of that would be on the other side. Basically, though, I would say that the thing that has served to keep the oil cartel cohesive, to a degree beyond that which you would normally find in an economic cartel, has been a common ideology, an ideological cohesiveness. Ideological cohesiveness is perhaps the wrong term—I mean by it that the third world has a common-sense of grievance against the industrial countries which serves to unify them.

And my own judgment is that over 4 or 5 years, over that period, there are a whole variety of ways in which, in effect, that sort of cohesiveness can break up.

Representative LONG. People tend to speak of it in terms of let's break it, like you would break a piece of glass, but I don't see it that way. I see the political pressure coming on them, and they are very real pressures, and I see things we can do if we develop an international global policy with respect to bring other pressures on them, which is a very legitimate thing to do in a business enterprise. There is nothing wrong with it at all. It is the name of the game for that matter.

And I think, frankly, over a period of time it has some possibilities.

Professor Cooper, what is your view on this matter?

Mr. COOPER. You alluded to the history of cartels. With one or two exceptions, perhaps, such as the diamond cartel, all of them have crumbled sooner or later. The collapse has come for two quite different reasons: One is the development of new sources of supply outside the cartel, which then erodes the capacity of the cartel to maintain the price. That has been the more common cause. The second reason is the one as you put it forward, that cartel members might cheat on one another in the face of weak demand. My own view is that OPEC, like other cartels, will crumble in the long term. But I do not see that happening in the near term. In particular, I don't think that the Adelman proposal for secret bids, which is in many ways an attractive one, will accomplish the objective he seeks. On the contrary, I think it might well solidify OPEC in the short run. For the natural response in a market that is dominated by half a dozen countries is simply to collude on the bidding. The bids may be secret from the public, but there is nothing to keep them secret from one another. It would provide another occasion for the key OPEC countries to get together and allocate shares to themselves for sales to the United States under this so-called secret bidding technique. The ability of OPEC to restrict supply without any formal allocation among the OPEC countries during the past year has been remarkable. They have

cut back production very substantially. Saudi Arabia has borne a disproportionate share of the burden, but that is a country that has vast reserves in terms of oil and a small population. Under present circumstances, I believe the Adelman proposal would work.

What I think will gradually erode OPEC is alternative sources of supply. Therefore, that is where we ought to direct our attention. Now unfortunately, developing new sources of supply takes time. In the meantime, we've got to live in a cooperative rather than confrontational spirit with the oil producers.

Representative LONG. If the current world recession-depression that we have and its resulting lack of demand for oil continues over an extended period of time, would this be a substantial influence on the breaking up or weakening of the OPEC cartel?

Mr. COOPER. Well, obviously the more demand for oil falls relative to the capacity of the countries to produce, the more likely OPEC will weaken. On the other side of the equation, these countries have adjusted to higher revenues and they are becoming more and more dependent on the revenues. And the more of a squeeze—

Representative LONG. I know, but the hardest thing in the world is to not continue making the sort of money you have been, once you start making it.

Mr. COOPER. That is right. So, if one can envision a further cut in world demand of let us say, 3 million barrels a day, that might well put severe strains on OPEC. But I think the world recession has probably bottomed out. It is not likely to get worse, although recovery may well be slow. But oil demand is not likely to fall further, and I cannot see politically feasible conservation measures lowering consumption by a further 3 million barrels a day from the present recession levels. Therefore, I am pessimistic in the near term about breaking up OPEC in this fashion.

Representative LONG. Thank you.

Mr. Peterson, do you have anything you would like to add to this?

Mr. PETERSON. Very briefly, I think what I tried to suggest with the enormous virtue of hindsight is that the mode of nondialog and the mode of confrontation has given the OPEC countries the pretext that they needed for not having a meaningful discussion. That is why I said in my statement I think the continuation of that would increase this pretext.

In my statement, on looking at this thing globally, you will notice that I emphasized, and perhaps too often, the need for diversified and competitive, you know, global centers of new oil production. Therefore, I think it is extremely important that we figure out some instrument through which the Indians and the Brazilians and the Chinese and now the Soviet Union can get this new supply out. And it seems to me the more we both increase and diversify the number of sources, then the more—

Representative LONG. Oh, on that point that reminds me of a question I was going to ask you. As you know, offshore in my State, we have more production than any State in the Union and practically anywhere in the world. The surprising thing to me, as a fisherman, is the extent to which it has brought new fish into the area and really in types and amounts you have never seen before feeding on the marine life that grows on the rigs. It has really been surprising to me

over the past few years what has happened. But, that is beside the point.

The point I was going to ask is that the common practice that the United States follows of requiring exceedingly high bids in order to get the right to drill in these areas seems to me to be a self-defeating policy, and that that money really ought not to be coming into the U.S. Treasury. What we ought to do is have, as a government, an entitlement to a higher percent of a royalty or working interest in the production itself. And once they find it, let that money be used to try to find new oil instead of just being paid into the U.S. Treasury.

Does that make sense?

Mr. PETERSON. What I believe so deeply is that the issue of potential is so important in terms of the way it is perceived by the OPEC countries that it is far more important to demonstrate the presence of lots of reserves and reserves in lots of places, than it is to get every last dime out of the leases and then wait another 5 years before you actually develop them.

So the whole thrust I am talking about is to multiply the alternative energy sources, not only of exotic kinds, but conventional kinds all over the world. And that fact, I think, is the single most important thing.

Representative LONG. When you couple that with the immediate problem of capital accumulation that is required in order to make the expenditures required for offshore drilling, it seems to me there are two advantages: One, it helps to some extent alleviate that problem and, second, it helps again the smaller companies to be able to participate in this offshore drilling and keep down the monopolistic tendencies which is growing so very strongly in this area.

Mr. PETERSON. You see, nothing to me would make our energy policy both more credible and more realistic than to have drilled 100 holes in various parts of our offshore area and encourage other countries to do that, and find out whether the Department of Commerce, who thought it was 8 billion was right, or the fellow that thought it was 140 billion. It is an enormous piece of information to have.

Representative LONG. Thank you.

Chairman KENNEDY. I want to thank you very much. I must say you have given us a good deal to think about before the Secretary comes on Friday. I think we really framed some of the important issues that will be placed with the Secretary at our Friday meeting, and I think it provided a good deal of understanding about many of these foreign policy implications; and provided a number of different suggestions about the steps that can and should be taken in order to develop a policy that will be meaningful in terms of both our domestic policy and our policy vis-a-vis oil producing countries. And I think that this is an extremely important thing.

Senator Ribicoff questioned you about the lack of domestic policy vis-a-vis these other countries. We now have just seen a formulation of one. I myself am hopeful that the Paris and U.N. speeches of the Secretary present the kind of forthcoming attitude I think many of you commented on as being necessary in terms of the development of a U.S. policy toward OPEC and the world community. I think that this has been lacking. And the interrelationship between these policies is extremely important. I think it has been a dimension that has gen-

erally been misunderstood by our colleagues in the Congress in debate on the development of a domestic program. You reminded us all about the importance of this in terms of our country's policy toward other countries around the world and why it is important to have the United States formulate such a policy.

We will have a chance to talk about it on Friday again.

The subcommittee will stand in recess.

[Whereupon, at 12:20 p.m., the subcommittee recessed, to reconvene at 10 a.m., Friday, September 19, 1975.]

U.S. FOREIGN ENERGY POLICY

FRIDAY, SEPTEMBER 19, 1975

CONGRESS OF THE UNITED STATES,
SUBCOMMITTEE ON ENERGY
OF THE JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 11:15 a.m., in room 1202, Dirksen Senate Office Building, Hon. Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senators Kennedy, Proxmire, Percy, and Taft; and Representatives Moorhead, Reuss, and Heckler.

Also present: John R. Karlik, William A. Cox, Robert D. Hamrin, Sarah Jackson, and Larry Yuspeh, professional staff members; Michael J. Runde, administrative assistant; M. Catherine Miller, minority economist; and John Stewart, subcommittee staff member.

OPENING STATEMENT OF CHAIRMAN KENNEDY

Chairman KENNEDY. The subcommittee will come to order.

On behalf of the Energy Subcommittee, I would like to welcome the members of the full Joint Economic Committee and our distinguished witness, the Secretary of State.

Mr. Secretary, we appreciate your coming here this morning. For the past several months, the Congress has been working on problems of energy. Along with the recession and inflation, it is a key item in our agenda, affecting every part of our economy and our country. The rise in oil prices during the past 2 years helped give us the highest inflation since Korea, and the deepest recession since the 1930's. Farmers, workers, businessmen and consumers—every one of us in his daily life—will suffer or succeed depending on what the administration and Congress do in this vital energy area.

Many of us are convinced that the United States has great scope for leadership in the global economy. And we are gratified by the leadership you have shown, in your Kansas City and Paris speeches, and more recently in your speech to the special session of the U.N. General Assembly. We look forward to constructive U.S. efforts at the forthcoming Paris preparatory conference on oil and broader economic issues.

But as we debate these issues, it is difficult to understand and to explain to the American people the reasons, both international and domestic, that would justify some of the drastic actions the administration has proposed.

There is general agreement about the need for the United States to consume less energy in the long term and to find alternative sources of energy that can reduce our reliance on imported oil. All of us recognize the need to take significant action in these two areas.

But we are concerned that the immediate decontrol of oil prices, sending already high prices through the roof, will provide very little new exploration or reduced consumption, but will rather insure a deeper recession and the return of double-digit inflation.

We are concerned that imposing a \$2-a-barrel tariff on oil imports has little impact on reducing imports, when there is no other way we can obtain the oil we need to heat our homes and fuel our factories. A strategic reserve—which the administration opposed last year and finally supported this year—and which we have passed in the Senate—is a far better protection against the threat of an embargo than a tariff.

We are concerned about other proposals, including the floor price on energy, which Congressman Reuss has done so much fine work on, that would lock us into high cost energy, however successful we might be in developing alternatives in the future.

And we are concerned that we waited nearly 2 years before recognizing, as our allies recognized almost immediately, that the facts of energy supply and demand made a policy of confronting the oil producers a futile exercise.

Many of us, as we travel abroad, hear our friends and allies say that they want us to take decisive action on energy. But they also tell us that they want the U.S. economy to move out of the recession, and to take the lead in avoiding a return of crippling inflation. We will gain little, if the price of today's energy policies is further damage to the U.S. and global economies.

This morning, Mr. Secretary, we hope that in your comments and answers to questions, you will speak about some of these concerns, and help us to understand the foreign policy factors that lie behind the administration's energy policy. And we look forward to working effectively with you as we search for answers to the difficult and vital problems in energy and the global economy that our country faces.

Before preceding to questions, we will welcome any comments or statements the others have. I might mention at this time that the Secretary has to leave at 12:30.

Secretary KISSINGER. 12:45.

Chairman KENNEDY. So we are going to be pressed for time and we will try to follow the rules of the Joint Economic Committee and ask the members to limit the time of their questioning.

Senator PERCY.

OPENING STATEMENT OF SENATOR PERCY

Senator PERCY. Mr. Secretary, I would simply like to thank you for being here and to express publicly, for the first time, the deep appreciation of all of us who had the privilege of working with you and Assistant Secretary Enders for the brilliant, creative and positive role the United States took at the recent session of the U.N. The subcommittee is a new Subcommittee on Energy. I think the general impression of the country is all Congress can do to solve a problem is to

create another committee, and if that is all we can do, that we can do, then we are impotent as one of our members said yesterday, when he voted against the pay increase, saying we haven't done anything.

I hope we are going to do something other than just create committees in this area. The administration is sponsoring legislation and has had a program down here and Congress has failed to respond to it. There is a compromise bill being introduced on behalf of the administration, that I am cosponsoring. The initiative has been taken by the administration. It is up to the Congress to now do something.

The purpose of these hearings, I think—and this is not a legislative committee—is to get a better public understanding. And if the public really understands what I consider to be the perilous position we are in, the dangerous position we are in on energy, and the foolhardy way we are handling ourselves as a people and as a nation and as a country handling this problem, then I think we would have helped a great deal.

I think your testimony today could be of immeasurable value in better informing the Congress and the American people as to the nature of this problem, what we are doing about it, and what we should do about it.

Chairman KENNEDY. Thank you very much. On that harmonious note, we will start.

STATEMENT OF HON. HENRY A. KISSINGER, SECRETARY OF STATE, ACCOMPANIED BY THOMAS O. ENDERS, ASSISTANT SECRETARY OF STATE FOR ECONOMIC AND BUSINESS AFFAIRS; AND ROBERT McCLOSKEY, ASSISTANT SECRETARY OF STATE FOR CONGRESSIONAL RELATIONS

Secretary KISSINGER. Mr. Chairman, I have a brief statement, and then I will answer your questions.

The events set in motion by the October 1974 war exposed the dangerous vulnerability we had incurred as a result of our growing dependence on imported oil. The oil embargo and the series of massive oil price increases which followed underscored the degree to which we had lost control over the price of a central element of our economic system. We also found that our own economic well-being and security were threatened by the energy vulnerability of our allies and that the escalating price of energy had wreaked havoc on the programs of developing countries.

Over the past 2 years, our objective has been to develop a comprehensive strategy to end our domestic and international energy vulnerability. Our goal has been to build a series of policies which would—

Protect us against short-term dangers such as embargoes and the destabilizing movements of assets held by oil countries;

Provide support for developing countries hard hit by high oil prices;

Make possible a return to noninflationary growth; and

Create the political and institutional conditions for a productive dialog between consumer and producer countries.

We have made substantial progress in meeting the immediate crisis. We and our partners in the International Energy Agency have joined in a plan for mutual assistance in the event of a future embargo.

In April, we and other industrialized countries agreed on a \$25 billion support fund to offset abrupt or predatory shifts of funds by OPEC as well as balance-of-payments problems.

Also, at our initiative, the International Monetary Fund will create a special trust fund for concessional loans to developing countries hit hardest by oil price increases.

We have also coordinated closely with Germany, France, Japan, and Britain to restore sustained economic expansion in the industrial world.

Despite this progress, much remains to be done if we are to overcome the impact of the energy crisis.

U.S. DOMESTIC PROGRAM

Here at home we must move rapidly in reducing our dependence on imported oil. Our present vulnerability will continue, indeed increase, unless we intensify our conservation efforts and promptly initiate those programs and policy measures which will insure the availability of major amounts of new energy by the end of this decade and into the 1980's.

For the short term, we look to conservation as the primary means of reducing our import dependence. In this regard, the decontrol of domestic oil prices is the single most important conservation measure we can take.

But there should also be other elements in our domestic energy policy including the deregulation of natural gas, as well as the accelerated exploration of potential resources in Alaska and on the Outer Continental Shelf.

CONSUMER COOPERATION

We cannot succeed alone in this effort. We must work closely with other major consuming countries if we expect to end the monopoly power of the producer countries in unilaterally setting oil prices.

We and our IEA partners are now developing a comprehensive program of long-term cooperation. In the conservation area, we will set overall targets based on equitable burden sharing among members, and we will verify each other's performance.

To accelerate the development of new energy, IEA members must pool their resources and expand research and development efforts. To cover the massive development costs, IEA countries must work together to insure that the necessary financial resources will be available.

It is also important that we establish a common basis for developing alternative supplies by agreeing that none of the IEA countries will permit imported oil to be sold in our economies below a certain minimum price level. The object of this element of consumer policy is to assure that our efforts are not disrupted by predatory pricing by OPEC and to protect those countries that invest heavily in higher cost energy from being put in a competitive disadvantage if the oil producers engage in predatory pricing.

These efforts by the United States and its IEA partners are extremely important, for without serious joint effort by the consumer

countries, our credibility will be questioned, and no balanced dialog with producer countries will be possible.

We seek such a dialog with the producing countries, one that will underscore our mutual interests rather than our differences.

If we and our IEA partners seek reliable access to oil supplies at stable prices, the producing countries also seek secure outlets for their growing assets and greater participation in the world financial and economic system.

We have worked hard to launch a productive dialog on energy, raw materials, development, and finance. We look forward to the meetings on these subjects, which will begin next month. They offer an opportunity for consumer and producer countries alike to demonstrate their ability to create new ties and relationships.

A major test of the producer country commitment to a more positive relationship will occur in the next few days when OPEC countries meet to decide whether or not to extend their own moratorium on oil prices increases. After the dramatic price increases of the past 2 years, another oil price rise can only endanger the positive dialog which we all seek. It will affect the expansionary policies of industrialized countries. It will further weaken the economies of the developing countries, so many of which are already in precarious condition. It could also result in the stagnation of OPEC oil exports and lead to demands for yet higher oil prices. Such a series of events is in the interest of no one and can only jeopardize our hopes for a new and constructive relationship.

Regardless of the decisions of the oil producers, the United States must regain control of its own economic future. Our leadership role in the world demands that we demonstrate our national resolve to overcome the problems we face and our determination not to entrust our political and economic destiny to others.

That is the end of my statement, Mr. Chairman.

Chairman KENNEDY. Thank you very much, Mr. Secretary. I was particularly interested in the comments you made in reference to the potential price increases by OPEC—to be decided in the next 10 days—and trying that issue into our own economic situation. As you know, I come from a part of the country which has been suffering the greatest problems of unemployment and inflation, probably, in the country. A substantial part of this derives from rising energy costs. Quite frankly, it is exceedingly difficult for me to convince the people in my own State of Massachusetts, or in New England, or in those parts of the country which are high consumers of the petroleum products, about the wisdom of the \$2 a barrel oil tariff program.

You eloquently commented on the serious economic implications that a rise in OPEC prices would have on the United States and other oil-importing nations. I certainly agree with you. But it seems to me that, with a \$2-a-barrel oil tariff program, the United States is basically saying that our economy can afford at least this amount of increase.

I am wondering what message the OPEC countries are receiving. Are they receiving your very elegant message that any price increase will have serious, adverse implications on the economies of the United States, the industrialized nations of the world, and the third world,

as well? Or will they hear the administration saying: "Well, we can afford a \$2 per barrel increase, because we imposed that much oil tariff ourselves, and the President and the administration has favored it?"

Which message do you think they will hear?

I am very much concerned they are hearing the President's message about the acceptability of an oil tariff program and a \$2 per barrel price rise. Do you think this is wise?

Secretary KISSINGER. As I understand the basic position of the administration—and I would like to emphasize that my responsibilities are in the foreign field and not on particular measures on the domestic side—but as I understand the position, it is this. There can be no conservation program without imposing some costs on the United States, and that the costs of the conservation program give us the ability to prevent much higher costs from being imposed on us later on by the increase in consumption that would follow without these conservation programs.

So, it is an attempt by the administration to reduce our dependence on imported oil and thereby make it more difficult to impose even higher prices on us later on, on the part of the oil producers.

Chairman KENNEDY. Mr. Secretary, I understand the idea of conserving 1 million barrels a day, which the administration has set as a goal this year, or 2 million for next year. But when you compare that both with what the Saudis alone can produce now—about 6½ million barrels a day—and with what they need to produce simply to balance their budget—about 2½ million barrels a day—how can we think that a 2 million barrel-a-day U.S. reduction in oil imports will have much of an impact on them in bringing down price, especially while we are saying with our tariff and decontrol policies that we are prepared to pay whatever the OPEC countries ask?

We are only importing about 3 million barrels a day from OPEC countries. Yet with a decontrol policy affecting the price of all U.S. oil consumption of 17 million barrels a day, we are saying that the OPEC countries can set all U.S. oil prices, and the people of New England and elsewhere in this country will have to pay those prices.

Now, from that vantage point, how do we justify our foreign energy policy? We will not have much impact on their economic ability to cut production, yet at the same time through the tariff and decontrol, we are giving them an open-ended invitation to raise their prices, letting OPEC decide what people who heat their homes or drive their cars or fuel their factories with imported oil are going to pay. From your conversations with OPEC heads of state, or ministers responsible for oil policy, how do you view their attitudes?

Secretary KISSINGER. Actually, in my conversations with foreign governments, this particular argument has, strangely enough, never been made to me, may be due to the fact they don't think I know enough about domestic policy to make it even worth arguing about with me. But when I have complained about the possibility of a price rise, they have never made this particular point.

But I won't rest the case on that, because the discussion was not in the context in which they could easily have made it.

You are quite correct, Mr. Chairman, that the ability to set the price unilaterally derives from the ability of several OPEC coun-

tries, of which Saudi Arabia is the key example, to reduce their production without really affecting their own needs. And therefore, even considerable conservation programs will not immediately affect the bargaining position.

Of course, our position in the IEA is that we are asking our partners in the IEA to match any conservation measures that we exhibit. So you would have to double the figures that you have mentioned, in order to have the overall impact.

The problem is, if we don't begin the conservation program now, we will never catch up with it. We hope that over a period of years, the rise in the needs of countries like Saudi Arabia, coupled with conservation programs, coupled with the development of alternative sources of energy, will produce a situation in which the bargaining power becomes more nearly equal, which is to say that the gap in which they can cut, that will be sharply reduced.

If we don't start on the conservation measures now, it will become hopeless, and we will abdicate any possibility of achieving it.

Chairman KENNEDY. May I ask, just before my time is up, how you see the Sinai agreement in terms of the security of oil supplies for the Western countries, and particularly for the United States? Does the agreement mean that the possibility of an embargo is more remote? Could you talk about the implications of the Sinai agreement in terms of availability of petroleum to the United States?

Secretary KISSINGER. We are very reluctant to link our foreign policy to the threat of an oil embargo, and therefore we are not talking to the oil producers directly about the impact of our policies on their oil policy.

On the other hand, it has generally been understood that under conditions of extreme tension in the Middle East, that almost certainly under conditions of war, an oil embargo was a distinct possibility.

We believe that the Sinai agreement has given us time to work on the problem of overall peace in the region and perhaps on some other, separate, agreements that might be made between some of the parties, and that by diffusing the situation, the danger of oil being used as a weapon has become more remote; and that in this sense, it should have had a beneficial impact on the oil supply situation.

Chairman KENNEDY. Congressman Moorhead.

Representative MOORHEAD. Thank you, Mr. Chairman.

I want to join my colleagues in welcoming you, Mr. Secretary.

In your statement, Mr. Secretary, you made the statement we should be searching for alternative sources. Would you consider mainland China as a possible alternative source of energy and particularly oil?

Secretary KISSINGER. Alternative sources can have two meanings, and has two meanings in our strategy: One is the development of alternative sources within the United States through the various synthetic means, like solar energy, or the discovery of additional oil deposits; the second is the introduction of other oil producers into the market. We have not had any direct discussions with the People's Republic of China about oil, but it isn't necessary that they sell oil to us directly. To the extent that they are additional producers entering the world market, it will affect the ability of the OPEC countries to set the price unilaterally. The ability to set the price unilaterally depends on the fact that the chairman pointed out, namely, that

production can be reduced in order to keep the prices at a preset level. For example, during the recent recession, the oil price did not fall, despite the fact that consumption was reduced, because the OPEC countries reduced their production. To the extent that other countries expand their production or enter the world market, it requires additional requirements for production cuts to maintain a certain price.

So, all we know about the People's Republic of China is that it is rapidly expanding its oil production. And to the extent that they sell this on the world market, even if they don't sell it to us, it will affect the ability of OPEC to set prices unilaterally.

Representative MOORHEAD. I agree with you, sir. It doesn't matter whether they sell it to us, as long as they sell it on the world market.

Secretary KISSINGER. Of course, you have to remember the consumption of China is ultimately going to increase, as its industrialization proceeds. So, I am not sure how significant the exports will really turn out to be.

Representative MOORHEAD. Now, let us turn to the Soviet Union as a possible alternative source. There we do have a situation where we are engaging in grain sales to the Soviet Union. Is it possible, and should it be done, to, well, not on the same piece of paper, but to somehow interconnect our supplying their needs for grain with our need for oil?

Secretary KISSINGER. Well, as you know, we are negotiating a long-term grain agreement with the Soviet Union. And Secretary Robinson has just returned from Moscow, where some progress was made, and he will return to Moscow probably toward the end of next week to make further progress. And that is going reasonably well.

We have also had some preliminary discussions, not in the same negotiations, but on the same time frame, about the virtues of some Soviet oil. Those discussions are also proceeding. They are in a somewhat more preliminary stage.

The Soviet capacity for exporting oil is relatively limited, although the impact of exports would be the same as the one I described for the People's Republic of China. But we are exploring with the Soviet Union the possibility of purchasing Soviet oil.

Representative MOORHEAD. Well, just as I think it would be to our advantage to have a long-term agreement on wheat so that our farmers can know that they can produce, it would seem to me that it would be to our advantage to have a long-term agreement, even though it isn't as large as we might hope, a long-term agreement with the Soviet Union on oil.

Secretary KISSINGER. That is exactly what we are attempting to discuss. That is exactly what we are discussing and we are exploring that possibility. And there might even be a possibility of larger exports by the Soviet Union in return for some technology that increases its production.

Representative MOORHEAD. Increases the production of oil?

Secretary KISSINGER. Of oil in the Soviet Union, but that is a separate, more long-term discussion.

Representative MOORHEAD. Now the preparatory meeting for the consumer-producer conference next month, in that the United States and other consumers will find themselves face-to-face with the OPEC

nations to discuss energy issues. Now, what does the United States reasonably expect to get out of these discussions?

Secretary KISSINGER. Well, we decided in the early part of this year that we would make a maximum effort to conduct our relations, not only with the producers but with developing countries, on the basis of understanding, of mutual respect, and very concrete proposals. We wanted to avoid ideological confrontation and we would work within our Government and with the relations between the Executive and legislative to develop as detailed and as forthcoming a program as we could put forward, and put this before the special session of the General Assembly, which has just concluded. And I appreciate Senator Percy's comments. I want to thank him and his colleagues of both parties for the role they played in shaping the program in New York.

This program couldn't possibly be implemented in one session of a 2-week duration. We conceive that many of its main elements could serve as our agenda also for the preparatory meetings, and later on for the main meetings of the producer-consumer dialog. That producer-consumer dialog will take place in four groups: Energy, raw materials, development, and the financial and monetary aspects of the other three, of energy, raw materials and development. In each of these the membership will be those countries that, by some objective criteria, have a principal interest in these issues, and the total number of each subgroup is about 15. So, these are forums that lend themselves better to detailed negotiations than the large meetings, like the special session of the General Assembly, which can only set out basic premises. If it works well, and it will be a protracted process, we ought to be able to put the world economy, especially the relationship between developed and developing countries, into a series of concrete programs in which the needs of countries with respect to energy, to raw materials, and development are dealt with on a balanced basis.

And we are quite hopeful that a new atmosphere can be developed in this dialog that avoids some of the theoretical issues that have been the bane of this before, and that will perhaps enable us to talk about the problem of energy price in a more comprehensive framework than has been the case up to now.

Representative MOORHEAD. Mr. Secretary, is it still the administration's position to favor a world floor price for oil? My time is already up, so if you could just answer it yes or no.

Secretary KISSINGER. I can answer it yes or no, but I don't want to break my reputation. The answer is yes, a minimum safeguard price is still our policy.

Chairman KENNEDY. Senator Percy.

Senator PERCY. Mr. Secretary, I personally believe it is not possible to separate our domestic energy policy from our foreign energy policy. Do you agree with that statement; if so, how do you see our foreign efforts dovetailing with our domestic efforts?

Could you comment specifically on how you and Secretary Simon coordinate to develop a U.S. policy on energy?

Secretary KISSINGER. First, our domestic policy is absolutely crucial to our foreign energy policy; since we consume half of the world's energy. It is almost that our position of leadership is essential, for without our conservation, there is no conservation program. Without our developing alternative sources, they cannot be developed.

So we took the lead in organizing the International Energy Agency. And without our leadership and our example, there can and will not be an effective foreign energy policy. This makes it essential, without going now into the merits of the various competing proposals, but it makes it absolutely essential, in our judgment, that the Congress pass a coherent energy program for the United States, because without it, we will have no negotiating position and we will have no leadership position with respect to our partners.

Internally, within the Government, the policy is being developed partly in the Economic Policy Board and partly in very frequent meetings between Secretary Simon and Mr. Zarb and myself. We meet at least once a week. And I would say that especially during the course of this year, there has developed a very close relationship with great confidence and mutual esteem. And I think we have a substantial agreement within the administration of the direction in which we are going.

Senator PERCY. I met yesterday with representatives of the Illinois Agricultural Association. Unlike other years, almost all the questions at the outset involved foreign policy, with particular interest in what deal we are making with the Russians—whether it is going to be a long-term deal—and also, is there somewhat of a barter arrangement involved whereby we might get oil for them getting grain.

Could you expand a little bit on Secretary Robinson's trip to the Soviet Union and what was accomplished?

Secretary KISSINGER. Yes, the discussions that Secretary Robinson had in Moscow were very fruitful and constructive. Since the negotiations are still going on, I don't think it is appropriate for me to go into details. We are not envisioning a barter arrangement. It is technically speaking very complicated, and there are many other reasons why it shouldn't be done. We are talking in terms of two separate arrangements which have at least an intellectual connection with each other. We are clearly talking about long-term arrangements, extending over a number of years in both categories. And we hope that on the next visit, some visible progress can be announced; in the next visit of Secretary Robinson which will take place at the end of next week.

Senator PERCY. Following up on previous questions by my distinguished colleague, is the Department envisioning a long-term policy of high oil prices? If not, how can the decontrol of oil prices be rationalized. Why are we letting domestic prices rise to the level of the prices established by an international cartel?

Secretary KISSINGER. We have the dilemma that unless we reduce consumption, the price of oil will go much higher than it is today, and the ability of the oil producers to set the price unilaterally will get totally out of control. So, in order to reduce consumption, the administration has put forward various schemes to reduce consumption and increase domestic production; has put forth various programs and implemented several that have the effect of raising prices somewhat in the short term in order to gain the ability to reduce prices in the long term and to regain some control over setting the price of one of our most essential commodities.

In the absence of a coherent American energy program, we have made practically no progress on our energy consumption. In conservation efforts, we rank 13 amongst 18 members in the IEA, and oil pro-

duction in this country is reaching new lows. We want to stimulate oil production in the United States; we want to develop other sources of energy; we want to reduce consumption. And even if this means an increase in price now, it will have the effect of limiting the price increases that can be imposed on us later, or eliminating them and eventually giving us the possibility to reduce prices.

Senator PERCY. Just to clarify this, that is a decision of the administration to not ration oil, but to use price as one means of cutting its use?

Secretary KISSINGER. I would say that I am not the best witness for the domestic decisions of the administration, because it is not in my principal area; but as I understand the decision against rationing, it is this. U.S. rationing can work for a brief period of time, but if you had rationing over the years, which a coherent energy program requires, it will cause so many dislocations and produce such a heavy bureaucracy that its impact on the country will be stifling. If we were in a 6-month difficulty, or a 1-year difficulty, perhaps one could look at it differently. But, since we think we are talking about a 5-year effort, it was thought that rationing would not be an effective means of dealing with this problem.

Senator PERCY. Would it not be in the vital interests of our foreign policy, however, to have the Congress adopt a policy, and the administration, that through one means or another would drastically cut our consumption of oil so that we are less dependent on our present sources overseas?

Secretary KISSINGER. I have to say as Secretary of State, my principal interest is that there be a coherent energy policy that reduces consumption and produces alternative sources of energy. Any measure that the Congress adopts will have real economic costs, because without them you will not have conservation. And the debate, really, in the Congress is between how to apportion these economic costs and not whether there will be economic costs. My strong view, as Secretary of State, is that we urgently need a coherent energy policy and not necessarily to put one scheme as against another, though of course, I generally support the administration.

Senator PERCY. Do you feel your success in reaching an interim agreement in the Middle East will have any effect on the OPEC meeting called for the purpose of discussing prices? And what effect and what impact on the world economy, both for developed countries and developing countries, do you feel that a substantial increase in price would have at this time?

Secretary KISSINGER. Of course, the basic issue in the oil price is the unilateral ability of the oil producers to set the price, and this ability reflects the gap between their needs and their productive capacity; in other words, their ability to reduce production to sustain almost any price level that they agree upon among themselves.

We cannot put the U.S. foreign policy into hock to the oil producers and therefore, I want to make clear we cannot gear the negotiations in the Sinai to the OPEC meeting. What a calmer situation in the Middle East may do is to prevent pricing decisions that are taken out of political resentment. And to that extent, I think the Sinai agreement may have had a calming effect on the deliberations.

But the basic decisions of OPEC will depend on their assessment of the economic impact of the price increase and may be of the political impact of the price increase, and I don't want to predict what they will do. We have certainly made clear through communications by the President to the key OPEC countries and through many public statements that the United States will consider an increase in OPEC prices at this time unjustified and a serious mortgage on the development of the world economy and especially of the developing countries.

Senator PERCY. Mr. Secretary, one final question. Last April, the United States was accused of scuttling a producer-consumer conference. Since that time a great deal of effort has been put in by you and Secretary Enders to construct a second conference, to be held in October with a ministerial meeting in December. Is this a shift in U.S. policy? What do you hope to accomplish by this conference? How does the producer-consumer conference get into the broader issue of a foreign energy policy? In about 1 minute, if it is possible, because my time is up.

Secretary KISSINGER. It is unfair to—

Senator PERCY. If it can't be done, I will withdraw the question, in deference to my colleagues.

Secretary KISSINGER. It is unfair to accuse us of scuttling the producer-consumer conference. We did not want to turn the consumer-producer conference meeting in April into an addition to the previous session of the special assembly of the General Assembly, where vague ideological principles were being put forward, and everything turned into a bloc debate. At that time, there was a tendency toward a comprehensive approach to all the economic problems of the developed and developing countries in one big forum, simultaneously.

We opposed it then and we would oppose it today.

In the meantime, through discussions with the producers upon which we spent a great deal of effort and with IEA, as well as with France, we have developed a format in which concurrent discussions that aren't necessarily linked are going on in four separate groups. We have established a working format that we think can lead to progress with good will on all sides. Therefore, it is not a change in our policy. Our policy has always been that we favor a dialog, but it must be a dialog that gives specific objectives with concrete foreseeable outcomes and not a confrontation between blocs.

Senator PERCY. Thank you, Mr. Secretary.

Chairman KENNEDY. Senator Proxmire.

Senator PROXMIRE. Mr. Secretary, we are delighted and honored to have you as a witness before this subcommittee. You happen to be, as I understand it, the first Secretary of State who has appeared before the Joint Economic Committee perhaps ever, and certainly in the 15 years I have been on the committee, which is more than half the committee's life. I think that is a great mistake on the part of the committee, because our foreign policy has a very serious effect on our economic opportunities and obviously we should hear the views of our principal foreign policymaker.

You have a great reputation for wisdom and properly. I don't know what your background in economics is, but I heard it is limited, but perhaps it is not. If it isn't limited, sir, I think it would be helpful if you would tell us what kind of economic advice you get. I don't

mean in terms of the specific advice you get with respect to energy negotiations. I mean with respect to the effect that your policies may have on the economy of our country, inflation, unemployment and so forth.

Do you talk, for example, regularly on this with the Council of Economic Advisers, the Secretary of the Treasury, and with outside economists?

Secretary KISSINGER. First of all, let me admit that my own knowledge of economics is limited. I become involved in economic questions when they affect foreign policy, and when they affect the political framework in which decisions have to be made. I have found many, or in most, of the key economic questions have a very significant political component, and that one of the big problems in making foreign economic policy is to bridge the viewpoints of both the economists and the policymakers.

The people with whom I meet regularly are: First, the Secretary of the Treasury, the Chairman of the Council of Economic Advisers, and I meet with Arthur Burns. I am not mentioning here the advisers that—

Senator PROXMIRE. Would you meet with outside economists like Paul Samuelson and Walter Heller and economists of that view?

Secretary KISSINGER. At the time that we formed the energy policy, I had a group of outside advisers that didn't include the names you mentioned, but it included a number of economists and former officials in the economic agencies. And I met with them every 2 or 3 weeks.

Senator PROXMIRE. Do you consult with Mr. MacAvoy?

Secretary KISSINGER. Yes.

Senator PROXMIRE. Because I am very impressed by his knowledge of energy economics, particularly. The reason I ask this is I got from your answers to Senator Percy that the administration's notion that you would trade high energy prices in the short run, with a view that this would reduce consumption?

Secretary KISSINGER. That is correct.

Senator PROXMIRE. And perhaps lowering it in the long run. Now, you see, that runs just squarely into our very serious economic dilemma now. We are right now, at this moment, having serious unemployment. And while the figures out today are more favorably on inflation, we know we have a very serious inflation situation. We hope and expect, within a year or two, that that will greatly improve. But, it seems to me that from the standpoint of its impact on the economy, a policy that would increase energy prices is very bad.

Furthermore, certainly the reaction we get from the public—they think this is a bad policy to permit oil prices and gas prices to go up now, at a time of heavy unemployment and a time of serious inflation.

Secretary KISSINGER. Well, the specific measures for conservation are not developed by the Department of State. My view is I would support any program that the domestic agencies support that brings about a substantial conservation. I can only state the requirement from a foreign policy point of view.

From a foreign policy point of view, my concern is that if we do not get control of the consumption now, it will be very hard to do later on.

Senator PROXMIRE. Well, when we agreed to supply Israel, for example, with oil during any future embargo by Arab States—this, at

least, was the report and perhaps the report is wrong and you can correct me if it is wrong—I understand this was in return for Israel's agreement to give up the Abu Rudeis oil fields. In any event, that kind of an agreement, of course, can have a very serious economic effect on our country. Have you taken that into full account? And if so, how?

Secretary KISSINGER. Well, we don't believe that it can have a serious effect on the economy of the country for the following reasons. Our agreement with Israel has three parts. One is that we would assist Israel in expanding its oil storage capacity from 3 months to a year. This is done, in part, to reduce our later liability. Second is that Israel is required to purchase its own oil on the open market under all normal conditions. If its normal sources should, for some reason, refuse to sell, then under conditions in which there is no embargo of the United States, the United States has agreed to purchase oil from other sources. That should have no effect at all on the American consumption of oil, because there would be no conditions of embargo and it would simply substitute—

Senator PROXMIRE. Well, it would have some effect on the availability of oil in America?

Secretary KISSINGER. Not really, because assuming that Israel gets oil now from Iran, then we could pick up the oil. I think the total availability would not diminish. Under conditions of embargo, however, then we have agreed to apply to Israel the same criteria of sharing that is applied to the IEA. It is not part of the IEA. Now what does that mean? It means that Israel would have to accept consumption restraints; second, that in determining what Israel can purchase, one would have to consider its oil storage capacity which, by that time, would be at the level of about a year, or which we are trying to build up to the level of a year. And within the framework of Israeli consumption constraints and storage capabilities, we would then agree to help Israel in the purchase of oil. Since, under normal conditions, the Israeli requirements are only 140,000 barrels a day, compared to the 6½ million that we import, if you deduct from this the consumption restraints that would have to go into effect and the calculations for the storage capacity, you are down at around 100,000 barrels a day, which could have no significant effect on our economy.

Senator PROXMIRE. Sir. I have to run to a vote, but I think I can ask one more question. Do you feel that the U.S. Government should have an opportunity to review and approve the substance of any agreement between Saudi Arabia, for example, and Aramco, or by any other OPEC country with American oil companies? The reason I ask this is I have a statement by the Saudi Minister of Petroleum and Mineral Resources who, in response to a question, said the following:

I do not think Saudi Arabia wants a drastic increase. It wants an increase, yes, but not of 35 percent. Those who want this above all are the oil companies. It is obvious when prices rise, their profits go up. And if the system does not change, if, for example, Saudi Arabia does not take 100 percent control of Aramco, as we hope to do in the future, they will continue to seek increases.

So that the negotiations between our oil companies and Saudi Arabia and other oil-producing countries are pretty one-sided on the side of higher prices. And it seems to me that we ought to have some

opportunity for the Congress, as well as the administration, to know about that and have an opportunity to pass on it.

Secretary KISSINGER. Well, to the best of my information, the agreements between oil companies and Saudi Arabia and other producing states do not involve price. They may involve production, but the price is set by OPEC at its regular meetings. Obviously, if it were true that our companies were setting price in cooperation with the oil producers, this would be an important issue of national policy.

Senator PROXMIRE. Well, whatever they involve, the price would be affected. If it involved production, the price would be affected.

Secretary KISSINGER. My impression is that the price and production levels are set at OPEC meetings. I have seen no evidence that it is the oil companies that are pressing for higher prices. If evidence to that effect appears, I repeat, we would have an important question of national policy that we would have to deal with.

Senator PROXMIRE. Thank you, sir. I have to run for a vote.

Chairman KENNEDY. Congresswoman Heckler.

Representative HECKLER. Thank you.

Mr. Secretary, I do welcome your presence this morning. I quite agree with you that the issues of energy policy and foreign policy are interrelated. I think you have quite appropriately asked the Congress for a coherent energy policy.

But I would ask you, sir, for a coherent foreign policy and in a specific regard. As you know, I represent a region of the country, as does Senator Kennedy, that is particularly susceptible to manipulation by foreign oil producers, since we have been traditionally very dependent on foreign oil. We, incidentally, lead the country in terms of our conservation record; a record of 17 percent reduction in the use of home heating oil. We simply can't afford to cut any more.

Keeping that situation in mind, I refer to public statements issued by the Shah of Iran when he was visiting the United States. We all know that the Shah led the dramatic price increase in oil prices, and was a principal advocate of OPEC increases in 1973. During his visit to the United States, or very shortly thereafter, when the testimony appeared in the press that despite the long-term friendship which has been always existed between the two countries and so forth, the Shah stated that there would be another oil price increase and that he was advocating that.

And frankly speaking, many of the constituents that I represent were outraged by his statements.

Now, I think that energy policy and foreign policy have to be interrelated. And I question what you have done in the past or intend to do in the future on a bilateral basis to provide some input into the Shah's thinking. There has to be some relationship on a quid pro quo basis. I know that the United States has been extremely generous with Iran. We have supplied technical assistance, arms, et cetera. Exactly what has the Shah of Iran done in terms of understanding the pressures that exist within our society? How has he demonstrated his friendship for the United States? What bilateral steps have been taken, or do you intend to take in order to produce a cohesive policy on this subject?

Secretary KISSINGER. First, with respect to the increase in prices, an increase in the OPEC price can result from two factors: One, from

intellectual leadership and the second from the capacity to affect the price. In terms of intellectual leadership, the Shah can provide a formidable input. In terms of his capacity to actually increase the price, it is extremely limited, because he is operating fairly close to capacity, as it is, and he cannot afford to cut his production very much because of his heavy import program. So he is actually in a position that he would like to expand his production and his pressure for price increases derives from the fact that his imports are reaching a point where the balance of payments may shift against him.

But, his objective ability to manipulate the market is extremely limited. The objective ability to manipulate the market of several other oil producers that are less vocal in their statements is much greater. And as your chairman pointed out, the ability, for example, of Saudi Arabia to cut its production and therefore to sustain a higher price is much greater than that of Iran and the same is true of several other countries.

Second, you asked about the role of Iran in the Middle East. The role of Iran in the Middle East in its widest sense has been on the whole as a stabilizing force, as a steady friend of the United States. He did not join the oil embargo; he did not involve his territory during the Middle East war of October; and he has, in foreign policy terms, been generally, not invariably, but generally supportive of our overall objectives.

We have also an agreement with Iran, which was signed on the occasion of the Shah's visit here, for a two-way trade of \$26 billion over, I think it is, a 5-year period and most of it is the purchase of American equipment in the United States and—

Chairman KENNEDY. Military equipment, isn't it?

Secretary KISSINGER. Well, some of it is military equipment and some of it is nuclear plants and some of it is other equipment. But a good part of it is military equipment.

So this provides some economic benefits for the United States. The point I want to make is we do not approve of the statements that the Shah has made; that is, we disagree with him. And we have said so to him; some members of the administration publicly, but most of us privately. And he can have no misapprehension about our views.

At the same time, the actual ability to manipulate the oil price does not reside in Iran. Whatever influence he has derives from whatever influence he has on the others.

If we withheld trade or military goods from him, it would only shift him to Europe and it would destroy the traditional friendship without changing the economic realities.

Representative HECKLER. Thank you, Mr. Secretary. Of course, your perception of the Shah's ability in this area is more sophisticated than that of my constituents, who see the image, but perhaps not the reality. But, in fact, his rhetoric was inflammatory. And I am somewhat reassured you have spoken to him on the subject.

But, I do ask you further, what approaches are available to you on a bilateral basis to deal with our foreign partners and to make them aware of domestic pressures? Because while you are the Secretary of State, nonetheless the energy questions and the implications for domestic policy have to be a factor in terms of what the United States can offer to its foreign partners. And I question what is the scope of

this bilateral ability to influence the OPEC leaders and so forth to make them aware of American domestic pressures and needs.

Secretary KISSINGER. At every meeting with OPEC countries, we are making clear our view with respect to the oil price along the lines that I have outlined here and about which I have made two other public pronouncements this week. The President has approached these leaders, and we know they have no doubt about our view. The problem is that as long as they have the market power, we are confined to exhortations. If we engaged in political and economic warfare against them, under present conditions, probably the victims would be those countries that have generally been most supportive of us, it would play into the hands of the most radical elements and would almost certainly split us from our European allies.

Therefore, we have considered it to be our primary objective to create conditions in which the market power does shift, because that is the only reliable basis on which we can appeal to them, other than on the basis of our general relationship.

Representative HECKLER. Mr. Secretary, during your testimony in response to one of the questions addressed to you, you stated that the most important method of achieving a program of conservation was through decontrol policy. Now, that is a restatement of your phrase, but I think that was the substance of your comments. I am at a loss to understand that. I can understand how the advocates of decontrol assert that decontrol is a key mechanism to achieve self-reliance in energy, but I do not understand how decontrol has to be or is the most essential element in a conservation policy. Would you explain that, please?

Secretary KISSINGER. My basic point is that 2 years after the energy crisis developed, we still do not have a coherent energy policy passed through the Congress. Decontrol will encourage more production and may spur the development of alternative sources, and should reduce consumption. And the combination of all of these three factors will help us shift the market conditions, but another combination that might have been passed by the Congress might also have achieved this. I am openminded.

But under present conditions, this seems the most effective and the most rapid means of proceeding. You should also keep in mind that all other industrialized countries have accepted higher prices as a means for reducing their consumption. Every other industrial country has done this.

Representative HECKLER. I understand, but my time limit has expired. Thank you.

Chairman KENNEDY. Congressman Reuss.

Representative REUSS. Thank you.

Welcome, Mr. Secretary. Let's talk about your trail-blazing February 3 Press Club speech—

Secretary KISSINGER. I was afraid you would.

Representative REUSS [continuing]. In which you advocated a floor on oil prices the world over. That bothered me, and most of the people I talked to, and so we held hearings during the first part of this year on whether that was a wise policy or not. And in the report of our International Economics Subcommittee of the Joint Economic Com-

mittee of June 27, 1975, we issued a very clear black letter recommendation, and I will quote:

The U.S. Government should cease immediately its efforts in the International Energy Agency to set a minimum import price until such time as the Congress authorizes the Executive to seek such an agreement.

Has the State Department followed that recommendation?

Secretary KISSINGER. No.

Representative REUSS. Why not?

Two reasons I ask this: One, if you want to hold this view, I suppose there is nothing we can do to exorcise it from you. Shouldn't you really pay some attention to what Congress says, however misguided we and the rest of the country are? You know, we couldn't get a witness, outside of the State Department, to put in a good word for the import price floor.

Secretary KISSINGER. Well, as I understand it, this was a subcommittee view of this committee, and it was studied with respect, but—

Representative REUSS. Are you suggesting that subcommittees are not sufficient?

Secretary KISSINGER. No; but when you said that we should take Congress seriously, it implied that it was the view of the entire Congress.

Representative REUSS. Well, on that, the President, in January, right after this idea had first surfaced, did send up proposed legislation which, had it been enacted, would have given the administration the authority to negotiate with other countries to set a common price floor for oil imports. That legislation has not been favorably considered. Do you require Congress to pass a specific affirmative bill to negate any idea that anybody in the State Department may have at some point, before you get the idea?

Secretary KISSINGER. Well, we would certainly put before the Congress, in some form, any result of the negotiations in which we are now engaged. Therefore, if the Congress wished to support it, it undoubtedly would have an opportunity to do so.

Our judgment has been that the minimum safeguard price was needed to encourage alternative sources of energy, to prevent unfair competitive advantages to other countries and finally to prevent predatory pricing by the OPEC nations.

Representative REUSS. Now, this idea of an international cartel to prevent price cutting, wasn't that the very idea of the Standard Oil Co. in the bad old days, and didn't they call any price cutting that they didn't like "predatory price cutting"?

I personally think a little predatory price cutting in oil would be a good thing.

Secretary KISSINGER. Well, the dilemma is this, that without alternative sources, the price of oil is going to go up, and you will not get alternative sources unless there is some protection against the downside pricing. The only time you are likely to get substantial price cuts is after you have encouraged substantial development of alternative sources. So, we are caught in a vicious circle. If we do not have alternative sources, we will never get any price cutting, predatory or otherwise. If you do get a substantial program of alternative sources, then somewhere around the world those who now hold a monopoly market

position may wish to preserve their monopoly market position by a temporary predatory cut of prices that would be ruinous to the alternative sources.

I would also point out that the minimum safeguard price we are talking about is substantially below the present price and therefore would permit a substantial reduction of energy prices before it became effective.

Representative REUSS. Well, what was your proposed price?

Secretary KISSINGER. Well, we are in the process of discussing it.

Representative REUSS. Tell us; you know, we would like to know.

Secretary KISSINGER. Well, we have stated it publicly that it would be somewhere between \$6 and \$8, but there has not yet been an agreement on it.

Representative REUSS. Was your view, Mr. Secretary, that you were helping the industry search for alternative sources of energy in this country at all shaken by the fact that industry unanimously, particularly the oil industry who testified before this subcommittee, said that they didn't want it?

Secretary KISSINGER. Because they like high prices.

Representative REUSS. Well, whatever the reason—

Secretary KISSINGER. Yes; but the reason that they don't want it is because, or they may not want it, is because—

Representative REUSS. They may like higher prices, but they were quite clear that they were willing to take the risks without your help in guaranteeing them high prices. Didn't that cause the State Department to reevaluate its proposal in any way?

Secretary KISSINGER. Many of them want to develop energy outside of the United States, and we are interested in developing energy within the United States. I think their objectives are quite different from ours. Their objective is maximum profit. Our objective is maximum invulnerability for the United States.

And with all due respect to the oil companies, I have not seen that their judgment of the long-term national interest is always conclusive.

Representative REUSS. Since June 27, 1975, when we issued this recommendation, have State Department officials in their international dealings with other countries on the oil import floor, called to the attention of the people with whom they were dealing that the Joint Economic Committee's subcommittee had recommended:

The U.S. Government should cease immediately its efforts in the International Energy to set a minimum import price until such time as Congress authorizes the Executive to seek such an agreement.

Was that fact made known by your State Department people?

Secretary KISSINGER. Mr. Enders, who is in on the negotiations, has whispered to me that he has called it to their attention.

Representative REUSS. Good. May we be assured that that will become standard operating procedure to make sure, Mr. Enders, that anybody you talk to knows that the Joint Economic Committee's subcommittee is opposed to the policy you have enunciated?

Secretary KISSINGER. We will make sure to make this view known.

Representative REUSS. Thank you very much.

Chairman KENNEDY. I think you are next, Congressman Moorhead.

Representative MOORHEAD. All right.

Secretary KISSINGER. Excuse me, but Mr. Enders tells me that your views have, in fact, been made, I assume, textually available to the IEA governing board.

Representative REUSS. Well, that is fine. And are those the only people you talked to?

Secretary KISSINGER. That is the forum in which we are discussing the minimum safeguards.

Representative MOORHEAD. To follow up on that, Mr. Secretary, would I be correct that your concern is the economic energy dependence of the United States, and you think that the minimum world price is necessary to do this. If the Congress could come up with proposals, or the administration, for guarantees to producers of alternative sources, such as those who produce coal gasification or liquefaction, as an example, that they would be guaranteed a minimum price so that there would be alternative sources, wouldn't that domestic decision coincide with your objective of your world price proposal?

Secretary KISSINGER. Our principal objective is to increase the invulnerability of the United States and to give a maximum incentive for the development of domestic alternative sources of energy. A subsidiary objective is not to be in the position where our exertions bring about a situation where other countries become low-energy consumers as the result of our unilateral efforts. And this is why we have attempted to achieve an international agreement also to enable other countries to participate in our program and to benefit from it. If there are other methods to achieve these objectives, we are absolutely open-minded about it.

Representative MOORHEAD. I think this is what the general sentiment in the Congress is, that we are willing to have purchase agreements with those who would produce gas through gasification of coal or oil through liquefaction, so that they would be protected in the case that the OPEC countries should suddenly decide to drastically drop their prices. It seems to me that the world price agreement really adds glue to holding the OPEC countries together, whereas other devices, which would assure our production of alternative sources, would not have the effect of holding the OPEC countries together.

Secretary KISSINGER. Well, first of all, the minimum safeguard price we are talking about would not really help with some of the high technology production; for example, shale oil I understand would be in the area of about \$14 and would require subsidies or incentives of a special sort anyway, even if there were a minimum safeguard price. Now, the last thing that we want to do is to contribute to holding OPEC together. So this is not intended as a minimum price for OPEC.

The world price could fall to whatever level it would fall, and countries could compensate for this by import duties, and thereby benefit from the lower energy prices, which the alternative sources program would hopefully, over a period of time, bring about. So we have attempted to combine the ability for the price to fall with a minimum safeguard price.

Representative MOORHEAD. What is your view on the proposal that the United States purchase oil through secret bid processes?

Secretary KISSINGER. Frankly, I haven't thought it through, but I am familiar with the proposal, and I believe that what governs the

price ultimately is the market power and relationship between the production and the consumption. And I would assume that in secret bids, you would wind up with a prior agreement among many of the OPEC countries as to quantities and as to bids that are made.

But I would like to think about it a little more before making a final judgment.

Representative MOORHEAD. Thank you, Mr. Chairman. Mr. Secretary, I thank you. I know the Secretary's time is limited, so I defer in favor of my colleagues.

Chairman KENNEDY. Mr. Secretary, I listened with considerable interest to your exchange with Congresswoman Heckler, about various statements made by the Shah of Iran, and also while you reviewed our relationship with that country. One thing which is troublesome to a great many Americans is the appearance, and to a substantial degree the reality, of these countries, particularly Iran, spending billions of dollars on the purchase of American arms, coupled with their having to meet their own internal economic responsibilities. So after they buy arms, they then need additional resources for programs of economic expansion and development. So then they raise the price of oil.

Aren't we in a situation where the American consumer, the homeowner, the factory worker, and the businessman are really paying for the military programs of these Persian Gulf countries?

I know you and the Secretary of Defense have stated that, if the United States doesn't sell them military equipment, maybe West European countries will do so, or they may go to the Soviet Union. I think the Shah has mentioned that in some of his news interviews.

But have we really tried to work with our allies in Western Europe to get some kind of moratorium on the flow of arms into the Persian Gulf? Have we raised this with the Soviet Union? And if we have done it, what kind of response are we getting?

If we haven't tried this approach, do you think it is worth pursuing?

The Shah has made some useful statements, with regard to prohibiting nuclear weapons in that part of the world, and has provided leadership on that issue; but it seems to me in the conventional area there is also an important responsibility. I think this responsibility falls on the United States; as well as other arms suppliers. I am interested in knowing whether we are attempting to gain control over arms sales with our allies and the Soviet Union.

If not, why not? And what are we trying to do, not only with Iran, but also with Saudi Arabia and any of the other countries that are involved?

You are aware of the statistics: That in the Persian Gulf in fiscal year 1974, \$4.4 billion was spent on arms, and \$4.3 billion was spent in fiscal year 1975. This includes the hottest military equipment the United States Armed Forces have. Generally, in an area with traditional instabilities, this really doesn't make sense in terms of our foreign policy.

Secretary KRISSENGER. With respect to your first point, I believe the sequence was the opposite. I think the sequence has been that the oil prices went up, that tremendous surpluses went up, and only after the surpluses went up and only after the surpluses existed, was the money

spent for military equipment. So I think it is not the equipment that is driving the price; it is rather the price that is driving the purchases.

Chairman KENNEDY. That may have been the case in prior years, but it is certainly not true now. We read about capital shortages in Iran and other oil-expanding countries, and we are aware of requests that are in the Defense Department for approval of various arms purchases. What I am interested in is both today and what is going to happen in the future. Quite clearly, the trend is upward.

Secretary KISSINGER. Well, your second question was a more fundamental one, which really was independent of the first; namely, whether there has been a systematic consideration with Western Europe on an agreed limitation of the sale of arms into, for example, into the Persian Gulf or maybe into the entire Middle East. Let us take the Persian Gulf to begin with.

I have to say that there has not been such a discussion on a systematic basis. There has been some very general discussion of a very inconclusive nature. It is, however, a subject that we ought to look into. And I think we—

Chairman KENNEDY. Does that mean you will pursue it?

Secretary KISSINGER. I will look into this. I will look into the attitude of the Western Europeans to this particular problem that you have raised.

Chairman KENNEDY. I know that in an earlier exchange there was a question about exchanging U.S. food for Soviet oil. I understand that the Secretary of Agriculture, before the Agricultural Committee, has indicated that this wasn't really possible, because the Soviet Union doesn't have sufficient quantities of oil. Yet if it is in the interest of the Soviet Union to purchase large quantities of agricultural products from the United States, why shouldn't we play with a hard ball, so to speak, in trying to obtain from them the oil which is so important to us?

Secretary KISSINGER. Altogether, the Soviet Union is not exporting quantities of oil that would be the greater part of our import requirements. We are, however, discussing with the Soviet Union now concurrently a long-term grain deal and separately, we are having discussions with the Soviet Union about the purchase of oil from the Soviet Union.

Chairman KENNEDY. The purchase of oil from the Soviet Union?

Secretary KISSINGER. The purchase of oil from the Soviet Union. And we are trying to put both of those on a long-term basis. We are further advanced in our grain discussions than we are in our oil discussions, but they are being pursued in the same general timeframe.

Chairman KENNEDY. What quantities of oil are we talking about?

Secretary KISSINGER. I would be reluctant to discuss this at a time when the negotiations are in such a preliminary stage.

Chairman KENNEDY. Are you hopeful about that?

Secretary KISSINGER. I am so far, I am fairly hopeful. And there could be a second aspect to it in which in return for some American technology, which will increase the production, some additional purchases of oil could be made, but that would be handled separately.

Chairman KENNEDY. When will we know about these negotiations; this year or the first of next year?

Secretary KISSINGER. I would expect we would know during the course of this year, during the course of the next 2 months.

Chairman KENNEDY. Finally, Mr. Secretary, you talked about the importance of conservation, plus developing alternative sources of energy, which I agree are extremely important. But what cost are we willing to pay—in terms both of the American consumer and of what this does to our economy and economic relations with Western Europe and other industrialized countries? I am sure you are familiar that a number of West European leaders have said that they are as concerned about the U.S. export of inflation and recession as about the development of a U.S. energy policy. Aren't you concerned about the implications of energy policies in relation to domestic inflation and recession, and how this relates to our allies abroad? Don't we have an important responsibility in restoring our own economy in terms of these relationships?

Secretary KISSINGER. I agree very much with your comments in your opening statement about the need and about the responsibility the United States has, not only for its own economic recovery, but for the recoveries of other parts of the world. There is no question that Western Europe and Japan are looking to the U.S. recovery as a means also of escaping their own recession.

Therefore, in our economic policies, we must be sensitive to their requirements.

We are now having, I think, the most intimate consultations that have taken place between us and our allies about economic progress and about economic coordination of our policies. And we are trying to strike a balance between the necessities of the economic recovery and the requirements of the energy problem.

I must note that all of our European allies have more substantial conservation programs than we do, so they must have assessed the inflationary impact about as we did.

Senator PROXMIRE [presiding]. Mr. Secretary, I want to apologize for all of us. Of course, we have had a series of votes, as you might expect, and that is why the chairman had to leave and why I had to leave several times during the course of your presentation on this very important issue.

I would like to ask a few more questions. I realize your time is just about up, but I would appreciate it if you would give us a couple of more minutes. Can you tell us what magnitude of price increases you expect in the next round of discussions with the OPEC nations and what effect this will have on the world economic situation, not only in this country but worldwide?

Secretary KISSINGER. If I admit that I expect any price increases, I will be accused of having brought them about. But I would think that any price increases would have an unfortunate effect on the world economy. They would have the tendency in the industrialized countries to slow down recovery, because of the fear of renewed inflation. They would have a very bad effect on the developing countries.

And as I pointed out in my statement, by reducing the consumption of oil, it would give the producers another incentive to increase that price in the next round in January or February.

Senator PROXMIRE. Is there a realistic prospect that we might be able to avoid a price increase still?

Secretary KISSINGER. We are still hopeful, but many experts think differently.

Senator PROXMIRE. Mr. Secretary, you were referring to the need for conservation and the need for making us as invulnerable as possible to foreign producers. How much are you willing to pay for invulnerability? Are you willing to pay just any cost imposed on the American consumers?

Secretary KISSINGER. Of course, my basic argument is that the cost that we impose on the American consumer we can recover, in part, through taxation and can be returned as a benefit to the American consumer. We would like to avoid the situation in which outside forces, whose interests are not necessarily compatible with our own, can impose the costs at will.

Obviously, a point will be reached, or can be reached, where costs may become exorbitant for the American consumer where we will have to take our chances. But to the extent that we can avoid it, we believe it is in our national interest to make a major effort to increase our invulnerability and so far the costs that have been discussed seem to us to be manageable.

Senator PROXMIRE. Well, might not the cost of the price increases by the oil producers be less than the \$2 tariff? Isn't that a possibility, a strong possibility?

Secretary KISSINGER. That is correct, but it is also possible that the \$2 tariff is keeping the price rise below \$2.

Senator PROXMIRE. Well, how do you reason that?

Secretary KISSINGER. Because if our consumption is not reduced, and if the oil producers do not see a program for alternative sources, their capacity to set the prices internationally is unlimited. And we might then see a repetition of some of the decisions that were made in 1973, where you had a very rapid and a very substantial increase in the price of energy.

Senator PROXMIRE. Well, so much of our policy depends on your assumptions of elasticity of demand as to whether or not higher prices are going to reduce consumption, it seems to me we have had a couple of years with very sharp increases in energy prices. You admitted that the consumption has not been reduced significantly. What evidence is there that if we get a further increase, a substantial further increase, that there is going to be an effect on consumption?

Secretary KISSINGER. But you have to compare the reduction in consumption not just from what it was in 1973, but from what it would have been without the increases in prices; some of which have been imposed by others and some of which have been imposed by us.

Senator PROXMIRE. Well then, you also have to crank in the fact we have been in a recession, with heavy unemployment.

Secretary KISSINGER. That is right.

Senator PROXMIRE. And for that reason, we consume less.

Secretary KISSINGER. That is right. So, at this moment, all you can say is we are well below the consumption trends, but there are many factors and they are not all working in the same direction.

Senator PROXMIRE. I just have one more question. In a number of your public statements you seem to be leaning in the direction of estab-

lishing stockpiles of scarce commodities or resources in order to live through future embargoes of any kind. Is this an accurate representation of your views?

And if so, how do you plan to establish these reserves?

Secretary KISSINGER. No, the furthest I think I have ever gone is to say we are considering them and to speak favorably in one of the cases that buffer stocks would equalize price trends. But we have not formulated a conclusive opinion on that subject.

Senator PROXMIRE. Thank you very much, Mr. Secretary. We so much appreciate your appearance. It has been a historic day for the committee and subcommittee. We have not had a Secretary of State appear before us before.

The subcommittee is adjourned.

[Whereupon, at 12:55 p.m., the subcommittee adjourned, subject to the call of the Chair.]

