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ECONOMIC IMPACT OF OIL DECONTROL

HEARING
BEFORE THE
SUBCOMMITTEE ON ENERGY
OF THE
JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES
NINETY-SIXTH CONGRESS
FIRST SESSION
—
APRIL 25, 1979
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ECONOMIC IMPACT OF OIL DECONTROL

WEDNESDAY, APRIL 25, 1979

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

The subcommittee met, pursuant to notice, at 10:05 a.m., in room 2228, Dirksen Senate Office Building, Hon. Edward M. Kennedy (chairman of the subcommittee) presiding.

Present: Senators Kennedy, Javits, McClure, and Jepsen; and Representatives Brown and Rousselot.

Also present: John M. Albertine, executive director; Louis C. Krauthoff II, assistant director-director, Special Study on Economic Change (SSEC); Jim Cubie, William D. Morgan, David Moulton, and George R. Tyler, professional staff members; Mark Borchelt, administrative assistant; Katie MacArthur, press assistant; Charles H. Bradford, minority counsel; and Stephen J. Entin and Peter Turza, minority professional staff members.

OPENING STATEMENT OF SENATOR KENNEDY, CHAIRMAN

Senator KENNEDY. The subcommittee will come to order.

Americans are deeply suspicious that the energy crisis is not real, that it is just an opportunity for higher prices and profits. Our economy needs a sound energy policy. In a democracy, people must believe that energy policy is fair if that energy policy is to be a solid basis for the economy.

It is clear that the direct economic costs of decontrolling oil prices will be very large—between \$50 and \$80 billion through 1985. The average household energy bill will increase by over \$300; inflation will be higher than ever.

And inflationary costs will be even higher than predicted if the American people believe that the decontrol decision is unfair. For instance, will unions moderate their wage demands to 7 to 10 percent if oil prices are raised by almost 50 percent next year? Estimates that oil decontrol would add a point to the inflation rate do not include the indirect inflationary effects of higher wage settlements as a result of decontrol.

The loss of public trust in the fairness of an energy policy may be even more costly than the direct costs to the consumers.

The only substantial new policy initiative in the April 5 message was the decision to raise the price of oil. Will the public view this decision to decontrol oil prices as a courageous decision in response to a real crisis, or will they think that the oil companies simply grabbed the Iranian shutdown as a potential opportunity to force oil decontrol?

It will be hard for many to see oil decontrol as more than political opportunism because in the period in which Iran's shutdown can affect us, oil decontrol will have practically no effect on supplies or consumption.

Ironically, if there are any shortfalls from the Iranian shutdown, public trust and cooperation will be essential to the success of voluntary programs to curtail consumption.

President Carter has correctly observed that a national energy policy must be regionally and economically fair. The fifth guiding principle of his national energy plan reads: "The United States must solve its energy problems in a manner that is equitable to all regions, sectors, and income groups."

Is the proposed oil decontrol policy regionally fair? It does not appear to be to me. Oil is the predominant fuel in certain areas of the Nation. The New England States have already conserved more than any other region, yet they will bear the brunt of this oil price hike. Between 1973 and 1977, energy use in New England declined by 3 percent, while it was increasing nationally by almost 14 percent. Why should the region that is doing the most to conserve energy now be asked to do even more? If energy is a national problem, should not its burden be borne nationally?

Decontrolling oil prices means that energy prices of the predominant fuel in the Northeast will be set under one set of rules, while energy prices of fuels predominant in other regions will be set by another set of rules.

Decontrolling oil prices means that every barrel of oil sold will cost \$15—it will be priced at the margin—even though some of this oil costs only \$1 or \$8 or \$10 per barrel to produce. Electricity and natural gas prices are regulated so that the prices of "old" electricity and natural gas are set at a lower price than new electricity or natural gas. Electricity from new plants is twice as expensive as the average cost of electricity.

Will consumers who buy oil at the margin believe an energy policy is fair that maintains electricity and natural gas prices based on average costs? Should not consumers of heating oil be protected by a two-tier pricing system just as electricity users are protected by average-cost pricing? Or is the administration proposing doubling electricity prices so it too will be sold at marginal cost?

Fairness to all economic groups is also fundamentally important. According to a DOE advisory committee, last year low-income families were spending 33 percent of their budget on energy, whereas medium-income families were spending 10 percent on energy. This disparity means that when prices of gasoline, oil, natural gas, and electricity soar at the rate of 25 percent, as they have this year, the low-income energy budget climbs three times faster than the medium-income budget. The relief proposed in the April 5 message is completely inadequate. It is only one-fifth as much as DOE's own advisory committee recommended.

Finally, the administration has decided to let the market determine the price of oil, but it has not decided whether it will subsidize refiners. I do not agree with the administration's assumption that OPEC prices are free-market prices, but if the administration believes the market can work, why is it uncertain about proposals to subsidize U.S. re-

finers? If the market is the best mechanism to set oil prices, isn't it also the best mechanism to control oil refiners' profits?

These are a few of the issues that this hearing will address.
Senator Jepsen.

OPENING STATEMENT OF SENATOR JEPSEN

Senator JEPSEN. Thank you, Senator.

Energy is a matter of great importance to everyone in America today. Is there a crisis? Will we have adequate energy supplies in the future? Will there be rationing or another oil embargo? These are just a few of the questions on the minds of Americans.

For too long the Congress and the President have been waffling on the energy situation. They have essentially allowed foreign nations in the OPEC cartel to make our energy decisions for us. And efforts to deal with the energy problem, such as President Carter's energy plan of 2 years ago, have been largely politicized and misdirected.

I believe that the way to solve the energy problem, avoid rationing, and reassert American control over U.S. energy policy is by encouraging the development of new domestic energy sources. This means removing price controls on oil, natural gas, and gasoline, encouraging the development of new energy sources—such as oil shale and solar power—and proceeding with careful, safe development of nuclear power.

The unfortunate fact is that no matter what we do, the price of all energy is going to rise, as it becomes increasingly costly to produce. Decontrol will also increase the price of energy. But this need not cause any harm to our economy.

Many people assume that the vast increase in energy costs which has taken place since the Arab oil embargo is responsible for our present double-digit inflation. This is not correct. The Germans and Japanese, for example, import a much higher percentage of their domestic oil requirements than we do, yet they have not suffered from inflation as the United States has.

Furthermore, the increase in the price of any good, even one as critical to our economy as energy is, does not effect the general price level unless it is accompanied by monetary expansion. An increase in the price of oil is no more inflationary than a reduction in the price of pocket calculators is deflationary. Only an increase in the quantity of money will increase the general price level. In the absence of this, there will only be changes in relative prices.

In fact, I would go so far as to say that far from being inflationary, oil decontrol will reduce prices. The reason I say so is this: If the price level depends on a relationship between the quantity of money, on the one hand, and the quantity of goods, on the other, then any measure which increases supply will reduce prices. Since decontrol will certainly lead to an increase in oil production, all other things being equal, therefore, prices will decline.

The point I am getting at is this: What we all want is more energy, and we ought not to let the prospect of having to pay more for it turn us away from doing what is necessary to get more energy.

For almost 8 years, we have had controls on the price of domestically produced oil, while foreigners have been free to charge whatever the

market will bear. Moreover, we have instituted an entitlement system whose effect is to subsidize the importation of foreign oil. Is it any wonder, therefore, that the percent of oil produced domestically has declined while the percent of oil imported has increased?

President Carter has finally proposed doing away with this absurd situation by decontrolling oil at last. Unfortunately, at the same time, he has proposed an excess-profits tax which may undo much of the good which would come from decontrol. If you assume that a price control is equivalent to a 100-percent tax rate, then it makes no sense to decontrol the price and replace the controls with explicit taxes. You simply undo with one hand what you have done with the other.

The only sensible thing to do, if it is necessary to have an excess-profits tax, is to combine it with a plowback provision which would require the oil companies to put their profits back into domestic energy development. It makes no sense at all to simply impose a tax and give the revenue to Government. The money will just get squandered on useless boondoggles which do nothing to increase domestic energy production. I have to believe that we will get a lot more energy by providing incentives for the experts in the private sector than by establishing an energy pork-barrel fund.

Senator KENNEDY. Congressman Rousselot.

OPENING STATEMENT OF REPRESENTATIVE ROUSSELOT

Representative ROUSSELOT. Thank you, Mr. Chairman.

In 1920, George Smith, director of the U.S. Geological Survey, said: "The position of the United States in regard to oil can best be characterized as precarious." And the Secretary of the Navy called for immediate nationalization as the only remedy.

In 1926, the Federal Oil Conservation Board estimated the United States only had a 6-year supply of proved reserves. In 1939, the Interior Department predicted that we only had a 13-year supply.

In the late 1940's, the Government warned that the end of U.S. oil supply was almost in sight, and economists such as John Kenneth Galbraith urged that wartime controls be continued on the petroleum industry to combat this problem. Fortunately, such advice was ignored, and we went on to enjoy a 25-year period of cheap, abundant energy.

If there are 600 billion barrels of proven oil reserves today, and the world is now consuming oil at a rate of roughly 20 billion barrels per year, the forecasters predict with great assurance that the world's oil will disappear in 30 years' time. What they overlook is that neither oil reserves nor the rate of consumption are fixed quantities.

To a large extent, both are products of human will and action, particularly when human beings are allowed to respond to the signals of prices on the free market. For if prices are free to respond to supply and demand conditions, then an increasing scarcity of oil will cause its price to rise.

A higher price will have two effects: Users will be induced to lower their consumption of oil and shift to other sources of energy; and oil men will have a greater incentive to look for, and discover, increased reserves.

There are enormous amounts of oil in the ground and under the sea, which only need to be found, and therefore get included in the official "reserve" when they are actually discovered and when people

go out and look for them. The eagerness and intensity that people will devote to the costly process of searching for oil depends on the price that people expect oil to bring. In other words, the higher the price incentive, the more oil will be sought, and the more oil will be discovered.

Even the story of how oil came into general use illustrates this process. Until the mid-19th century, oil was only an unwanted black ooze, an annoying waste product of nature. It was not a resource at all.

Then, as whales began to disappear and the price of whale oil for lighting rose ever higher, people responded to these price incentives and discovered the technology to use kerosene for lighting. Kerosene became a far better and cheaper source of light than whales had ever been. And I guess that would be in vogue today; we wouldn't be killing whales.

Oil had been converted from a useless product of nature into a resource by human beings devoting their creative energies to the problem of lighting, in response to the supply and demand signals of the free market.

At the 10th World Energy Conference in Istanbul last September, the consensus was that remaining recoverable reserves in the world probably exceed 2 trillion barrels, a 100-year supply even at current rates.

Last April, the Department of Energy's own Energy Research and Development Administration completed an investigation of gas supplies called the market-oriented program planning study—MOPPS. The study, which estimated that at \$2.25 per million cubic feet the United States would be awash in natural gas and at \$2.50 we would have about a 50-year supply at current rates, evidently did not provide the conclusions the administration desired.

So the ERDA brass sent the report back for a more pessimistic answer, which they duly received. But apparently it was not pessimistic enough, so it was sent back a second time. The second revision, however, still projected a 50-year supply at a price of \$3.25 per million cubic feet. Thus even the re-revised answer gave the lie to the administration's statement "that even if we increased the price of oil to \$20 a barrel, there would be little, if any, increase in our production and the same is true in the price of natural gas."

Another point, over the past 3 years the world's proven reserves of crude oil have risen by over 15 billion barrels while consumption has grown at only about 1 percent per year compared to 7 percent per year previously.

In addition to slowing the growth in consumption, higher prices have brought about an increase in supplies outside the OPEC countries. This has put competitive pressure on OPEC, holding their production at roughly 31 million barrels per day, nearly 10 million barrels a day below capacity, and at the same level as 1973.

In January of this year, OPEC countries were forced to cut production by 4 million barrels per day due to lack of markets. As a result, OPEC has been unable to increase prices over the past year. In fact, in constant dollar terms, correcting for the general inflation, my belief is they have cut prices.

The Department of Energy costs \$12 billion a year, which is \$4 for every barrel of domestically produced crude oil, or about as much as the profits of all the major U.S. oil companies combined.

The difficulty of finding genuine and disinterested support for a systematic policy for freedom is not new. Lord Acton long ago described how:

At all times sincere friends of freedom have been rare, and its triumphs have been due to minorities, that have prevailed by associating themselves with auxiliaries whose objects differed from their own; and this association, which is always dangerous, has been sometimes disastrous, by giving to opponents just grounds of opposition.

Now, I believe that, Mr. Chairman. We are privileged to have our witnesses here today, and obviously, I have some questions I want to ask, too.

Senator KENNEDY. We welcome the Congressman's participation, obviously, and we will look forward to getting started on our testimony of Mr. Schlesinger, Mr. Schultze, and Ms. Rivlin.

We look forward to your testimony, and your prepared statements, without objection, will be made a part of the hearing record.

Mr. Schlesinger, please proceed.

**STATEMENT OF HON. JAMES R. SCHLESINGER, SECRETARY,
DEPARTMENT OF ENERGY**

Secretary SCHLESINGER. Mr. Chairman, if I may, I shall make some introductory comments on the formal statements that you have read and introduce my own prepared statement into the record. I want to thank the chairman in particular for his objective presentation of this material. I think that between the two initial statements that we do have a sound policy, a policy of decontrol and of windfall profits tax.

But if I may, Mr. Chairman, I'll start with some observations on your opening statement, because the statement represents a compendium of misconceptions that threatens to mislead the American people.

In the first place, this is not an opportunity to force decontrol taken up by the oil industry. Decontrol was established by the U.S. Congress in 1975. Decontrol will come inevitably on September 30, 1981. There is only one responsible policy for the administration, recognizing the inevitability of decontrol, thus phasing in the impacts of higher energy prices so as not to disrupt the economy at that later date.

The industry has not forced decontrol, nor has Iran forced decontrol. That was built into the legislation that was passed by the U.S. Congress in 1975.

I think that all of us recognize that the chances of Congress passing an extension of controls are minuscule. Certainly, Mr. Chairman, on the Senate side, the votes are not there; and if the votes were there to pass the legislation, the votes are not there to defeat a filibuster.

Mr. Chairman, I should point out, second, that the control system now applies to 30 percent of the oil that we use, not to 100 percent—30 percent and shrinking. And we have in place a massive bureaucracy to deal with this 30 percent of our oil supply that is under control.

Senator KENNEDY. You don't mind being interrupted right there?

Secretary SCHLESINGER. Let me finish these few points, Mr. Chairman, in my initial comments.

Senator KENNEDY. All right.

Secretary SCHLESINGER. I would be happy to answer questions on my prepared statement, but I would like an opportunity to make some observations on your initial remarks.

Senator KENNEDY. All right.

Secretary SCHLESINGER. As a consequence, the 50-percent increase that you refer to for next year is not an accurate number. The increase in oil prices will be on the order of 11 or 12 percent rather than the 50 percent to which you refer.

The administration has never suggested that international oil prices are a consequence of purely competitive forces. We have recognized OPEC. The effect of failing to produce as much as we can will simply be to strengthen the bargaining position of OPEC and to tend to drive even higher what would otherwise be a slowly rising price of oil.

In other words, the effect of our control system has been to subsidize OPEC by underpricing U.S. oil by something on the order of \$3 or \$4 a barrel, and thus subsidizing imports to the extent that we are subsidizing overall usage in the United States.

New England, Mr. Chairman, fares better than do other parts of this country in two respects. First, it will have the slowest rate of increase of oil prices, because both distillate and residual fuel oil are closer to world market prices than the price of gasoline used so extensively elsewhere in the country.

In addition, the President has called for an elimination of product fees for the interim to ease the burden, particularly on those parts of the country that do indeed use a substantial fraction of oil as energy. New England will, consequently, be better shielded than will other parts of the country. That is by design, and it is a design to help the section of the country from which you come.

Finally, Mr. Chairman, may I observe that the question of public trust is, indeed, essential. Therefore, in order to maintain public trust, Government officials should present accurately the kinds of problems that we face in this country.

I will make one comment with regard to Mr. Rousselot's statement. The Department of Energy budget, which runs about \$10 billion a year, represents three-fourths of the amount used for national security expenditures. Included in that budget is something on the order of \$3 billion for research and development, production, and testing of nuclear weapons. I have never seen why it is that disagreements, which should now fade, with regard to the issue of regulation, involving a very small segment of the Department's budget, should bring into question these other activities that are essential to the United States.

We do not want to see the Trident submarine go weaponless. We do not want to see the cruise missile go weaponless simply because of a dispute over \$200 or \$300 million of a \$10 billion budget. And to use that overall budget as a way of saying that the per barrel cost of oil could be increased by \$3 a barrel, it seems to me, is equally misleading.

The Nation, gentlemen, faces a very difficult problem. We have had, as Mr. Rousselot indicates, 25 fat years. We may be facing 25 lean years, unless we take those measures that are necessary to deal with the energy transition.

One of these measures unquestionably will be to face up to world oil prices and not to insist that, like King Canute, we can command the

waves of the sea to stand still. The administration has supported replacement costs for oil since the time of the national energy plan. That is the right policy to follow. It is a courageous act of the President to face up to the responsibilities that have been thrust upon him by the legislation previously passed by the Congress.

Thank you.

Senator KENNEDY. Thank you, Mr. Schlesinger.

[The prepared statement of Secretary Schlesinger follows:]

PREPARED STATEMENT OF HON. JAMES R. SCHLESINGER

Mr. Chairman and members of the committee, I appreciate this opportunity to appear before you today to discuss the economic impacts of the President's oil pricing program.

In his April 5 address, President Carter renewed his warning of 2 years ago that this Nation's energy problem is serious and getting worse. This has been strongly underscored by trends in projected oil capacity. In the last two years, each new assessment has resulted in additional downward revisions of estimated OPEC capacity by 1985. Recent developments in Iran have again led to reduced estimates of prospective capacity.

During the struggle in the last Congress to reach a consensus on national energy policy, there were those who discounted these troubling projections. Time has not dealt kindly with arguments based on such short-sighted judgments. In addition to the impact on capacity of the recent events in Iran, a recent study on Saudi Arabia prepared by the Senate Foreign Relations Committee reaffirms the underlying problem which this Administration recognized several years ago: world oil productive capacity will not grow to keep pace with unconstrained world oil demand in the 1980's.

The Committee's report confirms judgements and statements made by this Department over the last several years. Saudi Arabia is not going to be a *deus ex machina* to solve the world's oil supply problem. Future production in Saudi Arabia is unlikely to rise above 12 million barrels per day as opposed to the 16 to 20 million barrels per day which some had hoped would be achieved.

When ex-ante demand overtakes supply, markets will necessarily be balanced by either prices being driven up or by reductions in income, output and employment. This condition was predicted to occur in the mid 1980's. But there are signs that the world may be beginning to enter these conditions now. World oil prices have been rising in what may become a chronically tight market. Furthermore, this general picture makes no allowance for additional short-term difficulties. In coming years, the Nation would be lucky, indeed, to avoid threats to the security of our oil supply such as that recently posed by the production curtailments in Iran.

Thus, we must plan now for the inevitable transition from oil to other fuels. Our actions, and those of others, can somewhat alter the actual timing of the convergence of available supply and demand for petroleum products. Slower economic growth, a prescription offered by some, tends to delay the inevitable. Events such as those in Iran, tend to bring it closer.

A growing U.S. economy will need adequate supplies of energy even as we redouble our efforts to conserve scarce fuels. If there will not be enough oil, the Nation must turn to alternative energy sources to do the job. This transition will be painful. But clearly, it will be more painful the longer we delay getting the job done.

Central to this strategy of transition must be a resolution of one of the major pieces of unfinished business in last years energy debate—oil pricing. We should start by recognizing shortcomings in the Nation's oil pricing policy since 1973. In good faith, this Nation attempted to insulate itself from the reality of a world where oil is in increasingly short supply and prices are rising. The domestic system of price controls now holds the average price of all oil used in the U.S., including imports, to approximately \$14.00 per barrel. Yet, it now costs approximately \$18.00 per barrel to import oil. The \$4.00 per barrel difference represents a subsidy that is paid through the cumbersome entitlements system to those who purchase and use imported oil. The result of any such subsidy is predictable; an increase in the use of the subsidized product. In this case, it has contributed to a disastrous rise in oil imports from 6 million barrels per day in 1973 to almost 9 million barrels per day today.

To administer this import subsidy program we have put in place a massive regulatory bureaucracy. Under the banner of protecting U.S. consumers from the inflationary effects of high energy prices, we have seen our dependence on foreign oil rise from 30 percent to 50 percent; our import bill from \$7 billion to a potential \$50 billion, and the value of the dollar drop by over 30 percent in relation to currencies in other major industrialized Nations. At the same time, we have reduced the incentive to conserve energy, inhibited the development of alternative energy sources, and reduced domestic production of oil and gas. In summary, a well-intentioned effort to resolve the short-term inflation problem ultimately has made our difficulties worse.

The President's proposed solution—phased decontrol with a windfall profits tax—is designed to strike a balance between our immediate concerns over inflation and the longer-run implications of continued import subsidies. The President's program does produce some relatively modest short-term inflationary impacts, approximately .3 of a percent on the Consumer Price Index for the next several years. By 1981, gasoline prices can be expected to rise approximately 5 to 7 cents per gallon as a result of this program, and the average family can expect to pay about \$80 more in overall energy charges.

But the longer-term inflationary and security consequences of continuing the existing system—which contributes to ever increasing imports, growing balance of payments deficits, a falling-dollar and a lag in the development of domestic energy alternatives—are even greater. Each 10 percent decline in the value of the dollar abroad eventually adds as much as 1 percent to the inflation rate at home. The decline in the dollar since 1973—caused in part by ever-growing oil imports—has cost the average American family many times over the modest cost of phased decontrol. The Nation cannot hope to reduce our oil imports and dollar outflows until we act to stop subsidizing imports and recognize the economic realities of world oil supply and demand. For these reasons the Administration has been committed to replacement cost pricing for crude oil with equity for the Nation's consumers.

Such equity considerations require enactment of a windfall profits tax designed to protect the American consumer from unjust oil company profits. In the near-term, the correct oil price from the perspective of domestic producers cannot possibly be whatever OPEC decides it ought to be. The windfall profits tax offers the U.S. the opportunity to recognize the prevailing world price as the real cost to the economy for additional energy use, while ensuring that any windfall to domestic producers is put to work for the citizens of our Country. The receipts from the windfall profits tax would thus be used to establish an Energy Security Fund to help meet future energy needs. This Fund will help minimize the impact of higher energy prices on low income households, provide for new initiatives, including the development of alternative energy supplies, and improve mass transit systems.

Under the Congressional mandate of the Energy Policy and Conservation Act of 1975, price controls expire in October of 1981. Since an extension of price controls could only compound the economic dislocations caused by the control system and contribute to an increase in oil imports, the President has decided to decontrol domestic oil prices by September 30, 1981. However, to minimize the sudden inflationary impact that could result at the time of decontrol, the President has adopted a more gradual path of phased decontrol. Economic losses and dislocations will be minimized by recovering for the Nation a substantial portion of additional oil revenues through a windfall profits tax that will be quickly reinvested in the economy.

With increasing imports, in part because of the subsidy provided by price controls, and Congressional action exempting certain categories of domestic oil from controls, the current domestic pricing system applies to only 30 percent of all the oil now used in the U.S. Maintenance of the massive bureaucracy required to continue controls over this shrinking quantity of oil makes little sense, particularly in view of the unavoidable expiration of controls in several years, their perverse effects on inflation and import dependency, and the potential for putting any windfall profits to work to help the poor, improve mass transit systems and increase alternative energy supplies.

Under the President's program, prices of domestically produced crude oil will be decontrolled in phase over the next 28 months beginning on June 1 of this year. This program will gradually move domestic prices up to world levels and fulfill the commitment made by the President at the Bonn Summit.

The President has directed the Department of Energy to complete or undertake administrative actions, pursuant to applicable rulemaking procedures, designed to phase out controls on all domestically-produced crude oil by September 30, 1981. Additionally, the Departments of Treasury and Energy, working in consultation with the Congress, are completing detailed specifications of the windfall profits tax outlined in the President's energy address to the Nation on April 5, 1979.

The phased decontrol program will begin on June 1, 1979, by providing special new incentives to those categories of oil which offer the greatest potential for increased domestic production, such as newly discovered oil and production from enhanced recovery projects. Beginning in early 1980, prices will be gradually increased for upper and lower tier oil which does not qualify for one of the special incentive categories. Under this schedule for upper and lower tier oil prices, the windfall profits tax can be in place as these changes become effective.

Completion of the required administrative actions will result in the following decontrol schedule:

- (a) Newly discovered oil will receive the world price beginning June 1, 1979.
- (b) As of June 1, 1979, 80 percent of production from properties which qualify as "marginal properties" under a definition based on depth and well output will be allowed to receive upper tier prices. On January 1, 1980, the remaining 20 percent will be eligible for the upper tier price.
- (c) Producers of all remaining non-marginal lower tier oil will be allowed to update their base periods. Past cumulative deficiencies will be erased, and a linear decline rate schedule of 1½ percent per month from June 1, 1979 to the end of the year and 3 percent per month from January 1, 1980 until October of 1981 will be applied.
- (d) The upper tier price will increase in equal monthly increments beginning January 1, 1980, until it reaches the world price on October 1, 1981.
- (e) Producers will continue to receive the world price for incremental tertiary production. In addition, from January 1, 1980, to September 30, 1981, producers will be permitted to release specified quantities of lower tier oil to the upper tier price as partial reimbursement for investment in qualified enhanced oil recovery projects.

The windfall profits tax would recapture 50 percent of any price increases in released lower and upper tier oil and 50 percent of any future real OPEC price increases. The funds collected under the tax will be used to provide assistance to low-income Americans, aid in the development of alternative energy sources including coal, shale oil, and solar energy, and in the improvement of mass transit systems.

The proposed decontrol schedule and windfall profits tax are projected to:

- (a) Reduce oil imports by ending the current subsidy and reducing petroleum use by about 250,000 barrels per day in 1985;
- (b) Provide incentives to increase domestic oil production by 700,000 barrels per day and associated gas production by 100 million cubic feet per day in 1985;
- (c) Provide incentives to maintain production from marginally economic oil fields;
- (d) Reduce the risk of future inflationary dislocations by gradually raising U.S. domestic crude oil prices to world levels by the time statutory authority for price controls expires;
- (e) Recapture a substantial portion of potential oil company windfalls for the purpose of minimizing the impact of higher energy prices on the poor, developing alternative energy sources and upgrading our transit systems;
- (f) Strengthen worldwide confidence in the dollar and meet the U.S. commitment at Bonn; and
- (g) Begin the process of eliminating the cumbersome system of price controls and crude oil entitlements which have been described as a "bureaucratic nightmare."

In addition to resolving the unfinished business of oil pricing, the President's program also addresses the critical short term problems that emerged as a result of Iran as well as the challenge of the longer term transition to more abundant alternative fuels.

For a detailed review of the short-term initiatives, I would call your attention to the Response Plan: Reducing U.S. Impact on the World Oil Market released by the Department last week. It details how the United States will meet its IEA

commitment to reduce oil consumption by 5 percent at the end of this year. The plan includes:

- (a) Standby mandatory controls that are now being reviewed by the Congress;
- (b) The increased use of gas to replace oil;
- (c) Electricity transfers from non-oil burning facilities;
- (d) A mandatory 5% reduction in Federal government energy use; and
- (e) Targets for states to reduce gasoline consumption.

The President plans to use the authority to establish mandatory building standards of 65° in the heating season and 80° in the cooling season as soon as Congress approves his plan. He also urges all citizens to observe additional conservation measures, including driving 15 fewer miles a week and adhering to the 55 mph speed limit. Through these two measures alone, gasoline demand could be reduced by 500,000 barrels a day.

The President also outlined a number of conservation and supply initiatives for the longer term. These initiatives include new tax credits for solar energy and oil shale, accelerated development of the Naval Petroleum Reserve in Alaska, accelerated offshore oil leasing, accelerated coal leasing, and an intensive 60 day effort to develop a program for increased coal utilization. To deal with the complex process of energy facility permitting and licensing, the President signed an Executive Order which gives the Office of Management and Budget responsibility to track major energy projects and to work with the various Federal agencies to ensure timely coordinated Federal decision making on critical, non-nuclear energy facilities.

The United States is in a far more favorable position to deal with its energy problems than Western Europe or Japan, which are limited in their resources and overwhelmingly dependent upon the resources of the Middle East.

To the extent that we are able to make our contribution to constraining oil demand around the world by reducing imports and moving to alternate sources of energy, we not only serve the interests of our own Nation but those of the free world.

In conclusion, I would observe that unless the industrial nations are able to grapple effectively with their short and long-term problems, the political associations that we have known since World War II would inevitably be weakened. Thus, our energy problems are closely related to the role of the United States as a world leader.

An oil pricing policy that recognizes the need to end import subsidies, reduce domestic consumption, accelerate the development of alternative energy sources, and protect the American consumer is clearly in the long-term interests of the nation. The President's oil pricing proposal is such a program. He has courageously taken on the most difficult short-term political problem by announcing a program of decontrol. With that gradual decontrol program now unveiled, I look forward to working together with the Congress to achieve enactment of the windfall profits tax.

Thank you, Mr. Chairman, for this opportunity to appear before this Committee. I would be pleased to answer any questions.

Senator KENNEDY. If it's acceptable to you, Congressman, we will take 15 minutes apiece for questioning.

Mr. Schlesinger, in your references to Massachusetts and New England, your prepared statement and comment about how President Carter's program is going to help us and shield us, I think is the word you used, reminds me of the story of the doctor and the patient. The patient's temperature was 102 on Tuesday, and then on Wednesday it went up to 106. And then on Thursday it only went up to 107. And the doctor says, really, the patient is getting healthier, because he's getting sicker slower.

The fact of the matter is, we are decimated and devastated and will be, by this energy program. And nothing that you say about the possible shield is really going to do anything to help prevent the enormous impact, devastating impact, to the people that live in New England or the Northeast or, quite frankly, to the other warmer parts of

the country, that are dependent upon energy resources to cool their homes or to warm them.

Now, I was interested in your comments about my objectivity in my presentation. I was thinking back, of a comment that was made at that time in 1975 that said the administration's energy policy is easy to describe: a large and sudden increase in the price of oil. If this policy is implemented—

It will add 3 to 4 percent to the Nation's inflation rate. It will cost us consumers more than \$30 billion annually, draining this purchasing power away from other parts of the floundering economy and increasing already disgraceful levels of unemployment. It will encourage additional OPEC oil price hikes; it will aggravate fuel distribution inequities and further damage New England and other areas which are especially dependent on declining oil sources. It will not result in decreased consumption equivalent to price increases because of inelastic demand for certain petroleum products. It will punish those with low and middle incomes, while the rich continue to waste all the fuel they want. It will continue a callous disregard for environmental quality.

In short, this energy policy is merely another example of letting the average American pay for the politicians' mistakes.

That is President Carter's statement. If that says it more objectively or less objectively than I just said it, I will subscribe to that.

And I think you owe the American people at least some response to what conditions have changed and what the differences are which would warrant and justify a complete retreat from that observation, because that is about as fierce an indictment of the past policy, as well as the current policy, as I could possibly imagine. And I think the American people want to know what the changing conditions are that warrant or justify this extraordinary kind of action.

Secretary SCHLESINGER. There are a number of things. In the first place, you refer to a retreat. We have recognized, and should have recognized from the first, that under the legislation the controls will end as of September 30, 1981.

To use as a base case the assumption that controls would go beyond 1981 strikes me as not entirely accurate. Those controls will inevitably end. The additional gains that will be obtained by the oil industry during the period up to the end of controls will be more than matched by the collections of the windfall tax after that period.

Senator KENNEDY. You don't really believe that?

Secretary SCHLESINGER. Yes, indeed. If the Congress passes the tax. We had, of course, passed the crude oil equalization tax through the House of Representatives. We were unable to get that tax through the Senate, because a number of liberals thought that that was a way of preserving controls. Controls will inevitably end.

Senator KENNEDY. Well, Mr. Schlesinger, you are about the only one in Washington, I daresay in the country, that believes you are going to get a realistic windfall profits tax.

Secretary SCHLESINGER. I have an insert for the record, if you will agree, Mr. Chairman, an article from the New York Times of April 24, which reports both the flow of public opinion on this issue and changed attitudes within the Congress.

Senator KENNEDY. Of course, without objection.

[The article follows:]

[From the New York Times, Apr. 24, 1979]

LEGISLATORS FACING BATTLE OVER DETAILS OF A LEVY AS SUPPORT INCREASES

(By Steven V. Roberts)

WASHINGTON, April 23.—Many members of Congress voiced strong support today for a tax on oil company profits that would flow in once prices are allowed to rise on June 1. But sharp divisions remained over how the tax should be applied.

A spot check on Capitol Hill as the legislators returned from their Easter recess showed that the fight over precise details appeared to be just beginning.

Senator Howard H. Baker Jr. of Tennessee, the Republican leader, told reporters that President Carter could get Congressional approval of the proposed oil tax "virtually for the asking."

"I'm hard-pressed to find anybody who's opposed to it," he said.

Senator Robert C. Byrd of West Virginia, the Democratic leader, said that rising oil company profits would bring added pressure on Congress to pass the tax. "If there isn't a demand now," he asserted, "there will be."

COMPANIES REPORT PROFIT RISES

Coincidentally, two of the nation's largest oil companies, the Exxon Corporation and the Standard Oil Company (Indiana), reported substantial profit rises today in their first-quarter operations, stemming in part from the higher oil prices that resulted from the Iranian revolution.

The main oil tax split in Congress centers on the proposal to include a "plowback"—a provision that would allow the oil companies to deduct from their taxes any profits that are reinvested in exploration and production of new energy sources. Opponents of the plowback, led by President Carter, say it would weaken the tax bill. Proponents say that any tax omitting a plowback would be unfair to the energy producers.

The ultimate shape of the oil profit tax will be heavily influenced by Senator Russell B. Long. The Louisiana Democrat, a longtime supporter of the oil industry, last week conceded that a tax plan "might pass" this session. But he also urged that the oil companies be given "the incentive to produce" more fuel—the sort of talk that is widely interpreted to mean a generous plowback provision.

When President Carter announced that he would allow prices to rise as of June 1, he proposed new taxes that would recapture 50 percent of the resulting profits. He also proposed that this new revenue be used to compensate the poor for the higher prices and to subsidize research into new energy sources.

PLAN CALLED A SELLOUT

Some liberals have attacked the President's plan as a sellout to the oil companies. Senator Edward M. Kennedy, Democrat of Massachusetts, said, "It's bad economic policy, it's bad energy policy and it's bad for the country."

After listening to his constituents last week, Representative Jonathan B. Bingham, Democrat of the Bronx, echoed that view. "We in the Northeast tend to suffer particularly from higher prices," he said. "And I'm not at all persuaded that higher prices will lead to more production."

But since phased decontrol is a virtual certainty, the focus is now on the profits issue. On their visits home last week, many of the legislators found widespread support for a new tax. Representative Charles Rose, Democrat of North Carolina, summed up the feeling this way: "The bottom line that I've been hearing is, support the President and let's work up something on windfall profits. The message has gotten across."

Representative Paul Simon, a Democrat, tapped the sentiment in his Illinois district and concluded: "The basic attitude out there is that the energy crisis has been caused by the big oil companies."

Many members also sensed that their constituents were deeply ambivalent on the question of a balanced budget. They favor the idea in principle, but oppose cuts in any projects that affect them.

Mr. Rose of North Carolina said that school administrators in his district were pleading for the continuation of impact aid, a program that helps school districts with large military populations. President Carter has cited the program as a classic example of Government waste.

Secretary SCHLESINGER. Second, Mr. Chairman, I would point out that the President's program responsibly faces up to the end of controls by phasing out controls between now and late 1981. It is not the sudden disappearance of controls to which you referred in the President's statement.

There are many changes that have occurred between the time that you refer to and the present, one of which is that the controls now apply to only 30 percent of the oil. And that means that we are maintaining a massive bureaucracy in order to hold down the price of oil on a fraction of our energy resources.

Senator KENNEDY. Can I ask a question just on this point of 30 percent? This is the second time you have addressed this.

You point out in your prepared statement that you just mentioned here, just exempting certain categories of domestic oil from controls, current domestic pricing applies to only 30 percent of all the oil now used in the United States.

What is the cost of U.S. production now for oil in the United States? Is \$9.25 to \$9.50 approximately correct?

Secretary SCHLESINGER. That is, of course, without including the one-third of our oil that is decontrolled. As you will recall—

Senator KENNEDY. The average is approximately \$9.25 to \$9.50, delivered into the United States—now we are talking about—

Secretary SCHLESINGER. The \$9.50 is just the controlled price. It does not include the oil that was decontrolled by statute by Congress, namely, stripper wells; it does not include North Slope oil. If one is dealing with all oil in the United States, the domestic production cost is \$12 a barrel.

Senator KENNEDY. Now, what is it delivered in the United States—\$18.50? Is that about correct?

Secretary SCHLESINGER. I think that, as these most recent price increases work out, the landed cost of oil will be something in excess of \$18.50 a barrel; that is correct.

Senator KENNEDY. We are talking about 5 billion barrels a year at \$6; you are talking about 3 billion barrels a year, is that correct?

Secretary SCHLESINGER. No, Mr. Chairman. We are talking about the share of oil that is controlled, which is 2 billion or less.

Senator KENNEDY. When you go to decontrol?

Secretary SCHLESINGER. The other billion barrels is uncontrolled at the moment and will follow world prices. This particular table lays out for you the shares of oil, that which is controlled, that which is uncontrolled.

Senator KENNEDY. Let's go to the decontrolled amount for the United States. As I understand, we use 3 billion barrels a year; am I correct?

Secretary SCHLESINGER. No, sir. We are using close to 7 billion barrels a year.

Senator KENNEDY. Domestic consumption?

Secretary SCHLESINGER. Domestic production is approximately 3 billion barrels.

Senator KENNEDY. So about half of that we will import; 3 billion barrels, am I correct?

Secretary SCHLESINGER. We will import something in excess of 3 billion barrels; yes, sir.

Senator KENNEDY. If you take oil at \$12, now, the average, going to the \$18, which is \$6, and we will be importing approximately 3 billion barrels a year, figure that is \$18 billion. Is that correct?

Secretary SCHLESINGER. No, sir. The numbers are not correct.

At the present time, the average price of oil is \$12 a barrel. It is increasing as a result of a variety of things, including—

Senator KENNEDY. That is domestic, or domestic and imported?

Secretary SCHLESINGER. It is domestic.

Senator KENNEDY. Three billion barrels; \$12 a barrel on average, including the one-third that is uncontrolled.

Secretary SCHLESINGER. Can I just add a point?

Senator KENNEDY. Yes; I just want to get through.

The cost in terms of the domestic is now \$12 a barrel. We import 3 billion barrels a year, use domestically 3 billion barrels. We are going to be going on up to some \$18 per barrel if controls come off. If the controls come off, that is \$6 a barrel.

Secretary SCHLESINGER. When the controls come off.

Senator KENNEDY. When the controls come off—6 times 3—that is \$18 billion. And when you say that the current domestic pricing system applies to only 30 percent of all the oil now used in the United States, I think it is important that the American consumer understands the relevancy to what they would otherwise be paying without that 30 percent. And it's in the way that the mathematics figure out, it is that it is \$18 billion.

Secretary SCHLESINGER. That is approximately correct. As we have—

Senator KENNEDY. Approximately correct? It is correct, Mr. Secretary, and that is \$18 billion.

Secretary SCHLESINGER. Your arithmetic has been impeccable, but it doesn't represent the facts. [Laughter.]

Senator KENNEDY. I see.

Secretary SCHLESINGER. As the administration has released in the fact sheet.

Senator KENNEDY. Which one? Which fact sheet? Because you have released a lot of fact sheets.

Secretary SCHLESINGER. The decontrol, when it fully takes place, will be \$16 or \$17 billion, very close to your \$18 billion figure.

Senator KENNEDY. Well, we ought to understand that only 30 percent of all the oil now used in the United States is under the current domestic pricing system—that is very important.

Secretary SCHLESINGER. That is absolutely the case. It continues to shrink, and we are accelerating the shrinkage by a system of controls that has led to a decline rate, for example, in old oil of 15 percent per annum. The effect of so rapid a decline rate and so rapid a shrinkage of these categories will mean that we have greater dependency on foreign oil, which is presently close to \$18 a barrel, and that price will tend to rise more rapidly because of a failure, relatively speaking, of American production.

Senator KENNEDY. I think that is another myth in your testimony, like the fact that, basically, the increased use in the United States is

the cause of the increased demand for it. Even with your decontrol program, you are not going to see that much of a reduction in the importation. Yet you are talking about subsidizing the production that we are bringing on in here as being the cause for the disastrous rise. Yet even when you go toward the decontrol, you see that the reduction of amounts that come in here is extremely marginal.

You just can't have it both ways. You contradict yourself.

Secretary SCHLESINGER. The savings that are projected based on present OPEC prices will be approximately a million barrels a year of imports by 1985. One quarter of that will be increased conservation; three-fourths of that increased production. Saving a million barrels per day, over the year, by 1985 will be a very considerable alleviation of our balance of payments deficit, which, incidentally, tends to fuel inflation.

Senator KENNEDY. Well, I don't think there is going to be anything that is going to influence inflation more than the action which has been taken by the administration in terms of the decontrol. And that is going to have an impact both here domestically and worldwide.

A final question—

Secretary SCHLESINGER. Mr. Chairman, may I remind you that the administration's actions are driven by the legislation of the Congress.

Senator KENNEDY. You don't have to do it until 1981, Mr. Secretary. There is no reason in the world that there may not be a different economic situation or that you cannot come back to the Congress of the United States and talk about it. There isn't a Member of Congress that doesn't understand that inflation is the No. 1 problem.

But all we hear from you is, Congress won't deal with that particular problem; therefore, we are not going to face up to it. And yet you say that Congress boldly will deal with the problem of excess profits tax, when I think anyone in this body, even the administration's program, is not going to recover the excess profits. And quite frankly, I think it is fundamentally a charade.

We will wait to see what finally comes out on it.

Secretary SCHLESINGER. Senator, I would be happy, despite the uncertainties, to enter into a side wager with you on that. [Laughter.]

Senator KENNEDY. In the meantime, the consumers of this country are going to be paying for the loss of those who would support your position.

Just a final point. In December, the President criticized the announcement of OPEC price increases, because, as he pointed out, they were unwarranted, first of all, and that these large price hikes will impede programs to maintain world recovery and reduce inflation.

That was an OPEC price increase from \$12.50 to \$14. That was in December. And so OPEC raised the price on about 40 percent of the U.S. oil by 5 percent.

In contrast, on April 5 it was decided to raise 60 percent of U.S. oil consumption by at least 50 percent. This is 10 times as great an impact as December's OPEC increase.

If the OPEC increase was unwarranted, why was the larger April 5 increase warranted, either from the President's own point of view of inflation, or in the interest of worldwide recovery?

Secretary SCHLESINGER. I think, Senator, that you have made two points very well.

Senator KENNEDY. Thank you.

Secretary SCHLESINGER. The first point is to underscore our dependency and the fact that international oil prices are, indeed, beyond our control. The second point that you have made, quoting the President, indicates that, indeed, OPEC is a cartel. The President has clearly recognized that international oil prices are not dominated by free-market forces, as you stated in your initial statement.

Senator KENNEDY. Well, I have gone over my time. Senator Jepsen, I will come back.

Senator JEPSEN. Mr. Chairman, I yield to Senator McClure.

Senator McCLURE. Thank you very much.

I think we need to put in some context, the backdrop upon which we are working here. A great number of people are very, very much concerned about the price of energy that we are paying, and it is a very serious problem.

That price that we are paying now is the price of neglect of domestic policy for several decades, the idea that we can have cheap oil perpetually by holding the price down without doing something on the production side. That is exactly why I did not join with some of my colleagues who were critical of the President's most recent message on energy, because that message, with all its faults and with all its strengths, at least focused on the production side of the formula in a much greater measure than did the 1977 message.

If as a matter of fact we don't like OPEC prices, there is only one way to deal with it, and that is to get some production of our own. If it is a matter of fact the price level for OPEC oil is unjustified, then limiting what can be done in energy production in this country can only guarantee that the consumers of this Nation will pay more for OPEC oil.

So while I hear a great many people around here wringing their hands about the consumer, what they are really doing is strengthening the hand of the OPEC cartel. I think it is time that we recognize what the alternatives are.

If as a matter of fact we want the OPEC cartel to continue to wring its extortionate demands from the American economy, then just continue to limit domestic energy supply. That is the whole argument. And while it may be very simple and very easy for us to say, oh, they are terrible; now let's lump our domestic energy suppliers in the same ball of wax with the OPEC cartel and say they are all bad, the very fact that you do that guarantees that that outflow of capital, which has been reaching the tens of billions of dollars per year, will become additional tens of billions of dollars per year, with all the distortion of the economy that we have already experienced, and what is equally—and perhaps more—important, the distortion of foreign policy objectives and initiatives on the part of this country.

We can't have it both ways. And I agree with the Senator from Massachusetts, you can't have it both ways. But if you don't want domestic energy production, you are forcing us into dependence upon foreign production and increasing the economic and political strength of the people with whom we are concerned right now throughout the world.

We can take these figures—if we don't decontrol—we will have increased exports, and that will drive up OPEC prices and raise our

import bill by an estimated \$35 billion; about \$10 billion more on current imports and \$25 billion on new imports. That \$10 billion on new imports certainly offsets the \$18 billion that may be increased prices for domestic supply.

But I want to go one step farther than that. You know, \$18 billion is a lot of money, even within the Congress. Senator Dirksen used to say, "A billion here and a billion there soon adds up to real money." As a matter of fact, \$18 billion is real money.

But against that backdrop, Mr. Secretary, the last statements that I have seen indicate that if the Western free world is to meet its energy requirements over the next decade, we must, in that decade, invest \$1.6 trillion in energy production—in capital investment.

Is that figure reasonably current and reasonably accurate?

Secretary SCHLESINGER. It's in the ball park, Senator; yes, sir.

Senator McCLURE. If that is correct, that is a rate of \$160 billion a year, just spread evenly throughout that 10-year period. I might ask, Mr. Schultze, what impact would that have on capital markets just by itself, one item, energy production, \$160 billion a year of capital demand?

TESTIMONY OF HON. CHARLES L. SCHULTZE, CHAIRMAN, COUNCIL OF ECONOMIC ADVISERS

Mr. SCHULTZE. It is not a question which I can give you an answer off the top of my head. What really counts, of course, is how much that is compared to what it is now. It is now a substantial number. That includes public utilities and the like.

So until I sit down and compare that number with what it now is, I can't answer you. Obviously, it is a big measure, but it isn't \$160 billion additional.

Senator McCLURE. That is correct. And I think you make your point very well, but it is still a large portion of the total available capital for investment.

Mr. SCHULTZE. If that number is right, it would be. At the moment, I can't say.

Senator McCLURE. Whether it is additional or not, still it is \$160 billion, whether it is additional or total. And \$160 billion, by any test, has impact on capital markets. And we are going to have difficulty assigning \$160 billion out of available capital each and every year for one purpose within our economy.

Mr. SCHULTZE. Remembering, of course, that our entire Western economy does grow, and savings to finance that expansion do grow—yes; it will be.

Senator McCLURE. It seems to me we have a right to expect that if people spend more money for energy, as they are going to have to, that that money might well be directed back to the production of more energy. As it is, we are sending a lot of that money outside this country that is not necessarily directed to the production of more energy but has something to do with the redistribution of the world's wealth. That doesn't do anything on the production side of energy, nor the supply side of energy worldwide. But it is a price the American consumer must pay.

I would think that a prudent policy would be to direct that the increased price that is paid by American consumers go back into the production of energy which is available to American consumers. That is why I proposed for some time an excess profits tax, but with a plow-back provision saying to the energy producers in this country, you can charge more, but if you get more and you make more, you are going to put it back into producing the thing that the consumer must have more of next year.

But start now breaking the back of the cartel. Let's start now producing more energy in this country. And if we will do that, we are not talking about extortionate profits out of the hide of the consumer. We are talking about whether that profit goes back into something that benefits them or whether it goes out of the country into the pockets of the OPEC cartel. That is the real choice we face.

I commend the President for having bitten the bullet on decontrol, and I look forward to working with you and the administration on some kind of a taxing measure that will make certain that all of this money goes back into producing more energy. That is the real need. It isn't wealth redistribution we need; it is energy production we need.

I think as we go on through this, I will have some further questions on a much narrower issue than that. I am concerned, but I will let my friends here ask some questions on the general subject. But I am very much concerned about why we are running into the shortfall of supply. And we are running into what I think is a shortfall of supply that doesn't match up with the figures that I see in total imports—total production.

I think the American people ought to be concerned as to why that is occurring and if there are ways in which we can make sure that that supply shortage that we see showing up now is both real and shared equitably.

But I would yield to my colleagues so they could ask questions on general matters, rather than getting into that one at this moment.

Senator KENNEDY. Senator Jepsen.

Senator JEPSEN. I will yield to Congressman Rousselot.

Representative ROUSSELOT. Mr. Schultze, I have three books here that I have reviewed that I think would be of some interest. One is "Thinking Through the Energy Problem," by Professor Thomas Schelling of Harvard. It is a study put out by the Committee for Economic Development, and I think you are familiar with it.

Mr. SCHULTZE. I have read it.

Representative ROUSSELOT. Do you think it is a reasonable document?

Mr. SCHULTZE. Ninety-five percent sound. It is higher than most things I do.

Representative ROUSSELOT. Anytime you can agree 95 percent with something, I am obviously in the mainstream.

The other book—

Mr. SCHULTZE. The only reason for the 5 percent is, somebody will pull a quote and say, "Charlie Schultze agrees with that." That is why I say 95 percent.

Representative ROUSSELOT. I will try not to do that.

The other book is "Higher Oil Prices and the World Economy," by Edward Fried and Charles Schultze. I guess you are familiar with that.

Mr. SCHULTZE. Fifty percent of that. [Laughter.]

Representative ROUSSELOT. He didn't do too well?

Mr. SCHULTZE. As a matter of fact, Fried and I only wrote two chapters.

Representative ROUSSELOT. This is while you were practicing economics at Brookings, so I assume that is OK for me to use as a document.

Then the third book is by Charles Schultze, entitled "The Public Use of Private Interest."

How about this? Are you 100 percent with this one?

Mr. SCHULTZE. Pretty high.

Representative ROUSSELOT. In that book you stated, "The world is not full of sharp corners and discontinuities." And by that, you meant, as I read it, that the higher the price went on a product, the more output would be encouraged. And the higher a tax went on the product, the less would be produced.

Wasn't that kind of the general theme there?

Mr. SCHULTZE. That is one way of interpreting it.

Representative ROUSSELOT. That is mine. How did you interpret it?

Mr. SCHULTZE. Well, what I had in mind in particular is that it works on the conservation side and that all taxes aren't bad. Be careful how you—

Representative ROUSSELOT. I will try to be careful.

I am moving carefully, Mr. Chairman.

Now, you applied this principle to oil in your other book and said, "A reasonable solution might be to provide for a gradual rise in controlled prices toward parity with imported oil." And that meant the world price.

Now, the Schelling book also defends the price mechanism, and it warns against mixing up policies to encourage energy production with policies to assist the poor. Prices should be allowed to do their work to encourage conservation and production, and the poor should be helped with cash grants out of general revenues. And they should not be helped by holding down prices, because that hurts our other goals. That was the general thesis.

Now, let me try to see if I can put this together in a question. Basically, it means that a permanent tax to hold domestic oil prices to producers down below world levels is going to lower U.S. production. The lower U.S. production will raise our imports. The higher imports will cost us money and hurt the balance of payments two ways: One, we will buy more oil abroad. Two, our added demand will increase the OPEC price, not just on new imports but on our current imports, too.

Professor Schelling gives us an illustration of this, where continued interference with domestic prices ends up by costing us almost \$100 million a day in higher foreign oil bills, or about \$35 billion a year. And all the while, we could have helped the poor out of general revenues instead of with taxes on energy.

Now, I hope you recommend these books to the President and the rest of his staff, because I think it would be helpful. And do you want to comment on my statement?

Mr. SCHULTZE. I certainly do.

Representative ROUSSELOT. I hope you will pass them on.

Mr. SCHULTZE. I certainly would recommend at least two of them.

Representative ROUSSELOT. All right.

Mr. SCHULTZE. Congressman Rousselot, fundamentally, I agree that one should use the price system in the ways that historically we have used the price system. Where a scarce commodity exists, encourage supply and restrain its demand. That doesn't mean we use it 100 percent blind, with 100 percent blind faith.

In particular, we are dealing with a commodity——

Representative ROUSSELOT. How about 95 percent?

Mr. SCHULTZE. I am coming to it.

For a product whose price on the world market has gone up not by 10 percent or 20 percent or 30 percent but has more than quintupled in the past 6 years and by three or four fold in real terms, a windfall tax which takes away 50 percent on new oil, 50 percent of the difference between what the world price is and that \$16 base is hardly one which is going to discourage production. That is point No. 1.

No. 2, you have to remember that in the longer term, we need two things. We need not just further exploration, development, and exploitation of our own oil reserves; we also need long-term research, development, and commercialization of alternative energy sources to oil.

The whole concept of the windfall profits tax and its use to finance, in a budget which we are trying to keep tight, those longer-term developments while allowing the oil companies significant additional amounts to do the oil and gas exploration and development is, it seems to me, a very good way to deal with that long-term problem.

On the conservation side, we are using the price system. On the other side, for supply, we are using the price system too. But given what has happened to price in oil, we are taking some of those proceeds for what we desperately need, which is long term research, development, and exploration of alternative resources. And that is what the President's program does.

Representative ROUSSELOT. But under the current law, Mr. Schultze, production and development have expected goals and prices; the companies expected to get world prices after 1981. That has formed the basis for their drilling plans.

Now the administration proposes a tax to hold the price producers will receive below world prices. It has lowered expectations about rates of return and not raised them.

Mr. SCHULTZE. I am not sure, Congressman Rousselot. I am not an oil producer. I don't know what they do.

Representative ROUSSELOT. But I think it is important to talk to them.

Mr. SCHULTZE. Well, I doubt very seriously that any oil producer who was planning on drilling and making future plans, in, let us say, 1977 or 1978, was thinking about \$18 OPEC oil. And I think, as a matter of fact, they are more likely to think about the price of oil than about what proportion of the world price that price is.

So again, I think one has to take a view on this which looks at both of our objectives: incentive for oil production and providing of finance in the reasonable future to do this in the longer term.

Representative ROUSSELOT. The administration's projection is what, \$25 in 1985?

Mr. SCHULTZE. It depends on what happens to the rate of inflation. Our own projections at the moment are not for any point price of oil. We don't know what it is going to be, what the world rate of inflation is going to be, and what OPEC is going to do, and what is going to happen in Iran.

We have given the subcommittee, in our factsheet, a range, using both a very conservative and an optimistic basis. But I don't know what they are going to mean.

Representative ROUSSELOT. But this proposal lowers the revenues on new wells and will lower drilling activity.

Mr. SCHULTZE. As far as I know, one, it does not lower the revenue on new wells. It raises them substantially.

And then if the world price of oil goes above \$16 a barrel, they still get 50 percent of it.

Let me say, Congressman Rousselot, and I think I am correct—I might be mistaken in some obscure country—that the price allowed for producers, for getting new reservoirs in effect under this program, is going to be by far the highest in the world, providing plenty of incentives.

Representative ROUSSELOT. It is the incentives that operate through rates of return on new activity.

Mr. SCHULTZE. I am talking about new activity. Say you are drilling in the North Sea. The United Kingdom will take much larger chunks away than if you are drilling in Saudi Arabia.

Representative ROUSSELOT. I am not talking about doing the things the United Kingdom does. I do not think they are a bad model for us.

Mr. SCHULTZE. Name any other country.

Representative ROUSSELOT. So I am hoping we won't go that way.

Mr. SCHULTZE. I would like to get that kind of oil.

Senator McCLURE. May I just ask one followup on the general question, Mr. Chairman? Because I want to make sure that my understanding is correct, and I want to get it into a perspective with which you can either agree or disagree with any of it.

And again, we are talking about the windfall profits. Under existing law, no change in law, each incremental dollar accrued to the companies as a result of decontrol, Government would receive between 49 and 58 cents in taxes and royalty payments, depending upon the extent to which that industry incurs business expenses as offsets connected with that particular operation.

Furthermore, the private royalty owners would get 6 to 7 cents of the remainder. Oil company shareholders could get up to 8 cents in dividends, which would leave 28 to 44 cents for the oil companies as additional profits for reinvestment in energy production or spending as they would like.

On April 5, I introduced an excess petroleum profits tax, which will levy a 90-percent tax on the income of the petroleum industry which exceeds the average rate of return from all industries. The oil companies will be exempt from the tax only if they reinvest the excess profits in domestic energy production, not in circuses or department stores or overseas refineries, but for U.S.-produced energy.

Do you think that approach would give the oil companies adequate incentive to achieve the administration's goal for new oil production,

while at the same time providing a much simpler mechanism for achieving that goal?

Mr. SCHULTZE. Let me note, there are really terrible problems you get into with trying to write that kind of windfall plowback.

Senator McCLURE. A lot easier than the one you have tried to write.

Mr. SCHULTZE. I disagree.

Senator McCLURE. When you try to trace through on every barrel of oil what their profits may have been compared to what they would be under this bill and then try to tax that, you are going to have a battery of accountants and lawyers fighting over it for 25 years.

Mr. SCHULTZE. You simply have several bases and tax the difference between that and some other basis. It is fairly simple. You don't have to trace each barrel of oil.

Next point: With respect to a plowback, you have to ask yourself, what do you mean by a plowback. Simply continuing what they are doing already?

That makes no sense. You have got to say you have to increase above what you otherwise would have done.

Senator McCLURE. If they have more money and plow it back, that is an increase over what they would have done.

Mr. SCHULTZE. Well, how do you know what they would have done?

Senator McCLURE. They wouldn't have done it if they didn't have the money.

Mr. SCHULTZE. I don't know that. All I ask is what is your base for the plowback? Anything that they spend? Do you give them a plowback for an amount equal to what they did last year? Do you have a base period? Take a company—

Senator McCLURE. The plowback says they spend the money back in the industry.

Mr. SCHULTZE. Even if they don't increase it a dime?

Senator McCLURE. Domestic.

Mr. SCHULTZE. Even if they don't increase their current spending by a dime, they get a plowback?

Senator McCLURE. They would if, as a matter of fact, they have spent all of the profit they have generated in energy research and development in this country.

Mr. SCHULTZE. Let's take a multiproduct company. I presume what you have to do is, first of all, to split out how much they earned on exploration and on crude oil versus how much they earned on refineries. And I will match their accountants against yours or against the IRS any year.

Second point: let's take a company—

Senator McCLURE. If that is a valid argument, they will win over you in spades.

Senator SCHULTZE. Let's take an example. With the world price of oil at \$20 and the President's program in effect, that company, for new oil, would get \$18 a barrel, six times that of 5 years ago.

Second, let us suppose it costs them \$10, just for the heck of it; let us assume that \$10 is what they invested in getting that oil.

With the plowback, that oil is then worth \$28 to them; namely, the \$18 they get plus the \$10 tax relief they get. And you have got a \$28-a-barrel incentive, which is far more than it seems to me anybody needs.

Senator McCLORE. You are playing with figures there. That is not accurate, because it can't be worth more than they got.

Mr. SCHULTZE. It surely is.

Senator McCLORE. It will be, if it is a plowback into production which produces energy which they can sell.

Mr. SCHULTZE. I am saying that the marginal incentive you are giving to an oil company versus to somebody who is not already in the business, and doesn't get a plowback, is \$28. What you are doing is providing a subsidy to get future energy exploration and development, particularly by existing companies, and giving them an advantage over those who aren't in the business right now.

And for competitive reasons, it seems to me that is just terribly bad.

Senator McCLORE. That is better than, as the administration is doing here now, saying, "We are going to tax some of that away from you; we are going to remove the import tariffs and therefore stimulate the outflow of capital to the production of further energy outside this country rather than inside this country."

Mr. SCHULTZE. As I indicated in an answer to an earlier question—let me note, by the way, that on crude oil, that tariff is only 21 cents a barrel. So eliminating that is hardly going to stimulate much.

Senator KENNEDY. The Senator's time is up.

Representative ROUSSELOT. I have one more question, and I will be glad to wrap up.

Mr. Schultze, if there were no windfall profits tax imposed after decontrol, what would the return on common equity be for the oil companies?

Mr. SCHULTZE. I do not know that answer.

Representative ROUSSELOT. And I would like to know—

Mr. SCHULTZE. It obviously would depend—

Representative ROUSSELOT. I would like to know what your figures show on that and whether this return would be higher or lower than all other industry.

Mr. SCHULTZE. All I can say is, I don't know.

Second, clearly, it depends on what happens to OPEC prices. With OPEC prices at today's rates, it is one thing. With OPEC prices at \$25, it is probably double. I don't know what the answer is.

Representative ROUSSELOT. But do you think that has some direct—

Mr. SCHULTZE. Of course.

Representative ROUSSELOT. Well, I would like to have that, Mr. Chairman.

Senator KENNEDY. Senator Javits.

Senator JAVITS. Thank you. Thank you very much, Mr. Chairman.

Gentlemen, I apologize for not being here sooner in this establishment. It is not a one-ring but a minimum three-ring circus.

I would like to ask you one question that is critical to me. I think the prime responsibility of the United States, our big trust-busting country, is to break the OPEC trust, the biggest trust ever, making Standard Oil or John D. Rockefeller, Sr., penny-ante business.

So question one, how do you expect OPEC as a trust to be affected by the President's plan?

Secretary SCHLESINGER. Senator Javits, the effect of the President's policy would be to reduce demands for imported oil in 1985 by approxi-

mately 1 million barrels a day by that year, thus reducing demand overall for OPEC oil. A consequence will be to weaken somewhat the burgeoning power of the cartel.

Senator JAVITS. Now, in view of the fact, Mr. Secretary—I am very openminded on this thing; I am really trying to find out—that our own figures indicate that regulation is much more important in cutting down imports than the decontrol measure, to wit, that you expect to save up to 1½ million barrels of oil this year if all your proposed regulatory and volunteer measures work. That is 750,000 barrels a day. Yet your savings of imports as a result of decontrol in 1985 is expected to be only 600,000 barrels.

Now, I read the paper, and I see the House of Representatives committee has already rejected one of your main conservation measures. Therefore, I ask you this question: Is it not mainly the fault of the Congress in being unwilling, for whatever reason it is motivated, to take the conservation measures which the President recommends that is causing us to go into decontrol as the alternative method?

Secretary SCHLESINGER. Senator, two points.

First, decontrol inevitably comes at the end of 1981. We do not have a choice, as a practical matter, whether to decontrol or not.

Second, with regard to the conservation programs, admittedly, there is a reluctance to vote for a contingency plan in the sense that that might seem to the electorate to be a vote for the contingency against which one wishes to defend oneself.

We are disappointed, needless to say, that the House committee has not approved it.

The decontrol proposals stand on their own merits. It will save us approximately 1 million barrels of oil per day by 1985. And I think that both sets of measures are desirable.

Senator JAVITS. Mr. Secretary, I appreciate your graciousness in letting the Congress off the hook. And I am a Member of Congress. And I think it is shameful that the Congress of the United States is not and will not face up to this primary way of breaking the OPEC trust, which is a little discipline in the United States and that U.S. families seem to be almost more in love with the family car than with the family.

And I count it as one of our grave deficiencies, Mr. Secretary, yours and mine, leaving everybody else out of it, that we have not been able to vividly enough picture this deep crisis to the American people adequately to awaken them to the peril in which they are positioned and that the alternatives, with all respect, are not remotely as good as what we ought to do; to wit, conserve.

Now, just one or two specific questions. I understand—and please correct me if I am wrong—there is a great potential in the non-OPEC LDC's for finding new sources of oil. That is the less-developed countries. How do you propose that we get that going at the same time that we are decontrolling in order to stimulate new production, when the United States per se may not at all be the best potential from that point of view.

Secretary SCHLESINGER. There is possibly a very substantial potential. We do not know as yet the extent of it. Your point is well taken, that we should, as vigorously as we can, attempt to explore and develop that potential, however great or limited it may be.

As you know, the World Bank has moved in the direction of producing funds for oil development. The problem that we have faced, Senator, is that some of the LDC's that might have oil potential have been reluctant to deal with the major international companies.

The U.S. Government itself is quite restricted in its ability, save through international institutions, to provide front-end money. For example, as I think we have discussed before, Senator, the Eximbank by charter is required to provide funds only for the export of American goods and services. I think that we shall have to reexamine some of our own institutions if we are to do a better job as a Nation, as opposed to a member of a consortium such as the World Bank.

Senator JAVITS. Mr. Secretary, would it be asking you to do anything too onerous to give us a paper on your views—that is, the Department of Energy's views—as to the potential of the LDC's and what incentives or changes in existing law we ought to make in order to exploit that potential properly, including what we ought to crank into the, hopefully, tax law which will accompany decontrol?

Secretary SCHLESINGER. Sir, we are completing within a matter of a few weeks a resource study which will incorporate the potential with its uncertainties in these other countries.

Senator JAVITS. And will you also submit that to us?

Secretary SCHLESINGER. Sure.

Senator JAVITS. With your recommendations or views, however you choose to do it, respecting incentives and changes in law which would facilitate a cracking of that situation.

Secretary SCHLESINGER. I will, of course, be obliged to seek OMB clearance for any recommendations that might be made on behalf of the administration.

Senator JAVITS. I understand.

Mr. Chairman, I ask unanimous consent that that be made part of the record.

Senator KENNEDY. So ordered.

[The following information was subsequently supplied for the record:]

The study on the resource potential of LDC's, which is referred to in the transcript is scheduled for completion on July 1, 1979. After this document has received appropriate review and clearance it will be submitted to the committee.

Senator JAVITS. I have just one other question, Mr. Secretary.

Mr. Secretary, I know that my colleague, Senator Kennedy, asked you about home heating oil and the failure, in his opinion, which I thoroughly agree with, for the present plan to adequately reach the grave difficulties we have, especially in the Northeast, on that situation.

I now understand that home heating oil supplies are down 17 percent from last year's stocks. What can we expect your Department to do respecting a target for home heating oil production for refineries and the monitoring of that output?

Secretary SCHLESINGER. As you indicate, Senator Javits, the supplies of distillate are at historically very low levels, below the level that we have regarded as a minimum. We have the authority to order refineries to produce more distillate, and we are presently examining within the administration just what should be done to build those distillate stocks

prior to next winter's heating season in order to overcome the possible difficulties to which you refer.

And we will be back to the Congress, I believe, within a very few days with a plan of action.

Senator JAVITS. Again, Mr. Chairman, I ask unanimous consent for that.

Senator KENNEDY. That will be made a part of the record.

[The following information was subsequently supplied for the record:]

VOLUNTARY DISTILLATE STOCK BUILD-UP PROGRAM

The Department will work with refiners to establish individual distillate stock level targets for October 1, 1979, to reach a total distillate primary stock level of 240 MMB by October 1. Intermediate monthly targets also may be established. DOE will take steps to be prepared to require refinery yield shifts if this becomes necessary to build distillate stocks to safe levels.

If gasoline demand cannot be met because of the reduced stocks, constrained imports and the need to rebuild distillate stocks, refiners may be requested to allocate gasoline supplies voluntarily, using an allocation fraction suggested by the Department. DOE will be prepared to impose a mandatory industry-wide allocation program if necessary.

Senator JAVITS. Mr. Chairman, I had in mind making an opening statement.

Senator KENNEDY. That will be included in the record.

Senator JAVITS. I thank the Chair.

OPENING STATEMENT OF SENATOR JAVITS

Mr. Chairman, I am pleased to have this opportunity to explore the troubling questions about the President's oil decontrol proposals. I have already indicated that I might well be willing to support a phased decontrol as an alternative to a sudden decontrol in 1981 or even 1983, if I could be sure an effective windfall tax policy and an equitable program of assistance of low income households and to users of home heating oil were on the books.

Yet, my study of the Administration proposal leaves me in some doubt as to whether the proposed tax is as effective as claimed and what would be its real impact. Furthermore, I am deeply disappointed in the suggested program for low income families which I believe falls an unrealistic \$5-\$7 billion short of meeting their real needs over the next 3 fiscal years. Indeed I expect to file an alternative proposal for the Senate's consideration in the next few days.

While it may be a little unfair to regard this proposal as an overall energy policy, if it is regarded in that light I believe it falls short of giving the American people the major infusion of creativity and, yes, funding which can turn our search for new energy supplies into the space program or Manhattan Project of the 1980's, to permit future generations to view the resources of the 21st Century with equanimity. I hope we can explore the question of whether the programs of the Energy Security Trust Fund even begin to approximate the full commitment to energy research and development we so badly need.

Finally I hope the distinguished witnesses we are fortunate to have with us today will be willing to explore the international implications of these proposed policies to determine how they will affect our leverage on world oil markets and what more we need to do to achieve our top priority—the weakening of the grip the OPEC trust has on our economy and that of all the world's oil consumers.

Senator KENNEDY. We will just recess briefly. We have to go vote.

[A brief recess was taken.]

Senator KENNEDY. The subcommittee will come to order.

Mr. Secretary, some time ago, at the outset of the questioning, I asked you, in reference to the percent of current domestic pricing systems to which control apply, what that price was for U.S. production. I mentioned the figure \$9.50. You had other figures.

I am just wondering whether you have had a chance to review those figures and statistics and whether there is anything that you want to state at this time on that.

Secretary SCHLESINGER. Yes, sir. The refinery acquisition cost for domestic oil is \$12.30 a barrel.

Senator KENNEDY. Now, what is the crude oil cost? It is \$9.47, is it not?

Secretary SCHLESINGER. It is not \$9.47. Without stripper oil, the crude oil cost would be \$9.65 at the wellhead. With stripper, it would be about \$10.50 at the wellhead. That wellhead price, of course, is substantially depressed because of the very high transportation cost from Alaska.

I think that one should recognize that Alaskan oil, which now is running 1.2 million barrels a day, is already at world prices, but the wellhead price, to the extent that one includes that in any average, depresses the average, simply because of those high transportation costs. But it should be noted that decontrol will not have any effect whatsoever on the price of Alaskan oil at the wellhead. The only thing that affects that is the movement of international oil prices.

Senator KENNEDY. Well, according to your own figures on the crude oil domestic prices at the wellhead, actual domestic average is \$9.47. That is according to your figures. We will come back to the changes, how they are interpreted or misinterpreted. But that is a document that is provided by the Energy Department.

Secretary SCHLESINGER. Yes, sir, Mr. Chairman. That was \$9.47 at an earlier point this year. That price is \$9.65; it does not include stripper oil, which would raise the price to something on the order of \$10.50 a barrel.

And I think that the comparison that you were using earlier was designed to talk about the impacts on consumers. And, of course, in terms of consumer impact, the critical question is not the transportation costs from the oil fields; it is what is the refinery acquisition cost. It is \$12.30 a barrel at the present time.

Senator KENNEDY. Well, the figures that we were trying to point out previously were that domestic production is about 3 billion barrels per year and the actual domestic average price is about at \$9.47, which according to your own figures as of December last year, is a few cents different. The figures—the cost to the American consumer—will be much closer to the \$27 billion than the \$12 billion to \$15 billion figure.

But in any event, the direct costs are going to be somewhere in that area. It is going to be billions of dollars of direct cost.

Secretary SCHLESINGER. Mr. Chairman, the figure you cited earlier was approximately in the right range. The refiner's acquisition cost now is something on the order of \$12.50 a barrel. If it goes to \$18 a barrel, over the next 2 years, on an average, that would add on \$5.50 for domestic use.

Of course, that margin should be shrinking, depending upon the rate of increase of domestic oil. And as I pointed out, old oil is disappearing at a very rapid pace. Unfortunately, too rapidly. So that inevitably, refiner's acquisition cost is going to be rising.

And if OPEC prices remain reasonably stable, the gap would narrow.

Senator KENNEDY. We talked a little bit earlier—I think Congressman Rousselot mentioned the long history about the availability of resources, petroleum resources, in the world. And your own study, I believe, would indicate that the difference between 1978 and 1979 showed there has been an increase of production of some 2.8 million barrels per day.

Are you familiar with that Lincoln Moses study?

Secretary SCHLESINGER. Are you referring to world production, Mr. Chairman?

Senator KENNEDY. Yes; world production.

Secretary SCHLESINGER. I think that we should have had an increase of that sort between 1978 and 1979. But that is by itself a somewhat meaningless comparison, because that applies to the first quarter of 1979. OPEC production in the first quarter of 1978 was at a very low level, simply because we had the largest drawdowns from inventory in history. If you compare that with 1977, for example, you get quite a different judgment.

Senator KENNEDY. But in terms of comparison of where we are this year versus where we were a year ago, you still, according to the DOE's figures, show that amount of increase. As I understand DOE's estimates, you estimate that demand for oil runs about 3 percent in excess of the previous year's consumption. If you put those figures together, obviously, you find out that if the world consumption of 60 million barrels a day were to increase at 3 percent, 1.8 million barrels, and you take the increase between—according to your own figures—last year and this, it would be 2.8 million barrels.

If you take the studies that have been done by the Irving Trust Co., which points out in their December 27 study, in the early 1960's the non-Communist world had a 33- to 35-year supply of oil available to it at the rate then current, it has the same forward supply currently available at today's substantially higher rates of production. And this supply will likely increase to 36 to 37 years by 1980.

And the other area that Senator Javits and this subcommittee have been long interested in is the non-OPEC countries. This same study goes on to show, in other words, over the past 5 years, demand has grown by little more than a million barrels per day, while non-OPEC supplies have increased by more than 3.5 million barrels a day.

Secretary SCHLESINGER. Consumption and production, Senator, will in any year be equal to each other, save for changes in inventory.

Senator KENNEDY. But I think the point is, at least as long as I have been on this subcommittee, we have been talking about the scare tactics which have raised and escalated the price of oil right up through the ceiling. The American people are prepared to tighten their belt, I imagine, even in spite of the recent proposals or studies that were printed yesterday in the New York Times about the heavy skepticism that the American consumer has about increased production. And I think they are absolutely right, because it is basically marginal.

The American consumer believes that you are going to see an enormous transfer of resources to the oil and gas companies, which I think is certainly warranted and justified in these figures and statistics. And if you measure that against even what the current figures are in terms of the percentage of profits by the oil and gas companies without decontrol, which is really just incredible—Texaco at 81 percent,

Gulf at 61 percent, Marathon at 38 percent, Exxon at 37 percent—you have to wonder what the average worker in the plants and factories in my State or any State of this country, how they are going to receive the suggestion of the administration to hold their wages down to 7 percent. It just isn't going to make any sense.

I would be interested in what Mr. Schultze believes on that point. We have seen you are going to have over 700 labor agreements that are going to be signed over the course of this year, when you have the explosions of increases in oil and gas profits. We see the major transfer of resources from consumer to producer with this recommendation of decontrol.

And the only answer we hear is the alternative, well, you are either going to have decontrol with an excess profits tax or not an excess profits tax, take your choice, when actually the administration had the power and authority not to decontrol and to come back here in 1981 and say, all right, this is where we are at. And if we are going to deal with these kinds of problems now, we are going to work with the Congress on it. But we are not going to put the economy further through the wringer and see the price explosions, continued explosions, of heating oil or gasoline for the consumer, and the very significant increase that it is going to have on the rate of inflation.

It is basically a no-win situation.

I would like to just ask either Mr. Schultze or you, Mr. Secretary, about your attitude about the oil and gas companies' noncompliance with the guidelines of the administration. I believe earlier this year that Mr. Kahn indicated that—this is a letter that he wrote about the question of controls and guidelines. He said: "I continue to believe that so long as they are subject to even more direct and mandatory controls"—now talking about crude oil and gasoline—"It is not sensible to have another tier of voluntary guidelines. The time to consider whether they might be placed under the guidelines would be if the mandatory controls are removed."

Well, if we are taking off the mandatory controls, would we be applying the voluntary guidelines?

Mr. SCHULTZE. In the first place, even with the removal or phased removal of mandatory controls on crude oil prices, that in effect the margins of the refiners do remain under legal controls by the Department of Energy. We don't see any point to put two sets of controls on.

Senator KENNEDY. That's only a guideline.

Mr. SCHULTZE. No; that is across the board on products, at least most products.

Senator KENNEDY. You mean all oil and gas products are under the controls?

Secretary SCHLESINGER. You are correct, Mr. Chairman, it is gasoline that is under control.

Senator KENNEDY. It is only gasoline? Now I am asking about oil.

Mr. SCHULTZE. About distillates, crude, or products?

Senator KENNEDY. Let's start with distillate. Let's figure out whether these are going to be under the voluntary guidelines. Is the President going to include gasoline? Is he going to enforce the guidelines on those aspects of the industry as well?

Mr. SCHULTZE. Several things. First, gasoline is under specific controls.

Second, refiners' margins are subject to the voluntary guidelines.

Senator KENNEDY. What about crude?

Mr. SCHULTZE. Crude is not. Crude remains under control. It will be phased decontrol, but it is still controlled.

Senator KENNEDY. Would you spell that out? When you are phasing out the control, are you going to be phasing in the other aspects or not?

Mr. SCHULTZE. That I can't tell you.

Senator KENNEDY. Well, I think you are the principal contributor to the problems.

Secretary SCHLESINGER. Senator, between now and 1981, prices will move from lower tier to upper tier, which is essentially still controlled. There will be, for new new oil, essentially a move up to no control. That would not be under the guidelines.

Senator KENNEDY. Well, are you prepared to say you will not permit them to rise faster than the voluntary guidelines?

Mr. SCHULTZE. What we are saying is, we are.

Senator KENNEDY. That is a simple question.

Mr. SCHULTZE. Yes; refiners margins essentially will be subject to the margin, the voluntary margin.

Senator KENNEDY. Refiners; but what about the cost of oil?

Mr. SCHULTZE. The cost of oil, essentially, is moving from lower tier to upper tier. And upper tier is controlled until 1981. So there is control.

Senator KENNEDY. What I am saying is, it is going to follow your decontrol. And even if it runs past the voluntary—

Mr. SCHULTZE. It can't.

Senator KENNEDY [continuing]. Guidelines, you are not going to intercept—

Mr. SCHULTZE. It can't. The upper tier is still there.

Senator KENNEDY. You are saying the rate of decontrol of oil is going to be consistent with the voluntary guidelines?

Mr. SCHULTZE. No; I am saying that the rate of decontrol is consistent with the President's specific phased decontrol measures.

Senator KENNEDY. All right. Is that consistent with the voluntary guidelines?

Mr. SCHULTZE. What do you mean by consistent with the guidelines? It is consistent like the other parts of the voluntary guidelines.

Senator KENNEDY. Is it rising faster than 7 percent?

Mr. SCHULTZE. Yes; it will rise faster than 7 percent, as many other prices subject to the guidelines also will. Some go faster and some go slower—7 percent is not a number that applies to prices. Some are lower and some are higher.

Senator KENNEDY. Are you going to do anything about it, I suppose is what the consumer wants to know. You know what the flow line is going to be?

Mr. SCHULTZE. We know where the flow line is on crude.

Senator KENNEDY. Are you going to do anything about it on crude in terms of bringing that more into conformance with the voluntary—

Mr. SCHULTZE. I am trying to answer, Senator. We know where the control line is with respect to crude during this period between now and 1981. That is subject to DOE control. We have guidelines under formal controls. Refiners' margins are subject to the voluntary guidelines, and they will be expected to follow it.

So on all three counts, we have a specific approach and a specific set of targets.

Senator KENNEDY. Just a final question. My time is running out.

What do you think, Mr. Schultze, is going to be the attitude of the workers of this country, members of the unions, when they see both, on the one hand, the extraordinary increases in profits over the period of the first quarter of 1979 versus first quarter of 1978, and they see a very substantial increase that is going to result in the decontrol, when they are being asked to hold down to 7 percent?

Elderly people in New England and Massachusetts who are on the social security retirement are spending 50 percent of their income on heating oil. You can lower that thermostat to 65°, but you can't really lower it any further.

The working people need gasoline in order to be able to get to their jobs in my part of the country and other parts. You can conserve so much, but you can't get any more.

When they find out that you have these profits from last year, they are going to see the significant and extraordinary transfer of resources, whether it is your \$16 or \$17 billion to the \$22 or \$23 billion that has been estimated by others, that transfer to the oil and gas companies, how in the world do you expect that working families are going to be able to make ends meet with a 7-percent limitation on their wages?

Mr. SCHULTZE. Senator, several things. The first thing I hope the working people would do is urge the Congress, in no uncertain terms, to pass the windfall profits tax. That is one. And urge the leaders of the Congress to support the President in getting that windfall profits tax. Second—

Senator KENNEDY. But that—

Mr. SCHULTZE. Senator, may I finish my answer, please?

Senator KENNEDY. All right.

Mr. SCHULTZE. Second, by the time decontrol is complete, the increased cost to the consumers of this decontrol will be something like 0.6 of 1 percent of their income. Of that 0.6 of 1 percent of their income, about two-thirds will go to the public bodies and a large part of it to the Federal Government for supporting long-term energy development and for helping the poor.

The other 0.2 of 1 percent of income will stay with the oil companies as an incentive.

Let me repeat the numbers. It is something like—you can quarrel on the margin, Senator—0.5, 0.6, and 0.7 of 1 percent of personal income, of which the public bodies will recapture about two-thirds. One-third will remain with the oil companies.

I would hope that workers, one, would recognize—and it is very difficult—that we have to do something, not dramatic and drastic; but we have to do something to reduce our dependence on OPEC oil, which is ultimately driving the price of that up very substantially; and two, would urge the Congress to pass that windfall profits tax. That is what I would hope.

Senator KENNEDY. Well, your 0.6 of 1 percent, 0.2 of 1 percent, Mr. Schultze—

Mr. SCHULTZE. By the time decontrol is finished, right.

Senator KENNEDY. Come with me to New England—I am sure you are familiar with my part of the country—It means about \$200 per family, minimum, in the colder regions of this country.

Mr. SCHULTZE. My understanding, Senator—

Senator KENNEDY. I have researched Mr. Schultze; it is \$80 per individual. You used entirely different bases for that figure. The consumer understands that.

I would like to have everyone whose heating bill or utilities bill—for you to meet with every one of those people from my State. They don't go up \$200, because it sure as the devil will. The New England Commission itself says that it is \$221 more. The Council of North-eastern Governments estimates \$320. These figures aren't just taken out of thin air. I give you the low side on them. And in the way you present it, 0.6 of 1 percent, it sounds like it is minimal.

Mr. SCHULTZE. Senator, take your number of \$18 million, which I think is high, but let's take your number of \$18 million. Over \$2.5 trillion income, that turns out to be 0.7, 0.6; I believe it is 0.6 of 1 percent.

Senator KENNEDY. Why not divide it among the people, 200 million people, and find out?

Mr. SCHULTZE. That is what I am doing—personal income.

Senator KENNEDY. What the families are going to be spending is very important.

Mr. SCHULTZE. I think it comes out to \$90.

Senator KENNEDY. Well, it is your estimate, but it doesn't come out to \$90 a family. If you take the 200 million and divide the \$18 billion into that, it doesn't come out at that level. It comes out to a good deal more per family.

Mr. SCHULTZE. Senator, all I am saying is that—

Senator KENNEDY. It comes out about double that.

Mr. SCHULTZE. Senator, all I can tell you is we can quarrel on the margin of personal income. By the time decontrol is done, 1981 or 1982; it will be in the neighborhood of \$2.5 trillion. You can make the multiplication by yourself and get the percent.

It will be more for some people than others. As Secretary Schlesinger pointed out, in New England they have been hit harder. But precisely because distillate is already up closer to the world price, the percentage increase for them will be less, not more.

And, therefore, in summary, I think we would all be better off if we watched our adjectives.

I occasionally get into the situation of overstating the case, and I think all of us do. This is a difficult, painful decision to decontrol in a period of inflation. There is no question about it.

Second, it is something which is essential to get a rational oil pricing policy.

Third, while it is difficult and painful, it is not debilitating or devastating or dramatic. We are dealing with something that faces up to the real world, some aspects of which we don't like.

I don't like what the OPEC prices are. But we are living in a world in which that has happened.

I think all of us would be better off if we argued about it within the context and maybe using the right kind of adjectives. I know I perhaps have overdone it; maybe other people have, too.

It is a painful and a difficult process, but it is not devastating. It is something which other nations of the world have done in facing up to the oil problem.

Senator KENNEDY. I can, perhaps, just vacate the comment. I differ with you. It is painful, but I believe it is not a necessary one at this time.

And then you are welcome to add. I think it is painful, I think it is basically inequitable. I think it is bad energy policy because you are not going to see the increase in production.

I think it is bad energy policy because you are not going to see the increase in the conservation. Because people are going to have to have their homes at minimum levels, and they are going to have to be able to go to their jobs.

The kind of rebate that you are providing in your own program for the neediest people, the elderly people, the poor people of this country, amounts to \$500 million a year initially and \$800 million after that, while your own advisory committee estimated that it should be \$3.2 billion a year. So it is policy of inequity to many millions of people in this country.

And it is not necessary for you to take this step at the present time. The American people ought to understand it. You have the power and the authority to wait until 1981 and to try and either work with the Congress in terms of a more rational program and a policy that is going to be fair and more equitable. And that, the administration has refused to do. And I think it is bad economics, and it is bad energy policy. And I think it is grossly unfair and inequitable to millions of Americans here.

Senator Jepsen.

Secretary SCHLESINGER. Mr. Chairman, just on the matter of arithmetic. If we take the \$18 billion figure that you cited and divide that by 220 million Americans, we wind up with \$82, right?

Senator KENNEDY. Now there happen to be 4-member families in our region. Eighty-two dollars—that's per person. Let's multiply that times 4. There are even bigger families than that up in my part of the country.

If we multiply that by 4, that is \$320 per family—\$320 per family.

When we talk about six-tenths of 1 percent or whatever percent, \$80 per person in a \$2 trillion economy, when we are talking about adjectives or statements or comments. I am glad we found out that to people across the country, it will cost \$320 per family.

But in the areas of the country which are particularly petroleum dependent and have been over a period of years, in the colder climates as well as in the Southwest, it will be a good deal more. And I am glad we were able to clear that up.

Senator JEPSEN. It has been said whoever gets our attention gets us. And we are talking an awful lot about OPEC.

In this area of budgeting as quickly as possible for energy needs, which I think is important for all kinds of reasons, we share, I think the same concerns for our country. I would like just to take this op-

portunity to ask Mr. Schlesinger what is proposed or being contemplated being done with President Portillo and our neighbors to the south in Mexico by way of negotiations for energy and so on now.

Secretary SCHLESINGER. There are two aspects to that, Senator.

The first is, of course, oil.

The second is natural gas.

With regard to oil, we have encouraged as rapid increase in production as is possible. As you know, the United States now is the market for 80 percent of Mexico's exports. We would hope that we would continue to be the major market for Mexican exports. That is driven, I think, by transportation costs. The production in Mexico is, of course, under the control of a state monopoly. It is a technically proficient group, but it's resources are limited. They have rejected in the past outside assistance by major international oil companies, given the developments there since 1938.

We would expect that production of oil would build up to about 4 to 4½ million barrels a day by 1985. We would hope they would do better, and we will continue to get as a result of ordinary commercial transactions a substantial share. The more rapid the build-up, the better it is from a worldwide standpoint.

With regard to natural gas, we have recently had a mission to Mexico City that engaged in discussion of general principles regarding gas prices, the search for a competitive price which is fair to both countries. We have scheduled another meeting of those two groups of people representing the two countries. What we are seeking to do is to achieve a framework agreement which is fair to the Mexicans and consistent with the natural gas act which calls for just and reasonable prices.

As soon as the general framework is established, the negotiations will be turned over to the commercial sector to finalize the contract in terms of that framework agreement.

Senator JEPSEN. Thank you.

With the Alaskan oil, do we have the refinery capacity on the West Coast, geographically located, with the pipelines and so on, to handle that? Or does it have to go through the Panama Canal and come around and be able to finally be used by the customers?

Secretary SCHLESINGER. We are providing 1.2 million barrels a day in Alaska at the present time. We hope to see that increased to 1.35 by the end of this year. Of the 1.2, at the present, about 400,000 barrels are excess to requirements on the West Coast and are being transported through the Panama Canal around to our Gulf Coast refineries.

The solution to this problem, the main element of the solution, is to create a west to east pipeline such as the Ohio pipeline. We have been working industriously on that. It may require legislation from the Congress to achieve that end. Also, a northern tier pipeline is a prospect.

An additional way of dealing with the problem is alteration or retrofits of the refineries in California to increase their use of Alaskan crude as opposed to imported crude. We are importing a substantial amount from Indonesia at the present time because of the characteristics of those refineries.

Senator JEPSEN. Thank you, Mr. Chairman.

Senator KENNEDY. Senator McClure.

Senator McCLURE. Thank you, Mr. Chairman.

Are you familiar with the analysis of the President's April 5, 1979, crude oil pricing plan that has been prepared by the Subcommittee on Energy and Power of the Committee on Interstate and Foreign Commerce in the other body?

Secretary SCHLESINGER. I am generally familiar with it, Senator.

Senator McCLURE. I don't know whether you have had a chance to analyze those figures or not, but on page 9 of that report, which is dated April 1979, there is a table in increased pre-tax producer revenues. And under that, under what is there labeled as the President's program, in 1981, is about \$0.3 billion going into newly discovered oil; \$1.4 billion into marginal properties, \$3.1 billion into released lower tier volumes, and \$4.7 billion into increased upper tier volumes, for a total price impact in 1981 of \$9.5 billion under the President's decontrol program.

I didn't go further than that because I believe that in making their projections, they assumed the continuation of controls through 1985 rather than recognizing the controls terminated in 1981. So I chose the end figure, and they have the 1979 through 1985.

Have you had a chance to look at those figures and state whether or not you are in general agreement or disagreement?

Secretary SCHLESINGER. Yes; indeed. Those figures are generally correct.

Senator McCLURE. So that it is about half the size of some of the projections that have been made by others. And this includes all of the classes of oil that would be affected by the President's decontrol plan; is that correct?

Secretary SCHLESINGER. In 1981. The point that I think Senator Kennedy would wish to make at this juncture is that control would continue to some extent through the major part of 1981. What he, I think, is telling us is that if you decontrolled in the entirety suddenly without this phaseout program, that the impact on the oil company profits would be of the order of \$16 billion. But for 1981, by itself, the number is about \$10 billion, as you indicate.

Senator McCLURE. In regard to the oil company profits that have just been reported for the first quarter, I think a great many people, including myself, were predicting that those profits would be up, and as a matter of fact, they would look to many people as being very, very bad indeed in view of the energy crisis. And there would be an immediate reaction to those oil profit reports.

I note from an article that appeared in the Washington Post yesterday that the Exxon profits have gone up 37 percent. In the same article, U.S. earnings on oil and gas operations dropped from \$366 million in the first quarter of 1978 to \$348 million this year. That is industrywide.

If you look at the balance of that article written by John M. Barry, the profits reported by Exxon come primarily from foreign exchange fluctuations. The dollar dropped; foreign exchange went up. Their profits went up because of the change in valuation and relationship between currencies. And the majority of their profits occurred on foreign operations.

And there was, of course, industrywide at least an element of profits reflected in inventory appreciation. Is that a correct statement of the general profit picture of the industry?

Secretary SCHLESINGER. I think that for the major internationals that that is generally representative. As you indicated, Exxon itself

had a decline in its profitability on domestic operations. Other companies—I think Amoco reported yesterday, and it had some small increase on domestic operations. The big increases, as you indicated, come from foreign operations, from, in the case of some of the companies such as Exxon, worldwide chemical operations which are distinct from this issue and from foreign currency transactions.

What happened a year ago was that the dollar was weakening. This year, the dollar is strengthening. The reflection of that is an improved profit position. But I don't think that we want to see the dollar weakened simply in order to hold down corporate profits.

Senator McCURE. It might have helped them in the long run.

I also notice that according to the same report, or perhaps another report, that Exxon's investments are only 40 percent in the United States and 60 percent overseas. If, as a matter of fact, this profit picture as reported yesterday is correct, based upon that 60-percent investment overseas, they make nearly all of their gains in profits, and that their profit picture in the United States on the 40 percent that is invested here is actually declining, I would guess that they would probably be kind of tilted in favor of more overseas investments and fewer domestic investments.

I think this might be reflected also in some policies that this country—affected at least by the policies that this country—will develop. And I am a little bit concerned about the picture that has taken, when we moved a tariff protection for the investments that are made here, whether or not that is going to increase the outflow of capital.

Senator Johnston of Louisiana has been very, very much concerned. And he knows much more about the investment picture in the oil industry than I do about why we are not building refineries in this country. If we look at this profit picture that says it is not profitable already to invest overseas, then we reduce the amount of tariff protection the domestic industry now enjoys, wouldn't there be an increased push for overseas investment and price differential between refined products produced overseas and refined products produced in this country?

Secretary SCHLESINGER. Under the entitlements program which will be around until the end of controls, Senator, there is a very substantial amount of protection for the American domestic refinery that amounts to about \$2.60. As controls phase out, that protection coming from the entitlements program will disappear. The removal of these tariffs, of course, was designed as a temporary cushion. We shall have to work, the Congress and the administration, during the next 2 years to design a refinery policy which is satisfactory from the standpoint that you mentioned.

Senator McCURE. If as a matter of fact, that a tariff is a cushion to domestic consumers, a price cushion, that is much less of a cushion than is the entitlements program itself; is that not correct?

Secretary SCHLESINGER. The purpose of removing fees and duties was to ameliorate the rise in consumer prices that have stemmed from the rise in worldwide prices. There is a different kind of cushion applicable to the refineries. And that is that they buy the product at lower cost. And that amounts to about \$2.60 a barrel.

There are two separate kinds of cushions.

Senator McCLURE. As a matter of fact, the entitlements programs in effect subsidizes importers.

Secretary SCHLESINGER. The entitlements program overall subsidizes the importation of crude oil and discourages the importation of products.

Senator McCLURE. Right. And the maintenance of the entitlements program, there will have to be either the entitlements program or something similar to it as long as the price of domestic oil and foreign oil remains different.

Secretary SCHLESINGER. Yes, sir.

Senator McCLURE. Because otherwise, you get market imbalances that drive some people completely out of the market at the expense of domestic producers.

Secretary SCHLESINGER. Yes, sir.

Senator McCLURE. There will continue to be a subsidy unless we get the prices together. That subsidy right now, the entitlements programs, is also being used to subsidize New England on their energy costs; is that not correct?

Secretary SCHLESINGER. Yes, sir, about 50 percent entitlements relief on residual fuel oil.

Representative ROUSSELOT. How much?

Secretary SCHLESINGER. Fifty percent of the entitlements relief for residual fuel oil.

Representative ROUSSELOT. For New England?

Secretary SCHLESINGER. Yes, sir.

Representative ROUSSELOT. That's certainly a subsidy.

Senator McCLURE. You people in California are grateful for the opportunity to help them.

Representative BROWN. And in Ohio.

Senator McCLURE. I don't mean to belabor this question very long, but I have been tracking through the world supply of oil and the supply available in this country. World supplies of oil have remained relatively stable in spite of the Iranian cutoff that occurred starting late last year and has persisted to some degree up to this date. But while there was a cutoff of supply from Iran, there was an increase of supply from other sources. And the world supply remained relatively constant or at least did not reduce the full amount of the Iranian cutoff. Domestic production has not lagged.

I looked at the total amount of oil and product that is flowing into this system. And it has not declined. And yet I look at the allocation of oil and product, at least in my State, where it is some 12 to 15 percent lower than it was last year.

Now, I can make that up from only two places, or can explain it based upon only two factors.

One is there is increased consumption, particularly of gasoline.

And second, there is a fuel penalty in the production of unleaded gasoline to meet our clean air requirements of some 7 to 15 percent of the barrel of oil.

So as we produce more and more unleaded gasoline, we are getting 7 to 15 percent less total product out of that barrel that was devoted to production of unleaded gasoline.

But do those two factors by themselves account for the fact that suddenly we have allocations to our retailers and jobbers in Idaho 12-15 percent below what they were last year?

Secretary SCHLESINGER. We have a very complicated process at work. As you know, we start out in the Persian Gulf and we load in the Persian Gulf. It takes 2 to 2½ months to arrive at our refinery gates. The pattern in the embargo of 1973-74 was that when the embargo came on in October, we did not see the effects until late in December; and that the low point in terms of the arrival of crude during the embargo came in February, 4 months later.

We see something of a similar pattern in this case. We have noticed in recent weeks there has been a substantial decline in crude arriving at our shores. And we have been monitoring this carefully.

There have been those who objected to our using the American Petroleum Institute figures, so we have been monitoring by the use of customs arrivals. What we have seen is compared to an anticipated demand level between 9.2 and 9.7 in million barrels of oil per day for this time of year, a first quarter—

Senator McCLORE. You are talking about the current dropoff in shipments or are you talking about actual estimates over the last 4 months?

Secretary SCHLESINGER. I am talking right now about the discrepancy between anticipated demand for imports during the first quarter of the year which ran between 9.2 and 9.7 million barrels as projected by the Energy Information Administration and the arrivals in the United States. These arrivals have been dropping off in recent weeks. So the latest pattern of arrival is about 7.9 million barrels per day, once again reflecting the lags in question.

We have been drawing down our inventories in the United States between 700,000 and 900,000 barrels a day, including drawdowns of both products and of crude.

In recent weeks, the crude inventories have come up somewhat as refinery operations have been slowed down. The overall intent was to follow a policy of allowing inventory drawdowns in the hopes that Iran would come back on stream. That leaves us with reduced levels of inventory. Inevitably, as these inventory levels have proved inadequate preparation for the summer driving season, the major refineries have had to begin allocating at levels about 5 percent below last year. This is significant since demand for this year has exceeded that of the comparable period in 1978.

Senator McCLORE. Am I correct in assuming that the Department of Energy, looking at the 1973-74 experience and anticipating the time lag between the interruption of supply at the other end and the arrival of the supply of this end has consulted with refiners and marketers in this country to get them to take measures to anticipate that shortfall of supply?

Secretary SCHLESINGER. We have consulted with them with regard to the general supply picture, but the decisions to place their retailers on allocation for the most part were made by the major refiners as they faced their declining inventories of crude oil, declining inventories of products, and anticipated demand for this summer.

Senator McCLORE. The thing that concerns me, while we may have a 12- to 15-percent shortfall in allocation now, that certainly has not been matched by a 12- to 15-percent reduction in supply at the crude oil or product input end. The allocations are actually more severe, at least in my State, than the supply reduction is to the industry as a whole.

Now, again, I can see some loss because of the Clean Air Act move to unleaded gas which consumes more than a barrel of oil per gallon of gasoline.

We also have an increase in produced demand because people are driving more. And I suspect they are not driving 55 miles an hour or below. But there is an increase in consumption.

But those two factors themselves don't seem to me to be enough to account for a 12- to 15-percent reduction in supply out in the market in my State.

Secretary SCHLESINGER. Well, we would have to look at the particular problems in Idaho. We must bear in mind that a State like your own tends to grow a little more rapidly in consumption than do other States and consequently since one is dealing with 1978, that bears down a little bit more heavily than it does in some Eastern States in which the demand tends to be stable.

The allocation fraction at the present time runs about 92 percent. I think that is reflective of the level of demand and the level of arrivals.

As I indicated earlier during the first 3 months of this year we were drawing down inventories at something like 700,000 barrels a day more than is normal at this time of the year.

Senator KENNEDY. The Senator's time is up.
Congressman ROUSSELOT?

Representative ROUSSELOT. Thank you, Mr. Chairman.

Senator KENNEDY. Just for the benefit of the members of the subcommittee we do have an additional witness, Alice Rivlin, waiting here patiently and will remain with us, although she is under a deadline. And we will continue to meet through the hour. There are going to be several more amendments they are going to start, and we will start voting and we will be in and out, so whatever just for the benefit of the members.

Representative ROUSSELOT. I will try not to filibuster with questions.

Gentlemen, the President has said very forcefully several times that we need to force the oil companies to reinvest their earnings. That has been a very strong popular theme.

Now, they already invest twice what they earn each year. And some of them even go into debt to invest. And I know the President knows that because the same data is as readily available to him as it is to us. And I also realize that it is part of the public relations to get Congress to push through these additional taxes. But isn't the President concerned that windfall profit taxes, as he enunciated, might make the drilling even less rewarding than now and chase away the drillers to other areas where it would be more profitable to work?

Do either one of you want to comment on that?

Secretary SCHLESINGER. Well, the effect of the decontrol program should be to increase profits by about 30 percent between now and 1981. And there should be substantially enhanced incentives given the higher price, given the prospects of expanded profits.

Representative ROUSSELOT. But you are going to take half of it away.

Secretary SCHLESINGER. This includes the removal of 50 percent of the windfall gains. There will still be a substantial expansion of profits after tax.

Representative ROUSSELOT. Well, that doesn't follow to me, but maybe I just don't understand the economics of it.

I also realize that we haven't gotten the final version in the Ways and Means Committee yet of how this windfall profits tax will be structured. We heard the speech; we haven't seen the language.

Chairman Ullman told me as of yesterday, he hasn't seen it, either.

But I just wondered what the incentive would be if you take half of it away.

Secretary SCHLESINGER. Well, it is taking half of the increase.

Representative ROUSSELOT. I understand.

Secretary SCHLESINGER. Therefore, the other half of the increase represents incentive for additional activity. I think we will find that there is a substantial incentive to expand drilling activities as a result of this program. And I think that the industry would agree to that.

I think that the industry's point would be that the incentives would be even better if the windfall profits tax wasn't there, a point that you heard made earlier in the discussion with Mr. Schultze.

But there is a very substantial increase in incentive as a result of this activity mitigated to some extent by the windfall profits tax.

Mr. SCHULTZE. To give an example, at the present time, under the current controls, the producer drilling for new oil, new reservoirs, new fields, in effect, would get \$13 per barrel, current OPEC prices.

Representative ROUSSELOT. If he hits.

Mr. SCHULTZE. That's right. That is the incentive. That is what you get when you hit, \$13, though.

Representative ROUSSELOT. As you know, they don't hit every time.

Mr. SCHULTZE. I understand that. We are talking about the increased incentive. With this decontrol in effect, on such new oil, the producer, with \$18 per barrel, world prices, in effect, gets something like \$17, \$4 increase on \$13, or 30 percent, which more or less comes close to the 30 percent to look at additive windfall profits.

So you are giving a substantial increase without saying the producer is going to capitalize fully on OPEC.

Representative ROUSSELOT. I already asked you earlier, and you were going to respond as to how you think the tax will affect return on equity.

Secretary SCHLESINGER. The return on equity, Mr. Rousselot, will substantially increase, in response to your prior phrasing of that question. At the moment, the average return for industry, for the oil industry, is slightly below the national average. I think that it will not be below the national average when one incorporates the extended profits that are coming in this first quarter.

Representative ROUSSELOT. Even with the increased tab?

Secretary SCHLESINGER. Oh, absolutely. As I indicated, in real terms, we would expect company profits to expand by some 30 percent by the end of 1981 and that would carry them at that juncture above the national average.

Representative ROUSSELOT. Well, I will be interested to see Mr. Schultze's response to my question on return on equity. Now, in followup to Senator Kennedy's comment on the general consumer and working person, which I think is important, according to figures that I have seen, the average tax on the working person in this country, the 95 million working people, average, is anywhere from 40 cents to 45 cents on every dollar they earn, all levels of government.

So actually, taxes are one of the constantly escalating costs to every working person.

Have we considered cutting taxes by maybe \$350 per working person as a way to compensate for this potential increase? I know maybe this is not the subcommittee to bring that up in, and I bring it up in the Ways and Means Committee all the time, and maybe that is a way to compensate.

Senator KENNEDY. Or an energy credit for those that are going to be particularly disadvantaged by this kind of escalation.

Representative ROUSSELOT. I am glad to have you all in.

Senator McCLURE. I just wanted to note that that issue is being debated on the floor of the Senate right now. We will have an opportunity to vote on it very quickly.

Representative ROUSSELOT. Is somebody offering an amendment?

Senator McCLURE. Yes.

Representative ROUSSELOT. Oh, that will be good. Help our consumers that way.

Do you want to comment?

Mr. SCHULTZE. My general proposition would be a general tax cut equal to this, given the fiscal situation and the desire to have a restrained budget in order to fight inflation, would not be a good idea. However, to shield those who can least afford it, the administration has recommended that a portion of the windfall profits tax be used for that purpose.

But a general tax cut for this or any other purpose, it seems to me, is not a good idea given the budgetary, fiscal, and inflationary situation.

Representative ROUSSELOT. \$350 per family, something like that.

Mr. SCHULTZE. That's right.

Representative ROUSSELOT. The increased cost.

Mr. SCHULTZE. In the first place, you were talking about \$350 per household. There are 78 million households. It seems to me it would not be a good idea, no, sir. That size tax reduction in the current fiscal situation wouldn't be a good idea.

Representative ROUSSELOT. Money they would keep in their pocket; don't let them have too much change.

Mr. SCHULTZE. Basically that is correct.

Representative ROUSSELOT. That is a good, normal bureaucratic response.

Mr. SCHULTZE. It is hardly bureaucratic. We want to go it one better and give everybody \$1,000 or maybe \$3,000.

Representative ROUSSELOT. Fine. I will join you in that.

Mr. SCHULTZE. I will join you in watching the Consumer Price Index.

Representative ROUSSELOT. I think my time is up.

Senator KENNEDY. Congressman Brown.

Representative BROWN. Thank you, Mr. Chairman.

Mr. Schultze, are you aware of the letter written by the Subcommittee on Energy to Ms. Rivlin about the studies done by the Congressional Budget Office and about the criticism of these studies made by the Energy and Power Subcommittee?

Mr. SCHULTZE. I am not aware of that letter. I am aware, although Ms. Rivlin will be here to testify, that in effect upon revision, the Congressional Budget Office's estimate of the inflationary impact of this program, if that is what you are getting at—

Representative BROWN. Yes.

Mr. SCHULTZE [continuing]. Is very close, if not the same, as the administration's, and the House Energy staff's estimates are slightly lower now.

We are dealing with tenths of a percent. So I don't want to make much out of a tenth of a percent. But the three major estimates so far from the administration, from the CBO, which I understand is revised, and from the House Energy staff are all in the same ballpark of something like half a percent to 1 percent increase in the consumer price level spread over a period of 3 to 4 years.

Representative BROWN. I think the Energy and Power Subcommittee's estimates were a maximum of—

Mr. SCHULTZE. One-half of a percent.

Representative BROWN [continuing]. 0.5 percent; isn't that correct?

Mr. SCHULTZE. Right.

Representative BROWN. I gather from what you say, Mr. Schultze, Ms. Rivlin is going to recant; is that—

Mr. SCHULTZE. No; I understand Ms. Rivlin will be here to testify. So let me simply say at the moment, what I have seen is the House Energy staff's and our numbers are very close together. And I believe the CBO's are, too.

Representative BROWN. Let me go back, if I can, just a minute, Mr. Schultze, to the point that my colleague, Congressman Rousselot, was making. And that is that under the law as it exists now, without any action by the President or even with action by the President, by 1981, there will be no price controls on oil, domestically produced oil. And the impact of that, in view of the fact that it is now 2½ years to that date, when the deregulation occurs automatically under present law enacted by the Congress, would be that anybody who goes out and looks for oil will get the market price in the world at that point without any tax provisions whatsoever; right?

Mr. SCHULTZE. Right.

Representative BROWN. So since it takes about 2 years to bring in an oil well, now is about the time when a lot of people ought to be hustling out there to look for oil because they have visions of pie in the sky or maybe geologically, pie in the ground, that they are going to benefit from.

But the impact of an added tax at this point is to depress that optimistic view of the 10,000 to 15,000 people who regularly get out and search for oil, isn't it?

Mr. SCHULTZE. If you want to say, does it depress that compared to a situation of complete decontrol and no facts—

Representative BROWN. Which is the current situation up until the time the President spoke. In other words, that is where the law was directed.

Mr. SCHULTZE. If everyone sat on his or her hands from now to that day, that is correct. The President does not believe that would make good energy policy, it is clear.

Representative BROWN. That is what I am unclear on. And that is what I want to clarify between you and the Secretary of the Department of Energy. What is the objective of the President's policy? Is it to produce more domestic oil? Is it to produce more revenues for the Federal Treasury? Is it to set some kind of a limit on the revenues of those terrible people, the oil companies?

Mr. SCHULTZE. No; let me do it my way. And I am sure Secretary Schlesinger probably has a more eloquent way to do the same thing, and he can try his hand.

Representative BROWN. I have learned you are both terribly eloquent. [Laughter.]

Mr. SCHULTZE. Thank you. I take back everything I might have said.

First is to introduce a rational pricing policy for energy, which means that on the market we ought to have prices for energy equal or level across sources.

Representative BROWN. Equal to what?

Mr. SCHULTZE. Equal to world levels, equal to world prices.

Representative BROWN. Prices, when you say "prices," you mean the people should pay the prices?

Mr. SCHULTZE. Domestic prices.

Representative BROWN. The people who are selling the oil, they should not get those prices?

Mr. SCHULTZE. I am trying to lay it out.

Representative BROWN. But, you see, two people play with the price issues—

Mr. SCHULTZE. I understand that.

Representative BROWN. You are talking about the ones who pay for the product?

Mr. SCHULTZE. Not the after-tax return, the price—

Representative BROWN. You are talking about the consumer, the price for consumers should be at world rates?

Mr. SCHULTZE. Price to users should be at world levels for the reasons that are spelled out in both Secretary Schlesinger's testimony and my testimony. And I won't bore you with them, but they are very, very important.

Representative BROWN. So the consumer should pay the OPEC price.

Mr. SCHULTZE. Users, meaning consumers, businessmen, whatever.

Representative BROWN. Thank you.

Mr. SCHULTZE. Second, that we have this in turn moving domestic prices up to that level, including prices on wells drilled many years ago will generate substantial additional profits, not all of which are needed or necessary to provide the kind of incentives and cash flow that is needed for the kind of oil and gas exploration that we need.

Next, that our longer term energy policy has to have two fronts to it. First, a front in which we are developing and exploiting our own domestic oil and gas resources.

Representative BROWN. Wait a minute, now.

Mr. SCHULTZE. Second, a front on which we are providing substantial research and development assistance for the discovery and the exploitation of new energy choices apart from that.

Now, essentially what the President's program does is use the substantial revenues from decontrol first to return some to the oil companies with a judgment as to this is what is necessary, and next to recapture some of those, both to shield the poor and, second, to provide longer term energy strategies because our problem is not just oil for the next 5-10 years. Our problem is a long-term strategy for the next 25-50 years.

Representative BROWN. Let's talk about some of those concepts just for a minute. First, there is the question of old oil. And I don't think

I misspeak your objective when you say that somebody who has old oil in the ground, that is oil found when the costs were not quite as high as they are now, in more accessible places, that those people should not have windfall return because it may be much more for them than it would be for somebody who had recently gone out and drilled a well at more expensive locations and at higher cost; is that right?

Mr. SCHULTZE. Can I qualify that a little? If we were dealing with a price which had gone up by 20, 30, or 40 percent, I think I would wonder about this, too. But who can distinguish what is and what isn't?

We are talking about a price which over a 5-6-year period has gone up by six-fold. And therefore, there is a difference.

Representative BROWN. Let me go on with the questions.

The question is as follows: I am advised that on average, you get about 25-30 percent of the oil out of the wells unless you really do something to get it out. And that years ago when oil seemed to be plentiful, we didn't worry about that extra 4, 5, or 10 percent of oil that was in the ground in an old well, but that now we can inject detergents, water, anything else you might think of, that would float that oil out. And you can get another 4, 5, or 10 percent out of the well to raise the return to, say, 35 percent instead of 25 percent.

Now, that is cost, right?

Mr. SCHULTZE. Right.

Representative BROWN. I happen to have, in my State of Ohio, two oil companies of some size. One of them, Marathon, is very much in the old oil business. The other one is very much in the new old business. Sohio is the big player in Alaska. So they have the expensive wells. Marathon has the old wells. But there is a whale of a lot of oil out there. And I am told that that company knows where those oil wells are, and they can put that stuff in the ground and get some additional oil out.

Now, does our policy, the President's policy, really encourage that?

Mr. SCHULTZE. Yes, sir.

Representative BROWN. Or does it say that we are going to punish those people because they have the old oil wells that didn't cost much to drill, but without recognizing that, currently, it will cost a good deal to do the extra work that is required to get that extra little 10 percent out of the oil well?

Mr. SCHULTZE. Let's see how we are going to "punish" them. At this time, that old oil brings them \$6 per barrel. Under the President's decontrol schedule, that enhanced recover technique, by 2 years from now, you are making plans, as you say, 2 or 2½ years from now, at the present price of OPEC oil, would bring them \$17 per barrel. So they would be punished by being able to get \$17 instead of \$6 for that enhanced recovery.

Representative BROWN. That assumes no cost, doesn't it? When you talk about \$17, when you talk about \$6 to \$17, that is \$11 but—

Mr. SCHULTZE. Instead of \$18.

Representative BROWN [continuing]. They don't get that \$11 just by turning the spigot. We are talking about the reinvestment required with that.

Mr. SCHULTZE. In this case, you brought up, in this particular case, without a tax, they get \$18 instead of \$17.

You might ask your friends from Marathon whether that is going to make a difference. I am saying they are being "punished" by going from \$6 to \$17. That does recognize the substantial additional cost and time.

Representative BROWN. What is that cost?

Mr. SCHULTZE. It is a very substantial cost.

Representative BROWN. What is it?

Mr. SCHULTZE. It varies. There is no one cost. It depends on the well and technique. It probably ranges from a relatively small to a large amount.

Representative BROWN. Let's say half of that \$11, \$5.50, goes into cost.

Mr. SCHULTZE. Pardon, I'm sorry.

Representative BROWN. Let's say that half of that \$11 per barrel, another \$5.50 or \$6, is cost.

Mr. SCHULTZE. Yes. So then they are getting, if it is \$11, they are going to get \$17 as against a cost of \$11.

Representative BROWN. And your tax.

Mr. SCHULTZE. The cost to the company of the old well is—

Representative BROWN. Your cost of finding the oil, of getting that additional oil out, is compensated in what way?

Mr. SCHULTZE. The cost is compensated by the fact they are going to get \$17 per barrel, against the cost of \$11.

Representative BROWN. With the tax.

Mr. SCHULTZE. No. It is with the tax taken out for that kind of oil, for enhanced recovery. In fact, we are going beyond that, and starting January 1, 1980, we are going to let them release some other barrels that aren't subject to enhanced recovery in order to get the front-end financing to do it. So with respect to that particular problem—

Representative BROWN. You feel you really give them sufficient incentive to make that investment, that \$6 or \$7 investment, in the well?

Mr. SCHULTZE. That's correct, sir. They are getting—

Representative BROWN. What kind of return will it create on that kind of investment?

Mr. SCHULTZE. There is no way I can know that because I don't know what the Marathon costs are, well by well. What I am saying is it is a very, very substantial increase.

And as Secretary Schlesinger just pointed out to me, taking into account the released barrel because of the front-end financing, they are getting better than world price as an incentive in this particular case for enhanced recovery, which is the very particular case you mentioned.

Representative BROWN. Maybe I ought to ask Secretary Schlesinger how much do you assume, then, we will produce from these old wells under that system?

Secretary SCHLESINGER. Well, we are expecting about 200,000 to 250,000 barrels a day of additional production because of—

Representative BROWN. By what year?

Secretary SCHLESINGER. By 1985 because of the special incentives for enhanced recovery.

Representative BROWN. Now, let me go to another point that you have hit upon about the need to shield the poor in your energy production policy. Can you cite to me any other approaches where we tax the

producer, in effect, to take care of the impact of the cost of his product on the user of that product? I think in terms of your food stamp program, for instance, that is a separate program, isn't it, from our agricultural program?

Mr. SCHULTZE. That's correct.

Representative BROWN. Or maybe I ought to talk about our public housing programs, which are programs of social necessity that the Congress has undertaken that are separately financed from policies that relate to homebuilding of the individual homeowner.

Mr. SCHULTZE. At the moment, I cannot cite you another example, which surely doesn't make it a bad policy.

Representative BROWN. It occurs to me it may not be a good policy simply because it may be counterproductive in this regard.

I just say to you, as an individual, I don't have any strong feeling that we should not assist the poor. As a matter of fact, I think quite the reverse. I think we need to do something about taking care of the impact of higher fuel costs as we have taken care of the impact of higher housing costs, taken care of the impact of higher costs of living in the social security program and others.

I think there is a distinct need for that. That ought to be part of our national social policy.

The thing I question is your tying it in with energy policy, the reference to the production of energy in this country.

Mr. SCHULTZE. Remember, if we were trying to shield the poor, as some would have us, by holding down energy prices below what was really an efficient and effective price, then I would agree with you, we are not doing that.

Representative BROWN. But you were, up to a few weeks ago. We still are. As a matter of fact, up until the 1st of June.

Mr. SCHULTZE. That is correct. What we are doing is facing up to, first, a fact of life that in the case of this particular resource, we do need to get prices to users up. There are some significant windfalls entailed. But, not all the increase is a windfall. We are not treating it that way. There are some significant windfalls in that policy which is necessary for our national security. And our national energy policy is going to be particularly painful on the poor.

It seems not only just but logical that a windfall tax, we believe, is needed in the interests of equity. Part of it should be used to aid the poor.

At the moment, I can't think of any other exact example.

Senator KENNEDY. We do that in black lung, I believe.

Mr. SCHULTZE. Good point.

Senator KENNEDY. Black lung is a certain percentage.

Representative BROWN. So we only really do it in energy areas.

Mr. SCHULTZE. Unless I can think of other examples, that's right.

Representative BROWN. Keep working on it because I don't think black lung has done anything but raise the price of coal.

Mr. SCHULTZE. We do some things. We do tax gasoline to build roads. That isn't the poor, but there are some other cases.

Senator KENNEDY. The Congressman's time is up.

Representative BROWN. Thank you, Mr. Chairman. I wasn't keeping close track of the time and wasn't here earlier to keep close track of the time. So I will accept your suggestion we abbreviate.

Does the tax policy that has been proposed or that is going to be proposed—because this is a little bit like discussing SALT, I find it awfully hard to debate an issue that has not been presented to the Congress yet—is it your anticipation that the tax policy will treat oil companies as an average? In other words, I go back to my Ohio situation where one company is a processor of old oil, and another company is a player in the new oil area. Prior to the embargo, Standard Oil of Ohio had very little new oil. They made heavy investments, heavily mortgaged the company, to make heavy investments in Alaska. And it produced additional oil for the United States if we can arrange to get it into this country.

And that has been a positive contribution, it seems to me, as it would be a positive contribution by Marathon if they could now go out and invest money in these old oil wells to get that additional percentage out. Both of those are good energy policies, I would think.

But what if Marathon decides to go out and look for new oil on the Continental Shelf with its gains from the old oil price escalation? That is the profits, the increased profits, that are made. Does the policy allow that? In other words, does it allow for a switching around of the nature of the company?

Do you understand what I am asking?

Mr. SCHULTZE. Yes, sir.

Representative BROWN. All right, will it?

Secretary SCHLESINGER. Indeed, it not only allows it, it even encourages it. We would hope Marathon would go out and find new oil for which the price will be the world price after June 1.

Representative BROWN. What about the possibility of investing in the development of coalfields?

Secretary SCHLESINGER. There is no constraint on that either.

Representative BROWN. Nuclear?

Secretary SCHLESINGER. There is no constraint on that.

Representative BROWN. So that in effect it is not an oil reinvestment, but an energy reinvestment that will be encouraged by the President's anticipated plan?

Secretary SCHLESINGER. I should say it is encouraged that they invest in other oil capacities. The program is neutral with regard to whether or not investments are made in coal or uranium. There clearly is a bias in favor of investments in the energy area as opposed to ancillary areas.

Representative BROWN. And you think that the impact of the tax, Mr. Schlesinger, since energy is your concern over the economics, I trust, will be greater than it would have been if we hadn't had any proposal by the President in this field? I am talking about the 1981 impact.

Secretary SCHLESINGER. The effect of the tax will be to some extent, as you have suggested, to mitigate the substantial improvements in incentives that will come from decontrol. But it would only somewhat limit the growth of incentives. The remaining incentives are very great, and they are particularly great both for new oil, to which you referred in the Ohio case, and for enhanced oil recovery, as in the Marathon case.

Representative BROWN. Just a final question. If there were no tax or if there were a tax that provided that all the additional gain was in-

vested in energy finding, energy production, would the impact of the additional supply of energy be worth not taking away that incentive or worth not taking away that tax?

Secretary SCHLESINGER. In the short term, the additional incentive does not strike us, in the administration, as worth it. There is a very substantial increase in incentive that comes from decontrol with the windfall profits tax.

Representative BROWN. I said that was the last question, but just once more, do you wish we had perhaps decontrolled a little quicker, Mr. Schlesinger, when we didn't have the Iranian situation that drove that price right through the roof?

Secretary SCHLESINGER. Well, with regard to gasoline, we have been trying to decontrol for 2 years. We would have preferred to have gotten out of that before the impacts of these shortfalls.

With regard to the crude oil, the authorities did not come to the President until June 1. And we were working with the legislation as passed by the Congress, which limited the flexibility of the President's position.

Representative BROWN. Mr. Chairman—

Secretary SCHLESINGER. Indeed, we have felt, to go back into the national energy plan, we ought to go to world prices and that as a consequence of that, we could get rid of much of the controls starting with the controls on refineries, going to controls on crude oil.

Representative BROWN. Mr. Chairman, let me conclude by this remark: I think the point that we have to look at here is what the additional tax is going to be—how big a part of the profit potential of additional investment in trying to find oil or any other energy source, that the company may be looking for—in other words, does the tax take all the profit?

Secretary SCHLESINGER. No, sir.

Representative BROWN. If it takes all the profit—no, no, I am not asking a question. I am saying that the issue of what the President is going to present to us is as follows: If the President says we take all the profit that the company is going to get for additional investment, then there is not going to be any additional investment in finding energy, and the whole decontrol process would have been unnecessary.

If, on the other hand, it allows for a sufficient additional product to be an adequate incentive for U.S. domestic companies to look for energy, not just oil, but energy, in this country, then the tax will make sense because that is what our objective is, I trust.

Secretary SCHLESINGER. Yes, sir.

Representative BROWN. I do differ, frankly, with the idea that you ought to protect the poor with your energy tax policy or your energy production policy because I don't think the two have to equate. I think you can protect the poor in other ways, as you do in many other fields.

But nonetheless, we will watch for that tax presentation to see whether or not in fact it is a sufficient incentive to get additional energy. If it isn't, then what the President has done in his speech in the other night is sort of a neutral position. And we won't be a hell of a lot better off than we are right now. And that is declining production.

Thank you, Mr. Chairman.

Senator KENNEDY. Thank you very much.

Secretary SCHLESINGER. Thank you, Mr. Chairman.

Senator KENNEDY. At this point, we will place your prepared statement, Mr. Schultze, in the record.

Mr. SCHULTZE. Thank you, Mr. Chairman.

[The prepared statement of Mr. Schultze follows:]

PREPARED STATEMENT OF HON. CHARLES L. SCHULTZE

I am pleased to discuss with the Subcommittee today the President's recent energy actions. I will cover three major topics in my testimony—why the President has chosen to decontrol crude oil prices, overall economic impacts we expect from this action, and the need for a windfall profits tax and the Energy Security Fund.

BACKGROUND

The supply and price of crude oil are at the heart of the nation's, and the world's energy problem. That problem has three parts: First, OPEC or no OPEC, the worldwide production of crude oil will simply not grow rapidly enough in the coming decades to supply the world's need if we continue to rely as heavily as we now do on petroleum products to meet our energy demands. We shall have to reduce our reliance on oil, develop alternative sources of energy, and use all forms of energy more efficiently. The use of oil and energy is deeply embedded in the current technology of production and in the behavior of consumers. Begun in good time, technology and behavior can gradually adjust, at relatively small cost and with a minimum of disruption. But postponing the adjustments in the hope of avoiding small costs now will inevitably impose very substantial costs and major disruptions later.

The second major aspect of the oil problem is our rapidly growing dependence on oil imports. This year alone we expect to pay \$50 billion for foreign oil that will supply half our domestic needs. We now import more oil than we did in 1977 when the President first proposed the National Energy Plan. One quarter of the world's oil imports are taken by the United States. The political crisis in Iran has demonstrated anew the fragility of the world oil market and our susceptibility to political upheavals in a very unstable part of the world. For the foreseeable future, we will have to rely on oil imports for an important part of our supplies. But we must curb the dangerous growth in that reliance. To the extent we do so we improve our national security, reduce the strain on our balance of payments, and, by reducing the worldwide demand for oil, make it harder for OPEC to raise its price.

Despite the provisions in the National Energy Act that promise to reduce oil imports, we have continued to promote the importation of oil by keeping its domestic price significantly below the world price.

The President's decision to phase out controls by October 1981 reverses this policy. It will end the subsidization of imports. It will stimulate efforts to search for and produce more oil. And it represents a major new step to help ease the longer-term transition away from oil to more plentiful energy resources.

THE PROGRAM

There are three major parts of the President's program. First, the prices of domestically produced oil will be permitted to rise gradually to world levels by October 1981. To accommodate our present inflation concerns, the allowed price path will be steeper in 1981 than in 1979 or 1980.

Second, the program both recognizes the need for additional production incentives and incorporates a tax to prevent owners of oil production from reaping undeserved windfalls. While oil producers will retain part of the price increase, the other part will be captured for public use by a windfall profits tax. Production incentives will be maximized under the decontrol path that will be followed.

Third, we propose to use the windfall tax to (1) shield the poor from the impact of the domestic crude price increase, (2) further develop mass transit, and (3) develop other energy conservation measures and alternative sources of energy supply. Passage of the tax is necessary to finance the spending initiatives proposed by the President.

NEED FOR AND GAINS FROM DECONTROL

Since 1973, prices of domestically produced crude oil have been controlled at levels below the world price. Today, there is a substantial discrepancy between the average price of domestically produced oil and the world price.

To prevent this disparity in prices for crude oil from upsetting the competitive balance of the oil refining industry, we have used an entitlements system to equalize the costs of crude to all refiners. Under this system the disparate prices for imported and domestic oil are averaged. All users pay that average price, which is now several dollars a barrel lower than the world price. The system has become highly complex and cumbersome. Most importantly, it encourages oil imports. Refiners who purchase expensive imported oil are compensated by refiners with access to cheaper domestic crude. And so consumers of oil in the United States all pay an average, or blend, price several dollars a barrel lower than the world price.

Every additional barrel of oil that is consumed comes from a step-up of imports, and the nation now pays the world price for each of those imported barrels. Those who consume the additional barrels, however, pay the lower, averaged price. Everybody else using oil makes up the difference, through the entitlement system, by paying just a little bit extra for all the domestic oil they use. In doing this we delude ourselves. Our controlled price system tells everybody that the cost of additional oil consumption is less than the world price. And so, consumers and business firms act on that presumption in their individual decisions. The nation, however, pays the full world price for the extra consumption, and the difference is subsidized by a "tax" on all the other oil we consume. In this way, we literally encourage unwarranted extra consumption and subsidize imports to supply it.

Moreover, our controls on oil discourage the development and production of alternative energy sources. Every barrel of oil equivalent that is produced from non-oil sources, like synthetic fuels, saves the nation some \$17-\$18 in reduced oil import costs. But we force producers of alternatives to sell into a market where they must compete with oil whose price is controlled at the lower average price. Thus we discourage investment in such alternative sources, at a direct loss to the nation. Incredibly, under the current control system, we pay OPEC more for oil than we are willing to pay Americans who produce oil substitutes. It would be hard to design a system more carefully calculated to encourage oil imports and slow down the development of alternative domestic sources.

Price controls also slow down the development of our own domestic oil resources. A lot of "old" oil was developed years ago at lower costs and continued production does not require high prices. However, the volume of that oil steadily declines as pressure is lost in the producing field. But even in old oil reservoirs, substantial additional production is possible with investments in various forms of enhanced recovery, higher costs are incurred, but additional oil can be produced. Higher prices, even after application of the windfall tax, will provide incentives to producers to make these needed investments and bring into production this additional oil.

These effects of the current system of price controls and entitlements combine to increase our dependence on OPEC, exacerbate our balance of payments position, weaken the dollar, and thereby worsen domestic inflation. Under these circumstances, it is essential that we embark on a path to decontrol the price of crude oil. We expect this action to produce four major benefits.

1. Reduced Oil Imports

Relative to continued price controls, decontrol will raise the average price of oil consumed to the United States some \$2.00 to \$2.25/barrel or about 5¢/gallon by the time decontrol is fully complete. While this is not a huge increase, it will nevertheless help to reduce oil imports by encouraging conservation and stimulating oil exploration and development.

The Department of Energy estimates that the President's program will reduce oil imports by about 40,000 barrels/day in 1981 and by roughly 1 million barrels/day by 1985. The Congressional Budget Office estimates somewhat smaller but still substantial, import savings. We will no doubt be hearing other estimates in the coming weeks on either side of these.

Savings of the order and magnitude we have estimated are not trivial. Even the savings of 400,000 barrels/day expected by 1981 translate into an annual dollar saving of almost \$3 billion.

By 1985, even if world oil prices rise no faster than world inflation, the expected savings will have risen to something like \$10 billion per year. There is probably no other single action we could take that would by 1985 produce oil import savings of this magnitude.

It will take time for both oil demand and supply to respond fully to higher prices. The current generation of housing, factories, buildings, and to a lesser extent automobiles, was built in an age when energy prices were far lower than those prevailing today. To completely replace it with a capital stock that is more energy efficient could take up to 30 years. We are making progress through legislated increases in automobile fuel economy. Later this year, DOE and HUD will propose energy efficiency standards for new buildings and appliances. But laws and regulations will not be sufficient. Unless we want to subsidize consumption, prices of fuels must reflect their costs of replacement. We have started on a path to do that with natural gas. We are now doing it for oil.

Despite the long lead times, we are already seeing demand responses to the sharp energy price increases suffered in the wake of the 1973-74 oil embargo. In the past when energy prices remained roughly constant, total energy demand grew at about the same rate as GNP. Between 1972 and 1978, however, when the real wholesale price of energy rose 55 percent, energy demand in the United States grew at slightly less than half the rate of GNP growth.

We also have abundant evidence that energy demand in particular sectors is responsive to changes in price. Economists measure such responses through "price elasticities," or the percentage change in demand for each 1 percent change in price. Studies clearly indicate that price elasticities of demand for energy products, including oil, are negative—that, as is true for other goods, energy demands falls when prices rise. More importantly, the long-run responses are substantially larger than the estimated short-run responses—confirming our view that the conservation effects of decontrol can be expected to grow over time.

Energy supplies also respond slowly to price changes. Like conservation efforts, there are long lead times associated with oil exploration and development programs. Recognizing this fact, the President's decontrol path provides incentives to begin new drilling and development as soon as possible by granting the world price to newly discovered oil and by providing world prices and front-end financing for tertiary recovery from existing oil reservoirs. In addition, the program substantially enlarges production incentives for existing wells by elevating growing fractions of lower-tier oil to the higher-priced upper tier and by raising the upper-tier price itself to the world level by October 1981.

To prevent producers from reaping windfall profits, we propose that a portion of the additional revenues from the decontrol effort be taxed. As I will discuss later in more detail, the tax is necessary to shield the poor from the price impact, to provide assistance to mass transit, and to fund research and development of alternative energy technologies. It does not remove the incentive to find, develop, and produce additional oil. Through the end of October 1981, after payment of both the windfall tax and the normal corporate income tax, oil producers will still receive nearly \$6 billion of the \$16 billion increase in oil revenues from decontrol.

Our oil pricing actions will also have a growing impact over time on our use of other energy sources and technologies. By removing the subsidy for consuming oil, we make both conventional non-oil energy sources—such as coal and gas—and the longer-range technologies—such as synthetic fuels, solar, and geothermal—more competitive. The proceeds of the windfall tax will finance a public program to accelerate the development, in particular, of the long-run technologies. The efforts to stimulate the development of alternative energy sources are a key part of our overall energy policy.

This brings me to a third point. As long as we control the price of oil below its replacement cost we help to create the expectation that the subsidy will continue, delaying efforts by consumers to conserve and discouraging the private development of non-oil energy alternatives. Oil price decontrol will reverse these expectations. It signals to consumers the importance of cutting back oil consumption and tells producers both of oil and of other energy sources to step up their production and development efforts. Over the long run, this reversal in expectations, coupled with the other effects I have mentioned, should pay off in substantially lower imports of foreign oil.

2. A Stronger International Economy

A second major benefit of the decontrol program is that it will strengthen the world economy. By raising the domestic oil prices to world levels and thereby reducing our import bill, we provide a strong signal to OPEC that we are truly tightening our belts and at the same time strengthening the value of the dollar

in which a large part of their assets are held. Together with the efforts being made to reduce imports by other consuming nations, these effects should help to apply downward pressure on the world price. All countries would benefit from this. In addition, the stronger dollar will help boost the export sales and growth of our trading partners. Their expansion, in turn, will enlarge the market for our own exports.

3. *Elimination of Entitlements*

One of the major benefits of decontrol is that it will finally put an end to the complex entitlements system. It will end the cumbersome bureaucracy that administers it. It will end the subsidy of oil consumption it helps to provide. And it will also result in one other major advantage.

Entitlements currently subsidize not only the importation of foreign oil but also the price of this foreign oil. Recently, during the initial months of the Iranian cutback, one oil company paid close to \$20/barrel for Iranian oil, a price well in excess of the official OPEC price at the time. The Department of Energy strongly objected, as they should have, because transactions in excess of the official OPEC price only encourage the cartel members to raise it. But DOE's objections were to no avail, in part because through reimbursement under the entitlements program, the effective price to this company will be lower than the price quoted in its contract with Iran. Ending the entitlements program will stop this subsidy and encourage oil importers to obey the laws of economics and shop around for the best price.

4. *Minimization of Disruptions*

The authority to control crude oil prices under the Energy Policy and Conservation Act expires on October 1, 1981. If we do not begin to gradually phase out controls now, the lifting of controls on the date of their expiration would impart a major shock to the economy. The President's plan avoids that outcome, beginning the process of decontrol now to smooth the transition toward full replacement-cost pricing of crude oil. It also avoids any uncertainty that a lengthy debate on the extension of controls would bring. It takes oil prices out of the hidden closet of the entitlements system and into the open air of the market to steer our consumption and production decisions along an efficient path.

NEAR-TERM IMPACTS

Decontrolling oil prices on a phased basis necessarily adds to the rate of inflation over the next several years. Higher prices for gasoline and heating oil, and for electricity produced from petroleum show up directly in the consumer price index. Higher costs for energy and petroleum feedstocks used in industry will be passed on in higher prices. There will be some indirect effects also through escalator clauses in wage contracts that raise wages and then prices in unrelated industries. Taking all of these direct and indirect effects into account, however, the impact is not large. We estimate that the additional inflation resulting from phased decontrol—compared to retaining controls indefinitely—amounts to about 0.1 percent in 1979 and averages 0.2 percent a year over the next three years. By 1982, the level of the consumer price index would be perhaps three-fourth of a percent higher.

These estimates assume that OPEC prices rise only as fast as world inflation over the next four years. We have also estimated the inflationary impact of decontrol under a scenario in which the world price of oil rises by 3 percent a year more than inflation. In that case, the inflationary impact of decontrol would be slightly larger—by 1982 the level of the consumer price index would be higher by 0.9 percent. The small size of the difference between the two scenarios stems from the fact that two-thirds of the oil we consume comes from either imported oil or from categories of domestic oil, like stripper and Alaskan, whose prices are already allowed to move with the world price.

The estimates of other analysts vary somewhat, but they are in the same ballpark. The staff of the House Energy Subcommittee estimates an inflationary impact slightly less than ours—a 0.5 percent increase in the level of the CPI spread over the next three years. The latest Congressional Budget Office estimates are very close to our own.

Immediate decontrol would have added a fairly substantial inflationary shock to the economy in 1979. The direct impact would have added about one-half of

1 percent to the price level directly, and another 0.3 to 0.4 percent in 1981 through indirect effects.

What the President has done is to spread out decontrol over 2½ years with somewhat more of the impact coming in the latter part of the period, and somewhat less in the early part. Our price trajectories for oil with the President's decontrol schedule and with continuation of current trends are contained in table 1 (attached).

A large part of the additional costs paid by users of oil will be captured by the windfall profits tax and the normal income taxes. They will be recycled back into the economy through the Energy Security Fund. The remainder of the added revenues, flowing to oil producers, should also give rise to added spending on oil, gas, and other investments. Since the additional spending on energy research, development, and other projects will take place only gradually, while consumers, after paying more for petroleum products, will have less available for other spending, decontrol will exert a small restraint on aggregate demand and will slow economic growth slightly over the next two years—by perhaps 0.1 percentage point a year. During 1979, as we fight inflation generally, such additional restraint is not unwelcome. In later periods, fiscal and monetary policy can be adjusted to the needs of the economy as they develop, taking into account the specific economic impact of oil decontrol and expenditures from the Energy Security Fund.

A small although unwelcome increase in today's inflation rate is the price we have to pay for a more rational and effective energy policy. Over the longer term, however, the actions taken by the President will work in the direction of reducing inflationary pressures, albeit by amounts that are not predictable.

Notwithstanding the existence of an oil cartel and the strong political motivation of some of its members, the relationship between world oil supply and demand has a great deal to do with the world price. Anything we do to affect the balance of supply and demand will importantly affect the balance of power between world oil producers and consumers.

The importance of supply and demand has been graphically demonstrated in 1978 and 1979. Increases in non-OPEC oil production in Alaska and the North Sea in 1978 equalled that year's growth in world oil consumption. After much debate, OPEC did not raise its prices by even some general inflation factor. In December of last year, without such non-OPEC restraints on the cartel's marketing position and with a prospective shortfall in Iranian exports, the cartel agreed to a staged \$1.84/barrel price increase scheduled for 1979. On March 27, with a substantial Iranian delivery shortfall an accomplished fact and with further uncertainty about future Iranian deliveries, the cartel agreed to advance all of the price increases previously planned for later this year to April 1 and to a flexible arrangement of up to \$2/barrel in additional surcharges which the ministers afterwards clearly indicated would depend upon what the market could bear.

It is frequently argued that the restraint on petroleum demand, the substitution of other fuels, and the increases in domestic output that result from price changes are small. But they are not insignificant. Rather, they have a disproportionate impact on our oil imports which supply nearly 50 percent of our consumption needs. Just as the increases in our total oil use in the last five years have led to a greater than proportional increase in our imports of oil, so any improvements in our use and output of oil here in the next five years will have a concentrated impact on the quantity of oil we import. This is because oil imports operate at the margin: all the additional oil we consume we import. If, for example, we cut our oil use by 1 percent, or up by 1 percent the share of our needs met domestically, we will reduce the quantity of oil we need in the world market by 2 percent. With the United States representing two-fifths of free world oil demand, even such small changes in our consumption and production will have more than negligible impacts on the future of world oil markets.

Beyond reducing the inflationary threat of future OPEC price increases, the President's decontrol schedule will also reduce the inflationary threat of a possible weakness of the dollar in world currency markets. Our current trade deficit is much more than fully accounted for by the \$50 billion cost of imported oil. Weakness in the dollar last year, which has contributed measurably to today's cost of living, was at least partly attributable to expectations of an unchecked growth in U.S. oil imports and in total payments for that oil. Steps to reduce oil imports and hence the deficit have a distinct anti-inflationary effect.

DEALING WITH THE WINDFALL

The decontrol schedule is going to divert sizable amounts of money from oil users to producers: \$2 billion at an annual rate by late this year, \$6 billion by late next year, and \$10 billion by late 1981. With higher OPEC oil prices the amounts would be even larger. Some portion of these funds is needed to provide additional production incentives. We have recognized that. But a substantial portion is a pure windfall that provides no further incentives and will simply allow producers to earn higher profits. The President's tax proposals are designed to capture these windfall profits.

We must use the proceeds of the windfall tax to meet three vitally important concerns. First, allowing oil producers to earn higher profits unrelated to incentives at the expense of the poor would be intolerable. Thus, not only must we have a windfall tax but some portion of the proceeds must be used to help the poor. We have proposed that low-income households receive assistance averaging about \$100 each year. According to our estimates, this should shield the group that can least afford it from the price impact of decontrol.

Second, we must increase our use of energy-efficient mass transit if we are to reduce reliance on scarce liquid fuels. A portion of the windfall profits tax proceeds will be used to provide increased mass transit assistance over the next decade.

Third, oil is not our only energy source. A sound energy policy requires that we pursue a diversified strategy of meeting our energy supply and efficiency needs. Thus, even if oil producers were allowed to retain all of the additional revenue from decontrol and succeeded in spending it on oil exploration and development, that would not be socially desirable. There is a wide range of technologies and resources such as solar, synthetic fuels, and shale oil, to name a few, that need further research and development before they can be commercialized. Private firms cannot be expected, on their own, to undertake the kind of research and development that is necessary. Early demonstration plants may also need Federal assistance. It is vital, therefore, that we use a portion of the proceeds from the windfall tax to fund the projects that will, over the longer run, reduce our dependence on such rapidly depleting resources as natural gas and crude oil.

I conclude with this observation. The President has taken an important step by putting us on a path to oil price decontrol. We now need quick Congressional action to ensure that the additional revenues from the decontrol program are used in a socially productive fashion: to protect low-income households, to support energy-efficient mass transit, to encourage new oil exploration and production, and to finance needed alternative energy technologies. We look forward to cooperating with you in this effort.

TABLE 1.—REFINER ACQUISITION COSTS (RACs)

[In dollars per barrel]

	1979:2	1979:4	1980:4	1981:4	1982:4
Base case: ¹					
World price.....	15.75	16.28	17.42	18.64	19.94
Average RAC for all oil without Carter policy.....	14.10	14.67	15.58	17.16	18.36
Average RAC for all oil with Carter policy.....	14.19	14.93	16.74	18.64	19.94
Higher OPEC: ²					
World price.....	15.75	16.28	17.91	19.70	21.67
Average RAC for all oil without Carter policy.....	14.10	14.67	16.25	17.97	19.77
Average RAC for all oil with Carter policy.....	14.19	14.93	17.23	19.70	21.67

¹ Assumes no further real increases in OPEC prices.

² Assumes a 3 percent annual real increase in OPEC prices.

Senator KENNEDY. Our next witness is Alice Rivlin who has been extremely patient with us this morning, who has some very important responsibilities to the Congressional Budget Office as its Director. And we look forward to her testimony.

We would be glad to include your prepared statement in its entirety in the hearing record. And perhaps you would be good enough to summarize.

STATEMENT OF HON. ALICE M. RIVLIN, DIRECTOR, CONGRESSIONAL BUDGET OFFICE, ACCOMPANIED BY RAYMOND SCHEPPACH AND RICHARD MORGENSTERN

Ms. RIVLIN. Thank you, Mr. Chairman. I do have a much shortened version of my prepared statement.

Let me also take this opportunity to introduce my two colleagues, Raymond Scheppach on my right and Richard Morgenstern on my left, who have done much of our work on these topics.

Mr. Chairman, I am pleased to appear before this subcommittee to discuss the President's proposal for phased decontrol of domestic crude oil prices, coupled with a windfall profits tax.

I have a prepared statement, but to save time, I will summarize the major points. In addition to the major energy and economic effects of the President's proposals, I will address the following four issues of special concern to this subcommittee:

The pros and cons of imposing windfall profits taxes on the increased oil revenues resulting from decontrol.

The possibility of continuing the tax on upper tier oil after 1981 and how this would affect both producers and Federal tax revenues.

The nature of the incentives that are included in the President's proposal for accelerated oil exploration and development.

And the pros and cons of creating an Energy Security Trust Fund.

Senator KENNEDY. Alice, let me ask you to just bring the mike up a little closer to make sure we get everything. Thank you.

Ms. RIVLIN. In general, the CBO analysis of the energy and economic effects of the President's energy proposal is quite similar to that reported by the administration. We estimate that the President's plan for phased decontrol would reduce oil demand by 250,000 to 350,000 barrels per day by 1985, and would increase oil production by 400,000 to 500,000 barrels per day by 1985.

In total, the phased decontrol would reduce oil imports by 6 to 8 percent by 1985.

Relative to an extension of controls, the plan would increase producer revenues by approximately \$17.6 billion by the end of 1981. The windfall profits taxes proposed by the President, in combination with the normal corporate profits tax, would return about 60 percent of these funds or about \$10 billion by the end of 1981 to the Government to be used in the Energy Security Trust Fund.

Finally, the phased decontrol would increase the overall price level by about 0.6 percent by the end of 1981 and by three-fourths of a percent by 1983. This represents an increase of approximately 5 cents per gallon for petroleum products by 1981.

Let me note, Mr. Chairman, that those numbers were revised downward from earlier preliminary numbers to which Congressman Brown referred.

Underlying the debate on the President's proposed windfall profits tax, and in fact underlying our present price control system as well, is the idea that U.S. oil producers are entitled to a reasonable price for their product, but that they are not necessarily entitled to receive the full proceeds resulting from the actions of a foreign oil cartel. In 1977, President Carter argued that:

In 1973-74, the oil-producing countries raised the world oil price fourfold. Deregulation of oil and gas prices would make U.S. producers the beneficiary

of those arbitrary price rises and would yield windfall profits from the increased value of oil and gas in existing fields. The producers have no equitable claim to that enhanced value because it is unrelated to their activities or economic contributions.

Oil industry spokesmen point out, however, that such windfall profits are not ordinarily taxed at higher than normal rates. After all, the Government does not impose especially high taxes on speculative gains made in the stock market or on profits derived from the sale of a home.

Why, they ask, should oil investments be treated any differently?

Further, industry spokesmen would argue that the increased revenues resulting from oil decontrol represent a return on risky investment that should be returned to the investor. Specifically, according to this view, some investors might have expected oil prices to be decontrolled when they made their drilling and other investments.

Those in favor of a windfall profits tax to capture the increased revenues for the public sector, view the situation differently. For oil that would not be produced unless the world price was offered—truly new oil—one can justify the higher decontrolled price. For oil that is already being produced at lower prices, it is more difficult to justify returning the full additional revenues to the private sector.

This is true, in part, because most of the investments to produce what is now labeled lower and upper tier oil, were made with the expectation of the lower prices that prevailed in the past. When drilling investments were made in the 1950's and 1960's, few producers expected that oil would one day receive a \$13 price per barrel.

Similarly, not many who made drilling investments in 1973 foresaw that prices of up to \$20 would occur so soon. In this sense, higher prices do constitute a "windfall."

The reason for higher oil prices is also important. To some extent, oil prices are rising because of a noncompetitive international oil market dominated by a producers' cartel. Under U.S. law, such a cartel would be illegal. This monopolylike power results in prices that are probably somewhat higher than a competitive market would allow. If U.S. producers were allowed to collect this monopoly premium, they would profit inordinately from the cartel's actions.

Senator KENNEDY. Ms. Rivlin, let me just ask a couple questions if I could. We are going to vote, and I think I have the next amendment up, unfortunately. So we will conclude.

In your prepared statement, you say that oil company revenues after taxes will be increased by \$35 billion as upper tier oil. Now, the oil, which is \$13 a barrel, increases to the world price.

In your estimate of increased production, is there any increased production as a result from this huge cost, the upper tier?

Ms. RIVLIN. There would be some, not very much.

Senator KENNEDY. Do you have any estimates of the increased production? I think you indicated earlier what the increase would be from decontrol and what would be from conservation. I gather from your testimony that the amount, the upper tier which is going to end up costing consumers \$35 billion, is basically marginal.

Ms. RIVLIN. The additional production from the upper tier would seem to be very small.

Let me see if we have any kind of estimate on that.

Mr. MORGENSTERN. We don't have a numerical estimate, but it would seem to be quite small. The incremental price above what would have prevailed without decontrol is in fact quite small.

Senator KENNEDY. What are we talking about anyway, 100,000 or 300,000 barrels or less than 100,000 barrels?

Mr. MORGENSTERN. I would say less than 100,000 barrels.

Senator KENNEDY. Less than 100,000 barrels, yet the cost to consumers is \$35 billion. Does that really make much sense?

Ms. RIVLIN. One isn't buying a great deal of production by doing that.

Senator KENNEDY. Is one not buying at a very substantial cost, \$35 billion to consumers?

Ms. RIVLIN. Under the President's proposals, approximately half of that would be taxed back.

Senator KENNEDY. That is assuming that the President's program went all the way through as suggested. But nonetheless, the consumers would be spending \$35 billion more for that upper tier and basically with incidental and virtually negligible results in terms of increased production in that particular area.

Ms. RIVLIN. That's right. The increased production doesn't come in.

Senator KENNEDY. Now, just one other item. If the Congress doesn't provide some kind of additional windfall tax, of which I am extremely doubtful, but if it does, and as the old oil gets used up, what is going to be the budget implications of the fact that over the period of years, there would be less and less old oil?

And what is that going to mean after these incentives that started up, these other energy sources? Does that mean we are going to have to increase taxes in order to make that up or what kind of shortfall are we going to face?

Ms. RIVLIN. No; I don't think a tax increase would necessarily be required, although it would certainly be sensible of the Congress to realize in budgeting for the future if this was going to be a declining source of revenue.

Senator KENNEDY. So even if they get it, and they start looking at it, I can see the case that they begin to get to some of it, and the oil companies are able to get some. And we find phasing out of the oil, and they will be coming right back to Congress asking for the supplements for that deficiency.

That is, as they use up all the old oil, they may come back to us and ask for either increases in taxes for workers, even beyond these prices, in order to make up for what is basically being phased out.

At least from an economic point of view, as you point out, that is a declining factor. It is going to be a declining amount of resources over a period of time.

Aren't we going to have to face that in any event?

Ms. RIVLIN. Yes; the old oil will eventually run out.

Senator KENNEDY. I apologize for having to run, but the subcommittee may want to submit some additional written questions for the record.

Ms. RIVLIN. Absolutely, Senator.

Senator KENNEDY. Thank you all for being witnesses in today's hearing.

Ms. Rivlin, you have been a great help to this subcommittee as you have been to the Congress. I think all of us have enormous respect for the work you and your staff have done and the service that you provide.

Ms. RIVLIN. Thank you, Senator.

[The prepared statement of Ms. Rivlin follows:]

PREPARED STATEMENT OF HON. ALICE M. RIVLIN

Mr. Chairman, I am pleased to appear before this subcommittee to discuss the President's proposal for phased decontrol of domestic crude oil prices, coupled with a windfall profits tax. I will first present a summary of the major energy and economic effects of the President's proposals and then address the following four issues of special concern to this Subcommittee:

The pros and cons of imposing windfall profits taxes on the increased oil revenues resulting from decontrol.

The possibility of continuing the tax on upper-tier oil after 1981 and how this would affect both producer and federal tax revenues.

The nature of the incentives that are included in the President's proposal for accelerated oil exploration and development.

The pros and cons of creating an Energy Security Trust Fund.

MAJOR ENERGY AND ECONOMIC EFFECTS

Over the next several years, the President's proposals would provide several benefits, but they would also impose a number of costs. On the benefit side, higher crude oil prices would create economic incentives for energy consumers to reduce oil demands through the substitution of alternative fuels and outright conservation and for producers to increase oil production from both older wells and new exploration. Although the oil price increases from decontrol would encourage investments in solar energy and conservation, they would probably not be sufficient to make unconventional fuels, such as liquefied coal or shale oil, economical. Combined, these supply and demand effects would provide some relief from oil imports.

On the cost side, price increases for domestic oil, coming as they do on the heels of the recent OPEC price hikes, would further accelerate inflation and might slow economic activity and increase unemployment. Moreover, these price increases would place new burdens on low-income households and transfer windfall income gains from consumers to producers through higher prices for oil that could be produced at the current, lower regulated prices. The President proposes to capture part of this windfall for public purposes through a windfall profits tax. He also proposes rebating some of the tax revenues to low-income households to reduce the burden of the oil price increases.

To analyze the President's proposals, we have compared them with an indefinite continuation of the controls now in place. Since the legislation that mandates price controls on domestic oil expires October 1, 1981, oil prices would increase to world levels on that date if additional legislation is not passed. Consequently, most of the demand reductions, supply responses, and inflationary effects that are attributed to the President's plan would take place anyway when prices are decontrolled in 1981. Therefore, it appears that the relevant baseline for analysis is one of continued price controls. Relative to an immediate decontrol in 1981, the President's program has the advantages of distributing the inflationary impact over several years and providing more short-term production. Although the more complete specifications of the President's program may affect our conclusions, our current analysis does not differ greatly from the Administration's. The preliminary results can be summarized as follows:

The President's proposal for the phased decontrol of oil prices would reduce demand by about 100,000 barrels per day by 1981 and by 250,000 to 350,000 barrels per day by 1985. It is important to stress, however, that the saving would be much higher after 1985 because energy is primarily used in association with capital equipment that takes, on average, 10 to 15 years to replace.

The phased decontrol proposed by the President would provide incentives to producers to increase production in the near term. We estimate this would result in increased domestic production of approximately 200,000 barrels per day by 1981 and 400,000 to 500,000 barrels per day by 1985. A significant percentage of

this oil, however, represents increased production that would have become available at a later date as prices increased; thus, decontrol would only change the timing of that production. This is particularly true for 1981 when most of the response is from old wells. The combined effect of this supply response and the demand reduction cited above would be to reduce imports by 650,000 to 850,000 barrels per day by 1985.

Compared with the wellhead price increases allowed under current law, the President's proposal for phased decontrol would result in a transfer from consumers to oil producers of \$0.6 billion in 1979, \$5.1 billion in 1980, and \$11.3 billion in 1981, for a total of \$17.6 billion by the end of 1981. (All numbers are in current dollars and represent total revenue increases before either windfall or corporate profits taxes.)

If the President's proposals to tax these windfall gains are enacted by the Congress, the transfer to the oil companies would be reduced (on an actual basis) by \$10.0 billion between now and the end of 1981. The federal government would tax back approximately \$4.0 billion in windfall profits tax and an additional \$6.0 billion in normal corporate profits tax during that period.

The President's plan has been designed to delay somewhat the adverse inflationary effects of decontrol. Our initial estimates indicate that the inflation rate would be higher by 0.1 percentage point in 1979, by 0.2 percentage point in 1980, and by 0.3 percentage point in 1981. In total, the President's proposals for phased decontrol of oil would increase the level of prices by about 0.6 percent by the end of 1981. This represents an increase of approximately 5 cents per gallon on petroleum product prices by the end of 1981. In subsequent years, feedback effects would continue to increase the price level so that by 1983 prices would be approximately three-fourths of a percent higher under decontrol. All these effects would be additional to both the price increases resulting from the March 26, 1979, OPEC pricing decisions and the price increases allowed under the Energy Policy and Conservation Act (EPCA).

WHAT CONSTITUTES A WINDFALL?

Underlying the debate on the President's proposed windfall profits tax—and, in fact, underlying our present price control system as well—is the idea that U.S. oil producers are entitled to a reasonable price for their product, but that they are not necessarily entitled to receive the full proceeds resulting from the actions of a foreign oil cartel. In 1977, President Carter argued that:

"In 1973-1974, the oil producing countries raised the world oil price fourfold. Deregulation of oil and gas prices would make U.S. producers the beneficiary of those arbitrary price rises and would yield windfall profits from the increased value of oil and gas in existing fields. The producers have no equitable claim to that enhanced value because it is unrelated to their activities or economic contributions."

Oil industry spokesmen point out, however, that such windfall profits are not ordinarily taxed at higher than normal rates. After all, the government does not impose especially high taxes on speculative gains made in the stock market, or on profits derived from the sale of a home. Why should oil investments be treated any differently? Further, industry spokesmen would argue that the increased revenues resulting from oil decontrol represent a return on risky investment that should be returned to the investor. Specifically, according to this view, some investors might have expected oil prices to be decontrolled when they made their drilling and other investments.

Those in favor of windfall profits taxes to capture the increased revenues for the public sector view the situation differently. For oil that would not be produced unless the world price was offered (truly new oil), one can justify the higher decontrolled price. For oil that is already being produced at lower prices, it is more difficult to justify returning the full additional revenues to the private sector. This is true, in part, because most of the investments to produce what is now labelled lower- and upper-tier oil were made with the expectation of the lower prices that prevailed in the past. When drilling investments were made in the 1950s and 1960s, few producers expected that oil would one day receive a \$13 price per barrel. Similarly, not many who made drilling investment since 1973 foresaw that prices of up to \$20 would occur so soon. In this sense, higher prices do constitute a "windfall."

The reason for higher oil prices is also important. To some extent, oil prices are rising because of a non-competitive, international oil market dominated by a

producers' cartel (OPEC). Under U.S. law, such a cartel would be illegal. This monopoly-like power results in prices that are probably somewhat higher than a competitive market would allow. If U.S. producers were allowed to collect this monopoly premium, they would profit inordinately from the cartel's actions.

In summary, the additional producers' revenues should not be taxed at any higher rate if they are perceived as a return for investment and risk. On the other hand, if prices have been increased substantially and unexpectedly above the market price by a non-competitive, international cartel, then an argument can be made for a windfall profits tax to return at least part of these revenues to the public.

THE TAX ON UPPER-TIER OIL

One of the most critical, and apparently unresolved, issues in the Administration's tax proposals concerns the status of the windfall profits tax after October 1, 1981. If the tax ended on that date, then all the subsequent revenues flowing from the decontrol of upper-tier oil (which by that time would include all former lower-tier oil) would accrue to the oil industry. In 1982, for example, these revenues would amount to about \$7 billion in 1979 dollars. From October 1981 to 1990, they would total approximately \$58 billion in 1979 dollars. If these revenues were subject only to the normal federal profits taxes, at an assumed 40 percent marginal rate, \$23 billion would flow to the government in increased revenues and the remaining \$35 billion would remain with the companies. If the windfall profits tax were still in effect, an additional \$1.32 per barrel, or about \$17.5 billion, would be paid to the Treasury over the period 1981 to 1990, leaving the companies with \$17.5 billion as well. (All estimates are in 1979 dollars.) Consequently, the additional revenues from decontrol—both for the producers and, possibly, the federal government—are far more significant after 1981 than they are during the transition period of 1979 to 1981.

Whether or not an excess profits tax should be maintained on upper-tier oil after October 1, 1981 depends on potential supply response, administrative ease, and equity considerations. It is doubtful that any significant additional supply would be stimulated by ending the upper-tier tax. Because the small incremental revenue change would come on top of a price that is already close to world levels, and because the upper-tier wells are generally new and thus not in need of large new investments, the additional \$1.32 per barrel in after tax profits would be unlikely to have more than a negligible effect on production. Most of the increased production under the President's proposals would come from the decontrol of old and so-called "marginal" wells, and from the increased incentives offered for tertiary recovery and truly new production. Continuation of the taxes would, however, maintain some of the complex administration of the current oil price-control system, which inevitably produces some inequities and inefficiencies. With respect to the equity issue, it depends on whether or not these additional revenues are truly a windfall, as previously discussed.

INCENTIVES FOR EXPLORATION AND DEVELOPMENT

Are the incentives proposed by the President, including the phased decontrol of oil prices and the windfall profits tax, adequate to promote large amounts of oil exploration and development over the next few years? Most economists view this question in terms of the prices allowed for new oil production: If the price of oil is high enough, rational investors will undertake the investment required to produce it. All the investment funds need not come from oil companies' internal cash flow, they argue, for the high price would be enough to attract the necessary capital, through borrowing. Viewed in this context, the incentives proposed by the President to encourage new oil exploration and development are most certainly adequate. For truly new oil, the producers would be allowed the world price, currently over \$16.00 per barrel. For marginal wells, the President would more than double the allowed price, from \$6.00 to about \$13.00 per barrel over the next 6 months. For tertiary recovery, the marginal revenue to the producers would actually exceed the world price, since producers undertaking tertiary projects would also be allowed more rapid decontrol for already flowing barrels. It appears, therefore, that in terms of price incentives, the President's proposals would be adequate to encourage a significant amount of new investment.

Some producers, along with segments of the banking community, have argued that, because oil exploration and development is relatively risky investment, it is difficult to obtain external financing and internally generated funds are a neces-

sity. Therefore, they reason, without the additional cash flow, the required investment for exploration and development will not occur. This view, however, is inconsistent with most conventional economics. Given the large price incentives in the President's program, all of the domestic oil that could be produced at a price of \$16.00 per barrel should be produced. To argue that increased cash flow would result in even more oil production, one must argue that this new production would not occur at a \$16.00 price. It is extremely doubtful that increased cash flow would be used to subsidize the oil production that is unprofitable at the world price.

Recent studies, moreover, tend to contradict the view that cash flow determines the level of investment in petroleum exploration. One study, for example, which examined both major oil companies and independents, found only a weak relationship between internal cash flow and investment in exploration and development. Also, this study found evidence of considerable borrowing by both major oil producers and independents for exploration and development. It is instructive, however, to consider the potential to expand oil exploration and development in the coming years.

Although there has been a slight decline in drilling activity in the past three to four months, 1978 was a good year for oil drilling in the U.S., with more drilling than any other year in the past two decades. Although complete data are not yet available, total expenditures for exploration and development may well have exceeded \$19 billion in 1978, compared to \$16.3 billion in 1977. Given the new price incentives proposed by the President, how much more could the industry spend over the next several years? Industry sources indicate that there is about 15 percent excess capacity in the drilling industry and that additional rigs could be constructed in the coming years to meet new demands. On the basis of industry-supplied data, which includes rapid construction of new rigs and equipment in the next few years, we estimate that drilling rates might be expanded by a maximum of 25 to 30 percent by 1981, compared to last year's levels. The key constraint to even more rapid expansion is the limited number of available drilling rigs. In dollar terms, after allowing for some inflation in costs, CBO estimates that total expenditures for oil exploration and development might rise to as much as \$25 to \$27 billion in 1981.

How then does the increase in cash flow generated by the President's pricing and taxing proposals compare to the funds that the industry could productively use for drilling in the next few years? Projections of this sort are necessarily speculative because of increases in drilling costs and other factors, but based on our analysis, the estimated \$7.6 billion in after tax cash flow provided in the President's plan over the 1979-1981 period would finance at least two-thirds of the maximum additional explorations and development that could take place between now and 1981. In light of the evidence of widespread use of external financing in the oil industry, it would appear that, even on the basis of a cash-flow analysis, the industry would have no difficulty financing rapid growth in exploration and development. Therefore, it seems reasonable to conclude that exploration and development activity would not be further stimulated by any reductions in the windfall taxes. Alternatively, because of the high price incentives proposed for new oil explorations and development, it is probably true that the excess profits tax could even be increased somewhat without any significant reduction in exploration activity. Additional revenues that were not used in exploration activity would most likely be invested in both other energy resources and nonenergy related industries.

THE PROS AND CONS OF AN ENERGY TRUST FUND

The President has also proposed that the Congress establish an Energy Security Trust Fund to redistribute the tax revenues to low-income households to soften the burden of higher oil prices, and to mass transit and energy research and development to foster the transition to a more energy-efficient economy.

Although such a trust fund has the advantage of providing a mechanism to assist low-income households in offsetting higher energy prices, it has some disadvantages from budgetary and policy coordination standpoints. First, trust funds, with their long-term earmarking of funds, limit budgetary control since they are only marginally affected by budget resolutions and the appropriations process. Second, since both energy investments and mass transit currently have relatively large federal programs, additional expenditures from a trust fund would create some coordination problems for the Congress in their authorization and appropriation processes and for the executive agencies in the administration of these programs.

Finally, if OPEC prices did not increase in real terms, the revenue flow into this fund would decrease over time and would, in fact, terminate when old and new oil was exhausted. Such a phaseout of the funding source might cause problems in managing these programs, particularly those for energy investments which are long-term capital projects.

In summary, oil price decontrol, coupled with a windfall profits tax, would help to reduce the demand and increase the supply of oil which should, in turn, reduce oil imports by about 6 to 8 percent by 1985. However, the resultant price increases would exacerbate our inflation problem, pose special hardships on low-income households, and create equity problems regarding who should receive the additional revenues from decontrol. Depending upon how these issues are resolved, particularly the equity consideration of whether or not the tax on upper-tier oil is permanent, oil decontrol could have a positive effect on long-term energy problems. Regarding the incentives in the President's program for accelerated oil exploration and development, it appears that the decontrol of new oil would provide large incentives, and that oil companies would not need significant additional revenues to finance their investments. Finally, the Energy Security Trust Fund has an advantage in providing a mechanism to offset some of the increased energy costs to low-income consumers but also has certain disadvantages from the standpoints of budgetary control and policy coordination.

Mr. Chairman, I would be happy to respond to any questions from your subcommittee.

Senator KENNEDY. Without objection, I will include, at this point in the record, the prepared statements of Paul Davidson, professor of economics and associate director, Bureau of Economic Research, Rutgers University; and John C. Zamzow, vice president, Energy and Regional Economics, Chase Econometric Associates, Inc., Bala Cynwyd, Pa.

[The prepared statements of Mr. Davidson and Mr. Zamzow follow:]

PREPARED STATEMENT OF PAUL DAVIDSON, PROFESSOR OF ECONOMICS AND ASSOCIATE DIRECTOR OF THE BUREAU OF ECONOMIC RESEARCH, RUTGERS UNIVERSITY

My name is Paul Davidson. I live at 18 Turner Court, Princeton, New Jersey. I received a Bachelor of Science degree from Brooklyn College in 1950, a master of Business Administration degree from City College of New York in 1955 and a Ph. D. in Economics from the University of Pennsylvania in 1959. I was a member of the Economics Department of the Wharton School of Commerce and Finance of the University of Pennsylvania and taught there during the periods of 1955-1958 and 1961-1966. From 1958 to 1960 I was an Assistant Professor of Economics at Rutgers University. In 1960-61, I was Assistant Director of Economics Division of the Continental Oil Company. In 1964-65, I was Visiting Lecturer and Fulbright Scholar at the University of Bristol in England. In 1970-71, I was a Senior Visitor at the Faculty of Economics and Politics of the University of Cambridge (England). I have been a Professor of Economics at Rutgers since July 1966. I am the coeditor of the *Journal of Post Keynesian Economics*.

I am the author of a book entitled "Theories of Aggregate Income Distribution" (Rutgers University Press, 1960) and one entitled "Money and the Real World" (Macmillan, 1972, 2nd edition 1978). I have coauthored books entitled "Aggregate Supply and Demand Analysis" (Harper and Row, 1964), "Milton Friedmans Monetary Framework" (University of Chicago Press, 1975), and a monograph entitled "Demand and Supply of Outdoor Recreation" (Bureau of Outdoor Recreation, 1969). I am the author of numerous articles on various economic subjects which have been published in professional journals such as *The American Economic Review*, *The Economic Journal*, *Oxford Economic Papers*, *Canadian Journal of Economics and Political Science*, *Public Finance*, *Econometrica*, *Land Economics*, *The Southern Economic Journal*, *The Natural Resources Journal*, *Review of Economics and Statistics*, *The Journal of Political Economy*, *The Journal of Post Keynesian Economics*, *Challenge*, *Highway Research Record*, *The Annals*, *Chemicals Engineering Process*, *Economie Appliquée*, *Economies et Societies*, *Economic Inquiry*, and the *Brookings Papers on Economic Activity*.

My interest in the economic problems of the oil and gas industry can be traced back to 1960 when I was the Assistant Director of the Economic Division of the Continental Oil Company. Since then I have analyzed economic aspects of oil and gas in professional articles, in testimony as an expert witness before the Federal Power Commission and various congressional committees, as a member of the Supply-Technical Advisory Committee of the National Gas Survey, and in the past few years as a consultant to the Ford Foundation's Energy Policy Project where I was the senior investigator on a study entitled, "The Relations of Economic Rent and Price Incentives to Oil and Gas Supply," and as a member of the Brookings Economic Panel where I was the senior investigator of a study entitled "Oil: Its Time Allocation and Project Independence."

I. WHAT IS THE ENERGY CRISIS?

Just as the Surgeon General has required that all consumers of cigarettes must be warned that consumption "may be injurious to your Health," it is my firm belief that all Congressional discussion and Presidential speeches on energy should start with the motto developed by Professor M. A. Adelman of M.I.T. in a 1976 study where he demonstrated that the current world price of oil "has no possible relation to scarcity present or future, known or feared". ["The World Oil Cartel," Quarterly Review of Economics and Business, 1976, p. 11].

My own analysis of energy supplies has led me to a similar conclusion. If one interprets scarcity in terms of a Malthusian shortage—where within our lifetime, or our children's' etc. the world will "run out" of this basic depletable natural resource—the deregulated wellhead price of oil will not reflect "true" scarcity or even the replacement value of energy that would exist in the absence of a cartel!

As I indicated in my testimony before this committee several years ago if facts (i.e. history) are the basics for judgment the energy crisis, whatever else it may mean, does not mean that the age of cheap fossil fuels is over—at least, not in terms of cheap economic real costs of finding oil. Nor does it mean, on either a world-wide or Western Hemisphere basis—at least if history is a basis for judgment—that increases in current market prices are necessary to meet growing petroleum consumption demands. For example, during the years 1962 through 1972 (where until the very end of the period prices were not rising) world consumption of petroleum increased by 108.4% while world crude oil *proved* reserves increased by 108.5% during the same period. In other words, the world was not facing any greater threat of running out of crude oil in 1972 than it was in 1962. What had happened was that, partly due to historical circumstances and partly due to U.S. government policies originating in the 1950's (some with the express purpose of making the U.S. *not* dependent on foreign oil supply and some of the covert purpose of providing aid to non-communist governments in the Persian Gulf) the reserves base of the petroleum industry was developed and concentrated in a small area of the world. Thus seeds of the world's most powerful cartel was sown.

The energy question, of course, is merely at what price are American consumers going to get all their energy needs filled. Neither the oil industry spokesman nor academics will deny there is plenty of domestic energy as well as western hemisphere, and other foreign sources of hydrocarbons which could take us well into the 21st century, even if there was no further technological development. The only question is the price of this energy! Given that current supplies conditions are dominated by expectations (user costs) of producers of energy that Persian Gulf States will for the foreseeable future continue to manipulate oil prices so that they more than keep with inflation (i.e. oil in the ground is better than money in the bank) then increasing the price of oil will *not* allocate significant additional resources to increasing the actual daily world wide flow of production of oil (although it may, at best, encourage some increase in resources used in finding underground hydrocarbon reserves).¹ Under existing supply conditions (involving a cartel and "user costs"), the unregulated world market price of oil is merely a device for redistributing the income and wealth from consumers of energy to producing companies *and* property owners of energy throughout the world. Thus, the so-called "energy crisis" essentially involves an economic struggle over relative income shares between consumers and producers—it does not involve a struggle between man

¹ For the analytical basis for this conclusion, see my article "The Economics of Natural Resources," Challenge, March/April 1979, pp. 40-46.

and mother nature. Hence, there are two ways of ultimately resolving our current energy crisis. They are either to (1) passively permit the market price of oil to continue to escalate until energy consumers in the world are so impoverished they have little income left to be extorted by the producing sector interests and/or the energy sector become so satiated in their wealth, they decide not to plunder any more; or (2) to actively adopt government policies which at least fractures (or breaks) the cartel's grip so that energy producers' expectation (user costs) are no longer biased in the belief that the cartel can keep the price of energy rising more rapidly than world inflation! This second (activist) way involves the U.S. engaging in economic war with the Persian Gulf States. (The U.S. was not the initiator of this war; it began in 1970 and the Persian Gulf States made it an all out war in 1973).

In Section III (below) I present a ten point National Energy Program (NEP) which will significantly reduce the control of the cartel on world energy prices. This NEP uses economic (not military) forces to wage war on the Persian Gulf States. This is a war where we can be successful if we have the will and the leadership—but it is not going to be won easily or without any disruptions. This war should not be avoided for the only choice is between (a) incurring temporary and hopefully minor dislocations and inconveniences during the initial state of economic warfare or (b) the permanent draining of income from consumers of energy. I would hope that we would have chosen the active policy of fracturing the cartel. Unfortunately President Carter has opted for a policy which will passively adopt to OPEC's perpetual domination of energy (except perhaps "in the long run" where as John Maynard Keynes noted "we'll all be dead").

II. THE CARTER-SCHLESINGER POLICY

The Carter energy proposal (circa 1977 and 1979) to deal with the "moral equivalent of war" in energy, attempts to resolve the problem via passive impoverishment of consumer. If the administration proposals are enacted, success will come only by bleeding consumers white. Any observer from outer space seeing the President of the largest consuming nation in the world supporting such a policy, would think the Administration has gone mad. Carter's deregulation order can appear to be rational only if it is based on the premise that it is not in the U.S.'s best interest (at any price) to severely weaken the power of the cartel—or more specifically the power of the current non-communist Persian Gulf States. The Carter deregulation order announced to the world that the U.S. government recognizes, legitimizes and gives respectability to the actions of a cartel which explicitly extorts huge sums of income from consumers throughout the world.

Apparently the Carter administration has preempted any public discussion of "Should the OPEC Cartel Be Broken?" Instead the administration accepts the power of the Cartel as a parameter and hence the Administration's energy policy should be subtitled "Dr. Schlesinger, or How I Learned to Live with the OPEC Cartel and Love It."

Not only should the cartel be broken, but it must be broken if Western Capitalist Nations (as we know them) are to remain vigorous healthy economies. Even if the U.S. can, as a nation, afford to turn over in the next few years 2 or 3 percent more of its GNP to Persian Gulf Kingdoms and also permit smaller crumbs from the cartel cake to fall into the laps of our own domestic producers and royalty owners, and even if the regional impact of this redistribution income and wealth is politically tolerable (and I believe it is not) the ultimate impact of continued Persian Gulf greed (and their continued ability to exercise it over a subservient consumer nation) will be to exacerbate and make unmanageable the stagflation disease afflicting all capitalist consumer nations and bring about the Second Great Collapse of Capitalism in the Twentieth Century. (The first was the Great Depression!) This must be avoided at all costs for the strength of these capitalist economies is not only necessary to improve the standard of living of our own citizens but it is also an essential factor in providing similar benefits for the LDC's of the Third World.

A. Inflationary aspects of deregulation

In modern, market production economies, inflation is caused by various organized groups of economic units attempting to use market power to obtain a greater portion of the output of industry for themselves. In other words inflation is the method that modern market economies redistribute income; and continuing inflation is a symptom of a continuing struggle for further redistribution.

Since President Carter's deregulation order merely stimulates additional redistribution from domestic consumers to domestic producers and royalty owners, it must severely aggravate already existing inflationary processes. (Section IV below explains in some analytical detail why if we do not break the cartel's grip on energy prices, the problem of stagflation will become even more threatening).

Quantitative estimates of the inflationary impact of the President's deregulation of prices are dependent on *ceteris paribus* assumptions regarding (a) the reactions of organized groups of workers and industries towards acceptance of the loss in real income engendered by higher energy prices and (b) the willingness of the cartel to limit future price increases. Thus such forecasts by the DOE will depend on the *ex post* realism of their basic assumptions, i.e. whether the future obeys Dr. Schlesinger's vision of the world. I do not feel the need to compete with DOE on the production of such speculative computer printouts and three color flip charts. I believe the DOE forecasts are bound to seriously underestimate the inflationary impact of deregulation while significantly overestimating the supply and conservation responses (see Section 11B *infra*) to higher oil prices.

Government projections released to coincide with Presidential policy pronouncements should, as a rule, be viewed with a jaundiced eye. In 1970, for example, the Cabinet Task Force on Import Controls, using information and expertise supplied by the major oil companies, the CEA, the Department of Interior, the Office of Technology, etc. predicted that with a wellhead price of \$3.30 per barrel (approximately \$6.00 in 1979 dollars) U.S. oil producers could profitably produce 13.5 million barrels per day in 1980. Now the DOE indicates that at a deregulated price of approximately \$15 per barrel, domestic producers are unlikely to profitably produce even 10 million BBL/D in the 1980's. If the 1970 Cabinet Projections were so inaccurate, what reason do we have to believe today's CIA-DOE forecasts?

I need only remind you that the administration forecasts are made by the same people who only a short time ago brought you President Carter's assurance that the Shah was and would continue to be the rock of stability in the Persian Gulf. If their economic forecasts are as good as their political forecasts, we should expect that if a competitive oil market could be established, the consumer would be inundated in a sea of oil at current prices!

In his 1977 energy message, President Carter accepted Schlesinger's unproven supposition about supply: it is a "fact that we are running out of petroleum." Accordingly, consumers must be forced to "conserve" through higher prices in order to buy time while R. & D. financed this time via an Energy Trust Fund, tries to trick Mother Nature into providing other abundant sources of energy at lower real costs than current technology permits.

B. Conservation via regional income transfers

I am not against conservation or advocating waste, but before we launch out on a Conservation Crusade (with some deep seated feeling that deprivation is good for the soul), it should be noted that conservation has two possible separate and distinct technical meanings in economics.

Economists talk of a downward sloping demand curve for such commodities as oil which, given consumers taste, consumption technology, and money incomes, indicates that at higher prices, consumers will buy less oil. Consumer's sensitivity to higher oil prices is measured by the price elasticity of demand as given by a movement up a demand curve. Policies to encourage conservation (i.e. less usage of oil) can be associated with either (a) a movement up an unchanging demand curve (due to higher prices) or (b) a shift of the entire demand curve inward so that even at the same price consumers would use less oil. Technically, in economist's jargon, conservation via (a) does *not* change the demand for oil. Only via (b), that is a shift in the demand curve, can we speak of a decline in the demand for oil. Different policies are necessary to achieve conservation via (a) than via (b); which form of conservation, if it is desired, should we strive for?

President Carter has directed primary focus on achieving conservation via (a) i.e., by permitting domestic oil prices to rise to the cartel price (net of transportation and quality differentials). Economists however, recognize that the amount of conservation induced by moving up a demand curve (price elasticity) depends on the summation of the magnitudes of (i) substitution effect and (ii) an income effect.

A substitution effect occurs if the price of oil rises *relative* to the price of energy substitutes. Empirically, however, the price of domestic substitutes (coal, shale oil, uranium, etc.) tend to rise "sympathetically" (as the N.Y. Times noted

on April 5, 1979) with the price of oil. Moreover, as I have demonstrated, given the current structure of the energy industry, there are good logical reasons for this sympathetic rise.² Consequently we should expect little or no conservation due to the substitution effect as the deregulated money price of domestic oil increases.

Accordingly, if the President's deregulation action brings about any conservation in oil usage it must be due to the income effect, i.e. rising oil prices reduces the real income (standard of living) of U.S. consumers so they can not afford to buy as much energy *and* other goods as otherwise. This effect will cause only those U.S. consumers to conserve whose energy costs as a proportion of their total budget exceeds the proportion of their income and wealth which is derived from property rights in energy reserves. Thus U.S. energy consumers with no economic interests in energy reserves will suffer the greatest real income loss while those with extensive energy property rights might actually find their real income rising and they will actually tend to use *more* energy than otherwise. Since energy costs as a proportion of one's budget, and energy wealth as a proportion of one's wealth are closely associated with residence in various regions of this country, such a policy can only promote regional disharmony and conflict, when what is needed is National harmony and cooperation against an external economic enemy who declared economic war on the U.S. almost a decade ago. Thus, in my view, conservation via higher prices is wrong-headed policy.

If President Carter insists on Conservation as a centerpiece of his energy policy, he should realize that he is relying almost solely on an income effect to achieve this objective. Once explicit recognition that conservation to the extent it is successful via moving up a demand curve will rely solely on reducing real income of many buyers (via large inter-regional income transfers) it should be obvious that there are other, fairer methods of reducing consumer incomes. An income tax based on ability to pay could be designed to remove sufficient income from all U.S. consumers to achieve any conservation goal desired. Such a tax would shift the demand curve inwards, thereby reducing demand without raising domestic prices. (Once (b) is recognized as an alternative to (a) to achieve conservation without raising prices, it is not difficult to conceive other policies which need not require income loss *per se* to conserve!)

Deregulation merely permits oil producers and royalty owners to act as if they were private "tax collectors" and, given the creative accounting of the domestic oil industry, to keep the lion's share of this tax for themselves; President Carter's "windfall" profit tax attempts to strike a deal so that the IRS gets a share of this largesse generated in the name of conservation.

C. Supply response to deregulation

As I have already suggested, given the current state of energy markets, I expect a very low supply response to higher domestic well head prices.³ As I have indicated in my aforementioned Ford Foundation and Brookings studies on supply response, that if my 10 point NEP was adopted, the supply response to higher prices would be much larger.

D. A trust fund for what purpose?

If despite all the arguments already presented, the President still insists on conserving by moving up a demand curve (without a change in demand), then a stiff windfall profits tax would be, in my view, highly desirable. As I argued in a paper in the Journal of Post Keynesian Economics⁴ if the U.S. government does not have the courage to break OPEC, then as at least, the government should join them and share in the monopoly rents generated by the cartel. Taxes such as the windfall profits tax, the earlier proposed crude oil equalization tax, and the ending of the foreign tax credit are ways where our government can share in this income extorted from consumers.

I would suggest that the revenues obtained from such a tax be used to subsidize mass transportation, financing a FOGCO and similar activities which will immediately create good substitutes to private use of gasoline or industry-

² See my "The Economics of Natural Resources," Challenge, March/April 1979, p. 45.

³ I have estimated in detail supply elasticities for crude oil in my Ford Foundation Energy Project Study "The Relations of Economic Rents and Price Incentives to Oil and Gas Supplies" by P. Davidson, L. Falk and H. Lee in "Energy Taxes and Subsidies," edited by G. M. Brannon (Ballinger, Cambridge, Mass., 1974).

⁴ See P. Davidson, "The United States Internal Revenue Service: Fourteenth Member of OPEC?" Journal of Post Keynesian Economics, Winter 1979, pp. 53-55.

controlled supplies of oil whose price can move in the opposite direction from world oil prices and thereby induce a substitution effect as well as an income effect and increase the price elasticity of demand facing the cartel.

Let me be clear that I am not against R & D *per se*, if, however, we subsidize substitutes which can not be controlled by the profit maximizing calculations of the cartel and willing industry supplicants who have a vested interest in *not* changing (shifting) the demand for oil while the Government spurs conservation, we will create market incentive for the industry to use their own money for R & D in reducing energy costs to the consumer as they find they have to compete (for a change) for the consumers' dollar.

III. PROPOSAL FOR A NATIONAL ENERGY POLICY (NEP)

The sudden quadrupling of the world crude oil price during the 1973-74 period was at least partly responsible for the severity of the world wide recession and economic dislocations. Moreover, OPEC's further crude oil price policies remain a serious threat to the survival of the world's monetary relations during the next few years.

In this section I propose to outline a ten point National Energy Policy (NEP) for the United States which will have both short run and longer run implications.

In the short run we should not undertake policies which are likely to exacerbate the current problems of unemployment and inflation.⁵ In the longer run, our policies should be oriented towards breaking up the OPEC cartel and the growing monopolistic control of domestic energy sources.

A ten point National Energy Policy (NEP) which could provide U.S. consumers with sufficient energy while allowing producers to earn a competitive return rather than permitting them to share in cartel profits would include:

(1) Extensive antitrust action to break up conglomerate energy companies and to create competitive alternative sources of energy (competitive to OPEC sources and the major oil and gas producers);

(2) Governmental coordination and regulation of wellhead prices of oil and natural gas so that any *necessary* price increases occur at such low annual rates as to make speculative withholding unprofitable (and in no case should wellhead price of oil and gas be suddenly decontrolled);

(3) Prohibitive capital gains taxes on oil and gas properties to catch any speculative profits which avoid other policy nets;

(4) The changing of leasing policies on federal properties in order to reduce the financial constraint of the front-loaded bonuses and permit independents to develop offshore properties;

(5) Policies which encourage and require accelerated exploitation of old and new properties, even if in certain situations such policies were to encourage flows in excess of MER;

(6) Policies which prohibit the "shut-ins" and other practices which permit speculative withholding;

(7) An announced increasing schedule of import taxes on foreign crude oil and products which might be restricted to non-western hemisphere oil over the next three or four years. Such an import tax schedule must be phased in with growing U.S. production while U.S. wellhead prices are controlled as suggested in (2) above;

(8) A federal sponsored corporation which at a minimum would aid in financing the development of new properties and might even enter into joint ventures with independents; in other words, a Federal Oil and Gas Corporation (FOGCO);

(9) The adoption for an import auctioning system with unidentifiable foreign sellers and long term guaranteed markets (see further explanation below) to supply the diminishing share of the U.S. market as we approach self-sufficiency in the next few years is desirable. Such a program will create a positive incentive for members of OPEC to break with the cartel, and for other non-OPEC producers whose price rises in sympathy with OPEC (e.g., Mexico) to be more competitive; and

⁵ The Nobel Prize winning economist, Sir John Hicks, has suggested that the reason the U.S. has not experienced the same higher rates of inflation of Western Europe in 1974 and 1975 was due to the fact that the price-rise of imported oil, "while it has a large effect on the American import price index, has not been allowed to soak through to the domestic American economy. The American oil producers have not been allowed to raise their prices . . ." (J. R. Hicks, "What's wrong with Monetarism," *Lloyds Bank Review*, October, 1975, p. 12). (For a further discussion of this aspect, see the section below entitled "Energy Policy and the Problems of Inflation and Recession.")

(10) Elimination of the foreign tax credit, and as I have argued elsewhere,⁶ treating payments to OPEC nations above traditional royalty rates as extortion or bribery and hence not a normal cost of doing business and therefore not deductible from U.S. income taxes.

This last point would create a major economic incentive for domestic based offtakers and refiners who are buyers of crude oil to reflect consumers interests for a change rather than producers interests as they have in the past.

When I originally prepared written testimony to present this NEP plan to this subcommittee on November 20th, 1975 I stated that:

"If, on the other hand, the government permits an unregulated market price for oil without altering existing market institutions and conditions, the 1980 domestic wellhead price for crude oil could easily be higher than the \$11 per barrel that the government's Project Independence forecasts as domestic oil prices will in essence be set by the Sheiks on the Persian Gulf; I see no reason to believe that the OPEC cartel will *necessarily* unravel of its own accord. The OPEC nations are engaged in an economic war with the major consuming nations over the distribution of the world's wealth. Existing economic and political conditions in consuming nations such as the U.S. have made the OPEC cartel's job of preventing price cutting competition from alternative sources easier. Until the consuming nations recognize that the dispute underlying this economic warfare can only be negotiated from a position of internal strength, the consuming countries will remain at the mercy of the producing nations *and* domestic conglomerates and royalty owners who have a vested interest in redistributing wealth from consumers to producers and property owners."⁷

I believe that events, unfortunately, have proved that my forecast was all to accurate. (For comparison it should be noticed that Milton Friedman predicted in Newsweek (March 4, 1974) that "In order to keep prices up, the Arabs would have to curtail their output by even larger amounts. But even if they *cut their output to zero*, they would not for long keep the world *price of crude at \$10 a barrel*. Well before that point the cartel would collapse [Italics added].)

a. An import auction scheme

To help achieve the intermediate range goals of breaking the OPEC cartel with the desirable attendant reduction in Arab-country power over Western Europe and the Third World, I would argue for elimination of the major international oil companies as direct importers of OPEC crude for the U.S. The OPEC cartel has not yet broken down, as a cartel usually will (because of its members cheating on price), for two important reasons: (1) the solidarity among the Arab producers, and (2) because the international companies willingly police prices and quantities in non-Arab OPEC countries. To act differently would threaten their Arab oil concessions. For example, Aramco, the sole producer in Saudi Arabia is a combination of four of the "Seven Sisters." These four companies cannot purchase large quantities of crude over long periods at prices well below OPEC levels from sources outside Saudi Arabia, or else they will be in serious danger of losing their control of more than 8 million bbls. per day of crude production in Saudi Arabia.

The establishment of a federal agency as the sole purchaser of imported crude and petroleum products via a secret auction system would eliminate the price surveillance mechanism of the internationals which is a strong prop holding the OPEC cartel together. This federal agency should not be limited to making a zero profit or loss in each year. The agency should be able to, at any point of time, refuse any or all sealed bids as part of a strategy to prevent collusive bidding arrangements; hence, the agency may not be able to purchase sufficient oil to cover the difference between domestic demand and supply for any one period. If the agency was forced to sell this limited quantity of imports at a zero profit price, and if there was no domestic price controls, the refining companies could make a windfall profit because of the shortage. Moreover, for reasons given below, there may be circumstances where it may be strategic for the agency to operate at a loss.

The bidding duration of purchase contracts should have a built-in flexibility which encourages sellers to price at less than the cartel price so that the greater the discount offered from the cartel price, the longer the purchase agreement.

⁶ See P. Davidson, "The United States IRS: The Fourteenth Member of OPEC," Journal of Post Keynesian Economics, Winter 1978-79.

⁷ The same prediction was made as early as Dec. 14, 1974 to the Senate Committee on the Budget.

For example, suppose all bids submitted are at the world cartel price. The agency should be required to limit purchases to 60 or 90 days (and perhaps even reduce imports) and request another auction. If sellers are willing to undercut the world price, the purchase contract should have a longer duration. For example, if the seller's dollar price is 5 percent below world price, a 4 month contract for a specified quantity per month would be accepted: if the discount is 10 percent, a year contract; if 15 percent, a two year contract; etc. Such a duration-discount schedule may be extended to as long as four or five year purchases for substantial discounts. This will increase incentives to cheat on the cartel if the U.S. will guarantee quantity purchases at below current cartel prices for a number of years; especially if a cartel member thinks that this may mean a guaranteed market in later years at a dollar price above the world price when the cartel disintegrates. The objective is to make it so lucrative for any one member of OPEC to cheat and guarantee his income for a number of years that each member is uncertain as to who will be the first to break; while those with the greatest reserves have the most to lose if others break first.

Of course, if the agency is successful in breaking the cartel, it will be saddled with purchase contracts for specified quantities for a number of years which may be at a price *above* the market price. The agency should then sell the oil to domestic refiners at the world price thereby passing the gain on to the American consumer, and the loss of the agency should be subsidized from tax revenues. These agency losses can be looked upon as a defense expenditure for economic warfare, and a successful expenditure at that!

IV. ENERGY POLICY AND THE PROBLEMS OF INFLATION AND RECESSION

There have been two main ways by which the rapid increase in energy prices have affected the recent U.S. inflationary and recessionary problems. Moreover, the energy sector will continue to exacerbate these problems in the future until the relations are properly understood and positive action undertaken to offset the energy sector impact.

In the first place, the exceedingly large increase in the cost of OPEC oil has led to an enormous transfer of purchasing power and real income from the residents of the U.S. (and other consuming nations) to the OPEC nations. Since the latter cannot or do not wish to spend most of their increasing claims on the purchase of newly produced U.S. goods (in economic jargon, the marginal propensity to save of OPEC nations is very high *vis-a-vis* American income recipients) even if the U.S. had not adopted restrictive anti-inflationary monetary and fiscal policies, there would have been, *ceteris paribus*, a reduction in aggregate demand. To the extent that the OPEC nations are willing to hold financial claims and not buy U.S. goods with the wealth that the cartel has extorted from U.S. consumers, the loss in U.S. real income due to redistribution will take the form of higher unemployment rather than a transfer of real goods. Since the cartel does not want real goods, the U.S. could, if we wished, maintain a higher current standard of living by enacting vigorous expansionary monetary and fiscal policies to offset the recessionary savings of OPEC.

Secondly, any increase in OPEC and domestic oil prices (and other commodities to a lesser extent) creates what in the 1920's was called a Commodity Inflation. A Commodity Inflation must *not* be allowed to spill over into an Incomes Inflation⁸ since the former can, with proper policies, be reversed; but the latter (i.e., a wage and profit margin inflation) is almost inevitably irreversible.

Inflation is a device for redistributing income. A commodity inflation will, as long as it lasts, redistribute real income from consumers of commodities to producers and owners of property from which the commodity comes. The world and domestic oil price inflation is a symptom of the real income redistribution that has occurred from energy consumers to the OPEC nations, multinational companies and domestic producers and property owners. The major impetus for this redistribution was the growing power of the OPEC cartel supported in large part by the lack of countervailing efforts in recent years by the multinational oil companies, the U.S. State Department, and the federal and state governments.

The American people must ultimately be told the inevitable economic realities of the recent world oil price rise, namely that there has been some reduction in

⁸ See J. M. Keynes, *A Treatise on Money* (Macmillan, 1930), Vol. 1, pp. 155-6 for an early discussion of this process. See P. Davidson, *Money and the Real World* (Macmillan 1972), pp. 338-57, for a more up-to-date interpretation of this inflation process.

the available total real income of the U.S.⁹ and a considerable reduction of the real income of U.S. energy consumers. Until and unless we break the cartel, the only question which our society can control is how we divide the burden of this lower real income among members of the U.S. economy. But each group of workers and energy using industries will refuse to accept a fair share of the lower standard of living which this income loss entails. Instead each group tries to maintain the former purchasing power of its income share by raising its wages or prices and thus push the burden of the loss on others. These uncoordinated, inconsistent and competing claims for higher money income to offset higher commodity prices results in a rampant wage-price spiral, i.e., an incomes inflation that puts us all on a treadmill where we must all run faster—demand more money income—merely to try to catch up. But since there is less goods and services to go around, all oil consumers cannot all catch-up to their pre-Commodity inflation shares of the National Product.

The traditional remedy for an incomes inflation is sufficient stringency in monetary and fiscal policies ("bullet-biting") so that the economy becomes so impoverished that it cannot be held for economic blackmail by powerful subgroups in the economy who take action to maintain or improve their well-being at costs to others in society.¹⁰

The high levels of inflation and unemployment that we experienced in 1974 and 1975 were in large measure the result of (i) free market forces attempting to distribute the loss in real income (due to the 1973-74 cartel oil price rise) to the economically weak sectors of the U.S. economy, and (ii) deliberate Administration policies to at least nibble on, if not bite, the bullet. We are still witnessing the economic ripples of the OPEC extortion which has severely lowered the real wealth and income of our cities, our public sector employees, our last-in first-out members of the labor force, and particular vulnerable energy using industries. Nevertheless this continuing economic loss (as long as the cartel remains) has been absorbed by our economy with, all things considered, amazing resiliency.

Economic forecasters see a slow (perhaps too slow) recovery as long as there are no further devastating price shocks by oil producers or other powerful economic groups attempting further increases in their income via extortionary price increases.

Unfortunately both the Carter Energy Policy (which is ultimately oriented toward a further redistribution of income and wealth from energy consumers to energy producers and royalty owners) and the OPEC strategy of regaining some of the extorted real income it lost due to the inflation of consuming countries' price levels will inevitably reagravate the inflationary and recessionary problems of the U.S. economy.

The remedy for our enlightened society which is faced with a redistribution of income towards foreign nations and domestic producers and royalty owners is not to adopt the free market philosophy of the "survival of the fittest" race to push the loss of real income onto others in our society. Instead, we should attempt to break the cartel and stop the redistribution via a coordinated national energy policy similar to the one I suggest above. To the extent that we must accept some of the already accomplished redistribution and potential future redistribution until the cartel is broken, an enlightened society should adopt a national policy for coordinating the income claims of various groups and equitably sharing the remaining output that would be available at full employment. Such a policy goes under various euphemisms such as "a social contract," or an "incomes policy" or even "wage and price regulation and coordination," i.e., "controls." In my view such a National Policy to Coordinate Income Claims (NPCIC) is the only viable alternative to the Darwinism of free markets where economic power is not equitably distributed¹¹ or a combination of Darwinism and "bullet-biting" where

⁹ The loss in real income could have been reduced, however, had the U.S. Government recognized in 1970 that OPEC was engaged in economic warfare with the consuming countries.

¹⁰ In essence each subgroup will attempt to emulate the Arab Sheiks and obtain and protect as much wealth for themselves as possible. Many economists in the U.S. are willing to force groups in our own country to bite-the-bullet, to accept economic impoverishment to fight inflation, but are strangely silent about encouraging bullet-biting remedies on the Sheiks of the Persian Gulf.

¹¹ A NPCIC is not as shocking as it seems. The government already deliberately affects the after-tax income distribution via fiscal policy and President Ford is suggesting a new redistribution with his energy tax of \$3 per barrel and a simultaneous reduction in other forms of taxation! It is not a big step forward to coordinate pre-tax income distribution as it is determined in "free" markets. Most people might find they like the results of such a policy once they get over the shock of it.

the hope of keeping each group in society in its place is to be accomplished by so debilitating our economy so no one can afford to make any demands.

The desirability of instituting full employment monetary and fiscal policies in tandem with a NPCIC is clear and I anticipate the Congress and the Administration will recognize its obligations in this area in the next few months. Accordingly, a National Energy Policy must be developed that is consistent with a NPCIC and the concomitant expansionary fiscal and monetary policies that prevent the redistribution of purchasing power to OPEC and domestic producers and royalty owners to take the form of a high unemployment and inflation in the U.S.

PREPARED STATEMENT OF JOHN C. ZAMZOW, VICE PRESIDENT, ENERGY AND REGIONAL ECONOMICS, CHASE ECONOMETRIC ASSOCIATES, INC., BALA CYNWYD, PA.

THE ECONOMIC IMPACT OF OIL DECONTROL

Mr. Chairman. The impact on the U.S. economy of Carter's proposed plan to gradually decontrol domestic oil prices can be summarized as "small but definitely positive." Despite higher domestic oil prices, which will slightly increase short-term inflation, decontrol will lead to higher real growth and lower unemployment. The most pronounced effect will be on foreign trade, where we see a stronger dollar, lower oil imports and thus an improved trade balance.

These results are summarized in Table I on the next page. Specifically, we believe that decontrol will lead to:

1. A reduction in oil imports of 300 thousand barrels per day in 1980 and 1.2 million barrels per day in 1985. About 25 percent of this decrease is due to price-induced conservation and about 75 percent is due to increased domestic production.

2. An increase in near-term inflation. The Consumer Price Index will be 0.1 percent higher in 1979, 0.4 percent higher in 1980 and 0.3 percent higher in 1981. By 1985, however, the CPI will total only 1 percent higher under decontrol, an average of less than .15 percent per year.

3. An increase in real growth. By 1985, real GNP should be almost 1 percent higher under continued controls. This increase takes effect mostly after 1981.

4. Lower unemployment rates. Unemployment should average 0.1 percent lower in the early eighties and 0.3 percent lower in the mid-eighties.

5. An improved trade balance. The oil import bill should be over \$6 billion lower in 1981 and \$14 billion lower in 1985. This heavily contributes to an improved trade balance of \$12 billion in goods and services by 1985.

TABLE I.—SUMMARY IMPACT, CONTINUED CONTROLS VERSUS DECONTROL

	1979	1980	1981	1982	1985
Imports (million barrels per day):					
Decontrol	8.4	8.7	9.1	9.1	9.9
Controls	8.5	9.0	9.7	9.9	11.1
Real GNP (percent change):					
Decontrol	2.0	0.5	3.1	3.5	4.1
Controls	1.9	0.5	3.2	3.3	3.9
CPI (percent change):					
Decontrol	9.4	7.6	7.0	5.8	5.7
Controls	9.3	7.2	6.7	5.7	5.7
Unemployment (percent):					
Decontrol	6.3	7.8	7.8	7.6	5.7
Controls	6.4	7.9	7.9	7.7	6.0
Value of dollar (1970=100):					
Decontrol	98.5	97.6	97.0	97.8	98.4
Controls	98.4	97.0	95.5	95.3	93.6
Net foreign balance (billions of dollars):					
Decontrol	-9.7	-1.8	6.1	10.4	22.1
Controls	-10.1	-3.2	3.3	5.5	10.1
Oil import bill (billions of dollars):					
Decontrol	47.8	53.1	60.0	64.1	72.9
Controls	48.3	55.7	66.0	74.7	87.1

6. A stronger dollar. The actual improvement in our trade balance plus the psychological benefit of decisive action on energy should lift the dollar 5 percent higher (on a trade-weighted basis) than it would have been under controls.

7. Lower world oil prices. Reduced U.S. oil import growth, a stronger dollar and increased world production due to the recent OPEC price hikes, will slow the rise in world prices in 1981. 1985 prices should be 10 percent lower under decontrol.

Repeating our summary conclusion, the economic impact is relatively small, but positive in almost every sense. The benefits increase progressively after 1981. The greatest impact is on our international trade position, which is strengthened considerably.

Energy assumptions

The oil price, supply and demand assumptions underlying our analysis are shown in Tables II and III. The price assumptions summarized in Table II show that under decontrol, domestic crude oil prices will be about \$10 per barrel higher by 1985, raising average crude oil costs (imports plus domestic) over \$3 per barrel.

The "continued controls" scenario assumes that domestic wellhead prices would be allowed to rise at a 7 percent rate over the forecast period. While EPCA ceilings are set at a 10 percent rate, it has been standard practice to allow overall increases at about the rate of inflation. This conservative assumption thus assumes no change from past practice and highlights the potential inflationary impact. World oil prices are assumed to rise at a 9 percent per year rate after 1979, or about 2 percent above the rate of inflation.

TABLE II.—PETROLEUM PRICES

	1977	1978	1979	1980	1981	1982	1983	1984	1985
Continued controls:									
Refiner acquisition cost (imports).....	14.53	14.60	17.40	18.95	20.65	22.50	24.50	26.70	29.10
Refiner acquisition cost (domestic).....	9.55	10.84	11.60	12.40	13.30	14.20	15.20	16.30	17.40
Average refiner cost.....	11.96	12.45	14.20	15.45	16.85	18.35	20.05	21.85	23.85
Motor gasoline, CPG ¹	66.4	68.3	77.1	83.1	90.6	97.6	105.0	113.0	122.3
Decontrol:									
Refiner acquisition cost (imports).....	14.53	14.60	17.40	18.70	19.85	20.85	22.65	24.65	27.10
Refiner acquisition cost (domestic).....	9.55	10.84	12.60	15.80	19.00	20.85	22.65	24.65	27.10
Average refiner cost.....	11.96	12.45	14.70	17.10	19.40	20.85	22.65	24.65	27.10
Motor gasoline, CPG ¹	66.4	68.3	77.9	86.6	95.7	103.1	110.8	119.2	129.3

¹ Unleaded regular, full service.

The "decontrol" scenario assumes a relaxation of price controls on domestic crude consistent with President Carter's announcement. This brings domestic prices up to world levels by October 1, 1981. World prices, however, are lowered under the decontrol scenario. This reflects the direct impact of reduced upward pressure on world oil markets occasioned by a slower growth in U.S. imports and the indirect impact of a stronger dollar. In fact, U.S. imports under decontrol will be less than 10 million barrels per day in 1985, which was a level only recently forecast for 1981. The world oil market should be sluggish in 1981-1982, reflecting not only reduced U.S. import growth but increased worldwide production arising from the recent high OPEC price increases. This is similar to what happened in 1977-1978 after the 1974 increases. Thus, the decontrol scenario assumes world prices will be 10 percent lower in 1985 than under continued controls, escalating at just above the rate of inflation.

Supply and demand figures are summarized in Tables III-a and III-b. Demand is 100 thousand barrels per day lower under decontrol by 1980 and 300 thousand BPD lower by 1985. This assumes a long-term demand elasticity by only -.1 for oil products, a conservative figure. Previous studies have indicated a probable range of .1 to .4, even with the low elasticity of motor gasoline. Short-term elasticities were assumed to be -.025, -.05 and -.075 in the years 1980 to 1982. The demand growth in each case assumes a mild recession in the last half of 1979 followed by a moderate recovery. Strategic Petroleum Reserve purchases are assumed to remain at the low level of 200 thousand barrels per day through 1980 and then climb to 500 MBD by 1982, giving the U.S. a reserve of 750 million barrels by 1985.

TABLE III-A.—U.S. SUPPLY/DEMAND FOR PETROLEUM, CONTINUED CONTROLS CASE

	1977	1978	1979	1980	1981	1985
Domestic demand:						
Consumption.....	18.4	18.7	18.9	19.1	19.4	20.1
Strategic petroleum reserve.....	0	.2	.2	.2	.4	.5
Total.....	18.4	18.9	19.1	19.3	19.8	20.6
Domestic supply:						
Alaska.....	.3	1.1	1.2	1.3	1.5	1.6
Lower 48.....	7.9	7.6	7.4	7.2	7.0	6.1
Natural gas liquids.....	1.6	1.6	1.6	1.6	1.5	1.5
Total.....	9.8	10.3	10.2	10.1	10.0	9.2
Processing gain, stock change, exports, etc.....	(.1)	.5	.4	.2	.1	.3
Imports.....	8.7	8.1	8.5	9.0	9.7	11.1

TABLE III-B.—U.S. SUPPLY/DEMAND FOR PETROLEUM, DECONTROL CASE

	1977	1978	1979	1980	1981	1985
Domestic demand:						
Consumption.....	18.4	18.7	18.9	19.0	19.2	19.8
Strategic petroleum reserve.....	0	.2	.2	.2	.4	.5
Total.....	18.4	18.9	19.1	19.2	19.6	20.3
Domestic supply:						
Alaska.....	.3	1.1	1.2	1.3	1.5	1.6
Lower 48.....	7.9	7.6	7.5	7.4	7.3	7.0
Natural gas liquids.....	1.6	1.6	1.6	1.6	1.6	1.5
Total.....	9.8	10.3	10.3	10.3	10.4	10.1
Processing gain, stock change, exports, etc.....	(.1)	.5	.4	.2	.1	.3
Imports.....	8.7	8.1	8.4	8.7	9.1	9.9

Turning to *supply*, we believe that oil decontrol will essentially halt the decline in domestic production. Some sources have estimated an increase of up to a million barrels per day, but this is probably optimistic and certainly not achievable without a 100 percent plowback of all increased revenues. We are assuming a 40 percent plowback of increased revenues from decontrol and projecting 1985 domestic production of 10.1 million barrels per day (including natural gas liquids of 1.6 MMBPD). This is only 2 percent below current production but assumes that all obstacles to Alaskan oil production are removed, allowing it to increase from 1.2 to 1.6 MMBPD by 1982.

Under continued controls, domestic production is shown to fall to 9.2 million barrels per day, even including the increased Alaskan production. This is over 10 percent below current levels but includes a diminution in the rate of decline in the Lower 48 States occasioned by higher prices even under controls.

In summary, therefore, we feel the demand and supply differences shown in the two cases are reasonably conservative. Even under these assumptions oil imports are 1.2 million barrels per day lower by 1985. The increased supply, resulting in .9 MMBPD higher volume by 1985, is certainly arguable, but a good case can be made for even higher levels. No one knows for certain what will happen to supply. We do know that more supply will be forthcoming; the only question is how much.

Economic assumptions

The favorable economic impact of decontrol described in the introduction stems from several factors—an improved trade balance, lower world oil prices and higher investment spending. The trade balance impact has been partially discussed above. Decontrol will reduce our oil import bill from \$87 billion to \$73 billion by 1985—a savings of \$14 billion. This reduction is due primarily to lower oil import levels, stemming from increased supply and decreased demand, but also is due to lower world oil prices. We believe that about half the lower oil imports will be reflected in lower exports, as oil sellers spend less in the U.S. This results in a downward adjustment of \$8 billion. The actual

improvement in the trade balance of goods and services of \$12 billion is due to the interactive and dynamic effects of the decontrol scenario.

The second factor, a slower rise in world oil prices, was discussed above as the outcome of reduced market pressures, a stronger dollar and increased worldwide production resulting from the recent OPEC price hikes. A stronger dollar results from our improved trade balance. Over the past five years, a \$10 billion improvement in the U.S. trade balance has created a 5 percent improvement in the trade-weighted value of the dollar. This is incorporated in our decontrol scenario.

The final factor is increased fixed investment. The increased revenues from decontrol will be substantial. We estimate them to be \$10.5 billion in 1980, \$17.7 billion in 1981 and over \$25 billion in the middle eighties. As noted under supply, we are assuming a 40 percent reinvestment of these funds in exploration and production. This will increase business fixed investment by the like amount. The remaining 60 percent of the revenue is assumed to go two-thirds into government spending and one-third into increased transfer payments (income supplements to the poor).

The one somewhat surprising result of the above analysis which has not been discussed is the small increase in inflation. The minimal inflationary impact is due not only to a stronger dollar, but to the fact that there are no other international repercussions from a domestic oil price rise. When OPEC prices rise, this affects international prices of goods as well as domestic prices, and hence the general price of imported products increases. Thus, a rise in domestic oil prices has less than half the inflationary impact of a similar increase in imported oil prices.

Conclusions

From the foregoing outline of assumptions and findings, it is probably clear that we support decontrol. The results point out the degree to which continued controls hamper real growth and in the long run contribute to higher levels of inflation through higher import bills. Conservation, alternate energy source development, domestic oil and gas production—all of these essential ingredients to reduced OPEC dependency and vulnerability are encouraged through decontrol.

The proposed windfall profits tax could prove counterproductive, but to the extent that it is a political necessity to gain overall support of decontrol, it is a small price to pay. The proposed uses of the tax, for energy credits to the poor, increased energy research, etc., are generally desirable. The danger, however, is that if the tax too onerous, it will partially defeat the purpose of decontrol—increased domestic production. It is essential that any such tax have a "plowback" provision. That is, all additional revenue that goes directly into increased exploration and production expenses should be exempted. In this way the aim of decontrol, which is to stimulate production as well as conservation, will be maintained. Even with a plowback provision, the government will receive about 50 cents out of every dollar in income taxes and royalties. A plowback feature insures additional taxation of only that revenue not poured back into the ground.

Senator KENNEDY. The subcommittee is adjourned.

[Whereupon, at 1:15 p.m., the subcommittee adjourned, subject to the call of the Chair.]

[The following written questions and answers were subsequently supplied for the record:]

RESPONSE OF HON. JAMES R. SCHLESINGER TO ADDITIONAL WRITTEN QUESTIONS
POSED BY SENATOR MCCLURE

GENERAL QUESTIONS

Question 1. I am concerned that my constituency be fully apprised of the supply picture, as well as what the major suppliers, and the Department of Energy, are doing to help correct the situation in a near term and long range basis.

I would appreciate your reporting to me what supplies and obligations for gasoline, heating oil and diesel fuel you are able to determine are and will be allocated by the oil companies to Idaho, as it is important to have an accurate assessment of supplies in the state at this time, as well as your commitment to maintain a reliable supply level in the state in the coming months.

Answer. The supplies of motor gasoline, heating oil, and diesel fuel are very tight throughout the United States. In the month of May, preliminary estimates indicate that Idaho will be allocated about 90 percent of the motor gasoline received in May 1978, and about 86 percent of the distillate fuel (diesel). This tight supply situation can be attributed to the loss of crude oil imports to the U.S. in the first quarter, which were 700 MB/D less than necessary to maintain stocks at desired levels. The loss of crude oil imports resulted in reduced refinery output, and the excess use of petroleum stocks to meet demand. As a result, both gasoline and distillate stocks are at an unacceptably low level. With demand for gasoline greater than 2.5 percent above the 1978 demand, there will be continued shortfalls this summer. The current mandatory allocation procedures for distillate as implemented by the suppliers, is providing an equitable sharing of product shortfall on a state by state basis. In order to assist in providing fuel to agricultural users as well as other priority users, the Department of Energy (DOE) issued a notice to the Federal Register on April 19, 1979, to encourage suppliers to voluntarily recognize the priority needs for diesel fuel for essential users as provided in the mandatory allocation regulations. DOE has also held meetings with 35 major refiners to establish individual goals for the buildup of distillate stocks to meet the heating oil demand next winter.

In addition, DOE published a Response Plan: "Reducing U.S. Impact on the World Oil Market (April 1979)," which detailed the U.S. role in the International Energy Agency (IEA) plan to reduce petroleum consumption by up to 5 percent as its contribution to offset the world's shortfall brought about by reduced oil production in Iran.

The Response Plan is designed to rebuild winter fuel oil stocks to safe levels by next October. Petroleum stocks have already been reduced by about 70 million barrels below normal by the end of March. It will be necessary to rebuild distillate stocks to safe levels by October to assure adequate heating oil supplies for the winter heating season.

Question 2. Mr. Secretary, many critics protest that incremental decontrol of United States crude oil prices will result in "windfall profits" for the oil companies. Under existing law, of each incremental dollar accrued to the companies as a result of government decontrol, the government would receive between 49 and 58 cents in taxes and royalty payments. Depending on the extent to which industry reinvests its additional earnings. Furthermore, private royalty owners would net six to seven cents. Of the remainder, oil company shareholders could get up to eight cents in dividends—which would leave 28 to 44 cents for the oil companies to reinvest in energy production or spend as they like.

On April 5, I introduced an excess petroleum profits tax which will levy a 90 percent tax on income of the petroleum industry which exceeds the average rate of return for all industries. The oil companies will be exempt from the tax if they reinvest the excess profits in domestic energy production not circuses or department stores or overseas refineries, but for U.S.A. produced energy.

Do you not think that this approach will give the oil companies adequate incentive to achieve the Administration's goals for new oil production, while at the same time providing a much simpler mechanism for achieving that goal?

Answer. In his April 5 Energy Message, the President outlined his crude oil pricing program and the accompanying windfall profits tax. This proposed tax plan was designed to prevent U.S. oil producers from reaping excessive profits as a result of the decontrol of domestic crude oil prices and should provide revenues for the establishment of an Energy Security Funds which will assist low income households, provide financial assistance for mass transit systems and aid in the development of alternative energy supplies. In the formulation of this tax, the Administration sought to balance concerns for equity with adequate incentives to promote additional development of energy sources. The Administration believes that the windfall profits tax, as proposed, is the most appropriate measure for fulfilling these objectives.

Adoption of the "90 percent tax" which you endorse, with exemptions if profits are reinvested in energy production would certainly stimulate additional investment in domestic energy sources. However, it could also tend to establish a barrier to entry of new companies into the oil industry because a new company would not be able to shelter revenues through plowback to the same extent as existing firms. Therefore the new company would find itself in a lesser competitive position until it could generate revenues greater than its exploration and development expenditures. Additionally, such a proposal fails to address other energy problems that cannot be solved by the oil industry. Development of alter-

native fuels, mass transit, the stimulation of new technologies, and providing relief to the energy needs of low income households are all part of the composite goals of the President's Pricing Program. These needs cannot be met by encouraging excessive reinvestment by oil companies in projects that are increasingly marginal.

It has been reported that DOE is working on a proposed amendment to the Powerplant and Industrial Fuel Act, which was signed into law in November 1978. This amendment would eliminate the 1990 ban on boiler fuel uses of natural gas in an apparent effort to give DOE the flexibility to extend its short term policy of backing out imported oil through increased utility and industrial gas use.

The proposed amendment signals a growing DOE belief that the fuel use act was written under a set of assumptions that might not be true today.

Question 3. Mr. Secretary, how do you expect the Congress to enact into law policies and programs that have been presented to them by DOE, when DOE, in fact, as reflected by the discussion surrounding this proposed amendment, does not on a month to month basis know what our National Energy Policy with respect to specific fuels should be?

Answer. While admittedly the energy supply and demand situation for the United States is a dynamic and complex one, changing in its details on a monthly basis, there are underlying strategic considerations which if they change at all, will change only over the longer term. One of these is the continuing depletion of our current domestic reserves of natural gas. Despite increased drilling and exploration reserve additions have not kept pace with natural gas consumption since 1970.

To restore the balance between supply and demand and insure that natural gas would be available for high priority use in future years, the Powerplant and Industrial Fuel Use Act of 1978—PIFUA—mandates the conversion to coal and other more abundant fuels, of boiler fuel users who are currently using natural gas as their primary fuel.

Despite short term improvements such as the current excess gas deliverability in the intrastate market, the underlying strategic considerations remain unchanged. As a result, the Department of Energy (DOE) is not considering amendments to the PIFUA which would lift the scheduled 1990 ban on boiler fuel use of natural gas.

While some studies indicate that as a result of the incentive pricing and other mechanisms within the Natural Gas Policy Act of 1978 (NGPA) supplies of natural gas will stabilize at current consumption levels by the mid 1980's, there is no guarantee that such a situation will indeed occur. Absent such guarantees the Department considers that an aggressive coal conversion program is the appropriation action to be pursued.

Question 4. What assurances can you give the Congress that once such an amendment is accepted, based on your new set of fuel supply assumptions, that these assumptions will not in fact be modified again, thereby placing the Congress in a compromising position, as perceived by the American public?

Answer. As noted in the previous answer, the DOE is not considering submission of an amendment to lift the 1990 ban on boiler uses mandated under PIFUA.

Question 5. When do you foresee such an amendment being sent to the Congress, if in fact such an amendment is being seriously considered? If such an amendment is not being considered, do you feel that DOE's current public exemption rules could be used to extend low priority gas burning beyond 1990?

Answer. In the event that the natural gas supply situation subsequently improves there is sufficient flexibility in PIFUA through the exemption rules to extend low priority use of natural gas if the DOE determines that such extensions are in the public interest.

DETAILS OF DECONTROL

Question 6a. The price of gasoline has been escalating rapidly in recent months. This price increase has taken place under the Federal Government price control regulations. Under the President's decontrol proposal, further price increases will take place.

How large will the increase from decontrol be? Since this increase will be rolled in gradually, how much of a price increase is likely to take place along with the increase due to decontrol?

Answer. We estimate that the gasoline price increases due to crude oil decontrol will be from \$0.05 to \$0.07 per gallon by 1982. Even without decontrol, we would have expected gasoline price increases of \$0.07 to \$0.08 per gallon due to OPEC increases and \$0.04 per gallon due to the gasoline tilt rule recently promulgated.

Question 6b. How much of a price increase would be likely to be passed on to consumers if the U.S. does not decontrol and increases from OPEC go basically unchallenged? How much restraint do you think decontrol will have on OPEC pricing decisions?

Answer. If the United States does not decontrol, the OPEC price increases will be at least as great as with decontrol. Furthermore, as a longer term objective, the President's crude oil pricing program will promote increased domestic oil production, induce conservation and serve to stimulate the development of alternative energy supplies, thereby relieving the upward price pressure currently associated with today's petroleum supply/demand imbalance. The long term effect on OPEC decisions is very difficult to forecast, but this step cannot help but have a dampening influence on the frequency and magnitude of future OPEC price increases.

Question 7. The administration has claimed that the President's proposal will result in the total decontrol of oil by September, 1981. When I add up the total percentage reductions, month by month. In the lower tier area alone, I see that the monthly sums do not add up to 100 percent. Therefore, I expect that there will be some quantity of old oil that has not been rolled into the upper tier category. Just how much remains under lower tier price controls immediately before price controls expire in September, 1981?

Answer. Pursuant to provisions of the Energy Policy and Conservation Act of 1975 and prior statutes, statutory authority to control the price of domestically produced crude oil expires on September 30, 1981. Accordingly, the President has proposed a program of phased deregulation, designed to minimize the near-term inflationary impacts of decontrol while gradually ramping domestic prices up to world levels to mitigate the shock of a precipitous price rise on October 1, 1981 when controls are terminated.

Under the President's proposed crude oil pricing program, lower tier domestic production will be treated under one of two schedules—either as marginal or non-marginal production. All of the marginal production will be released to upper tier levels by January 1, 1980. Non-marginal lower tier production will receive an updated base production control level; all cumulative deficiencies will be erased; and the following linear decline rates will be applied: June 1, 1979 to December 31, 1979 at 1.5 percent per month; January 1, 1980 to September 30, 1981 at 3.0 percent per month.

Additionally, substantial lower tier volumes will be released to upper tier levels as a result of the President's program to provide producers investing in qualified enhanced oil recovery projects with capital to finance such investments. Further, some lower tier production will have declined to stripper status by the time controls terminate. In part, then, the exact volume of lower tier remaining in that category when controls expire is heavily dependent on those volumes affected by the tertiary release program. It is, therefore, not possible to precisely state how much lower tier oil will remain in the lower tier category in September of 1981. However, since lower tier oil currently represents only about 30 percent of total domestic production, with the accelerated release proposed by the President's crude oil pricing scheme, we expect that only a small amount of domestic production will be priced at the lower tier level when controls expire.

Question 8. Can you explain, in simple terms, how you plan to reach the world price for upper tier oil, by September 1981, by using equal monthly increments? It seems to me that using a fixed line to hit a moving world price is likely to fail and likely to result in the need to reimpose price controls in September 1981 to avoid another large jump in prices as all oil moves to meet the world price immediately after decontrol takes place.

Answer. Since this question will be the subject of a notice of proposed rule-making which will be issued in the next several months, any comments at this time are somewhat speculative. One of the alternatives we may propose would be to increase controlled domestic upper tier oil ceiling prices in equal monthly amounts from January 1980 through September 1981, using an estimated end-period world oil price escalated from the January 1980 world price by an assumed rate of increase, perhaps the projected U.S. inflation rate.

The calculated monthly escalation can be changed if actual world price increases deviate from our estimate. Therefore, we believe that any gap between domestic controlled and OPEC prices in September 1981 can be minimized. As a practical matter, domestic controlled oil will continue to decline as a fraction of total consumption, thereby mitigating any consumer impacts at end of period if there were such a gap.

SUPPLY

Question 9. The Congressional Budget Office has done a preliminary analysis of the President's decontrol plan. Among their conclusions is the statement that only 100,000 of new production will be realized from the decontrol of new-new oil. Does the Administration agree with this CBO prediction? What is your estimate of the amount of new production which will be brought on line as a result of decontrol?

Answer. The Congressional Budget Office did not publish the basis for their estimates of the supply response resulting from decontrol of crude oil prices. The DOE supply response estimates of the President's decontrol program were derived through the use of the Energy Information Administration's (EIA) oil and gas supply model and DOE staff analysis. The Administration's projected supply response for the newly discovered oil category approximates 400-500 thousand barrels per day in 1985. In addition, DOE projects approximately 200,000 barrels per day of incremental tertiary production for a total supply response of approximately 700,000 barrels per day by 1985. The CBO final report, by comparison, projects a total supply response from decontrol of 405,000 barrels per day in 1985.

Question 10. CBO also estimated that 200-250,000 barrels per day would be stimulated by changing the marginal well definitions and allowing upper tier prices for production from this category.

What is the Department's estimate of what will come on line in this category?

What supply response does the Administration expect from its tertiary recommendation?

Answer. With expected technological advancements in Enhanced Oil Recovery (EOR) processes, the supply response attributable to the Administration's tertiary proposal should be about 200 thousand barrels per day by 1985.

By contrast, the marginal wells proposal is expected to encourage producer/operators to maintain currently productive wells and to perform needed work-overs. This proposal may result in significant incremental production between now and the early 1980's but is not expected to contribute substantially to 1985 production levels. Accordingly, the Department did not assign a specific supply response to this provision in the President's pricing program, and in this context it can be categorized as "conservative."

Question 11. If one were to look for indicators which would show that additional revenues were being put back into the ground, which are the most reflective of significant activity in the oil field?

Answer. The expenditures for lease acquisition, the amount of footage drilled per year, and the drilling cost per foot are the most relevant indicators of activity in the oil field.

Question 12. Is it possible that if these leading indicators show that there is a substantial reinvestment in the oil fields, and that the Administration's estimates of new oil production are met and exceeded, that the President's tax could be counterproductive to the primary objective of decontrolling oil prices—increasing prices to reduce demand and price of OPEC oil?

What would the Administration do in this event?

Answer. Regardless of the extent of drilling activity, we know that we are dealing with a finite resource base. Allowing decontrol of the price of oil forces recognition of the value of the commodity and cautions against excessive use. Decontrol will bring us closer to allowing natural economic forces to work for both greater production and more conservation. But the windfall profits tax on current production is necessary to prevent unwarranted profits and cash flow to the industry will be in excess of potential reinvestment requirements. The windfall profits tax on future OPEC increases will still leave the industry with 50 percent of the OPEC increase which will provide a substantial, incentive for new production.

Question 13a. Has the Administration been increasing prices recently to the maximum extent permitted under the Energy Conservation and Production Act?

Answer. Crude oil prices have not been escalated by the full 10 percent permitted under the Energy Conservation and Production Act.

Question 13b. The Act permits increases of up to 10% per year. There are reports that the Administration has only been allowing 7 percent. Is this true?

Answer. Crude oil prices were frozen in June 1976 due to excess receipts under the Energy Conservation and Production Act and lower tier remained frozen or rolled back during this interval. Price escalation of both tiers was resumed in September 1977 and continued to date—each tier being escalated at GNP deflator. During the 15 month suspension the GNP deflator averaged 4.8 percent per year and during the period June 1976 through December 1978 the GNP deflator averaged 6.04 percent per year. In addition the real average price increases have occurred due to the decline in old oil production and the increase in decontrolled stronger production. The computed composite price calculated in accordance with ECPA has increased by 10.3 percent since March 1978.

Question 13c. If so, why has this been done?

Answer. Prices were held below the 10 percent ceiling to provide a reserve to prevent over collection such as occurred in 1976, and to provide flexibility to permit the implementation of incentive programs such as the tertiary enhanced oil recovery program and the California Gravity Price adjustment.

Question 13d. What supply response might have been realized if prices had been increased at the maximum rate?

Answer. Statutory authority for establishing price ceilings for domestically produced crude oil expires on October 1, 1981. Given the uncertainty on the part of producer/operators with respect to the future of controls and the fluctuations of the crude oil market and regulatory atmosphere over the past few years, it is difficult to assign a production response associated with allowing prices to have increased at the 10% rate permitted under ECPA. However, we do not believe the response would have been substantial enough to significantly offset our declining production trend or our import dependence.

DECREASE IN IMPORTS

Question 14. The President has sent a Response Plan to the Congress which includes a number of Administration actions to reduce demand for petroleum. If the Administration is successful in achieving those goals, and if the conservation goals of the decontrol plan are realized and if the new production estimates are achieved, how much total reduction in imports could be realized by this overall package?

What do you realistically expect to be able to achieve?

Answer. The Response Plan, which the President has submitted to Congress, includes a number of actions to reduce demand for petroleum. This plan was developed in the current petroleum supply-demand relationship brought about by the recent Iranian situation.

As presented by the President those actions could achieve a savings in the range of 854,000–1,539,000 b/d in the first quarter of 1980. That range can be represented in the following manner:

Estimated Savings From Response Measures—January–March, 1980

	<i>Thousands of bbl/d</i>
Increased domestic production/reduced consumption :	
Decontrol of crude oil prices.....	100–120
Increased Elk Hills production.....	20
Increased Alaskan production.....	0–150
Immediate demand reduction actions :	
State, local, private initiatives to save gasoline.....	200–250
Switch to natural gas.....	250–400
Electricity transfers.....	100–200
Building temperature controls.....	180–375
Reductions in Federal use.....	29
Subtotal	879–1,544
Additional action if necessary : Mandatory weekend gasoline sales restrictions or alternative State plans.....	110–220

These savings will vary over time primarily due to the fact that several of these actions are intended only for use in the short-term, in response to our current

supply situation. Thus, in the long term, it is estimated that the major initiatives will result in a reduction in oil imports of 1.0 to 1.2 million barrels per day by 1985.

The greatest savings in oil imports would result from the oil pricing proposals, decontrol of oil prices and the measures mentioned by the President on April 5, to be funded from the revenues generated by the windfall profits tax. These savings are estimated to be .9 to 1.1 MMB/D. The tax exemption for gasohol could save an additional 30,000-40,000 barrels per day. Savings of 40,000-80,000 barrels per day could result from the other solar energy initiatives (wood burning stoves, tax credits for solar process heat and passive solar, and Federally-guaranteed loans for solar projects).

Question 15. If Senator Kennedy succeeds in his efforts to retain price controls on crude until September, 1981, what would be the inflationary impact of that action? What would be the oil balance of payments deficit in 1982 with a retention of price controls at current levels?

Answer. It is estimated that if price controls were to remain in effect until September 30, 1981, when they expire under the EPCA, \$11 billion in additional costs would be experienced by the U.S. economy. When applied to the \$2.9 trillion economy, projected by CEA by 1981, this would translate into an approximately 0.4 percent direct impact on the CPI and an additional 0.3 percent increase due to indirect effects.

It has been projected that the President's program, on the other hand would result in a CPI increase of 0.1 percent in 1979, 0.25 percent in 1980, 0.35 percent in 1981 and 0.15 in 1982. Thus, by phasing in decontrol the President's program would have a smaller inflationary "shock" effect on the nation's economy.

If price controls remain in effect, as proposed by Senator Kennedy, past the September 30, 1981 expiration date, it is estimated that the U.S. oil import bill will be in the range of \$63.2 to \$64.2 billion. (The \$63.2 billion figure is derived using DOE Case II price assumptions in the April 5 Fact Sheet which project oil imports to equal 9.563 MMB/D in 1982. The \$64.2 billion figure is derived using DOE Case I price assumption which project oil imports to equal 9.716 MMB/D in 1982.) These values are presented in 1979 constant dollars.

The President's program will substantially reduce oil imports both by increasing domestic oil production and by restraining U.S. demand for oil. This reduction will be 517,000 B/D in 1982 under DOE Case I assumptions and 605,000 B/D under DOE Case II assumption. Thus, the President's program will reduce the oil import bill presented above by \$3.4 billion under DOE Case I and by \$4.0 billion DOE Case II. The range under the President's program becomes \$50.2 billion to \$60.8 billion. It becomes evident that larger OPEC price increases cause greater oil imports savings.

RESPONSE OF HON. ALICE RIVLIN TO ADDITIONAL WRITTEN QUESTIONS POSED BY
SENATOR McCLURE

Question 1. The President's plan does increase revenues to the oil industry by decontrolling oil currently produced. But it slaps a permanent new tax on future discoveries. This new tax, which does not now exist, will lower the rate of return currently anticipated on drilling and output after 1981. In current law, controls expire in 1981. New production now stands to get the world price after 1981. But the President's plan reduces the price to the driller. How can anyone claim there will be any added drilling or any added output under the President's plan compared to current law if the tax on new output is about to go up and the rate of return is about to go down? It is the rate of return on expansion that matters. Not the average tax or average revenue, but the marginal tax and marginal revenue. Dr. Rivlin, does your model and forecast take this drop in the rate of return into account, or do you only look at the averages?

Answer. You are entirely correct that, by imposing a permanent OPEC tax after 1981, the President's plan does lower the marginal rate of return on new drilling as compared with the alternative of total decontrol after 1981. Although we have made no quantitative estimates of the extent to which the OPEC tax will diminish drilling incentives, it is probably small. This is because, on a historical basis, world oil prices are already high and even under the President's plan the producers are able to keep all the gains from inflation plus one-half the gains accruing from future real OPEC price hikes. Further, the tax rates (including government royalties) on domestic oil production are among the lowest in the world. The

more important issue raised by your question is what is the proper alternative against which to compare the President's plan. Oil pricing (and taxing) policies involve choices between near-term and future revenues, and between revenues for oil that is already flowing versus truly new oil. The Administration has attempted to balance these various interests and to do so in a manner that meets criteria of economic efficiency and equity. While the OPEC tax might be subject to some attack on grounds of economic efficiency, it is consistent with certain equity considerations that the Administration has supported.

Question 2. The added revenue received by producers on oil from oil wells may help finance new drilling, but that could also have been done by borrowing. Regardless of cash flow or borrowing, the amount of added drilling will depend on the rate of return to added drilling. Are there any forecasters and forecasting models in existence or under development which can focus on these marginal rate of return and investment issues?

Answer. A major analysis of investment decisions in the oil industry has recently been completed by ICF, Inc., a Washington consulting firm, under contract to the Department of Energy. This study, entitled "Capital Resources and Requirements for the Petroleum Industry Under the National Energy Plan," review the determinants of investment in the industry and also attempts to explain the decline in drilling productivity in recent years.

Question 3. You are familiar with the new Committee for Economic Development study entitled, "Thinking Through the Energy Program." That study concludes that we have to use the price mechanism to get the conservation and production we need. It implies very strongly that any move to help the poor could best be done through general assistance and general revenues, not through price controls, or taxes on a particular product. This is a basic economic principle, whether the problem is food prices, fuel prices, or medical costs. Does CBO take these economic efficiency gains from separating the price and welfare solutions into account in its forecasts? Can the available forecasting models provide estimates of these effects, and if so, what is their magnitude?

Answer. At CBO, we generally try to separate economic efficiency gains from price and welfare effects. One of the strengths of the President's plan, as compared with current policy under EPCA, or with an indefinite continuation of EPCA-type controls, is that higher oil prices are used to encourage both conservation and new production. Professor Thomas C. Schelling of Harvard University in his book "Thinking Through the Energy Problem" argues for a use of the price system quite similar to that proposed by the President. One key issue running throughout the oil debate is what constitutes a windfall. If one supports the view, espoused by the President, that oil prices set by OPEC have created a windfall for domestic producers, then some form of taxing mechanism would be appropriate. The distribution of the revenues derived from that tax is a separate issue. A case could be made that the funds should be treated as any other form of tax revenue, and should be subject to the normal Congressional budgetary process.

Question 4. This same study discusses the effect on OPEC oil prices of U.S. oil production. If we do not decontrol oil, U.S. production will fall, and we will increase our imports of OPEC oil. This will obviously cost us more money for the increased imports. But there is another effect. Our added demand will help to raise OPEC prices, and we will pay more on current levels of imports as well as on additional imports. This could amount to tens of billions of dollars. Does the CBO study of the cost of decontrol take the saving of these charges into account? Could you estimate the size of the savings under different price responses by OPEC?

Answer. Every additional barrel of oil that the United States imports raises our import bill by the price of that last barrel *plus* some additional amount reflecting the increased tightness of world oil markets which, sooner or later, will be reflected in the price paid for all oil purchased on world markets. To date, CBO has not made an independent estimate of this incremental amount and hence we have not included it in our forecast of the dollar savings associated with oil import reductions. We understand that the DOE has studied this problem and may have some estimates available. We believe this is an important issue that has too often been overlooked in assessing the energy situation. Within the coming months, we hope to be able to devote some staff time to making our own estimates. When we do, we will provide you with them.