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MEETING OF THE

NATIONAL PETROLEUM COUNCIL

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CWS

MEETING OF THE

NATIONAL PETROLEUM COUNCIL

U. S. Department of Interior
Auditorium
18th and C Streets, Northwest
Washington, D. C.

Wednesday, August 6, 1975

The meeting of the National Petroleum Council commenced, pursuant to notice, at 9:12 a.m., o'clock, before The Honorable JOHN E. SWEARINGEN, Chairman, National Petroleum Council.

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C O N T E N T S

bear on that kind of analysis. So that's why we made the request to look at this kind of an update of your energy outlook study that was so fundamental to much of the studies and policies that are proceeding at this time.

No one forecast the shock of the embargo, and this has altered the energy operations very seriously, and the very large price increased imposed from abroad.

CHAIRMAN SWEARINGEN: We have a motion to accept the recommendation of the Agenda Committee that we undertake the study which Mr. Chandler has outlined.

Those in favor please signify by saying aye.

(Chorus of aye's.)

CHAIRMAN SWEARINGEN: Opposed, no.

(No response.)

CHAIRMAN SWEARINGEN: The motion is carried. Thank you very much.

The next items are a few housekeeping matters that we need to take care of this morning. First, I'd like to call on Jack Abernathy, who is Chairman of the Budget Committee, and a late arrival, who will make the report of the Budget Committee.

MR. ABERNATHY: Mr. Chairman, believe it or not, my taxicab had a wreck this morning. That may be symbolic. Mr. Chairman, Secretary Carlson, members of the council, I want to make three points only at this time in this report.

First, you may recall from the March 18th council

meeting that the Budget Committee "to complete the fiscal year 1975 with a surplus in our accounts of $20,000 to $30,000", and the council records are currently being audited by our new auditors, Arthur Young and Company, and from our inhouse data it appears we have ended fiscal year 1975 with a cash surplus of about $19,000.

Item two; in the march presentation the committee recommended that the council approve a budget of $1,350,000 for fiscal year 1976; that is, ending June 30th, 1976, and based on our contribution collection experience and projected cash flow, we have adjusted the fiscal year 1976 budget to $1,300,000, a $50,000 decrease.

Item three; the budget committee is well satisfied with the administrative procedures and financial controls provided by Ken BeLieu and his administrative staff. They keep the council officers and me informed of their funding activities each month.

Mr. Chairman, that concludes my report. Thank you.

CHAIRMAN SWEARINGEN: Thank you very much, Mr. Abernathy. That requires no action this morning.

I'd like now to call on Mr. Ken BeLieu who is Executive Director for a few remarks.

MR. BeLIEU: Mr. Chairman, Secretary Carlson, and members of the council, and thank you, Mr. Abernathy, for your kind remarks.

I have just one item to mention to the council this morning, and those of you who received my letter of April 12th, 1975 know that the council, along with its officers, as well as the Department of Interior and the Federal Energy Administration and the Office of Management and Budget and the respective heads of those agencies have been sued by Senator Metcalf and an individual plaintiff who are described as residential and general consumers of petroleum products.

The principal allegation of the suit is that the council memebership is not fairly balanced and is anappropriately influenced by special interests. The plaintiffs do not seek money damages, but seek to have the council enjoined in advising federal agencies until the council complies with the balance of other provisions of the Federal Advisory Committee Act.

Since the filing of the complaint in March, we have formally answered the complaint, and have provided answers to interrogatories; and the ultimate parties have also responded jointly with the government, and we have also pursued discovery of the Complainant's by interrogatories, and the plaintiff's answers to these interrogatories are due next week. We anticipate at this time that the case can be resolved on the basis of motions which must be filed by September 15th under current schedules set by the court.

I will keep you informed of all substantial developments in the case.

Today completes my seventh month, Mr. Chairman, as your Executive Director, and I could not leave without thanking you and the members for the privilege of being with you. It's a worthy cause and I am gratified to be with you. We have an excellent staff and the cooperation of members in their willingness to give and take in the democratic process to me is most rewarding. Thank you.

CHAIRMAN SWEARINGEN: Ken, I'd like to say in front of the council here, I think the council is very lucky indeed to have you as its Executive Director, and the cooperation that you have extended to me and members of the council and staff has certainly been outstanding, and we are very pleased that you have been with us.

The last item we have on the agenda this morning is a report of the nominating committee, and Carrol Bennett is prepared as Acting Chairman of the Nominating Committee to make a report.

MR. BENNETT: Mr. Chairman, due to complications alluded to by Ken and other reasons we would like to limit our recommendation at this time to the Chairmanship and Vice-Chairmanship of the Council, and defer the other recommendations to the next meeting of the council.

Therefore, it is our recommendation that Mr. John

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P R O C E E D I N G S (9:13 a.m.)

CHAIRMAN SWEARINGEN: Gentlemen, will you please take your seats?

The meeting of the National Petroleum Council will please come to order. I should like to welcome all of you to the 73rd meeting of the National Petroleum Council. I appreciate the large number of you who were able to attend this meeting on such short notice.

As I notified you by letter, this meeting is to take the place of the meeting originally scheduled for September 11th. The meeting date was accelerated so that we could consider the draft report of the Committee on Emergency Preparedness. Fortunately the Energy Conservation Committee was able to accelerate its time to also report to you this morning.

Now, in order to speed the proceedings we will dispense with our call of the roll, and the official check-in at the door, at the back of the auditorium, will serve as the official attendance for the meeting. If you do not check in as you enter the auditorium, will you please do so before you leave the building this morning?

Now, I would like to introduce the persons at the table with me this morning. On my right is Chairman of the Budget Committee, Mr. Maurice Granville, or Chairman of the Committee on Energy Conservation; and we have the

Honorable Jack Carlson, Assistant Secretary of the Interior, whom we are particularly pleased to have with us; and also the Honorable Kent Frizzell, who is Acting Secretary of the Department of the Interior; and on my far left, Kenneth BeLieu, who is Executive Director of the National Petroleum Council; Carol Bennett, who is Chairman of the Committee on Emergency Preparedness; Collis Chandler, the Vice Chairman of the National Petroleum Council; and a man who already seems to be standing up, but he really isn't, The Honorable Rogers C. B. Morton, Secretary of Commerce.

I was distressed, as I'm sure all of you were, to hear of the resignation of the Secretary of the Interior, Stanley Hathaway. It's very unfortunate that Mr. Hathaway was not able to meet with us today, or to continue his duties in the Department. I know all of us will wish him well in his future endeavors.

With us this morning is Mr. Kent Frizzell, who is Acting Secretary of the Department of Interior, and I would like to call on you, Mr. Frizzell, if you will, to make a few remarks to the council at this time.

MR. FRIZZELL: I am pleased to be here, Mr. Chairman. Mr. Chairman, ladies and gentlemen, I want you to know that it is a genuine honor for me to welcome each of you here this morning. But as the Chairman indicated, I regret very deeply

the circumstances under which Secretary Hathaway is unable to greet you personally. Stan Hathaway would have found a pleasure in visiting with us this morning. Those of you who would have met him for the first time would have readily seen why he is held in such high regard by those who do know him.

Stan Hathaway, in my opinion, is one of the finest, most decent, most dedicated man that I have met throughout my governmental or political experiences. It is our country's loss of his leadership and the Department's in his resignation. I know that each of you join with me in wishing Stan Hathaway a speedy recovery, and of course, I also want to thank Secretary Morton for taking the time to join us today, as well as his acceptance as a member of this council.

As for my role here this morning, I want to share with you the awkwardness of trying to fill in for one former boss, in the presence of another former boss. That's particularly true when one of those former bosses is Rog Morton, because Rog Morton is and has been one of this nation's finest leaders during the past 15 years.

It's also universally recognized that he and his brother, Thurston Morton, made up one of the top brother teams in the political anals of this country; that the two Morton's are men of great stature, and have been known for many years in their native Kentucky.

One story that demonstrates that recognition goes back 20 years, in the mid-50's, when older brother Thurston Morton was seeking election to the United States Senate, in the Democratic State of Kentucky, running as a Republican.

Rog Morton was touring the Commonwelath with his brother to try to give him a little help. Those of you who know Thurston Morton know that he's a big man himself, but Rog is several inches and a few pounds larger in size, so together they make quite a pair of campaigners.

With the rural courthouse political tradition in Kentucky, it's customary for the candidates to go from town to town, to county seat, in all 120 counties of that state. So the story goes candidate Thurston Morton was running far behind in his schedule this particular morning, and he and his brother Rog drove into one small town with a full day's schedule ahead of them.

As he got out of the car, Thurston turned to Rog, and said, "Rog, we've got to get back on schedule. I tell you what we'll do. I've never been in this town before, and nobody knows me. You go down the other side of the street, and I'm going to go down this side, and just stick out your hand, and tell them your name is Morton and you're running for the United States Senate, and you'd appreciate their votes, and then move on and we'll meet at the end of the street."

With that the two Mortons split up, and Thurston

stopped the first man coming down the street, stuck out his hand, and said, "My name's Morton, and I'm running for the United States Senate and I'd appreciate your vote". The old man without hesitation looked him right in the eyes and said, "Sorry, I'm a Democrat, always been a Democrat", and with that he took off down the street heading in the other direction.

So Thurston wasn't going to let that one reversal bother him, so he kept on working the crowd. Meanwhile on the other side of the street Rog Morton was doing what his older brother had told him to do, grabbing as many hands as he could and asking for their votes.

As he neared the end of the street, fate would have it, who should come along but the same old man that Thurston had first encountered. Rog not knowing about it, plunged right into his act, grabbed the old fellow's hand, and pumped it vigorously, and the old gentleman was mightly impressed, and he was really taken aback. He stepped away a few paces, took full stock of the man who had just given him a second rousing handshake, and said, "Morton, I'm still a Democrat, always been a Democrat, and I ain't going to vote for you, but you sure as hell are the growingest son of a gun I've ever seen."

Rog Morton grew on all of us here at Interior. We had the privilege of having him as our Secretary. It

was an honor and privlege to be a member of Secretariat and one of his friends. I want to say to everyone in this room, and elsewhere, that we here at Interior are determined to move ahead as rapidly as possible with the Department's many important programs, so that the momentum started by Rogers Morton, continued by Stan Hathaway, will not be lost.

We feel that we owe that to the President, to Rog, to Stan, and more particularly, to the American people. Perhaps it would be helpful if we'd take just a minute and ask yourselves just where do we stand today in America with regard to the nation's energy needs, considering that we have the finite amount of natural resources, and the American people have an insatable appetite to consume those resources.

I only wish it were possible for me to point with pride and certainty to a definitive energy program, or even progress in the formulation of a national energy policy. Such is not the case. In my judgment President Ford has diligently sought a realistic solution to these energy problems.

He has demonstrated over and over again his capacity for leadership. In dealing with the difficult national problem, he has proposed the definitive energy program. He has formulated a proposed energy policy, while making every conceivable effort to accommodate the many divergent congressional approaches to that same problem.

On the issue of oil pricing, the inability of the legislative branch to reach an acceptable compromise is regrettable, but we may have backed ourselves toward what may well be the best solution after all, and that's the use of a free, competitive marker to redress the balance of supply and demand.

Let me hasten to add, however, that in such instance the oil industry must again clearly demonstrate that it can function in a responsible manner without excessive and punitive government controls. If restraint in the control of prices is not used, and profits are not plowed back into efforts to increase domestic energy production, we undoubtedly can expect congress to impose more stringent governmental controls that would certainly hinder this nations drive to achieve domestic independence.

Now, is the time, in my opinion, to back the President and to prove conclusively that decontrol is in the best interests of our country, and all Americans.

And now, what about Interior's role in all of this? Happily I can report some forward movement and progress. In those aspects of the energy effort over which this Department has jurisdiction; for instance, in recent weeks, the Department has published the draft environmental impact statement on the Alaska Gas Transportation System proposal. It is seven volumes long, and 57 pounds in weight, believe it or not.

We have received nominations of potential lease sites for oil shale development under our oil shale prototype program. We have received nominations and are now in the process of selecting tracts or potential oil and gas leasing in the mid-Atlantic area of the OCS. We intend to proceed with the decision making process for a possible lease sale off southern California in October, to be followed by another possible sale in the Gulf of Alaska in December.

We're on track and moving toward a rationale energy-minerals program on the public lands. The planned leasing programs for oil and gas are proceeding on schedule, and we will continue to review oil and gas leases with shutin production. In the meantime we will continue to work with the energy resources council to assist in the preparation and plan to develop a synthetic fules program, and to ease the effects of a natural gas curtailment.

And we will balance such programs with the reasoned, rational appreciation for the environment in so doing.

In short, we have our hands full, but I want to repeat that there will be no management vacuum in the Department of the Interior. We may well make some mistakes, errors in judgment, but I'll guarantee they'll be honest mistakes, and the working preface will be what's in the best interest of America and her people. And we will work together in this great experiment in democracy. There will be no lack of

work in the months ahead, likewise for this council. The work you've done in the past has had significant impact on the administration's policies. I wish there had been an earlier response, an appreciation of this council's clear warnings of impending energy difficulties, but if we needed your expertise then, we need it now more than ever.

With this in mind, we look forward to receiving the reports, Mr. Swearingen, that you'll be considering today.

The subject of petroleum storage for national security is of utmost importance to this government, yours and mind. It is entirely likely that legislation in the coming months will be created to establish a strategic petroleum storage system. The information that you provide us will and can be put to use immediately. The potential for energy conservation in the United States Study 1979-1985 will allow us here at Interior and the country to look ahead at what we can rightfully accomplish during that time period to reduce petroleum consumption, and I submit that the prima facia case for energy conservation has been made, and is irrefutable. The evidence is in, the defense stands mute, and the jury can deliver only one verdict. It's essential that we conserve energy in this country.

But the council's work will not end there. Earlier this year the Department asked the council to undertake a study

of the state of the art of advanced oil and gas recovery. Improvement in our recovery capability is a key element of th is nation's energy development program. Perhaps most important among your upcoming assignments is the reappraisal of the U. S. energy outlook. In the three years since the council first issued that report there have been monumental changes in the world energy situation; price effects, market divisioning, exploration policies, and a host of other energy factors have been altered dramatically in the past 36 months.

Such changes are bound to affect our energy outlook. From the government standpoint, the Department's, we cannot look to make enlightened energy policy in the absence of current data and up to date projections of our energy future. And we look to you here assembled this morning for that helpful input.

On behalf of the Interior Department, I want to thank each of you for your selfless efforts in giving to the National Petroleum Council. I trust and predict that your session today will prove to be most successful and productive.

Thank you for allowing me to be here.

CHAIRMAN SWEARINGEN: Thank you very much, Mr. Secretary.

I would now like to call on the Honorable Jack Carlson, the Secretary of the Interior, to introduce to you the new members of the council who were appointed since our

last meeting in March.

MR. CARLSON: I would like to join with Kent in welcoming the seasoned members to this important advisory committee meeting, and among the seasoned members, I see a seasoned colleague from another department of government, and I would like to welcome our Chairman of the Federal Power Commission, John Nacikus.

At mid-year we do have some changes, primarily replacement changes on a calendar year basis. If we are making major changes that is the time we normally do it, and the changes that we have are primarily replacement of other members.

The new members are J. C. Bergen, who cannot be with us today. He is from the Petroleum Equipment Suppliers Association; a new member is Mr. Richard A. Campbell, of R.A. Campbell Company; and Mr. Stanley R. Case, from the American Public Power Association who couldn't be with us; Mr. Bernard J. Clark of Columbia Gas who could not be with us; and I understand all of these gentlemen have substitutes. Mr. B. R. Dorsey of Gulf Oil; Mr. Harold D. Coutman from Marathon; Mr. John G. Hurd from Killean and Hurd of Larado, Texas; Professor Henry D. Jacobi, Professor at MIT; Mr. Floyd W. Lewis, who couldn't be with us, but the alumnist of this department is here in his place, King Mallory; Mr. Duke Legan of Bracewell and Patterson, a new member; and Mr. Edgar B. Speer of U. S. Steel; and Professor Edward W. Erricson of

North Carolina State, and he couldn't make it today. His appointment went through at the last moment. And last but not least is Secretary of the Commerce Department, who is a new honorary member of this council, and I recognize him in this department as President of our Alumni Association, and I am pleased to call upon him for some comments.

MR. MORTON: Mr. Chairman, gentlemen, colleagues in the department and government, and members of this great National Petroleum Council, first let me thank you, Kent, for all the nice things that you said.

You know, if we'd have stayed on that schedule that day and worked as hard as I was working, I might have got elected to the Senate, although the way the Senate is now I thank God I'm not there.

I'm a little weary of flowery introductions which are always a part of the political scene, and secretly I think we all like them, but we're a little afraid of them.

One time I was out in the Midwest and we were having a big political gathering, and I was the speaker and preceeding that there was about a two hour cocktail session of which the Toastmaster was the ringleader, and so when it came to introducing me he was fully in high gear and overdrive, and he then went through a long -- it was very interesting, he went through the biography of the guy I was sitting next to and he put my name in it. It was really quite a colorful

career.

Finally realizing his mistake he just simply closed on the point that I was a great, great, great American, and left it at that, and finally when we were leaving I turned to Ann, my wife, and I said, "Darling, how many great, great, great Americans are there?", and she snapped back that quick and said, "Just one less than you think, big boy."

First, I want to thank the members, the Chairman for the honor that you have bestowed on me in making me an honorary member. I am always a little apprehensive about what the responsibilities are, but I'll do the very best I can. But I deeply appreciate it.

I think that this council has a unique opportunity to really render a great service. We're having a real problem implementing and laying out on the track a good, sound, energy program.

And I think it's easy to blame and say, it's this ones fault, and that ones fault, but basically, it may be all our fault for not really educating the people in this country as to what energy is all about in terms of demand, supply and the world situation and all the rest.

I thought I'd take just a minute this morning to try and put us in perspective as to where we were post-embargo in the winter of '73, and where we are today, and what's been accomplished, and what hasn't been accomplished, and

what the situation looks like from our perspective.

First, it's real great to be back here where I at least know where the men's room is, and be among people whom I admire so much. My friends and members of this great party.

Over here the slogan was Save the Wolf, and over at Commerce it's Save the Whale, so you can see we're getting bigger all the time, and doing hopefully a better job. We're doing such a good job that you won't have to figure on whale oil as much competition from now on.

If you will remember what the President started out to do, and admittedly it looks like we've gone under a lot of bridges and over a lot of falls to get back to the original premise of the national energy policy that the President tried to put in place.

Number one, he addressed himself to the demand side. He admitted that we had to have a new ethic. He admitted that we were going to have to change our ways, and said so in plain language, but he said, let's don't do it with rationing, let's don't do it with allocation, let's do it by letting the forces of the marketplace work. That was his premise, and that still is.

The second thing he addressed himself to was the supply side, the side that perhaps most of you are interested in. He said, let's move in all directions, first in the technological field of bringing on new generations of

technology by stepping up our research, and by reaching for synthetic fuels from coal, synthetic fuels from oil shale and get these technologies in the laboratories, off of the bench, into the demonstration areas, and he didn't limit himself to that.

He talked about solar energy, the feeder-reactor, and all the rest. All the things that wee see downstream including the far off ones like hydrogen, fusion, and so on.

And he said there, let's step up the government participation in this by putting the necessary funds into ERDA, which also had been conceptualized as a means of consolidating the energy research effort, and attract as much private capital into that area as we possibly can by the use of matching funds, and this came to pass.

The third thing he said, let's do this so that it is as economically neutral as we possibly can, and here we ran into some trouble. He said we should arbitrarily raise the price of fuels and as we do that, we should rebate or refund those increases that were established by government action to the economy, with emphasis on the consumers who were at the lower end of the socio-economic spectrum.

So he tried to do three things; one, increase the efficiency of the use of our energy base; two, to increase the supply across the board, converting to coal where practical, increasing and stepping up the production of oil into reserves

that we think we have, both on the land and in the marine environment; and pursuing vigorously new technologies; and finally, trying to keep the thing in balance economically by putting back the arbitrary price increases into the economy. That is so easy to say, and so well understood that the congress has never been able to do a dam thing with it.

Now, that's where we are, and I'm going to talk to you about -- oh yes, we were able to get the depletion allowance off. Sure, that came down the pike pretty fast, but we have not been able to create much more than as Shakespeare said, "A great deal of sound and fury signifying very little".

But I think that we may as Kent said, we may find ourselves with an energy policy by default. Now, there are some things that are wrong with that, as we approach the end of this month. Now, I'll talk about that a little later.

But now, let me just again put the President and the congress in the perspective that they have been in over the last several months, over really the last year.

First, the President never was arbitrary, and he said at the outset in his state of the union message, when he first came onboard; "I am not wedded to these numbers, I am not wedded to this exact language, and I am ready to compromise as long as we stick to these given principals; the principals of the market place, and the basic fundamental

motivation that results in increased production."

The vulnerability that we experience as a nation is pervasive not only in terms of our total society and economy resting really at the mercy of decision makers in other parts of the world, but also that vulnerability is going to be with us for some time, because there's no magic wand. Actually our petroleum production has been on a rather steady decline of about eight percent, as you know.

To change over from one type of fuel to another requires a long time, probably three to four years of lead time for most basic conversions. In the meanwhile, back at the natural gas well, we had a declining production at a fixed wellhead price in spite of the herculean efforts of John Nacikus, who's sitting right here to free himself of the bond of regulation of the price of natural gas.

We didn't ask to deregulate all natural gas. We asked that congress deregulate new natural gas so that enough capital would be attracted so that the deeper, and more difficult structures could be explored and developed, and we could offset the five or six or seven percent decline that we were experiencing in natural gas.

And a number of hearings have been held on this subject, and are rather substantial, but nothing beyond the hearings has come out, so we are still faced with a very complicated dual production and marketing system for natural

gas that tends to distort and deflect some of the basic forces in the economy, the intra-state system and the inter-state system.

Now, price wise, they are totally unrelated. The overwhelming desire on the part of many congressmen to hold the line on price failed to take into consideration the need for capital formation in the energy industry, and whenever you have an artificial depressant on an industry that discourages the rate of capital formation, that can be put into that industry to replace obsolete technologies, drywells, and all the rest, you run into a bad situation, and that is exacerbated as time goes on. And all of the graphs that you can draw in your studies will demonstrate this beyond any doubt.

Yet, when the new oil price came along there was a vigorous resurgence of drilling, but you had a peculiar situation in that as oil fields were depleted, and oil could not be classified in a field until the whole field had new oil, until the whole field exceeded the base of 1972, the concentration of driling did not take place in the areas where the most productive results were likely to occur.

As you all know, this is history, and I think you're familiar with it.

So what we actually did is we looked at 11,00 different bills, and there were 11,000 bills that were

introduced, and these bills were referred to 33 different committees of the congress, and 65 subcommittees of the congress, and also another panel or two that was created. Now, about 200 pieces of legislation dealing with all thesematters actually had some kind of action, some kind of response by the congress, and the only thing that came down the pike was the 55 mile an hour speed limit, the repeal of the depletion allowance, a strip mining bill which was successfully vetoed, and an extension of the allocations passed, which is now before the congress -- I mean, will be before the President, and I will talk more about that in a minute.

But substantively there were no other pieces of legislation that became law, and the embargo was in the winter of 1973-1974. Now, this is what concerns me. Why? If you will take the newspapers and the trend that you've seen in the editorials, and go back about six months you will see that there was a shocking resistance to Mr. Ford's plan; his plan of conservation, supply development, economic neutrality.

But as people began to understand it better, we have seen a rapid change in heart develop, and we have seen also a demand for action, and I think it might be good to quote a recent editorial in the New York Times, which is a demand for action, and it says; "When congress returns next month its leaders should do what they ought to have done last January and insist upon the creation of select committees in the House

and Senate with exclusive jurisdiction over energy, including energy taxes, The erratic and unsuccessful performance of the congress on energy is as much a failure of organization as it is a failure of will." And I've tried to make this point over and over again, and finally in the joint leadership meeting not long ago in the White House with the President I had my opportunity, and I took advantage of it; of really chastizing the congress for failing to institutionalize itself so that it can handle in a reasonably free from politics way a problem that affects every american, be he liberal or conservative, be he Democrat or Republican, and affects our nation, our's, as it relates to the rest of our trading partners and the rest of the world.

I think there's a little bit of a sense of guilt but not quite enough to change the pattern which is in existence for the handling of energy matters.

Now, where are we at the moment? Well, at the moment, let's go to the economic neutrality, and you will remember that when the President's program was proposed, we outlined several specific steps. One was the -- a $2 tax on runs of distills across the board, be it imported or be it domestic oil; a 37 and a half cent excise tax on natural gas; a windfall profits tax; and a few other relatively minor fees. This would have totaled a collection by the United States of about 20 billion dollars, 16 of which would have been refunded

in the form of reduced taxes to individual and refunded to corporates in the form of a lower corporate tax rate, from 48 to 42 percent.

There was parallel to this, and I think this is where we got into some trouble, because the congressional mind could only handle one thing at a time, and the parallel course was a refund of taxes on the 1974 tax base in order to stimulate the economy, and that happened to come out at 16 million dollars, and so the two things, because they were the same figure, got confused in everybody's mind.

Well, the congress enacted the refund of the 1974 income taxes, and they also overshot the field and went considerably beyond the President's proposal. Therefore, the sense of urgency to enact an energy tax refund system was ameliorated.

So now, we're back at milepost zero, having taken no action that substantively changed either the conservation, or supply of energy.

The congress has enacted a law, and has not yet sent it down, but is waiting so that the ten legislative days do not take place while they are adjourned, and has that law in abeyance for the President to sign or veto, and that is simply an extension of the present allocation act for a period of six months. It would be my guess that the President would veto it. And it would be my guess that unless his

program or something very close to it, which included a deregulation over a period of 39 months, and some kind of windfall profits tax with a plowback provision in it were enacted, that law will be forthcoming as I said.

There is a chance, however, before a veto is either sustained overridden, that the congress could take some other action. Remember, this particular bill that is a simple extension of the allocation act, went through separately, thru both houses, concurrent to consideration of other energy bills, the so-called Dingle proposal and with all of its amendments. The new amendment to it is really a great one. It rolls back the price of oil, as you know, and I think would paralyze the expansion of this industry.

So in short, we have seen an awful lot of activity in terms of hearings, we have seen an awful lot of balloons put up, trial ballons, but we have actually only seen a couple of bills which the President has reacted to, and in all of this time we've only seen one or two minor bills that could be signed into law.

So now what can you do and what can I do? Well, number one when I go out -- and I conclude on this-- when I go out in the country people do not differentiate between what the Administration is trying to do and what the congress is either trying to do, or trying not to do. There is a general feeling that it's Washington, and Washington is in many people's mind a single institution, and I think that

one of the things that you can do is help clarify the position; whether you agree with it or not, the position of the President and of the energy resources council, which I chair, the position of the Federal Energy Administration, and clarify in people's minds what is the problem.

The problem is that we're operating on two philosophical tracks, and one; the President believes that,all of us that are with him concur in this belief, that we cannot solve this problem for America unless free market forces are allowed to prevail, and the other side takes the position that we must use some volumetric controls and economic controls and control the price of fuel, and under the type of controls that they are proposing I do not believe that we will get the job done.

So we have an education job to do, and I think that this great council can do its part in developing a better understanding. The tide is going with us. Editorials are beginning to be written, and that's the forerunner of public understanding. I don't think anybody reads the editorials, I wouldn't go that far, but I do think they are after the fact, and if you will notice polls that have been conducted on the subject, there is a beginning to realize that the forces that made this country great are still worth saving.

Thank you very much.

CHAIRMAN SWEARINGEN: Secretary Morton has just

indicated that he would be delighted to respond to any questions that you might have with respect to his remarks, or anything that he did not cover something on.

(No response.)

CHAIRMAN SWEARINGEN: Well, Rog, thank you very much for the very appropriate summary. We appreciate your coming this morning to review this whole problem with us which we are both eminently involved in.

MR. MORTON: John, thank you. I've got to run along, and we're going to get into the natural gas shortage this morning. We're going to talk about how bad it will be, but I doubt if we do much about it.

CHAIRMAN SWEARINGEN: As I mentioned earlier, we do have two reports from study committees to be considered by the council.

First is the study on petroleum storage for national security prepared by the Committee on Emergency Preparedness. This report was mailed to you on July 11th for your review and comments. A copy of the report is also included in the package of materials submitted to you this morning, with only minor editorial changes which have been made between the draft you received in July and the copy before you this morning.

Carol M. Bennett, the Chairman of the Committee on Emergency Preparedness will present to you the report of

his committee, Carol.

MR. BENNETT: Thank you, Secretary Frizzell, Secretary Carlson, Mr. Chairman, fellow members and guests.

As you are aware the council has been working in the area of emergency preparedness for about two and a half years, I had thought our duties were over when the council approved the September 1974 report Emergency Preparedness for Interruption of Petroleum Imports into the United States.

However, the Secretary of the Interior determined that further analysis was needed in the specific area of a petroleum security storage program for the nation, and the committee was reactivated to prepare a response to this request.

The draft report before you this morning expands upon the analysis of a security storage system presented in the September report and emphasizes logistical, economic and environmental considerations which would affect the completion of a security storage project.

We were very fortunate to have had the assistance of leaders in the environmental field in the development of this study, and we feel that any difficulties which could be encountered in completing a project such as is recommened in the draft report can be characterized as engineering challenges and not environmental problems.

Edward J. DiCorcia, Assistant General Manager of the Supply Department of Exxon Company, chaired the Coordinating

Subcommittee which prepared the background analyses for this report, and Ed is here with us this morning and will present the details to you.

MR. DiCORCIA: Thank you, Carol.

The questions in Assistant Secretary Carlson's letter of December 31st, 1974 are summarized on the first slide. He asked that the analysis include a discussion of the optimum size of the security storage system and the relative needs for crude versus product storage, the sources and economics of the fill, the storage facility alternatives available, the financing problems which could be expected to arise, and the federal actions that might assist or deter expediting development of the security storage system.

I will discuss each of these key questions and then Carrol Bennett will conclude with the specific recommendations.

Starting with the question of optimum size of the security storage system, the committee recognizes that it is difficult to make a convincing argument that one particular size is best.

However, the report refers to an NPC survey in which total petroleum imports to the United States in 1978 to 1990 are estimated to average approximately 8 million barrels per day, including crude oil imports at 5.5 million barrels per day. In the 1980's, emergency energy conservation measures

are estimated to be available to reduce total petroleum demand by about one million barrels per day. Therefore, 500 million barrels of security storage is equivalent to about 110 days of crude imports, or about 70 days of total petroleum imports.

In addition to volumes in security storage, however, approximately 30 days of imports would be provided by volumes of crude and product in transit at the time of an interruption plus oil in usable U. S. working inventories. An interruption of total petroleum imports is considered unlikely, thus actual supply coverage afforded by a 500 MMB program, in the event of a more likely denial of 3MMBD magnitude, could range from 6 to 9 months. Since a strategic reserve is not a viable long range substitute for an expanded energy resource base, it appears that the benefits of a second 500 MMB increment would be lower in relation to its cost than the first 500 MMB ste.

Moving to the question of crude versus product storage, projected supply and demand patterns were examined to assess the probable impact of a future petroleum import denial. Refining and logistical responses were designed, and specific product shortfalls were estimated, and appropriate emergency steps were developed for relieving the indicated shortfalls.

As suggested by the Department of the Interior, two 3 MMBD import denial cases were examined; the first was a loss

of only crude; and the second was a combination of 60 percent crude loss and 40 percent product loss.

Now, this next slide shows schematically the projected crude oil imports to the United States around 1978, which was utilized to postulate a base case U.S. petroleum supply and demand balance.

I would like to skip to the next overlay.

This overlay shows the estimated initial effect of a 3 MMBD crude denial. Those are the numbers in red. PAD Districts Four and Five would probably be most least affected by a future denial of petroleum imports. However, it should be noted that future West Coast import volumes will depend not only on North Slope crude deliveries, but also on the growth in District Five oil demand, the future level of production in District Five and the volume of crude move from District V into Districts I thru IV, and the availability of Elk Hills crude in that District. Some or all these factors may be clarified in the next few years. Thus the need for security storage in District V can be deferred to a later date.

This slide shows the schematic of how security crude could be withdrawn from Gulf Coast salt domes located near major crude pipelines capable of delivering crude inland to pipeline connected refineries in Districts II and III at rates equivalent to their normal import rate. In addition, if the salt domes

have access to water, tankers can be loaded for delivery of crude to U.S. refineries in District 1.

The petroleum industry response to the estimated shortfall of product was based on the incremental U.S. refining yield patterns as reported by the Bureau of Mines. In the crude denial case only minor product shortfalls were calculated and these were shown to be readily covered within the capabilities of refinery flexibility; therefore, a crude denial alone appears manageable with crude only in security storage.

The next slides shows a similar depiction for the crude and product import denial case. The base imports are the same as previously discussed with the product import volumes shown after the slash line.

Now, the first overlay here shows the initial effect of a 3 MMBD denial of 60 percent crude and 40 percent product. The expected response was -- with security storage crude is shown on the next slide.

The security crude storage could be run in the Caribbean area refineries as well as domestic refineries based on the expected spare capacity of these refineries during a combined crude and product embargo or denial situation. The Caribbean refineries are an integral part of the refining capacity normally serving the U.S. market and should therefore be utilized in an embargo situation.

The logistics of supplying these refineries are

similar to that of delivering crude out of Gulf Coast security storage to East Coast refineries.

The expected overall response to a crude and product denial indicates that most product requirements could be met. The only product shortfall that remains on paper after processing security storage crude is a possible four to six hundred thousand barrel a day residual fuel oil shortfall for PAD District I.

A possible solution for responding to a fuel oil shortfall is product security storage. Residual fuel oil could be stored in heated, above ground, steel tanks at individual refineries, terminas, and at the major utilities and individual industrial plant locations in the Eastern states.

However, this is a very high cost storage and there is substantial economic incentive to develop alternative means for covering, or at least easing, heavy fuel oil shortages before initiating a costly fuel oil security storage construction program on the East Coast.

Now, this slide lists a number of alternative steps to cover a fuel oil shortfall, which were considered by the committee. The exact impact of these options at the time of an embargo is uncertain; however, an estimated range of the potential effect of each of these steps to mitigate a fuel oil shortfall is presented. The estimated total potential of additional fuel oil available thru these emergency steps

is about 400 to 800 thousand barrels a day, plus the non-quantified effects of implementing extraordinary refinery yield flexibility steps and possibly storing higher residual yield crudes. Therefore, it would appear that covering a four to six hundred thousand barrel a day shortfall might be achieved, although admittedly there is some uncertainty in this analysis.

Thus the refining/logistical analyses indicate that with the possible exception of residual fuel oil on the East Coast, a substantial denial of crude oil and/or refined petroleum products could be covered with a crude storage program. To confirm the extent of any potential fuel oil shortfall we -- resulting from the interruption of product imports, independent and detailed surveys are need of individual refineries located in PAD Districts I and III to determine their actual capability to produce and ship residual fuel oil in an emergency.

It is believed that these refiners can respond, although this may require some non-optimum operating steps. The extent to which refineries logistically connected to the eastern states can increase fuel oil availability is highly dependent on the individual refinery's processing and shipping facilities and has not previously been documented. Pending results of such a survey, together with a further assessment of other potential residual fuel oil emergency steps, the

Committee feels that a final decision as to the need, if any, for high cost fuel security storage of oil should be deferred.

Now, regarding the next question of sources and economics of crude fill, the four principal sources of crude oil were considered for storage and they are shown on this slide.

With the exception of oil obtained from the Naval Petroleum Reserve at Elk Hills, the other sources are already being utilized to meet base domestic consumption and their diversion to security storage would require a net increase in foreign imports. Cost of the fill for these alternatives would be effectively the cost of the foreign crude used for replacement, including tanker transportation, or roughtly $12 to $14 a barrel, currently.

The Committee recognizes that if legislation is passed to permit the Naval Petroleum Reserve to be produced and sold into the domestic economy, diversion in that instance to security storage would result in foregoing a potential decrease in imports, and under this assumption, the cost of fill would be the same as the other sources. But, under that assumption that NPR-1 crude would not be produced except as a national security resource costs of fill from this source would be equivalent to just the out of pocket production costs for development and operation of the field, which has been estimated by the Navy to be about $1.50 to $2.00 a barrel, plus the transportation costs in an assumed pipeline from the

Gulf Coast salt domes, which might run from $1.15 to $1.35 a barrel, and resulting in a total out of pocket cost of approximately $2.65 to $3.35 per barrel. There could be an advantage for delivery of NPR-1 crude to West Coast refineries in exchange for comparable crude oil delivered to security storage locations in the Gulf Coast, thereby providing lower transportation costs than is shown.

It is concluded that Elk Hills crude is NPR-1 is the logical choice as a basis of security storage fill since it is the only source of fill which would probably not increase foreign imports and is the lowest expenditure-cost alternative. The value of NPR-1 to the nation as a strategic reserve would be greatly enhanced, as its deliverability in time of need would, in effect, be increased from its current 3,000 barrels per day to over 3 million barrels per day.

The third area that the Secretary Carlson's questions focused on relate to the storage facilities. Security storage of crude or refined products can be located above ground in steel tanks or underground in caverns leached in salt domes. The primary advantage of steel tank storage is locational flexibility and the ease with which supplies can be integrated into the existing petroleum logistical system. The major disadvantage is cost which is estimated to range from $6.00 to $12.50 per barrel in 1975 dollars, depending on tank size, location, and local conditions.

With regard to salt domes, there are more than 350 known salt domes within a 50,000 square mile area along the Gulf Coast, and many of these domes are located near the major refining centers, the Gulf of Mexico, and the major inland waterways. Underground petroleum storage projects have a good record of safety and reliability based on 20 years of experience and individual storage caverns of more than 5 million barrels capacity and each can be constructed with existing technology.

If two Gulf Coast offshore terminals are constructed the most efficient and lowest cost system would be one 250 million barrel storage facility integrated with each offshore terminal. If Gulf Coast deepwater terminals are not available in time to meet the desired program completion, a different set of salt domes projects would be required for optimum logistical efficiency: one near the Houston Ship Channel refining center; one near the Beaumont/Port Arthur Ship Channel refining centers; and one near the Mississippi River. These inland waterways could be utilized to transport imported crude to major refining centers in the absence of deepwater terminals.

The next slide lists the facility costs based on a study of several Gulf Coast salt domes. Underground storage in leached salt dome cavities can be provided at an initial cost of between 70 cents and $1.15 per barrel in 1975 dollars,

depending upon the cost of pipelines required to connect the storage to distribution facilities and the distance from suitable water sources and brine disposal areas. This estimate applies to large volume projects of the 250 million barrel size. Facilities to permit tanker loading during an emergency will add 15 to 40 cents per barrel, resulting in a total facility cost of from 85 cents to $1.55 per barrel in 1975 dollars.

Also shown are the previously discussed cost estimates for using NPR-1 Elk Hills crude for fill. Thus the total expenditure cost for the recommended program is shown at $3.50 to $4.85 per barrel, which for a 500 million barrel program, totals approximately 1.8 to 2.4 billion dollars.

The next slide illustrates the normal development schedule for a 250 million barrel salt dome storage project and, as we discussed earlier, there could be two of these salt domes that would proceed in parallel. Completion about five and one-half years after an appropriate government directive is issued may be possible. If environmental studies begin promptly and design begins in January 1976, 125 million barrels of storage might be completed and ready to fill in mid-1979. This schedule fits in reasonably well with the earliest probable startup date of deepwater terminals and is also about as early as new crude oil delivery facilities such as a pipeline from the Elk Hills to the Gulf Coast, or new tanker docks

could be completed. With this schedule, leaching of a 250 million barrel project could be completed in 1980 and the storage fill might be completed during the early 1980's depending on crude deliverability.

If it appears necessary to complete construction of a 250 million barrel project prior to 1980, this could probably be accomplished, but it is doubtful that the start of cavern leaching could begin prior to the time indicated on the normal development schedule.

This overlay shows the leaching time might be cut in half (red bar shows the time that might be saved) by installing duplicate leaching and brine disposal facilities at an additional cost of 10 to 35 cents per barrel. With this approach, total project capacity might be ready to fill with crude in mid-1979. If sufficient crude is available, fill might be completed perhaps a year or so earlier than with normal development schedules.

The fourth area of the study examined the question of financing, ownership, and control of security storage. A proper evaluation of the various ownership and financing alternatives requires that they be considered in the light of the goals of an effective petroleum security storage program. The committee has developed what it feels these goals are as listed on the next slide.

The first three goals that the security storage

facility be built with sufficient capacity to insure against a reasonable range of anticipated risks; that facilities be designed and located for quick and efficient movement of security stocks into the U.S. supply system, and that an expeditious construction schedule be pursued as import levels and vulnerability are already significant and growing--these points have been addressed.

We would invite your attention to the next five goals, which are: that petroleum security stocks be clearly distinguished from working stocks of crude and product maintained by industry. Certainly we want to pursue the minimum program cost and have this cost distributed equitably to the beneficiaries of the program. Thight control of the system operation to ensure that security stocks are actually on hand in the event of an emergency is essential and undue complexity in ownership should be avoided, and also with financing and administrative requirements.

Also we would hope that the benefits of petroleum security storage would be provided without reducing our thrust towards another very necessary national goal and that is, expanded energy resource development.

On this last point, the problem of sharply increased petroleum industry capital needs has a significant bearing on security storage financing options. During the next several years, when a security storage program would be implemented,

industry's capital requirements will double or triple. In fact, serious concerns exist over the industry's ability to generate the required capital for needed energy resource development.

A number of financing alternatives can be constructed whereby the government, by means of loan guarantees, loans and grants, tax credits, and rebates, provides a direct means of cost recovery. These systems are in reality indirect means of government financing with the attendant administrative complexities and problems of equitable treatment.

A number of alternative private and combined private-government financing and ownership plans were analyzed and in an effort to develop a system which would support the above goals; and while at first glance it appeared counter intuitive, the concept of government ownership and financing of national security storage emerged as the most straightforward alternative than any other considered.

On the other hand, government ownership and control of security storage crude and facilities should not preclude involvement of the private sector in design, construction, management, and operation. This expertise can readily be obtained by the government through use of competitive private contractors, which is common practice in a wide range of government procurement programs. The supervising government agency itself, need not duplicate or overlap existing private industry capability.

The last of Secretary Carlson's questions referred to federal actions that might assist or deter prompt implementation. They are listed on the slide.

One federal department or agency should be designated to direct the petroleum security storage program. The target volumes and time schedules for security petroleum stocks to be in storage should be specified. On this point, it should be recognized that since conditions constantly change, attempts to answer all questions regarding the ultimate extent of the program can only delay the attainment of an initial degree of security against petorleum import denials.

Complètion of environmental studies and preparation of environmental impact statements, as required by the National Environmental Policy Act, is a first and most important step for the responsible department or agency.

The authority to develop and produce NPR-1 as the basis for security storage fill must be granted.

The method of government financing will also have to be determined.

To minimize uncertainty in responding to an emergency denial of petroleum imports the legislation should provide an operational definition of an energy emergency, require conservation measures prerequisite to withdrawals from security storage, and empower the President to activate withdrawal mechanisms only after energy emergency guidelines are met.

Since expeditious movement of oil out of security storage may be necessary in an energy emergency, the President should be authorized to engage vessels not normally permitted in the coastwise trade to transport oil cargoes between U.S. ports.

Finally, the enabling legislation should provide for easing conflict of interest and antitrust restrictions to permit knowledgeable industry people to assist the Federal government in implementing any phase of the security storage program.

I will now turn the meting back over to Carrol Bennett who will give you the recommendations of the committee.

MR. BENNETT: Thank you, Ed.

Based upon the studies made pursuant to Secretary Carlson's request, the following summary recommendations are offered by the Committee on Emergency Preparedness for adoption as recommendation of the National Petroleum Council:

One, the first objective of the national security storage program should be to store approximately 500 million barrels of produced crude oil, of which at least one-third is low in sulfur content.

Two, the Naval Petroleum Reserve at Elk Hills should be developed and produced. The Federal government's share should from the basis of crude security stocks.

Three, the national security crude oil storage should be in caverns leached in the Gulf Coast salt domes and connected to existing and planned U. S. petroleum industry logistical systems.

Five, the Federal legislation and administrative action should be taken promptly to authorize and expedite a petroleum security storage program if it is to be available for fill by 1979.

Mr. Chairman, this concludes our report.

CHAIRMAN SWEARINGEN: I think you skipped number four. I think you ought to read that one.

MR. BENNETT: Excuse me.

No. 4, the Federal government should finance, own and control the crude oil security storage system utilizing private industry expertise in design, construction, management and operation.

I quite agree, that was a very important one.

Now, that concludes our report, Mr. Chairman.

CHAIRMAN SWEARINGEN: Thank you, Mr. Bennett. I think it would be appropriate for you to answer any questions that members of the council would like to put to you with respect to this report.

MR. BENNETT: I would be glad to try, and if not, I'm sure Ed can answer them.

MR. CLAREY: My question, in relation to Title IV, we are in the storage business, and we store fuel for the military and the system, we think, is effective using private capital. I think the same system could be used here. I'd like to hear more discussion on it.

MR. BENNETT: Well, we considered, as I pointed out, several alternative procedures, but due to the size of this operation, plus the political problems that might develop in trying to mix government crude with private capital in some form, as he said, this seemed to be the cleanest approach.

Now, this doesn't mean that the government couldn't lease the storage facility of yours or Dow Chemical's or anyone else's, but it would still be their preroggative to handle the transaction.

Did I answer your question?

MR. CLAREY: I think it does in part. The military owns the fuel that we store, and the President has complete control over it, but the funding is done by private capital, not the federal government.

MR. BENNETT: Are you saying that you're prepared to underwrite the construction of the pipelines?

MR. CLAREY: Obviously not, but I think that such a program could be undertaken. I think it deserves further study, rather than the council recommending complete

government control over that storage system.

MR. BENNETT: Well, we had some pretty good investment council advice, in fact, two members that were on the committee, and they concurred in our recommendation here, because the other needs of industry for funds, and the exploration and development of domestic crude supplies, oil and gas, they just didn't feel there was enough to go around for both products.

Any other questions?

A VOICE: Carol, my question goes to the point of time. I think there are many on the council who have felt that something of this nature should have been in place long before now, and I observed that 1979 time frame if action is taken immediately, and what kind of action do you see the congress taking on this, or will they implement their usual dilatoryness on this subject? Do you think they will move?

MR. BENNETT: Of course, I wouldn't attempt to answer what congress might do with this, but I feel though there is some feeling developing in congress, at least that we do need emergency storage systems, and hopefully they will take prompt action on it.

Jack, would you have any inside feeling on this thought as to how fast the congress might act? Would you like to answer that one?

MR. CARLSON: I would think that the congress is moving towards something in the storage area now. I have seen at least some move, maybe not an optimum pace, but some movement in this direction, because the benefit-cost analysis that I've seen because of the work of this council and other sources in the case of some sizeable storage program -- with proper respect for -- so I think we'll see some action and perhaps not as fast as some of us think would be best for the country.

A VOICE: Carol, in that connection, are there somethings that each of us as council members can do to help this? Can we carry this concern directly to the congress?

MR. BENNETT: Well, of course, personal contact with your own congressman is probably the best thing that you could do at this point in trying to explain the necessity of our recommendations, and asking for speedy action.

Any other questions?

(No response.)

CHAIRMAN SWEARINGEN: I think, gentlemen, before we take action on approval of the report and recommendations of the committee as outlined by Mr. Bennett, I would like to point out that there is a cover letter which has been drafted, and I believe is in the material which you have in front of you.

I think I should like to read this proposed letter of transmittal to you, and have the action of the council uphold

both the report and its recommendations, as well as this letter of transmittal. We don't believe there will be any surprises in the letter in view of what's already been said about the content of the report, but I wouldlike to read it to you nonetheless.

It's from myself as of this date and addressed to the Secretary of Interior.

"Dear Mr. Secretary. On behalf of the Members of the National Petroleum Council, I am pleased to transmit to you herewith the National Petroleum Council Report on Petroleum Storage for National Security approved by the council at its meeting on August 6th, 1975.

The attached study, which is in response to a December 31, 1974 request from the Assistant Secretary of the Interior, Jack W. Carlson, stressed the urgency of creating a crude oil national security storage system, and recommends a plan for establishing a sound program.

The recommended program includes a 500 million barrel crude oil reserve built in U. S. Gulf Coast salt domes and connected to the existing and planned petroleum logistical system. The share of production from the Naval Petroleum Reserve at Elk Hills, California is recommended to form the basis of fill, although a determination of the optimum amount of crude oil that should be placed in the security storage system is based on numerous subjective decisions.

The National Petroleum Council believes that a 500 million barrel program is a sound objective. A substantially smaller volume would provide little ability to withstand an inport interruption, whereas a much larger effort would be excessively costly in terms of direct investment and diversion of manpower and materials from other needed areas.

A much larger petroleum storage system would encounter diminishing added security benefits, and as the size of the program increases, the costs of oil placed in storage may well rise.

Moreover, the long term security of supply can be obtained only by sharply reducing the nation's dependence on imported fuel supplies. Based on refinery and logistical analyses, the NPC recommends that a crude oil security storage system be developed. For a future interruption where all crude oil would only cover the product shortfalls would occur. In a 300 MMBD interruption of 60 percent crude oil and 40 percent refined product, most product requirements could be met, the only potentially significant shortfall of product is on the order of 400,000 or 600,000 barrels per day of residual fuel oil on the U. S. East Coast.

A number of objects, such as refinery yield, flexibility in planning, reduced demand, and fuel conversion, were analyzed and considered probably adequate to cover

such a shortfall. However, specific steps are recommended to verify this conclusion.

I would like to express the council's concern with the proposals which appear to provide a quick security storage solution, and the nation must realize that no practical quick solutions exist, and begin now on a comprehensive program such as the one proposed in this report. Attempts to implement near term and temporary security storage would seriously dilute efforts to achieve a more meaningful alternate program by affording a false sense of security, misdirecting resources, confusing program priorities, and in short, the makeshift program may be of less value than no program at all.

It is imperative to underscore the urgency of the Federal government's proceeding immediately with a crude oil security storage program. The time for studies is over, and we must now proceed with specific implementation plans, and this phase can be best expedited with -- costly mistakes and needless delays with major decisions being made with respect and access to the knowledge and experience of industry personnel, and sound professional advice would be required on setting of storage and terminal facilities, sizing of storage pumps, pipelines, and a host of related matters in order to insure the optimum integration of the security storage system into the U.S. petroleum logistical

system.

Provisions must be made for formal access to the expertise of the pteroleum industry, and the National Petroleum Council, and the industry stand ready to provide whatever assistance is possible.

I call your attention to the recommendations of the council that the federal government own and control the entire crude oil security storage capability. Because the council believes stonrgly that the free market system will provide the greatest degree of long term energy security, the decision that the federal government should own and control the entire security storage capability was a difficult recommendation to make.

This recommendation reflects the fact that a national security petroleum storage program is designed to provide insurance against a threat to the nation's economic well being, and to its military security. Beneficiaries of the security storage program are the nation as a whole, and its economy, and all its people in their role as producers and consumers.

Further this recommendation reflects the very large financial burden on the program, and the ownership of crude by the government, through production at Elk Hills, and the necessity of the private sector to devote its resources to the very formidable task of increasing domestic energy supplies.

There is simply not enough money for the petroleum industry to undertake both efforts simultaneously. In the next several years when a security storage program is implemented the industries and government requirement will double or triple. In fact, serious concern exists over the industry's ability to generate the required capital in order to meet energy resource development, and design the implementation of a security storage plan.

We must also not lose sight of the real keys to long term security of supply, and the strenuous implementation of fuel conservation measures, and a greatly expanded effort to increase production of domestic oil, gas, and other forms of energy. If we are able to take effective steps to reduce our dependence on foreign energy sources, we almost certainly minimize the danger of the crippling effect of import interruptions on the U. S. economy, and effectively reduce our future investment in requirements for security storage.

The National Petroleum Council sincerely hopes that this study will be of benefit to you, and the federal government in the difficult decision making process that lies ahead.

It is submitted respectively over my signature as Chairman of the council."

Gentlemen, are there any further questions with respect to either the letter which I've just read to you, or with respect to the report or the recommendations?

A VOICE: John, I think just to clarify the record, and I'm sure that others are much closer than I am, but I think the Senate backed bill, 677, passed legislation for security storage last month, and the House is also passed it, and I believe it will be going to the congress as soon as they resume, so I think legislation in some form is moving, and certainly the information of the council should be available to the congress so they can see the recommendations set out in the report.

MR. BENNETT: This is the very reason why this meeting was accelerated to today from the planned date of September 11th. So much of these matters are currently under consideration in the congress, and Secretary Carlson felt that it was important that the report be made available in final form to him for use in connection with the legislation that's now moving thru the congress. Your point is well taken.

A VOICE: I am from the American Farm Bureau, and I want to raise a question relative to the approach of going to the government for support and direction, when we have this year projected an $80 billion deficit in budget, and we talk about a lack of source of supply, and money from the government comes directly from enterprise and from individuals and where this kind of a record is present, I think we ought to look twice before running to the government for the resources. I realize the size of the demand necessary

but there might be other means. Another thing, I question whether or not we can get the kind of direction from the political input delegating this responsibility to the politicians, and in order to relieve the private segment, and in fact, in the long run, the resources must come from enterprise and the private segment, and not the government. The government is not a source of supply, it's only a source of collecting the funds, and it's going to come anyway from other sources, and to allow the politicians to put in there the location of plants and the kind of plants that are neccessary, and I just raise the question as to whether or not these political decisions would be as sound as the decisions that can be made by the industry and under private direction. Thank you.

MR. BENNETT: I am glad to have you with us. I think you've raised some very pertinent points.

Well, it certainly was considered, and as the letter said that John just read, it was a most difficult decision to make. There were a lot of people that agreed with you that private industry could move much more expeditiously, and better perhaps if we could keep government out of it, but you have this factor, and that is that the oil that we're recommending being used for this fill now belongs to the government, and we felt that it was politically impossible to have that transferred to private industry. If they were

to own the crude and the facilities it would be convenient for the facilities to be own by the government. This figure being two billion wouldn't be spent all at one time. It wouldn't be necessarily in any one budget year, and it would be spread out over a period of time, and as we viewed this, this is an insurance policy of the government to protect the nation as a whole, and therefore was basically a government function.

Now, whether congress will accept it or not, that the industry be allowed to use its expertise not only in construction of these facilities, but the location of them, the tieing in with the existing logistical systems of the industry, and the operation of the facilities once they are completed, is another thing. So all we are talking about the government doing is funding this over a five year period, and in effect, saying it is an insurance premium that they are paying for the protection of the country.

CHAIRMAN SWEARINGEN: Ed, was there something you'd like to add?

MR. DiCORCIA: Carrol covered all the points, but there was one technical point that I'd like to add, and that is, we have to keep in mind the nature of this program. It is not one in which individual companies would be making a decision based on their assessment of the need, and based on their knowledge of the marketplace, and then generating the

necessary funds on the prospect of covering those funds in the marketplace. In order to achieve economy of scale we are talking about just one or two or at most three storage locations, and so that companies would have to get together and have to abide by a single decision in order for the economy of scale to go forward. So that is an inherently different problem.

Secondly, the locations have been suggested almost precisely in the report so that there's significant guidiance already given to government by the rather extensive detail in the report.

Third, this is not the kind of investment that generates any revenue stream, because for the oil to be an insurance policy it should not be used, and since the investment has to be made and not used, there really is no feasible way of recovering it in the marketplace, and with all industry having to share in the common program, administration of any artificial means of recovering it, and insuring equity among refiners and independent terminal operators and importers and so on, and domestic and Caribbean area refiners and so forth, would be extremely difficult.

It is not a decision that was made hastily, or a recommendation that was made hastily. The initial impressions of those studying -- or preconceptions of those studying the problem almost unanimously were in favor of the private sector

undertaking this venture, but it was after about a year of pretty intensive study, and very intensive study in the last six months, that this recommendation was brought forward.

A VOICE: I don't object to it, but I suggest that in the second paragraph, the last sentence, could be well quoted out of context and to the disadvantage of the industry.

CHAIRMAN SWEARINGEN: Are you referring to the report or the letter?

A VOICE: I'm referring to your letter, John. "In fact, serious concern exists over the industry's ability to generate the required capital for energy resource development." I can see that quoted out of context, and I suggest you remove it.

CHAIRMAN SWEARINGEN: Well, Dick, you are just ahead of me. You mean the next to the last?

A VOICE: No, on, before the next to the last one.

CHAIRMAN SWEARINGEN: You're referring to the sentence, the very last sentence in the first full paragraph on the second page: "In fact, serious concern exists over the industry's ability to generate the required capital for needed energy resource development."

A VOICE: Yes, considering the fact that there is a proposal that the government go into energy resource development itself, I suggest we don't aid that proposal.

CHAIRMAN SWEARINGEN: If that sentence is deleted,

and without something there, the preceeding sentence or two are left hanging.

A VOICE: I think they might well be deleted too.

CHAIRMAN SWEARINGEN: Well, the problem of having a board of editors to write a letter here is quite difficult, with 150 different people having input, and perhaps Bob Anderson has a suggestion.

MR. ANDERSON: To me it's simply a statement of fact, and we have gone on record as having said exactly that many times in the past. To me the relationship between where we'd like to live and where we live bears less and less resemblance as time goes on, and we might as well face the fact that we are looking at a commodity that's become a strategic material, and the decision to stockpile it is not an economic one, and it is a political decision based on world realities of our time. The government has stored strategic materials in the past, and I wish we lived in a different world. I think this is a good report, and I think it's realistic, and I strongly endorse it, and I would move for its adoption.

A VOICE: I second the motion.

CHAIRMAN SWEARINGEN: May I just add with respect to the question that you raised, I feel pretty strong that we should leave the statement in here. I recognize the point you made that it can be lifted and used out of context to

justify the government's participation or attempt to justify the government's participation in our oil business, but at the same time I remind you that we have problems with respect to price controls, and allocations, and all of these things with respect to future taxation of the industry, and we are going to be arguing just this very point. I don't know that we can really protect ourselves completely from every possible interpretation of what's said, and I'd prefer leaving it in the letter as I've read it to the group.

I have both a motion and a second for the adoption of the letter, and the report. Are there any further questions that anyone would like to raise with respect to this matter before I put the question up for vote?

A VOICE: Mr. Chairman, may I just make one more comment. Referring to Mr. O'Shield's comment and his question was perhaps valid, as I analyze this thing, and to the point of the psychological impact that the cutoff had on this nation was tremendous, and this to me, Mr. O'Shields, is like allocating a couple of aircraft carriers for the general welfare of the United States, and it isn't the industry, but it has an impact on the whole nation, and I think that's what we're dealing with, and this may be improper, but that certainly is how I see it, Mr. Chairman.

CHAIRMAN SWEARINGEN: Thank you.

Is there any other comments or question?

(No response.)

CHAIRMAN SWEARINGEN: Then the motion has been made and seconded that the report, the cover letter, and recommendations as presented to the council this morning be adopted. All those in favor please signify by saying aye.

(Chorus of ayes.)

CHAIRMAN SWEARINGEN: Opposed?

(A few no's.)

CHAIRMAN SWEARINGEN: I believe the aye's have it, and the report is adopted and will be transmitted in accordance with the letter which has been submitted.

Now, I would like to turn to the next item, and before doing so, let me thank you, Carol, for the fine work you and your committee did in performing the service of putting this report together in the period of time that you did.

The second report we have before us this morning is by the Committee on Energy Conservation, and Maurice Granville is the Chairman of the Committee, and he will now present their final report which was sent to you on July 21st for your review. Mr. Granville?

MR. GRANVILLE: Thank you, Mr. Chairman, Mr. Secretary, and fellow council members. The report, Potential for Energy Conservation in the United States, 1979-1985, is

before the council today and is the final action and represents the final work of the committee on Energy Conservation. It was prepared under the direction of the council, in response to the Secretary's request of July 23rd, 1973. At that time the Secretary requested the assistance of the National Petroleum Council in assessing the patterns of future U.S. energy use, analyzing and reporting on the possibilities for energy conservation in the United States and the impact of such measures on the future energy posture of the nation.

Two previous reports were prpeared by the Committee on Energy Conservation, and were subsequently approved and issued by the National Petroleum council, and presented potentials for energy conservation in the short term, 1974 to 1978, which were identified in this overall study effort as Phase One. The conservation potential discussed in the current report was directed towards future technological changes, and the patterns of energy use, and concentrated on the period 1979-1985, and beyond, and was identified as Phase Two.

The energy conservation potential identified as Phase One has been presumed to continue and extend into the Phase Two period. The Phase Two report has expanded earlier work emphasizing the impact of technology on energy use. A particular important development of this study has been

the recognition of consumer and public interests through the input of a consumer task group. This task group includes representatives of labor, environmental interests, acadamia, state government, industry, and a consumer advocate. The report does not include a separate chapter on consumer and public interest; however, the comments and concerns of the consumer task group have been recognized and considered thruout the report.

Such concerns were particular directed to the conservation potentials identified, and their impact on the public and society in general. In addition to consumer and public interest represented in the study, wide non-petorleum participation and support was solicited and utilized, particularly in the end use sector task groups, and in addition, a draft report was circulated to numerous industry and trade associations for their review and comments.

Comments were received from these organizations and have been carefully considered and incorporated in the report as appropriate. A caveot has been included in the report stating that if it does not fully reflect the views on energy conservation of any particular industry, trade association, or other interested group, those views should be expressed to the Secretary of the Interior for his consideration.

Thruout this study three principle approaches to

energy conservation have been considered; first, measures to reduce the consumption of energy by reducing the level of services provided, and reducing the level of activities performed; secondly, measures that increase the efficiency of energy utilization; that is, reducing the consumption without reducing the level of services or activities; and third, measures that would permit substitution of more plentiful resources for those in scarce supply in the generation of electric power.

The first two categories were considered in the Phase One report, and while Phase Two concentrates on the second and third categories. The report concludes that during the course of the study, which included the period encompassing the Arab oil embargo, of late 1973 and early 1974, it has become evident that the role of energy in our society is not universally understood. Some groups have apparently overlooked the fact that U. S. economic growth and standard of living improvements have been closely related to increasing energy consumption.

It has been suggested that the United States has been guilty of wide-spread waste of the world's energy resources, and waste is an economic social term.

Prior to the energy price increase in 1973 and 1974, U. S. economic and social structure was developed by substituting energy for labor, and therby improving economic productivity,

and providing more leisure time and improving the standard of living. Society as it existed at that time was a product of its past economic environment.

Today energy prices have increased and some of the energy related practices that were economically efficient are no longer so. Obviously, changes in energy use patterns should occur. However, many current use patterns in the United States cannot be changed in a few years without severe economic and social penalties. Energy conservation is part of the answer to the general question of the future U. S. energy posture.

However, energy conservation is only one facet, and should be considered in conjunction with continuing development of energy supplies. Every published word to date of the U. S. energy requirements in 1985 indicates that more energy will be required than is being consumed today, even with a lower economic growth rate, a substantial energy conservation achievement. Most investigations into domesitc energy independence indicate that even with foreseeable reductions in the rate of energy consumption, the United States is expected to be at least partially dependent on foreign energy sources in the future.

Conservation of energy should be an integral part of an overall national energy policy. After proper consideration and debate regarding other national priorities such as

economic growth, alleviation of unemployment, and social welfare, environment, national security, balance of payments, and so forth, policies which are in conflict with energy conservation, and which fail to allow individual freedom of choice should be carefully evaluated, and trade offs between capital costs and energy costs are common.

In this report is emphasized the front end capital requirements of energy conservation measures. Correlary to this, and also worthy of note, is shortage of capital which causes deferral of conservation or energy expenditures and often will have to be compensated for by extraordinarily heavy demands upon fossil energy sources, and particularly upon petroleum.

Deferral of needed investments in utility generating capacity calling for use of non-petroleum fuels, nuclear and coal, may result in later emergency installation of turban facilities requiring petroleum fuel. It should not be assumed that increased energy savings necessarily results in economic savings for consumers. Thru enforced conservation standards a consumer could be required to install and directly pay for installation of more capital equipment, and result in energy cost savings, and would pay for it. A good example is the installation of solar heating, requiring conventional heating backup. In this case, the energy supplier would have to provide standby capability which the consumer

would have to pay for, and the net result might be higher costs, included in the consumer's cost of capital, than heating with gas, oil, or electricity.

Energy use patterns will differ for each geographic region, and end use sectors. Mandated reduction of energy used could create hardship in certain regions, and sectors of our society. Within this framework, the marketplace, which has long been one of the most efficient allocators of scarce supplies, should be allowed to eliminate the efficient uses of energy. While historians are occasionally opposed -- distortions are occasionally imposed upon the market by external events such as the recent Arab oil embargo, government intervention systems should be allowed to clear the inefficient uses of energy, and only should be supplemented by public policy decisions, and if they are obvious and unfailable inequities in the sahring of the burden which may be involved.

The overriding goal should be to preserve the freedom of the individual to select his options to fit his needs and resources. The function of the market may not eliminate some inefficient uses of energy as long as some sources of energy supply continue to be subject to regulatory actions, which cause misallocation of resources. This must be taken into account in consideration of public energy policy.

Now, I would like to call on Bob McKay, Chairman

of the Coordinating Subcommittee, to present to you further details of the report.

MR. McKAY: Thank you, Mr. Granville. It's a pleasure to be here today before the council to present the details of our report.

This draft is the result of a final phase of our study effort, as Mr. Granville noted earlier, it focused on the technological developments that may contribute to energy conservation in the period beyond 1979.

Our objective has been to provide a qualitative insight into the problems that lie ahead, rather than attempting to develop a quantitative framework, as was done in the Phase One final report, entitled "Potential for Energy Conservation in the United States 1974 to 1978", which you approved at the September 10, 1974 council meeting.

Therefore, our estimates for projections of total possible conservation, and absolute levels of future energy consumption, have been avoided for a number of reasons: First, it has not been deemed possible within the context of this study to evaluate economic and social acceptability of all the various technological possibilities examined to combine them into entirely consistent projections; and secondly, reduction in energy use as evidenced by absolute consumption levels may not represent the impact of conservation, particularly where such reductions are the

result of a slowdown of economic activity, with a failure to obtain optimum levels of economic growth. As a consequence, this work is not a projection of absolute energy conservation achievable, but rather a discussion of energy conservation potentials.

I think the members of our working groups have done a noteable job in developing the discussion of these potentials and they are the first to acknowledge that they are estimates of potentials, not firm forecasts of what will eventuate in the period beyond 1979.

We have concluded that in the era of seemingly plentiful and inexpensive energy that has now ended, the pressures to utilize more energy efficient equipment, and processes that were available and being developed were not as compelling as the incentives currently being generated by higher costs of energy and the prospects that supplies of energy in its familiar forms are limited in the future.

There will be forces resisting changes in energy use patterns, and these forces will stand firm; first cost considerations, capital availability, difficulty in providing sound technological assessments, proposed measures, availability of qualified technical manpower, the rate at which changes can be made, and the existing mode of consumption, and desirability of other priorities.

These factors will have to be balanced;as a result

difficult choices may have to be made thru the economic and political processes of our free nation.

The parameters of the Phase Two study represent a continuation of the U. S. energy demand projections based on the continuation of historic trends of the early 1970's developed in Phase One.

This projection was used as a benchmark for estimating the conservation potential and has been entitled "Past Trends Continue Case", and we realize that the past trends continue case projections are out of date and do not take into account the major factors of the recent few years, such as the Arab oil embargo in 1973-74, and greatly increased energy costs, and the economic recession of '74 and '75.

However, during this time of rapid change there has been no attempt to develop a more reliable projection and the past trends continue case has been displayed as a comparison standard only. As in our previous reports on energy conservation potentials for the period 1979-1985, they were developed for the following end use sectors; industrial, residential, commercial, transportation, and electric utilities. I shall not address myself to a detailed account of the energy savings potential envisaged by the various end users and other past groups.

However, I would like to present the general approaches employed, and the conclusions reached in the separate end use

analyses. The industrial sector, to determine the extent to which industry as a whole could effect energy conservation, eight industries which account for the major portion of this secotr's energy use were selected for evaluation. These industries are: chemical, iron and steel, agriculture, food processing, petroleum, paper, aluminum and cement.

A number of activities are underway which devote considerable attention to industrial energy consumption including the current attentions focused on the energy problem by the news media, repetitive publicity and higher energy prices, and have attracted the attention of the end users research and development organizations, and engineering contractors, and equipment designers, and manufacturers.

We feel that wider use of currently available and developing technology thruout industry could increase energy conservation during phase two. However, the availability of cpaital and the technical manpower will continue to be the major constraints in implementing energy conservation projects thruout the 1979 to 1985 period.

Additional energy demands that may be required for desirable safety and environmental projects could, however, offset some of the conservation gains, and in our analyses of the residential and commercial sectors, each was examined individually, and we feel that in the residential sector, energy savings potential develop in three principle areas:

in existing houses, the buildings reflecting a continuation of savings as quantified in phase one; in new construction, and embodied in improved techniques; and thru more efficient appliances, equipment, and systems in the 1975-1979-1985 period new construction, both add on, and replacement housing will offer the largest potential for conservation. Existing construction will continue to be a significant base for potential savings during this period.

Long term residential equipment savings are expected over some moderate possibilities for reduction in energy demand. The commercial sector, the Phase Two analysis examines the avenues available for reducing incremental energy consumption in the new construction market. Three influences on this trend are discussed. The impact of current technology that can be applied to new construction, the effect of new technologies that are becoming available, or what will be available in the next decade, and methods for motivating actions to affect implementation of these influences.

There are three prime areas relative to a building which can affect optimum energy use, and they are the building envelope, the building systems, and self imposed actions.

The first two can be implemented thru objective engineering design, and the third involves the human element. The principal factors influencing thermal efficiency of housing and buildings in both the residential and commercial sectors

are glass area, insulation, exterior solar shading, building orientation and landscaping, appliances and equipment used for space heating and cooling, water heating, lighting and other service.

We also examined in residential and commercial areas systems in the residential and commercial areas which utilize non-depletive energy sources such as solar energy, and we concluded that they will likely offer significant long term potential for conservation of depletable energy resources.

However, it appears that the major impact of these systems on the nation's energy posture will be in the period beyond 1985, and into the next century.

In the transportation sector, the basic modes of transportation, which include highway, airway, waterway, urban public transit, and pipeline systems were examined. We feel that energy savings in these modes could be accomplished by three principle methods; reduced level of services, modifications of transportation utilization patterns, technological improvements in systems. The last of these methods represents the primary focus of our analysis, based on available and developing technology, it is felt that savings potentials will exist in all the transportation modes; however, during the phase two period sufficient technological advances appear applicable in the highway mode to generate a larger percentage of savings than any other mode.

A number of incentives exist which have already

begun to affect and improve the efficiency of units employed in transportation of freight and passengers, and our analysis indicates that this trend will continue into the period beyond 1979.

And our analysis of the electric utilities sector examined the impact of new technologies on electricity generation, and transmission efficiency. In this sector we varied our approach from that employed in the other end use sectors, in that measures that would permit substitution of more plentiful energy sources for those in scarce supply are examined in detail.

Thru 1985 overall improvement in conversion and transmission efficiency in the electric utilities industry is expected to be relatively small, and in percentage terms the draft points out that improvements in both steam and internal combustion efficiencies may be offset by additional energy requirements associated with environmental protection measures.

However, minor improvements in the net efficiency of the industry represents considerable quantities of primary energy, illustrating this is a one percent increase in current thermal efficiency nationwide, and this could reduce the energy demand in electric utility industry from 410 to 550 thousand barrels of oil per day.

Of the various technological advances which could

lead to efficiency improvements in the coming ten to fifteen years, combined cycle steam turbine-combustion turbine appears most promising, and advanced combined combustion turbine technology could result in cycle efficiencies as high as 50 percent by 1985. Beyond the potential for conservation of total BTU's there exists the possibility of displacing considerable amounts of oil and gas in the electric utility industry. Current utility use of these two fields comprises about 30 percent of all primary energy consumed. A vigorous program of coal and nuclear development could permit reduced consumption of oil and gas in the utilities sector to as little as five percent of the total energy requirement by the mid to late 1980's.

Technological prospects for energy savings in the electric utilities sector beyond the 1980's revealed enormous potential for tapping efficiency or tapping new energy sources and some new prospects for increasing conversion efficiencies beyond projected levels. Feeder reactors, high temperature gas reactors, geothermal sources, and ultimately fusion reactors may eventually allow electric utility industry production to be derived from non-fossil fuels, and wide scale use of electricity generated from breather and fusion reactors could produce significant energy savings in areas such as fuel transport and processing.

Exploitation of these advanced operations and generation

of parts could also permit the use of excess heat released in the electricity production process for a variety of ancillary purposes with attendent increases in overall efficiency of fuel resource utilization.

In closing, I wish to again stress that this work is not intended to be a projection of an absolute level of achievable energy conservation, but rather a discussion of energy conservation potentials which could accrue from the application of existing new technologies.

Thank you.

MR. GRANVILLE: Thank you, Mr. McKay. This concludes the Committee on Energy Conservation's final report to the council.

CHAIRMAN SWEARINGEN: Thank you, Mr. Granville.

Will you please remain and sponsor any questions that any member of the council would like to ask with respect to this report. Are there any questions about the report?

(No response.)

CHAIRMAN SWEARINGEN: Well, thank you very much, Mr. Granville. You and your Committee have done some very fine work and we very much appreciate your efforts.

I believe you have put your recommendations in the form of a motion, that this report be adopted by the council for transmission to the Secretary of Interior, is that correct?

MR. GRANVILLE: Yes, Mr. Chairman.

CHAIRMAN SWEARINGEN: Is there a second to this motion?

A VOICE: I second it.

CHAIRMAN SWEARINGEN: Is there any comment or question with respect to this motion?

(No response.)

CHAIRMAN SWEARINGEN: All those in favor please signify by saying aye.

(Chorus of aye's.)

CHAIRMAN SWEARINGEN: Opposed?

(No response.)

CHAIRMAN SWEARINGEN: The motion is carried. Thank you very much.

(Tape changed while meeting was in progress.)

CHAIRMAN SWEARINGEN: Thank you, Mr. Robins.

Let me remind you that the council is not engaged in lobbying with respect to any legislation. This group is advisory to the Secretary of the Interior, and the work that we do is in response to questions by the Secretary of the Interior, and authorized by the council to be undertaken in reply to a specific request from the Interior Department.

MR. CARLSON: The advice that the council gives as a whole, and we only receive the advice that the council gives as a whole in terms of these reports, and only when the

council has voted on them.

However, I would like to pick up on that, and ask that individual members who do have advice would please send it to us, and we'd greatly appreciate that. Or if they disagree with a particular recommendation that was made here, we'd appreciate receiving that advice. If there's one thing that we are short of, it's good advice. We have lots of advice, but not always good advice, and we'd appreciate receiving more of that.

I frankly am greatly appreciative of the fact that the council has gone thru the conservation side looking at the time where technologies can change, and where you can use existing best technology, and you can start seeing some new technology on the horizon that can be implemented in the 1979 to 1985 time period. We will look at this advice with considerable interest.

In addition to Mr. Roger's points, which regarded making the reports more understandable to people who may read them, I do wnat to takenote that this is one of the major efforts of the council, to make sure that a balanced presentation was made in the sense of having participants from different parts of society that are going to be involved with conservation.

I take particular note of the consumer task force which was operated to bring forth this study, which has

a representative cross-section of the impact upon consumers, and in fact, I dare say since the council has been reorganized under the Advisory Committee Act of 1973, the effect of the reorganization act in January, we have seen that balance that was provided on the council reflected in these two committees; the committee dealing with emergency preparedness, and the Committee on Energy Conservation.

The Committee on Energy Conservation was far ahead of our chaning the balance of the council pursuant to that particular act, and we will take these, now that we have had the formal presentation of advice to the council, we will share these with our colleagues, and will share them with the congress. I do think that there are some followup steps.

I think one of them was identified by the Committee on Emergency Preparedness concerning the flexibility of providing residual oil at a time of embargo the the West Coast, and that really requires a survey of the refineries and the capability for flexibility there to go ahead and meet that challenge, and we're going to be talking about conducting that kind of a survey and getting that kind of information. So we will be more knowledgeable as we go forward.

As Mr. Melvin McGert pointed out, the congress is way down the track on legislation in this area, and we will share with the committees that may be involved the -- to resolve the legislative differences between the two houses.

I will also take note as individual advice or discussion you have at the private versus federal level here, which has been of considerable interest to the deliberation of the particular committee involved in it, and concerning how much is the appropriate bill for the Federal government in terms of providing capital for the strategic storage program, and how much is appropriate for the private sector, and the comments by Bill Coutman and also by Bill Clarey; we will keep those in mind as additional advice to the formal report that we received, and we will have considerable deliberation on the subject.

On behalf of the Secretary of the Interior we gratiously appreciate this effort. The one report was conducted in something like seven or eight months, and even with some delays, so I think we do have a product that is now timely in the case of the emergency storage program, and the public policy can now consider this to be one important source of information to their deliberations and our deliberations.

On the conservation side, this is timely too as we go down thru our legislative process, and as our country tries to decide in terms of their individual decision making roles where we can, in fact, conserve resources, and where, in fact, we will go given the fact that price has risen, and we all know the sensitivity in price in terms of our own

consumption patterns and whether it's consumer or industry; so these two reports are greatly appreciated and we will study them carefully during our deliberations. Thank you.

CHAIRMAN SWEARINGEN: Thank you very much, Jack.

I would like to say further, Mr. Rogers, with respect to your remark that if you'd like to take the time, I'm sure Mr. McKay or some of his associates would be very pleased to sit down with you and go over those parts of the report which you found difficult to follow. I think perhaps this is for two reasons; one, to help you with your problem; and I think it could help us in writing the future reports in getting a point of view from someone who is not directly in the industry as to what our jargon does for you, and when it's perfectly plain to those people who are in the industry.

So I suggest that you talk with Mr. McKay and see if you can arrange to sit down with him. If there are any other members of the council present who would like to do the same thing, I suggest you talk to Mr. McKay and perhaps it can be done at one time, and we would appreciate your comments.

Now, I would like to call on the Agenda Committee for its report. Unfortunately Jake Hanlon who is the Chairman of that Committee is unable to be present with us today, and Mr. Collis Chandler, who is the Vice Chairman of

the Council will present the report.

MR. CHANDLER: Thank you, Mr. Chairman, Mr. Secretary, and members of the council.

Following the last council meeting on March 18th, the Agenda Committee met with Secretary Carlson and approved a request of the council to undertake a study of enhanced recovery techniques for oil and gas in the United States.

You have a copy of the Secretary's letter of request, and the committee will be chaired by Fred Harvey of Union Oil, and the work will commence this fall, with a final report scheduled to be completed for consideration of the council next spring.

At that same meeting Secretary Carlson discussed with the agenda committee current increasing natural gas curtailments, and their effect on the nation's industrial output and employment. He discussed the government's need for more information on the impact of curtailments on specific regions, and specific industries, and the need to reduce the immediate economic impact.

The agenda committee agreed with Secretary Carlson as to the urgent need of the government for information on the subject, but the committee felt that it would not be proper or advisable for the council to consider matters involving end use priorities of the nation's natural gas.

Secretary Carlson agreed that the council was not

the proper organization to conduct such an investigation.

The agenda committee met yesterday and as we all know, the major events that have occurred since December 1972 and chaning the basic conditions under which the energy is produced, consumed in this country, and thruout the world.

Recognizing these changes, the Secretary by letter dated August 5th of this year, requested the council to undertake a critique of its December 1972 U. S. Energy Outlook Report, and develop an outline for its updating. The Secretary requested that the outline be submitted no later than January of 1976, and the expectation that a review of the proposed study outline will preceed the study, and then proceed to a study that results in the updating of the U. S. Energy Outlook Report by the first quarter of 1977.

The Agenda Committee met yesterday afternoon to review the Secretary's letter, and unanimously recommends to you the acceptance of this request, with the reservation that the Agenda Committee review the critique and outline before beginning the actual update of the U. S. Energy Outlook Report.

Mr. Chairman, on behalf of the Agenda Committee I'd like to move that the council accept the report of the Agenda Committee and charge you with organizing a committee of the council to prepare a response to the Secretary's request.

CHAIRMAN SWEARINGEN: Thank you.

Would you respond to any questions that anyone might

have with respect to this proposed new study or report. This is a very massive undertaking. You will recall the previous energy study was reported in a series of volumes about so thick (indicating), and various estimates as to the cost and participation of industry personnel were anywhere from three to five million dollars. I would hope that much of the methodology and acumulation of the original statistical data is already done, and that the principal amount of work will relate to projections of the future in light of what we know today, as compared to what we knew, say five years ago.

It will still be a massive study, and there are estimates or guesses, I should properly say, of the cost of such a thing, and it would probably be a third to a half of the cost of the original undertaking.

So it's a very massive thing that we are doing, but I also think that it's a piece of information that is essential to the determination of national policy in those areas with regard to energy supplies.

Mr. Carlson, is there anything you'd like to say with respect to the request?

MR. CARLSON: Yes. I think that after we've looked at how we carried out the energy outlook study before, which by the way became the foundations for many other studies and deliberations, found out areas where we viewed things differently, thereby find areas for improvement, and make

the next step of outlining the next study, and how you would carry out an update of an energy outlook and adding some additional years of the future. Then we can decide if that is the correct outline, and it seems to be worthwhile to go ahead and provide the new energy outlook.

It seems important to me that when we finish with the political activities next year, which comes about every four years in this country, the country will be ready to settle down in 1977 and to proceed where it has unfinished business in the energy area, and to get on with those kinds of policies. The environment, I think, will be conducive for a relook at energy policy at that point. If that be the case, and I think it will be, it will be important to have a new energy outlook, and I think it will be important to have a new energy outlook provided by those that are concerned about the supply side of energy in this country, which is a great number of the people in this advisory committee, and to bring forth their best information of what the energy outlook looks like in 1977.

And that's why the Interior Department has made the request of the council to consider this study effort. I think it will be very important, and we think the nation will want to have this kind of analysis at that time, and there will be other sources of analyses, but they won't have the expertise on the supply side that this council can potentially bring to

Swearingen and Mr. Collis Chandler be reelected for one year to their existing offices. That concludes our report.

A VOICE: I so move.

A VOICE: I second the motion.

CHAIRMAN SWEARINGEN: The motion has been made and seconded. Is there any comment or question?

(No response.)

CHAIRMAN SWEARINGEN: All those in favor please say aye.

(Chorus of aye's)

CHAIRMAN SWEARINGEN: Those opposed, no.

(No response.)

CHAIRMAN SWEARINGEN: Thank you very much, I hope.

Gentlemen, that will conclude our agenda for the meeting this morning, unless there are some questions that some of you would like to bring before the group.

If not, the floor will accept a motion for adjournment. I would like to say if there are any members of the press who are here and would like to ask questions of those of us, and we will remain for a few minutes after the meeting.

Is there a motion for adjournment?

A VOICE: I move we adjourn.

A VOICE: I second it.

CHAIRMAN SWEARINGEN: All those in favor say aye.

(Chorus of aye's.)

CHAIRMAN SWEARINGEN: Thank you.

(Whereupon, at 11:55 a.m., the meeting was adjourned.)