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DEPARTMENT OF INTERIOR

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HEARING OF THE NATIONAL RECONSTRUCTION COMMISSION

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Volume

3

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NATIONAL PETROLEUM COUNCIL

- - - -

MEETING

- - - -

Conference Rooms A and B,
Departmental Auditorium,
Between 12th and 14th Streets on
Constitution Avenue,
Washington, D. C.
Tuesday, July 9, 1968

The meeting was convened at 9:35 o'clock, a.m.,
Mr. J. C. Donnell II, Chairman, presiding.

PRESENT:

OFFICERS:

CHAIRMAN:

J. C. DONNELL II,
President,
Marathon Oil Company

GOVERNMENT CO-CHAIRMAN:

HONORABLE STEWART L. UDALL,
Secretary of the Interior

VICE CHAIRMAN:

JACK H. ABERNATHY,
President,
Big Chief Drilling Company

SECRETARY-TREASURER:

VINCENT M. BROWN,
Secretary-Treasurer,
National Petroleum Council

ASSISTANT SECRETARY-TREASURER:

MAXWELL S. MC KNIGHT,

PRESENT: (Continued)**OFFICERS: (Continued)**

Assistant Secretary-Treasurer
National Petroleum Council

SPEAKERS:

HONORABLE J. CORDELL MOORE,
Assistant Secretary of the Interior
for Mineral Resources

S. DAVID FREEMAN,
Director of Energy Policy Staff,
The President's Office of Science
and Technology

REAR ADMIRAL FOWLER W. MARTIN, SC, USN,
Commander,
Defense Fuel Supply Center

ADMIRAL ONNIE P. LATTU, Ret.,
Director,
Office of Oil and Gas,
Department of the Interior

STANLEY LEARNED,
Vice Chairman of the Board,
Phillips Petroleum Company
(Chairman, Committee on Petroleum
and Gas Industries Manpower
Requirements)

MEMBERS:

ROBERT O. ANDERSON,
Chairman of the Board,
Atlantic Richfield Company,
Philadelphia, Pennsylvania

PERRY R. BASS,
Fort Worth National Bank Building,
Fort Worth, Texas

ELMER E. BATZELL,
Batzell & Nunn,
Washington, D. C.

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CARROL M. BENNETT,
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Texas Pacific Oil Company,
Dallas, Texas

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President,
Quincy Oil Company,
Quincy, Massachusetts

H. HAROLD BIBLE,
President,
Lion Oil Company,
St. Louis, Missouri

W. T. BLACKBURN,
President,
Rocky Mountain Oil & Gas Association,
Denver, Colorado

JACOB BLAUSTEIN,
President,
American Trading and Production
Corporation,
Baltimore, Maryland

HOWARD BOYD,
Chairman of the Board,
El Paso Natural Gas Company,
Houston, Texas
and President,
Independent Natural Gas Association
of America

REID BRAZELL,
President,
Leonard Refineries, Inc.,
Alma, Michigan

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International Trade Mart,
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President,
National Stripper Well Association,
Wichita, Kansas

E. O. BUCK,
Vice Chairman,
Texas National Bank of Commerce,
Houston, Texas

ROBERT A. BUSCHMAN,
President,
American Association of Oilwell
Drilling Contractors,
San Antonio, Texas

F. ALLEN CALVERT, JR.,
President,
Calvert Exploration Company,
Tulsa, Oklahoma

SAM H. CASEY,
President,
Commonwealth Oil & Refining Company, Inc.,
San Juan, Puerto Rico

R. EUGENE CHAMBERS,
General Manager,
Armour Properties,
Wichita Falls, Texas

FRANK O. ELLIOTT,
President,
Elliott Production Company,
Roswell, New Mexico

ELMER R. ERICKSON,
President,
Northwestern Refining Company,
St. Paul Park, Minnesota

WILLIAM A. FLUHR,
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National Oil Jobbers Council, Inc.
Red Bank, New Jersey

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Executive Vice President,
Independent Oil & Gas Producers of
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Los Angeles, California

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Natural Gas Pipeline Company of
America,
Chicago, Illinois

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Getty Oil Company,
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Dallas, Texas

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Los Angeles, California

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Perth Amboy, New Jersey

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San Antonio, Texas

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New York, New York

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Mt. Vernon, Indiana

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New York, New York

JOHN H. LICHTBLAU,
Director of Research,
Petroleum Industry Research Foundation,
New York, New York

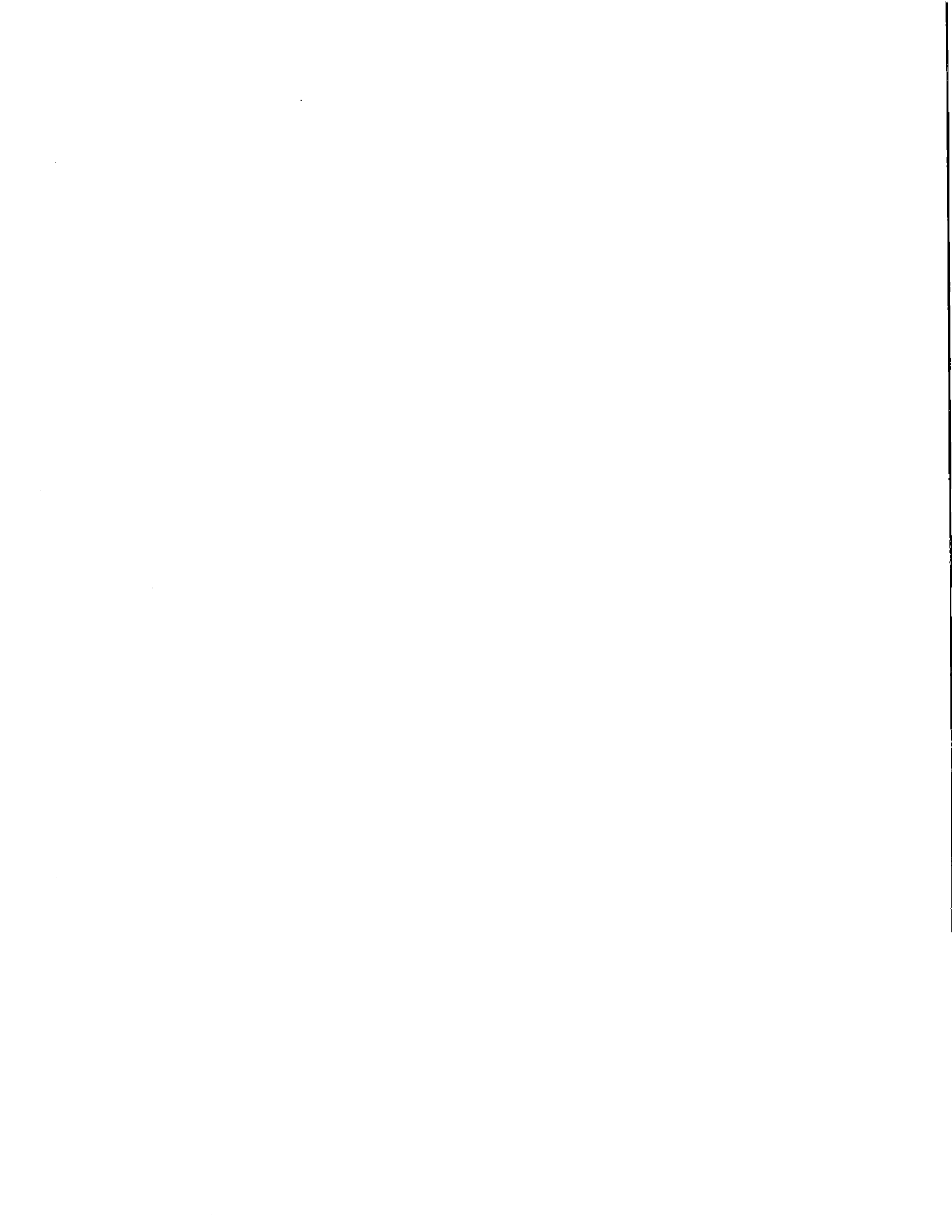
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Chairman of the Board,
The Columbia Gas System, Inc.,
New York, New York

A. S. C. HULTON,
Consultant,
(for D. K. LUDWIG,
President,
National Bulk Carriers, Inc.,
New York, New York)

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President,
McClure Oil Company,
Alma, Michigan,
and President,
Independent Petroleum Association
of America

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President
(for E. H. MC COLLOUGH,
Chairman of the Board,
Amerada Petroleum Association
of America)

RICHARD C. MC CURDY,
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Shell Oil Company,
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Chairman of the Board,
Transcontinental Gas Pipe Line
Corporation,
Houston, Texas

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Fort Worth, Texas

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Chairman of the Board,
Panhandle Eastern Pipe Line Co.,
Houston, Texas

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President,
Tenneco Oil Company,
Houston, Texas)

THOMAS A. MARTIN,
Executive Vice President
(for J. L. SEWELL,
President,
Mid-Continent Oil & Gas Association,
Dallas, Texas)

JOHN S. SHAW, JR.,
President,
Southern Natural Gas Company,
Birmingham, Alabama

ROBERT H. SHERTZ,
President,
National Tank Truck Carriers, Inc.,
Lansdowne, Pennsylvania

FORREST N. SHUMWAY,
President,
The Signal Companies, Inc.,
Los Angeles, California

CHARLES E. SPAHR,
President,

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Texas Independent Producers & Royalty
Owners Association,
Austin, Texas

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President and Chairman of the Board,
Northern Natural Gas Company,
Omaha, Nebraska)

R. J. FARRELL,
(for JOHN E. SWEARINGEN,
Chairman of the Board,
Standard Oil Company (Indiana),
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Chairman of the Board,
Sunray DX Oil Company,
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New York, New York

ALBERT W. TAYLOR,
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Continental Oil Company,
New York, New York

O. P. THOMAS,
President,
Sinclair Oil Corporation,
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VAN THOMPSON,
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Artec Oil & Gas Company,
Dallas, Texas

J. W. VAN GORKOM,
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Jackson, Mississippi

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New York, New York

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Ashland, Kentucky

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Company, Inc.,
Hastings, Nebraska

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Williams Brothers Company,
Tulsa, Oklahoma

JOHN FRATHER,
Fort Lauderdale, Florida

M. A. WRIGHT,
Chairman of the Board,
Humble Oil & Refining Company,
Houston, Texas

AND OTHERS.

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P R O C E E D I N G S

THE CHAIRMAN: Members of the Council and guests:

The meeting will come to order. We will start with a roll call by the Secretary-Treasurer.

MR. BROWN: If we have any members or official alternates in the back of the room, we would like to have you come up to the forward section of the room.

Is Mr. Freeman in the room? If so, we would like him at the head table -- David Freeman.

I will call the roll. Mr. Abernathy?

MR. ABERNATHY: Here.

MR. BROWN: Mr. Robert Anderson?

MR. ANDERSON: Here.

MR. BROWN: Mr. Baldrige?

(No response.)

MR. BROWN: Mr. Bass?

MR. BASS: Here.

MR. BROWN: Mr. Batzell?

MR. BATZELL: Here.

MR. BROWN: Mr. Bennett?

MR. BENNETT: Here.

MR. BROWN: Mr. Bergfors?

MR. BERGFORS: Here.

MR. BROWN: Mr. Bible?

MR. BIBLE: Here.

MR. BROWN: Mr. Blackburn?

MR. BLACKBURN: Here.

MR. BROWN: Mr. Blaustein?

MR. BLAUSTEIN: Here.

MR. BROWN: Mr. Borger?

(No response.)

MR. BROWN: Mr. Boyd?

MR. BOYD: Here.

MR. BROWN: Mr. Brazell?

MR. BRAZELL: Here.

MR. BROWN: Mr. Brockett?

MR. BROCKETT: Here.

MR. BROWN: Mr. Bruce Brown?

MR. BRUCE BROWN: Here.

MR. BROWN: Mr. George Bruce?

MR. BRUCE: Here.

MR. BROWN: Mr. Buck?

MR. BUCK: Here.

MR. BROWN: Mr. Buschman?

MR. BUSCHMAN: Here.

MR. BROWN: Mr. Allen Calvert?

MR. CALVERT: Here.

THE CHAIRMAN: Mr. Calvert is a newly appointed member, but previously served as a member. We are happy to welcome you back, Allen.

MR. CALVERT: Thank you, Mr. Chairman.

MR. BROWN: Mr. Casey?

MR. CASEY: Here.

MR. BROWN: Mr. Chambers?

MR. CHAMBERS: Here.

MR. BROWN: Mr. Donnell?

THE CHAIRMAN: Here.

MR. BROWN: Mr. Duncan?

(No response.) *Lat*

MR. BROWN: Mr. Frank Elliott?

MR. ELLIOTT: Here.

MR. BROWN: Mr. Erickson?

MR. ERICKSON: Here.

MR. BROWN: Mr. Fluhr?

MR. FLUHR: Here.

MR. BROWN: Mr. Foree?

MR. FOREE: Here.

MR. BROWN: Mr. Fox?

MR. FOX: Here.

MR. BROWN: Mr. Garver?

MR. GARVER: Here.

MR. BROWN: Mr. Getty?

MR. GETTY: Here.

MR. BROWN: Mr. Gonzalez?

(No response.)

MR. BROWN: Mr. Goodrich?

(No response.)

MR. BROWN: Mr. Graham?

MR. GRAHAM: Here.

MR. BROWN: Mr. Haider?

MR. HAIDER: Here.

MR. BROWN: Mr. Hammer?

MR. HAMMER: Here.

THE CHAIRMAN: I would like to introduce to you Dr. Armand Hammer, President of Occidental Petroleum Corporation, a new member of the Council.

MR. HAMMER: Thank you very much.

(Applause.)

MR. BROWN: Mr. Hamon?

MR. HAMON: Here.

MR. BROWN: Mr. Hartley?

MR. HARTLEY: Here.

MR. BROWN: Mr. Hess?

MR. HESS: Here.

THE CHAIRMAN: Mr. Leon Hess, the Chairman of the Board of Hess Oil & Chemical Corporation is a new member of the Council.

Welcome, Leon.

MR. HESS: Thank you.

(Applause.)

MR. BROWN: Mr. Hope?

(No response.)

MR. BROWN: Mr. Hornby?

✓ MR. HORNBY: Here.

MR. BROWN: Mr. Howell?

✓ MR. HOWELL: Here.

MR. BROWN: Mr. Hurd?

✓ MR. HURD: Here.

MR. BROWN: Mr. Ikard?

✓ (No response.) *late*

MR. BROWN: Mr. Jacobsen?

✓ MR. JACOBSEN: Here.

THE CHAIRMAN: Will you stand, please, Mr. Jacobsen?

(Mr. Jacobsen rose.)

Mr. Jake Jacobsen of Austin, Texas, is a new member of the Council.

(Applause.)

MR. BROWN: Mr. Harry Jackson?

✓ MR. JACKSON: Here.

MR. BROWN: Mr. J. Paul Jones?

✓ MR. JONES: Here.

MR. BROWN: Mr. Kavouras?

✓ MR. KAVOURAS: Here.

THE CHAIRMAN: Mr. Kavouras, a new member of the

Council, is Director of the Petroleum Division, Farmers Union Central Exchange.

(Applause.)

MR. BROWN: Mr. Keeler?

MR. KEELER: Here.

MR. BROWN: Mr. John Kelly?

MR. KELLY: Here.

MR. BROWN: Mr. Kenny?

MR. KENNY: Here.

THE CHAIRMAN: Mr. Kenny, also a new member of the Council, is President of the Meenan Oil Company, Incorporated.

(Applause.)

MR. BROWN: Mr. Kiltz?

MR. KILTZ: Here.

MR. BROWN: Mr. Levy?

MR. LEVY: Here.

MR. BROWN: Mr. Lichtblau?

MR. LICHTBLAU: Here.

THE CHAIRMAN: Mr. Lichtblau is also a new member of the Council. He is Director of Research, Petroleum Industry Research Foundation.

(Applause.)

MR. BROWN: Mr. Liedtke?

(No response.)

MR. BROWN: Mr. Loomis?

✓ MR. LOOMIS: Here.

MR. BROWN: Mr. Ludwig?

✓ (No response.) *I believe I did not see him*

MR. BROWN: Mr. McClure?

✓ MR. MC CLURE: Here.

MR. BROWN: Mr. McCollough?

✓ MR. A. T. JACOBSON: Mr. Jacobson for Mr. McCollough.

MR. BROWN: Mr. McCurdy?

✓ MR. MC CURDY: Here.

MR. BROWN: Mr. McGee?

✓ MR. BENNETT: Phil Bennett for Mr. McGee.

MR. BROWN: Mr. McGraw?

✓ MR. MC GRAW: Here.

MR. BROWN: Mr. Maddox?

✓ (No response.) *was present*

MR. BROWN: Mr. Marshall?

✓ MR. MARSHALL: Here.

MR. BROWN: Mr. Mecon?

✓ MR. MECOM: Here.

MR. BROWN: Mr. Otto Miller?

✓ MR. MILLER: Here.

MR. BROWN: Mr. Charles Mitchell?

✓ MR. MITCHELL: Here.

THE CHAIRMAN: Mr. Mitchell, the Chairman of the Board of Cities Service Company, is also a new member.

(Applause.)

MR. BROWN: Mr. Moriarty?

MR. MORIARTY: Here.

THE CHAIRMAN: Mr. Moriarty is President of the National Petroleum Refiners Association.

(Applause.)

MR. BROWN: Mr. Charles Murphy?

MR. MURPHY: Here.

MR. BROWN: Mr. Nickerson?

MR. SCHMIDT: Herman Schmidt for Mr. Nickerson.

MR. BROWN: Mr. Nielson?

MR. NIELSON: Here.

MR. BROWN: Mr. Niness?

MR. NINESS: Here.

MR. BROWN: Mr. Osborne?

MR. OSBORNE: Here.

MR. BROWN: Mr. Parten?

MR. PARTEN: Here.

MR. BROWN: Mr. Penrose?

MR. PENROSE: Here.

THE CHAIRMAN: Mr. Penrose, will you please stand?

(Mr. Penrose stands.)

Mr. Penrose, a new member of the Council, is Chair-

man of the Board of Penrose Production Company.

(Applause.)

MR. BROWN: Mr. Potter?

✓ MR. POTTER: Here.

MR. BROWN: Mr. Rambin?

✓ MR. RAMBIN: Here.

MR. BROWN: Mr. Ritchie?

✓ MR. RITCHIE: Here.

MR. BROWN: Mr. Ritts?

(No response.)

MR. BROWN: Mr. Rodman?

✓ MR. RODMAN: Here.

MR. BROWN: Mr. Rowan?

✓ MR. ROWAN: Here.

MR. BROWN: Mr. Sanders?

✓ MR. SANDERS: Here.

THE CHAIRMAN: Mr. Sanders, will you please stand?

(Mr. Sanders rose.)

Mr. Sanders is Chairman of the Board of Panhandle Eastern Pipe Line Company.

(Applause.)

MR. BROWN: Mr. Wilton Scott?

✓ MR. MEASON: George Meason for Mr. Scott.

MR. BROWN: Thank you. Mr. Sewell?

✓ MR. MARTIN: Tom Martin for Mr. Sewell.

MR. BROWN: Mr. John Shaw?

MR. SHAW: Here.

THE CHAIRMAN: Mr. Shaw, will you please stand?

(Mr. Shaw rose.)

Mr. Shaw, a new member of the Council, is President of the Southern Natural Gas Company.

(Applause.)

MR. BROWN: Mr. Shertz?

(No response.)

MR. BROWN: Mr. Shumway?

THE CHAIRMAN: Just a minute.

MR. BROWN: Excuse me.

THE CHAIRMAN: Mr. Shertz, also a new member of the Council, is President of the National Tank Truck Carriers, Incorporated.

(Applause.)

MR. BROWN: Mr. Shumway?

MR. SHUMWAY: Here.

MR. BROWN: Mr. William Wikoff Smith?

(No response.)

MR. BROWN: Mr. Spahr?

MR. SPAHR: Here.

MR. BROWN: Mr. Steed?

MR. STEED: Here.

MR. BROWN: Mr. Strauss?

MR. GAGNE: Fred Gagne for Mr. Strauss.

MR. BROWN: Mr. Swearingen?

MR. FARRELL: Dick Farrell for John Swearingen.

MR. BROWN: Mr. Taliaferro?

MR. TALIAFERRO: Here.

MR. BROWN: Mr. Tarkington?

MR. TARKINGTON: Here.

MR. BROWN: Mr. Albert Taylor?

MR. TAYLOR: Here.

THE CHAIRMAN: Mr. Taylor, a new member of the Council, is President of the Natural Gas Processors Association.

(Applause.)

MR. BROWN: Mr. O. P. Thomas?

MR. THOMAS: Here.

THE CHAIRMAN: Mr. Thomas is President of the Sinclair Oil Corporation, a new member of the Council.

(Applause.)

MR. BROWN: Mr. Van Thompson?

MR. THOMPSON: Here.

MR. BROWN: Mr. True?

(No response.)

MR. BROWN: Mr. Van Gorkom?

MR. VAN GORKOM: Here.

MR. BROWN: Mr. Vaughn?

✓ MR. VAUGHRY: Here.

MR. BROWN: Mr. Vockel?

✓ MR. JAMESON: Minor Jameson for Mr. Vockel.

MR. BROWN: Mr. Ed Warren?

✓ MR. WARREN: Here.

MR. BROWN: Mr. Everett Wells?

✓ MR. WELLS: Here.

MR. BROWN: Mr. Wesley West?

✓ MR. WEST: Here.

THE CHAIRMAN: Mr. West, a new member of the Council, is from Houston, Texas.

(Applause.)

MR. BROWN: Mr. John White?

(No response.)

MR. BROWN: Mr. Whiteman?

✓ MR. WHITEMAN: Here.

MR. BROWN: Mr. J. H. Williams?

✓ MR. WILLIAMS: Here.

MR. BROWN: Mr. John Winger? Mr. Winger?

(No response.)

MR. BROWN: Mr. Woesnam?

(No response.)

MR. BROWN: Mr. John Wrather?

✓ MR. WRATHER: Here.

MR. BROWN: Mr. Wright?

MR. WRIGHT: Here.

MR. BROWN: Mr. Ikard?

MR. IKARD: Here.

MR. HULTON: Mr. Chairman, I am sorry I missed my cue. Mr. Hulton, for Mr. Ludwig.

THE CHAIRMAN: Mr. Hulton, a representative for Mr. Ludwig.

MR. BROWN: Thank you.

MR. RITTS: Mr. Chairman, Mr. Ritts, Union Carbide Petroleum Corporation.

THE CHAIRMAN: Mr. Ritts, a new member, is President of Union Carbide Petroleum Corporation.

(Applause.)

This will be an all-time record attendance for the Council. We will have a tally later on.

In addition to the members of the Council, I would like to welcome the many government observers in the audience this morning. We appreciate your coming, and your interest in the work of the Council.

The minutes of the last meeting, which was held on January the 25th of this year, have been circulated to the members.

Are there any corrections or additions to the minutes?

FROM THE FLOOR: Move their approval.

FROM THE FLOOR: Second.

THE CHAIRMAN: As many as favorable will please say "aye".

(A chorus of "ayes".)

Opposed "no"?

(No response.)

I now recognize Mr. Bruce Brown.

MR. BRUCE BROWN: Mr. Chairman and gentlemen:

The members of the National Petroleum Council pause in sorrow and in fond recollection to note the loss of one of our staunchest and most dedicated colleagues. Alfred "Jake" Jacobsen passed away on December 18, 1967, in his eightieth year.

Born in Denmark, he migrated to Mexico as a youth and in 1906 joined Mexican Eagle Oil Company, rising to the position of Managing Director. In 1926 he came to the United States as Vice President of Amerada Petroleum Corporation, becoming President in 1929, Chairman in 1955, and finally retiring in 1967.

The pressures of directing a highly successful oil enterprise did not prevent Jake from giving a full and devoted measure of service to his government, his industry and to humanity throughout his long useful life.

He was named as a member of the Petroleum Industry War Council upon its inception in November, 1941, and served

until its dissolution in December, 1945. He was named a member of its post-war counterpart, our present National Petroleum Council, upon its formation in 1946, and continued in that service until his retirement.

During the war period he acted as a prime counselor to Secretary Forrester. He was named Oil Industry Advisor by the State Department in 1944 during negotiations with the British Mission to the United States on a proposed Anglo-American oil treaty. In this connection, he also went to London in 1945 as advisor to a delegation headed by the Secretary of the Interior, Harold Ickes.

In a series of hearings held between May, 1945, and March, 1946, before a senatorial "Special Committee Investigating Petroleum Resources", Mr. Jacobsen, as chairman of a special petroleum industry committee, analyzed and summarized the testimonies presented by fifty-seven industry witnesses. He also presented to the senatorial committee recommendations for a "National Oil Policy for the United States", as prepared by the Petroleum Industry War Council.

Jake served this Council with devotion and distinction. A member of many of its advisory committees, he chaired several. Appointed a member of our Agenda Committee in 1946, he served as its Chairman for fourteen years.

His career in American Petroleum Institute activities was similarly distinguished. He joined the A. P. I.

Board in 1933 and for twenty years, commencing in 1945, he served on its Executive Committee. He was for many years Chairman of the A. P. I. National Oil Policy Committee. He was prominent in the affairs of other industry groups such as the I. P. A. A. and the Mid-Continent Oil and Gas.

Nor were Jake's public activities confined to oil and government. He was devoted to New York's Memorial Hospital for cancer and allied diseases, serving for many years as a member of its Board of Management, as a member of its Executive Committee, and as Vice President.

Naturally and properly Jake was honored in recognition of his fine citizenship. These honors included honorary degrees from the University of North Dakota and from Northeastern University. Also, in 1963, he received the Distinguished Service Award of the Texas-Mid Continent Oil and Gas Association and, in 1967, the American Petroleum Institute's Gold Medal for Distinguished Achievement.

The Knight Order of Dannebrog was founded in the year 1219. In 1953 the King of Denmark conferred this decoration on Alfred Jacobsen in recognition of distinguished services in promoting cultural and commercial relationships between Denmark and the United States.

Jake was deliberate in judgement and incisive in expression. He was considerate of the opinions of others, willing to express his own views and always ready to "go

the second mile".

It has been my privilege to attend almost every meeting of the original Petroleum Industry War Council and its successor, the National Petroleum Council, either as a government official or a committee-man or as a member. The two Councils have numbered some truly great individuals in their rosters -- but none more worthy of respect and affection than our beloved Jake.

NOW THEREFORE BE IT RESOLVED on this 9th day of July, 1968, that we the members of the National Petroleum Council record our warm affection for our old friend we can never forget; and that we also record our admiration and appreciation for the selfless service he rendered to this Council, to all his colleagues in the petroleum industry, to his Government, and to the people of this Nation.

I thank you.

THE CHAIRMAN: Shall we adopt this with a rising vote?

(The members rose.)

I would like to alter the agenda slightly and save my brief remarks for later in the meeting.

We are privileged to have with us this morning the Co-Chairman of the Council, the Honorable Stewart Udall.

SECRETARY UDALL: Thank you very much, Jim. It is a pleasure for me to be with the members of the Council

as always, and I regret my inability to participate in the social aspects of our gathering last evening.

I would like to say to the new members of the Council, if they are not aware of it, that there is nothing -- the National Petroleum Council is a somewhat unique organization; there is none in that industry group that has the particular history that this Council has. Its roots are in World War II and the problems, the very severe and vital problems, that concerned the National Security at that time, and in the very special relationship that grew up and was fostered by Secretary Ickes and by the leaders of the petroleum industry at that time, and we think it offers a very unique and excellent opportunity now for the petroleum industry, working through the Council, to continue to serve the national interest, working intimately with the Department and with the other agencies of government that are represented here today.

It also, it seems to me, looking back on it, offers a very excellent forum and an opportunity for all of us to exchange views, both informally and formally, in terms of the future of this vital industry.

This is perhaps the last meeting -- it probably is the last meeting of the Council while I will serve as Co-Chairman. We are -- as you can see by the pace of activity that the President is keeping up, this isn't a very lame

"lame duck" administration. We still are enjoying our work. We have at least six months to go, and for some of us, at least, who have been around a while, we expect this to be a productive and creative period. We are not resting on our oars.

We are going to make whatever decisions we have to make. And indeed sometimes you are free from pressures that would otherwise be present, and we invite any and all of you informally, officially -- my door has always been open to most of you as individuals and as a group, and any suggestions that you have of policies that a new and, perhaps, more timid administration -- any administration coming in is going to be a little timid, I can tell you that! We welcome any suggestions you might have.

I will have a few personal comments to make at the conclusion of my prepared remarks, because I want to look back with you at this period of seven and a half years that we have crossed during the time that I have had a special relationship with this Council and with this industry.

But I wanted to comment this morning on our new report, which we are releasing this morning, and which you have copies of, which we are quite pleased with. And I think that it also serves as a focus for us to look backward and look forward, in terms of the future of this industry. If there is anything that, of course, is of paramount concern

to the nation and to the industry, it is with regard to this whole broad question of what the future holds. And therefore, very heavy emphasis has always been laid, and always must be laid, on the reserve position of this industry, because, in some ways, the petroleum industry is like a bank, and knowing what the reserves are, and what the reserve picture is, is extremely vital in terms of an attempt to forecast what the future holds.

Of course, petroleum being a non-renewable resource, it is unlike a bank in that sense, and this is the reason that it is even more vital for us to know what the reserve picture is. And this, of course, is the focus of this report, and this outlook with regard to the energy resources situation in the United States.

It is the response of an Interior Department study group to a request that I made for a survey of our national capability to supply the steadily mounting demand for oil and gas we anticipate over the next fifteen years. We always have to take a time span. We took the fifteen-year time span as the focus of this study.

Now that we have the results of the survey between two covers, it occurs to me that my remarks this morning might appropriately be directed to some of the things found to be of particular interest, some of the main conclusions of this report.

The first part of the report is devoted to an assessment of what we can expect to happen if things continue to go along about as they have been doing. The value of projections of this type is that if we don't like what the projection tells us about our future position, we may be prodded into doing the things necessary to change it -- if there are things that we can do.

The supply-demand projection made in the survey shows, after going through all the arithmetic of discoveries, recovery rates, additions to proved reserves, and production withdrawals, that the domestic oil industry is unlikely to replace as much crude oil in its reserves as it will withdraw for use between 1965 and 1980.

The implications of this imbalance are for a gradual deterioration in the nation's capabilities to supply itself with crude oil. No precipitate, near-term crisis is in prospect, in our view, and the deficits could go on accumulating for several years. But it is clear that sooner or later the account must be balanced; no industry can go on indefinitely shortening its stocks in the face of a steadily rising demand for its products.

Now let me introduce some qualifications. Obviously any projection of future trends in discoveries and reserve additions is only as good as our knowledge about our present reserve position and the results of discovery

activity over the recent past.

As you know, however, these results are never fully known until long after the past ceases to be recent. The figures for proved reserves and discoveries of oil in place are only partial statements of the oil that will eventually be found and recovered from the deposits already located due to the continuing development of old fields and pools. A substantial degree of ambiguity, therefore, characterizes the figures that we have available since 1957.

In attacking this problem, the group did its best to use logic to bridge the gaps in information. But after all pertinent adjustments and allowances were made and all other modifying circumstances were considered, the study group was still forced to conclude that the large decline in drilling that has occurred since 1956 has been accompanied by a large decline in the amount of crude oil discovered. There is no surprise, of course, in this.

During this same period, however, the nation's proved reserves of crude oil increased by a billion barrels while accommodating a production rise of nearly twenty per cent. And in the single year following May, 1967, the petroleum industry paid \$1.7 billion for oil and gas leases on the Outer Continental Shelf -- some \$400 million more than it had paid for Federal offshore leases in all the years prior to that time.

This certainly, I think we would all agree, is the major event domestically of the past year -- the three sales that we held -- the Louisiana sale in June of 1967; the California, the Santa Barbara sale last winter; and the Texas sale a few weeks ago; the response of the industry -- I think this is of enormous significance for the future. You yourselves know why you made the bids that you did, and what you think the prospects are.

And, of course, until much of the drilling activity is carried out, no one is going to know how prudent those investments were, and what the future holds.

But it is very obvious, and we can all draw this as a major conclusion -- that industry, that domestic industry is far more interested in activity on the Continental Shelf than anyone would have thought two or three years ago. And I hope, for our part, speaking in the national interest, that these were prudent bids, and that your investments in development and production will be carried out effectively. I think that if the Shelf proves to be as productive as most of us think it will be, that this in itself can be one of the major positive factors, when one looks down the road fifteen or twenty-five years in terms of our petroleum future.

We are contemplating, as all of you know, an additional sale -- probably something eighteen months or two years from now -- in the Gulf of Alaska, which the geologists

tell us has what appear to be some very favorable geological conditions.

And here again, this will confront the industry with a challenge, because the problems of technology that you confront there, the adverse conditions that are prevalent, will make it particularly risky. And yet the prize may be a particularly attractive one.

But that is part of your industry; your industry is, and always has been, an industry with a high risk element. This has been a gambling industry; it has been a bold industry. And that is the reason that it has gone to the four corners of the earth in search of petroleum, that the companies represented here today are the companies and the people that have done more exploring on all of the continents of the earth than any other group that could be gotten together in one room today.

And so when my scientists also tell me that these underwater environments that are going to be the next major technological development, in terms of offshore activity, that we are probably -- what? Five? Eight? Ten years away from having underwater environments perfected which will lead to a new era in the development of the Shelf -- I would say that I think that you, by your activity, by your bids, as it were, have forecast already that the Continental Shelf is going to be -- not only one of the major areas of action

during the next few years, but that it may very well prove out to be one of the most significant developments in terms of the last half of the twentieth century, as far as the petroleum industry is concerned.

(At this point Mr. David Freeman came into the room and took his seat at the speakers' table.)

In addition, of course, to these startling developments in the offshore area, in 1967 the Rocky Mountain region came alive with some of the best discoveries that have been made anywhere in the country in years, in Montana and Wyoming in particular. And to my own pride, even Arizona had an oddball, but very significant discovery, which we are glad that Kerr-McGee made.

These are not ordinarily the acts of an industry that is in the process of liquidation, of the type of bidding and the type of exploring that you people are doing and are ready to do.

So the question remains as to whether all the facts and figures which forecast a downturn in crude oil reserves are really relevant to the industry's prospects over the next several years.

Are the returns to drilling as poor as they look, or are we in reality finding much more oil per foot drilled than ever before? This is one of the questions that my people asked themselves when they finished this study.

Does the low level of discoveries reported over the past decade reflect a true condition, or is there indeed a vast amount of unreported newly-found oil awaiting only further development to confirm its existence and extent?

Does the continued growth of proved reserves in the face of declining discoveries indicate a sudden jump in efficiency that can be relied on in the future as an effective substitute for drilling? That is another question we ask ourselves.

Or does it mean that for the most part the industry is "living off the shelf" -- finding oil with a pencil by re-evaluating a few of the old giant fields?

Do the huge payments for offshore leases of the past year signify high confidence -- or eleventh-hour desperation?

And I have already indicated that I think it indicates a very solid confidence and a bet on the future of the resources of this country.

Are some of the recent significant and onshore discoveries a flash in the pan, or do they foretell a revival of onshore exploratory activity and success?

This is why no conclusive judgment can be made of the outlook for the petroleum industry. The crystal ball, it would seem, is never clear.

And this is why the report ends on a note of chal-

lenge to the industry, either to mount the additional effort that appears to be necessary to provide the required additions to proved reserves of crude oil, or to demonstrate that the things it is now doing will prove sufficient to supply the oil needed to meet the rising production requirements of the years ahead.

It has pleased me, and I should like to say that the emphasis that Harold McClure, the current President of I. P. A. A., has given, the way he has hammered away at his people that more exploration activity is the key to their success, and that rather than complain about what hasn't been done in the past, that he has been expressing his conviction and feeling that the industry should be forward looking, and should be willing to plunge right ahead with a high rate of exploratory activity.

The outlook for productive capacity this study found to be markedly different from that for reserves and discoveries. For a variety of reasons, crude oil productive capacity has grown three times as fast as production, proved reserves, and number of productive oil wells since 1948.

The study group, therefore, considered that if the reserves were found in the volume needed to replace withdrawals between now and 1980, the capacity to produce them would be acquired as a matter of course. Even if a somewhat lesser volume of reserves were found than were withdrawn,

productive capacity would still probably be adequate.

The outlook for gas and gas liquids is somewhat better than that for crude oil. Between now and 1980 the study group considers that additions to natural gas reserves will more than offset production, and will actually increase reserve levels by some 28 per cent over those of 1965. So we have a rosier picture on that side.

Additions to proved reserves of natural gas liquids are expected to just about equal production, with virtually no change in reserve levels between 1965 and 1980 -- or, at least, that is our forecast.

The Second Part of the report examines the more important factors which may influence the availability of oil and gas in the United States over the intermediate future: technology, of course, new prospective areas, imports, synthetic fuels, and government policies.

Some of these factors influence the cost of finding and producing oil and gas. Others impose limits, actual or potential, on the price at which these products may be sold. All affect the profitability of petroleum producing operations to some degree, and hence the availability of domestic oil and gas.

In the context of a privately-financed and operated economy, the availability of any product is a function of investment in the processes that make it available. The

study group did not find the domestic oil producing business unprofitable. It did find a trend of increasing costs which has substantially narrowed the range of onshore drillable prospects in which operators are willing to invest their money. The result has been a reduction in traditional exploration and development activity.

The report notes that the solution to the industry's profitability problem rests with the prospects for reducing the unit cost of finding and producing a barrel of oil, either by technological or managerial improvement or by finding large reserves, or -- most likely -- by some combination of all three. There are still large areas of promising, but largely untested territory offshore and in Alaska, as well as many thousands of cubic miles of deeper sediments onshore. The very fact that these areas have remained so largely undisturbed during a hundred years of exploration, however, suggests something of the costs and difficulties of operating in them. Technology has contributed much to the solution of these cost problems in the past, and undoubtedly will in the future. It has the potential for contributing much more, and many are convinced that many giant fields remain to be discovered in the remaining untapped provinces of this country.

In the extensively prospected onshore areas, however, the solution to the cost problem appears to lie not

so much in discovering large deposits, as in finding ways to make the discovery and exploitation of smaller ones profitable through reducing the regular costs of exploration, development, and production.

The report deals with numerous other conditions faced by the domestic petroleum industry, among them the generally indifferent results from onshore exploration ventures, the pressure of imports and competing fuels and the future possibility of challenge by synthetic oil and gas. Not the least of the influences acting on the future availability of petroleum is the deep and growing involvement of government in overall energy matters. President Johnson addressed himself to this subject in his message to the Congress in January of last year. Our guest speaker this morning, Dave Freeman of the Office of Science and Technology, and formerly with the Federal Power Commission, is here, and you will be interested in his report, because the need for coordination of Federal energy policies is important enough to merit attention at the White House level.

I cannot close without acknowledging my sincere appreciation of the way in which your industry has responded to the need for better, more meaningful information on the nature and results of its operations. This study is, to a substantial degree, possible only through your cooperation as always.

The new series of data on reserves, ultimate recovery, productive capacity, and discoveries of original oil in place published jointly by the A. P. I., the A. G. A., and the Canadian Petroleum Association, are a landmark achievement.

The Council's own two outstanding reports, "Impact of New Technology" and "Factors Affecting U. S. Exploration, Development and Production", were basic reference works for much of our study group's considerations. The response of industry representatives to requests for assistance to the Federal Interagency Petroleum Statistics Program, for which my Department has focal responsibility, has been gracious and cooperative. As we continue to improve the quality of our information on the operations of the petroleum industry, we will also improve the quality of our decisions and the policies which affect those operations.

Your industry is now in its 190th year, and regularly throughout all that long period of time, there have been cries of alarm that the Nation would soon run out of oil. These warnings have invariably been wrong in the past and I believe that they will continue to be wrong in the future if you do your job properly. But this is not the issue anyway.

The real problem that the domestic oil industry must someday face is that it is demand which will eventually

be exhausted, and not supply. The volume of oil in the rock beneath our feet is enormous, and we can have all of it we want -- but at costs which rise with the increasing difficulty of reaching it and producing it. But the consumer pays only the going price of energy in the particular form it is required -- and he is not interested in recompensing petroleum producers for costs which may be higher. If such a situation should develop, the certain result would be a takeover of petroleum markets by competing and substitute sources of energy, which is the reason I think that Dave Freeman's presentation will be of special interest to you today, with a decline in production caused not by an insufficient supply, but by the simple choice of the imperious consumer.

It has been one of the things that I have learned in my job, particularly in working with an industry such as yours, that economics calls the shots most of the time -- and should.

I think that this nation will remain strong and powerful economically as long as it is efficient. It is almost that simple. I think that the reason that we are an economic powerhouse in the world scene today can be traced, and can be traced in the main to the striving for efficiency, and, of course, this naturally embodies the amount of money we invest in research, our ability as engineers and scientists to perfect technology, as well as our ability to be bold

and to be ahead of others, in terms of the new steps that it is always possible to take.

Thus far, through a combination of imaginative management and superb technology, the oil industry has managed to subdue the tendency of costs to rise to the point of threatening the competitiveness of its products. But the problem is ever-present, and it gives no signs of diminishing in the period just ahead. The best efforts of the industry will be required to meet and master this new phase of an old challenge.

Those are my prepared remarks, and as I indicated a moment ago, I would like to reminisce a little bit, if I may, because I first addressed this group on this rostrum, as I recall it, when Walter Hollernan, the late Walter Hollernan, Jim, was the Chairman of the Council at that time, in February of 1961.

The sixties are still with us, but they will soon be history, and I think, therefore, having been one of those stubborn Cabinet officers who stayed on during two Presidents in most of the nineteen-sixties that maybe some of my own reflections might be of interest to you, because there were very few of you that I knew seven and a half years ago, and yet I look out today and see many faces that are familiar; many of you are warm personal friends, many of you are acquaintances whose friendship I value, and you first met me

probably you thought, a rambunctious and cocky young Congressman who somehow managed to get in a President's Cabinet!

But I can say to you that these have been very exciting years for me, and watching the nation grow, and watching particular segments of industry very closely, as we have had to do, and of seeing how the decisions are made, and of seeing how an industry behaves under pressure, and how or what its own conception of the national interest is, has been one of the fascinations of this job.

I personally think, for a number of reasons, that these have been good years for the nation as a whole. These have been years of steady growth.

One of the great accomplishments of the nineteen-sixties any way you look at it, it seems to me, is the fact that -- whether temporarily or permanently -- we have licked the business cycle. The new economics is given much of the credit for this.

I think industry itself, and the way it has managed its policies and made its judgements, has certainly played a major role in this.

But we do realize that the nation is much stronger, our economy is stronger, if we can have a constant rise, rather than have the roller coaster dips that have featured our economy in the past. No one is predicting at this point that the nation isn't wise enough, in terms of managing its

economy, that we won't have future recessions of some kind. But we have it in our capacity, if we are wise and flexible, if government and industry and labor can work together, to not only hold inflation at reasonable levels, but to continue this kind of steady growth.

I think all of you would certainly say that the petroleum industry is healthier, is stronger, today than it was eight years ago. This is due to a number of factors. Among them is not only the increased diversification of this industry, but the fact that the industry itself, when one looks at the international scene, has a much bigger stake in the international petroleum picture than it had before. And I think that this is good not only for the nation, but good for the world as a whole.

I would say certainly when one looks at the national security aspect that we are on a sounder footing as a result of experiences of recent years, and that the nation knows better and wiser ways in which to conduct its affairs so that, as far as energy is concerned, the nation is more secure. I could emphasize this by simply talking about the unimportance of Suez:

We -- part of the dialogue as I learned early with the petroleum industry people was, of course, the Suez crisis of 1956, and pre-Suez and post-Suez. Well, Suez isn't very important today, and it is perhaps going to become less important as a result of the events of last year.

The fact that industry in this country, the industry in the Western world, the petroleum industry, the energy industry, was able through wise management and a little flexible broken field running, to survive the Middle East crisis of last year and take it in stride, I think, was an indication that we have learned some lessons from the past, and that we are prepared and we are looking always to do business in such a way that political crises and extraneous factors interfere as little as possible.

I think this is a very sound development, and it indicates an attitude by industry to invest and to make decisions that are good for the long haul, and that are also keyed in with the national interest.

There also has been a continuing heavy worldwide impact, it seems to me, when I look at these years, in the whole field of science and technology:

The increasing interest in the Shelf that I have just mentioned.

The development of the supertanker.

The continued improvement in drilling and production and refining.

All of these things are not only helping petroleum keep competitive, but they are adding to the strength and health of the industry.

I would single out too as another major develop-

ment of the nineteen-sixties a very deep increase, not only in awareness, but in performance of the industry with regard to its conservation responsibilities, as I will call them, to the nation as a whole.

We have made under President Johnson, in my judgment, one big basic decision with regard to conservation, which has, of course, enormous implications to industry, and particularly to you industry. And that is that the old assumption that we operated on so long -- and this really was a basic assumption -- that a highly industrialized country such as ours, that it was inevitable that such a nation would also be a dirty and unclean and ugly country, because the debris -- whether it is the effluence from our factories poured into rivers, or the left-over carcasses of our products, that the country just had to be unclean and dirty and uninviting.

And considering the wealth we have, and considering the capacity of science to teach us how to carry on business affairs in a clean and orderly way, to clean up messes when we make messes, I think the country is now committed to the idea that we can be both successful in terms of our industrial production, and that we can have a clean country as well. We haven't accomplished this yet, but we have set out down this road.

You find us constantly hammering at this. I hope

and expect that whoever my successor is, he is going to be as nuts on conservation generally as I am, because I simply think that we owe our children and their children a responsibility in this field. And President Johnson has come down hard on this.

And I would say, looking at industry generally, I think that the petroleum industry has reacted very well to this challenge. You are making investments, most of you today, that you were not making a few years ago, in terms of control of pollution. You are going to have to make more investments. I don't hear too many complaints from any of you. You are doing this as part of the normal course of business, and you are passing the cost on in your products, as you should, and as we properly do in this country.

But it is part of the creed of business today, and must be, that we are going to carry on our activities in such a way that we do as little damage as possible to the other resources that are so vital to the people. Whether it is water or air or the land, these responsibilities are most vital.

And it pleases me no end, and I sometimes scribble little notes and send them to some of you here, when I see actions that have been taken, particularly when I see some of you that are helping to tell the conservation story with your advertising programs, and with your other activities.

So I believe this has been a major development. And I believe that we will all look back on it in a few years as a major achievement in terms of the general management of man's environment.

We have, in the nineteen-sixties, in my Department, tackled one problem that sat and went unnoticed for thirty or forty years. I refer to the oil shale program that we have been attempting to develop.

This has taken -- and as I look back upon it, we can certainly be criticized maybe for failing to go up one side and down the other, but I think that we do deserve credit for having tackled the problem, for having attempted to get it in sharp focus, so that we can begin the development of this resource.

The recent report that we issued a few weeks ago represented some of the best staff work that I have seen in the Department in my seven and a half years. I am sure that all of you are reading it with great interest. We asked some of you in the room here for your comments and observations and suggestions in the latter stages of preparing that report.

I hope that before I leave office that we can try out some of these test leases. I think that if -- once we can get the technology, certainly if we have a technology, when you talk about the reserve picture that I was discussing

a moment ago, if we had a technology to turn oil shale into a usable petroleum product, and we could do this economically, suddenly this whole vast deposit of oil shale is added to our petroleum reserve.

So this is probably the biggest factor in the picture when one takes a longer look, a fifty-year, or one-hundred-year look, because this country is fortunate in that we have the largest deposit of oil shale, and the richest, that is known in the world today. And this I believe fifty years or a hundred years from now will be a dominant factor in the world energy picture.

So we will accept criticism of any who say that we have gone too slow or we have been -- we have done that deliberately, because it has been my feeling all along, considering some of the explosive arguments that have been made, that I would rather go a little too slow and be sure of my ground, than move too rapidly and stir up unnecessary controversy that might actually set back the program.

So this is going to continue to be a subject of interest and discussion, I am sure, in the years ahead. But if the Canadians with the help of American companies can develop tar sands, we can develop oil shale -- I am sure of that.

I would also comment -- and I would tread carefully, because I know that you all have your own views on

to the import program, the oil import program. But really looking at it, despite all of our conflicts and arguments, and all of the decisions that we have made, I think the oil import program is on a stabler, sounder basis overall than it was previously. The putting in the 12.2 formula for districts one to four was certainly a major step. This put an element -- this, in effect, put a ceiling on it. It put it in a proper perspective so that everyone could understand it.

I am not going to tell you all about all of our negotiations, and the way we had to handle so gingerly all of our relations with our neighbors to the North in Canada. Many of you, or your companies and subsidiaries, are involved in Canada. But this has been a very sensitive and delicate problem and yet we have managed it somehow.

And I sometimes look back, because we have had two or three Canadian governments; the Canadians have had a highly expert group of technical people that we have worked with, and we have managed somehow to work out our problems with them.

And I think this is good because, certainly, our national security interest, which is at the heart of the oil import program, is served by having a strong Canadian petroleum industry, and one that is geared in with our own. And so I will simply express the opinion -- and some of you can

argue with me privately -- that I think that despite all of the decisions and actions that may have aroused the ire of some of you at one point or another, that generally speaking the import program is working reasonably well, that it is, as I said, on a sounder and stabler footing than it was previously, and I think the national interest is served. I think it represents a pretty good compromise of the various interests that are present.

We are going to continue to hear arguments from some of the economists and some of the consumer interests that we ought to have more oil imports, because after all the present level of imports represents an attempt to strike a balance, if you want to think of it that way.

And certainly, when you start talking about balance of payments, the balance of payments problem, more of our money goes out of this country for purchases abroad for petroleum than any other commodity. This is number one, in terms of the outflow. And so that, also, is part of the picture.

On the other hand, you have the economists who will point out what they think would be the benefits to the consuming public if you had two or three times as much imports. And this I personally think and have come to believe, that the national interest is served by having the right kind of balance.

When one looks at the national security aspect, certainly, if we were -- if, over this last period of the last ten years we had had no imports whatsoever, and we had been draining down our reserves very substantially, our picture might be significantly different. It might be even alarming today.

And I think that whoever, whatever political party is in power, whoever is administering the oil import program, their main problem is going to be finding what this right balance is, in terms of imports versus domestic production. And we will have to weigh in as a primary factor the national interest, the national security interest, and the overall economic interest of the country.

And this is a big, tough problem. And I don't pretend to know all of the answers. But I can tell you that I have had some very hard-working people in the Department, and that we sweat over all of these issues. None of them are easy, and we don't make them lightly and we have tried to do our best to be fair in making the decisions that we have made.

Finally, on an even more personal note, I would like to express my thanks to all of you who have made special contributions to the relationships between government and this industry during these years.

I have to mention specifically the members of your

group who have served as Chairman or Co-Chairman with me in the National Petroleum Council:

Guinn Follis; of course, Walter Hollernan before him; Jake Hamon, a great guy, who served so well; and Jim Donnell who has done an outstanding job, as he does in everything. I would like to express my personal thanks to these men.

I would like to add, finally, that I predict a great future for this industry. I do this because it is characterized -- I have come to know you and know the way you do business, and I think that this is an industry that, more than most in our country, has been characterized by boldness. You had a leadership that has been bolder than that of most industries. You have been willing to invest in research, to try out new technology. And it may be that this gambling element which is involved in exploration is one of the things that has drawn to the industry a type of leadership that is more venturesome than most.

And as long as you are willing, as long as this industry keeps this element of boldness in it, as long as you continue to have a faith in the future of this country -- because it is that faith too that causes you to be able to persuade your Board and your stockholders to make bold investments, belief in the future, a belief in world stability and world peace, a belief in the fact that this country has

a special role to play.

So this is my little farewell speech. My door is always open to all of you. Nice to be with you this morning.

(Applause.)

THE CHAIRMAN: Thank you very much, Mr. Secretary. On behalf of the members of the Council, I would like to thank you for the interest and support that you have given this Council in the past seven and a half years.

It has been one of the most productive periods, I think, of the cooperation between government and industry. Many fine reports have been prepared, and studies are underway on a number of additional very important ones.

I would also like to thank you for the things that you have said about our industry at the conclusion of your remarks. I think most of us who have spent our lives in this industry are proud of it, proud of the things that have been accomplished for our country and its welfare. And we are happy that you share our own feelings.

(Applause.)

(At this point, Secretary Udall left the room.)

I would like now to introduce a new member of the Council who came in just as the role call was being finished, Mr. Earle Maddox, the President of the Association of Oilwell Servicing Contractors.

(Applause.)

I would like now to introduce the Honorable Cordell Moore, Assistant Secretary for Mineral Resources.

(Applause.)

MR. MOORE: Thank you, Mr. Chairman, my colleagues at the head table, gentlemen:

After hearing Secretary Udall speak, I am reminded of an incident that happened to my father quite a number of years ago. He has been dead ten years, but he also was on the platform speaking rather extensively over two areas of the Middle West.

His boss and he were traveling around giving a canned speech in various counties throughout the State of Illinois. My father was quite a prankster. He enjoyed very much pulling a joke on anyone. So after about the tenth meeting he just about had the boss's, George Metzger's, speech down pat.

So finally they appeared down in Southern Illinois in a little county, and he got up and gave George Metzger's speech. And when George Metzger got up to speak, he didn't know what the hell to say -- excuse the expression!

(Laughter.)

I feel a little bit like that today because Secretary Udall has given my speech!

(Laughter.)

A VOICE: Give his!

MR. MOORE: But I will improvise and perhaps I will shorten it quite a bit.

I am not going to put very much in there about synthetics. He has covered that.

But nevertheless I will give you a shortened version of what I think is in store for the petroleum industry. I guess the theme of my remarks would be, "What do you do for an encore?"

Secretary Udall has given the highlights of our new report on the outlook for future petroleum supply -- including its observations on discovery and recovery rates, reserve additions, productive capacity, costs, and the specific problem of a prospective imbalance between crude oil reserve additions and production.

In view of the rather extensive background that Secretary Udall has provided, it would seem appropriate for me to begin where he left off; namely, with the problem implicit in a condition of expanding production and stationary, or shrinking, reserves. What are the responses that we as a nation can make to such a situation? What are the options open to us, given the basic national requirement for a secure, adequate supply of energy, in the various forms needed, at the lowest cost commensurate with other national objectives?

The key specification here is the phrase "in the forms needed." Over the long run, this emphasis on form

is not especially relevant, because given enough time adjustments can be made to accommodate almost any form of energy to almost any application. But over the short and intermediate range -- which is the period of our concern -- form is crucial. Without liquid fuels, airplanes do not fly and automobiles do not run. Even in the area where fuels do compete directly, large-scale shifts from one form to another take a long time to accomplish. By and large, we're stuck with our present energy use patterns for years into the future, and this is the central feature of our concern with the outlook for our crude oil reserve position between now and 1980. In 1968 we have a general requirement for energy; but beyond that we have the specific requirement that two-fifths of our energy be in liquid form. Insofar as we can see, the liquid component of our energy requirement for 1980 will be only a few percentage points less than it is today.

In these circumstances, what are the things we can do to assure the nation of an adequate supply of low-cost liquid fuel energy?

First, we can try harder to improve our performance in finding and recovering conventional petroleum in the U. S. -- not because oil is number two in the energy competition, but to insure that it continues to be number one. Oil has a lot going for it here: a sound, vigorous, ongoing, prospering industry; a vast pool of skilled manpower and technical

know-how; highly trained and imaginative management at all
by us; adequate sources of capital, and a great and growing
fund of knowledge about the physical environment in which the
industry operates.

Fortunately, I might add, a lot of what we know
about that environment is not true.

I say fortunately, because there is a strong human
tendency to foreclose a lot of valuable opportunities to our
productive use because somewhere along the line we convinced
ourselves that they didn't exist.

In 1920, for example, everybody knew that there
wasn't any oil in the Permian Basin, and we had a couple of
hundred dry holes to prove it. In 1944 we know that -- and
I'm quoting now -- "the petroleum which lies within our con-
tinental limits cannot be depended upon to supply us forever,
or even for very long." This had to be right. It was the
Department of the Interior that said it!

(Laughter.)

By 1965 most of the industry had convinced itself
that there was no sense wasting any more time or money in
the Rocky Mountains. Try and sell that line of argument in
the Rockies today, in the Powder River Basin, particularly!

Today, in 1968, we know -- just as firmly as we
knew all these other eternal truths -- that we have found
just about all the large structures that we can expect to

find onshore in the shallower formations; that the Mid-Continent area is moribund; that costs are trending upward; and that discoveries are in a long-term decline.

The greatest contribution the oil industry could make to the nation would be to prove these things are wrong, as it has done in the case of countless other verities in the years gone by.

And, gentlemen, I cannot express to you the true depth of my feeling that the key to the revival of exploratory success lies in the minds and the attitudes of the individuals charged with the responsibility for the decision to drill or not to drill. We cannot simply will success in finding hundred-million-barrel fields. But success will never come in the absence of will. Oil is never found by people who have given up looking for it.

I can produce no countervailing evidence to balance the well-established record of increasing failure rates, mounting costs, and diminishing average size of discoveries. I do know that such data describe only what has happened in the past, and that they do not necessarily -- they cannot -- take into account the factor of change. But in today's world change is the name of the game.

I need only to cite your own memorable report on the "Impact of New Technology on the U. S. Petroleum Industry" to call your attention to the vast increases in the

productivity of your industry over the past twenty years or so that have resulted from technological change. Or to remind you to think about how many leases you are making money out of today that would have been classified as submarginal ten years ago.

Today work is going on in a half a dozen areas which could completely change the outlook for domestic reserves of both oil and gas between now and 1980; steam injection; nuclear fracturing; in situ combustion; digital processing applied to geological and geophysical data; and measures to improve drilling rates -- to name some of the more highly publicized efforts.

Not only technology, but administrative changes will contribute to the prospects of the domestic oil industry. I feel certain that the trend toward wider well spacing will continue, and that eventually the growth of understanding will permit the widespread use of unitized production, with all its attendant savings and benefits. As the report states, these administrative and regulatory improvements can contribute as much to lowering operating costs as any technological innovation now in sight.

Meanwhile, your industry will have its hands full testing the new offshore leases acquired in the three sales over the past year -- 1,650,000 acres altogether, and a return to the federal government of \$1,700,000,000.

This 1,650,000 acres is forty per cent of the total amount of Outer Continental Shelf acreage held under oil and gas leases as of January 1, 1967, on which some 8,000 wells have been drilled. The next several years will be busy ones in these provinces, with a great potential for domestic discovery of both oil and gas. We will all be awaiting the results with intense interest.

In Alaska, while exploration in the Cook Inlet Basin is catching its breath, two highly promising new discoveries this year again call our attention to the north side of the Brooks, the North Slope of the Brooks Range. Indeed, the possibility exists that the two wells have tapped the same reservoir.

There are tremendous problems to be encountered, to be surmounted in every phase of that forbidding region. The mean annual temperature, I believe, is ten degrees Fahrenheit. I have no doubt, however, that these problems will be solved, just as so many have been solved in other years gone by.

Alaska in '68 might well be compared with Texas or California in 1900. We have absolutely no idea of what its full potential will turn out to be. But based on information received to date, the ultimate potential could be of greatest significance.

In its search for new places to look, I know that

your industry is keenly anticipating the availability of the Council's new study on Future Petroleum Provinces -- as indeed are we in the Government. The updating of the work done by the American Association of Petroleum Geologists in this area is long overdue, and a vast amount of new data has been generated since the symposium in 1951. The result of this effort should be an extremely useful document, a documentation of the petroleum potential of all the important sedimentary regions of North America.

We wish Chairman Otto Miller and his fellow Committee members Godspeed on this, their very important assignment.

I would like to make another point in this regard. The newer producing provinces -- Alaska, the offshore, places like the deep Delaware Basin in West Texas -- have gotten most of the headlines and interest, and a lot of the drilling money over the past several years. They are the new horizons, and it is understandable that people will expect a great deal out of them, because they do have a great potential. But the contribution of these new frontiers is still likely to meet only a fraction of our total needs between now and 1980.

The prolific Louisiana offshore, for example, has been under development for twenty years, and during that period it has added only some five billion barrels of liquid

hydrocarbons to proved reserves out of a total of seventy-five billion for the nation as a whole. Last year offshore oil production was less than ten per cent of the nation's total.

This suggests to me that the bulk of the Nation's future oil supply must still come from the historic producing provinces that have been providing our petroleum for over 100 years. There are many places in these areas where we haven't yet exhausted the possibilities for discovering worthwhile deposits, and as exploration concepts and tools continue to improve, we can expect the more imaginative prospectors to be successful in finding them.

Now since Secretary Udall covered very well the synthetics, he covered the oil shale development, he covered oil from coal -- but I do have a few remarks that I would like to add to those which he presented to you, bringing in very briefly the oil import control program.

The oil import control program will have to continue. We would be placed in a very ridiculous position without an oil import control program.

This speech is totally unrehearsed. No one has given me the remarks for it, but I am going back into my memory.

It has its impact even upon the development of synthetics.

We hope that we can find a great deal of oil in

the United States, in these fifty States, and the Arctic Slope, in the Gulf of Alaska -- we have already found it in the Cook Inlet; there is probably more to be found there -- in the Gulf of Mexico.

But if we do have to go to these new sources of oil, we also have to look at our present sources of liquid hydrocarbons:

We have roughly thirty-four per cent -- I think that figure is right -- thirty-four per cent of the domestic production of oil is in the form of marginal production from marginal wells. Without an oil import control program -- whether you like it or whether you don't -- a great many of those thirty-four, a great portion of that oil -- that is roughly a billion barrels a year -- would not be produced. Those wells would be shut in because those wells simply cannot compete with the wells of the Middle East with production of five thousand or seven or eight thousand barrels per day. So without an oil import control program, and competing on the world market, we would not only lose the production, a great deal of that billion barrels -- and I don't know how much; no one, I suppose, could tell you exactly -- but once those wells were shut in, they would never produce again. And I think the oil men in this crowd know exactly what I am talking about.

So we not only lose the production, but we lose

the reserves behind that production. So then we have to re-appraise our entire liquid hydrocarbon position.

Furthermore, it is well known that our synthetics, although they are almost competitive at the present time, if they were to have to compete on the world market, with the price of oil as it is, when you are where they can produce five or seven or eight thousand barrels a day, then the development of synthetic oils from the tar sands or from coal or from the oil shales would be delayed for many years, at least to the extent that until such time that we became totally dependent upon foreign sources for our supplies.

So, gentlemen, when we talk about the synthetics, we are talking about synthetics at a price. And when we are talking about the oil import control program, there is an awful lot to be said about not only the liquid hydrocarbon position, but the position of the liquid -- of the synthetic fuels also.

The point of my remarks, the point of these remarks is this, that we will ultimately develop the synthetics. How soon we develop them depends, of course, upon the price at which they can be placed on the market, and the competitive area -- in the competitive area.

I suspect that we will have an oil import control program for many years. Therefore, I would suspect that the development of oil from the tar sands, which has already started at Fort McMurray -- and you all know this is a reality,

on a very small basis -- forty-five or fifty thousand barrels a day, I believe, through the oil shales and the coal will phase in over a period of a number of years, but during that period of a number of years, as the technology develops -- and we intend to help it develop to the maximum extent possible in the Geological Survey and the Bureau of Mines and the Department of the Interior, and the other agencies of the government participating -- we will still have a need for millions and millions of barrels of oil, because we will, between now and 1980, use just about as much oil as we have used for the last hundred years, strange as it may seem.

So I wouldn't expect to see oil from coal spring up overnight in huge quantities. The tar sands at Fort Mac Murray have cost \$250 million to produce 45,000 barrels a day.

You can multiply that, and that, of course, is only a very small fraction of the amount of oil used in the United States every day. You can see the huge capital investment involved, and you can see the necessity for maintaining a high degree of stability in the petroleum industry that we have enjoyed over the past few years.

As we look ahead to the future for the supply of our liquid fuels, I must say, however, that I am far more impressed with the promise that it offers than with the problems it presents. Between our resources of coal, oil shale,

and petroleum, we have an almost incomprehensibly large supply of available energy awaiting our developing technology. And I must say here, as a tribute to the industry, that we do have a vigorous, a superbly competent industry energetically working at turning these resources to our beneficial use.

And I am confident that regardless of what happens, the problems will be surmounted by this very fine industry. I think perhaps this organization, which has been in existence for a long, long time, is one of the most valuable tools that we can have to work on the problems relating to energy, without which this country simply cannot exist. It is a fine industry, and it is a fine group that we have here. And gentlemen, I thank you very much for all of the help that you have given me during the three years that I have been in this job.

Thank you.

(Applause.)

THE CHAIRMAN: Thank you very much, Mr. Moore.

It is now my privilege to introduce Mr. S. David Freeman, Director of Energy Policy Staff, the President's Office of Science and Technology.

Mr. Freeman is a native of Chattanooga, Tennessee. He holds a Civil Engineering Degree from the Georgia Institute of Technology, and a Law Degree from the University of

Tennessee.

Before moving to Washington in 1961, Mr. Freeman served as an attorney with the Tennessee Valley Authority in Knoxville. He was Assistant to the Chairman of the Federal Power Commission from 1961 to 1965, playing a leading role in the conduct of the F. P. C.'s national power service, and as a key aide in the planning and execution of the F. P. C.'s electric power and natural gas regulatory program.

During the interval between 1965 and his appointment by the President on November 25th, 1967, to his present position as Director of Energy Policy Staff, Mr. Freeman was engaged in the private practice of law in Washington, as a partner in the firm of Swidler and Freeman.

The purpose of the Energy Policy Staff, headed by Mr. Freeman, is to coordinate energy policy on a government-wide basis.

We are happy to have you with us, Mr. Freeman.

(Applause.)

MR. FREEMAN: Chairman Donnell, Secretary Moore, and members of the National Petroleum Council:

Needless to say, I greatly appreciate this opportunity to address the National Petroleum Council. Those of us who work in the Executive Office of the President can usually manage to persuade people to come over and visit with us, but an invitation to speak to the top advisory committee

of an agency isn't easy to come by. And I, therefore, take this occasion as tangible evidence of support for the work of the Energy Policy Staff, and I greatly appreciate the opportunity to be here.

I think that it is of some significance that after perhaps eight or nine years of the administration of Secretary Udall and Secretary Moore that this Council would attend this meeting today with a turnout, I understand of eighty-nine people, out of a total membership of ninety-eight. I think that this is, in a way, a tribute not only to the Department but to the Council, and tangible evidence of the very strong working relationship that has been operating to the mutual satisfaction of everyone concerned, and to the benefit of the nation.

Cordell Moore was kind enough to send me the Council membership before I came over here, and I went over the list, and it is indeed an impressive list of the outstanding executives in the energy industry.

I guess what impressed me the most was that there were one or two people on that list that used to be clients of mine, and I think that perhaps this will be the first occasion when those gentlemen get their money's worth from listening to me!

(Laughter.)

As I read through the names it occurred to me

that rather than telling you about the Energy Policy Staff, and what we have in mind, that I should use this occasion to tap the vast pool of knowledge and experience in this audience.

As a matter of fact, I have an idea for doing just that, which I shall take up with you before I release the podium.

I assume that the reason that I was invited over here to speak today is that there is a certain amount of natural curiosity about any new member of the already large federal family with whom the energy industries must reckon. I think that the rumor that has been spread that this office was created just to add to the confusion is just not true!

(Laughter.)

It is also not true that the agencies themselves are also managing to take care of that matter. I think that the reason for the creation of this staff is one that I want to discuss with you today, and the reason that I want to take this opportunity to do so is that I believe that any new actor on an already crowded stage must justify his right to come aboard.

A famous American made the following observation concerning our energy resources, and I quote:

"In the past the Federal Government and the States have undertaken various measures to conserve

our heritage in these resources. In general, however, each of these efforts has been directed toward the problems in a single field: It is time now to take a larger view: To recognize -- more fully than has been possible or perhaps needful in the past -- that each of our great natural resources of energy affects the others.

"It is difficult in the long run to envisage a national coal policy, or a national petroleum policy, or a national water-power policy without also in time a national policy directed toward all of these energy producers -- that is, a national energy resources policy. Such a broader and integrated policy toward the problems of coal, petroleum, natural gas, and water power cannot be evolved overnight."

The two paragraphs that I have just quoted are contained in a message from the President of the United States to the Congress, but not in this Administration nor in the prior one. It was delivered on February 15, 1939, by President Roosevelt. You can thus see that the idea of taking a broader look at our energy policies is not a new one, and, in fact, the first step toward implementing this idea was taken almost thirty years later, when President Johnson created the Energy Policy Staff, which I head.

As I reviewed the subsequent history in this field

in the past three decades I find that the concept of taking a broader look at our energy policies has been a fairly controversial one.

Let me make clear that this present effort is not another chapter in the controversies of the past. The creation of the Energy Policy Staff does not mean that federal energy policy is to be cast in a single mold. It does mean, however, that there is concern whether the federal energy family operates as a coordinated team and whether the various federal programs in the energy field are best adapted to meeting the enormous needs of the nation in the future. The Energy Policy Staff is simply a recognition that the present state of inter-fuel competition, combined with the very deep government involvement in the field of energy policy, requires that a few people take on the full-time job of looking at the big picture for the President.

Interestingly enough, the impetus for the creation of the Energy Policy Staff came from a task force of the federal agencies responsible for energy matters. Now this may strike you as being a bit strange since the federal departments and agencies, not unlike private companies, value their independence of action.

What moved the agencies to make this recommendation was the realization that the forms of energy for which they are responsible are competing in the larger energy

market and that there is no agency with the job of looking at the big picture. Decisions by any one agency could have major effects across the entire energy scene and it seemed to make sense to establish a small staff group in the Executive Office of the President that could provide an overall agency framework in which the agencies dealing with particular forms of energy could fit.

The decision-making power will, of course, remain where it is today, with the agencies and with the President. The job of the Energy Policy Staff will be to try to assure that these decisions are not made in a vacuum but with advance analysis of how they will affect the industry as a whole.

The Energy Policy Staff was thus established in the Executive Office of the President as part of the Office of Science and Technology headed by Dr. Donald F. Hornig, the President's Science Adviser. It was established as a permanent, professional staff group. Its assignment in the words of President Johnson is "to coordinate energy policy on a government-wide basis". The assignment includes the questions that face government today as well as a reexamination of existing policies to be sure that they meet the energy needs of tomorrow.

I have no illusions about the difficulty of this assignment. Creating the techniques and attitudes that

will facilitate the federal departments and agencies concerned with energy in working as a team will require time, patience, and perseverance. There are so many agencies and so many issues that complete coverage is not only impossible, it would be unwise. Our job is to work on the major issues and ask the tough questions but not to do any of the work of the agencies.

We, of course, will not be involved in the decisions of the independent regulatory agencies, but their broad programs and responsibilities also require reexamination in light of changing circumstances, and we consider such reexamination to be part of our assignment.

The work of the Energy Policy Staff will thus serve the dual function of providing the President with an overall energy perspective in appraising the work, recommendations and programs of particular agencies, and at the same time hopefully assist the agencies themselves by assuring that reverberations across the energy scene are considered before and not after major decisions are made.

We also expect to work very closely with the other groups in the Executive Office of the President, such as the Bureau of the Budget and the Council of Economic Advisers and hopefully make a positive input into the decision-making process at that level of government.

Coordination of the work of government is, of

course, always a desirable goal, but I believe there is good reason, however, for the special interest in coordinating the work of the agencies in the energy field. That reason is that the government plays such a crucial role in the welfare of the private companies that make up this sector of our economy, and in turn the welfare of the consumers they serve.

I need not remind this audience of how important government policy is to the fortunes of their companies. In addition to the variety of tax, regulatory, leasing, research and development and import policies that have been part of the scene for many years, we now have the new programs to enhance the quality of our environment.

The preexisting federal programs must be coordinated with the new ones to develop economic means of burning fuels and discharging wastes without undue damage to our environment. The twin goal of low-cost power and improving the quality of our environment is a challenge to everyone concerned, and especially so in the light of the fact that this nation will be consuming more energy in the next twenty years than the total energy consumption thus far in this entire century.

Attempting to coordinate the work of the agencies in the energy field does not, in my opinion, imply that the government's role should be enlarged.

What it does imply is that the federal government needs to take stock of these activities to be sure that programs and policies are responsive to its responsibilities to the public at large, and more particularly for assuring this nation of an abundant supply of low-cost energy in the future with due regard to the environment. Existing policies which may have served us well in the past are not necessarily best adapted for the future. Changing technology, diminishing reserves as compared with greatly increased future needs, environmental considerations and changes in institutional arrangements in the industry all combine to require that government reexamine its policies for the future.

I am sure that those of you in the audience whose organizations are more and more becoming energy companies can understand why the government itself would want to take a fresh look at its own policies from an overall energy point of view.

I have had occasion in the past two weeks to meet with officials responsible for energy policy in the European Economic Community in Brussels and also in the French and British governments. I came away from these meetings with an increased appreciation of the interrelationship between the energy policies which this government pursues and those of the Free World in general.

This nation is exporting energy to Europe today in the form of coal and in enriched uranium and our policies with respect to the oil industry have a direct impact on the price, availability and security of supply of oil to the Free World. I think it is fair to state that the nations I visited are concerned and interested in the future shape of U. S. energy policy, and we in turn have a very strong interest in the energy policies that they are pursuing. I mention these meetings because any reexamination of U. S. energy policies should recognize that no matter what policies we pursue, they are important to our allies as well as to the citizens of this nation.

I speak of a reexamination of existing policies because that is a major element of the assignment to the Energy Policy Staff. The President has directed us to make the necessary studies to better understand our future energy needs and resources and "to make certain our policies are directed toward achieving these needs and developing those resources."

As a first step in carrying out the President's request, the Office of Science and Technology asked an organization called Resources for the Future to survey the energy policy field and provide us with a list of the policy issues which they thought warranted review and analysis. When we received the report in draft form recently, we asked

R. F. F. to publish it as promptly as possible and they have done so only within the last few days.

We wanted the report to be subjected to public scrutiny and it is our hope that publication of the R. F. F. report will stimulate others to make the same sort of analysis and give us the benefit of their views. Toward this end, I have arranged for each member of the National Petroleum Council to receive a copy of this report at this meeting. And I assume that you have them, the reports, in the folder that was given to you.

The report which R. F. F. has prepared is not a study of energy policy, but it is an attempt to raise for discussion in an overall energy context many of the policies which we are pursuing today. As the preface to the report states "it is exclusively the work of R. F. F. and has no official status as a government document." Nevertheless, the report is comprehensive and I believe that reviewing it may well suggest comments, suggestions or even additional areas of study that may be beneficial.

I think it would be a public service if I could enlist the help of each of you in this audience and the organizations that stand behind you in this reexamination of government policies in the energy field. At this stage of the game, we are not looking for answers but merely trying to be sure that we will be probing into the areas

where analysis and discussion may prove most beneficial for meeting the future needs of the nation.

The volume which R. F. F. has prepared represents one viewpoint. We are interested in a variety of viewpoints, and specifically in obtaining access to the wealth of information and knowledge which is in the possession of industry. I would deeply appreciate hearing from you or any other interested person because I am sure that each of you could make a worthwhile contribution to our work at this formative stage of its development.

Thank you very much for listening to me and giving me this opportunity to appear before you.

(Applause.)

THE CHAIRMAN: Thank you very much, Mr. Freeman. I am sure that the members of our industry will be very willing to respond to your invitation to present their views and suggestions on this subject.

We will now hear from the Director of the Defense Fuel Supply Center, our old friend, Admiral Martin.

(Applause.)

ADMIRAL MARTIN: Mr. Donnell and members of the National Petroleum Council;

We seem to be living in the age of mergers and acquisitions recently, and you gentlemen are more aware of that probably than I am. But my agency is about to become

We now come to the real business of the Council, and that is the reports of the Committees which are engaged in the studies requested by the Secretary of the Interior:

The first report is that of the Committee on Effects of New Technology on the Petroleum Industry -- Mr. McCurdy, Chairman.

MR. MC CURDY: Mr. Chairman, gentlemen:

I have for you what I hope may prove to be the final report on this interesting project.

As John Hammond reported to you last January, the Committee's report was edited and printed last fall, and the 341-page book entitled "Impact of New Technology on the U. S. Petroleum Industry, 1946-65" was released to the public on January 15th of this year.

In addition to the Council's normal publication distribution program, we worked closely with the Society of Petroleum Engineers in Dallas and obtained a widespread distribution of this volume among technical people. The distribution still continues at a moderate pace.

The book has enjoyed a very good reception in many quarters, and has been reviewed by the general press as well as the professional and technical press. To date, 2,000 copies of the book have been distributed enabling us to recoup \$21,000, or about seventy per cent of the total publication costs.

involved in a merger of sorts.

Specifically, starting the first of January, we will be assigned responsibilities for buying petroleum products for the entire federal government. At the present time this assignment is with -- the civil agency piece of it is with the General Services Administration.

Going back to several years ago, you will recall that we had the two Hoover studies on the reorganization of the government. And one of the recommendations that came out of that, of course, was that there be a greater integration within the government for the performance of common services and the acquisition of common supplies.

The General Services Administration grew out of these studies and over the years has assumed a larger and larger role, not only for the civil agencies, but also in the support of the Department of Defense.

Specifically, within the Department of Defense, the General Services Administration supports such commodities as hand tools, paint, industrial gases, office supplies, and so on.

Our assuming the role of supporting the civil agencies with petroleum is a kind of a reverse of the trend. I think that the reason that we got this assignment is, of course, the volume, both in terms of product and dollars required by Defense is considerably greater than by the

civil agencies, so I guess they thought it made sense to give us the job.

We will be supporting, as I said earlier, substantially all of the agencies. I think that the one big exception is the Tennessee Valley Authority. They are big users of coal and they will continue to purchase coal. We will be involved not only in the petroleum, but in coal. At the present time we buy about four million tons a year for the Department of Defense. We will be buying another million for the civil agencies.

In terms of petroleum we have a similar role now for what we call our post, camp and station business, where we buy heating oils and motor gasoline and things of that kind under open-end, indefinite quantity contracts, for the posts, camps and stations.

The kind of business that we are picking up from the General Services Administration is very similar. They do the same kind of thing for various government agencies, such as post offices, and Indian reservations, and various other field offices of the various government departments. They presently do this on a decentralized basis, as you may know. They have ten regions and they do the buying for each region at their regional headquarters.

We have four regions for our post, camp and station business, and when we combine we intend to have eight.

We will do all of our buying, however, centrally here in Alexandria.

We are working very closely with them. We hope to make this job as painless as possible for industry. We will be coming out with various releases on it. And in terms of the volume of business, it approximates about a hundred million dollars a year; that is what we will be picking up that the G. S. A. is now handling for the civil agencies actually.

Our own post, camp and station business is around 113 million dollars a year. In terms of what we call "line items", that means supplying a given product to a specific customer, we will have about twice as many line items to supply to civil agencies as we do to our Defense customers today.

We already, of course, are handling some of the business for the civil agencies. Our lube oil bulletin is used extensively by civil agencies today to take care of their package petroleum requirements.

Even though we don't provide for this in our contracts, we also find that a lot of state and local governments are using these. They get hold of them and as long as you people honor their orders, I guess everybody is happy, and we don't complain about it.

Well, that is the story on our taking over, or

plans to take over, the support of the civil agencies.

There is one other item that came up recently that might be of interest to you:

There always, of course, is somebody starting a study in the government, particularly in the Department of Defense. And one got kicked off here a couple of weeks ago that is designed to make another review of the management of petroleum within the Department of Defense. The Secretary of Defense signed off on this letter, and asked one of his assistants to form a Committee to look into this.

At the present time, I think that you are probably aware that the Defense Fuel Supply Center, which I head, is responsible for the purchase of products, and for arranging with M. S. T. S. for the tanker distribution worldwide. We do have to -- we are not concerned with inventory management, with computing requirements, with funding for the products, or that kind of thing.

The purpose of this study, I guess, is to see whether or not maybe our role should be extended, that some of the functions that are now being performed by the individual services, namely, the Army, Navy, and Air Force, maybe should be combined with the Defense Fuel Supply Center or some similar agency.

This sort of thing has been studied in the past, and there have not been any major changes made recently, and

I am not in a position to predict what is going to come out of this.

The study people, the people making the study, have been told to look at four possibilities:

One, the status quo.

Second, the status quo with some improvements.

Third, a greater degree of integration in the management of petroleum with the integrated manager being under the Defense Supply Agency, similar to my role today, expanded.

The fourth possibility is to have an integrated agency, but instead of being a part of the Defense Supply Agency, reporting to one of the Service Secretaries, such as the Air Force, or Navy, or Army.

General Coleglazier, who was retired, a retired Army General recently retired, and formerly Deputy Chief of Staff for Logistics in the Army, and he has a broad logistics background, will be heading up this study. Most of the other members are people from the Office of the Secretary of Defense. I have a representative from my agency on it.

And I am sure that somewhere along the line in the progress of this study, although I certainly am not running it, and I am a neutral bystander who will be providing them information -- I am sure that they will be in contact with industry, and I am sure that they would appreciate any

suggestions that you gentlemen might have.

Thank you.

(Applause.)

THE CHAIRMAN: Thank you very much, Admiral Martin.

We will now hear from Admiral Lattu, the Director of the Office of Oil and Gas.

(Applause.)

ADMIRAL LATTU: Thank you, Mr. Chairman.

Gentlemen, we had two very successful exercises in the last six months:

One was in Denton.

And the other was in national headquarters.

They were realistic. They were well planned and well organized. Now the success of these exercises is due to your continued support.

Now the Mid-East crisis has not been settled. Therefore, we are continuing the Emergency Petroleum Supply Committee on a standby status.

Gentlemen, the oil industry, with the government as part of the team, is ready for any crisis.

Thank you.

(Applause.)

THE CHAIRMAN: I think you deserved the response, Admiral.

The second portion of the assignment to our Committee was to produce a brochure reporting the results of the two decades of impressive achievements described in the book in some brief, understandable, colorfully illustrated and interesting story for the general public.

After the views of the Committee members were obtained as to the most significant technologic achievements which might be featured, a technical abstract was prepared for the use of a knowledgeable journalist, so that he, in turn, might put it all into layman's language.

We have held discussions with the officials of the American Petroleum Institute and are pleased to advise that the popularized version of the Council's book will be published under the auspices of the A. P. I.

After a long search for a writer, the A. P. I. was able to obtain the services of Mr. Henry D. Ralph of Tulsa, formerly with the Oil and Gas Journal. We have given the technical abstract to Mr. Ralph and he has already begun his work.

Now in as much as the popular version will be based upon the full report as approved already by the Council, I believe, Mr. Chairman, that an expeditious and acceptable procedure would be to go ahead with the publication upon our Committee's approval of the material prepared by Mr. Ralph.

If this is the pleasure of the Council, then I suggest that our Committee be considered discharged upon completion of this final task. Publication, we hope, can take place by year's end under this arrangement.

Thank you very much.

(Applause.)

THE CHAIRMAN: Thank you, Dick.

In the absence of any comment, I am sure that the Council would be happy to leave the matter as you have suggested, and I want to thank you and the members of your Committee for one of the more significant pieces of work that this Council has turned out.

MR. MC CURDY: It has been a pleasure, Jim. Thank you.

(Applause.)

THE CHAIRMAN: The next Committee to report is that on Petroleum and Gas Industries Manpower Requirements, Stanley Learned, Chairman.

MR. LEARNED: Mr. Chairman, gentlemen:

The objectives of this study of Petroleum and Gas Industries Manpower Requirements are:

First, to up-date for the year 1967 the National Petroleum Council 1963 Report on the same subject.

Second, to expand this prior report to cover the aspects of the manpower situation to include:

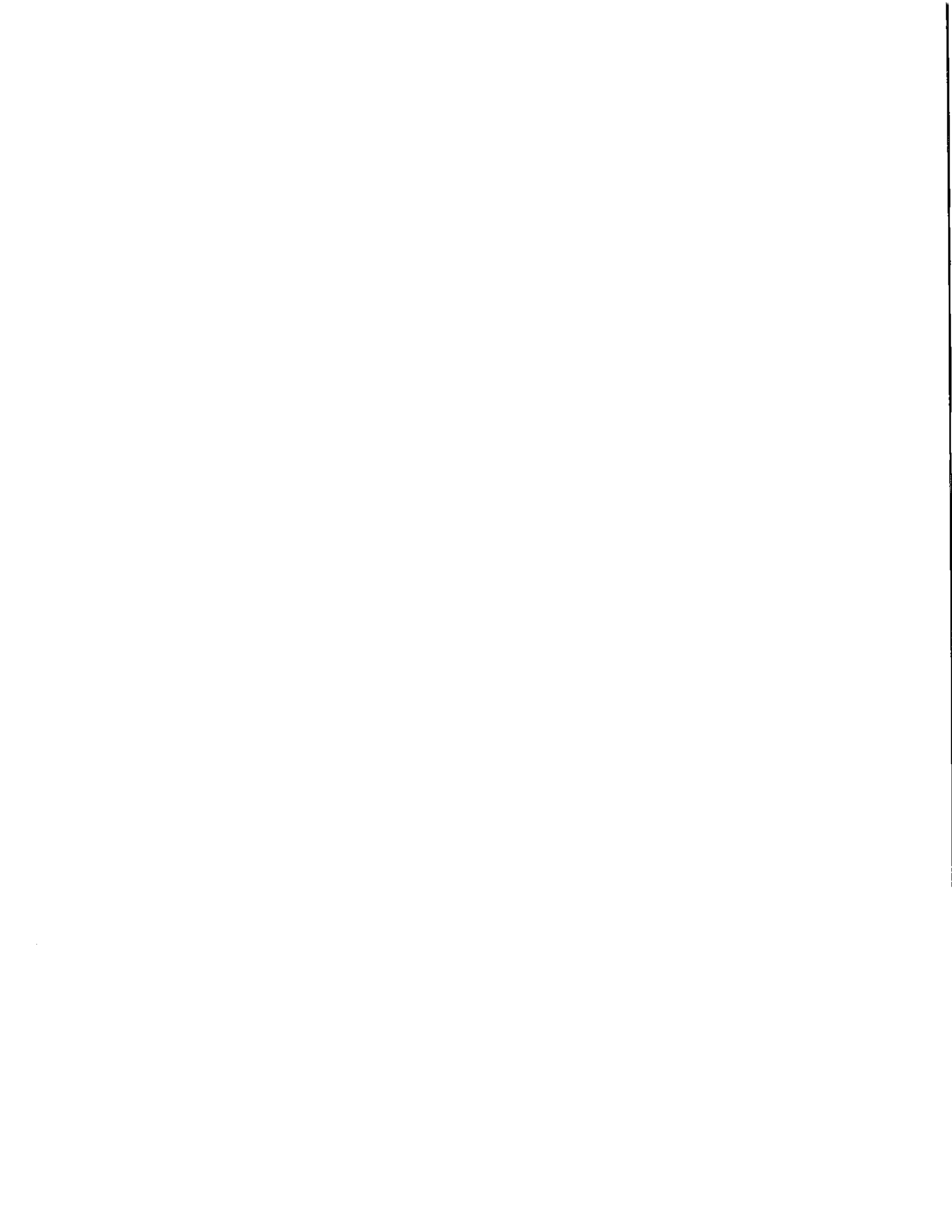
The number of U. S. nationals involved in foreign operations, assigned at home or abroad, shown by broad geographical areas and with a breakdown by professions and non-technical degrees.

An inventory of the current level of employment and future requirements for skilled personnel, including drillers, refinery operators, maintenance crafts, and other specialized skills.

Guidelines, both for young people contemplating careers as engineers and scientists in the petroleum industry, and for the educational institutions which must equip them for these chosen professions.

An assessment of the effective long-term changes occurring and required in the industry, such as the use of automatic data, the need for increased efficiencies of geophysical and geological methods, greater emphasis on increased recovery and how these changes relate to the outlook for future needs for scientific and engineering skills.

The Technical Subcommittee has met with manpower specialists in the Office of Emergency Planning in the Executive Office of the President and in the Department of Labor. It concludes that the expansion of the earlier report is the most significant contribution to be made by this committee's work. The development of significant data on long-lead-time skilled categories has important implications for national



security. Such data will substantially assist the Emergency Petroleum and Gas Administration in determining the validity of oil and gas industry applications for professional and skilled manpower and will support the E. P. G. A.'s claims on the Department of Labor for such manpower in the event of a national emergency.

Now in the progress report made at the N. P. C. meeting on January 25th, this year, it was indicated that there was considerable work still to be done. Data for the year 1967 from government sources proved very limited and inadequate.

It has, therefore, been necessary to develop the data base to provide:

First, manpower engaged in U. S. domestic oil industry operations.

Two, manpower engaged in natural gas pipeline operations (up to the city gates).

Three, manpower engaged in gas distribution (within the city gates).

And fourth, U. S. citizens engaged in foreign oil and natural gas operations.

As quickly as these data can be consolidated, completion of the final report will proceed.

The Technical Subcommittee, headed by Frank W. Pierson of Standard Oil Company of California, anticipates

nal report will be submitted in time for consideration N. P. C. Committee prior to our next meeting.

(Applause.)

THE CHAIRMAN: Thank you. We will look forward to receiving this report at the next meeting.

The next Committee to report is that on Materials Requirements for Petroleum Exploration and Production, Mr. Tarkington, Chairman.

MR. TARKINGTON: Mr. Chairman and Council members,

I have a progress report from our Technical Subcommittee and I will brief it for you, and if there are any questions I will be glad to try to answer them, Mr. Chairman.

As to the objectives of this study, the Technical Subcommittee has divided the objectives into two parts:

First, to update for the year 1967 the N. P. C. report titled "Materials Requirements for Oil and Gas Exploration, Drilling and Production", which was published in 1962.

Second, to expand the above report by developing a list of materials, equipment, services, and engineering data, for estimating material and service requirements on a basis of a national program.

The Subcommittee believes that the item number two is the most significant contribution to be made by its work. The importance of developing useful estimating criteria is recognized by the Subcommittee, since such criteria will substantially assist the Emergency Petroleum and Gas Administration in determining the validity of oil and gas industry applications for controlled materials, and will support the E. P. G. A.'s claims on the Business and Defense Services Administration for such materials in the event of a national emergency.

In the Subcommittee's work, "controlled materials" refers to carbon steel, alloy steel, stainless steel, copper and copper-base alloys, aluminum and nickel alloys.

As to the status of the Subcommittee's work, this Committee met on March 6th, 1968, and organized its work into six units, which I have covered here by an elaborate organization chart, and I might just tell you that I am convinced that the work is well divided and distributed among very competent petroleum executives.

Each of these six working groups is actively engaged in the search for and collection of the data required for its portion of the project. Every effort is being made to expedite data compilation, and to eliminate duplication. Although some difficulties have developed in some areas in acquiring certain required data, the total project is pro-

ceeding satisfactorily.

Based on the progress to date, the Technical Subcommittee plans to have its final report for our general Committee by November 1st. Mr. Chairman, I think that will permit us to make our final report to the N. P. C. prior to the next meeting.

THE CHAIRMAN: Thank you, Andy.

(Applause.)

The next Committee to report is one that was mentioned earlier as being a very significant study. It is the Committee on Possible Future Petroleum Provinces of the U. S., Otto Miller, Chairman.

MR. MILLER: Mr. Chairman, gentlemen:

As you know, our Committee on Possible Future Petroleum Provinces of the U. S. was appointed on December 8, 1967, for the purpose of preparing a comprehensive report on the future petroleum provinces of the United States.

Considerable progress has been made since my last report to you in January, and I wish to give you a brief summary of the actions that we have already taken, as well as the plans that we have agreed upon to date.

On March 1 of this year an Executive Advisory Committee was established, under the Chairmanship of Morgan Davis, and the Co-Chairmanship of Dr. Pecora, Director of the U. S. Geological Survey. In addition to these two officers,

there are twelve prominent geologists on this Committee.

I believe Morgan Davis and Dr. Pecora are here today, and I would appreciate it if they would stand up and take a bow. I think all of you gentlemen know these people,

(Mr. Davis and Dr. Pecora stood up.)

(Applause.)

Thank you, Morgan, and Dr. Pecora.

The Executive Advisory Committee was formed in order to provide our parent Committee with the guidance and expertise of leading U. S. geologists. The group was asked to explore and to define the objectives for this difficult and complex undertaking, and to formulate procedures to enable the working groups to carry out their assignments.

At the first meeting of the Executive Advisory Committee that was held on March 12th, Ira H. Cram kindly consented to serve as the Chairman of the Coordinating Subcommittee, and it was agreed that he should have wide flexibility in organizing and directing this study of future petroleum provinces of the United States.

For the purposes of this study, Chairman Cram divided the United States into eleven regions and obtained the services of an outstanding geologist in each region to serve as a member of the Coordinating Subcommittee. Once this was done the Coordinating Subcommittee was formally appointed by our Chairman Donnell on May 16th.

Each regional chief on Ira Cram's Subcommittee has already or will be obtaining the services of individual petroleum geologists to report on the sedimentary basins or other subregional areas or stratigraphical divisions within each region. The individuals who will write the geological reports required for this study will also, as they are selected, be appointed to membership on the Coordinating Subcommittee.

Now I believe Ira Cram is also here this morning, and all of you gentlemen know Ira. Ira, will you stand up and take a bow?

(Applause.)

Thank you, Ira.

It is anticipated that the efforts of the regional chiefs and of the individual authors will result in the preparation of some fifty to sixty geologic reports. Assignments have already been made for about one-half of these reports and the remainder are now being discussed with selected authors or oil companies.

In this regard, although we have received considerable assistance from the United States Geological Survey, State Geological Surveys, universities and individual consultants, nevertheless most of the work will have to be done by company geologists since they comprise the largest segment of petroleum geologists and either know or have access

to unpublished data of significant value to this study.

I appreciate the willingness of the Council members to cooperate in this matter. We believe this to be a particularly important undertaking and we are sure that you want this Committee to obtain the services of the best and most knowledgeable talent on this subject. We are hopeful that you and your management people will give these individual authors the back-up support they will need during the course of this study.

I would also like to emphasize that no confidential company information of competitive value is being sought or expected in these studies. On the other hand, we believe that a large amount of information that is available only in company files can be contributed to the studies with great benefit to the project, without foregoing or jeopardizing any competitive advantage by the companies.

In any event, the companies contributing will, obviously, be the sole judges on questions relating to the use of their own company information.

Now I would like to give you a brief resume of the items agreed upon by both the Executive Advisory Committee and the Coordinating Subcommittee at meetings held by those groups on June 25th and June 26th.

With respect to the scope of the study to be made, the habitat of all potential undiscovered oil and gas will

be covered both in producing and non-producing areas, but oil shale and tar sands are to be excluded. Likewise, known shallow oil-impregnated deposits in which the oil is unrecoverable by conventional methods, are to be excluded.

Geographic coverage will be the continental United States, including Alaska and Hawaii. The continental shelves will be included out to the bottom of the continental slope.

The present studies of future petroleum provinces in the United States relate only to undiscovered oil and for that reason present production and the geologic environment of such production will be important only as a guide or as an indication of what might be expected in untested areas and/or horizons where stratigraphy, facies, possible traps, reservoirs, tectonics and other geologic factors are the same or similar to presently producing or produced areas. Because primary interest is in the future rather than present production, it is hoped that the introductory and historical part of each paper can be held to as brief a presentation as will furnish the required background information.

The Coordinating Subcommittee has prepared an outline to be used as a guide by each of the individual authors in order to give a better concept of the type of study that is contemplated. You will find a copy of this outline appearing as Exhibit F in the written Progress Report, and that has been placed in your kits that are with you here

this morning. We urge you to read and to keep this written report which contains much more detail about the study and also the names of all individuals appointed thus far to work on various aspects of this assignment.

It was the consensus of the Executive Advisory Committee that approximate quantitative estimates of future discoveries of crude oil originally-in-place and of natural gas should be developed in the study to the extent feasible. The authors' outline contains an item calling for the "Calculation of volumes of hydrocarbons in place or estimates of ranges of such volumes where feasible."

I know you recognize how extensive a task we have before us. Nevertheless, we are setting a target date of May 1st, 1969, for the completion of all individually authored manuscripts.

Early July, 1969, has been designated as the date at which the whole project will be completed. To do this and obtain the satisfactory and quality result will require the fullest cooperation of the petroleum and gas industries, the United States Geological Survey, State Surveys, and the academic institutions. Given this, we feel that we can meet the target dates and produce a report that truly is in the national interest as well as a major contribution to the geological literature.

Now in closing I would like to extend again my

appreciation on behalf of the Committee to Morgan Davis and Ira Cram and the individual members of their Committees for the outstanding work that they have already done on this project. They have the task well in hand, and we are indeed indebted to them for their knowledge and their thoroughness that they are bringing to bear on this very important subject.

Thank you.

(Applause.)

THE CHAIRMAN: Thank you very much, Otto. This is a study which will be of great interest and significance to the Department of the Interior, and also to Mr. Freeman and his staff.

The last Committee report is one that was requested at the last meeting of the Council under somewhat of a crash schedule, the Committee on Petroleum Resources Under the Ocean Floor, E. D. Brockett, Chairman.

MR. BROCKETT: Mr. Chairman, gentlemen:

I ask your indulgence as to the length of this report. The reasons will become apparent, I think, as we proceed this morning.

In a letter dated January 24th, 1968, the Honorable J. Cordell Moore, Assistant Secretary of the Interior for Mineral Resources, requested the National Petroleum Council to "assist the Department of Interior, and other Government agencies, in formulating their posture toward the de-

velopment of petroleum resources of the deep sea." Specifically, he asked the National Petroleum Council "to prepare a study which should consider:

(a) Whether the definition of the Continental Shelf is in keeping with technological advancements in offshore capability,

(b) What type of regime would best assure the orderly development of the petroleum resources of the ocean floor, and the time frame within which it might be implemented,

(c) What type of regime is best designed to assure conservation of the resources and the protection of the environment, and

(d) Any other points or comments deemed appropriate."

On the same date as the Secretary's letter, January 24th, a meeting of the Agenda Committee of the National Petroleum Council took place in Washington. At this meeting, Mr. Cordell Moore elaborated further, saying "The proposal which you have before you requesting that the National Petroleum Council undertake a study of certain problems relating to the exploitation of the deep sea is in essence a request by the Department of Interior and State Department to take the pulse of the oil industry which has such a tremendous stake in the question."

The National Petroleum Council Agenda Committee agreed to recommend to the Council the appointment of an appropriate committee to make the study as requested and, as you know, Mr. J. C. Donnell appointed a committee entitled the "Committee on Petroleum Resources Under the Ocean Floor." You gentlemen are aware of the membership of the Committee.

A Technical Subcommittee was established in mid-March to study the various aspects of jurisdiction and regime in the development of the petroleum resources under the ocean floor. This sixteen-member committee, consisting of experts from various segments of the industry, is chaired by Dr. Hollis D. Hedberg of Gulf and Mr. R. E. Ebel of the Interior Department, Office of Oil and Gas, as Co-Chairman.

At this point, may I thank these gentlemen and their Committee for the industry, the perseverance, the dedication which they have shown in preparing this report, this interim report.

And it is the interim summary report drafted by this Subcommittee which you have before you this morning. Let me outline briefly the background of its preparation and its principal conclusions.

The Subcommittee has held numerous meetings, both as a whole and in smaller groupings. At an early stage the State Department indicated that it would prefer to maintain current contact rather than await a final report. As a

result, both State and Interior representatives have attended all Subcommittee meetings on an informal observer basis.

At a meeting on June 10th, the Subcommittee was surprised to learn that the U. S. delegation to the U. N. was being armed by the State Department with a "statement of principles" with which to lead off when the U. N. ad hoc committee on Peaceful Uses of the Sea Bed and Ocean Floor was to start its deliberations on June 17th.

A preview of this tentative draft made it at once apparent that if the National Petroleum Council's advice was to be of the fullest value to the State Department and the petroleum industry, the substance of it must be transmitted before and not after the final formulation and announcement of these principles.

Accordingly, the Subcommittee immediately put aside work on the completion of its final report in order to prepare, at its June 10th meeting, a short two-point resolution, a suggested revision of the preliminary version of the State Department's "statement of principles," and the draft of a brief interim summary report of the position which it believed the National Petroleum Council should vigorously support. These were informally made available to Colonel Farrington of the State Department, on a privileged basis, with the request that the State Department, if possible, refrain from taking any action which might be inconsistent

with the position outlined by the Subcommittee, at least until after the official views of the National Petroleum Council could be transmitted following its meeting here this morning.

The interim summary report was distributed to you on June 24th. The opening of the discussions of the U. N. ad hoc committee, ^{subcommittee} the U. S. statement of principles made to the U. N. committee on June 20th, the proposal of members of the international law panel of the President's Marine Science Commission which has already been made public, the proposals of various other organizations and individuals which are being circulated, all point up the urgency of an official statement by the National Petroleum Council of its position.

You have a copy of the report before you. I might briefly summarize its highlights as follows:

1. Petroleum accumulations, comparable to those currently commercial on land and in shallow coastal waters, probably exist also under deeper oceanic waters, although available data suggest that the potential for petroleum is much less favorable beyond the continental margin.

2. The petroleum industry already has the technical capacity for geological and geophysical exploration in the deep oceans and even for exploratory drilling to considerable sub-ocean-bottom depths in waters of several thousand meters. Exploitation drilling (that is, drilling for pro-

duction) has been confined to date almost entirely to waters of less than 100 meters, but progress in technology is such that, given reasonable incentives, production techniques and facilities will probably be realizable from depths of as much as 400 meters within the next three to five years and the capability to drill and produce in water depths to 1500 to 2000 meters might be considered reasonably attainable within the next 10 years.

3. The timing of the U. S. petroleum production operations in the deep oceans will be largely dependent on commercial incentives. Among controlling factors will be: overall demand for petroleum; competition from land and shallow water areas; competition from oil shale, tar sands, and coal sources; cost and effectiveness of deep marine operations; productivity of deposits in deep ocean waters, and the assurance of favorable lease conditions and security of investment. Many currently voiced highly optimistic estimates of the potential of ocean floor mineral resources do not realistically reflect the economics of recovery operations in this adverse environment. As operations progress into deeper and deeper waters farther from shore costs will increase substantially and if operations are to develop in these waters strong incentives are needed. These will include not only assured exclusive rights under a stable political regime, but also favorable lease and production terms.

The major conclusion of the report is that the United States (and other coastal states) should have exclusive jurisdiction over the natural resources of the continental land mass, oceanward generally to where the submerged portion of that land mass meets the abyssal floor. This domain would include the continental shelf, continental borderlands, continental slopes, and at least the landward portion of the continental rises.

Moreover, it is concluded that under the concepts of exploitability and adjacency contained in the Geneva Convention on the Continental Shelf, the coastal states (including the United States) already are given such jurisdiction and the report documents this position with a legal study (which is attached as Appendix B) of the background and negotiations leading up to the execution of the Convention on the Continental Shelf showing that this was the intended scope of the Convention.

It is recommended that the United States should declare and insist on these rights and should recognize corresponding rights in other coastal nations. It should be prepared to participate, in consultation with other nations, in activities leading toward a practicable means of delineating a boundary line between the exclusive natural resource jurisdiction of the coastal nations and the deep ocean areas.

With respect to the oceanic floor beyond the con-

tinental margins -- the domain seaward of coastal nations' exclusive jurisdiction over seabed resources -- the report counsels the avoidance of precipitate decisions or actions pending the acquisition of more information such as will be forthcoming from the International Decade of Ocean Exploration. It encourages cooperative international research and study of this vast and poorly known area constituting three-fourths of the total area of the oceans, but believes that no elaborate international regime to govern the development of possible petroleum resources in this domain will be required for many years.

The objective toward which any international arrangements should aim should not be the creation of an international licensing authority with power to grant or deny mineral concessions, but instead:

- (1) International agreement on standards of conduct of individual nations; and
- (2) International agreement on standards of scope, area, and duration for development projects; and
- (3) Establishment of procedures for international registry of claims and activities.

Such explorations of the deep ocean floor as may be practicable for the foreseeable future may be carried out under the protection and control of the nations under whose authority these enterprises are undertaken, governed by

existing principles of international law.

Mr. Chairman, I move that the principles contained in the Interim Report of the Committee be approved and adopted by the Council -- and that the Council Secretary be instructed to print and release to the public a finished version of the report within 15 days.

MR. BLAUSTEIN: Mr. Chairman, may I make a statement?

THE CHAIRMAN: Yes, sir.

May we have a second to the motion, so that --

FROM THE FLOOR: Second it.

FROM THE FLOOR: I second.

MR. BLAUSTEIN: Mr. Chairman, I have been a member of the National Petroleum Council since the beginning. I have rarely had to speak in opposition to the adoption of a Committee report, but I feel that with respect to this report now before us by the Committee on Petroleum Resources Under the Ocean Floor that I must say a few words.

First, let me mention what you may already probably know, that I am one of fifteen members of the President's Commission on Marine Science, Engineering and Resources. And it so happens that I am also a member of the National Petroleum Council, so I do find myself in somewhat of a dual position.

The Commission's task is a comprehensive one to

which approximately two years of deep study by the country's top experts, among others, is being devoted. It covers many aspects. We don't deal only with mineral resources. Among others, it goes to the security of our nation, and it goes to our international relations with other nations.

Our Commission has not yet defined a definite report, but tentatively, as to oil resources, it differs in some respects with the conclusions in the report before us in this National Petroleum Council meeting today.

Therefore, if this report is to be voted on today, I would like to be recorded as not voting, but may I make a few observations?

There are two major differences between the Interim Report of the N. P. C. Committee, and the tentative proposal of the Commission on Marine Resources:

One -- and this is important -- the N. P. C. Committee states -- it is on page 6 of its report; it would not -- "It would not be to the --"; "It would not be desirable for the United States or other nations to reopen the Geneva Convention on the Continental Shelf for amendment in the near future."

Thus the N. P. C. Committee does not want to clarify internationally the Geneva Convention on the Continental Shelf, taking the position that the definition ^(of the continental shelf) should be left as it is, and that the United States should unilaterally --

unilaterally insist that the definition now stands "extends to the exclusive jurisdiction of the coastal states, to the Continental Shelf, continental borderland, continental slopes, and at least the landward portion of the continental rises."

The N. P. C. Committee also does not want to do anything apparently for a long time about determining the jurisdiction over the ocean's deep seas.

Now as to the first issue raised by the N. P. C. Committee, namely, not internationally to clarify the definition of the Continental Shelf, let me say that, first, this is contrary to the position our government has taken in its resolution introduced in the U. N. several days ago. Let me read it to you:

"Taking into account the Geneva Convention of 1958 on the Continental Shelf, there should be established as soon as practical, an internationally agreed precise boundary for the deep ocean floor, the sea bed and subsoil beyond that, over which the coastal states may exercise its sovereign rights for the purpose of exploration and exploitation of the natural resources, by international agreement."

So what is proposed here now would be contrary to the position of our country in that regard.

Now to the practical standpoint:

The present definition of the Continental Shelf

is recognized by most authorities as being absolutely ambiguous -- there are differences of opinion -- and subject to reasonable differences of interpretation. And this means, and I am speaking now in terms of an oil man, that an oil company with leases beyond two hundred meters depth of water may not be sure of its title, unless there is an international declaration.

The Commission's present view is that as soon as possible there needs to be an international clarification of the Geneva Convention on the Continental Shelf. Our proposal would be to make it definite to the extent seaward to a water depth of two hundred meters isobath or fifty miles, whichever is greater, where the coastal state and its oil companies, would have all of the rights and the procedures now existing, and that in addition there be set up an intermediate zone between the two hundred meter isobath or fifty miles, or the 2,500 meter bath or 110 miles, whichever is greater.

I am not asking you to approve this formulation. I think it is a very good formulation. I think it would take very good care of our American interests. But you don't have the pro's and con's before you today.

And incidentally, you haven't really had the pro's and con's before you, even in the written report, or in the recommendation that has come from the Committee.

And, by the way, I want to say this:

That there is nothing, nothing in the Commission's thinking that will put title to these resources in the United Nations, and that word, that thought has been thrown around a good deal. And it is not in the Commission's thinking, and it is not in the thinking of our State Department.

It must be emphasized that under this proposal of the Commission the United States and its licensees would have exclusive access to the mineral resources in the intermediate zone -- that is the zone beyond the continental shelf as redefined -- as well as on the continental shelf. It is contemplated that any lease terms and conditions adopted by international agreement applicable to this zone would assure that the operating companies have exclusive rights to a large enough lease area for a long enough time to assure recovery of investment as well as adequate profit.

As I have stated, the proposal of the N. P. C. Committee that the United States should unilaterally declare its jurisdiction over the continental slope and rise is based upon language of the Convention on the Continental Shelf and its legislative history, which many attorneys agree is ambiguous and subject to reasonable differences of interpretation.

It certainly -- it cannot be said that the United States now has exclusive jurisdiction over the natural resources

of all of the areas of the continental shelf, the slope, and the rise, regardless of depth. And to try to grab this -- and I use that word advisedly; the President has used it, as I will cite to you in another minute -- to try to grab this would be embarrassing to our government, and ultimately jeopardize the influence of our oil industry on the important events that are to follow on this, perhaps, the most important problem that our country is dealing with, and that the world is dealing with.

In the absence of some internationally accepted clear redefinition of the Continental Shelf, in broader terms, title and operations in areas beyond two thousand feet in depth will remain subject to uncertainty. And I don't think that the proponents on this Committee can differ with that. It will, at least, remain in the area of uncertainty. It is not presently clear how far beyond the two hundred meter isobath national jurisdiction for resources purposes extends actually.

However, if the United States were to attempt to expand its jurisdiction over the slope and rise beyond the two hundred meters, by unilateral declaration, or otherwise, this would be inconsistent with the foreign policy objectives of this country as declared by President Johnson, and to quote just one sentence:

"We must be careful to avoid a race to grab and

hold land under the high seas."

However such terms as "deep ocean areas" and "Continental Shelf" may be defined, it would hardly be consistent with this declaration of policy to grab as much sea bed jurisdiction as possible before the nations of the world have an opportunity to consider the problem of national jurisdiction over the sea bed, its subsoil and resources.

Now what's more -- and I am quite experienced in this area at the United Nations and elsewhere, although we are not slanting this towards the U. N. -- we just wouldn't get away with it.

There is something else, and this is important:

To the best informed knowledge of our Commission -- and we have talked to experts -- the proposal that it has made is more consistent, our Commission's report is more consistent with national security considerations than would be the N. P. C. Commission plan of extension of full national jurisdiction over the continental slope and rise.

In spite of the allegations to the contrary, the accession and exercise of national jurisdiction over the slope and rise would have potentially serious effect -- so we are told by our Armed Services -- upon the freedom of the supra-adjacent seas, with consequent limitations on military operations.

Well, so much for the first point of difference.

I will deal with the second one very briefly:

The National Petroleum Council Committee takes the position that nothing need be done for a long time -- perhaps a decade -- about clarifying the international situation and jurisdictions regarding the resources under the deep seas.

Now this, gentlemen, in our opinion, is unsound, is impractical, that going nothing, wait and see, would be bad from both economic and national security standpoints. It would lead to nations individually grabbing deep sea areas and then fighting for them.

It would lead to international anarchy.

And besides, there are now several resolutions in the United Nations, pertaining to the deep seas, that go to this, that are in process for consideration at an early date. And it is certainly most desirable that the United States should not say, "Well, we can't say anything. We have got to wait."

That is the way things run away with you. That is the way that Malta resolution might have run away with respect to turning these resources over to the United Nations.

We have to be alert, our State Department has, with a positive position, a well-considered, sound position on the deep seas, so it can have the situation in hand as

they deal with it in the U. N. area.

So I conclude. It has been a little loud, Jim. I feel very firmly and very strongly about this. I conclude, gentlemen, that the recommendation that the N. P. C. or the Commission's -- the Committee's report, I recommend that it not be voted on today. I think that it is premature. I know that the men that we have had working on this are very industrious, but they have not been able to do -- even in ten meetings, if they have them -- what our Commission with all its many experts have done for two years, and we have contacted in the State Department the people who have authority.

The gentlemen that you spoke of or mentioned a little while ago did not have authority to speak for the State Department.

And I say that there are not enough facts before this body this time for us to act. And if we do act, we are going to be contrary to the position of our government, and we are going to be, I think, jeopardizing the opinion, which has always been a sound opinion, of our industry, and I am afraid that that would go somewhat by the wayside.

I do hope that it will not be voted on. I think that what ought to be done is to have a further study made, and to have talks with the Marine Commission, and with the staff, and with the people in government who have authority.

And then I should think that if we got together and discussed this thing, that we might be able to arrive at a better conclusion than to freeze it; that is the thing that bothers me than to freeze it here today.

Now, on the other hand, Mr. Chairman, if my suggestion is not followed about delaying the vote on it, I wish to be recorded, please, as not voting.

MR. HAMON: Mr. Blaustein, will you -- no, you can stay there; I just want to ask you a question:

As Chairman of the Agenda Committee, you will recall that there was considerable doubt whether we should undertake this study. One of the members -- in fact, two of the members, expressed some reservations.

You were present at the meeting, as was the State Department, and the Department of the Interior. And we were repeatedly urged that time was of the essence. And you, you felt that the oil industry was ~~certainly~~ -- its opinion was vitally necessary to the determination of this question, although you recorded yourself as not voting for the question when it came up for us to take it over.

But we recognized at the time that your Presidential Commission, of which you were a member, was studying the problem. And certainly we recognized your experience in the oil business. And we had a hesitancy in undertaking the study.

I think that this is really a very broad subject that is on the table, and I think that to get into a debate on this today will lead us nowhere.

What I would like to suggest is -- and I thought I had -- that I would not act on this thought today and have a further study made by the Subcommittee alongside the Resources Committee and authoritative people in government, and then come back later. I think that would be the preferable thing.

Now who does not?

MR. MURPHY: Mr. Chairman.

THE CHAIRMAN: Yes, sir.

MR. MURPHY: With all deference to the voice of wisdom and experience here, as a member of the Committee, I must defend the Chairman's report.

This has been responsive to a request that has been made in an orderly manner under the procedures of the government and the National Petroleum Council. The Agenda Committee approved it.

And I dare say that there are adequate procedures for coordination within the government to resolve any conflict of conscientious recommendations that have been made from the Council or the Presidential Commission on Marine Sciences.

I have listened carefully to Mr. Blaurstein's very

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I have listened carefully to Mr. Blaustein's very

persuasive arguments, reflecting on the Committee's deliberations of yesterday, and I am convinced that the divergence is not wide, and that it can and will be brought together when the government brings into force its coordination of procedures.

And the motion has been made and seconded, and I urge the Council to adopt it.

MR. BLAUSTEIN: Pardon me for talking so much, but the divergence is great.

THE CHAIRMAN: We are, of course, not making government policy; we were responding to a request.

Mr. Haider.

MR. HAIDER: Well, Charlie has, in essence, said what I was going to say.

I also attended the meeting yesterday where we had a rather full discussion of this, and the pro's and con's. The State Department was represented. And we have been urged to come out with something promptly by State, as well as by Interior.

This does not control the government policy. This is merely a recommendation that we are making as to what their policy should be. It is up to the government to decide whether they accept it or not.

But I think that this is a question we should vote on today.

THE CHAIRMAN: Are you ready for the question?

FROM THE FLOOR: Question.

FROM THE FLOOR: Right.

CHORUS OF VOICES: Question.

THE CHAIRMAN: As many as favor the adoption of Mr. Brockett's motion will please say "aye".

(A chorus of "ayes".)

As many as opposed will please say "no".

(One "no".)

[MR. BROWN: Record Mr. Blaustein as not voting.]*

FROM THE FLOOR: That is one Blaustein and I have won!

(Laughter.)

THE CHAIRMAN: I would like to make one comment, in view of the proposal which you have just passed, I would appreciate your treating your copy of the report as restricted and confidential until Vince Brown can arrange printing and the official release of it. I believe that there are some editorial changes that need to be made.

I would like now to recognize Paul Taliaferro.

MR. TALIAFERRO: Mr. Chairman, gentlemen:

I express my appreciation to you for the opportunity of presenting for the record the remarks and a resolution in memory of our associate and friend, Don H. Miller.

The members of the National Petroleum Council,

Editor correction: It was subsequently confirmed that Mr. Blaustein voted "no" and it is so recorded.

with a sense of deep sorrow, note the untimely passing on April 7, 1968, at the age of fifty-eight, of one of their fellow members, Don Hugo Miller.

Born in Kansas City, Missouri, on June 9, 1908, Don Miller graduated in 1932 from the University of Missouri. Even before completing college he began working for the Skelly Oil Company. That was in 1929, and he launched an impressive career, that included service in almost every position in the company's marketing organization.

After working throughout the midwest of the United States, he rose to the position of President of Skelly Oil Company in the Fall of 1959, which position he held until the time of his death.

Don Miller's contributions to the American petroleum industry were varied and wide-ranging. He was a director of the American Petroleum Institute, the National Petroleum Refiners Association, and the International Petroleum Exposition. He was also a trustee of the University of Tulsa and the Midwest Research Institute of Kansas City.

Don Miller was a member of the National Petroleum Council since his appointment by the Secretary of the Interior on January 6, 1961. He had served on a number of the special study committees of the Council and at the time of his death was a member of the Petroleum and Gas Industries Manpower Requirements Committee and the Materials Requirements

for Petroleum Exploration and Production Committee.

Today the members of the Council pause to pay tribute to the memory of Don Miller -- a leader in the petroleum industry and a warm friend. The contribution by him of his knowledge and understanding of the oil and gas industries was of great value to the industry and to the United States Government. We extend to his wife, Mary, and his two sons, Randall and Lawrence, our sincere and abiding sympathy.

NOW, THEREFORE, BE IT RESOLVED, on this 9th day of July, 1968, in the City of Washington, D. C., that this resolution be entered upon the permanent records of the Council, and an appropriate copy thereof be delivered to the family of Don Hugo Miller as a remembrance of the affection, admiration and respect which we shall always have for him.

THE CHAIRMAN: Shall we adopt this by rising?

(The members rose.)

Unfortunately, I didn't keep my record of having these meetings over by 12:00 o'clock, as I had expected to. I have a few remarks prepared, which I think you will have to listen to.

The first meeting of the National Petroleum Council was held on June 21, 1946, with fifty-three newly appointed members present. That was twenty-two years ago. This is the sixtieth consecutive meeting of the Council and there are ninety members in attendance today, plus nine represen-

tatives. This is more than have ever been present at any previous meeting of the Council. The highest ever before was seventy-seven.

The spirit of cooperation with the Federal Government on the part of oil and gas industry leaders through this organization has never been higher. Since the Council was established, some 425 oil and gas industry executives have served as members. They, together with almost 2,000 other members of the two industries, have completed 185 special studies in response to direct requests from the five Secretaries of the Interior under which N. P. C. has served. This, I believe, indicates more clearly than words the effectiveness and usefulness of the Council to the Federal Government and to the nation.

Since this is the last meeting at which I will be presiding as your Chairman, I would like to say a few words about the past two years. During this period, eight special committees with twenty-two subcommittees or task groups worked or are now working diligently on significant and important matters which have an effect on the oil and gas industries, energy supplies, Federal policies and the general public. The areas studied or being studied have included factors which have affected exploration, drilling and production since World War II; the impact of new technology on the United States petroleum industry; future petroleum provinces of the

United States; petroleum resources under the ocean floor; materials and manpower requirements; and transportation capabilities.

In addition, the Council, as it has for many years, continues to work closely with the Department of the Interior and other agencies of the government in the field of emergency planning for the oil and gas industries in order to continue as the industrial sector in the United States best prepared to meet a national emergency.

We are indebted to the some 500 individuals in these industries who have participated or are now participating in these efforts. It has been my pleasure and that of the Council staff to work closely with these oil and gas men, and we have been impressed with the tremendous interest and ability they bring to the many required formal and informal deliberations. Fifteen separate reports have already been completed and published, and four of our committees are still working on their respective assignments.

One major report which, as you know, came out this January, is "The Impact of New Technology on the United States Petroleum Industry," a study which contributes significantly to the literature. The book has been well received. Over 2,000 volumes have been sold to date at a value of \$21,000 and sales are continuing.

The size of the Council's staff has not mater-

ially changed. It now totals nine individuals in addition to Vince Brown. The authorized budgets, however, have increased from \$160,000 in fiscal 1967 to \$220,000 for the last fiscal year, in both years of which we ran a deficit. And for the new fiscal year we feel compelled to request you to approve a budget of \$300,000. The committee operating costs increase in direct proportion to the comprehensiveness and extensiveness of the matters being examined. This is true of both basic committee operating expenses as well as costs of editing and publication.

With committee costs averaging about \$65,000 and costs of the Headquarter Office about \$200,000 a year, we have not been able to rebuild our contingent reserve which was depleted two years ago. Accordingly, we feel that we will need at least \$300,000 this coming year in order to meet our normal operating costs, and to put some money in the reserve. The Council had a substantial reserve which, as I said, was depleted two years ago.

I would, of course, be remiss if I did not extend my appreciation to the officials of the Department of the Interior and their respective staffs for the great cooperation they have always given us. Because of this cooperation, the Council can function at its best in a spirit of give and take and candor concerning important oil and gas issues.

I would also like to express my appreciation for

the support and assistance of the Vice Chairman, Jack Abernathy, who was always available for counsel and guidance during the past two years. Working closely with Vince Brown has convinced me that he and his staff are invaluable to the effectiveness of the Council.

In conclusion, I have enjoyed my two years' assignment, and I thank each of you for the assistance you have given me at all times. I look forward to continued service with the Council as a member.

(Applause.)

The next item on the agenda is the report of the Secretary-Treasurer, Vince Brown.

MR. BROWN: Mr. Chairman, Secretary Moore, and members of the Council:

Our outgoing Chairman, Jim Donnell, has just given you a brief summary of our recent activities. And taking into account his comments and the progress reports of our Committee Chairmen, I am sure it is apparent to you that the Council, as usual, has a number of important irons in the fire. I won't restate these activities or assignments but will give a brief report of our financial situation and then present for your consideration a proposed budget for the new fiscal year.

However, just before I do that, I would like to tell you what a real pleasure and an honor it has been to

me to work these last two years with Jim Donnell. He is not only a fine person to deal with, but he turns out to be a nice guy. And I am most appreciative, also, of the assistance that has been given to me by Nick Dumbros, the Vice President of Marathon Oil.

Having said this, I would like to repeat verbatim briefly what I said to you a year ago, because it is just as applicable this year. I said at the time that:

"I want to take this opportunity to express, in all sincerity, my thanks to you, the members of the National Petroleum Council, for the courtesy and consideration you always give to me and the members of the Council staff. In the formation of committees and working groups, and in the execution of their increasingly difficult and important assignments, you give willingly of your own personal time and effort, and you have consistently made available to us only the best talent from your organizations. The cost of this, in terms of time and dollars, to you and your companies, has been very considerable. I want each of you to know how much we appreciate your immediate aid whenever we call for help. I am sure our good friends in government share my feelings in this regard, for this is what really makes Industry-Government cooperation work."

That is what I said last year and I would like

to underscore it once more. In my seventeen years with the National Petroleum Council, I have never had a Council member decline to assist us whenever we asked.

I will now present to you the brief summary of the costs of our Fiscal 1968 committee and office operations, and project our money requirements for Fiscal 1969. Last year you approved a budget of \$220,000. We actually received from your contributions, as well as from interest and other receipts, a total of \$240,623.

In addition, we received \$20,572 so far from the sales of publications, primarily the Technology book. Accordingly, our gross receipts from all sources were \$261,195. During the year, we expended a total of \$251,187, broken down this way:

\$75,082 was needed for committee operations; \$176,105 was expended on the running of the Headquarters office, and \$10,007 was needed to cover the Fiscal 1967 deficit. This left us a net income for this year of \$807.

In order to meet moderate increased costs of basic operations in the new year, Fiscal 1969; and in order to cover projected costs of extensive Committee operations; and to start rebuilding our depleted contingent reserve, your officers propose for your consideration a total budget of \$300,000 for Fiscal Year 1969. Now this budget exceeds the one you approved last year by \$80,000. While we are reluc-

tant to propose a budget increase, we do feel compelled to keep it at a realistic and workable level, commensurate with the assignments we have agreed to undertake.

Should this budget be acceptable to you, we propose to increase your dues in what we hope is an equitable manner. We apply a formula which we trust is fair to everyone, and which is essentially based on the size of your respective operations, measured by net income.

This concludes my annual report to you. On behalf of Jim Donnell, Jack Abernathy, and myself, may we say that your genuine interest and cooperation in the affairs of the National Petroleum Council is a great source of inspiration and satisfaction to us.

Thank you.

(Applause.)

THE CHAIRMAN: You have heard from me and from Vince about the size of the size of the proposed budget for next year. What is your pleasure?

I would hope that this budget could be held at this level for several years in the future.

FROM THE FLOOR: So move.

FROM THE FLOOR: Second.

THE CHAIRMAN: Is there any question or comment?

(No response.)

If not, as many as favorable will please say "aye".

(A chorus of "ayes.")

Opposed "no"?

(No response.)

We now come to the last item on the agenda, the report of the Nominating Committee.

Mr. Ed Warren.

MR. WARREN: Mr. Chairman and gentlemen:

The Nominating Committee appointed by Chairman Donnell are as follows:

Mr. W. W. Keeler, Mr. John M. Kelly, Mr. Harold M. McClure, Mr. J. Howard Marshall, Mr. Charles H. Murphy, Mr. Ed Parkes, Mr. Forrest N. Shumway, Mr. Charles E. Spahr, and Mr. M. A. Wright, and myself as Chairman.

The Committee met in late April, and have come up with the following recommendations and names that I will put in nomination:

I would like to first nominate the officers for the coming year:

Mr. Vincent Brown, Secretary-Treasurer.

Mr. E. D. Brockett, Vice Chairman.

Mr. Jack H. Abernathy, Chairman.

Mr. Chairman, I would like to put these names in nomination.

THE CHAIRMAN: You have heard the report of the Nominating Committee.

FROM THE FLOOR: Second.

FROM THE FLOOR: I second.

THE CHAIRMAN: As many as favorable will please say "aye".

(A chorus of "ayes".)

Opposed "no"?

(No response.)

The officers are elected. Will you continue with your report, Ed?

MR. WARREN: There are two of the Committees that are elected by the Council:

One of them is the Agenda Committee.

The other is the Appointment Committee.

On the Agenda Committee, the members of the -- the action of the Committee on the nominations that we would like to make is:

Jacob Blaustein.

Howard Boyd.

Bruce K. Brown.

Michael L. Haider.

John M. Kelly.

H. M. McClure, Jr.

J. Howard Marshall.

John E. Swearingen.

A. W. Tarkington.

Ed Warren.

Chairman: Jake L. Hamon.

And Ex Officio Members:

Jack H. Abernathy, the new N. P. C. Chairman.

E. D. Brockett, the new N. P. C. Vice Chairman,

and J. C. Donnell, the Immediate Past Chairman.

For the Appointment Committee the recommendations are for members:

Mr. Perry R. Bass.

Mr. George F. Getty.

Mr. Baxter D. Goodrich.

Mr. Fred L. Hartley.

Mr. W. W. Keeler.

Mr. Charles H. Murphy.

Mr. A. L. Nickerson.

Mr. J. Howard Rambin.

Mr. Roland V. Rodman.

Mr. Arch H. Rowan.

With Frank N. Ikard for Chairman, and Ex Officio

Members are:

Mr. Abernathy and Mr. Brockett.

Mr. Chairman, I would like to put these names in nomination.

THE CHAIRMAN: Is there a second to that?

FROM THE FLOOR: Second.

FROM THE FLOOR: So move.

THE CHAIRMAN: As many as favorable will please say
"aye".

(A chorus of "ayes".)

Opposed "no"?

(No response.)

Thank you, Mr. Warren.

MR. WARREN: Thank you.

FROM THE FLOOR: Mr. Abernathy, I guess you are
the Chairman now.

I want to make a motion that the language of the
plaque that we presented to Mr. J. C. Donnell last night at
the dinner be made a part of the official minutes.

FROM THE FLOOR: Second.

FROM THE FLOOR: Second the motion.

THE CHAIRMAN: You have heard the motion and it
has been seconded.

Will all in favor please stand and applaud, as I
did?

(The members rose and applauded.)

(At this point, Mr. Abernathy assumed the Chair.)

THE CHAIRMAN: Thank you, Jim.

You said that you wanted to be through by noon,
and I assure you that I will take not much longer. And though
it has been a pleasure to work with you and for you for these

two years, Jim, I will remind you and inform the members of the Council that this has continued a pattern set several years ago when Jim was Vice President for Production for the A. P. I. and I worked for him as Chairman of the Executive Committee for Drilling and Production Practice.

You know, thinking about this, how does one hope to follow in the footsteps of men like Walter Hollerman, and Guin Follis, and Jake Hamon and Jim Donnell? Well, of course the answer is, you don't.

Nevertheless, Del Brockett and I will do our best, with the guidance of such men as Jim and Jake and Ed Warren, Frank Ikard and others -- that is, men of long experience and proven good judgement. We'll try to continue to help marshal the knowledge of the industry, to be of assistance to the Department of the Interior, to the Secretary of the Interior, to Secretary Moore, Admiral Lattu and others, where we are needed and where we are called upon.

You know, one thing is certain, and this is referred to by Secretary Moore -- we are coming into a year or years of change -- political change, technological change, and economic change. And if the National Petroleum Council is to continue its tradition of usefulness, we will no doubt have plenty of new problems to study.

Yet you see this really is kind of an end of an era in a way; it is also a beginning.

Mr. Freeman's request for help in his talk is one example of new avenues for service, to be of service to the nation, which no doubt will -- it is just an example of matters which will require explanation, exploration and perhaps some work on our part, well, working, of course, through our traditional government partnership with the Interior Department.

Well, and in this continuing effort to be useful, I know from experience what a pleasure it will be to work with Del. You know, Del and I started working together as far back as 1946, when he was a young Colonel fresh from World War II and I was just a brand new entrant into the drilling business.

So it is an honor to attempt to serve you, and it is an humbling proposition to think of following men like Jim and those others who preceded him, these great men.

Well, Del, won't you say a word now to the group, please?

(Applause.)

MR. BROCKETT: Thank you, Mr. Chairman.

I think this group has heard enough from me this morning!

(Laughter.)

I do want to thank the members of the Council for their confidence, and I pledge to you my continuing interest

and cooperation and support for the efforts of this organization.

Thank you very much, Mr. Chairman. My congratulations to you, and to you, Jim.

(Applause.)

THE CHAIRMAN: The final item, agenda item, prior to adjournment is "Consideration of such other matters as may be proposed or approved by the Co-Chairman of the National Petroleum Council".

Mr. Moore, have you anything else for us?

MR. MOORE: I have nothing to add, Mr. Chairman.

THE CHAIRMAN: Thank you. May we have a motion for adjournment?

FROM THE FLOOR: So move.

THE CHAIRMAN: Will you vote with your feet?

(Laughter.)

And thank you very much.

(Whereupon, at 12:50 o'clock, p.m., the meeting was adjourned.)