

NATIONAL PETROLEUM COUNCIL
114TH MEETING OF THE NATIONAL PETROLEUM COUNCIL

Weston Hotel
2100 Massachusetts Avenue, Northwest
Washington, D.C.

Wednesday, December 1, 2004
9:30 a.m.

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A G E N D A

AGENDA ITEM:PAGE:

- | | | |
|------|---|----|
| I. | Call to Order and Introductory Remarks | 13 |
| | Bobby S. Shackouls, NPC Chair | |
| II. | Remarks by the Honorable E. Spencer Abraham
Secretary of Energy | 15 |
| III. | Consideration of the Council's Response to
the Secretary's Request for Advice on
Petroleum Refining and Inventory Issues | |
| | James J. Mulva
Co-Chair, NPC Committee on Refining
and Inventory Issues | 33 |
| | Phil Frederickson
Chair, Inventory Subcommittee | 36 |
| | Don Daigle
Chair, Refining Subcommittee | 46 |
| | Lee R. Raymond
Co-Chair, NPC Committee on Refining
and Inventory Issues | 65 |
| | Mark Maddox
Acting Assistant Secretary for Fossil
Energy and Government Co-Chair of the
Inventory and Refining Subcommittees | 68 |
| IV. | Administrative Matters | 69 |
| | Bobby S. Shackouls | |
| V. | Discussion of Any Other Business Properly
Brought Before the National Petroleum
Council | 70 |
| | Bobby S. Shackouls | |
| VI. | In Memorium to Patrick F. Taylor | 71 |
| | Bobby S. Shackouls | |
| VII. | Adjournment | |

P R O C E E D I N G S

9:30 a.m.

Call to Order and Introductory Remarks

Bobby S. Shackouls, NPC Chair

CHAIRMAN SHACKOULS: Will the 114th meeting of the National Petroleum Council please come to order.

Welcome to all of you, members of the Council, honored guests, and members of the press and public. We have what I hope will be an interesting and worthwhile session for you this morning. In addition to remarks from the secretary, we will receive the report of the Committee on Refining and Inventory Issues. This report is in response to the concerns that the secretary raised at our June meeting of this Council.

If there is no objection, I will dispense with the calling of the roll. The check-in outside will serve as our official attendance record. Any member or observer for a member who has not checked in, please do so before you leave so we'll have an accurate record of today's attendance.

Now I would like to introduce to you, and for the record, the participants at the head table.

On my far left is Jim Mulva, inventory co-chair of the NPC study -- or, Committee on Refining and

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1 Inventory Issues.

2 Next to Jim is Mark Maddox, acting assistant
3 secretary for Fossil Energy.

4 On my far right is Marshall Nichols,
5 executive director of the Council.

6 Next is the council's vice chair, Lee
7 Raymond, who also served as refining co-chair of the
8 NPC Committee on Refining and Inventory Issues.

9 On my immediate right is Spencer Abraham,
10 Secretary of Energy.

11 Our first order of business this morning is
12 to hear from the secretary of Energy. Spencer Abraham
13 became the nation's tenth secretary of energy on
14 January 20th, 2001. He leads a cabinet department with
15 a \$23 billion budget and over 100,000 federal and
16 contractor employees.

17 Under Secretary Abraham's leadership, the
18 Department of Energy has pursued an ambitious agenda
19 that strengthens America's energy and national security
20 by achieving significant success toward reducing
21 America's dependence on foreign sources of energy,
22 improving the environment, and further securing the,
23 homeland through efforts to reduce nuclear
24 proliferation.

25 Mr. Secretary, we're honored to have you with

1 us this morning, and we look forward to your comments.

2 Would you please join me in welcoming
3 Secretary Abraham?

4 Remarks by the Honorable E. Spencer Abraham
5 Secretary of Energy

6 THE HONORABLE MR. ABRAHAM: Bobby, thank you,
7 and thank everybody here today.

8 I'd like to begin, though, with a special
9 thanks to Lee Raymond and Jim Mulva for the work that
10 they and their teams have done on petroleum refining
11 and inventory study. These are important assignments,
12 and I'm very grateful that you were both willing to
13 take them on, and to bring together an excellent team of
14 individuals to work with us.

15 These are issues which will continue, I
16 think, to be major topics of discussion and debate for
17 us at both the Department of Energy but in a broader
18 sense in the American energy sector. So these insights
19 which the studies that have been conducted will provide
20 us are going to be very valuable and timely for us to
21 receive. So, many thanks to everybody involved.

22 Today, I speak to you in a sort of
23 interesting role. As you know, I will be soon moving
24 on to a new assignment, and the last four years have
25 been a very interesting time for me. It's been an

1 important period, certainly one of the most important
2 ones for the energy sector, I think, in recent memory.

3 We've faced a number of very serious challenges.

4 So I kind of thought it might be an
5 appropriate time to review some of the developments in
6 the energy sector that have occurred during these past
7 four years with you today.

8 As you will recall, when we took office and
9 the president was sworn in in January of 2001, the
10 country was already facing some extraordinarily tough
11 situations, with more to come. The most visible
12 immediate problem was the rolling electricity blackouts
13 that had been taking place in California.

14 But what the public viewed as America's most
15 pressing energy challenge back in 2001, those
16 blackouts, was really just the tip of the iceberg,
17 because the problem, of course, ran a lot deeper than
18 the lights flickering out in California. The problems
19 across the energy sector were much broader and much
20 deeper than most people realized.

21 President Bush and Vice President Cheney,
22 however, I think, truly understood the depth of the
23 energy challenges we faced, and that is one of the very
24 first priorities which was outlined by the
25 administration, was the creation as well as the

1 implementation of a comprehensive National Energy
2 Policy in 2001.

3 And of course, soon after taking office, the
4 president created our Energy Task Force, made up of
5 members of the cabinet and chaired by the vice
6 president, to try to pinpoint America's energy problems
7 and to develop a strategy to address them.

8 As you know, in May of 2001, we issued the
9 National Energy Policy that emanated from the task
10 force work and which provided a road map to address
11 these pressing problems and to promote abundant,
12 affordable, and environmentally sound energy to meet
13 the future demands of our nation.

14 That Energy Plan, as you will recall,
15 consisted of 105 specific recommendations to overcome
16 the challenges and accomplish the goals set forth in
17 the plan. Some focused on production, some on
18 conservation and energy efficiency, others on ways to
19 minimize the environmental effects of energy production
20 and use. Still others were aimed at ensuring safe,
21 secure, and affordable energy supplies for the future.

22 Ninety-five of those 105 recommendations I'm ,
23 happy to say have been either partially or fully
24 implemented through executive branch action between May
25 of 2001 and today. I believe they're working well to

1 reduce the energy challenges and risks which we faced
2 three years ago.

3 Of course, some of the recommendations have
4 not been implemented because they require congressional
5 approval, and they are a part of the comprehensive
6 Energy Bill which we have asked Congress to pass.

7 For nearly four years of course, that has not
8 taken place. We've been unable to get that legislation
9 completed, but I truly believe that is about to change.

10 With larger Republican majorities in both the House
11 and Senate as a result of the elections, I feel very
12 confident in predicting the Congress will, and soon,
13 pass the energy bill that this nation urgently needs.

14 I think we can also look forward to getting
15 the votes necessary for the development of
16 environmentally safe exploration in a small portion of
17 the Arctic National Wildlife Refuge.

18 As you know, if President Clinton had not
19 vetoed ANWR exploration in 1995, we could today have
20 access to an estimated 1 million barrels per day of
21 additional domestic oil, and we would not be
22 confronting some of the issues which have been raised
23 by the current tight market supply situation. That's
24 why I believe that Congress will act, and soon, to
25 authorize this common-sense solution to a very serious

1 problem.

2 In addition to the creation of the Energy
3 Plan, we've had several other important accomplishments
4 over the past several years. Let me begin with the
5 work which has been done by the NPC on a number of key
6 issues.

7 In 2001, I was grateful to receive the study
8 from Dave Lesar's committee on specific actions
9 industry and government could take to identify and
10 reduce infrastructure vulnerabilities in the oil and
11 natural gas initiative. Clearly, this subject has
12 important ramifications not just for the energy
13 industry. The work that we have done implementing
14 these important recommendations has had tangible
15 benefits for the nation's economic and national
16 security on a very broad range.

17 Last year, Bobby's study group that
18 highlighted the importance of natural gas as a critical
19 source of energy in industrial feedstock was released.

20 That survey, which updated the previous natural gas
21 survey, was extraordinarily important, I think, in
22 putting in perspective some of the challenges which we
23 now confront in the natural gas sector.

24 The report examined energy market dynamics,
25 and it gave us extraordinarily valuable advice on steps

1 we must take to ensure adequate and reliable supplies
2 of natural gas.

3 Among other recommendations, the report
4 highlighted the importance of completing the Alaska gas
5 pipeline. Our Department, of course, shares that goal,
6 which is why we've been very pleased by the fact that
7 Congress recently approved and the president signed
8 major legislation which is beginning to move this
9 project forward.

10 In addition to the study, the NPC also hosted
11 the June 2003 Natural Gas Summit. As you know, in the
12 spring of last year, it became clear to all of us that
13 natural gas storage was more than 30 percent below the
14 2002 level, and it had of course begun to raise
15 concerns about natural gas supply for the winter of
16 2003-2004.

17 At my request, this organization stepped up
18 to the plate, convened the summit, and brought the
19 relevant stakeholders together for what I think was one
20 of its most important activities in recent years. That
21 summit helped us to launch our Department's Energy
22 Savers Program, as well as other actions to restore the
23 natural gas supply in time for last winter.

24 Now, of course, we will receive the new
25 petroleum refining and inventory study. Ensuring

1 adequate petroleum refining capacity and inventories to
2 meet the needs of consumers is a very vital issue, as I
3 already said, and I am confident that this study will
4 offer a number of valuable insights in terms of the
5 factors influencing the expansion of refining capacity
6 in the United States.

7 Without prejudging the report that we will be
8 working on here today and just to comment a little more
9 generally, I just would say that I personally see these
10 issues that relate to refining capacity as ones that
11 absolutely must be addressed. We clearly face a
12 growing challenge in terms of meeting the demands of
13 the marketplace here, the demands of a growing economy,
14 and this is overdue. We look forward, therefore, to
15 receiving the study and to acting on recommendations
16 from it in the days ahead.

17 So I just, again, thank everybody here not
18 just for the work on this recent set of studies but for
19 all the hard work which has gone into these various
20 projects and which has helped us to strengthen our
21 domestic oil and gas supply.

22 In addition to the work which we've done as
23 part of the NPC, the Department of Energy has also been
24 working to meet our nation's fossil fuel needs in other
25 ways as well over the last four years. Most notably,

1 we've been engaged in very aggressive international
2 efforts to accelerate the development of a global
3 market for LNG. We've signed several agreements to
4 enhance LNG receiving and trade opportunities. We've
5 moved to expand the necessary infrastructure. We've
6 taken, I think, some important steps to begin to
7 address LNG transport and storage safety issues.

8 We've also, in addition to the work on LNG,
9 been active in a variety of ways in an international
10 context to strengthen America's petroleum trade and
11 investment opportunities in many diverse regions of the
12 world, from Russia to the Caspian region to Africa to
13 other parts of the western hemisphere, to Australia, to
14 Indonesia, and virtually every part of the globe.

15 Our Department has also been very active in
16 the last four years in other elements of energy policy
17 beyond oil and gas. I think we can claim a number of
18 other noteworthy achievements over the last four years.

19 I think we've decisively moved the nuclear energy
20 sector forward with the development of the Yucca
21 Mountain Nuclear Waste Repository.

22 The decision which we made in 2002, a
23 decision many people said would never be made, a
24 decision which people thought would always be delayed
25 with some excuse, was an important one. After 20 years

1 of debate, Congress and the president ratified the
2 decision which was made, based on the Department's
3 careful scientific work, and we were very pleased to
4 see our recommendation signed into law.

5 Obviously, there remain critical challenges
6 to opening the site. I can predict here today that
7 between now and the date at which Yucca Mountain is
8 finally open to receive waste, there will be ongoing
9 and multiple legal and other challenges posed, but we
10 will work through them because this is a task we simply
11 must get done.

12 More than 161 million people in this country
13 live within 75 miles of nuclear waste that's being
14 stored at 131 sites in 39 states, storage facilities,
15 by the way, which were intended to only be temporary
16 when they were constructed. Yucca Mountain is
17 important not only for dealing with the existing
18 nuclear waste, but it's obviously also essential to
19 allowing us to move forward with the advanced nuclear
20 technologies that will help to ensure our energy
21 security well into the 21st century.

22 When this administration took office, we
23 noted that the debate over nuclear power had not really
24 changed since Three Mile Island in the 1970s.
25 Listening to this debate is a little bit like trying to

1 appreciate the latest computer animated movie on an old
2 black-and-white television. It's kind of pointless.

3 The truth is, compared to the reactors built
4 in the 1960s and '70s, the latest nuclear power
5 technologies are just as advanced as a widescreen,
6 surround sound, plasma television is compared to an old
7 black-and-white set. Today, nuclear power is
8 quantifiably safer, more reliable, and more efficient
9 than it was a quarter century ago, and we're working to
10 make it even more so tomorrow.

11 Just last month, we announced two awards
12 under the program we call Nuclear Power 2010 to begin
13 the first phase of the Nuclear Plant Licensing
14 Demonstration Project. These projects will demonstrate
15 the combined construction and operating license
16 regulatory process, and they will enable power
17 generation companies to make firm business decisions on
18 ordering and building new nuclear power plants.

19 Meanwhile, we're also pursuing Generation 4
20 nuclear technologies that take us to the next level in
21 terms of efficiency, reliability, and safety.

22 So it has, I think, been a very important
23 four-year period in the area of nuclear energy policy
24 at the Department as well. I think we have begun to
25 lay the ground work for the future on the nuclear

1 energy sector side during that time.

2 But even as we have pursued advanced nuclear
3 power generation to diversify our energy supply, the
4 Department has also been investing heavily in new
5 science and technology research and development to make
6 traditional fuel sources cleaner, more efficient, and
7 less expensive.

8 Today, we're engaged in the most ambitious
9 effort in history to remove the pollution and to
10 capture and store the carbon dioxide from coal-fired
11 powerplants. That will allow America to continue using
12 its abundant and economical coal reserves without
13 concern about adverse environmental effects.

14 As part of this effort, we launched the
15 Future Gen Project, which is a \$1 billion prototype for
16 a coal-fired zero-emission electricity and hydrogen
17 generation plant. In addition, we've made significant
18 headway in developing vital carbon sequestration
19 technologies, including launching a large-scale
20 international partnership to pioneer this critical
21 research. This partnership acknowledges a simple fact,
22 that fossil energy, oil, gas, and coal, will continue
23 for decades to be the lowest-cost and most readily
24 available energy resource in the world.

25 At the same time, we've taken major steps to

1 transform the way we use energy over the long term.
2 Our Department's Hydrogen Energy Initiative and other
3 new technology efforts are helping them to guarantee
4 the fuel diversity which is critical to maximizing our
5 nation's energy security for the future.

6 We're especially excited about our
7 revolutionary Hydrogen Fuel Initiative, the president's
8 initiative, which is aimed at developing the technology
9 for clean hydrogen production and commercially viable
10 hydrogen-powered fuel cells.

11 As you know, we initiated a public-private
12 partnership between DOE and the nation's auto makers to
13 accelerate the development of hydrogen fuel cell
14 vehicles and important bridging of automotive
15 technologies, like hydro-drive trains and clean diesel.

16 We're also working with energy companies to address
17 production and storage challenges.

18 Looking even further ahead, we're seeking
19 other new sources of energy for the future. One of the
20 most fascinating possibilities is nuclear fusion.
21 Fusion power is one of those technologies driven by
22 success in basic research that can truly transform the
23 world's energy equation.

24 We know that in developing countries, the
25 demand for large, huge supplies of electricity is just

1 around the corner. If successfully developed, a fusion
2 plant could generate vast amounts of electricity during
3 the day to power mega cities and at night produce
4 hydrogen for transportation needs with no emissions of
5 pollution or greenhouse gases.

6 Drawing on clean and almost exhaustible fuel
7 sources, fusion would have virtually no security
8 concerns with respect to proliferation and produce no
9 long-term waste.

10 So fusion and the carbon sequestration and
11 hydrogen partnerships I mentioned are very important
12 elements in the future of the Department of Energy.
13 They're also ones in which we've had a very successful
14 international collaboration.

15 In addition to those, we've also signed a
16 number of significant agreements with countries in
17 Asia, the Middle East, Europe, and Central and South
18 America to strengthen energy trade and investment
19 opportunities, to enhance the infrastructure for LNG
20 transport, to share efficiency and conservation
21 techniques, and to build mutually beneficial energy
22 security relationships.

23 We believe that good international
24 relationships in these areas are increasingly vital in
25 a global energy market, and we have made, I think,

1 excellent progress in developing working partnerships
2 with countries around the world to that end.

3 All these important steps we've taken would
4 not have been possible, however, without the dramatic
5 improvements which we have been able to achieve in the
6 Department in terms of our own internal management.

7 At the beginning of this administration, the
8 Office of Management and Budget established a new
9 management agenda for federal departments and agencies.
10 Five areas of focus were highlighted for improvement:

11 human capital, competitive sourcing, financial
12 performance, e-government, and budget and performance
13 integration.

14 Since then, the Office of Management and
15 Budget has conducted a regular process to assess
16 operations and performance by rating each of the
17 departments in these five categories. On the initial
18 score cards in 2001, our Department was given the
19 lowest rating in each of these areas. This was, of
20 course, probably consistent with your observations, the
21 external opinions of how the Department had operated in
22 recent years.

23 But we didn't believe that the Department
24 always had to be perceived that way or operate in that
25 fashion. Over the last four years, we have made

1 improving management operations the top priority for
2 our project managers and division heads.

3 We've got a lot of serious responsibilities
4 in this Department. We have a budget of taxpayer
5 dollars of \$23-plus billion, and these responsibilities
6 and projects we work on, as you know, are some of the
7 most significant, serious, and important in the world.

8 So we've spent the last four years trying to
9 make a significant change. We have streamlined and
10 consolidated the Department's financial and information
11 technology systems. We've begun to link the allocation
12 of resources in the budget to an objective assessment
13 of whether or not they're working.

14 As a result, our 116,000 employees and
15 contractors have transformed the Department from an
16 organization generally thought to be one of the
17 government's worst-managed agencies to what I think is
18 today one of the best. In fact, on the most recent
19 score card, in September, our Department received the
20 highest rating in four of the five categories that we
21 were assessed on, and the second-highest rating in the
22 fifth.

23 So I'm happy to tell you that today the
24 Department of Energy has the highest rating of all
25 federal departments in the federal government across

1 the board on this rating system.

2 So, in addition to the projects that we've
3 worked on in a substantive way in the Department, I'm
4 very pleased that we've been also able to improve its
5 management as well.

6 All of these accomplishments which I've
7 discussed are important and obviously ones I'm proud
8 of. But there's one final achievement which I think is
9 perhaps the most significant because I think over the
10 last four years we really have begun -- and this is,
11 obviously, largely due to the president's leadership --
12 to change the energy debate in this country in a
13 fundamental way.

14 Our Department and this administration have
15 made it clear that we must produce more energy
16 domestically. We have made the argument and, I think,
17 made it effectively that only a balanced approach which
18 combines conservation and new production will meet the
19 challenges of the 21st century.

20 For too long, that side of the energy debate
21 had not been, I think, well articulated in Washington.

22 Today it is. I think people have a clearer
23 understanding of energy issues now than they did when
24 only one side of the equation was being voiced.

25 I think that means that as energy policy is

1 addressed in the years ahead, we can look forward to
2 results that are much more consistent with a balanced,
3 forward-looking approach, the kind of approach which
4 America deserves, the kind of approach which means that
5 this country's need, demand for a safe, stable,
6 affordable, environmentally sound supply of energy will
7 be in fact accomplished, and that as a result of that,
8 our economic security and our national security will be
9 protected.

10 In closing, let me just say there's still a
11 great deal to be done to achieve real long-term energy
12 security for our country and to make our use of energy
13 safer, cleaner, and more reliable. But I think in the
14 last four years we have made enormous strides to move
15 us closer to that goal through our investments in
16 transformative energy technologies, through our basic
17 research and science to uncover new, better energy
18 sources, and through our cooperative efforts
19 internationally, and also by making the Department
20 itself a stronger, more efficient place.

21 I'm very proud of all which we have done and
22 I'm proud to have helped in my way serve the president
23 to serve the American people in the role I've had, and
24 of course, to work with all of you.

25 In closing, I just want to say that I truly

1 have enjoyed and appreciated the association which I've
2 had with this organization. All of the members of the
3 NPC really are committed and demonstrate that
4 commitment year in and year out to the goal which we
5 all share.

6 So I want to close by saying two things.
7 First, to all of you, thank you for the opportunity to
8 work together and for your commitment. In particular,
9 I want to thank Bobby Shackouls for his leadership.
10 Somewhere, I'm told, there may be even a presentation I
11 can make to you.

12 Bobby, if you'll let me here, from the
13 Department of Energy, a special certificate thanking
14 you specifically for what you've done.

15 (Presentation of certificate to Chairman
16 Shackouls.)

17 CHAIRMAN SHACKOULS: I appreciate it. Thank
18 you.

19 THE HONORABLE MR. ABRAHAM: Thanks a lot.

20 CHAIRMAN SHACKOULS: And to all of you, it's
21 been great to work together.

22 (Applause)

23 CHAIRMAN SHACKOULS: Thank you, Mr.
24 Secretary, for your remarks. I know that all the
25 members of the Council join me in thanking you for your

1 dedicated service to our nation, and we wish you the
2 best in whatever future endeavors lie in front of you.

3 Thank you very much.

4 (Applause)

5 CHAIRMAN SHACKOULS: We will now consider the
6 proposed final report from the NPC Committee on
7 Refining and Inventory Issues. I especially want to
8 thank Jim Mulva and Lee Raymond for chairing this very
9 important committee.

10 Jim will now begin the presentation of the
11 committee's report.

12 Jim?

13 Consideration of the Council's Response to the
14 Secretary's Request for Advice on Petroleum Refining
15 and Inventory Issues

16 Report by James J. Mulva

17 MR. MULVA: Thank you, Bobby.

18 Good morning to everyone. I'd also like to
19 extend my welcome to the Council members and to the
20 guests that are here with us this morning.

21 We have before us the proposed final report
22 for Refining and Inventory Issues Study Supplement
23 which was requested by Secretary Abraham.

24 As I'm sure all of you will recall, at our
25 last meeting, Secretary Abraham requested advice with

1 respect -- from the Council on issues surrounding
2 domestic refining capacity, product imports, and
3 inventories. He asked for our response in a very short
4 time period, much shorter than the time that this
5 organization typically spends analyzing issues and
6 developing recommendations.

7 So we did agree to undertake this update,
8 which it essentially is, an update, of the 1998
9 inventory and the 2000 refining studies after Lee
10 Raymond and myself, we met with the secretary and
11 discussed the scope and methodology that could be
12 achieved in this relatively short time frame.

13 So in early July, at a Council forum, a
14 Committee on Inventory and Refining Issues with Lee
15 Raymond of Exxon Mobil, David Garman of the Department
16 of Energy, and myself serving as co-chairs.

17 The committee formed two subcommittees who
18 essentially have done all this work to separately
19 address the refining and the inventory issues. Phil
20 Frederickson, ConocoPhillips, chaired the Inventory
21 Subcommittee, Don Daigle of Exxon Mobil chaired the
22 Refining Subcommittee, and Mark Maddox of the
23 Department of Energy served as the government co-chair
24 for both of the subcommittees.

25 We asked the subcommittees to complete their

1 work and provide us with the proposed report for
2 consideration within the time frame that was requested
3 by the secretary. So our organizations have responded.

4 Although this current effort has been largely
5 qualitative, we are quite confident in the valuable
6 insights and recommendations that have been generated
7 from these reports.

8 So the report is based on the vast experience
9 that the participants brought from their own individual
10 backgrounds. Both subcommittees had broad, diverse
11 participation not only from the industry but also from
12 related organizations.

13 So what I intend to do is to turn the floor
14 over to Phil and Don in a moment and give you a summary
15 of the proposed report. You will hear from them that
16 the fundamentals of our 1998 and 2000 work remain valid
17 today, and you'll hear a reassessment of the
18 appropriate levels for the operating inventory
19 indicators for crude oil and inventories.

20 You'll hear that we don't foresee significant
21 problems supplying gasoline and heating oil in the near
22 term, but we do see some potential problems with
23 respect to implementing ultra-low sulfur diesel in 2006
24 due to the challenges posed during distribution of the
25 product to the customer.

1 You'll also hear a number of recommendations
2 that could reduce hindrances with respect to expansion
3 of domestic refining capacity and distribution
4 capability if implemented.

5 Some of these recommendations are very much
6 carryovers from the 2000 study, including
7 recommendations where this administration has attempted
8 to reform but has been resisted. An example is the New
9 Source Review.

10 So what I'd like to do now is turn the floor
11 over to Phil and to Don, who will present the findings
12 of the subcommittees.

13 Phil, you ready?

14 Report by Phil Frederickson
15 (PowerPoint presentation)

16 MR. FREDERICKSON: Thank you, Jim.

17 It's a pleasure to be here this morning to
18 present the results of the 2004 Refining and Inventory
19 Issues Supplemental Study. Don Daigle and I will share
20 the presentation this morning.

21 I'm going to start by providing the
22 background. I'll summarize the key findings of the
23 entire study, and then I'll present the results of the
24 inventory portion of the study. Then Don's going to
25 present the refining and the import section, and then

1 he will propose or share the key recommendations from
2 the entire study.

3 Jim mentioned Secretary Abraham's request
4 from the last NPC meeting. Subsequently, in his July
5 16th letter, the Secretary formally requested that we
6 identify the factors that would impact the refining and
7 distribution industry's ability to meet product demand.
8 Additionally, the letter asked that the Council
9 reexamine its 1998 advice on lower operating inventory
10 levels for crude and petroleum products.

11 Given the study's limited time frame, the
12 Council determined that the scope of the study would be
13 to review and to supplement the '98 Inventory Report
14 and the 2000 Refining Report.

15 Broadly, what we did is, the supplement
16 reviews the findings of the previous studies, reaffirms
17 or modifies the recommendations as appropriate, and
18 develops a consensus on additional observations and
19 recommendations based on our experience since the last
20 or the prior studies.

21 Jim shared with you the organization that was
22 assembled to undertake this study. , Let me just add
23 that the members of the committee and subcommittees
24 were drawn from NPC member companies, other
25 organizations, as well as government. They represented

1 broad and diverse interests, including integrated oil
2 and gas companies, large and small petroleum refiners.

3 We had transporters, marketers, and financial and
4 consultant services.

5 So with that, let me summarize the key
6 findings of the study. First, the NPC does not foresee
7 significant hurdles to the general availability of
8 gasoline and heating oil supplies to meet consumer
9 demand. However, we do have concerns about meeting
10 ultra-low sulfur diesel demand during the transition to
11 the 15 part per million maximum sulfur specification
12 beginning in mid 2006.

13 The NPC believes that the transition period
14 for ultra-low sulfur diesel is likely to be more
15 difficult and longer than historically associated with
16 major product specification changes. This is due to
17 the difficulty anticipated in maintaining and assuring
18 the specified sulfur level and volumes during
19 distribution from refineries to the ultimate consumer.

20 Furthermore, the NPC does not expect that
21 imports of ultra-low sulfur diesel will be widely
22 available to make up for product downgrades or volume
23 downgrades during distribution.

24 This is a very important issue, and Don will
25 discuss it in greater depth in his presentation.

1 Another significant finding is that the
2 product imports are expected to continue to be an
3 economic component of U.S. supply. It's very important
4 to understand that the U.S. products market is part of
5 a global petroleum market. Product imports have been
6 growing. The volume of imports in the future will
7 depend upon a number of factors, including domestic
8 demand and refining capacity growth, as well as supply
9 and demand factors outside the United States that
10 affect the economics of imports versus domestic
11 refining.

12 Don will cover several recommendations that
13 would avoid impeding domestic refining capacity growth
14 and improve the domestic climate for domestic refining.

15 The study also has important observations
16 about how market mechanisms contribute to supply
17 reliability. Market mechanisms provide the fastest and
18 the most efficient response to supply disturbances.
19 Petroleum markets respond to supply-demand changes with
20 price movements that provide the incentive to increase
21 or decrease supply to correct any imbalance. This is
22 an integral part of normal and effective market
23 operation.

24 The U.S. supply system is robust and has the
25 flexibility to adjust to significant supply

1 disturbances. Each year across the U.S., there are
2 hundreds if not thousands of events that have the
3 potential to affect the supply-demand balance to some
4 extent at local or regional levels. It is a measure of
5 the efficiency of the industry supply system that the
6 public are generally unaware of these events because
7 there is no interruption to supply. Even major supply
8 disturbances are typically rebalanced within a short
9 period of time.

10 The market functions efficiently because
11 companies continually strive to operate reliable supply
12 systems and meet consumer demand while financially
13 optimizing operations. The competitive nature of the
14 industry drives companies to minimize working capital,
15 of which inventory is a component, while ensuring
16 reliable supply systems.

17 Failure to plan for adequate inventories
18 results in lost profit opportunities and competitive
19 disadvantage. Ultimately, consumers benefit from
20 efforts to reduce petroleum supply costs.

21 With that, I'd like to move to the subject of
22 inventory, starting with crude oil. This chart shows
23 the U.S. crude oil inventory trends from '89 to 2004.
24 You can see with the green line that crude oil
25 inventory has continued the slow downward trend that

1 was noted in the 1998 study. This trend is attributed
2 to delivery system efficiency improvements and
3 declining domestic crude oil production.

4 One of the big factors is Alaska crude
5 production. It continues to decline, which lowers the
6 volume of oil in transit from Alaska to the lower 48
7 states. Since the mid '90s, Alaska oil in transit has
8 declined from over 12 million barrels to about 6
9 million barrels in 2003. This results in a reduction
10 in inventories, as Alaska crude in transit is
11 considered inventory.

12 In addition, lower 48 crude oil production
13 has also been declining, and like Alaskan crude, is
14 replaced with imported barrels. These foreign barrels
15 that are in transit are not considered as inventory.

16 The chart also shows, and the blue line, the
17 lower operational inventory level for crude oil. It's
18 important to understand how LOI is defined. In the '98
19 study, the NPC defined LOI as the lower end of the
20 demonstrated operating inventory range updated for
21 known and definable changes in the petroleum delivery
22 system.

23 The concept was introduced to move away from
24 the MOI, or minimum operating inventory, that was in
25 place prior to the '98 study, and the concept that

1 there is some definable, specific inventory level where
2 supply system reliability becomes a significant issue.

3 Based on the observed crude oil inventory
4 trends, the NPC concludes that the crude oil LOI should
5 be in the range of 260 to 270 million barrels, compared
6 to the '98 study conclusion of 270 million barrels.

7 Since the '98 study, crude oil inventory has
8 been observed to be as low as 260 million barrels
9 several weeks with no impact on crude oil supply to
10 U.S. refineries. As previously mentioned, there has
11 been a considerable decline in oil in transit from
12 Alaska.

13 Concern has been expressed that a few
14 refineries in the Gulf Coast had to borrow oil from the
15 Strategic Petroleum Reserve after Hurricane Ivan in
16 September of 2004 despite the fact that crude oil
17 inventories were at 270 million barrels.

18 Hurricane Ivan, of course, had a significant
19 impact on the offshore oil platforms, on pipeline
20 movements, and on oil imports. At the peak, 60 percent
21 of Gulf of Mexico crude supplies were disrupted. This
22 created localized supply disruptions at a few
23 refineries, especially those that were highly dependent
24 on sweet crude oil that could not quickly be obtained
25 elsewhere. This was a significant event that caused a

1 loss of about 30 million barrels of production.

2 This reinforces the concept that LOI is only
3 one indicator of the adequacy of supply, and therefore
4 a crude oil LOI range is recommended, rather than a
5 single value, to better represent the degree of
6 accuracy associated with the LOI methodology.

7 The NPC remains highly supportive of the
8 strategic petroleum reserve for use only during
9 significant crude oil supply disruptions that threaten
10 the system's ability to meet domestic demand.

11 Now I'll turn to product inventories. You
12 can see on this slide the trends in LOIs for U.S.
13 gasoline and distillate. We had a long, slow decline
14 of gasoline inventory at terminals that was noted in
15 the prior study. You can see that it's no longer
16 apparent. Distillate inventory has remained
17 essentially flat through both the previous and the
18 current study periods. Therefore, no change is
19 recommended at this time in the LOIs for gasoline or
20 distillate.

21 Now I want to turn to the subject of price
22 volatility. I'm addressing this because it was
23 reported on in the 1998 study, so we updated it as a
24 part of this supplement.

25 The first observation that I want to make

1 about price volatility is that crude oil price
2 continues to be the main driver of product prices, as
3 was concluded in the previous study. This slide
4 demonstrates that close relationship between WTI prices
5 and gasoline and distillate prices. This observation
6 was supported by a recent report by the Federal Trade
7 Commission that indicated that changes in crude oil
8 prices had accounted for approximately 85 percent of
9 the changes in U.S. motor gasoline prices over the past
10 two decades.

11 The second observation I'd make about price
12 volatility is that both crude and product price
13 volatility have increased since the previous study.
14 The previous study focused on a time frame of 1992
15 through 1997, which was a time period of relative calm
16 in the oil markets.

17 You can see that this chart indicates that
18 the number and magnitude of crude and product price
19 upticks, defined as increases greater than 10 percent
20 or more in price versus the prior-year period, has
21 increased since 1997. You'll also note that most of
22 these price upticks are shown to be driven by events in
23 the global crude oil market.

24 The last point I want to make about price
25 volatility is, retail gasoline prices continue to be

1 less volatile than crude prices. You can see this on
2 this slide. The retail gasoline prices are in fact
3 less volatile. Price increases in the global crude
4 market and product spot markets are delayed and
5 somewhat dampened in retail prices.

6 The last topic I'm going to address this
7 morning is the relationship between inventories and
8 price. This was also discussed in the previous study,
9 and it was updated.

10 There is an expectation that inventories
11 influence price, based on the economic assumption that
12 inventories do provide a measure, however imperfect, of
13 the changing imbalance between supply and demand.
14 However, statistical analysis of the relationship
15 between inventories and price find only a modest
16 correlation at best.

17 This conclusion is indicative of the fact
18 that the interaction of inventories and prices is very
19 complex and that prices for crude oil and petroleum
20 products are influenced by many other factors besides
21 inventories.

22 For example, crude oil inventories were at
23 270 million barrels in October of 2002, when we had
24 prices under \$30, and of course, we have prices today
25 of over \$45 and inventories at 292 million barrels.

1 There are simply many factors at play in addition to
2 inventory that influence prices, and inventory is a bad
3 predictor of price.

4 Now I want to turn this over to Don Daigle.
5 He will address the refining and import section of this
6 study and then also cover the entire study
7 recommendations.

8 Report by Don Daigle

9 MR. DAIGLE: Thank you, Phil.

10 I'll be covering the refining and imports
11 portion of the study as well, as Phil indicated, the
12 study overall recommendations. I have about 20 minutes
13 of prepared material, including 10 slides.

14 (PowerPoint presentation.)

15 MR. DAIGLE: There has been a lot of press
16 coverage and some congressional testimony over the past
17 few months concerning domestic refining capacity and
18 petroleum product supply. As shown by the chart on
19 this slide, domestic refining capacity, indicated by
20 the yellow line, and measured by crude distillation has
21 increased over the past decade, although the rate of
22 increase has slowed during the past few years.

23 Between 1996 and 2000, the year of the last
24 NPC Refining Report, domestic capacity grew about
25 300,000 barrels per day per year, an amount equal to

1 adding two average-size refineries each year.

2 Since 2000, the growth rate has been one-
3 third of that level, or about 0.6 of 1 percent per
4 year. Light product demand growth, on the other hand,
5 has been about 2 percent per year, so capacity growth
6 has not kept up with demand growth recently.

7 The chart also shows the number of U.S.
8 refineries. The red line shows a steady reduction in
9 the number of operating domestic refineries for the
10 last several decades, as some of these refineries have
11 become uneconomical to operate. The remaining
12 refineries, though, have expanded sufficiently to
13 offset these shut-downs and to net increase overall
14 capacity.

15 The U.S. has a net import of gasoline, jet
16 fuel, and distillates. Imports have been for years,
17 and are expected to continue to be, an economic
18 component in U.S. supply.

19 The chart focuses on gasoline production and
20 imports. The majority of the U.S. product imports are
21 gasoline. I'll have some specific comments on diesel a
22 little bit later.

23 The chart on the lower left shows domestic
24 gasoline demand, the top line in yellow, and domestic
25 production, in red, slightly below that. The

1 difference is imported gasoline, which, as shown, is a
2 small component of supply. For 2003, net gasoline
3 imports were 8 percent of total supplies.

4 Gasoline imports have been increasing
5 recently, shown more clearly by the chart on the lower
6 right, which depicts imports by source. Since 2000,
7 imports have increased about one-third, and that
8 increase has supplied slightly less than one-half of
9 the domestic demand growth since then.

10 The majority of imported gasoline comes from
11 Europe, Canada, and the Caribbean basin. We have
12 confidence that these areas will continue to be
13 economic supply sources, as we have seen refineries in
14 Canada, the Caribbean, and Venezuela undergo
15 reconfigurations that will allow them to provide
16 product quality suitable for sale in the U.S.

17 Furthermore, we expect the availability of
18 gasoline from Europe to actually increase in the near
19 term because Europe is shifting from gasoline use more
20 toward diesel, and we expect this trend to continue.

21 While we believe that this increase in
22 imports reflects economic operation of the worldwide
23 petroleum products market, this increase was at least
24 partially responsible for raising the question, what
25 can be done to increase domestic refining capacity?

1 This study has identified a number of factors that can
2 impede the growth of domestic refining capacity, and
3 I'll cover those in the next three charts.

4 The economics of refining investment is a
5 significant factor. It won't be any news to any of the
6 industry people here that domestic refining returns
7 have been pretty low over a long period of time. The
8 chart on the lower left shows the return on equity of
9 the total domestic petroleum industry as reported by
10 DOE, in red, and for the S & P 500, in blue. Total
11 petroleum industry return is about 1 percent below the
12 average of the S & P 500 over the last two decades.

13 The chart on the right shows the return on
14 capital employed for the refining and marketing
15 segment, in green, compared to the total petroleum
16 business, in red. Over the period, refining and
17 marketing averaged a little over 5 percent, nearly 2
18 percent below total petroleum. So, clearly, investment
19 in domestic refining and marketing has been less
20 attractive on average than other U.S. business
21 opportunities.

22 The situation doesn't change if you take a
23 shorter term view and look at just the period since
24 1990, as shown by the horizontal lines. There is a
25 significant year-to-year variability. Even though

1 refining and marketing profits are higher in 2004, the
2 lower right chart shows that as recently as 2002 there
3 was extremely low downstream profitability.

4 This is a capital-intensive industry with
5 long lead times to install significant investment and
6 long payout periods for those investments. While each
7 company makes its own decisions based on its own
8 analyses and forecasts, the long-term history of below-
9 average rates of return remains a key factor that must
10 be considered in refining investment decisions.

11 Uncertainty is another significant factor in
12 refining investment decisions. While uncertainty
13 results from many factors and will always be present as
14 we consider the future, uncertainty can be
15 significantly affected by government action. For
16 refinery investment decisions requiring large amounts
17 of capital with long payout periods, increasing
18 uncertainty tends to minimize, delay, or even stop
19 investment.

20 This results because awaiting resolution of
21 uncertainty by delaying investment, even if it means an
22 economic loss in the short term, can be a much more
23 attractive alternative than investing in equipment that
24 is not optimum for the long term.

25 We see a number of sources of increased

1 uncertainty resulting from regulatory action or
2 inaction. One of the most important and prominent is
3 the EPA's retroactive reinterpretation of New Source
4 Review regulations over the last few years and
5 challenges to recent efforts to better define and
6 reform the rules.

7 Another is implementation of the new National
8 Ambient Air Quality Standards, with the unknown actions
9 that states will need to pursue to come into
10 compliance, and whether these actions can even be
11 sufficient and in time.

12 A third is the potential for waivers,
13 exceptions, and exemptions of regulations, particularly
14 product quality requirements, which raise questions
15 about what standards will actually be applied.

16 The proliferation of botique fuels has
17 attracted a lot of attention over the last few years,
18 and botiques pose both a challenge to the efficient
19 operation of the supply system as well as complicates
20 the future for those considering investment.

21 One of the drivers behind botique fuels is
22 the RFG oxygenate mandate, and the outlook remains
23 uncertain for national energy legislation to eliminate
24 it.

25 While the body of this report details other

1 factors that affect refinery capacity expansion, I'll
2 mention just one other here, and that is resource
3 constraints. The U.S. downstream petroleum industry
4 continues to make significant investments in its
5 facilities, to the tune of about \$8 billion per year,
6 for a variety of improvements: for expansion, for
7 product quality changes, for environmental improvement,
8 for reduction in energy consumption, and for security
9 enhancement.

10 The refining industry is a very diverse group
11 of companies with varying access to resources. For
12 example, for some companies, access to capital can be
13 limited by the assessment of the attractiveness of the
14 refining business by outside financial parties. For
15 international companies, opportunities in other
16 countries compete for resources with domestic
17 opportunities.

18 And for all companies, highly skilled human
19 resources are not limitless. Whether capital or human,
20 increased demand for resources by one area, such as
21 product quality improvement for environmental purposes,
22 can in some instances detract from resources available
23 to pursue other opportunities, such as domestic
24 capacity expansion.

25 With this as background, I want to cover the

1 major study conclusions. First, the NPC does not
2 foresee significant hurdles to the availability of
3 gasoline and heating oil supplies to meet consumer
4 demand for the next few years. We foresee no general
5 supply problems from the implementation of the low
6 sulfur gasoline requirements which are currently
7 underway. However, we may still see some of the
8 typical short-term localized problems that can
9 accompany major product quality changes.

10 We also don't see any significant issues with
11 heating oil supplies near-term. As was mentioned
12 earlier, though, we do see potential for significant
13 supply disruptions accompanying the implementation of
14 the ultra-low sulfur diesel requirements beginning in
15 mid 2006.

16 Refiners are proceeding with preparations to
17 manufacture ultra-low sulfur diesel, as reported by EPA
18 in the most recent pre-compliance report released in
19 late September. However, we foresee potential problems
20 maintaining and assuring product quality during
21 distribution to the end user for two reasons.

22 First, EPA has established a downstream test
23 tolerance which is significantly less than the actual
24 test variability, which means that product which meets
25 specification could be declared off-specification

1 simply by the variability in test results.

2 Efforts to reduce variability have shown some
3 progress. However, they are still a long way from
4 matching the tolerances specified by EPA.

5 Second, there is a significant potential for
6 contamination of ultra-low sulfur diesel with small
7 quantities of other material during movement through
8 the tanks, pipelines, ships, and trucks. Quantitative
9 test information has recently become available which
10 suggests that the magnitude of this distribution
11 degradation could be quite large, especially in the
12 complex systems that transport products from the Gulf
13 Coast to the northeast, mid Atlantic, and midwest.

14 We have concerns that there will not be
15 sufficient production excess to offset the distribution
16 downgrade, and there may not be a viable outlet for the
17 downgraded volume in some markets.

18 Furthermore, we don't expect imports of
19 ultra-low sulfur diesel to be widely available to
20 offset any loss of domestic production due to downgrade
21 during distribution. While we currently import diesel,
22 the volume is small. European demand is increasing,
23 and their diesel specifications are also being
24 tightened.

25 We do not foresee spare foreign production

1 capability for increased ultra-low sulfur diesel to the
2 U.S. in the 2006 time frame.

3 With the exception of ultra-low sulfur
4 diesel, we expect imports to continue to be an economic
5 component of supply to meet the U.S. demand for
6 products. Whether imports increase or decrease will
7 depend on a number of factors, including the rate of
8 growth of demand, economics of domestic versus foreign
9 production, and the amount of domestic capacity
10 increase.

11 I'll move next to the recommendations
12 identified to help ensure reliable petroleum product
13 supplies. These recommendations are aimed at avoiding
14 the hindrance of refining capacity expansion, improving
15 the environment for domestic investment, and not
16 impeding effective operation of the supply system.

17 It is important that prompt implementation be
18 pursued so that these recommendations can begin to take
19 effect. As mentioned earlier, the lead time for
20 significant refining investment is measured in years,
21 not months.

22 First, we reiterate the recommendations from
23 the 2000 refining study. These remain applicable and
24 should be implemented to the extent that they have not
25 been. Some have been, some are in progress. I'll

1 mention a few key ones individually a little later, and
2 a full listing is included in the appendix of the
3 proposed report.

4 The first and most significant step that can
5 be taken to reduce hindrance to capacity expansion is
6 to implement the New Source Review reforms promulgated
7 by the administration. These reforms are currently
8 being challenged, and the challenge should be
9 vigorously opposed.

10 These reforms will reduce the uncertainty
11 about how modifications to existing sites must be
12 evaluated and will prevent capacity expansions from
13 being burdened with providing emission reductions
14 beyond the projects' actual effect.

15 Reforms will also ensure that the extensive
16 New Source Review permitting requirements are applied
17 only to projects where these requirements are
18 warranted.

19 The EPA has also proposed additional reforms
20 regarding de-bottlenecking and project aggregation that
21 should also be finalized. These additional reforms
22 will further facilitate domestic refining capacity
23 expansion.

24 Next, the EPA should review and revise the
25 compliance deadlines and procedures from the National

1 Ambient Air Quality Standards. The existing rules will
2 not allow some areas to take full advantage of the
3 emission reductions benefits that will be provided by
4 programs that are already in place. As a result,
5 states may be forced to require additional costly
6 controls that might not otherwise be needed and might
7 not be deliverable in the required time frame.

8 This could result in additional investment in
9 station air resource controls at existing refineries,
10 diverting resources and reducing the viability of
11 domestic refining versus imports. It could also
12 increase the requirements for emissions offsets for
13 refinery expansions, reducing the economic
14 attractiveness of those potential investments. It
15 could also result in new requirements for boutique
16 fuels, which will reduce the efficiency and reliability
17 of the distribution system.

18 We do not believe that the fuel supply
19 implications of current National Ambient Air Quality
20 Standards requirements have been adequately considered.

21 Next, I mentioned earlier that we have
22 significant concern about the potential for supply
23 disruption with the implementation of ultra-low sulfur
24 diesel in mid 2006. EPA released their draft 2004 Pre-
25 Compliance Report about the same time that this draft

1 NPC report was distributed for review. EPA concludes
2 that domestic refineries should be able to produce
3 volumes of ultra-low sulfur diesel about equal to
4 projected consumer demand.

5 However, we believe that there is potential
6 for significant loss of on-specification ultra-low
7 sulfur diesel downstream of the refineries during
8 distribution. Recently, studies of several actual test
9 shipments have become available, and these results
10 support our concern.

11 EPA should work with DOE and industry to
12 understand the results of these tests and to determine
13 how to achieve the emissions reduction goals of the
14 programs while keeping diesel users reliably supplied
15 with fuel.

16 We also recommend EPA's sulfur test tolerance
17 downstream of the refineries be increased to match the
18 statistical reproducibility of the test. This will
19 avoid loss of ultra-low sulfur diesel volume due to
20 testing inaccuracy. While industry has been seeking
21 improvements in the tests, those improvements are a
22 long way from matching the tolerance specified by EPA.

23 Should improvements be made in the future, the test
24 tolerance could then be addressed accordingly.

25 Next, NPC recommends passage of national

1 energy legislation as embodied in the current
2 Conference Report on H.R.6 as a vehicle that we see
3 with the highest probability of obtaining prompt action
4 to address the issues associated with the reformulated
5 gasoline oxygenate requirement, with MTBE liability,
6 and with the proliferation of botique fuels.

7 The fuels provisions of H.R.6 represent a
8 carefully crafted compromise. While there are parts of
9 that individual compromise that individual companies
10 might not like, on the whole this package will help
11 remove some of the uncertainty impact in the domestic
12 refining industry.

13 I'll mention two parts of this legislation
14 that have broad industry consensus.

15 The limited liability protection for
16 defective product claims involving MTBE and other
17 federally required oxygenates should be approved. This
18 would eliminate only defective product claims that
19 penalize fuel manufacturers for meeting the Clean Air
20 Act requirements. This would not affect liability or
21 clean-up of leaked or spilled product and remediating
22 any damage.

23 Second, requests for additional botique fuels
24 should only be approved when they are a necessary and
25 cost-effective emissions reduction step. Continued

1 proliferation of boutique fuels will further fragment
2 the market, increasing the potential for supply
3 disturbances and price volatility.

4 Where state and local special fuel programs
5 are implemented, they should be coordinated to avoid
6 hindering the efficient operation of the distribution
7 system, and they should provide sufficient lead time to
8 implement any changes necessary to refineries and the
9 distribution system.

10 We're not in a position to recommend any
11 specific changes to the currently required slate of
12 fuels across the nation. However, we do support a
13 joint DOE and EPA study on the current boutique fuel
14 issue, with participation of all the stakeholders.

15 The 2000 NPC Refining Report recommended that
16 regulation should be based on sound science with
17 thorough analysis of cost effectiveness, and that
18 recommendation remains valid today. Regulations that
19 are soundly based are more likely to survive challenges
20 and provide planning certainty.

21 In 2001, President Bush signed Executive
22 Order 13211, which requires a statement of energy
23 effects when undertaking regulatory actions. This
24 executive order should be made law and strictly
25 enforced.

1 Furthermore, cost benefit analysis should be
2 performed on an incremental basis to ensure that each
3 increment of regulatory severity is justified. A total
4 and average analysis can disguise high cost
5 requirements with little incremental benefit.

6 There has recently been considerable
7 discussion and even proposed legislation concerning
8 streamlining the permitting process. A streamlined
9 process could reduce the uncertainty posed by current
10 indefinite timelines and overlapping agency roles. Any
11 streamlining should include clear definition of
12 process, agency roles, and deadlines for decisions.
13 The streamlining effort should include all stakeholders
14 to avoid the potential for a later challenge outside
15 the permit system.

16 Next, NPC recommends reducing the tax
17 depreciation schedule for refining equipment from the
18 current 10 years to five, consistent with the treatment
19 of process equipment in the chemical industry and with
20 other manufacturing equipment. We also recommend
21 reducing the depreciation period for pipelines and
22 storage facilities.

23 Such a reduction would reduce the capital
24 recovery period for investment, helping to offset the
25 historically low returns in this business. The

1 adjustments should be applied to all new refining and
2 distribution equipment.

3 Past experiences can sometimes be part of a
4 broader efficiency and yield improvement project, so
5 attempting to apply any depreciation revision on a
6 narrowly defined segment of investment could have the
7 perverse effect of reducing the incentive for more
8 significant additions to base capacity.

9 The use of exemptions, exceptions, and
10 waivers should be limited to responding to serious
11 supply disruptions that affect delivery of fuel to
12 consumers. The possibility of waivers and the like
13 increase market uncertainty and hinder investment.

14 To reduce this uncertainty, EPA should issue
15 a definitive procedure for considering and issuing
16 waivers and variances to provide clarity of future
17 requirements. Proposed guidelines have recently been
18 issued as a first step in this process.

19 Policymakers should recognize that mandates
20 or subsidies for alternative fuels would increase the
21 uncertainty for the future of the petroleum refining
22 business and reduce the incentive for investment. As a
23 result, they may not actually reduce petroleum product
24 imports as intended and could actually increase the
25 overall fuel cost to consumers.

1 Next, the 2000 Refining Report recommended
2 that the drivability index requirement for gasoline not
3 be reduced without thorough additional analysis. Such
4 a reduction could significantly reduce existing
5 refinery gasoline production capacity by 10 percent or
6 more for the change evaluated at the time of the 2000
7 study.

8 To date, EPA has resisted auto makers' calls
9 for a reduction in drivability index and a change to
10 distillation index, and EPA should continue this
11 stance.

12 Lastly, site security should remain an
13 industry responsibility, with ongoing risk assessment
14 and security improvements coordinated with the
15 Department of Homeland Security, which should retain
16 the lead federal role. Refining industry participants
17 are committed to keeping their facilities secure from
18 threats and violence or terrorism.

19 Refiners have expended substantial resources
20 to enhance security, and they expect to continue to do
21 so. There are proposals being discussed that include
22 provisions for forcing technology change and for
23 criminal liability. These provisions would not provide
24 a security benefit and could reduce domestic fuel
25 production capability.

1 As I mentioned earlier, significant refinery
2 investment requires long lead time to implement. It
3 can take four years or more to implement the steps
4 necessary to install a major refinery modification. As
5 a result, the effects from implementing these
6 recommendations will generally be translated into
7 additional refinery capacity coming on stream years
8 from now.

9 The secretary asked for options that could
10 help meet demand over the next year. We did not
11 identify in this study any steps that could
12 significantly increase domestic refining capacity
13 within the next year. The refining capacity that will
14 exist in 2005 is the result of investment decisions and
15 regulatory actions over the past several years.

16 However, we do believe that, barring
17 unforeseen events and further restrictions of domestic
18 capacity and worldwide free trade flows, product
19 supplies should be sufficient to meet domestic demand
20 in the near term.

21 Finally, I want to summarize and conclude
22 with this final chart. In the, near term, the NPC does
23 not foresee significant hurdles to the availability of
24 gasoline and heating oil supplies, though we do have
25 significant concerns about ultra-low sulfur diesel fuel

1 implementation beginning in 2006.

2 The U.S. products market is part of a global
3 petroleum market and is influenced by global
4 fundamentals. We expect imports to continue to be an
5 economic component of supply. Market mechanisms
6 provide the fastest and most efficient response to
7 supply disturbances.

8 Finally, we have provided recommendations to
9 help ensure reliable product supplies both to allow for
10 efficient operation of the supply system and to
11 mitigate some of the factors that have impeded domestic
12 refining capacity growth.

13 That concludes our report, so Lee, I'll turn
14 the floor over to you.

15 Remarks by Lee Raymond

16 MR. RAYMOND: Thanks, Don and Phil.

17 Jim and I wish to extend the committee's
18 thanks to all the participants of this study for their
19 commitment and diligent effort. The findings and
20 recommendations are most timely, considering the high
21 level of interest and proposed legislation in many of
22 the areas.

23 I also wish to express our appreciation to
24 the DOE for their considerable support and
25 participation in the study.

1 Mr. Chairman, this completes the study
2 presentation to the Council. I believe that this
3 report is responsive to the secretary's request, and it
4 should be of significant value to the administration in
5 formulating and carrying out policy.

6 I echo Mr. Mulva's comments that our
7 organizations that responded to the secretary's request
8 with extensive effort in a very compressed time frame.

9 Although this current effort has been largely
10 qualitative, we are confident that valuable insights
11 and recommendations have been generated.

12 This report is based on the vast experience
13 that the participants brought from their own individual
14 backgrounds. Both subcommittees had broad, diverse
15 participation not only from industry but also from
16 related organizations.

17 I want to thank all of you for the resources
18 you have contributed to this work. In spite of the
19 very short time frame, your people have put in a
20 significant amount of effort into this study, and we
21 hope that this report will provide additional
22 enlightenment to the public discourse on these topics.

23 Accordingly, I move that the National
24 Petroleum Council adopt the proposed report, subject to
25 final editing.

1 Bobby?

2 CHAIRMAN SHACKOULS: Thank you, Jim and Lee.

3 We have a motion to adopt the report of the
4 Committee on Refining and Inventory Issues subject to
5 final editing. Do I have a second?

6 (Seconded)

7 CHAIRMAN SHACKOULS: Are there any Council
8 members who have questions or comments on the proposed
9 final report?

10 (No response)

11 CHAIRMAN SHACKOULS: All in favor, please say
12 "aye."

13 (There was a chorus of "ayes.")

14 CHAIRMAN SHACKOULS: Opposed?

15 (No response)

16 CHAIRMAN SHACKOULS: Thank you. The report
17 is adopted.

18 I thank you, Jim and Lee, your committee,
19 Phil and Don, your subcommittees, and the many
20 volunteers who helped to complete this work. You have
21 prepared a very valuable report, and I'm confident that
22 you, Mark, and the secretary will,, along with others in
23 the administration, will find this work very useful as
24 you address the issues that confront you.

25 Mark, would you like to make a few comments

1 at this time?

2 Remarks by Mark Maddox

3 MR. MADDUX: First, I want to thank the NPC,
4 Jim Mulva, Lee Raymond, Don Daigle, Phil Frederickson,
5 and Tom Mueller for all their hard work and all their
6 committee members' hard work on this.

7 At my first response, I have a couple
8 conclusions strike me. First, that in spite of the
9 U.S. being an attractive place to do business due to
10 its large market, market transparency, and legal
11 certainty, we have made this a hard place to build a
12 refinery. Our regulatory approach creates a climate of
13 investment uncertainty, and the cost of regulations
14 means more than pennies at the pump. It diverts
15 dollars from capacity expansion to regulatory
16 compliance.

17 Second, a passive policy that discourages
18 refinery expansion or construction also means we are
19 making a passive decision to participate in a global
20 product market. As such, we need to think how our
21 regulatory decisions impact our access to this world
22 market.

23 As I told FERC last year regarding natural
24 gas quality, we must look not just at how decisions
25 impact liquidity in domestic markets but how decisions

1 impact global market liquidity or risk paying a higher
2 price premium for this product for this lack of
3 liquidity in reducing the economic competitiveness of
4 our nation. For policymakers, this means synchronizing
5 and coordinating our policies with other consuming
6 nations.

7 How we go about meeting and understanding the
8 global policy approach and how other nations are
9 developing their refinery approaches will be a
10 challenge that we have not taken up as a nation and
11 haven't had to. This report, I think, lays out how
12 important that process is going to be and how it may
13 impact us sooner rather than later, perhaps later in
14 this decade if we don't.

15 To reiterate the secretary's earlier
16 comments, I want to reiterate our appreciation to the
17 NPC for their hard work and their valuable advice.

18 Thank you.

19 Administrative Matters

20 Bobby S. Shackouls

21 CHAIRMAN SHACKOULS: Thank you, Mark.

22 We now turn to our administrative matters.
23 The first is a note for the benefit of members of the
24 press. Following adjournment, study leaders will be
25 available here at the head table to respond to your

1 questions.

2 The second is to inform members that final
3 printed copies of the Refining and Inventory Issues
4 Report will be available from the NPC and on the NPC's
5 website by the end of this month.

6 I also want to inform members that we'll be
7 sending out questionnaires to many of you requesting
8 operating and financial data for calendar years 2002
9 and 2003. These non-proprietary data will be used by
10 the Finance Committee to update contribution requests
11 for the coming year. While there will be no
12 substantive change in the total funds requested,
13 members can expect their individual requested amounts
14 to change.

15 If you receive one of these questionnaires,
16 would you please return it to the NPC by December 15th.

17 Discussion of Any Other Business Properly Brought
18 Before the National Petroleum Council

19 Bobby S. Shackouls

20 CHAIRMAN SHACKOULS: Ladies and gentlemen,
21 before I turn to the final item on our final agenda,
22 let me ask if there are any council members that have
23 any other matters to raise at this time?

24 (No response)

25 CHAIRMAN SHACKOULS: Does any non-member wish

1 to be recognized?

2 (No response)

3 In Memorium to Patrick F. Taylor

4 Bobby S. Shackouls

5 CHAIRMAN SHACKOULS: Our last item is a sad
6 one. We've recently been told of the death of one of
7 our longstanding members of the Council, Pat Taylor of
8 Taylor Energy in New Orleans.

9 Pat founded his company more than 25 years
10 ago, and while he was very successful as an oil man, he
11 was most proud of his efforts to provide a college
12 education to Louisiana high school graduates.

13 I would now ask you all to stand and remember
14 Pat Taylor with a moment of silence.

15 (Moment of silence)

16 CHAIRMAN SHACKOULS: Thank you.

17 The 114th meeting of the National Petroleum
18 Council is hereby adjourned. Thank you very much.

19 (Whereupon, at 10:47 a.m., the meeting was
20 adjourned.)

21

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23

24

1 REPORTER'S CERTIFICATE

2

3 This is to certify that the attached

4 proceedings before:

5 DEPARTMENT OF ENERGY

6 NATIONAL PETROLEUM COUNCIL

7 In the Matter of:

8 114TH MEETING OF THE NATIONAL PETROLEUM COUNCIL

9 were held as herein appears and that this is the

10 original transcript thereof for the file of the

11 Department, Commission, Board, Administrative Law Judge

12 or the Agency.

13 Further, I am neither counsel for or related

14 to any party to the above proceedings.

15

16

17 *Debbie Derr*

18 Official Reporter

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20 Dated: DECEMBER 2, 2004

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