GOVERNMENT OF THE UNITED STATES OF AMERICA

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DEPARTMENT OF ENERGY

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NATIONAL PETROLEUM COUNCIL 119th ANNUAL MEETING

THURSDAY, SEPTEMBER 17, 2009

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The Council Meeting convened in the Astor Ballroom at the St. Regis Hotel, 923 Sixteenth Street, N.W., Washington, D.C., pursuant to notice, at 9:00 a.m., Claiborne P. Deming, Chair, presiding.

PETROLEUM COUNCIL MEMBERS PRESENT:

CLAIBORNE P. DEMING Chair
DAVID J. O'REILLY Vice Chair
MARSHALL W. NICHOLS Executive Director

DEPARTMENT OF ENERGY MEMBERS PRESENT:

HON. DANIEL B. PONEMAN, Deputy Secretary of Energy
HON. JAMES J. MARKOWSKY, Assistant Secretary, Fossil Energy

NEAL R. GROSS

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(9:06 a.m.)

CHAIR DEMING: Could I have your attention, please? Good morning. I'm Claiborne Deming, the chair of the National Petroleum Council.

Will the 119th meeting of the National Petroleum Council please come to order.

Welcome to you all, members of the Council, honored guests, and members of the press and public. We have what I think is an efficiently structured meeting this morning that will formally mark the beginning of the Council's service to the new administration, continuing an unbroken service to administration since President Truman established the Council in 1946, through 10 Secretaries of the Interior, and now the 12th Secretary of Energy, Steven Chu.

For the members of the Council, if there is no objection I will dispense with the

calling of the roll.

The check-in across the hall in the Chandelier Room 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 to ensure we have an accurate record of today's attendance.

I would like to introduce to you, and for the record, the participants at our head table. On my immediate right is The Honorable Daniel Poneman, Deputy Secretary of Energy, representing the Council's co-chair, The Honorable Steven Chu, Secretary of Energy, who is unavailable to be here this morning.

Dan, we are pleased to have you here.

Next is the Vice Chair of the Council, Dave O'Reilly. On my left is The Honorable James Markowsky, Assistant Secretary of Fossil Energy, and next to him is Marshall Nichols, the Council's Executive Director.

Our first order of business this

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morning is to hear from the Deputy Secretary of Energy. Daniel B. Poneman was confirmed by the United States Senate on May 18, 2009, as the Deputy Secretary of Energy.

Under the leadership of Secretary of Energy Steven Chu, Mr. Poneman also serves as Chief Operating Officer of the Department. Since 2001, Dan was a principal of the Snowcroft Group, an international business advisory firm based in Washington, D.C. Prior to that, he was a partner in the law firm of Hogan & Hartson, and from '93 to 1996 Dan served as Special Assistant to the President and Senior Director of the Non-Proliferation and Export Controls at the National Security Council.

He joined the NSC staff in 1990 as Director of Defense Policy and Arms Control, after serving as a White House fellow in the Department of Energy. Dan co-authored "Going Critical: The First North Korean Nuclear Crisis," which received the 2005 Douglas

1	Dillon Award for Distinguished Writing On
2	American Diplomacy.
3	He received an A.B. and J.D. with
4	honors from Harvard, and a master of
5	literature in politics from Oxford University.
6	Dan, we are honored to have you
7	with us this morning, and we look forward to
8	your comments.
9	Ladies and gentlemen, please join
10	me in welcoming Daniel Poneman, Deputy
11	Secretary of Energy.
12	(Applause.)
13	MR. PONEMAN: Thank you,
14	Claiborne. Unfortunately, that introduction
15	went so long he took up all the time I had
16	reserved for my remarks.
17	No, I want to thank the Council.
18	I know the history. It has performed enormous
19	services for decades for the nation, for the
20	Department. It is indispensable. You know,
21	at the NSC we used to say, "I don't have
22	access to the unclassified literature

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to

anymore." And it is only by working with you, and by having the interchange that we have with people on the front lines of the industry, that we can come up with intelligent policies in the areas that we all care so much about.

So I want to thank and honor my colleagues up on the dais, Claiborne Deming, Dave O'Reilly, Marshall Nichols. I am delighted to be joined by our newly-confirmed Assistant Secretary for Fossil Energy, Jim Markowsky. And we are delighted.

I had an opportunity to look at some of the more recent work of the Council, and I was very impressed by its breadth, its analytical rigor, and I think that there's a lot we can do together.

Secretary Chu very much enjoyed his brief visit, wished he could stay overnight, so he could be here this morning, but sends his warm regards and enjoyed the time that he spent with you all last evening.

These are tough issues, and I think in thinking about oil and gas and its broad role in energy, I always find that it is useful to go to first principles. And we just have to start from certain premises of where American interests are best defined, and it is clear that, as a first principle, we rely vitally on energy in all of its forms for our continued safety and security and prosperity as a nation.

In that connection, given that Providence has not distributed the resources that support our energy use evenly around the globe, we have an inextricable commitment to be working with industry in ensuring that Americans enjoy the access that they require to support that prosperous growth of the economy.

And it will continue to be I think a core interest and a first principle to ensure that we have for our nation the access to the resources, oil and gas resources, but

really all energy resources that we need to drive that prosperity.

first level of Also, at the principles, the President is committed to drive our economy into a more prosperous future. We have had a very rough period that we have all endured. We look cautiously like we are on the right road again. We are still looking at a very difficult road ahead, and we significant budgetary and financial have issues that we need to grapple with.

But we believe that we are moving in the right direction, and it is clear to me — and I believe clear to all in this room — that as we move in this direction that energy will continue to play a vitally important and central role. Indeed, I would submit that I think it will — it will play an even broader role, because I think many of the most exciting growth opportunities that we are looking at in the future can in fact be found in the energy sector.

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So it is not only merely finding the energy that we need to support our economic activity, but viewing that energy sector as an opportunity for starting a new clean revolution, as the President and Secretary Chu like to call it. And, again, that's something that I'm sure is of keen interest to all in this room.

We are all facing at the same time deep concerns that are global concerns. We have all been reading the IPCC reports. We are all thinking about the preparation for Copenhagen, and we all are concerned that the prospects for climate change may in fact impair some of those continuing and enduring interests that we all share.

And so it is absolutely critical that we get the relationship between energy and climate change right, and I think we can already see some of the directions in which we will be heading. We are a nation that has been created by and fueled by and driven by

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innovation, and we now see it all across the various energy sectors.

I come out of more of a nuclear background, but in the time I have been spending at the Department of Energy through transportation sectors, through the the unbelievable opportunities that are witnessing in building efficiency -- and I want to acknowledge the good work that I was reading in the last couple of days that the Council has already done in this area, in the area of increased use of renewables, smarter technology, smart grids to make sure we make best and optimal use of the electricity that is available to us, and, obviously, continuing hydrocarbon critical access to the our resources of the world at the same time we seek to reduce foreign dependence and increase our ability to tap our own resources.

The U.S. Government and industry I think have an inextricable relationship to one another, and inextricably bound up mutual

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interest that we need to pursue. And that is 1 why this Council is so important, and that is why the dialogue that Secretary Chu was proposing last evening is so important. is Ι think it underestimated how much good we can do when we When I was still at the work together. National Security Council, it was not in my wheelhouse but I watched with keen interest the whole development of the BTC discussion. 10 And I remember the early days when people said 12 it couldn't be done, and it was done, and it 13 was done by -- from what I saw from a -- sort of a third party perspective, an incredibly 14 15 effective cooperation close and government and industry. 16 17 So I am hoping that, as we start 18 this new relationship, and this new phase I 19 should say of our relationship, that that kind kind 20 tradition and that 21 relationship is one that we can see continue. 22 I am reminded -- I don't know if I

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learned this from Dan Yergin, from whom I learned so many things, but in thinking about energy and looking into the future, I am often reminded of what Sheikh Yamani I think famously said about the Stone Age, which was the Stone Age did not end because we ran out of stones.

so I think one of the most exciting things that we are looking at as we are moving ahead into the future is the role of technology. And I think that we have to put in place the kind of regulatory framework that is friendly and open to technology, and I think one that — again, going back to first principles, gets us to where we want to go.

And where we'd like to go as a nation I think is a future that is a future of greater -- efficient use of the resources that we have, and a low carbon future in which we can mitigate the most harmful effects of potentially catastrophic climate change. And that is why we have been working very hard on

coming up with legislation that can move us in that direction and set a clear regulatory framework that can support us in that dimension.

We need to be responsible steward of the resources that are available to us. The United States remains the world's second largest producer of natural gas and the third largest producer of oil. We know that we will never drill our way out of dependence on foreign oil, but I think it's clear that we can, and we should, use the resources that are already granted to us by nature.

And even as we continue to develop our renewable energy resources, I would just like to quote President Obama as saying that we can and should increase our domestic production of oil and natural gas. We are not going to transform our economy overnight. We still need more oil, and we still need more gas. If we've got some here in the United States that we can use, we should find a way

to do it in an environmentally sustainable way. We are committed to doing that.

Since January, the Department of Interior has held 21 onshore lease sales and two offshore auctions, offering more than 55 million acres of U.S. public lands in offshore areas for oil and gas development. Those sales have generated, so far, more than \$875 million in revenues.

We are looking forward to developments exciting that we have witnessing over the past several years in natural gas, some of the resources that we are able that were not earlier now to tap available, and I think there are very exciting developments that we can see into the future using natural gas for transportation fleets and a lot of innovative ways that people in this room are already deeply engaged working on.

We, therefore, need to understand as best as we can the infrastructure

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requirements that we are going to need as we continue to move into the evolved use of oil and gas in the future, and that is precisely why when we were talking earlier to Claiborne and to Dave with Secretary Chu a couple of months ago, and the suggestion came from that discussion to have the study of the Council on prudent development of North American natural gas and oil resources, we immediately seized upon that as something that we thought was critically important and on which we would really benefit from the good work of the And we are looking forward to Council. working with you on that study.

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It is never easy to develop these resources. They are not always found. It is not like the old days where we used to see on TV with the gushers, unfortunately. We understand that, and so now we have to work in a more sophisticated way and do this in a manner that is sensitive to the environment, supporting our economic growth, and also

supporting our national security.

We have been working very hard, and it is another big challenge to the Department right now -- I have been spending some time on this as well -- on the need to reduce carbon emissions in the transportation sector. We have been granted budget authority from the U.S. Congress in our auto loan program, the ATVM program, and we have already made a number of grants of loan and loan guarantees, and we are looking at this from a portfolio perspective.

We already, as people here know, have provided over \$8 billion in loans to support \$10 billion projects for Ford, Nissan, and Tesla. We are looking at vehicles. We are looking at drive trains. We are looking at components. And we have an opportunity here I think to help, again, working with industry, to support a lot of new technologies that will move our vehicle fleet in the right direction.

already provided have We billion in authority to support \$4.8 billion in projects to build battery manufacturing and transport electrification capabilities, all in 4 support of our effort to get a million plug-in 5 hybrids on the roads by 2015. 6 We are pursuing, and I know many 7 of you are pursuing, next-generation biofuels 8 that come from agricultural wastes, energy 9 crops, including algae. And we are also, 10 obviously, using the regulatory authorities of 11 the U.S. Government to try to move us in this 12 direction as well. 13

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sure most of you Tuesday that EPA Administrator Jackson and Transportation Secretary Ray LaHood announced new vehicle fuel standards that will reduce oil consumption by approximately 1.8 billion dollars -- barrels, sorry.

This is another area where we need your help, and I know it is a burden. told it is not completely unprecedented.

when Claiborne and Dave came in we talked about three subjects, and we ended up picking two out of the three for a study, and we are grateful that the Council will consider doing another study on future transportation fuels.

We just need to understand a lot better the options, the risks, the costs and benefits of the options that we are now facing, and how to integrate that fleet into nationally and infrastructure the internationally it would need to support it. I think, and Secretary Chu certainly believes, National Petroleum Council is that the uniquely positioned to be able to help us think this thing through.

I would also like to spend a few minutes talking about electricity. The transformation of the electricity supply is a daunting, daunting challenge. We are going to need a lot of carbon capture and sequestration. We are going to need more nuclear power, and we are going to need to

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move towards more clean and renewable sources.

We still get half of our electricity from coal. In China and India, it is 80, 90 percent. In many other countries, the same. It is -- you know, it is a huge part of our electricity in terms of our installed base.

We are blessed. This is one that we got a better deal from the creator in the sense of U.S. possessing a quarter of the known coal supply, and between the U.S., Russia, and China and India, we account for two-thirds of global reserves. And of course coal accounts for a quarter of the world energy supply and 40 percent of carbon emissions.

So coal is here, and it is going to be here for a very long time. It is going to support the electricity generation fleet for a very long time, and that makes it absolutely indispensable that we get significant progress, and soon, in the area of

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carbon capture and sequestration, in the area of advanced coal technologies, and we are very open to finding new and unconventional ways to get at this problem.

We have provided \$3.4 billion -- I should say "we." The Congress has provided \$3.4 billion for carbon capture and storage, and we are aggressively pursuing a whole range of coal gasification, burning coal and oxygen in the atmosphere, and other technologies that will get us moving in the right direction.

We are going to have to not only build new plants, we are going to have to retrofit old plants. The fleet that we've got is going to be burning coal for a very long time, and these are plants that once built will last for decades.

And I don't know what the latest statistic is, but I believe for quite some period the Chinese were putting about a gigawatt of new coal power generation in per week, which is staggering but it's true. And

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it just points I think to the significance of the problem.

I might add that the conversations of the Secretary Chu and others that with our Chinese had Department have counterparts in this and many other areas have shown the Chinese to be taking a keen interest in moving in the same direction as well.

Of course, the G8 has called for 20 CCS projects in 2010 in China. Secretary Chu, when he was there in July, announced a new clean energy and research center that will facilitate joint research in a number of areas, but certainly including CCS. We are also supporting testing CO2 sequestration in seven different geologic formations in the U.S., and we also believe that the human capital component is vitally important, and we are supporting training in that area as well.

So whether it is in the area of R&D, in the area of deployment, we are going to have to move I think very aggressively and

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innovatively to see what we can do and how soon with respect to our improvement of our coal generation that is in a manner that comports with our broader environmental and economic goals.

And also, when we are talking about baseload electricity, of course we do have 20 percent of our baseload electricity that is effectively carbon-free, and that is our nuclear fleet. We have 104 operating reactors, and I think for me a very compelling various analysis of how these pieces, including nuclear, fit together came out in 2003 when a group at MIT produced a study that looked at the future of nuclear power.

And I remember the front part of that report saying, you know, we used to ask about, is it going to be fossil fuels or efficiency or renewables or nuclear? And the answer is: it's all "ands." We need them all.

And just to keep nuclear at 16

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percent of global power generation by midcentury would require, according to that study, a tripling of the installed fleet. In other words, from somewhere over 400 gigawatts to around 1,000 gigawatts of installed base.

And in some countries it is already happening. I believe the last number I saw was about 36 reactors now getting built in 12 countries. And Secretary Chu believes that we need to move smartly to get nuclear back into the mix as a source of baseload power generation.

We are working on pulling together a Blue Ribbon Commission to take a look at the whole back end of the nuclear fuel cycle, given that the Yucca Mountain geological posture is not going to be the direction that we are taking.

We have, as I am sure everyone here knows, loan authority available to support both front end processing of nuclear fuel as well as a number of nuclear power

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And we are in due diligence on a stations. these potential nuclear number of stations, and we will be looking to use that loan authority, understanding that overcoming 30 years of not having built a nuclear power country, the Federal station in this Government is going to have to play a very important role in seeing if we can get that back into the mix.

Just as in the other areas, we are not just looking at the current date technology. We are looking at advanced technologies. We are looking at advanced fuel cycle technologies. We are looking at Gen IV reactor technologies.

And as President Obama said when he was in Prague, we also need to look internationally, because if you had enrichment and reprocessing facilities growing in a linear function with powerplants you are going to have way too much enrichment reprocessing. And as somebody who is a former non-

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proliferation guy, this is not good in terms of the risks that we run for the diversion of technology to nuclear weapons.

so President Obama called for the establishment of a new civil framework that will provide assurance to those governments who wish to avail themselves of nuclear energy that they can do so in a manner that does not run an excessive risk of proliferation. So we have to, in short, provide them with assured and reliable access to nuclear fuel services, so they do not feel compelled to go down that road on their own.

Finally, I want to say a few words about the Recovery Act. We have been, again, as everyone here knows, actively pursuing a wide smorgasbord of alternative and renewable sources of energy, new ways to harness the sun, to harness the wind, the geothermal potential of the Earth. Secretary Chu has called for a new industrial revolution on clean energy to create jobs, increase

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security, and reduce the threat of climate change.

This really is the economic opportunity of our time. And as the President has said, the nation that leads the world in creating new sources of clean energy will be the nation that leads the 21st century global economy. That is the nation I want America to be.

I often read on Sundays Tom Friedman, and I think he has been very articulate on this subject. And it has been noticed in countries outside of our own that the clean technology revolution is one that promises enormous economic benefit.

Again, I just think of America at its best, and it's when we innovate, it is when we invent the future. And I think the potential here -- and, again, the people in this room have access to the technology and to the markets that will hopefully allow them to embrace it, we are at our best, and we are at

our most prosperous, and we are at our most secure.

The Recovery Act is something that we view as a down payment. We recognize that this was a shot in the arm, and that the purpose of it is really to seed a lot of potential ideas, but it is absolutely critical that those -- of those ideas that actually have merit and promise and test out in the marketplace, are taken up by industry, are financed by our capital markets.

and I think this is a place where government and industry must work together, to make sure that we make good use of that investment from the taxpayers as a glide path to that future energy path, because we can't simply take for granted that it will happen without a very active intervention.

I think tremendous progress is possible under the Recovery Act in energy efficiency. Secretary Chu likes to call that

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not the low-hanging fruit but the fruit that is lying on the ground. And since 40 percent of our greenhouse gas emissions come from buildings, the up side potential there is enormous. We have the substantial weatherization investment that we are making that has direct impact, short term, on jobs and on getting our economy moving again.

And also, as the Secretary likes jobs that cannot these are say, So that's really а exported. situation in providing significant economic stimulus at the same time it provides a big down payment on getting the kind of efficiency returns that we are looking for.

We are looking at a wide array of ways to make these investments smart. When I first came into the Department to talk to people about the Recovery Act, they said there are two failure modes. We can either not get the money out the door, or not get the money out the door smart, and we are working very

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hard with a team that is working unbelievably hard, and with internal discipline that I have rarely seen to do just that.

The National Petroleum Council is

-- it's an invaluable resource. We need to
learn from you. You are out there every day
in the marketplace, in countries around the
world. You are running rigorous analytical
processes that I think we can benefit from.
You can benefit from one another.

And my hope and my sense is is that if we start from some of these first principles, where I think, frankly, οf whatever Americans whether they be political stripe or from industry or from government or from academia, can agree -- and remember the old line about everyone entitled to their own opinions, but you are not entitled to your own facts.

And I think this is really what Secretary Chu was getting at last night. I think that lays the predicate to figure out

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how we can get the country where it needs to be.

If you think some of the ideas that we have been proposing are pipe dreams, we want to hear about it. We want -- you heard that, again, clearly from the Secretary last night. Tell us why, tell us where the assumptions are in error, and we will -- no pun intended -- drill down with you and try to figure this out.

We do want to get beyond just a kind of linear business-as-usual scenario. We do think that the challenge of facing climate change, of embracing the clean revolution, is such that we need to think out of the box, all of us.

And it's something that we view with excitement, with anticipation, but with humility, that there is no silver bullet, that there is no one person with a monopoly on all the right answers, and that if we start from the premise of trying to move in a common

direction with the cooperation between our respective experts that we have a chance of succeeding. And it really is a challenge for our time.

You know, I've spent a lot of time in and around different parts of the issues, but this piece of it, looking at the future, it's not just the most important set of issues for the country, it is the most important set of issues of issues for the planet. It is about our prosperity. It is about being environmental stewards that our children and grandchildren will be proud to look back on.

It is about exploiting these energies in a way that the other values that we cherish and promote are preserved and protected in a way that, as we do for example pursue the nuclear option, we are able to do so in a manner that does not produce risks of the proliferation of nuclear weapons that could bring, you know, so much havoc.

And I think there is really

nothing more exciting that anybody could be 1 working on today. So we hope that this forum 2 will provide the opportunity for a 3 conversation. I give you my word that I will 4 I can representing the 5 work as hard as Secretary, and being in very close touch with 6 the Council and the members on the studies 7 going forward, if this is the direction which 8 we take, because I think we can expect nothing 9 less. 10 And I hope that we have a good 11 opportunity. You know that our door is always 12 open to learn more, and we hope that it's a 13 two-way street in terms of communication. 14 So I want to close by thanking 15 everyone here for all the time and effort you 16 have spent so far, and looking very much 17 forward to continuing that effort together and 18 the country into a prosperous, bringing 19 successful, and secure future. 20 Thank you. 21 (Applause.) 22

CHAIR DEMING: Dan, thank you so much for those thoughtful remarks. And he has agreed to take a few questions. So if there's any -- and there's a portable mic that we're going to bring around.

Dan Yergin?

MR. YERGIN: Thank you very much

MR. YERGIN: Thank you very much for your comments, Dan. I think speaking —
I think all the members of the Council very much appreciate your looking and the Department's looking to the Council and to its members as a resource that will be helpful to the Department and the Secretary as you pursue your complex agenda.

As part of that, I wanted to ask a question. Obviously, innovation technology ran throughout your remarks. And you have had a long involvement with, as you say, technology going back to your involvement with nuclear power.

As you try and shape, prioritize, and implement this broad technology agenda, we

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would be interested just to hear your sharing 1 some of your observations of dealing with it now over the last several months, and how it takes form, and how it looks to you. 4 5 MR. PONEMAN: Thank you, Well, I'm reminded of that Willie Sutton line. б When they say, "Why did you rob banks?" he 7 says, "That's where the money is." 8 guess I'd make a couple of remarks. 9 One is one thing that was new to 10 me was I did not realize the extent of the 11 role of our building fleet in the whole 12 13 greenhouse gas equation. So as mentioned in my remarks, 40 percent of greenhouse gas 14 from buildings, 15 emissions come investments there have a tremendous return. 16 So the -- I think for me one -- I 17 think we are going to continue to look to 18 those places that could be, if you will, in 19 economic terms most lucrative in terms of big 20 payoffs for modest investments. And it's very 21

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interesting to see -- there have been polls

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conducted where people -- these would be what you might call grass top, not grass roots, people who are actually in the industry tended to overestimate the cost of some of these building efficiency investments and to underestimate the rate of return on those investments.

So some of it is actually getting the technology. Some of it is applying the technology. Just before we started here, I had a chance to chat with one of my predecessors, Mayor Bill White. And he was telling me about what they are doing in Houston in terms of moving into neighborhoods.

If you pick out, you know, one and two houses spread all over creation, it is hard to make this thing work. But if you can do this at scale -- and you probably saw the ramp up in technology that we just had -- if we can move into whole neighborhoods and go through and do the windows and do the insulation and do the smart meters, you can

get the kind of scale that at least will demonstrate, in a manner that we hope the private sector will then pick up and promulgate across. So that is one thing.

The other thing is, as I often find myself saying, the -- and as a historian you will appreciate -- the historical track record of Gosplan is not such as to inspire confidence, right? So, you know, in the old Soviet days, you know, it came down from the politburo in Ohio, it's going to be this and this and this and this. That is not the attitude we're taking.

We don't know where that transformational breakthrough is going to be. So we are ecumenical in a sense, and that is why. And I think it's very important — that's why you see the things that we're doing in terms of ARPA-E, the hubs, the Energy Frontier Research Centers, to see if we plant a number of these seeds, which ones will take root.

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so I would say it is a two-fold approach in which we are trying to be thoughtful and intelligent about finding where those highest payoffs are going to be, and then also trying to do what government should do in the sense of making those initial investments where no shareholder should be expected to look out that many quarters for a return, but which may in the long run provide the biggest payoff.

And I'd just say one other thing. We are doing this not only kind of across technologies, but we are doing it within individual sectors. So, for example, when we were looking at the portfolio of projects that have been presented for possible support under the ATVM program, you have the first three that we took, and part of the order you take them is the order in which they submit, but it happened to be a portfolio de facto -- Ford, Tesla, and Nissan -- where you had different kinds of combinations.

1	Whether you make a modest
2	improvement on an existing engine design, or
3	a slightly evolved engine design, you get a
4	modest improvement over a huge fleet, or more
5	dramatic, you know, technological breakthrough
6	in terms of drive train and electrification
7	over a smaller one that might become sort of
8	a new wedge into the marketplace. So we are
9	trying to be take a portfolio approach to
10	the way we look at these technologies.
11	CHAIR DEMING: We have time for
12	one more question. Back of the room.
13	MR. POTTER: Thank you. Good
14	morning, Mr. Secretary. My name is Fred
15	Potter, Hart Energy here in Washington, D.C.
16	Terrific speech. I want to reemphasize the
17	point you made on the 2003 study. Every
18	technology can make a difference, each
19	molecule counts, we are all in this together.
20	Terrific.
21	Really just a comment. In terms
22	of DOE and NPC working together, two things I

wanted to raise and get your reaction to. You know, we still statistically count, you know, foreign oil or international supplies of oil, also counting from Canada and Mexico, and so it says 62 percent dependent, but they are part of North American free trade. They are certainly secure.

It kind of leaves us with a statistic that instead of 45 percent dependent if you will, or 62 percent dependent, and it creates a -- maybe a greater fear if you will on raw statistics than is practical. I don't think we are energy insecure from Mexico and Canada, point one.

energy secure and solve that 45 percent problem, or 62, depending on -- I would love to see DOE and NPC do an analysis that said of that unit of challenge, by offshore how much can we get? What period of time? At what taxpayer cost? By hybrid, how much can we get? You know, I'm focusing on transportation

fuels -- can we get over what timeframe per 1 cost? Ten miles more a vehicle, 2,000 miles 2 of car. Biofuels, cellulose, how much can we 3 4 get? And do a matrix over the next 15 5 or 20 years that really gives the policy folks 6 and the Congress, DOE, NPC, this is our matrix 7 This is the BTU equivalent or of choices. 8 9 barrel equivalent we can get, over what cost. And I think we really would depolarize the 10 debate about foreign oil, biofuels, hybrid. 11 We need them all. But without a decision 12 1.3 matrix like that on costs and volume and timeframe, we are still not quite operating 14 off the same baseline. 15 So welcome your comments. Really 16 appreciate DOE's leadership and NPC working 17 18 together. I'll just -- it's MR. PONEMAN: 19 not a question, but I'll just allow myself a 20 brief comment. I think too often, and where 21

I found -- that's why I like to go to first

principles -- when we start out with a conclusion and try to back our way into the facts, this is not a good way to go.

And the kind of analytical work you are doing, you are suggesting, where we have common units of account, measure it in BTUs, do just a straight up and down costbenefit analysis across these various options, I completely agree with the premise that we need to, you know, think very thoughtfully about what dependence or independence means, given the fungibility of oil, given the various kinds of relationships we have with different nations.

But I think if we get that kind of

-- if we start with good terms of reference as

to what the right questions are, so you are

building the right matrix, and then provide

common units of account and compares likes to

like. Then, I think you do get straight-up

options that -- I'm a person, I don't know, I

actually believe sometimes there is an

analytically correct answer you could actually find. Not always. I think we've got a better chance of doing that.

And my sense is that since at the level of top line we want the prosperity, we need the security, you know, we want to modernize our vehicular fleet, we want to tap in, to the maximum extent possible, to the economic opportunities that are inherent in some of these new technologies, and then you laid out, well, what do these new -- various, not all new, technologies have? You know, what are the implications upstream and downstream?

We got a shot, and, again, it is one that no one has a monopoly on either the data or the wisdom to interpret the data.

But I will give you one last anecdote. I was out at Livermore a few days ago, and -- this is actually interesting. I don't know how this works, but they have a -- they have a matrix, and there have been a huge

number now of climate change predictive studies, some of which have been around long enough to actually kind of match them up to some data that has followed the publication of the various studies.

they showed all of these And laying out the different predictions, you know, the degrees Centigrade, the parts per different million, all the areas of measurement, and then all of the different And the column that showed the aggregate average of all of the studies turned out to be more accurate than any of the individual studies.

I thought that was interesting, and I'd like to think maybe it's -- and it's a fitting note on which to close. I think maybe if we kind of work together in that way, whether it's in terms of figuring out the right investments, figuring out the best legislation, figuring out the best approach globally through Copenhagen and whatever comes

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after that, I think we will end up doing better.

Again, so I'd just like to thank everybody for coming, and wish you well in the rest of your meeting here, and I look forward to working with you on the Council.

(Applause.)

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CHAIR DEMING: Before we -- and the Deputy Secretary is going to leave as we go to the administrative parts. Before I turn it over to Dave O'Reilly to make a report of the Agenda Committee, there was reference made to the reception that we had last night where Secretary Chu made some remarks which were very thoughtful.

But if you weren't there, it really was an extraordinary event. We gave an award to Lee Raymond for his wonderful service to the Council in overseeing the Hard Truths Study. And the gift that the NPC staff selected, which was so thoughtful, was a gift of Lee and Charlene's five grandchildren,

portraits which were put together in this 1 wonderful frame, and what was so wonderful and 2 remarkable, to see the famously gruff and the 3 famously taciturn Lee Raymond emoted. 4 (Laughter.) 5 And smiled and was touched. 6 Our first administrative matter 7 that we are going to address this morning is 8 the report of the Agenda Committee. 9 Nichols can't be here, and in his stead Dave 10 O'Reilly will make the report. 11 VICE CHAIR O'REILLY: Thank you, 12 Claiborne, and good morning. 1.3 In the packets in front of you, 14 you will find a letter from Secretary of 15 Energy Chu requesting the National Petroleum 16 Council undertake not one but two studies, one 17 on the future of transportation fuels and the 18 North American resource 19 second one on development. 20 Those of you that heard Secretary 21

Chu last night, and Deputy Secretary Poneman

a few minutes ago, will recognize that these high importance the studies οf. to are recall at the administration. You may Council's meeting at this time last year the outgoing Secretary Bodman asked the Council to identify potential value-added future studies, and the scope that might be involved in addressing items that might be of interest to the next administration.

The chair of the Council accepted the Secretary's request and asked the Co-Chairs Coordinating Committee to review and high grade a list of suggested topics received from Council members, from the DOE, and other sources.

Earlier this year the Co-Chairs Coordinating Committee conducted a process that developed a list of top topics, which the Council felt could provide the most added value for the administration, and that were in NPC competencies of the areas of core membership the majority of the NPC or

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membership.

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That committee also developed papers on those topics for use by the leadership of the Council in discussions with the Department of Energy. Claiborne and I met with the Secretary and his senior staff in early May to provide an overview of the Council's operations, the results of the Hard Truths Study, and to discuss potential new topics.

Since that time, the DOE staff has conducted internal assessments of the subjects the Council might address, and has discussed potential topics with other departments of the administration. And the Secretary's September 15th letter, which is in your binder, was the result of all of that work.

And, significantly, the two topics he requested, the Secretary requested, were among the three top topics that the Coordinating Committee had suggested. Let me now briefly review those two studies, and I am

quoting a little bit from the Secretary's 1 letter. 2 future the The first one on 3 specifically, transportation study --4 requests that the National Petroleum Council 5 conduct a study on future transportation fuels 6 which would analyze U.S. fuels prospects 7 through 2030 for auto, truck, air, rail, and 8 water-borne transport. 9 study should address fuel The 10 demand, sources, manufacturing distribution, 11 infrastructure. And of particular 12 and interest is the Council's advice on policy 13 options and pathways for integrating new fuels 14 and vehicles into the marketplace, including 15 infrastructure development. 16 include consider 17 Factors to dynamics, technological advances, market 18 mandates, cost-benefit environmental 19 tradeoffs, and impacts on land and water use. 20 North The second study, the 21 Study, 22 American Resource Development

specifically the Secretary requested the following, and I quote -- the National Petroleum Council to reassess the North American resources' production and supply chain, and infrastructure potential, and the contribution that natural gas can make in a transition to lower carbon fuel mix.

Your study should describe the operating practices and technologies that will be used to minimize environmental impacts and also describe the role of technology in expanding accessible resources.

Of particular interest is the Council's advice on policy options that would allow prudent development of North American natural gas and oil resources, consistent with the government objectives of environmental protection, economic growth, and national security.

Our Agenda Committee met on Tuesday to review these requests, and our committee feels that both of these subjects

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are of great importance. So I am pleased to report that the Agenda Committee unanimously recommends that these requests are proper and advisable, and that a committee should be formed to expeditiously conduct the requested studies and prepare reports for the full Council's consideration.

So, Claiborne, this concludes the report of the Agenda Committee, and on its members' behalf I move that it be adopted by the Council.

Thank you.

CHAIR DEMING: Thank you, Dave.

We have a motion to adopt the οf the Agenda Committee, report recommends that we accept the Secretary's studies. is Ιt not request for two unprecedented for the NPC to conduct two We last did it in 1990. studies. unusual but certainly not unprecedented, and I think we ought to be flattered that the Secretary has asked us for two.

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1	Do I have a second to Dave
2	O'Reilly's motion?
3	PARTICIPANT: Second.
4	CHAIR DEMING: Are there any
5	questions or comments?
6	(No response.)
7	All those in favor say aye.
8	(Chorus of ayes.)
9	All opposed like sign.
10	(No response.)
11	We have just agreed to undertake
12	two studies, Marshall, so we'll swallow hard
1:3	and get to work.
14	I am going to move forward to
15	establish two committees made up of members of
16	the Council to conduct these studies and to
17	submit to the Council for approval these
18	proposed reports, and then we will transmit
19	our advice to the Secretary.
20	In anticipation of today's
21	favorable action, and thank you for agreeing
22	to do it, I approach two very capable Council

future

members asking, if the Council did vote to accept these study requests, would they be head of these serve as willing And I am extremely pleased to committees. that Clarence Cazalot of Marathon report the study chair agreed to transportation fuels, and that Jim Hackett of Anadarko agreed to chair the study on North American resource development. And we are extremely fortunate to have two very capable, veteran, thoughtful individuals with lots of resources -- pardon the pun -- to bring to the party to chair these two committees.

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I am going to start a process of identifying balanced groups of Council members to appoint and serve on these committees. have to ensure that these committees representative of the various views expertise that are resident on the Council.

And under the provisions of the Federal Advisory Act, NPC committees must be

comprised of Council members, but no such restriction exists when it comes to study subcommittees, task groups, and subgroups. Thus, we will include an even more broad range of participants in these subcommittees and subgroups.

And as you will recall, that was the same process that we used in the Hard Truths Study, which was so effective and so widely agreed to be an unusually effective study. And if any member of the Council wishes to serve on these committees, please come to me or come to Marshall and we will get about doing it done. And we urge and encourage you to participate in what I think are going to be interesting studies.

Now we are going to turn to the Finance Committee. I would like to turn to Chuck Davidson, Chair of the NPC Finance Committee. He will present the committee's report. Chuck?

MR. DAVIDSON: Thank you, Mr.

Chairman.

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The Finance Committee met this morning to review the financial condition of the Council, and with us were representatives of Johnson, Lambert & Company, our independent outside auditors, who were there to review their draft audit report for calendar year 2008.

And based on that review, accounting report that our pleased to procedures and controls received high marks, and I am also pleased to report that the contingency fund year-end Council's at remained at about five months of expenditures. And this is in no small part due to your to contribution requests, which response exceeded 96 percent in 2008.

As you may recall, the Finance Committee also met this past March and recommended a calendar year 2009 budget in the amount of \$3,658,000, which was a 10 percent reduction from 2008, and recommended also that

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-- member contributions in the same amount to fully fund this budget.

By a ballot vote, the Council

this morning we also reviewed 2009 expenditures to date as well as projections

membership approved both recommendations, and

year-end.

The cost-cutting measures built into our 2009 budget have borne fruit, and additional savings have also been realized through some very favorable terms through extending the Council's office lease. As a result, we anticipate that we will end 2009 in an excellent financial position as we did in 2008.

Also in March, Claiborne sent a letter to all members requesting your financial support. To date, the response is over 94 percent, only slightly lower than the 96 percent of last year's record-setting pace. I have to put in a little advertisement here. For those few who have not yet responded, I

encourage you to do so as soon as possible.

The committee also discussed two additional items. The first was to develop a formal charter for the Finance Committee, which recognizes the committee's finance audit and investment responsibilities. Council's fiscal governance processes are strong. We want to codify them and periodically review them in a formal charter. Once completed, we will be distributing that charter to all Council members.

Finally, regarding the two studies that we just all agreed to undertake for the Secretary, later this year the committee will be -- or in early 2010, as we get the budget estimates from these two new committees, we will be incorporating those into 2010 Obviously, will budget. these inexpensive projects, and we can't expect to see the year-over-year budget decreases the Council enjoyed going from 2008 to 2009.

Thank you, Mr. Chairman. This

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1	completes my report, and I do move that it be
2	adopted by the Council.
3	CHAIR DEMING: Chuck, thanks very
4	much.
5	We have a motion to adopt the
6	report of the Finance Committee. Do I have a
7	second?
8	PARTICIPANT: Second.
9	CHAIR DEMING: Are there any
10	questions or comments for the Finance
11	Committee Chairman?
12	(No response.)
13	Hearing none, all those in favor
14	signify by saying aye.
15	(Chorus of ayes.)
16	All opposed like sign.
17	(No response.)
18	Thank you, Chuck, for a good
19	report.
20	And I followed Marshall Nichols'
21	negotiation on the lease of the offices of the
22	NPC, and he did a remarkably good job to save

us all some money.

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Before leaving the subject of the Council's finances, I would like to recognize the important and very supportive work of a key NPC staff member, Jim Hough. Jim worked for the Council for 36 years. The Council is 63 years old, so Jim has been there literally not from the beginning but pretty darn close. And the last 30 of the 36 he was Director of Administration, and then Director of Finance.

Jim has been an administrator of our finances, and I can tell you as chair, former chair of the Finance Committee, we were in good hands, and our interests were always well protected. And thanks to Jim's Tutelage, the new financial manager is continuing these high standards.

At the end of the Finance Committee meeting this morning, we formally recognized Jim's dedicated service by awarding him a Certificate of Appreciation, and so let's all give Jim Hough a round of applause

as he has done --1 (Applause.) 2 well-deserved enjoy your Jim, 3 retirement. And I can tell you from personal 4 experience it's not too bad on the other side. 5 Our final administrative report 6 this evening -- this morning is from the 7 Nominating Committee. Ray Hunt chairs the 8 Nominating Committee very ably, and he will 9 now present the committee's report. 10 MR. HUNT: Mr. Chairman, thank you 11 for saving the best for last. 12 (Laughter.) 13 Nominating Committee The 14 yesterday. I am pleased to report that our 15 meeting did not consist of a series of 16 rancorous mudslinging political campaigns. 17 Rather, the committee, with unanimity, would 18 propose the following. And I would, for 19 efficiency, suggest this should be one motion. 20 following individuals 21 That the serve until the next formal meeting of the 22

Council in 2010, or organizational meeting, 1 that the NPC Chair be Claiborne Deming, that 2 the NPC Vice Chair again be Dave O'Reilly. 3 For the Agenda Committee, we recommend Bob 4 Catell, Bob Fri, Ray Hunt, Dave Lesar, Andrew 5 Liveris, John Miller, Mike Morris, Jim Mulva, 6 Rex Tillerson, Dan Yergin, with Larry Nichols 7 serving as chair, and that was the committee 8 9 this last year. situation with the The same 1.0 Appointment Committee, all were eligible and 11 agreed to serve again. And that would consist 12 of George Alcorn, Bob Best, Bob Fisher, Doug 13 Foshee, Jim Hackett, John Hess, Jim Rogers, 14 Bruce Smith, Diemer Tru, Lou Ward, with Bob 15

In addition, we recommend the following as the five at-large members of the Co-Chairs Coordinating Committee, Greg Armstrong, John Hamre, Steve Malcolm, Adam Sieminski, and Pat Woertz.

Palmer serving as chair.

With that, Mr. Chairman, that

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1	would be one motion, and we would recommend
2	unanimously that these individuals serve until
3	the next organizational meeting of the
4	Council.
5	CHAIR DEMING: Thanks, Ray.
6	I have a motion to adopt the
7	report of the NPC Nominating Committee. Do I
8	have a second?
9	PARTICIPANT: Second.
10	CHAIR DEMING: Are there any
11	further nominations from the floor?
12	(No response.)
13	Any questions of Ray while he is
14	up here to receive your arrows and mud and
15	whatever?
16	(No response.)
17	No, there's not. Hearing none,
18	all those in favor of the motion say aye.
19	(Chorus of ayes.)
20	All opposed like sign.
21	(No response.)
22	The report is adopted.

Before the final items on our 1 formal agenda, let me ask if any Council 2 member has any other matter to raise at this 3 time. 4 (No response.) 5 Does any non-member wish to be б recognized? 7 (No response.) 8 Our last item is a sad one, which 9 marks the passing of a very distinguished 10 Council member. Bill Custard will present a 11 memorial resolution in honor of his father-in-12 law, Frank K. Pitts. 13 Thank 14 MR. CUSTARD: you, Claiborne. And I just can't express how much 15 I appreciate the opportunity to be able to 16 provide this or read this memorial resolution 17 18 today. long 19 Frank and Τ had We all laugh sometime about relationship. 20 father-in-law/son-in-law relationships. Frank 21 and I were coming up on 50 years, and I can 22

1 tell you he was one of the greatest guys I 2 have ever known in my life. He, if I may before I read it, 3 just a couple of personal observations. 4 was a gentleman through and through, of the 5 old school. He was a man that had absolutely 6 unlimited enthusiasm and energy. Whatever he 7 undertook, he gave it his all. 8 9 Now, Frank was not easy. He may have been one of the toughest traders I have 10 ever dealt with in my life, and at times I had 11 to challenge whether he was really thinking 12 about family estate planning or not when we 13 14 were competing with each other. He was a great American. He loved 15 16 this country, and he appreciated all of the 17 opportunities it afforded him. He loved this 18 industry. He absolutely thrived on it. answer to everything was to drill it. 19 Не never met a prospect he didn't like. 20 I think that, as we visited quite 21

a bit in those last couple of weeks, what I

really wanted to share was he said, "You know, I have been very fortunate and people have thanked me for some of the things I have tried But one of the nicest things that to do. happened to me in my entire life was being a member of the National Petroleum Council." And he said, "You know, people, past and present, " he said,

represent the very best of our industry and the very best of the United States." That's really -- it was one of his final comments to me, and I wanted to share them with you.

if I may read the memorial resolution to Lloyd Franklin Pence, presented to the National Petroleum Council this, the 17th day of September 2009, the members of the Petroleum Council deeply were National saddened by the death of their distinguished colleague, L. Frank Pitts, on March 16, 2009, at the age of 98.

Born in Wesson, Mississippi, Copiah-Lincoln graduated from 1910. he

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Community College in 1930 and went on to attend Northwestern University in Evanston, Illinois. Soon after he began his career with Nu-Enamel Paint Company in Chicago. As the thriving Nu-Enamel expanded, Frank moved to Europe to open paint stores across the continent, and by age 29 was president of the international company.

An independent oil and natural gas producer for almost seven decades, Frank participated in the drilling of more than 3,000 wells. At its height, Pitt Oil and its affiliated businesses had offices and operations in 11 states. In addition, Frank was the president and largest stockholder of the geophysical firm Exploration Surveys, Inc.

As an industry activist, Frank was involved in many political groups and industry associations. He transformed lobbying efforts at the Texas Independent Producers and Royalty Owners Association while serving as TIPRO's president and chairman. During the '70s oil

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crisis, he was a staple on TV as an important spokesman for the industry.

Frank became a leading voice in Washington for the energy industry, crusading for deregulation of natural gas prices. The fruits of his efforts were seen in the Natural Gas Policy Act, a 1978 law that began to pave the way for the renaissance in domestic gas production.

Among his many honors were the Chief Roughneck Award sponsored by Lone Star Steel at that time, presented by the IPAA; the Award, the association's TIPRO 1989 Mr. highest honor; and the 2001 Pioneer of the Year Award presented by the Texas Railroad Commission, recognizing outstanding Texans for their contributions to the oil and industry.

In addition, the American Association of Petroleum Landsmen honored him with both its Distinguished Service Award and a special award for industry leadership. The

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Southwestern Legal Foundation recognized his extraordinary civic and professional contributions with its John Rogers Award, and the Interstate Oil and Gas Compact Commission presented him with the Warwick Downing Award for exemplary service and dedication.

Residents of Dallas since 1948,

Residents of Dallas since 1948, Frank and his late wife of 58 years, Martha, were leaders in the community. They were benefactors of the Dallas Opera, the Dallas Symphony Orchestra, the Dallas Theater Center. Frank was a past president of the Park Cities Rotary Club and a member of the Dallas Citizens Council.

In addition, he was a chairman of the Baylor University Medical Center Foundation, and chairman of the World Affairs Council of Dallas/Fort Worth. A benefactor of Southern Methodist University, Frank endowed four presidential scholarships.

And to honor Frank on his 90th birthday, the Custard and Maguire families

established an endowed scholarship program known as the Frank Pitts Oil and Gas Scholars, and, within the Maguire Energy Institute of SMU, the Frank Pitts Oil and Gas Lecture Series.

Being ever grateful and mindful of his early education, he endowed numerous scholarships for needy students, and a special fund for faculty enrichment at Copiah-Lincoln Community College.

First appointed to the National Petroleum Council in 1979, Frank was an active member for 30 years. During his membership, Frank involved himself in the work of many study committees. He also served as a member of the Council's Nominating Committee.

Therefore, with sincere admiration for his achievements and contributions to the nation, the industry, and the Council, and with a great sense of loss, be it resolved, on this, the 17th day of September 2009, that the deepest sympathy of the members of the

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1	National Petroleum Council de extended to his
2	family.
3	It is further resolved that this
4	resolution be entered upon the permanent
5	records of the Council, and that an
6	appropriate copy thereof be delivered to his
7	family as a remembrance of the Council's
8	esteemed and deep appreciation.
9	And, Mr. Chair, I will be honored
10	to deliver this resolution to the rest of the
11	family.
12	And thank you all very, very much.
13	CHAIR DEMING: Thanks, Bill.
14	Ladies and gentlemen, I propose
15	that we signify our adoption of this
16	resolution in memory of Frank Pitts by rising
17	for a moment of silent reflection and prayer.
18	(Whereupon, a moment of silence
19	was observed.)
20	Thank you.
21	And thank you, Bill, for those
22	thoughtful remarks. And I would echo my

1	sentiments that Frank was a wonderful,
2	wonderful gentleman.
3	Do I have a motion for
4	adjournment?
5	PARTICIPANT: So moved.
6	CHAIR DEMING: Is there a second?
7	PARTICIPANT: Second.
8	CHAIR DEMING: All those in favor
9	say aye.
10	(Chorus of ayes.)
11	Opposed like sign.
12	(No response.)
13	The 119th meeting of the National
1.4	Petroleum Council is hereby adjourned.
15	(Whereupon, at 10:15 a.m., the
16	proceedings in the foregoing
17	matter were adjourned.)
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CERTIFICATE

This is to certify that the foregoing transcript

in the matter of:

National Petroleum Council,

119th Annual Meeting

Before:

Claiborne P. Deming

Date:

September 17, 2009

Place:

St. Regis Hotel Washington, DC

represents the full and complete proceedings of the aforementioned matter, as reported and reduced to typewriting.

Peter Sullivan