AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

OVERSIGHT OF THE BUSH ADMINISTRATION'S ENERGY POLICY

HEARING

BEFORE THE

SELECT COMMITTEE ON
ENERGY INDEPENDENCE
AND GLOBAL WARMING
HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

MAY 22, 2008

Serial No. 110–38

Printed for the use of the Select Committee on
Energy Independence and Global Warming

globalwarming.house.gov

U.S. GOVERNMENT PRINTING OFFICE

61–728 WASHINGTON : 2010

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

SELECT COMMITTEE ON ENERGY INDEPENDENCE AND GLOBAL WARMING

EDWARD J. MARKEY, Massachusetts, *Chairman*

EARL BLUMENAUER, Oregon
JAY INSLEE, Washington
JOHN B. LARSON, Connecticut
HILDA L. SOLIS, California
STEPHANIE HERSETH SANDLIN, South Dakota
EMANUEL CLEAVER, Missouri
JOHN J. HALL, New York
JERRY MCNERNEY, California

F. JAMES SENSENBRENNER, JR., Wisconsin, *Ranking Member*
JOHN B. SHADEGG, Arizona
GREG WALDEN, Oregon
CANDICE S. MILLER, Michigan
JOHN SULLIVAN, Oklahoma
MARSHA BLACKBURN, Tennessee

PROFESSIONAL STAFF

GERARD J. WALDRON, *Staff Director*
ALIYA BRODSKY, *Chief Clerk*
THOMAS WEIMER, *Minority Staff Director*

CONTENTS

	Page
Hon. Edward J. Markey, a Representative in Congress from the Commonwealth of Massachusetts, opening statement	1
Prepared Statement	3
Hon. F. James Sensenbrenner, Jr., a Representative in Congress from the State of Wisconsin, opening statement	5
Hon. Earl Blumenauer, a Representative in Congress from the State of Oregon, opening statement	6
Hon. John Shadegg, a Representative in Congress from the State of Arizona, opening statement	7
Hon. Jay R. Inslee, a Representative in Congress from the State of Washington, opening statement	8
Hon. Marsha Blackburn, a Representative in Congress from the State of Tennessee, opening statement	8
Hon. John Larson, a Representative in Congress from the State of Connecticut, opening statement	9
Hon. Hilda Solis, a Representative in Congress from the State of California, opening statement	10
Hon. Stephanie Herseth Sandlin, a Representative in Congress from the State of South Dakota, opening statement	11
Hon. Emanuel Cleaver II, a Representative in Congress from the State of Missouri, opening statement	11
Prepared Statement	13
Hon. John Hall, a Representative in Congress from the State of New York, opening statement	14
Hon. Jerry McNerney, a Representative in Congress from the State of California, opening statement	15

WITNESS

Hon. Samuel W. Bodman, Secretary, U.S. Department of Energy	15
Answers to Pre-Hearing Questions	47
Prepared Statement	18

OVERSIGHT OF THE BUSH ADMINISTRATION'S ENERGY POLICY

THURSDAY, MAY 22, 2008

HOUSE OF REPRESENTATIVES,
SELECT COMMITTEE ON ENERGY INDEPENDENCE
AND GLOBAL WARMING,
Washington, DC.

The committee met, pursuant to call, at 10:09 a.m. in room 2175, Rayburn House Office Building, Hon. Edward J. Markey (chairman of the committee) presiding.

Present: Representatives Markey, Blumenauer, Inslee, Larson, Solis, Herseth Sandlin, Cleaver, Hall, McNerney, Sensenbrenner, Shadegg and Blackburn.

Staff present: Jonathan Phillips.

The CHAIRMAN. Good morning. This is the Select Committee on Energy Independence and Global Warming. We welcome you all to this very important hearing with the Secretary of Energy, Samuel Bodman.

Less than 3 months ago, when asked by reporters about predictions that gas prices would rise to $4 per gallon, President Bush admitted that he had not heard those forecasts. Well, for millions of consumers in New York and California, Chicago, all across America, $4 gas is now a reality. Gas prices have now reached a record nationwide average of $3.81 per gallon, up more than 160 percent since President Bush took office, increasing on average by 34 cents a gallon each year of the Bush administration.

The price of oil has also skyrocketed. A few years ago, people scoffed at the prospect of $100 oil. But American consumers have now seen an increase of $100 per barrel in the price of oil since President Bush took office.

The incredible escalation of gas and oil prices is not an accident. It is the reality of more than 7 years of this administration pushing an energy policy solely focused on fossil fuels.

One of the Bush administration's first major actions was to convene the secret Cheney Energy Task Force, comprised of Cabinet-level and other senior administration officials meeting in closed-door sessions with big oil and other industries. Not surprisingly, the recommendations from this clandestine group focused on more oil and gas drilling.

On January 29, 2001, the day of the first meeting of the Cheney Energy Task Force, the price of oil was $32 per barrel. The Bush administration and the Republican Congress then passed an Energy Bill in 2005 that gave billions of dollars in tax breaks and subsidies to the oil, coal, nuclear and gas industries.

On August 8, 2005, when President Bush signed the Republican Energy Bill into law, the price of oil was $64 per barrel; and over the last 7 years the Bush administration has offered big oil the rights to drill on more than 268 million acres of public land offshore. Oil companies now own the drilling rights to more land than they know what to do with. In fact, big oil currently holds more than 30 million acres both onshore and offshore that aren't even being used. But last week, on May 17, as the price of oil stood at $126 per barrel, President Bush once again echoed the tired refrain we have heard for the last 7 years, that we must increase our domestic oil exploration.

The price of oil is now $135 per barrel. After 7 years of filling our tanks with record-high gas and filling the calendar with new records for the price of oil, it is time to stop giving gifts to big oil. In the last 16 months, since the Democrats took control of the Congress, we have passed legislation not only to provide consumers with immediate relief at the pump but also to reduce our oil dependence in the long term.

Last year, the Democratic Congress passed an Energy Bill that by 2030 will reduce our consumption of oil by nearly 3 million barrels per day. Last week, the Democratic Congress passed legislation that required the Department of Energy to stop purchasing oil at record prices to fill the Strategic Petroleum Reserve. But the Bush administration can and must do more to help American families right now.

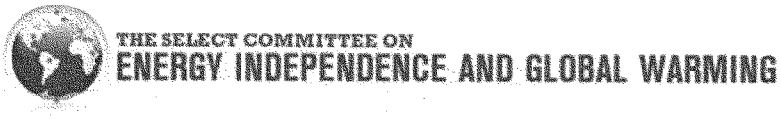
In a fire, you are supposed to stop, drop and roll; and when it comes to using the Strategic Petroleum Reserve to help the consumers in an energy emergency, the President should stop, swap and sell. The President must deploy, must sell the oil from the Petroleum Reserve, which has a proven track record of success in bringing down prices. Putting more oil into the global marketplace is the step which will send a signal that we are serious about reducing the price of oil globally.

The administration has no problem deploying our National Guard Reserves to Iraq, but it continues to refuse to deploy our oil reserves to help consumers this summer. This weekend is the start of the summer driving season, but the Bush administration refuses to take any action that would stop driving up oil and gas prices. American families are begging for help from high energy prices, and it is time for this administration to finally heed that call.

That completes the opening statement of the Chair.

I now turn to recognize the gentleman from Wisconsin, the ranking member of the committee, Mr. Sensenbrenner.

[The prepared statement of Mr. Markey follows:]



Opening Statement for Chairman Edward J. Markey
"Oversight of the Bush Administration's Energy Policy."
Select Committee on Energy Independence and Global Warming
May 22, 2008

Good morning.

Less than three months ago when asked by reporters about predictions that gas prices would rise to $4 per gallon, President Bush admitted he had not heard those forecasts. Well for millions of consumers in New York, California, Chicago and elsewhere around the country, $4 gas is now a reality. Gas prices have now reached a record nationwide average of $3.81 per gallon, up more than 160% since President Bush took office – increasing, on average, by 34 cents a gallon each year of the Bush Administration.

The price of oil has also skyrocketed. A few years ago, people scoffed at the prospect of $100 oil, but American consumers have now seen an *increase* of $100 per barrel in the price of oil since the President took office.

The incredible escalation of gas and oil prices is not an accident. It is the result of more than seven years of this Administration pushing an energy policy solely focused on fossil fuels. One of the Bush Administration's first major actions was to convene the secret Cheney Energy Task Force, comprised of cabinet-level and other senior Administration officials meeting in closed-door sessions with Big Oil and other industries. Not surprisingly, the recommendations from this clandestine group focused on more oil and gas drilling.

On January 29, 2001, the day of the first meeting of the Cheney energy task force, the price of oil was $32 per barrel.

The Bush Administration and the Republican Congress then passed an energy bill in 2005 that gave billions of dollars in tax breaks and subsidies to the oil, coal and nuclear industries.

On August 8, 2005, when President Bush signed the Republican energy bill into law, the price of oil was $64 per barrel.

And over the last seven years, the Bush Administration has offered Big Oil the rights to drill on more than 268 million acres of public land offshore. Oil companies now own the drilling rights to more land than they know what to do with. In fact, Big Oil currently holds more than 30 million acres both onshore and offshore that they aren't even using.

But last week, on May 17th, as the price of oil stood at $126 per barrel, President Bush once again echoed the tired refrain we have heard for the last seven years -- that we must increase our domestic oil exploration.

The price of oil is now $135. After seven years of filling our tanks with record high gas and filling the calendar with new records for the price of oil, it is time to stop giving gifts to Big Oil.

In the 16 months since the Democrats took control of the Congress, we have passed legislation not only to provide consumers with immediate relief at the pump, but also to reduce our oil dependence in the long-term. Last year, the Democratic Congress passed an energy bill that, by 2030, will reduce our consumption of oil by nearly 3 million barrels per day. And last week, the Democratic Congress passed legislation that required the Department of Energy to stop purchasing oil at record prices to fill the Strategic Petroleum Reserve.

But the Bush Administration can and must do more to help American families right now. In a fire you're supposed to 'stop, drop and roll' and when it comes to using the Strategic Petroleum Reserve to help consumers in an energy emergency, President Bush should 'stop, swap and sell'. The president must deploy oil from the reserve, which has a proven track record of success in bringing down prices.

This Administration has no problem deploying our National Guard reserves to Iraq but it continues to refuse to deploy our oil reserves to help consumers this summer. This weekend is the start of the summer driving season, but the Bush Administration refuses to take any action that would stop driving up oil and gas prices. American families are begging for help from high energy prices and it is time for this Administration to finally answer that call.

Mr. SENSENBRENNER. Thank you very much, Mr. Chairman.

Now my hearing aid was on during your discussion, and it seems to me that, in our three branches of government, the Congress has got some responsibility, too. And with gas prices rising through the roof, signs that energy costs will rise even higher, now is the time for leadership.

The Democrats today are calling for leadership from the administration, but it is Congress's job to set policy, to make important policy changes, and to make sure that those changes will result in lower fuel and electricity costs. So far, the Democratic leadership has not taken that job seriously, especially when it comes to gas prices. Instead of solutions to the Nation's high energy prices, the House leadership has given the American people the Pelosi premium. Since taking control of Congress in January, 2007, gas prices have risen more than $1.50 a gallon in Wisconsin under Speaker Nancy Pelosi's watch, despite her promise of a commonsense plan to lower gas prices.

There has been a lot of talk from the Democratic leadership about windmills and solar panels, but those technologies are better suited for reducing greenhouse gas emissions, not energy prices. A recent report from Secretary Bodman's own Energy Information Administration shows that while solar power receives government subsidies totaling about $24 per megawatt hour and wind power receives about $23 in subsidies, coal power receives just 44 cents and natural gas just gets a quarter. While there are benefits to wind and solar power, coal and natural gas are the best options for expanding electricity production at reasonable cost.

I think the American people's number one priority for Congress is lowering fuel and electricity costs, and Republicans are committed to doing that.

When it comes to gasoline, Democrats have focused on fuel standards and ethanol. Higher fuel standards do have the potential to help lower fuel demand in the long run, but the American people need help now. Ethanol has caused more harm than good, as both food and gas prices continue to rise. That is why I am supporting legislation that will repeal the subsidies and tariffs for ethanol and end this boondoggle which I think—using a Democrat term—can best be described as corporate welfare.

And while Democrats will blame energy costs on the President, the facts are clear. In the period between January, 2001, and January, 2007, before the Democrats assumed leadership in Congress, gas prices rose 84 cents a gallon, which is a significant jump but nothing compared to the Pelosi premium of more than $1.50 in more than 18 months.

With neither a commonsense plan in sight from the Democratic leadership or an end to high gas prices, House Republicans are hearing the cries of the American people and are putting forth our own plans which are truly common sense. We will expand production of American oil and gas and do so in an environmentally safe way. There are billions of barrels of untapped oil that can be recovered without harming the environment. Nearly 85 percent of the offshore oil and gas fuels are untapped because Congress has placed them off limits.

Additionally, we must expand the refining capacity in the United States if we are going to continue to meet the surging demand for gasoline.

The House Republicans' broad plan will also encourage the expansion of nuclear power, which is a technology that stands to greatly improve U.S. energy independence and greenhouse gas reductions. House Republicans will also push for greater energy efficiency by supporting conservation tax incentives to Americans who make their homes, cars and businesses more energy efficient. And despite their costs, House Republicans also know there are great benefits to solar, wind, hydroelectric and other sources of renewable energy and will continue to support further development of these technologies.

The primary difference between Republicans and Democrats on the issue is that House Republicans want to explore all the options that are on the table, while the Democrats want to pick winners and losers. That plan hasn't worked in the past, and it won't work now.

House Republicans are also pushing a plan that can help get energy costs under control. These are the kinds of policies that the Democratic leadership should be supporting, too. But, sadly, this kind of leadership is lacking in this 110th Congress and for the sake of all Americans, Republican and Democrat, that is a shame.

I yield back the balance of my time.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from Oregon, Mr. Blumenauer.

Mr. BLUMENAUER. Thank you, Mr. Chairman.

I am a little vexed that we have my friend from Wisconsin concerned about a so-called Pelosi premium. When in fact what we are seeing is a culmination of the policies that have been put in place, a compliant Congress doing what the Republican administration has wanted to do over the course of the last 6 years. And I particularly am interested in this canard that somehow we have got to open up some of the most pristine and delicate areas, like the Arctic Wildlife Refuge, when there are already, of the 42 million acres of American land currently leased by oil and gas companies, only about 12 million are currently drilled to produce oil and gas now.

According to the Federal Government's own surveys, 82 percent of the gas in the Outer Continental Shelf and 79 percent of the oil is available for leasing; and this is before the Republican Congress opened more space in the Gulf of Mexico for drilling in 2006.

The fundamental problem here is that the United States, with 2 percent of the world's oil reserves and using 25 percent of the world's oil, cannot continue to waste more oil than any country in the world; and we are not going to drill our way out of this problem. I think having a comprehensive energy approach as we have been looking at on this committee is part of it.

I look forward to exploring with the Secretary as we move forward some of the trade-offs here in terms of the policies working and what the implications are for their success or failure. In the final analysis, it is not simply something that we are going to be able to do by ignoring the realities. We have a small amount of a declining resource. We are going to have to be able to be more effi-

cient and give the American consumers more choices, not simply broaden the field for the oil companies that aren't already using the total amount that has been given to them that is at their disposal.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from Arizona, Mr. Shadegg.

Mr. SHADEGG. Thank you, Mr. Chairman; and I thank you for holding this hearing. It is important to have this discussion.

As you can see, we have quite a wide divide in views on this issue. I am very pleased that my colleagues on the other side of the aisle pushed to open the Strategic Petroleum Reserve and to not add additional oil to the Reserve at the moment and even, hopefully, to press to release some oil from that Reserve. I am also supportive of legislation that would say we should take—we should be replacing some of the heavy for light oil that we are putting into the Reserve. But I think it is very important to understand why that is so critical.

Although the Strategic Petroleum Reserve represents only 1/10 of 1 percent, some experts have pointed out that somewhere between 20 percent and 40 percent of the current cost of gasoline could be driven by speculation. And the argument goes that if we were to open the SPRO or stop putting oil in it, that might send a price signal to the speculators and they might stop speculating.

The important part for that discussion is that it demonstrates that those who advocate that we don't put any more oil into the SPRO right now understand that there is a link between supply and price because their argument is, look, by putting oil into the SPRO, we are reducing the supply for public consumption, and that is driving up cost and increasing speculation. If there is a link between supply and price, then we have to examine the policies of this Congress.

I have been a Member now for going on 14 years; and over that 14 years we have had vote after vote after vote after vote after vote on the issue of either increasing domestic supply or cutting off domestic supply, either opening further areas for exploration and production or restricting further areas for exploration and protection. And in vote after vote after vote, we have decided to not increase domestic production. We have decided to limit areas for exploration.

Just I believe 2 years ago there was legislation contemplated to expand production off the Outer Continental Shelf. The idea was to give the States a voice in that issue and to place the drilling rigs at least 50 miles offshore where they couldn't be seen. And we not only didn't pass it for oil, we didn't enact it for natural gas.

Just a few months ago, last summer, the majority party imposed a moratorium on oil shale. There is a fact here, and that is this Congress has created this crisis by restricting supply. Everybody agrees that in the long term we have to pursue alternatives. I would simply say that in the short term we cannot continue to restrict supply in the Outer Continental Shelf, in the inner mountain west, the oil shale, or for ANWR and expect prices not to go up.

And I thank the chairman for holding the hearing.

The CHAIRMAN. The gentleman's time has expired, and the Chair recognizes the gentleman from Washington State, Mr. Inslee.

Mr. INSLEE. Thank you.

I was at a meeting in Napa, California, a couple weekends ago of a bunch of venture capitalists and CEOs and some really exciting American businesses that are developing really truly alternative energy sources. And there was some talk about this issue, that people thought this was such a silly debate back in Washington, D.C., about whether or not we could reduce gas prices by opening up some of the areas that we currently use for our pristine areas like the Arctic. And folks pointed out that it was really a kind of a silly debate because the fact of the matter is, is somehow our dinosaurs got planted under somebody else's sand. And I am not blaming the Bush administration for that.

The fact of the matter is, the oil is just not there to have any appreciable impact on world oil prices. And no matter what we do, a barrel of oil is a worldwide market that is determined by worldwide supply and demand. We use 25 percent of the world's oil. We have less than 3 percent of the world's oil supply.

Mr. Bodman in his testimony talks about if we opened up every spigot in Yellowstone, in the Arctic and Mount Ranier National Park, we could maybe increase our domestic oil supplies by 20 percent. That is a worldwide increase of .6 percent increase of worldwide oil supplies. That will have virtually no impact on oil worldwide, barrel of oil prices. And the fact of the matter is we could drill on the National Mall, and the oil price of a barrel of oil is still going to be over $130 a barrel.

Now there are some things we can do about the speculative market. What we really need to do is to get our cars to drive on something other than oil.

I met a guy out in Napa named Shai Agassi, a young guy, he is about 35, 36 years old. Now here is a guy we ought to be listening to. He signed a contract to totally electrify all the cars in Israel and soon Denmark.

This is what we should be thinking about. We have got to get off of oil ultimately in our cars. When we do that, then we will have a transportation system that is efficient. We have to think a lot bolder than we have been.

Thank you.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentlelady from Tennessee, Mrs. Blackburn.

Mrs. BLACKBURN. Thank you, Mr. Chairman. I appreciate the hearing.

Mr. Secretary, thank you for joining us this morning.

It is so interesting to sit here and think what the American people must think as they are listening to these opening statements. One of the things that we hear from constituents, they think that Congress doesn't have and the leadership in the Congress doesn't have an energy plan. They are looking at what has happened in the past 2 years to a barrel of crude when it has gone from $55 to $130 a barrel.

As someone had mentioned earlier, the price of that barrel—and when I was preparing for the hearing, Mr. Chairman, we went back and looked; and the price on a barrel when President Bush took office was $30 a barrel. It varied very little until 2004, when

we saw growth in the India and China economies. And then it really did not start to accelerate until early 2007, and the acceleration has been from that $55 mark to $130, and that has been in less than 2 years. So I do think that is noteworthy.

Now when we were doing the Energy Policy Act of 2005, one of the items we discussed was getting that bill had taken a 6-year period of time to come to agreement. And there have been many times that, this side of the aisle, that we Republicans have pushed to address the supply and the capacity issue. We did it in the 2005 Act. We had a bill that followed the 2005 Act in October of 2005 that dealt with that issue. We had pressure from the Democrat side of the aisle to not address those capacity and supply issues.

And what we know is that our constituents and the American people want to see this issue solved. To address the price at the pump today, we are going to have to talk about supply capacity, about energy exploration, about energy independence, and begin to look at what we do in the short term, the mid-range and the long term on these issues.

Americans want American solutions. We are the most innovative people. We certainly can figure this one out. We know that there are barriers that have been placed in front of extraction, in front of exploration. Mr. Chairman, we need to remove those barriers, get the price down at the pump and have a long-term plan.

And I yield back the balance of my time.

The CHAIRMAN. The gentlelady's time has expired.

The Chair recognizes the gentleman from Connecticut, Mr. Larson.

Mr. LARSON. Thank you, Mr. Chairman. And I have to suspend belief when you listen to our distinguished colleagues on the other side. And I think it was called the Pelosi premium?

The CHAIRMAN. Yep.

Mr. LARSON. I didn't realize that Nancy Pelosi was in those behind-closed-doors meetings with Dick Cheney as they were putting together the master plan for their energy strategy that is in its current eighth year. You know, I didn't realize she was in on those meetings. But perhaps I am wrong.

Our colleagues, who used to be known as the Grand Old Party, are giving new meaning to GOP, primarily inasmuch as they have become to mean gas, oil and petroleum and protecting those interests at all costs.

You have to suspend your belief, because I think our colleagues over here have been a little bit unfair. They do have a policy, an energy policy; and Thomas Friedman has talked about it frequently. It is called leave no moolah behind. Because what we end up doing is by the moneys that we are sending overseas that work their ways through the madrassas and into the hands of the very people that are assaulting and killing our men and women over in the Middle East. And meanwhile, as gas prices continue to go up because of policies that were made behind closed doors with no oversight and review, with speculators that are running unbridled and over the counter, with an invisible market where they are able to jack the price up minimally 10 to 40 percent so that people in my district who get their Social Security check have to sign it over

to the oil dealer to pay for the heating of their homes—this was the work of Nancy Pelosi, I am told.

This is the work of an administration that hasn't had a policy and people on the other side of this aisle who continue to block initiatives that would otherwise lead to our independence and nonreliance on the Middle East for foreign oil and embrace the alternatives that we know will provide a greener environment, the jobs that we need and get away from this path that we have followed.

And with that, Mr. Chairman, although I could speak for several more minutes, I reserve my time.

The CHAIRMAN. That would be the Irish side of the gentleman, not the Swedish who like to speak longer. I appreciate it.

The gentlelady from California, Ms. Solis, is recognized.

Ms. SOLIS. It is going to be really hard to follow. But I, too, want to join my colleagues here and thank our Chairman Markey for having this important hearing.

It is nice to have you here with us, Mr. Secretary. As you know, you can hear our frustration.

And I guess my concern again is, in your testimony, you believed that we could do more here. We can actually cultivate more energy resources by drilling and opening up previous leases along our coast and what have you. Well, that is a no-starter for many of us. So how can we really talk candidly and really talk about exploring renewable energies and investment in home resources here in the United States?

Yesterday, most of my colleagues I think on the dais here supported, you know, renewing credits, tax credits so we can invest in solar energy and renewable energy. We need to do more. And I just am waiting to see what incentives and what innovative ideas that your office and through your leadership can provide.

Every day that we go home to our districts, every weekend at least, that gas prices keep inching up. In my district now in Los Angeles it has been over—well over $4 for the last 3 weeks, if not a month. And that doesn't even explain the other costs that are being applied to consumers when they go to the grocery store, because all the diesel fuel also has gone up dramatically.

It hits very hard upon our low-income, working class, blue-collar communities that right now we seem to be ignoring. And I am standing up for that little guy and that little woman out there that is trying to make it to school to take her children or to make it to her part-time job that really has no voice at this table. And I am hoping that there is something realistically that we can do other than just holding our hands up and saying, well, gee, we can't get the oil corporations to do anything about it and, oh, my God, we pay so much in taxes. Well, Jesus, when you talk to the regular Joe or Mary on the street, they are saying the same thing. And our frustration is very, very real.

This economy, we don't have support by the American public. The direction is wrong. And one area of it hits home very clearly, and that is in our pocketbook when we go home to our districts, whether it is in California, whether it is in New York, Miami, Florida or in Texas. So I would just hope you could enlighten this committee with some innovative ideas.

Thank you.

The CHAIRMAN. The gentlelady's time has expired.

The Chair recognizes the gentlelady from South Dakota, Ms. Herseth Sandlin.

Ms. HERSETH SANDLIN. Thank you, Mr. Chairman.

Mr. Secretary, welcome.

If you look at my district, the entire State of South Dakota from end to end, whether it is our vast fields of corn and soybeans on the eastern side of the State, wind across every part of the State, and the great forests of the Black Hills in the west, South Dakota embodies the idea that we need a diversified approach to our national energy policy and in particular we need to take advantage, as Ms. Solis is saying, of new opportunities for renewable energy.

So as we strive to meet our national energy needs, we must continue to recognize I think that rural America has much to offer; and rural States should be at the center of the solution as our national energy policy shifts and adjusts in ways that can enhance our national and economic security, promote innovation and conservation and ultimately ease the strain on the budgets of families and businesses.

With the passage of the original renewable fuels standard in 2005 and the aggressive increase included in last year's Energy Bill, we have already taken some initial key steps in the right direction as we seek to take advantage of the contribution of agricultural producers in rural States to reduce our dependence on foreign oil and the overall carbon emissions through an increase in the production of biofuels, wind and other types of renewable energy.

I respectfully disagree with the ranking member, the gentleman from Wisconsin, on the impact of ethanol. Ethanol has kept gas prices from going even further, upwards of 15 percent higher than they are today. And the price of corn to make ethanol has very little to do with the increase in food prices when compared to other factors like the cost of energy and the processing and transportation of food.

So I look forward to your testimony on these and other issues and in particular infrastructures for the transmission of wind energy. Thank you for being here, and I yield back.

The CHAIRMAN. The gentlelady's time has expired.

The Chair recognizes the gentleman from Missouri, Mr. Cleaver.

Mr. CLEAVER. Thank you, Chairman Markey and Ranking Member Sensenbrenner.

I would like to welcome Secretary Bodman to the hearing.

It is difficult to refute our current administration's poor record on environmental protection and renewable energy promotion. For example, the administration has consistently lobbied for drilling in the Arctic National Wildlife Refuge as if the oil there contains gold-plated gas which would solve our growing greed for gasoline. The administration has also continued to support the oil and gas industry in terms of subsidies.

Alcoholics Anonymous does not encourage its participants to visit more bars as a means of reducing their dependence on alcohol. Likewise, the solution for our energy crisis is not more drilling. For this reason, Congress is attempting to change the course of American energy policy by passing meaningful and effective legislation.

Just this week, the House passed H.R. 6049, the Energy and Tax Extenders Act of 2008. If it becomes law, this important bill will extend expiring tax provisions for renewable energy production and energy conservation. The progressive Pelosi policy has promoted renewable sources of energy efficiency and conservation, but we must have support from the current administration if we are to be truly successful.

And I hope, Mr. Secretary, that you can offer some insight into the policies promoted by this administration and that we can work together to the extent possible to reach energy independence and achieve a cleaner environment for all Americans. Thank you for being here.

I yield back the balance of my time, Mr. Chairman.

[The prepared statement of Mr. Cleaver follows:]

U.S. Representative Emanuel Cleaver, II
5th District, Missouri
Statement for the Record
House Select Committee on Energy Independence and Global Warming Hearing
"Oversight of the Bush Administration's Energy Policy"
Thursday, May 22, 2008

Chairman Markey, Ranking Member Sensenbrenner, other Members of the Select Committee, good morning. I would like to welcome our distinguished witness Secretary Bodman to the hearing today.

It is difficult to refute our current Administration's poor record on environmental protection and renewable energy promotion. For example, the Administration has consistently lobbied for drilling in the Arctic National Wildlife Refuge as if it contains gold-plated gas, which will solve our growing need for energy. The Administration has also continued federal support for the oil and gas industry. Increased use of fossil fuels is not a long-term solution to our energy crisis. For this reason, Congress is attempting to change the course of American energy policy by passing meaningful and effective legislation. Just this week, the House passed H.R. 6049, the Energy and Tax Extenders Act of 2008. If it becomes law, this important bill will extend expiring tax provisions for renewable energy production and energy conservation.

This progressive Pelosi policy has promoted renewable sources of energy and energy efficiency and conservation, but we must have support from the current Administration if we are to be truly successful. I hope that Secretary Bodman can offer some insight into the policies promoted by the Administration, and that we can work together to the extent possible to reach energy independence and achieve a cleaner environment for all Americans.

I thank Secretary Bodman in advance for his answers and insight, and I appreciate him taking the time to visit with our committee today.

Thank you.

The CHAIRMAN. Great. The gentleman's time has expired.

The Chair recognizes the gentleman from New York State, Mr. Hall.

Mr. HALL. Thank you, Mr. Chairman.

Mr. Secretary, thank you for being here.

America is clearly at an energy crossroads, and one look at oil costs or conversations with families in my district or others around the country who are being forced to sacrifice in order to keep on the lights and the heat and the fuel in their vehicles is all the evidence one would need to come to that conclusion.

It is our job in Congress to look at how we got here and what our government is doing to solve the crisis, and I am disappointed. When one looks back over the last 7 years, it is apparent the administration has pursued what I see as sort of a lose-lose-lose policy where we are shipping more and more of our dollars to unstable countries in unstable parts of the world where they are used, as one of the other members mentioned, to fund—in part, to fund madrassas or arming of these governments who we may have disagreements with about human rights or other foreign relations issues and then borrowing that money because we are running a deficit at the same time and a balance of trade deficit.

We are basically borrowing the money from other countries and finding ourselves losing our sovereignty, so it is a lose-lose-lose policy. And I would like to see us move to a win-win-win policy where we are developing the new technologies that provide jobs here and keep our dollars here in this country and, at the same time, get us our sovereignty back.

This is not an ideological statement. It is an empirical one, looking at oil prices that are breaking daily records, hitting $135 per barrel overnight. Gas prices have more than doubled since 2001. In New York, they are over $4 a gallon.

Until recently, the administration had shown resistance to providing short-term relief through timely use of the SPR; and I am glad that the administration has chosen to agree with Congress on this issue and halt deliveries to the SPR to provide some relief on the demand side.

However, the long-term solutions to our energy crisis remain somehow inexplicably tied to a "drill first, ask questions later" mentality. While private investment is driving renewables by wind and solar to grow by leaps and bounds, we are somehow being told that we really need to keep trying to bring them along and at the same time throw more money at the oil industry, as the Energy Act of 2005 did with subsidies that we have been trying to take back, tax breaks to an industry that is already claiming record profits. And also throwing more money down the nuclear rabbit hole. Dozens of years and billions of dollars in taxpayer-financed largesse.

And I just would comment that I think the ranking member said we shouldn't be picking winners or losers. We have always picked winners and losers. The taxpayer is the insurance company that indemnifies the nuclear industry since the Price-Anderson Act, for instance. So the question is not whether we pick winners and losers but whether we pick the right ones.

The path we need to follow is one that has been advocated by this Congress, focuses on green, domestic, innovative solutions that

will reduce our reliance on old forms of energy and drive rather than drain our economy.

I remain an optimist, and I hope that even in its last 6 months the Bush administration can turn a corner and join with Congress to realign the priorities that meet this vision.

I yield back.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from California, Mr. McNerney.

Mr. MCNERNEY. Thank you, Mr. Chairman; and thank you, Secretary Bodman, for agreeing to come to talk to us today.

In this committee, we are taking a broad look at all our options to reduce our dependence on imported oil. We have seen the benefits of pursuing renewable energies and the startling savings that are available through energy efficiency measures.

I am concerned that, despite the administration's rhetoric, the only action that we have seen is a push for more domestic drilling, including going to the length of preventing my State of California from requiring our vehicles in California to have more fuel efficiency.

You know, I had a constituent literally yell at me in my face last weekend because he was so humiliated to see the President go hat in hand to Middle Eastern countries to beg for oil. I agree with that sentiment, and I implore this administration to take real steps toward attaining energy independence by allowing States to lead the way.

Mr. Bodman, thanks again for coming. Let's stop the rhetoric and start working together to find solutions. And I look forward to your testimony.

Thank you.

The CHAIRMAN. The gentleman's time has expired.

All time for opening statements from the committee members has expired; and we turn to our witness, the Honorable Samuel Bodman, who is the Secretary of the Department of Energy.

Secretary Bodman has led the Department of Energy since February of 2005. He also served in the administration as Deputy Secretary of the Treasury and the Department of Commerce. He was also the CEO of Fidelity and also the Cabot Corporation, both up in Boston.

We welcome you, Mr. Secretary. Whenever you are ready, please begin.

STATEMENT OF THE HONORABLE SAMUEL W. BODMAN, SECRETARY, U.S. DEPARTMENT OF ENERGY

Secretary BODMAN. Congressman Markey, Congressman Sensenbrenner, members of the committee, I want to thank you all for providing me the opportunity to speak with you about America's energy and environmental challenges.

These are very serious issues, in my judgment. They are deserving of serious consideration which in my judgment begins with the recognition that distinct energy challenges and unique constraints are creating a new global energy reality.

Our response to this new reality is based on the fundamental premise that energy insecurity poses an unacceptable risk to the

United States's national security and our economy. Implicit in the new energy reality is the recognition that energy issues must be assessed and addressed in a global construct.

Today, coal produced in South America is used to generate electricity in Europe. Oil drawn from Africa is used to power cars in Asia. Liquefied natural gas from Trinidad powers homes and businesses in the United States. America can no longer consider its energy security as largely a domestic issue.

To illustrate what I am talking about, consider this new reality's three underlying causes: one, an extraordinary surge in global energy demand; two, resource limitations coupled with increasing geopolitical instability; and, three, the likelihood that some type of carbon constraints are an eventual part of the world's energy future.

The challenges that these underlying causes present are considerable; and the administration, in my view, has been quite vigorous in its efforts to address them. This administration has, since 2001, spent more than $22 billion to research, to develop and to promote alternative energy sources and to reduce energy demand. In 2006, the President proposed the Advanced Energy Initiative as a comprehensive plan to change the way that we power our homes, our businesses and our automobiles. The Department of Energy is moving ahead with a loan guarantee program that will assist in the development and commercialization of clean alternative energies by systems that are providing up to $42 billion in loan guarantees.

These initiatives, coupled with our other efforts, have led us to an approach which I believe can be distilled into four principal areas of focus:

One, the development of energy from a more diverse set of sources such as oil, shale and advanced biofuels, coupled with efforts to expand production on traditional forms of energy into areas such as the Arctic National Wildlife Refuge and the Outer Continental Shelf.

The development and deployment of innovative technologies such as those pursued by the Department's vehicles technologies and building technologies programs. These programs provide producers and consumers with ways to substantially increase energy efficiency at all levels of economic activity.

Three, the development and deployment of low carbon or no carbon energy technology such as carbon capture and storage, wind, solar and clean safe nuclear power.

And, four, the development and deployment of an expanded U.S. energy infrastructure to include additional refineries, expedited siting for pipelines and improvements to the electrical grid in order to handle the need for increased capacity safely and securely.

Any one of these areas that I named of those four areas requires considerable commitment. Together, they represent an opportunity for this Nation to excel and to lead.

I continue to be confident that we are laying the groundwork necessary for investment and innovation to occur. The results are not going to be immediate, but our efforts eventually will come together to increase America's energy security and to provide economic relief to the U.S. taxpayer. In addition, they will provide en-

vironmental relief by changing the impact of our energy consumption and altering the ways in which we produce energy.

To that end, between 2001 and 2008, this administration has invested more than $45 billion toward activities related to climate change science and technology.

In April of this year, the President set a new national goal for stopping the growth of U.S. greenhouse gas emissions by the year 2025. But that reduction in emissions will take place only so long as the necessary technology continues to advance, which is an important mission for this Department. It will require the cooperation of the world's major economies, an effort that the President proposed and is leading, and the cooperation of Congress, State and local governments, businesses, entrepreneurs, investors as well as academia.

In my judgment, there is considerable reason for optimism. Having spent many years in the Nation's financial sector, I can honestly say that for the first time in history we are seeing the venture capital community putting sizable amounts of money into entrepreneurial companies in the alternative energy business.

One recent industry report showed that the so-called clean tech sector, which includes renewable energy and efficiency technologies, experienced record venture capital investment levels of $2.2 billion in the year 2007, up from just $500 million in the year 2005. That by almost any measure is quite remarkable in terms of its growth.

Mr. Chairman, each of us, in my view, has a part to play in increasing America's energy security. Developing new technologies is not enough. Implementing new policies is not enough. And it is not enough to simply devise new incentive schemes or to open new areas for production. All of these can and should contribute to increased U.S. energy security, and they must be done in concert with one another. They must be pursued with an understanding of the facts of the new energy reality. Our economic and national security future is largely dependent upon our energy future.

Mr. Chairman, at this time, I would like to conclude my remarks by asking that my written testimony be—a copy of which I think has already been provided—that that be entered into the record; and I would be happy to respond to any questions.

The CHAIRMAN. Thank you, Mr. Secretary; and, without objection, the Secretary's entire testimony will be entered into the record at this point.

Secretary BODMAN. Thank you.

[The statement of Secretary Bodman follows:]

STATEMENT OF

SAMUEL W. BODMAN

SECRETARY OF ENERGY

BEFORE THE

SELECT COMMITTEE ON ENERGY INDEPENDENCE
AND GLOBAL WARMING

U.S. HOUSE OF REPRESENTATIVES

MAY 22, 2008

Mr. Chairman and members of the Committee, thank you for this opportunity to appear before you this morning to discuss the energy and environmental challenges facing our nation. It is important to first recognize that that we live in a new energy world, where energy insecurity poses an unacceptable risk to our economy and national security. We live in a time when we must pay even greater attention to the interrelated environmental challenges posed by our dependence on fossil fuels, a time when free and competitive markets for energy trade and investment are essential, and a time when innovation and support for the development of new technologies is absolutely critical.

We are in a global environment and our actions should reflect that reality. Today, coal produced in South America is used to generate electricity in Europe, oil drawn from Africa is used to power cars in Asia, and liquefied natural gas (LNG) from Trinidad powers homes and businesses in the United States. We can no longer look at our energy security as solely a domestic issue. We must consider the global context as we work toward developing new energy solutions for this new energy reality.

I believe it is important to understand what I view to be the three principle causes of this new reality: 1) a significant surge in demand 2) geopolitical instability and resource limitations 3) concerns about climate change.

GLOBAL DEVELOPMENTS AFFECT AMERICA'S ENERGY SECURITY

The high-priced energy environment is being driven by the fact that demand has outstripped supply. In the past three years, we have witnessed an unprecedented surge of demand for commodities around the world, but primarily from developing countries such as China and India where demand is expected to increase by over 70% of the increase in global primary energy use by 2030[1].

A few facts tell the story. In 1990, private ownership of automobiles was prohibited in China. Today, there are approximately 40 million automobiles in China for over a billion people. That figure is increasing at a rate of 7-9 million per year and is projected to be in excess of 200 million total vehicles in less than twenty years. To put this in context, the United States is a country of 300 million people yet we have roughly 240 million vehicles. The growth in China is astonishing.[1]

India has a growing thirst for energy to fuel its rapidly developing economy, where GDP is expected to expand at an annual rate of 6.3 percent[2]. According to the International Energy Agency (IEA), energy demand in India will more than double by 2030[3], with transportation demand projected to grow by 6.1 percent per year over the next 25 years as vehicle ownership expands with rising household incomes.[1]

---

[1] International Energy Agency's World Energy Outlook 2007, p. 73.

[2] International Energy Agency's World Energy Outlook 2007, p. 463.

[3] International Energy Agency's World Energy Outlook 2007, p. 463.

Additionally, there are over 1.6 billion people around the world who do not currently have access to electricity.[4] As we help promote policies of increasing development, trade, and prosperity, those people will ultimately become connected to the grid and when they do, the necessary supply for that demand will be staggering. Some estimates are that electricity demand will double worldwide over the next 25 years.[5] Meeting that demand could require a significant global investment in infrastructure over that time frame.

PREPARING FOR A CARBON CONSTRAINED FUTURE

We know that the world is not running out of energy resources, but above ground risks such as resource nationalism, limited access, and infrastructure constraints may effectively limit production to something far less than what may be needed. We need to consider the issue in the context of tackling the issue of global climate change and the likely future reality of a carbon constrained environment.

Just as we are linked by supply and demand in the energy markets, so too are we linked by the environmental effects. What happens in one country now has effects on others. Emissions of CO2 and other greenhouse gases in the atmosphere contribute to the global concentration of GHGs regardless of where the emissions come from. Any impact from GHGs will result from these global emissions. To have any meaningful impact on global GHG concentrations, action to address GHG emissions must include all major economies. Now more than ever, our environmental future will be determined by global cooperation.

All of this points to the same conclusion: the energy challenges we face are global in scope; therefore, so too, must be our solutions.

RESPONDING TO THE ENERGY CHALLENGES WE FACE

Within the context of the challenges outlined above, it is my view that we must recalibrate our focus on the following major areas:

- We must develop more traditional energy supplies from a greater diversity of sources.
- We must have more energy options through the development of technology.
- We have to substantially increase energy efficiency.
- From a technology standpoint, we should promote development of low carbon and no carbon technologies.
- We must improve the Nation's energy infrastructure and better secure it from purposeful and inadvertent disruptions.

We must expand conventional energy supplies and diversify their sources. This is why the Bush Administration continues to call for the development and production of our domestic oil and gas resources found on the North Slope of Alaska, along the Outer Continental Shelf, and in the Rocky Mountain States. These areas contain substantial

[4] International Energy Agency's World Energy Outlook 2007, p. 281.
[5] International Energy Agency's World Energy Outlook 2007, p. 73.

amounts of oil and natural gas, and new development technologies and methods will provide the opportunity for this development to proceed with proper protection for the environment.

For example, at the end of 2006, the President signed the Tax Relief and Health Care Act, which included the Gulf of Mexico Energy Security Act "GOMESA". The GOMESA allowed for leasing of slightly more than 8 million new acres in the "Eastern and Central Gulf of Mexico planning areas. The Department of the Interior and the Minerals Management Service on March 19th of this year announced the preliminary results of Lease Sale Number 224 and 206, which included a portion of this OCS acreage, (about 2.3 million acres) within the "Sale 181 Area" of the Eastern and Central planning area, and is evaluating the bids it received. In the Spring of 2009, the remaining new acreage in the Central Planning Area, the "Sale 181 South Area," will be offered for sale pending an environmental review of the area.

The Bureau of Land Management estimates that there are approximately 31 billion barrels of undeveloped oil resources and 231 trillion cubic feet of undeveloped natural gas resources remaining to be discovered on onshore Federal lands. About 62 percent of these oil resources and 41 percent of the natural gas resources are currently unavailable for leasing and development[6]. The Minerals Management Service estimates there could be almost 86 billion barrels of undiscovered technically recoverable oil resources and 420 trillion cubic feet of undiscovered technically recoverable natural gas resources offshore on the Federal Outer Continental Shelf, and about 20 percent of those resources are not available for leasing due to ongoing Congressional moratoria and a Presidential Withdrawal. This amount is equivalent to almost seven years of U.S. crude oil consumption at 2007 levels, though it would take much longer to produce the resource and the economically producible resource could be significantly smaller.

The Department of Energy and the Department of the Interior estimate that the Arctic National Wildlife Refuge (ANWR) fields alone could allow America to produce up to a million additional barrels of oil a day at peak production, which translates to about 27 million gallons of gasoline and diesel fuel per day[7]. That would be about a 20-percent increase of domestic crude oil production over current production levels and could mean lower gasoline and diesel fuel prices. Yet, these proposals have been repeatedly blocked by Congress.

We must also vigorously pursue development of new technologies, and DOE is doing that. Since 2001, the U.S. government has spent more than $22 billion to research, develop and promote alternative energy sources and reduce energy demand. In his 2006 *Advanced Energy Initiative* (AEI), the President laid out a plan to change how we power our homes, our offices, and our automobiles. In support of these goals, DOE is

---

[6] EPCA III to be released 5/22.

[7] Using 18 billion barrels per DOI 1/25/2008 testimony, the amount of OCS oil not accessible is equivalent to 9.6 years of U.S. crude oil production.

establishing Energy Frontier Research Centers (EFRCs) to accelerate the rate of scientific breakthroughs needed to create advanced energy technologies and is standing up its Loan Guarantee office, which will encourage early commercial use of new or significantly improved energy technologies. In addition, the Department has a number of programs focused on supporting emerging energy technologies.

We must vigorously develop power generation sources which reduce carbon emissions, and DOE is doing that. The AEI recognizes that nuclear energy, which supplies twenty percent of our Nation's electricity, is a non-carbon dioxide emitting source of energy and will be a key factor in any climate change mitigation scenario. While we share the hope to expand use of wind and solar energy, we will need more nuclear power plants in order to maintain the current percentage of our electricity that is non-carbon dioxide emitting to meet growing demand. To this end, we are committed to safe nuclear power and to deploying advanced technologies.

The Global Nuclear Energy Partnership (GNEP) is a cooperative framework among 21 member countries with a common vision. GNEP supports reduced global dependence on fossil fuels through the safe and secure use of nuclear energy, in a manner that also meets important nonproliferation objectives, including the development of advanced, more proliferation-resistant fuel technologies. GNEP helps to address spent fuel and waste management challenges. Other key objectives of the program include efforts to establish reliable fuel services, develop advanced safeguard approaches, and promote new, advanced reactor designs appropriate to the capabilities and needs of developing countries.

Continued development of the geologic repository at Yucca Mountain, Nevada, including submission of the License Application to the Nuclear Regulatory Commission, is important to support the necessary expansion of nuclear power in the U.S.

Development of a wide array of renewable energy sources is critical, and DOE is leading the way. R&D projects in the areas of wind, solar, and geothermal energy are addressing the barriers to operability, reliability and storage that will bring costs down and enable even greater industry growth. The Solar America Initiative aims to make photovoltaics cost-competitive by 2015. Since 2001, America has increased wind energy production by more than 300 percent, and more than 20 percent of new electrical generating capacity added in America came from wind last year[8].

In order to utilize America's abundant coal reserves, which is used to meet about 50% of the nation's electric power needs, the President and Congress have invested billions of dollars, in cooperation with leading businesses, to develop technology that will help utilities cut carbon dioxide emissions, with additional benefits in reduction of sulfur dioxide, nitrogen oxide, and mercury emissions from power plants. This year's budget request for DOE's coal program is the largest submitted to Congress in over 25 years. In 2009 alone, the combined government and matching private sector commitment in clean

[8] http://www.whitehouse.gov/news/releases/2008/03/20080305.html , paragraph 44, sentence 2 and 4.

coal research and development is estimated to be nearly $1 billion (subject to appropriations).

Through seven U.S. regional partnerships, the Department of Energy is making progress on demonstrating the potential of pumping carbon dioxide safely underground, through a process called sequestration.

The President's Clean Coal Power Initiative (CCPI) is a demonstration program that seeks to deliver innovative technologies to improve the environmental performance of new and existing coal-fired power plants in the U.S. There are currently eight active CCPI projects and a third round of solicitations is currently underway that is aimed at technologies that will capture CO_2 for sequestration or other beneficial use.

The FutureGen program also seeks to demonstrate CCS technology on commercial plants. DOE has restructured the program to provide funding for the addition of CCS technology to multiple industry-planned plants that could be operational as early as 2015. This approach builds on technological research and development advancements in Integrated Gasification Combined Cycle (IGCC), pulverized coal (PC), and CCS technologies achieved over the past five years and is expected to at least double the amount of carbon dioxide sequestered compared to the original FutureGen concept announced in 2003, where the rate was 1 million tons per year[9].

We must also aggressively move forward with the development and use of biofuels. Last year, President Bush proposed the Twenty-in-Ten plan to reduce U.S. oil dependency by twenty percent within ten years. It called for 35 billion gallons of renewable and alternative fuel use by 2017 and reform of the fuel economy program in passenger cars. In 2007, Congress responded in part to the President's energy proposals by passing the Energy Independence and Security Act (EISA), which requires the Environmental Protection Agency to issue a new renewable fuels standard (RFS) that will substantially increase the use of renewable fuels in the U.S.

The Department is committed to advancing technological solutions to continue promoting the cost-effective, sustainable production of biofuels. Just last calendar year, DOE announced over $1 billion in multi-year funding biofuels R&D (subject to appropriations). To meet the ever-growing demand for energy worldwide, especially in emerging economies such as China and India, while confronting climate change, biofuels must play a significant role and be a part of a balanced portfolio of energy solutions. Last year, the Department launched the formation of three Bioenergy Research Centers to provide the transformational science needed for bioenergy breakthroughs.

In addition to breakthroughs in advanced fuels, the Administration is committed to advancing vehicle technology. For example, Plug-in Hybrid Electric Vehicles (PHEV) could potentially get over 80 mpg, more than triple the current average fuel economy. Because PHEVs require far more battery capacity, battery technology is particularly critical. To make PHEVs more cost competitive, batteries must be cheaper, lighter, and

[9] See FutureGen Report to Congress, 2004, p. 5.

longer lasting. The Department is supporting research and development on batteries as part of its Vehicle Technologies Program. We also continue our long-standing support for the Freedom CAR and the U.S. Advanced Battery Consortium focusing on battery technology R&D to make hybrid vehicles more marketable –we need to increase storage capacity and durability, improve charge and discharge performance and reduce costs.

ENERGY EFFICIENCY

The Federal government must provide leadership in energy conservation, and I am proud that DOE is helping to fill this role. For example, this month the Department was pleased to announce the completion of the 500th Energy Saving Assessment at the nation's largest industrial facilities. These assessments have helped identify over 80 trillion British Thermal Units of natural gas—roughly equivalent to the natural gas used in over one million American homes. This program is a small part of our efforts to support the broader goal of working with leading industrial companies, plants, and supply chains to reduce their energy intensity by 25% over a 10-year period, consistent with the Energy Policy Act of 2005 (EPACT) Section 106 .

Last year the President issued an Executive Order to mandate the federal government to lead by example and reduce our energy intensity by 30% by 2015. On August 8, 2007, I announced the Transformational Energy Action Management (TEAM) Initiative, a plan for DOE to meet or exceed the aggressive goals for increasing energy efficiency throughout the federal government laid out in Executive Order 13423. As the Secretary of Energy, I have challenged my team to meet this benchmark in 2 years. We are underway toward meeting this challenge. Through the use of Energy Savings Performance Contracts and other efforts, the Department anticipates achieving the President's mandate.

The Department and other Federal agencies are supporting a broad range of efforts to improve the efficiency of both new and existing structures and energy using equipment. For new commercial buildings, the Department is working on the development of cost-effective technologies, integrated design strategies and improved operating procedures designed to help increase the energy efficiency of new commercial buildings by 30% beyond the 2004 standard. Simultaneously, DOE has an aggressive research program to enable the construction of net zero energy commercial buildings by 2025. To achieve this goal DOE will develop whole-building strategies that use 60 to 70 percent less energy relative to the 2004 standard, with on-site renewable energy providing sufficient energy to meet all remaining energy needs. For appliances and equipment, DOE and EPA continue to use the Energy Star program to promote the introduction and purchase of higher efficiency products, while also DOE sets required minimum efficiency standards for certain products.

LEADERSHIP IN REDUCING GREENHOUSE GAS EMISSIONS

The U.S. is leading the development of many advanced technology options that have the potential to reduce, avoid, or sequester greenhouse gas emissions. The U.S. Climate Change Technology Program (CCTP) was created by President Bush in 2002, and subsequently authorized in Title XVI of the Energy Policy Act of 2005, to coordinate and

prioritize the Federal Government's investment in climate-related technology. From fiscal years 2001 through 2008, the Federal Government has dedicated over $45 billion in all climate change-related activities and incentives. In September 2006, CCTP issued its *Strategic Plan* organized around six complementary goals: (1) reducing emissions from energy use and infrastructure; (2) reducing emissions from energy supply; (3) capturing and sequestering CO_2; (4) reducing emissions of non-CO_2 greenhouse gases; (5) measuring and monitoring emissions; and (6) bolstering the contributions of basic science.

In addition to the funding for climate change-related activities, DOE has available $42.5 billion of loan guarantee authority for its new Loan Guarantee Program, established by the Energy Policy Act of 2005, to support investments in new technologies that avoid, reduce or sequester air pollutants or greenhouse gases. To ensure due diligence of applications under the Loan Guarantee Program, DOE has requested in its FY2009 Budget Proposal an extension of authorization to issue loan guarantees through FY 2010 and FY 2011.

The recent energy bill will also result in billions of tons of CO2 reductions through increased fuel economy, lighting efficiency requirement, and the new renewable fuel mandate.

On April 16th, the President announced a new national goal to stop the growth in U.S. greenhouse gas emissions by 2025. This new goal marks a major step forward in America's ongoing efforts to address climate change. If we fully implement our strong new laws, adhere to the principles the President outlined, and adopt appropriate incentives, we will put the United States on an ambitious new track for greenhouse gas reductions. The growth in emissions will slow over the next decade, stop by 2025, and begin to reverse thereafter, so long as technology continues to advance. Taken together, these landmark actions will prevent billions of metric tons of greenhouse gas emissions from entering the atmosphere.

CONCLUSION

Through the actions I have described, coupled with the tremendous amount of ongoing research and development at the Department of Energy and international collaboration through multilateral and bilateral dialogues, we are advancing the effort to curb America's dependence on fossil fuels and reduce GHG emissions. These efforts are expected to eventually help mitigate the effects high energy prices have on the American taxpayer. There is no silver bullet that will immediately solve our energy challenges, or drastically reduce costs at the gas pump. But we need to work together and answer the President's call to increase domestic exploration, expand our nuclear infrastructure as well as solve our long-term nuclear waste storage challenge.

In order to achieve the greatest benefits from the technologies I have described in this testimony, a number of technical and non-technical hurdles must be overcome, including legislative, regulatory, and litigation issues. For example, in order to achieve significant

growth in renewable power, transmission line siting concerns must be addressed. In order to gain the benefits of CCS, we must allow for pipeline siting as well as regulatory certainty on liability. To expand nuclear power, our only currently available GHG-free base load resource, we must fulfill our obligation on waste and minimize NIMBY-ism. Most experts say that current climate legislation proposals would require greater use of natural gas in the near term; we must therefore provide adequate access to domestic supplies and/or ensure LNG infrastructure to accept imports.

It is not enough to say we need solutions; we must take real actions that will allow these solutions to come to fruition. We have made great progress in the past seven years, and the groundwork has been laid to meet our nation's economic, national and energy security needs in the future.

The CHAIRMAN. The Chair now recognizes himself for a round of questions.

Mr. Secretary, we know that swapping and releasing oil from the Strategic Petroleum Reserve has a proven historical track record of success. President Bush's father in 1991 deployed the Strategic Petroleum Reserve. Prices dropped by 1/3. When President Clinton deployed the Strategic Petroleum Reserve, prices dropped by 18 percent; and when President Bush deployed it after Hurricane Katrina, there was a reduction of 9.1 percent.

Why is President Bush refusing to answer this historical challenge by deploying the Strategic Petroleum Reserve, by now sending millions of barrels of oil out into the open marketplace that will have, obviously, looking at the historical record, a depressing effect upon the price of oil?

Secretary BODMAN. Look, the goal, Mr. Chairman, is to provide security for this country. That is what the purpose of the SPRO is. And the SPRO is there. It is meant to deal with matters where we have the physical delay, interruption of the flow of oil to our country. We don't have that issue today, and that is the reason.

The CHAIRMAN. Well, we did not have that in 1991. We did not have that in the year 2000, when President Clinton deployed it. We did not have that, in fact, when the President deployed the SPRO after Hurricane Katrina.

Secretary BODMAN. Of course we did.

The CHAIRMAN. In each one of those situations there was not an international crisis that was going to have some permanent effect upon our access to oil.

You understand what I am saying here? What we have got here is last Friday President Bush asking the Saudis to please produce more oil because it would have an effect on reducing the price of oil for American consumers.

Secretary BODMAN. I understand.

The CHAIRMAN. The Saudis said no. But we have 700 million barrels of oil stored that are ready to be deployed that will have the same effect if President Bush was willing to use it right now because of the speculation in the oil marketplace that nothing is going to happen.

Why won't you recommend to President Bush that he deploy the Strategic Petroleum Reserve, given the historical, successful record?

Secretary BODMAN. I don't know how to be clearer with you, sir.

First of all, there was in 2005—I don't know about the other cases, but there certainly was an interruption of supply that was caused by the hurricanes and that we had requests for the availability of oil, and we responded.

The CHAIRMAN. Don't you believe that there is now rampant speculation going on now in the oil futures marketplace——

Secretary BODMAN. No, I don't.

The CHAIRMAN [continuing]. That is artificially driving the price up exponentially almost on a daily basis?

Secretary BODMAN. No, I don't.

The CHAIRMAN. You don't believe there is speculation right now?

Secretary BODMAN. Let me explain why, if I may.

The CHAIRMAN. Sure.

Secretary BODMAN. If you look back over the history of oil production globally, it increased by about a million barrels per day per year. So that each year as you moved along, it increased by roughly a million barrels a day. Until you got to the year 2004. In the year 2004, we had almost an increase of 3 million barrels a day of consumption. In the year 2005, 2006 and 2007, we have had flat production. There has been no change in the global production of oil over that period of time.

And the facts are that in the year 2004 we sopped up all the additional—all the available spare capacity in the system. And that has been the issue. That is the issue today. And it is clear to me that when you look at very little spare capacity in the system and you look at the ability of price to reflect the increase in demand, if you have a 1 percent increase in demand, my economics friends tell me, you have about a 20-fold increase in price. So that for every 1 percent increase in demand, I have got a 20 percent increase in price. It is easy to see that we have got that kind of situation going on at the current time.

The CHAIRMAN. Well, we have seen over the years 1 percent increase in demand, but we have never seen a spike like we have seen over the last——

Secretary BODMAN. And that is because in the year 2004 we sopped up all the additional capacity of the system.

The CHAIRMAN. Mr. Secretary, what you are testifying here today is that you are not going to recommend to President Bush that he use the Strategic Petroleum Reserve as a weapon against Saudi Arabia, against OPEC, to tell them we are not going to stand on the sidelines and that we are going to actively send more oil into the marketplace. That over the next 10 years you might have a plan to drill in wilderness areas in our country. But over the next 10 weeks, this summer, there is no plan that the Bush administration has to reduce the price of oil.

Secretary BODMAN. I don't believe——

The CHAIRMAN. What one weapon you have, the Strategic Petroleum Reserve, a proven weapon of success against OPEC, you are not going to deploy, notwithstanding Saudi Arabia turning a deaf ear to President Bush's request last Friday.

Secretary BODMAN. First of all, Saudi Arabia did increase the production by some 300,000 barrels.

The CHAIRMAN. But not in response to the President. They said that is something they had already done.

Secretary BODMAN. I assume that that is the case, but I don't know that. But the situation is that the Strategic Petroleum Reserve is meant to be there as a protection for the American people.

The CHAIRMAN. The American people right now are being—Mr. Secretary, the American people are being tipped upside down at the pumps and having the money shaken out of their pockets. Ford just announced that they are going to cut 15 percent production in the manufacture of vehicles this year. Airlines are declaring that they are on the verge of bankruptcy. The American people are under assault from the skyrocketing price of oil, and the Strategic Petroleum Reserve is the one weapon in the short run we have to stop this bubble from continuing to ravage the American economy and the American people, and we must use it now.

Secretary BODMAN. I disagree with you, sir.

The CHAIRMAN. Well, I think it is a disagreement that is really going to hurt our economy.

My time has expired. I recognize now the gentleman from Wisconsin, Mr. Sensenbrenner.

Mr. SENSENBRENNER. Thank you very much, Mr. Chairman.

There is another way I think we can reduce the price at the pump, at least those of us that have to buy gas that has 10 percent ethanol in it, and that is repealing the tariff on imported ethanol, which is a protection for the U.S. ethanol industry that is reflected in the pump, at least for those of us who live in areas where there has to be this kind of a blend. Does the administration have any plans to reduce or eliminate that tariff?

Secretary BODMAN. I think that the administration would deal with the questions related to the tariff by working with Congress. We are happy to work with Congress on that subject.

Mr. SENSENBRENNER. Doesn't the administration have the power to do this administratively, however?

Secretary BODMAN. I don't believe so, sir.

Mr. SENSENBRENNER. Okay. So it does require an act of Congress?

Secretary BODMAN. I believe so. Yes, it does.

Mr. SENSENBRENNER. Well, if it does require an act of Congress, will the administration request that we consider legislation to repeal this tariff?

Secretary BODMAN. I don't have a good answer to that offhand, but I would be happy to get it for you.

Mr. SENSENBRENNER. Well, I would appreciate that.

I will give Mr. Markey some of my time since he used a bit of it up in his round of questioning. But it seems to me that we ought to have everything on the table. And we hear an awful lot of ranting about big oil, and a lot of that ranting is deserved. But I also think that big corn has got an oar in this equation as well because of the protection against cheap ethanol coming into the market that is produced outside this country.

I would just very strongly urge the administration to put out a full court press to reduce the tariff; and maybe, at least with the 10 percent of the petroleum that we get at the pump, we can reduce the cost of that, which will bring down the total cost.

I thank the gentleman and yield back the balance of my time.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from Oregon, Mr. Blumenauer.

Mr. BLUMENAUER. Thank you, Mr. Chairman.

Thank you, Mr. Secretary.

Your phraseology here I think is important when you talked about new energy realities that I think we are all trying to adjust to. You have been clear in your testimony in prior comments that we are dealing with a global energy market that is being affected by things that are happening around the globe and that there is no one source. It is all sort of blended together. And you just finished saying that results won't be immediate, that there is certain lag time that is going to be required as these things work their way through the system and adjustments are made in production and

what not. I am curious if you have a perspective on what that lag time is before there are things that ripple their way through the energy production system. Six months? Six years?

Secretary BODMAN. I think it varies, sir, according to which form of energy you are thinking about.

On oil, we have already, I think, seen a turn where, for the first time, we have a turn in the percentage of oil that we import. For the first time in some years, it has declined; and I think that is an indicator that if the non-OPEC producers continue to do what they are intending to do that we will see a success there.

Nuclear power, I would expect that we would see nuclear power and the licensing of and the proposals for nuclear power in a serious way. I think we now have four reactors that have been applied for.

Mr. BLUMENAUER. My time is limited, and I want to get at this notion of, if we have a sense of lag time, are we talking months, years on an overall energy situation?

Secretary BODMAN. I think we are talking years. We are going to be talking a few years to see in biofuels, which is the whole question that the chairman raised the issue about. In biofuels, we are looking at, by the year 2012, that is 4 years out, that we are going to have cellulosic biofuels that will be cost competitive with corn.

Mr. BLUMENAUER. Well, we are looking here from an historic perspective. In May of 2001, when your predecessor was on the Vice President's Energy Task Force, their vision was put in place, and at that time gas prices were $1.70. In 2005, you said that 95 percent of the administration's energy policy had been implemented. And now we are looking at $2.07 a gallon for gasoline. Then we have the Energy Policy Act in August of 2005, which the President claimed was going to make a big difference for every American. A year later, there was a big celebration in the Department of Energy celebrating the first anniversary of the passage of that.

I am trying to get a sense now, we have had the administration in control since 2001. You had a Congress that in the main was very much in agreement with the administration, compliant, giving you what you wanted, and much of it was implemented, and it has been now 6, 7 years.

Secretary BODMAN. Right.

Mr. BLUMENAUER. Are the $4 a gallon prices that we are seeing now a result of the success of the energy policy that has been in the pipeline now for some 7 years?

Secretary BODMAN. I would say not, sir. I would say, however, that when I—you quoted me as saying that 95 percent of the energy policy of the administration had been implemented. That is not correct, if that is the word you claim that I said. I don't recall having said that.

Mr. BLUMENAUER. Then let me reframe that. It has been 7 years. You have had an administration that has gotten virtually everything it has wanted from Congress. It has been in place. And I grant you that it takes a year or 2 or 3 to work its way out. Shouldn't we be seeing the results? Are we seeing the results of the energy policy?

Secretary BODMAN. Well, we are starting to see the results, yes. As I indicated, the percentage of oil that we are importing has started to turn.

That the American public is fed up with the high prices, I recognize that. I am acutely aware of that. I hear about it every day. And it is something that you and I have in common, I am sure.

But it is also something that I think—we are looking to decades. We have been 30 years without appropriate research having been done on renewable energy, on solar energy, on wind energy; and this takes a long time to accomplish. And so it is something that is years away, in my judgment.

Mr. BLUMENAUER. Thank you very much.

Just for your records, my understanding is that you did say that on March 9, 2005; and if I am in error——

Secretary BODMAN. I don't recall having said that. If I said that, I was dead wrong.

Mr. BLUMENAUER. I am giving you a specific date. If I am in error, I will correct that, if you did not, in fact, say that on March 9, 2005.

Secretary BODMAN. Thank you, sir.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from Washington State, Mr. Inslee.

Mr. INSLEE. Thank you, Mr. Secretary.

I think you said several times that you expected the world to be operating in a carbon-constrained economy at some point in the future; and I want to ask, is that something you believe should happen? Do you believe that we should be taking actions to deal with global warming to restrain the growth of carbon dioxide and other greenhouse gases? Or are you simply stating that you are resigned to that happening and you can't stop that from happening.

Secretary BODMAN. Of course, it should happen; and we are doing everything we know how to do to accomplish that.

Mr. INSLEE. So you think we should be doing all we know how to be doing to accomplish a reduction in greenhouse gases?

Secretary BODMAN. Yes, I do.

Mr. INSLEE. Great. I do, too. I think we might disagree on whether we are doing that, however.

I want to ask you about a cap-and-trade system, which we know how to do because we invented it in the United States. It has worked marvelously in sulfadoxine, with probably zero cost to the U.S. economy. Europe has now engaged in it on their second round that they have learned some lessons on, and they are now going to improve some of the stakes.

We have an American system that we know works. We have a system that has been proposed in the Senate. I believe it has passed the committee over there. And we have a proposal many of us on this dais are supporting here for a cap-and-trade system. To me, it is real clear that, absent that, we won't be able to achieve the carbon constraint that you indicate is necessary.

The last time you were here I asked if you had spoken to the President about the cap-and-trade system, and you indicated you had not. Could you tell us what the administration plans are if we send you a cap-and-trade bill this year, whether the President will

sign it? And, if you can, describe the cap-and-trade system that the President will sign. We are most anxious to receive some leadership from the White House.

Secretary BODMAN. The President laid out issues related to greenhouse gas control that he would be prepared to support: reasonable and achievable goals that encouraged the investment in new technology, that worked on nuclear power, that encouraged the use of coal, that all nations need to be included in the program, and that we remove trade barriers. As I recall it, those were his five or six different points; and he has laid that out.

I will tell you, sir, that I have now been in this administration 7½ years, and I have spent a lot of my time at Commerce and then at Treasury and now at Energy negotiating with the Chinese over their exchange rates. And we have made this much progress. And I would tell you that I think it is a mistake for the President to unilaterally declare what he is prepared to do prior to undertaking this whole major economy meeting, series of meetings, which he has been doing; and it is my view that he is correct in the way he is going about dealing with it.

Mr. INSLEE. Well, that is very disappointing. Because, essentially, you just said that the President will not join us in embracing a carbon-constrained effort in the United States during his remaining term of office.

Secretary BODMAN. I didn't say that.

Mr. INSLEE. Well, obviously, we are not going to have a global agreement by June 20, 2009; and what you basically said is America is going to secede from its historic destiny of leading the world in these matters and taking a back seat and refusing to act until China agrees. And I think that is a huge mistake for several reasons.

Number one, we didn't wait for China to develop democracy before we acted. We are the world's leader, we are the world's largest polluter, and we have got both the moral obligation to act but, more importantly, an economic opportunity here.

I mean, I met people yesterday in my office that are signing solar thermal contracts for solar thermal plants. We have got great strides in solar photovoltaic. We have got great strides in enhanced geothermal. We got guys making all-electric cars starting in June. We have got the young man I talked about signing a contract to electrify the whole State of Israel. But those people can't get the help of the White House to send a signal to the markets that they need to invest in these new companies because there is going to be a price on carbon. It is very, very disappointing.

And I just have to tell you that when the world looks back at all of our terms here, I just wish you could spend the next few months figuring out how to achieve a constraint on carbon in the U.S. economy that can drive investment into these new technologies. I think we are missing a huge opportunity here. I am very disappointed in your position.

You can comment.

Secretary BODMAN. Well, I would just say that that particular company that you mentioned, to my knowledge, they have gotten a lot of investment and that they are pretty well fixed.

Mr. INSLEE. But the venture capital community, I met with 12 of them here in an office, in fact, in this building, 2 weeks ago and said, look, until—as long as the fossil fuel guys can put their pollution in the sky for free in unlimited amounts, we are not going to get this job done. You are letting the guys—it is like putting their garbage in a dump truck, back it up to the city hall parking lot and dump it all for free. As long as the fossil fuel guys can do that, we are not going to get the quantum leap we need so we lead the world and become the arsenal of clean energy like we were the arsenal in freedom. It is very disappointing. We are going to have to work starting in January.

Thank you.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentlelady from South Dakota, Ms. Herseth Sandlin.

Ms. HERSETH SANDLIN. Thank you, Mr. Chairman.

Mr. Secretary, late last year, the results of a study co-sponsored by your Department were released supporting the possibility of mid-range ethanol blends such as E–20 or E–30 that can enhance fuel economy for some non-flex-fuel vehicles. In an update last month from the Department on its intermediate ethanol blends testing, it recognizes the urgent need for continued and expanded testing based on the new RFS and the anticipated saturation of the E–10 market. The update reports of the Department will have at least 160 test vehicles on line this month, and I am glad to see it is also evaluating the effects of higher ethanol blends on smaller engines such as pressure washers.

So two questions. When do you expect definitive results on the effect of intermediate ethanol blends on most engine families, and has the Department considered evaluating higher ethanol blends over E–20?

Secretary BODMAN. To my knowledge, we have not considered—to take your second question first, we have not considered above E–20, and we are testing various engines for E–15 and E–20, and that would be enough to encourage the development of the ethanol industry.

The concern is that with the concentration of the production of ethanol only in the Midwest that we will not encourage the nationwide adoption of ethanol, and we need to do that and that a way to stimulate that would be to increase the availability of E–15 and E–20.

Ms. HERSETH SANDLIN. So what exactly—I am not sure I follow what the concern is about testing E–30 at the same time.

Secretary BODMAN. We can test anything. But the E–20 is enough to get us through the——

Ms. HERSETH SANDLIN. Beyond the saturation of the E–10 mark.

Secretary BODMAN [continuing]. Whole issue related to E–10.

Ms. HERSETH SANDLIN. And then when do you expect those definitive results?

Secretary BODMAN. I don't have a quick answer for you on that, and I would be happy to get it for you.

Ms. HERSETH SANDLIN. Okay. If you could.

On wind energy——

Secretary BODMAN. On wind energy?

Ms. HERSETH SANDLIN. Yes. Your Department released its 20 percent report earlier this month concluding that wind energy could contribute as much as 20 percent of the Nation's electricity by 2030 while significantly reducing the carbon footprint, and Assistant Secretary Andrew Carson was quoted as saying that this can happen for less than half a cent a kilowatt hour. So what do you think are the key steps Congress must take this year and next to make this possible; and what do you think is key to facilitating the siting of a new transmission infrastructure, given that the report also states that transmission must be categorized with the interstate highway system?

Secretary BODMAN. Well, I think the issue related to transmission is something that we would encourage. I think we have enough tools to encourage that. We have the so-called Electricity Office of—I think it is Energy Reliability and Electricity Delivery. And that office, headed by Kevin Kolevar, is—I just had a session with them the night before last with an advisory committee that represents those from all over America dealing with this question. So I think we have—to my knowledge, we do not need work from Congress, but I would be happy to come back to you again if that proves to be otherwise.

Ms. HERSETH SANDLIN. So you are confident that there is enough incentives that currently exist for private investment alone to move forward with the building of the transmission capacity?

Secretary BODMAN. I think so, based on my discussions with the participants in that industry.

Ms. HERSETH SANDLIN. How about the production of tax credits? Would you favor the extension of the production of tax credits for wind energy production?

Secretary BODMAN. There again, we are happy to work with Congress to do that.

Ms. HERSETH SANDLIN. Do you think that that is key in order to get to the point where we can meet the 20 percent?

Secretary BODMAN. It would appear that it is.

Ms. HERSETH SANDLIN. Okay. Thank you.

Thank you. I yield back Mr. Chairman.

The CHAIRMAN. The gentlelady's time has expired.

The Chair recognizes the gentleman from Missouri, Mr. Cleaver.

Mr. CLEAVER. Thank you, Mr. Chairman.

Mr. Secretary, I just want to clear up something that I am not sure was clear earlier when you responded to Mr. Blumenauer. Are you saying or suggesting that Saudi Arabia agreed to increase production to 300,000 barrels a day as a result of the request from President Bush?

Secretary BODMAN. I do not know. I don't know that. I haven't been told that, so I don't have a quick answer for you. I do know that they did agree that day, apparently, according to, I guess, the chairman. That was something that they had already agreed on ahead of time. I don't know.

Mr. CLEAVER. That was my understanding, and so I just want to get that cleared up.

Secretary BODMAN. I don't know.

Mr. CLEAVER. The Saudis have responded to the request by the President by saying that the price of oil is impacted more by the

weakened U.S. dollar than anything else. Do you agree with their assessment?

Secretary BODMAN. No, sir, I don't.

Mr. CLEAVER. Why not?

Secretary BODMAN. For the reasons that I just mentioned. That production has been flat for the last 3 years, having had a big jump up in 2004. Whenever you have a situation where we know that demand is increasing, demand from China, demand from India and even a small increase from here, that when you have a situation like that you can get the current kind of pricing environment where you have flat production and you have very little upside in terms of availability.

Mr. CLEAVER. It seems to me that the market is madly searching for any excuse to raise the price of oil.

Secretary BODMAN. I can't comment on that, sir.

Mr. CLEAVER. Well, I mean, you know, the price of oil appears to be raised on all events, you know, whether it is a hurricane, whether it is a loss by the Washington Nationals. I mean, whatever happens, it seems as if, you know, they raise the price of oil.

Secretary BODMAN. Unfortunately, the Nationals seem to be losing a lot.

Mr. CLEAVER. Yeah, they ran out of gas early. But I am just—I mean, you know—I mean, you mentioned Katrina earlier.

Secretary BODMAN. Right.

Mr. CLEAVER. You know, the administration seems to think that to solve the problem we just drill in the Wildlife Refuge. You know, the Saudis say it is the weakened U.S. dollar.

Secretary BODMAN. That is not what I said. I said that we need everything. We need not just—this isn't going to yield to drilling in ANWR or any other place. I think I acknowledged that in my opening remarks. We need everything. We need solar energy, we need wind, we need nuclear power, we need biofuels, we need coal, carbon capture sequestration, all of it in order to deal with this issue.

Mr. CLEAVER. Greater nuclear power?

Secretary BODMAN. Yes, sir.

Mr. CLEAVER. Do you have some suggestions on where we will store the waste?

Secretary BODMAN. We are working very hard on the whole Yucca Mountain program. And next—I guess it is 2 weeks, a week from next Monday or Tuesday or so, we are scheduled to file the application.

Mr. CLEAVER. So you are going to go ahead, in spite of the fact that all the Nevada Members of Congress and the Governor are all opposed?

Secretary BODMAN. I am going ahead because I am acting as the agent of Congress and the presidency. As best I know, Congress has opined on this matter, as well as the administration; and our job is to execute.

Mr. CLEAVER. But the point is—where are you from?

Secretary BODMAN. This is a filing of a license with the Nuclear Regulatory Commission.

Mr. CLEAVER. Does it—I mean, do you support the construction of new nuclear facilities?

Secretary BODMAN. Yes, I do.

Mr. CLEAVER. Where?

Secretary BODMAN. Where?

Mr. CLEAVER. Yes, sir.

Secretary BODMAN. That is something to be looked at on a State-by-State basis, wherever the States decide they want to put them.

Mr. CLEAVER. Including your State?

Secretary BODMAN. I am including—I am a resident of the District. I don't think that there is likely to be any being put in the District.

Mr. CLEAVER. You know, the preys of the Bengal tiger increases with the distance from the jungle.

Thank you, Mr. Secretary.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from New York State, Mr. Hall.

Mr. HALL. Thank you, Mr. Chairman; and thank you, Mr. Secretary.

A couple of observations. I think you said that the administration between 2001 and 2008 has spent about $45 billion on measures to reduce greenhouse gas emissions.

Secretary BODMAN. It was on both the science and the technology.

Mr. HALL. That is good. I just want to point out that it is a little bit less than 4 months of what we are spending in Iraq. I know this is off topic. I am not asking you to comment on that. But I just think in terms of national priorities it is important to say it.

Secretary BODMAN. I understand.

Mr. HALL. And you also said at one point during your testimony that the results from many of these technologies we are looking at are not going to be immediate. You also said each of us has a part to play.

Secretary BODMAN. That's correct.

Mr. HALL. And I would suggest that if each of us—perhaps you, as Secretary of Energy, might make a statement or, you know, the President in his position of bully pulpit can make a statement that it is patriotic, not just wise in terms of climate and the economy but patriotic to drive in the most fuel-efficient manner possible, drive the most fuel-efficient vehicle, buy the most fuel-efficient vehicle possible, try to use as little energy as you can. And that actually would have an immediate impact, would you agree?

Secretary BODMAN. I agree with that.

Mr. HALL. So there are some things that can have an immediate impact. And even a short-term impact, like, for instance, the Idaho National Laboratory has done studies in low head hydro sites in, I believe, all the States. But in particular those States that have changes in elevation that lend themselves to it. In New York, the Idaho Laboratory's Web site shows 4,000 some low head hydroelectric sites, small dams and waterfalls that are currently not being used for hydro generation and estimates that greater than 1,200 megawatts of power could be harvested by putting turbines where water is already falling and wiring that into the grid. Something that would have a short-term effect.

I would guess a serious effort, a top-priority effort to harness this unused hydro power, which, by the way, would hire mechanics and electrical workers and tradespeople to do the insulation and, of course, has the advantage of not being a single large point source but being a lot of small point sources that would be spread out over the grid would, in fact, hire a lot of people besides generating a lot of power.

I just wanted to throw that out as something.

Secretary BODMAN. I agree with all that.

Mr. HALL. So maybe we could work with the administration to try to make that happen.

I don't know. I am sure there are liability issues with some of these dams that are orphan dams and so on. Some may need to be indemnified and repaired. But if we can indemnify the nuclear industry, I suggest we should put renewables on the same footing. Either none of them get indemnified or we look at helping the ones that need it.

I wanted to ask you about—there is one aspect of the administration's budget that I was curious about. The committee has explored the potential to make massive improvements in efficiency and greenhouse gas emissions by making buildings more efficient.

Secretary BODMAN. Right.

Mr. HALL. I actually commend my friend from California and his State's efforts to reduce electrical consumption. While the rest of the country has had this curve going upward, California has sort of wiggled around and kept constant, mostly constant, for the last 20 years because they have had stricter standards than the other States have had; and I think we should be emulating them rather than making them conform to a looser standard.

But, at any rate, in the most recent budget deal we have zeroed out the weatherization assistance program——

Secretary BODMAN. Right.

Mr. HALL [continuing]. Which would help those most in need by simultaneously boosting efficiency and cutting their energy costs and, by the way, employing a lot of people. Weatherization hires tradespeople to put in storm doors, storm windows, insulation, et cetera. So what is the deal, the rationale for eliminating funding for this program?

Secretary BODMAN. It is simple. I was the one that made the decision. So if there is a bad guy I am the guy.

And the issue there was the—we are largely a technically driven science and engineering organization. That is what we know how to do. We are experts at that. We are very good at it. In all these national labs—two-thirds of all the employees of the Energy Department work in the national laboratory, and they are very good at this.

The issue therefore gets to be, what kind of return do we get for our money? We make, as best we now know, the number I was given is that we have a 20-for-1 return on investments in technology. I got a 1.5 return for the weatherization program. It was strictly a financial matter.

Mr. HALL. Well, you are very honest; and thank you for your candor.

I would just close by saying that, 35 years ago, my next-door neighbor in the Hudson Valley, a Vietnam veteran and entrepreneurial soul named Jan Ashwood, was lighting balloons full of hydrogen in his backyard and calling up the press and trying to get them to come and see it. He was making hydrogen from a barrel of water, a photovoltaic cell and two electrodes in the water and then collecting hydrogen—singeing the hair off his arm by lighting these balloons full of hydrogen. But as a demonstration that a renewable, any kind of renewable, combined with water could use hydrogen as a storage device for energy.

And it seems to me that siting such a facility to both store hydrogen, which we now know how to handle much better than we did when the Hindenberg went down—that was sort of the Three Mile Island of the hydrogen era. I think we have the space shuttle powered by it. We know how to handle it much more safely.

And it seems to me it would be much easier to site a hydrogen storage and generation facility that produces no waste except water when you burn the hydrogen than it would be to site a new nuclear plant. And, in fact, you are looking for the same site. You are looking for a place away from population on a body of water. So I am just curious how 35 years have gone by since I saw my next-door neighbor doing that and we haven't seen more of an effort in that direction.

My time is up, so I yield back.

The CHAIRMAN. The Secretary may answer the question, please.

Secretary BODMAN. The answer to that question is we have been through over the last 35 years a real dip in the fact that oil all of a sudden went from the outlandish price of $30 to $35, which it was in 1978, down to $10 or $8 or $9 something like that. All work in this area, in research area, stopped at that point in time. Everything. That is the issue we are dealing with.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from California, Mr. McNerney.

Mr. MCNERNEY. Thank you, Mr. Chairman.

I am going to follow up on an earlier question, although your question deserves following up, too, Mr. Hall.

Ms. Herseth Sandlin mentioned that the Department had just issued a report a couple weeks ago that wind energy could provide 20 percent of our Nation's electrical needs by 2030, and yet the Department of Energy's proposed budget increases the wind energy research by only $3 million. Now, this is a budget that was decimated over the period between 2000 and 2006. So what is the justification for such a low level of funding for such an important part of our Nation's energy supply?

Secretary BODMAN. To my knowledge, a lot of the work that has been done has already been accomplished in order to create electricity from wind. That is one answer. And, two, there continues to be a very substantial commitment in both Massachusetts, where Mr. Markey is from, and in Texas relating to new wind blade test facilities. And so there is work going on.

I guess I would answer that research, where it needs to be done, that is what we are good at. That is what we do, is research, research and development. We don't fund new——

Mr. MCNERNEY. To go from 1 or 2 percent of our Nation's energy to 20 percent is a huge jump. I mean, that is as much more or maybe more than nuclear is producing. So I suggest that additional research is going to be needed to meet that level of demand or that level of production.

My second question would be, do you agree that there are tremendous gains to be made with energy efficiency.

Secretary BODMAN. Yes, I do.

Mr. MCNERNEY. Then would you agree to work within the administration to allow States to lead the Nation in efficiency legislation even though it may exceed Federal standards, especially referring to vehicle efficiency?

Secretary BODMAN. I can't commit to that because I don't understand all the details of it. I would be happy to study that particular question.

Mr. MCNERNEY. Well, what I am asking is would you advocate that? Because California, Massachusetts and other States have had trouble getting the administration to allow that sort of legislation to go forward. And, honestly, if you don't agree to that, then, by association, the administration stands in opposition to the most—I believe the most effective tool we have to lowering gas prices in the long run.

Secretary BODMAN. Okay.

Mr. MCNERNEY. All right. Good. I like that kind of agreement.

Now, you had mentioned to Mr. Blumenauer that you don't remember mentioning a 95 percent success in implementing the administration's energy policies.

Secretary BODMAN. That's correct.

Mr. MCNERNEY. But on the White House Web site it shows that you have said that, over the past 4 years, we have implemented 95 percent of those recommendations, 100 recommendations that are made. So that indicates in my mind that the administration's policies are flawed. Because they have been implemented to a large degree, and the success in terms of keeping gas prices low, for whatever method, by increasing efficiency or by increasing supply, haven't been as successful. Do you have a response to that?

Secretary BODMAN. Well, I think the response is that we clearly have a long-term research program in solar energy, wind, nuclear power, biofuels, carbon capture, sequestration; and it is going to take a number of years to dig ourselves out of the hole that we are in. And so the fact that I am quoted as having said that this is 95 percent done, if I am quoted correctly by the congressman, I am wrong.

Mr. MCNERNEY. Okay. Thank you. I yield back. Thank you for your testimony, Mr. Bodman.

The CHAIRMAN. The gentleman's time has expired.

There is going to be a series of roll calls in a few more minutes, and I think what might be advisable is if we can continue to question the Secretary until that time has arrived. So the Chair will recognize himself for another round of questions.

Mr. Secretary, last Friday, the President was in Saudi Arabia; and at that time he and Secretary Rice reached an agreement in a memorandum of understanding which is—and I quote here from the agreement—intended to cooperate on the issue of appropriately

sized light water nuclear reactors and fuel services arrangements for the Kingdom of Saudi Arabia, promoting the establishment of arrangements that would allow future civilian light water nuclear reactors deployed in the kingdom of Saudi Arabia with access to reliable nuclear fuel supplies and services.

Now, I don't understand, Mr. Secretary. Three years ago, Vice President Cheney said that—and I quote—here is what he said, talking about Iran's deeply questionable nuclear program. He said, Iran is already sitting on an awful lot of oil and gas. No one can figure why they need nuclear as well to generate energy.

So if that is true for Iran, why are we in the United States introducing yet more nuclear technology into the Middle East when we know that has been a source for much of the friction that exists in that region? Because, ultimately, any country can pull out of the nuclear proliferation regime, hold on to the uranium, hold on to the plutonium and have a nuclear weapons program with the very same light water reactor materials. Why, Mr. Secretary, is the President——

Secretary BODMAN. I don't know. I wasn't there, so I can't respond to that, other than saying I presume that the President has a good deal of confidence in the King and in the leadership of Saudi Arabia.

It is also true that it is going on in the United Arab Emirates where they have expressed a lot of interest in nuclear power, in solar energy.

The CHAIRMAN. Well, that is the point, Mr. Secretary. Saudi Arabia is three times the size of Texas.

Secretary BODMAN. Yes.

The CHAIRMAN. It is one big desert. It is sunny almost every day of the year.

Secretary BODMAN. Right.

The CHAIRMAN. Why aren't we having a Saudi solar cooperation agreement with the United States? Why would we introduce more dangerous nuclear materials into that region when solar energy should be the basis of our partnership with a country that says it wants to diversify from oil and gas? Although Mr. Cheney would say if Iran has plenty of oil for 75 million people, Saudi Arabia has twice as much for a third of the population. Why would we introduce more nuclear power? Does that make any sense, given the volatility of that region and the ability to have solar become the future for Saudi Arabia if they want to end their oil and gas era?

Secretary BODMAN. I can't answer that, Mr. Chairman. I don't know. I wasn't there.

The CHAIRMAN. You know, I know this sounds—I'm incredulous. I can't believe that the President's Secretary of Energy doesn't have a view or have knowledge about the nuclear agreement that the United States is implementing with the Saudi Arabians. Given the fact that it is your agency that is touting new research in solar, new research in renewable energy resources, that you seem to be out of the loop in terms of then what is the energy policy for what our agreement should be around the world.

Secretary BODMAN. That is true.

The CHAIRMAN. It is true?

Secretary BODMAN. Yes.

The CHAIRMAN. I just find that hard to believe. It seems as though the Secretary of State can use nuclear power plants as a short-term diplomatic tool for her use, knowing that solar energy is a better alternative for Saudi Arabia for sure, and that our long history with transfer of nuclear materials into these Middle Eastern countries almost inevitably results in the compromise of that program and the use of those materials for a nuclear weapons program.

Secretary BODMAN. I am sure that Secretary Rice was not contemplating the fact that this program would be compromised. I mean, you are assuming that it is going to be compromised.

The CHAIRMAN. I am saying to you that if you look at——

Secretary BODMAN. I am assuming that it is not.

The CHAIRMAN. If you look at Saudi Arabia, you have to say that solar should be the first resort of that country; and, instead, we are sending them more nuclear power plants, the same way that the world sent Iraq and Iran and North Korea nuclear power plants that ultimately turned from energy sources into weapons programs.

We know the tension that exists between the Saudis and the Iranians. We know that they are trepidatious about the nuclear weapons program in Iran. I don't understand why we would be fueling this tension in the Middle East by providing the beginnings of a program where we will send nuclear materials to Saudi Arabia under the guise of an energy exchange when my real fear here is that the Bush Administration knows that this program is likely to be compromised in the future by the Saudis.

Secretary BODMAN. I don't believe that, sir.

The CHAIRMAN. Well, they should know it.

Secretary BODMAN. We have a difference of view.

The CHAIRMAN. Well, how about this? Can we have an agreement that this should be a Saudi solar agreement with the United States and that we should be sharing our solar technology with the Saudi Arabians?

Secretary BODMAN. If Saudi Arabia would like to have a solar agreement, they certainly can ask us and we would be happy to respond.

The CHAIRMAN. But aren't you suspicious that the Saudis don't want a solar agreement? Saudi Arabia is the Saudi Arabia of solar. There it is. It sits there as a desert with sun 12 months a year, blistering hot. Why wouldn't this administration be suspicious that they are asking for nuclear rather than solar power exchange in order to meet their long-term energy needs?

Secretary BODMAN. There are a lot of good reasons to use nuclear power. It is less expensive than solar energy right now. We don't have solar energy that is cost competitive.

The CHAIRMAN. Do you personally believe that Saudi Arabia needs nuclear power plants?

Secretary BODMAN. I believe that it is wise for them to diversify their sources of energy away from oil and gas, yes.

The CHAIRMAN. You know, here is the problem, Mr. Secretary; and I don't think the Bush Administration is ever going to understand this. That every nuclear power plant is a generator of electricity, yes, it is, but with a by-product of nuclear materials that

can be used for a nuclear bomb program. And that is what is going on in Saudi Arabia.

Secretary BODMAN. That is your opinion, sir.

The CHAIRMAN. I know it is my opinion. But all Middle Eastern history points in that direction. And the Bush administration should be touting the dramatic breakthroughs that have been made in solar energy over the last couple of years and encouraging the Saudis to move in that direction, given their geographic location, the desert nature of their population and the leadership role that we can play in partnership with them in pointing the world in that direction and away from this nuclear fuel cycle which is ultimately going to come back and haunt the world once again.

Let me turn and recognize the gentleman from Oregon, Mr. Blumenauer.

Mr. BLUMENAUER. Thank you.

The Vice President famously said in 2001 that conservation may be a sign of personal virtue, but it is not a basis, a sufficient basis for a sound comprehensive energy policy. Is that still the administration's view, that conservation is a personal virtue and is not a cornerstone?

Secretary BODMAN. It is certainly not my view.

Mr. BLUMENAUER. I was curious, as you moved forward early in your tenure to implement the recommendations of Mr. Cheney's national energy policy— and, again, our understanding is that the assertion was that much of those recommendations were, in fact, implemented, which, as my colleague mentioned a moment ago, you were quoted as saying on the White House Web site. Yet, according to the GAO, the Department of Energy has missed 34 of the 34 congressionally mandated deadlines for setting new efficiency standards for appliances and electrical equipment. Why was meeting those efficiency standards such a low priority of the Department of Energy that they missed 34 out of 34?

Secretary BODMAN. I can't answer that. I can tell you that one of the things that I have focused on during my 3-plus years of work in that Department had been management and has been the issue of trying to run things better. And we have—I think have turned that around and have that entire program now in better shape. It is still going to be a number of years before we get caught up, but we now have it on a program that I think makes sense.

To write an appliance standard is a much more difficult task than it appears to be on the surface, and it takes time. You have got to then get agreement of both the manufacturing community and the regulatory community and others that are involved.

Mr. BLUMENAUER. Well, that is your choice, to get the agreement of the manufacturing community. I mean, the administration stepped in and stopped some of the stronger standards that were already under way by the Clinton administration.

Secretary BODMAN. Not to my knowledge. I don't know about that. I can't speak to it.

Mr. BLUMENAUER. Air-conditioning standards, you don't know that your Department stopped the implementation of more rigorous air conditioning standards?

Secretary BODMAN. Do I know that? No, I don't.

Mr. BLUMENAUER. Okay. I mean, I would think that that would be part of—if you are getting a handle on the management and you were concerned that we missed 34 out of 34 standards, that there might—and it is so hard to get agreement, that these would be things that would be pretty high priority for you to know.

Secretary BODMAN. I don't happen to know about air conditioning standards. I don't happen to know about that.

Mr. BLUMENAUER. Well, what are your priorities for efficiency? I mean, air conditioning I think is number one or number two in every area of the country.

Secretary BODMAN. Furnaces. They are very important in the South. They are less important in the North. Furnaces are very important. There are all kinds. Dishwashers, refrigerators. I mean, it is a long list of things.

Mr. BLUMENAUER. Air conditioning is number one or number two in every major region of the country, is it not?

Secretary BODMAN. Not to my knowledge. I don't happen to know that offhand.

Mr. BLUMENAUER. Okay. Thank you.

Thank you, Mr. Chairman. Thank you, Mr. Secretary.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from Washington State, Mr. Inslee.

Mr. INSLEE. Thank you.

Mr. Secretary, I want to ask you again about this cap-and-trade system. Many if not most of the investment community, the cap organization, which are several Fortune 500 companies that have been urging your administration to embrace a cap-and-trade system, they believe it is necessary both from an environmental and an economic standpoint. And the people I am listening to are the people in these cutting-edge companies who are developing advanced solar photovoltaics, enhanced geothermal, wave power, solar thermal plants, a whole host of new technology, the electrification of the automobile.

What they tell me is that we are missing an economic opportunity by not adopting a cap-and-trade system. And what they tell me is that we are in a race—we are in a race against Germany, Denmark, Spain to see who is going to be developing these technologies to sell to China and India.

India, when I was there, they have 400 million people that don't have access to a light bulb. They are going to want electricity. The question is, who is going to provide them the clean energy technologies to do that? Is it going to be us or is it going to be Spain or Germany? And, right now, we are losing out to those countries because they have policies that drive investment into these clean energy technologies.

That is what the clear energy CEOs and the investment community is telling me. Why do they get this and this administration not get this as seeing this as an economic opportunity for us and why we should lead the world? Why do they understand that and your administration does not understand that?

Secretary BODMAN. I don't know how to answer it any differently than I have already answered it, Mr. Inslee. I think the question gets to be how do we bring all of the countries of the world to-

gether. And the President has I think wisely developed a program for getting the largest—I think it is the largest 17 or 18 economies, the major economies of the world, to get them together to make an agreement on what the approach, what the world's goal ought to be and what each country's goal ought to be. And he will be prepared to commit to that at that point in time.

And there is a G–8 meeting that is supposed to occur I think in early July. And if there is successful—if we are successful in getting a response from the other countries, this country will respond accordingly.

Mr. INSLEE. Well, clearly, we all have a stake in this; and everybody needs to act at some point. But there is two major flaws with that.

Number one, if we had adopted the Bush administration model of democracy, we would still be trying to reach a global goal of everybody becoming a democracy before—we just went ahead and did it in 1776 because we decided to lead the world. And I think that is the policy of America, that we ought to be leading the world.

But, secondly, and just as more importantly, this strategy, if you call it that, of the administration is we don't do anything until Bangladesh signs onto an agreement. This is a huge, huge economic failure, because we are not going to develop the clean energy technologies to sell to the world if we wait for the entire world to get on board.

I look at this as losing an economic opportunity while we wait for the rest of the world, and I just don't know why the administration cannot understand that, of what it is to lose economic opportunity. Why don't you agree?

Secretary BODMAN. I don't know how to be any clearer than it was. These are the major economies of the world. I think there are 17 or 18 of them. They include places like China, India, Brazil, Mexico; and we are making some progress, good progress forward.

Mr. INSLEE. So you are willing to give away a market to sell China clean energy technology? You are willing to give that away to Spain and Germany, who are now taking advantage of our failure to act on this?

Secretary BODMAN. Not in my view.

Mr. INSLEE. Well, that is what is happening. Germany—we used to be the leader in solar photovoltaic. Now Germany is. The reason is they have adopted a cap-and-trade system, they have adopted a feed-in tariff, something I will be introducing shortly, and we have dropped back to number five or six. And now they are leading in selling product to China because this administration has failed to act and are giving away those markets.

Thank you.

The CHAIRMAN. The gentleman's time has expired.

The Chair recognizes the gentleman from New York State, Mr. Hall.

Mr. HALL. Thank you, Mr. Chairman; and, Mr. Secretary, thank you for this conversation.

Our office in Putnam County, New York, in the 19th District received a call lately from a woman who was all excited about buying a flex-fuel vehicle; and she asked my staff, where can I get some flex-fuel? And we had to tell her there were only a couple of pumps

in New York State, even though there are more than 200,000 vehicles, I believe, sold by Ford and GM.

We have sort of induced people to build vehicles that can burn E85, allowed them to advertise it on TV as a green thing to do. You can help the environment by buying an E85 car. And allowed the oil companies to continue to not provide that kind of blend.

In fact, when the oil executives, the top CEOs of the top five companies, came before this committee, I asked them in my brief questions, now that you have made the biggest profit in the history of the world, of any corporation of the world, would you commit to putting at least one biofuels pump at every station that you own, not franchise stations, but stations that you actually own? And every one of them said, no. And I said, why? And they said, we don't know if the demand will be there. And I said, haven't you heard of flex-fuel vehicles? Haven't you heard of advertising?

I think they may need some help from your Department.

And I know that you are all Ph.D.s and researchers and that things like this or efficiency weatherization may be far below the level of interest of a lot of people who work at the Department of Energy, but we have a situation where last week—I checked on the Internet—ethanol was selling for $1.97. It has gone up a little bit this week, but it is still somewhere between a half and a third the price of gasoline.

So if we have got these vehicles on the road, we have incentivized production capacity, some of which, by the way, is in danger of going bankrupt and new ethanol or cellulosic ethanol projects are in danger of not being built because they are seen as weakening in the market, what can we do or what can your Department do to make sure that the infrastructure exists to bring that fuel to market? Because that would have an immediate impact on the price of oil.

Secretary BODMAN. We can work and are working with the oil companies as well as the auto companies to get more flex-fuel vehicles made and to get the oil companies to include an E85 pump and/or other pumps available.

Mr. HALL. Thank you, sir. I hope that works as fast as possible.

And I am proud to say that West Point in my district, after some discussion with the commander of the post and his staff, have decided to put in a 5,000 gallon E85 tank underground and to sell that fuel to flex-fuel vehicles in their motor pool and at the commissary where the faculty in the West Point community buy fuel.

And the more we can do to especially have these large facilities that move large quantities like school bus fleets that might be able to burn a blend of biodiesel or UPS or big shipping companies and so on to pull the string through the tube so that there is more demand to help create more production on the other end—and I would encourage you to do everything you can to try to make that happen.

Secretary BODMAN. Thank you very much.

Mr. HALL. I thank you, and I yield back.

The CHAIRMAN. The gentleman's time has expired, and all time has expired.

Mr. Secretary, we thank you so much for coming here today. We know that you have an unenviable task. You are the President's

principal energy advisor, and you have the responsibility of defending indefensible positions which are created by President Bush and Vice President Cheney. And we recognize the difficulty of the position which you are placed in here because those positions are indefensible.

Again, in conclusion, on the issue of deploying the Strategic Petroleum Reserve beginning this Memorial Day weekend, you are arguing that there is no natural disaster. President Bush argues that there is no international crisis in the Middle East; and, therefore, the conditions do not exist that would require the deployment of the Strategic Petroleum Reserve. I could not disagree more. I think we are in an economic crisis right now. It is largely fueled by high oil prices that are affecting consumers, affecting business all across our country.

You are right. It is not a natural-disaster-created oil spike. It is a Bush-administration-driven price spike in oil and gas.

Secretary BODMAN. I disagree with you.

The CHAIRMAN. I know you disagree. But all evidence points to the fact that oil has gone from $30 a barrel to $135 a barrel during the 7½ years that President Bush and Vice President Cheney have been implementing their secret energy plan; and that secret energy plan is one that has not included the robust investment in renewable energy resources, wind and solar. The administration is still opposing the extension of the wind and solar energy tax breaks.

And even as we hit the Memorial Day weekend the Bush administration is still refusing to sell oil from our Strategic Petroleum Reserve as a way of sending a signal to the marketplace that we are not going to stand on the sidelines; we are going to actively intervene to protect consumers and businesses.

And I understand your position. You are in a difficult one as the Secretary of Energy when the President and Vice President are committed to ending their administration as they began it, without a real energy policy. And it is bad news for our economy.

But I think drivers should expect, as they head to gas stations across the country today and tomorrow to get ready for the Memorial Day weekend, to pay the highest prices that any American has ever paid for oil at the pump; and I think it is the responsibility of the Bush administration to deploy the Strategic Petroleum Reserve in order to protect them.

Again, Mr. Secretary, I thank you for being here.

With that, this hearing is adjourned.

[Whereupon, at 12:00 p.m., the committee was adjourned.]

Answers to May 6th, 2008 Letter

Q1. Does the Administration have authority to suspend the fill of the Strategic Petroleum Reserve (SPR) based on the market price of oil?

A1. Yes. The Administration conducts its oil acquisition activities in accordance with the authorities delineated in the Energy Policy and Conservation Act (42 USC 6201 et al), and in compliance with the *Procedures for the Acquisition of Petroleum for the Strategic Petroleum Reserve* in 10 CFR 626 (71FR65376, 11/18/06), which requires decisions concerning acquisition to take into consideration both market and non market forces.

Under the *Procedures for the Acquisition of Petroleum for the Strategic Petroleum Reserve*, Section 626.6 specifically provides that for direct purchase activities "DOE may refuse offers, decrease the rate of purchase, or suspend the acquisition process if DOE determines acquisition will add significant upward pressure to prices either regionally or on a world-wide basis." Likewise, Section 626.7 for royalty-in-kind exchange provides that "DOE may, after consultation with DOI, suspend the transfer of royalty oil to DOE if it appears the added demand for oil will add significant upward pressure to prices either regionally or on a world-wide basis."

Q2. Does the Administration have authority to swap light, sweet crude oil out of the SPR for heavier, sour oil?

A2. Yes. Section 160 of the Energy Policy and Conservation Act (42 USC 4201, *et seq.*) authorizes the Secretary to acquire petroleum products for the SPR by purchase, exchange or otherwise. Further, the SPR has conducted exchanges in the past to alter the crude type stored in individual caverns in order to improve the operational efficiency of Reserve.

Q3. Does the Administration have authority to fill the SPR by acquiring a steady dollar value ("dollar-cost-averaging") rather than acquiring a steady volume of oil?

A3. Yes. The *Procedures for the Acquisition of Petroleum for the Strategic Petroleum Reserve* in 10 CFR 626 (71FR65376, 11/18/06), which establish the rules and procedures for the Department of Energy to acquire SPR crude oil by direct purchase or royalty-in-kind transfer, would allow the Department to acquire by a steady dollar value ("dollar-cost-averaging") as well as by any other scheme which takes into consideration both market and non market forces, and gives DOE the flexibility to ensure that the government is getting the best value for taxpayers. Acquisition by dollar cost averaging, however, would make our national security asset, SPR, subject to annual appropriations and would not be easily compatible with a royalty in kind volumetric program.

Q4. Should the size of the Northeast Home Heating Oil Reserve be expanded?

A4. The Administration believes the Northeast Home Heating Oil Reserve's (NEHHOR) two million barrel hearing oil reserve is the appropriate size to provide 10 days of energy supply in the event of an emergency. It requires 10 days for ships to carry heating oil from the Gulf of Mexico to New York Harbor in the event of a supply disruption or shortage in the northeast region.

While it seems intuitive that a larger reserve would provide more protection, that is not necessarily true. Both the heating oil reserve and the SPR have been designed to augment commercial supplies during an emergency --- not to displace the private market.

When weather disrupts heating oil supplies and simultaneously increases demand, it is critically important that importers will respond to the situation and bring more oil into the country. Usually that extra heating oil is purchased in Europe at very high prices, but it does arrive where it is needed.

The bigger we make the heating oil reserve, the greater the risk to importers that their expensive purchases will lose value before they can be transported and sold in the U.S. If the importers do not respond because of the risk created by the heating oil reserve, we will find ourselves releasing the heating oil inventory every year and effectively displacing the market.

Q5. Should the United States establish a strategic reserve for any other type of refined petroleum product?

A5. There is no clear need for additional refined petroleum product reserves outside the Northeast Home Heating Oil Reserve.

The Strategic Petroleum Reserve (SPR) is authorized by law at present to store both refined products and crude oil. However, in preparing the 1977 SPR Plan for development of the Reserve, an analysis of the U.S. refining industry indicated that the industry was robust and had the refining capacity to satisfy the major portion of the nation's demand for petroleum products provided it had access to adequate volumes of crude oil. This continues to be true today—more than 30 years later.

The U.S. petroleum import dependency is overwhelmingly crude oil, not refined products. In addition, crude oil is cheaper to acquire, store and transport than refined products. Crude oil quality does not degrade over time as do refined products. Crude oil also provides flexibility in responding to fluctuations in refined product market needs. Refined products are expensive to maintain in storage and are subject to changes in specifications seasonally and as mandated by environmental legislation.

Q6. Over the past 10 years, how much has U.S. refining capacity increased or decreased in barrels of oil per day? Please provide an annual summary for each of the last ten years of the average U.S. refining capacity in barrels per day.

A6. U.S. crude oil distillation capacity has increased almost 2 million barrels per day since 1997 as summarized in the table below.

U.S. REFINERY CAPACITY	
Year	Average Operable Crude Oil Distillation Capacity (Thousand Barrels Per Day)
1997	15,594
1998	15,802
1999	16,282
2000	16,525
2001	16,582
2002	16,744
2003	16,748
2004	16,974
2005	17,196
2006	17,385
2007	17,447
May-08	17,588

Q7. Section 804 of the Energy Independence and Security Act of 2007 (EISA) requires the Administrator of the Energy Information Administration (EIA) to review and analyze information of refinery outages to determine whether any such outage "may nationally or regionally affect the price or supply of any refined petroleum product" and submit a report to the Secretary "not less frequently than twice each year." Has the EIA performed such an analysis and submitted a report?

A7. Yes. As indicated in the report prepared responsive to Section 804 of the Energy Independence and Security Act of 2007, the Energy Information Administration (EIA) reviewed and analyzed information that was available from commercial reporting services on scheduled refinery outages for 2008, and assessed the expected effects of those outages on the prices and supplies of gasoline. Much of the report focuses on a review of 2007 in order to establish a basis for determining how planned refinery outages and other factors might impact gasoline markets in 2008. EIA's future reports on planned refinery outages under Section 804 will evolve as additional information becomes available and EIA develops new methodologies for analysis.

The planned refinery outages for January through May 2008 are lower than for that period in 2007. Given lower planned outages scheduled for this spring and assuming the return of unplanned outages to more typical levels, including the return of BP's Texas City refinery to full operation, gasoline production could increase between 100 and 200 thousand barrels per day over last year's level, depending on the incentives from market demand for the various refined products. In addition, ethanol use, which adds to gasoline supply, is expected to continue to increase as a result of the Energy Independence and Security Act of 2007.

The report can be found at:

http://www.eia.doe.gov/pub/oil_gas/petroleum/feature_articles/2008/spgmogas2008/spgmogas2008.html.

EIA's next report to the Secretary is planned for late August or September, looking ahead to the fall outage season.

Q8. Is the Department aware of any coordinated refinery outages in the United States at any point over the past 15 years?

A8. The Department of Energy has no evidence of any coordinated refinery outages in the United States over the past 15 years. Refiners conduct planned turnarounds (maintenance) at refineries, which depending on the size and complexity of the refinery, requires advance scheduling for highly skilled labor personnel, which are often limited. See report from EIA addressing this issue at: http://www.eia.doe.gov/oiaf/servicerpt/refinery_outages/SROOG200701.pdf.

Q9. Section 432 of the EISA statute requires federal agencies to designate energy managers to reduce energy use at each large building or facility six months after EISA's enactment. What progress has the DOE made in implementing this provision and meeting Section 432's requirement that energy and water evaluations be carried out within eighteen months after the date of enactment?

A9. DOE has been working closely with the Federal agencies, many of which have already designated managers to meet the requirements. To help agencies meet the 18 month deadline, DOE is preparing the guidance called for by the Energy Independence and Security Act. In order to enhance collaboration, we formed a working group to develop the required guidance materials. The Interagency Working Group has met and drafted a guidance document which is expected to be finalized and submitted for DOE concurrence by May 23, 2008. We will publish the Guidance document as soon as possible after it is received.

The guidance will cover the following topics:

- Designation of facility energy managers responsible for reducing energy use at Federal agencies.
- Comprehensive energy and water evaluations of Federal agencies.
- Implementation of identified efficiency measures by facility energy managers and annual follow up.
- Web-based tracking system of evaluations, projects, and follow-up.
- Benchmarking.
- Summaries of agency implementation status in Office of Management and Budget (OMB) Scorecards.

Q10. Section 421 of EISA requires that the Department of Energy appoint a Director for the Office of Commercial High-Performance Green buildings. What progress has the Department made in carrying out this Section?

A10. The Senior Executive Service program manager for the Building Technologies Program in the Office of Energy Efficiency and Renewable Energy will carry out the duties of the Director of High Performance Green Commercial Buildings.

Q11. Section 421 (f)(1) of EISA statute requires that the Director of Commercial High-Performance Green Buildings formally recognize one or more groups as a high-performance green building partnership consortium within 90 days of enactment. What progress has DOE made in carrying out this section as required by law?

A11. The Department will develop and publish a Federal Register Notice to solicit applications for formal recognition of all qualifying consortia that wish to be so recognized. A draft notice is currently being reviewed.

Answers to May 15th, 2008 Letter

Q1. **According to the timeline outlined in an April 4, 2008 Department of Energy press release and staff conversations, bids for contracts seeking to exchange 13 million barrels of oil for the Strategic Petroleum Reserve during the final six months of 2008 were due on May 13, 2008 and could be finalized as soon as May 14, 2008. Please provide the Committee with a list of the companies to whom any new contracts were awarded and the size of those contracts.**

A1. The Department did not sign any new contracts last week to continue the royalty-in-kind exchange program with the Department of the Interior.

Q2. **Please describe any "termination for convenience" clauses that are included in any SPR contracts, including details on any penalties that may be incurred by the federal government. What would be the total size of the penalty to the federal government in the event those contracts were canceled for convenience?**

A2. All DOE royalty-in-kind contracts have provisions for termination for the convenience of the Government. The contract clause makes the Government liable for actual costs incurred by the contractor before the effective date of termination.

Termination for Convenience cost has potential for being substantial. Depending on current and future market conditions and length of positions taken by contractors, the liability could range from $25 to $200 million. DOE contractors may incur costs with respect to prior market hedging of their royalty barrel resale and exchange liability at time of award which would have to be terminated, as well as any physical barrels purchased for future delivery. Contractors must bear the cost of financial guarantee instruments. Contractors may incur costs for canceling long term charter contracts or tank leases, and for defaulting on current contracted power usage.

Q3. Did the Department of Energy consider delaying entering into these new SPR contracts in light of Congressional action requiring the Department to temporarily suspend filling the SPR?

A4. Yes. In light of Congressional passage of a bill seeking to stop additions of oil to the SPR, the Department felt that it was better not to award contracts that would require delivery of exchange oil to the SPR beginning in August.

Q4. Has the DOE analyzed the refineries in the Gulf Coast area to determine the percentage of that capacity that is fully compatible with the types of oil currently stored in the SPR? Would swapping some percentage of the lighter oils currently in the reserve for heavier grades of oil better match up with the needs of these refineries?

A4. DOE has analyzed the refineries in the Gulf Coast area to determine the compatibility of those refineries with the types of oil currently stored in the SPR. In general, the crudes currently stored in the SPR are compatible and desirable for the majority of the U.S. refineries and are well suited to mitigate most supply disruptions.

Swapping lighter crudes for heavier oils would be very costly because it potentially would require emptying one or more existing caverns. DOE has stated that in the planned expansion of the SPR to 1.0 billion barrels, it will be giving consideration to the storage of a quantity of lower gravity crude to address refiner needs.

Q5. Has the DOE analyzed or taken a position on "dollar-cost-averaging," i.e., filling the SPR based on a specific dollar value of a barrel of oil rather than a specific volume of oil?

A5. Yes, DOE has analyzed various methods for acquiring crude oil for SPR fill, including "dollar-cost-averaging." The net cost impact resulting from dollar-cost-averaging will depend on market conditions at the time in which it is applied.

The Department believes that the current practice of acquiring constant volumes is the most transparent way to acquire oil and provides the best chance of avoiding undue interference with market prices. The market knows well ahead of time the volume of oil that will be removed and market participants have time to react. DOE's practice has been consistent with GAO recommendations on this subject.